Growing on (Un)common Ground

Motivations and Locational Choice of Urban Agriculture Entrepreneurs

Kerstin Schreiber

Urban Studies
Masters (Two-Years)
30 CP
Spring Semester 2018
Supervisor: Fredrik Björk

Abstract

Urban agriculture in post-industrial countries is commonly represented in form of shared community gardens or individual gardening lots. However, within the last years, an increasing number of commercial urban farming enterprises around the globe have started their operations. While recreational projects have received much attention, the commercial and entrepreneurial remained mainly uninvestigated. Using a grounded theory approach, this explorative dissertation aims to contribute to an understanding of farming as a new urban profession and the motivation of commercial urban farmers (CUFs) to grow in the city, rather than the countryside. Based on ten semi-standardized in-depth interviews, this study reveals first, that CUFs merge the commonly rural occupation of farming and their desire for autonomic labor with the urban lifestyle as self-made growers, without significant relevant personal or educational background in farming, using alternative growing techniques. Second, the study finds two CUF categories: urbanists, who perceive themselves as actors in sustainable urban development and pursue urban growing activities to contribute to this target; and bargainers, who regard urban growing as a means to an end to progress to small-scale rural agriculture. This suggests that CUFs must engage in inner negotiations between their economic capabilities, the geographic location, and the more society oriented visions they commit themselves to. This research conceptualizes urban farming as tool to fulfill not only food and sustainability goals, but that could also function as basis for sustainable small-scale growing in the countryside.

Keywords

urban agriculture, commercial urban farming, location-based entrepreneurship, ecopreneurship, grounded theory, motivation

Dedication

For my Dad Arthur
(13 May 1950 – 24 May 2016)

&

For Maël

Acknowledgements

First, I would like to thank all study participants. The dedication of their time, as well as their openness and trust towards me were essential in studying this interesting topic. I am endlessly grateful for their support.

A great "Thank You" goes to Fredrik Björk, who has been my supervisor for this and my prior project and committed a seemingly infinite amount of time and effort into guiding me. His advice has always been of great value for my work and I could not have chosen a better supervisor, advisor, and mentor.

There is yet another group of people who deserves lots of appreciation. Even though they could not contribute to this work directly, their support and encouragement propelled my ambitions and endurance throughout this Master's program. No matter whether they are already by my side for years or they joined my path recently, their love and inspiration means a lot to me. I am so grateful to have you all (in alphabetical order): Alina, Arne, Ben, Cat, Chris, Éliane, Fifi, Io, Laura DR, Laura V, Lena, Marietta, Mark, Pia, Simone. All around the world, in Augsburg, Beith, Berlin, Cologne, Freiburg, Montpellier, Montreal, Munich, New York, San Francisco, and Würzburg, you are far away geographically and yet very near in my heart. Anytime.

Lastly, Maël, who is the greatest support one can ever wish for. "Things are only impossible until they're not!" (JLP)

Table of Contents

Abstract i

Dedication ii

Acknowledgements iii

Chapter 1 - Introduction 1
- **(Grand-)children of the Green Revolution** 1
- **Research Objective** 3

Chapter 2 - Context 4
- **Urban Agriculture** 4
  - Defining Urban Agriculture 4
  - Categorizing Urban Agriculture 5
- **Ecological and Location-Based Entrepreneurship** 7
  - Ecopreneurship and Agripreneurship 7
  - Location-Based Entrepreneurship 8

Chapter 3 - Methodology 9
- **Grounded Theory and Research Design** 9
- **Data Generation** 11
  - Theoretical Sampling 11
  - Qualitative Inquiry 12
  - Skype Interview 13
  - Memo Writing 14
- **Data Analysis** 15
  - Data Management and Coding 15
  - Comparative Analysis 15
- **Limitations and Critical Appraisal** 16
  - Generalizability, Validity, and Methodological Questions 16
  - Ethical Considerations 17
  - Reflexivity and Situating in the Research Project 17

Chapter 4 - Results and Discussion 18
- **Characterizing the CUF** 19
  - Growing the "Farming Entrepreneur" Spirit 19
  - Turning awareness into business 21
  - Supporting Factors 24
  - Remaining an Urban Farmer 25
- **CUFs and their Relationship to the City** 27
  - The "Urban" as Potential 28
  - The "Urban" as Compromise 34

Chapter 5 - Synthesis and Model Building 36
- **Farmer or Entrepreneur? Characteristics of CUFs** 36
- **Why CUFs Farm in the City Rather than in the Countryside** 37

Chapter 6 - Conclusion 41

References 44

Appendices 50
- **Appendix 1: Interview Guideline** 50
- **Appendix 2: Interviewees Pseudonyms and Interview Dates** 51
- **Appendix 3: Interviewee Matrix** 52

"With cities, it is as with dreams: everything imaginable can be dreamed, but even the most unexpected dream is a rebus that conceals a desire or, its reverse, a fear. Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else."

Italo Calvino, Invisible Cities

Chapter 1 - Introduction

(Grand-)children of the Green Revolution

Over the last decades, fuelled by the "Green Revolution," the agricultural sector in the Global North underwent bold transformation processes. Industrialization and globalization resulted in a reliance on specialized agricultural production with long supply chains, as well as high capital and technology inputs, which was accelerated by governmental subsidies (Norberg-Hodge et al., 2002). During the 1960s and 1970s, when environmental consciousness and anti-capitalism claims gained momentum, the "Green Revolution" trend faced counter movements, for instance in France. About 100,000 Parisians moved to the French countryside to pursue alternative lifestyles, including alternative agricultural practices (Mailfert, 2007). Similar movements, what American demographers call the "Urban-to-rural migration turnaround," also arose in other industrialized countries like the United States (Jacob, 2003). Such "Back-to-the-land"-farmers, also referred to as "Neo-Yeomen" [ˈjəʊmən], were farming on a smaller, semi-subsistence scale. Like in France, this sociological group was mainly driven by non-economic reasons and the wish to escape from the maladies of urban life, to enjoy the beauty of nature and small-city life, or return to the rural family (Jacob, 2003). Even though, in the French example, only 5% of the movement remained in the countryside, while the great majority returned to the urban areas[1] (Mailfert, 2007), it nevertheless emphasizes the affiliation of the "rural" with pastoral, alternative, and natural food production practices by urbanites.

Regardless of industrial or alternative farming, agricultural processes are mostly being "ruralized," hence, disconnected from dense urban areas and the places of consumption (Poppinga, 1979). More contemporary alternative food trends aim to re-connect these spheres and actors physically and socially under the notion of local and alternative food networks (Jarosz, 2000). Food, that is produced "locally," is grown or raised in proximity to the consumer, rather than transported over several hundreds or thousands of kilometers (Jones, 2001; Norberg-Hodge et al., 2002; Pretty et al., 2005; Jarosz, 2008). More

[1] Back to the land urbanites often returned due to a lack of access to social networks and incompatible social structures in rural communities (Mailfert, 2007).

specifically, local can mean both, the linking of consumption and production at specific sites through the provision of regional products, as well as the differentiation of these products by attributes connected to places, territories or terrains, which entail specific environmental and social values (Allen et al., 2003). Furthermore, food is often being marketed directly from the producer to consumer, bypassing brokers and middlemen such as food processors, supermarkets, and wholesalers (Hendrickson & Heffernan, 2002; Jarosz, 2008).

Albeit a modest number of Neo-Yeomen (and women) exist to this day (Jacob, 2003), a new group, consisting of city dwellers, remains within the city's boundaries and farms on dormant urban land, forming niches called "urban agriculture." Cities are being more and more perceived as spaces that offer multiple opportunities for a diverse citizenry who are using the dynamics and creative spaces for economic experimentation (Scott, 2000; Florida, 2002a, b), even for rural practices like agriculture.

The urban agriculture movement, which is mainly being represented by social, recreational, and educational projects and organizations, is gradually being complemented by undertakings with more commercial and market-oriented foci (Feenstra et al., 1999; Kaufman & Bailkey, 2000; Mincyte & Dobernig, 2016). An increasing number of urban farming enterprises around the globe have started their operations. "Lufa Farms" in Montreal, Canada or "Aerofarms" in New Jersey, USA are only two well-known and highly professionalized actors in the field of urban commercial indoor farming. These enterprises grow food in formerly unused urban infrastructure and sell to restaurants, supermarkets, and private customers. On the other hand, less high-tech depended organizations use permaculture or organic farming to produce food, for example, in Amsterdam, Montréal, Malmö, Copenhagen, and Detroit. These market-oriented for-profit and not-for-profit enterprises respond to the increased demand for high-quality food and non-food products and deliver fresh produce and by-products to urban customers (Atkins & Bowler, 2002).

Along with this trend, farming as a profession comes into focus. Guidebooks and YouTube channels offer guidance and advice on how to start and run a small-scale (urban) farm successfully[2]. Since many commercial urban farmers (CUFs) are start-ups, they turn to business incubator programs, such as Square Roots in New York or Stadsbruk in Malmö, whose goal is to provide space for new entrepreneurs to launch their urban agriculture businesses. While only a small number of CUFs are profitable today (Cabannes, 2012), researchers confirm economic potential. According to a study on CUFs in British Columbia, Canada, urban farms could generate revenues of CA$ 2.39 million and provide full-time jobs for 26 urban farmers, given the initial support of the municipal government and related sectors (Moreau & Hodgson, 2012).

[2] "Pastured Poultry Profit$", "Your Successful Farm Business: Production, Profit, Pleasure", "You can Farm: The Entrepreneur's Guide to Start and $ucceed in a Farming Enterprise", "The Market Gardener: A Successful Grower' Handbook for Small-Scale Organic Farming", "The Urban Farmer: Growing Food for Profit on Leased and Borrowed Land", "Compact Farms: 15 Proven Plans for Market Farms on 5 Acres or Less; Includes Detailed Farm Layouts for Productivity and Efficiency"

Research Objective

Urban growing in its commercial form is a new phenomenon, and the number of organizations, just like the number of people trying to succeed, is growing continuously. It is therefore pivotal to understand this group of urban residents and what drives them to establish and enter this specific occupation. More than that, the city is an unusual context for this type of entrepreneurship. Going beyond mere descriptiveness, this thesis further seeks to investigate the spatial determinants and rationales for their decision to grow in urban rather than in rural areas.

A small number of studies on CUFs have investigated the business perspective of urban farming (Stolhandske, 2001; Hedin, 2015, Knapp et al. 2016), and focused on land tenure, farm infrastructure, land suitability, legal and political environment, business practices and knowledge, and innovation (Pfeiffer et al., 2014). Likewise, the psychological perspective of urban agriculture is only being studied marginally and focusses specifically on community farmers and volunteers with social and recreational, rather than economic or political agendas (see Veen et al., 2012 and Mincyte & Dobernig, 2016).

Intertwining professional agricultural practices in an urban environment raises new theoretical questions and asks for alternative methodologies. It is tempting to adhere to standard research procedures and scrutinize the CUF occupation from only one of many epistemological strands of social science research. In lieu, the lack of prior research and subsequent theories and concepts implies, that the application of grounded theory methodology would be instrumental in filling this gap. Following this more unconventional way of inquiry, with a slightly divergent array, the study's report is structured as follows: Chapter 2 provides a brief descriptive introduction into the broader conceptual landscape of CUFs to familiarize the reader with the concepts of urban agriculture and alternative and location-based entrepreneurship, in which CUFs operate. Complying to grounded theory methodology (as will be explained in Chapter 3), Chapter 2 does not aim to and must not cater a preliminary theorization or conceptualization, since the researcher is entitled to ensure an unbiased entry into the research arena. Chapter 3 is dedicated to the methodology of this work. Here, the author will elaborate on the principles and process of grounded theory and how this methodology has been used in the study of CUFs. Chapter 4 presents and analyzes the results of the data collection, which are briefly being juxtaposed with selected concepts from adjacent research branches as additional data or "slices of data" (Glaser & Strauss, 1967, p. 65). This approach allows that converging and diverging points of interest from previous literature in adjunct research fields can be put into context with the study's research findings (Charmaz, 2006), which contribute to the theorizing process of this thesis. Chapter 5 presents the synthesis and developed model from this study. The final Chapter 6 then summarizes this work and suggests themes for further investigation.

Chapter 2 - Context

Even though grounded theory researchers should enter the field without a pre-fixed set of concepts and theories to explain a specific phenomenon, it is nevertheless essential to map the area under investigation, that is, examine a research problem, question or focus, and engage with the context in which it takes place (Glaser & Strauss, 1967). Subsequently, this chapter seeks to familiarize the reader with the relevant CUF setting, rather than examining previous theories, since it could hinder the unbiased investigation of CUFs.

As actors in the urban economy, CUFs engage in formal, market-oriented activities, while applying traditional rural practices. Thus, it is imperative to embed the study properly in the Urban Agriculture and Alternative Entrepreneurship and Urban Entrepreneurship discourses. The first part contains an introduction into Urban Agriculture as an urban agro-ecological practice in which citizens, and in this case entrepreneurs, interact with their urban natural and social environment. The second part delves into Alternative Entrepreneurship and Urban Entrepreneurship and the unique physical, social, and economic niches and spaces that CUFs appropriate.

Urban Agriculture

Defining Urban Agriculture

Definitions for urban agriculture are vast. A comprehensive description is being provided by Mougeot:

> Urban Agriculture is an industry located within (intra-urban) or on the fringe (peri-urban) of a town, a city or a metropolis, which grows or raises, processes and distributes a diversity of food and non- food products, (re-)using largely human and material resources, products and services found in and around that urban area, and in turn supplying human and material resources, products and services largely to that urban area. (1999, p. 11).

As an increasingly popular and well-known phenomenon, urban agriculture develops in many different shapes and on various scales: from recreational, community, and roof-top gardens to productivity-oriented urban farms (Garnett, 1996; Lovell, 2010; Turner, 2011; Veen et al., 2012). Yield and outputs are primarily produced for household consumption or for the sale at local markets (van Veenhuizen, 2006; RUAF n.a.) and can contribute to diverse urban functions, such as the transformation of empty to productive urban spaces (Mougeot, 1999; Jansma et al., 2012) or ecosystem services like pollination or the dispersion of seeds (Ernstson et al., 2010). Further purposes include energy conservation, waste management, biodiversity, microclimate control, urban greening, economic revitalization, community socialization, public health, cultural heritage, education (Lovell, 2010) and the provision of a "natural"

experience (Mincyte & Dobernig, 2016). Doing so, urban farms and gardens, as socio-ecological micro-systems, are embedded in the social, natural, and built infrastructure and environment of cities by emitting, transforming, and absorbing resources (Berkes & Folke, 1998; Eakin & Wehbe, 2009). Additionally, they aim to contribute to long-term human well-being in urban areas (McPhearson et al., 2015; Knapp et al., 2016).

Urban agriculture is not new (Pothukuchi & Kaufman, 1999), but has long been suffering under the perception that the combination of urban areas and food production is the antithesis to the modern city. However, the attitude towards urban agriculture as an allegedly mentally and spatially unfit model underwent a shift. Today, the notion of urban agriculture does not only depict the practice itself but also serves as a symbol for citizen engagement in alternative city planning (Veen et al., 2012). More and more municipalities react positively and proactively to this trend by incorporating food issues into their urban planning (Morgan, 2009; Morgan, 2013; Morgan and Morley, 2014; Moragues-Faus and Morgan, 2015; Morgan, 2015), for instance, by providing spaces for urban farming and gardening and promoting gardening activities. However, researchers warn that spatial capital, built through urban growing, tends to benefit mainly urban elites and fosters gentrification processes (Centner, 2008).

Categorizing Urban Agriculture

Even though the opinions about the impacts of urban agriculture are ambivalent, the fact that urban agro-ecological projects and organizations are versatile, diverse, and multi-dimensional is undebated in urban agriculture scholarship. A commonality of most urban growing initiatives is their rooting in social actions and their embeddedness in distinct socio-ecological niches with socio-cultural, economic, technological, biophysical, and institutional opportunities and barriers (Ojiem et al., 2006). Entrepreneurial farming businesses, as examined in this study, are just one example of such initiatives (Knapp et al. 2016).

Scholars have put much effort into developing suitable categories to systematize the vast amounts of urban agriculture activities (Ackerman, 2011; McClintock, 2014). For instance, Cohen et al. (2012) separate between a) institutional projects that collaborate with hospitals, schools, churches or prisons, b) community gardens, based on members or volunteers, c) community gardens led by non-profit organizations with a clear mission towards public engagement, and d) farms with a commercial focus. Similarly, Berges et al. (2004) classify urban agriculture initiatives based on the distribution level (micro, meso, and macro), as well as on the actor type (individuals and private households, associations and start-ups, enterprises) and their interests (subsistence, socio-cultural, commercial) (Figure 1).

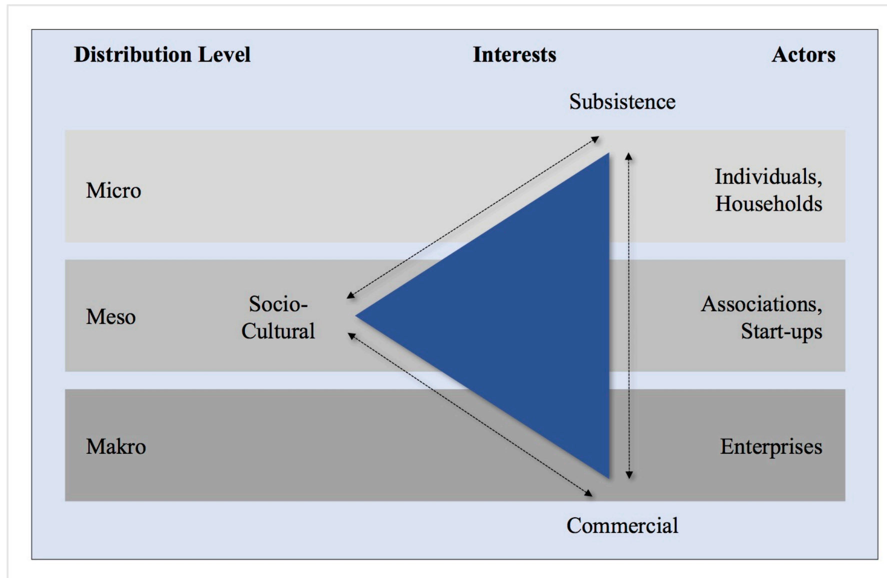

Figure 1 Urban agriculture initiatives classification (adapted from Berges et al., 2004)

Self-evidentially, while these attempts to cluster urban agriculture systematically provide a general overview and orientation, Mincyte and Dobernig also warn of an over-categorization, since urban farms and gardens can vary significantly in their mission, ownership, and organization:

> Indeed, the boundaries defining the above categories are often blurred when commercial farms develop non-profit divisions coordinating youth or refugee programs, or when members of both community farms and community gardens operate Community Supported Agriculture (CSA) schemes through which they earn income or generate revenue. (2016, p. 1772).

Being sensitive to such concerns, the acknowledgment of differences between urban agriculture projects is nevertheless crucial as they target different outcomes and impacts, act with varying motivations, require various resources within the urban realm, and require case-sensitive investigation.

Knapp et al. (2016) distinguish entrepreneurial urban agriculture from community gardening projects in that the former produces crops for sale and income generation. Entrepreneurial farms exist on different scales and in diverse sizes, and market their harvest directly to consumers or use it in their cafés or restaurants. In a North American context, this type of commercial urban agriculture is also referred to as for-market city farming, city farming, or entrepreneurial gardening (Feenstra et al., 1999; Kaufman & Bailkey, 2000). The food market is competitive and does not yield significant revenues. Therefore, business diversification is a crucial element for a commercially viable and financially stable urban farm (Mincyte & Dobernig, 2016), which often entails the addition of socio-cultural offers and business model elements. In this work, the focus is being put on commercial urban agriculture, which often (but not always) links to socio-cultural values, as described by Berges et al. (2004).

Ecological and Location-Based Entrepreneurship

A thorough look through the literature on the concept of entrepreneurship makes clear that there is no "one" single definition of the entrepreneur (Palich & Bagby, 1995). A basic classification, however, is required to identify and delimitate the entrepreneurial characteristics in this work. Based on Schumpeter (1934), Carland et al. (1984) suggest that the entrepreneur forms a social unit that differentiates itself from a small business owner and manager by her conduct of innovation: "The entrepreneur is characterized by a preference for creating activity, manifested by some innovative combination of resources for profit" (p. 357). Entrepreneurship, in comparison to earlier centuries, has experienced a steady rise and momentum gain since the late 1990s (Gartner & Shane, 1995). With the growth of the field, scholars have unlocked new subcategories of the relatively broad concept of entrepreneurship. Next to "conventional" entrepreneurs are so-called "niche entrepreneurs," who address dysfunctional systems or governance and insufficient infrastructure on a local level through innovation, primarily related to sustainability transitions (Sutherland et al., 2015; Pesch et al., 2017), which adds the factors of solution-orientation and location-dependence to Schumpeter's and Carland et al.'s hypothesis.

Ecopreneurship and Agripreneurship

One of the most relevant sub-categories of niche entrepreneurship concerning urban farming is the idea of "ecopreneurship," which has evolved as conceptual development around the millennium, primarily fostered by Anderson (1998), Keogh and Polonsky (1998) and Pastakia (1998) and later defined and operationalized by scholars such as Kirkwood and Walton (2010). Ecopreneurs create, produce, and apply novel services, organizational schemes, products, and techniques with significantly less environmental impacts and higher potential for life-improvement (Schaltegger, 2002). Accordingly, Kirkwood and Walton identify ecopreneurs generally as "entrepreneurs who found new businesses based on the principle of sustainability" (2010, p. 205)[3].

Departing from this still very broad category towards a more agro-ecology-focused type, the idea of "agripreneurship" arose recently as a practitioner concept for the most part. Young Professionals for Agricultural Development (YPARD, 2018) defines an agripreneur as "a new breed of entrepreneurs combining their love of farming and agriculture with business." Young people in developing countries are the main actors in this movement. YPARD emphasizes that these entrepreneurs return to jobs in the food sector to offer "healthy better choices to the consumer." The description is not limited to farmers but spans across the whole value chain, including processing and packaging innovations.

[3] Kirkwood and Walton base this definition on Issak (2002) and Walley and Taylor (2002).

Location-Based Entrepreneurship

Given the focus on urban agriculture, the author focuses principally on entrepreneurship in the geographical context of cities. Osorio and Ozkazanc-Pan (2014) define an urban entrepreneur as a "resident of a census tract with a high-population density, or an entrepreneur that provides services and/or products to a high-population density census track" (p. 4). Even though micro-enterprises often struggle financially, urban entrepreneurs generate local employment opportunities, foster economic mobility, provide products and services, and become agents for social problems and contributors to socio-economic and physical urbanization processes. These processes, according to collective outcomes and personal programs (Osorio & Ozkazanc-Pan, 2014), are important factors for a healthy urban economic environment (Sriram, Mersha & Herron, 2007). Doing so, urban entrepreneurs co-construct their socio-economic environment and networks (Granovetter, 1985). More than merely economic spaces, the city is a realm where lifestyle choices are being shared among the city's residents, including socio-economic exchanges and interdependence, as well as personal relationships (Wirth, 1938). Based on the re-structuring processes and personal and professional embeddedness in local communities, Osorio and Ozkazanc-Pan (2014) understand these entrepreneurs as "unintended social engineers" (p. 12).

Most urban entrepreneurs are allocated in the secondary (processing, manufacturing, and constructing), tertiary (entertainment and media, clerical service, healthcare, law, retail and wholesale, gastronomy, distribution and transportation, and banking) or the quaternary sector (scientific and industrial research, education, government, information technology, and culture). Often, their location decision is based on economic considerations, such as cluster effects, which make the provision of products and services more efficient (Florida, 2002a, b; Storper & Scott, 2009; Wojan et al., 2007).

More recent contributions (Cohen & Kietzmann, 2014) merge both, ecopreneurial and urban entrepreneurship. In their theoretical essay, the authors combine the three streams of entrepreneurship, urbanism, and sustainability, grounded in observable alliances by public, private, and entrepreneurial bodies, which seek to address urban illnesses and positively impact the city. This approach aims to expand, respectively focus, the view to practical systemic interventions in the urban context and further academic exploration of the field. However, as CUFs are active in the primary sector, which is, as mentioned above, not traditionally penetrated by their entrepreneurial peers, these entrepreneurs require a peculiar attention.

Chapter 3 - Methodology

The lack of available data and theory on the research subject requires a more exploratory research design. An inductive methodology, such as grounded theory, provides an open and creative approach to fill the gap of a lacking or insufficient theory (Mäkelä & Turcan, 2018) and has been chosen the appropriate framework. The following chapter elaborates on the research process and ethics in this regard.

Grounded Theory and Research Design

The Role of Theory and the Potential of Theory Building

Theory plays a particular role in research and must fulfill several expectations to be valuable: the explanation and prediction of behavior, theoretical advancement, applicability for practitioners to understand and control situations, and to provide research guidance. A given theory must be comprehensive for researchers of all career stages as well as non-specialists and offer precise hypothesis and categories for future qualitative and quantitative research (Glaser & Strauss, 1967). However, researchers often encounter, so Glaser and Strauss (1967), the dilemma of a theory-data-gap: "The result is that our forcing of "round data" into "square categories" is buttressed by a long justificatory explanation for the tentative relationship between the two" (Glaser & Strauss, 1967, p. 37). In contrast, a "fitting" theory applies the study's data and provides a meaningful framework (Glaser & Strauss, 1967). To avoid such tensions, Glaser and Strauss propose the research methodology termed "grounded theory". They argue "that generating grounded theory is a way of arriving at theory suited to its supposed uses" (1967, p. 3).

Principles of Grounded Theory

The notion of grounded theory implies both its purpose and process. The methodology's unique characteristic is its emphasis on emerging categories, following a systematic discovery process, which is more likely to provide a conforming frame for data collected from a specific research project. Diverging from logical-deductive approaches, where data is selected for the theory, grounded theory allows the emerging of theory through continuous generation and comparison of data and categories. Along with this iterative process, both data and categories undergo constant checks for relevance (Glaser & Strauss, 1967; Charmaz, 2005). Grounded theory does not prescribe a restriction on the size of a social unit. Hence, it applies to the individual up to companies or even nations (Glaser & Strauss, 1967).

Grounded theory, as an inductive approach, is guided by empirical data rather than by testing narrow theoretical concepts in real-world environments. Therefore, it is imperative to enter the field without preconceived hypotheses (Glaser & Strauss, 1967). Grounded theory, furthermore, is not restricted to a single epistemological perspective or ontological view. Instead, the classic grounded theory approach

remains open and sensitive for the numerous theoretical codes emerging from the data into a theory (Charmaz, 2005; Glaser, 2005). This procedure requires a systematic and continuous grounding of concepts in data as well as a certain amount of creativity (Babbie & Benaquisto, 2009).

Even though research utilizing a grounded theory approach is characterized by an iterative and circular process of data collection, analysis, and theory building, researchers must obey the principles of scientific work to generate credible knowledge. A guide of replicable steps is essential to satisfying this demand (Babbie & Benaquisto, 2009). Based on the guidance of Glaser and Strauss (1967, p. 28-52) and Charmaz (2006, p. 11), the process outline used in this study is being presented in Figure 2. The most critical components and their operational realization will be described in more detail in the following sub-chapters.

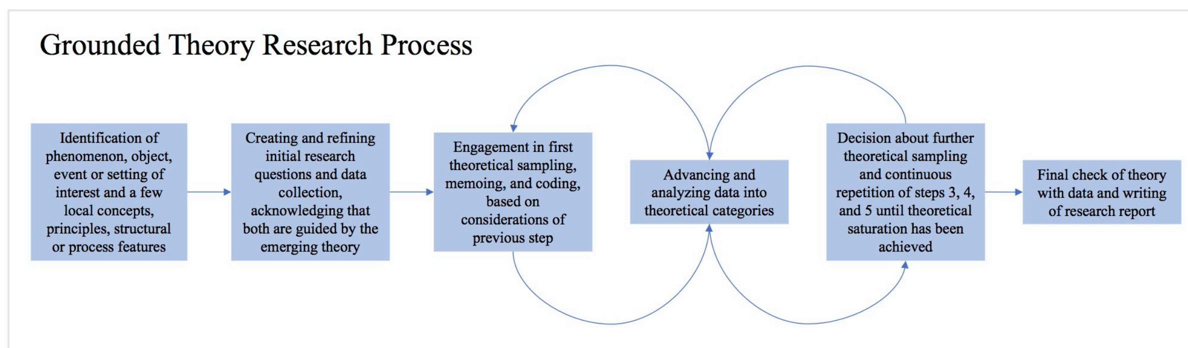

Figure 2 Grounded theory research process (adapted from Glaser and Strauss, 1967 and Charmaz, 2006).

The researcher must pay close attention to blurring the boundaries between and intertwine each step, that is, keeping data collection, coding, and analysis a joint operation and conduct all three tasks simultaneously to meet the demand for emerging theory (Glaser & Strauss, 1967).

After this brief introduction to grounded theory methodology and before proceeding to its practical implications, it appears necessary to elaborate on one specific component of conventional research designs that is missing in the grounded theory approach. A literature review is commonly being used before the data collection phase to identify and specify concepts that help to answer the research questions. Doing so, linkages, issues, and relationships can be tested and rendered, grounded in prior empirical evidence. The exploration and aggregation of results and findings from previous research can be of relevance in providing a solid backbone for the author's investigation (Eisenhardt, 1989). While this is a strong argument for conducting a literature review before planning the research design and the epistemological and ontological vantage points, it also fosters the researcher's bias, a circumstance that should be avoided in ground theory studies. Instead, literature is regarded as a different type of input (Glaser & Strauss, 1967) that can be used in on-going juxtapositions with the empirical data to "unfreeze" thinking and to generate theory that is less biased than "incremental studies or armchair, axiomatic deduction" (Eisenhardt, 1989, p. 547).

Data Generation

Theoretical Sampling

When commencing the process of investigation with a grounded theory methodology, the researcher's choice on where to enter the field is only controlled by a general idea about the theme or problem of interest. The utilization of "local" concepts provide a first judgment of the structural features, an approximate framework for the study, and guide the first data generation. However, "local" concepts are flexible and their initial utilization does not guarantee their presence in the evolving explanatory framework later on (Glaser & Strauss, 1967). Further into the research process, theoretical sampling is characterized by its embeddedness in the circular research approach of grounded theory (Glaser & Strauss, 1967) and continues until the point of saturation, when the depth and breadth of a concept seems to be sufficiently explored, and no new insights are to be expected (Strauss & Corbin, 1990).

Sampling the "right" individuals or groups in grounded theory is therefore distinct from comparative, prescriptive or verifying research where comparability is a key issue and goal. Glaser and Strauss (1967) criticize the paradigm of comparability as it holds the challenge to settle and define specific features in one group that the other groups do not entail, therefore, that excludes the latter group from the potential sampling cluster. Both scholars assert general "un-comparability" of groups as it is impossible for anyone to control the factors and forces that make them "same" or "different." Beyond this, the aim to compare groups "likely hinder the generation of theory, in which "non-comparability" of groups is irrelevant. They prevent the use of a much wider range of groups for developing properties of categories" (Glaser & Strauss, 1967, p. 51). In concert with the grounded theory philosophy, Glaser and Strauss suggest neglecting comparability in the sampling process to take advantage of a broader bandwidth of possible data sources: "Such a range, necessary for the categories' fullest possible development, is achieved by comparing any groups, irrespective of differences or similarities, as long as the data apply to a similar category or property" (Glaser & Strauss, 1967, p. 51). This does not mean that similarities and difference do not play a vital role:

> These differences should be made a vital part of the analysis, but rules of comparability tend to make the analyst inattentive to conditions that vary findings by allowing him to assume constants and to disqualify basic differences, thus nullifying their effort before the analysis. (Glaser & Strauss, 1967, p. 51).

Following this protocol, grounded theory asks for a purposive sampling of research subjects. However, as urban farms vary in practice quite substantially, depending on the geographical, economic, and political circumstances, it is crucial to delimitate the context in which this work revolves. In this investigation, commercial or entrepreneurial urban farming takes place in post-industrial, capitalist, and neoliberal cities in the Global North. Another selection criterion was the language. CUFs included in this study were fluent in English. Given the limited amount of commercial urban farms in a specific city,

often only one or two, the geographical boundaries were dissolved, and the author interviewed CUFs from different cities and countries in the Global North.

A search for enterprises was run on the Google engine. Furthermore, the author posted a request in an urban food systems Facebook group. Additional information was retrieved from databases provided by preceding studies and periodical articles (see Buehler & Junge, 2016; Pfeiffer et al., 2014). The list of urban farming enterprises that fulfilled the criteria mentioned above resulted in a total of 40 entries in countries like Sweden, Denmark, Germany, the Netherlands, Switzerland, the UK, Canada, and the United States. Of those who were contacted, 15 agreed to an interview, yet, due to time constraints or technical concerns, four cancelled and three did not reply to reminder e-mails after the initial communication. Some CUFs were already familiar to the author from previous research projects. Interviewees also functioned as gatekeepers, through whom the author got access to two more CUFs who were relevant for the slowly emerging theory. In total, the author conducted ten interviews with farmers from seven different urban agriculture businesses in Sweden, the Netherlands, Denmark, Canada, and the United States (Figure 3).

Figure 3 Cities and countries in which the interviewed CUFs manage urban farms.

Qualitative Inquiry

Qualitative data can be applied in a multitude of circumstances and, in comparison with quantitative inquiries, proves to be particularly beneficial in areas that are not yet well explored (Edmondson & McManus, 2007). Furthermore, qualitative investigation acknowledges the complexity of social phenomena, which requires the understanding of people's social life, social action, and its qualities (Strauss, 1987; Dougherty, 2002). This inquiry approach further fathoms how social reality is being constructed and charged with meaning (Mäkelä & Turcan, 2018). Using qualitative research methods does not seek and imply representativeness, but rather the identification of critical variables, experiences, perspectives, and other relevant characteristics essential for theory development (Eisenhardt, 1989; Mäkelä &

Turcan, 2018; Hooley, Wellens, & Marriott, 2012). Nevertheless, recruitment bias must and can be avoided by the researcher's careful framing of her or his sampling endeavor (Hooley, Wellens, & Marriott, 2012), which follows grounded theory propositions in this study.

The objective of this collection process was to gain a thorough understanding of the entrepreneurs' motivations about their farming business and the location they chose. Qualitative in-depth interviews were an ideal method to acquire the necessary information about the farmer's background, motivations, and experiences since they allow for a "full expression of the interrelationships between the many variables that can impact on one person's ultimate decision to start a business" (Stevenson, 1990, p. 442). As an aid for the semi-structured interviews, the author collected a set of questions in preparation for the data collection phase (Annex 1).

Skype Interview

To gather relevant data, the geographical limitation to a single city has been dissolved. However, the restricted time frame and resources for conducting this research made travels to different research sites challenging. Furthermore, urban agriculture, except indoor growing, is an overall seasonal endeavor. Therefore, during the spring months, in which this research project took place, many farmers were severely limited in time. Many researchers conducting qualitative studies with face-to-face interviews face similar constraints (Cater, 2011).

In the last years, the internet as a communication tool, together with diverse complementing technologies, has not only enabled but significantly simplified long-distance synchronous interaction (Hooley, Wellens, & Marriott, 2012). Mitigating spatial separation, these tools allow the internationalization of research without the usually high investments of time and money (O'Connor et al., 2008). Online interviews can now be efficiently conducted via instant messenger protocols, text-based chat rooms or video conferencing (Stewart & Williams, 2005; Stieger & Gortiz, 2006). Online communication services like the Voice over Internet Protocol software (VoIP) "Skype" are increasingly popular among researchers (Fielding, 2010; Sullivan, 2012), because they are free to download and offer diverse communication functions, such as audio and video transmission with two or multiple participants, calls to mobile phones and through landline for reduced international rates, and a chat for the exchange of text messages and files.

In past research projects, the use of online communication services like Skype has proven to be an essential factor to overcome time and space barriers for interviewees and researchers alike. Since the interviews can be flexibly conducted in convenient locations with familiar conditions, more potential research subjects are inclined to participate (Deakin & Wakefield, 2013). A study by Smith-Stoner and Weber (2000) showed a positive correlation between the use of Skype and the quantity of respondents. The method allowed the interviewees to participate in a study without time and money intensive travel arrangements by lowering the barrier for those who would not have been able to speak with the researcher. One of the most decisive factors was the opportunity to fit the call into their agenda.

Given the time and distance challenges in this project, Skype was, therefore, an appropriate and beneficial tool to carry out the one-on-one interviews and allowed growers to "fit" the interview into their tight schedules, consisting of family or work responsibilities. To provide the same comparable environment, all study participants were interviewed using Skype rather than face-to-face, even though some could have been met in person. This also eradicated the need for finding a quiet interview place that would be available within the study participant's time off. Private homes of either the researcher or the interviewee were generally excluded. Rooms provided by the university did not provide a decent environment and were not available or accessible when needed. So-called "third places" like cafés lack calmness and privacy, and interruptive surroundings might compromise the quality of the data generation due to the interviewee's disability to concentrate adequately (Deakin & Wakefield, 2013). However, concentration and a feeling of safety were incremental given the demanded personal experiences from the interviewees. All interviews were entirely recorded with the respondent's approval and lasted about 30-70 minutes. Interviewees were asked before or during the Skype meeting whether they prefer to use video or voice transmission.

Besides its advantages, online interviewing techniques also inhibit difficulties and challenges. While Deakin and Wakefield (2013) acknowledge the opportunity to conduct interviews in distraction-free conditions, the experience from this study shows, that interviews at home or in the office also hold disruption potential. For instance, calls and texts could pause or distract from the conversation. Besides, some participants did not feel comfortable using this technology. Hay-Gibson (2009) stress that people might encounter feelings of embarrassment or discomfort using the software or sitting in front of a web camera. Scholars like Deaking and Wakefield (2013) and Smith-Stoner and Weber (2000) come to different conclusions in terms of exclusion related to age. This study confirms that the capability of using Skype did not depend on age. While one young potential study participant declined the interview request since she has never used Skype before, another respondent in her 50s did not have problems with this communication method. Lastly, on few occasions, the limitation to audio conferencing was necessary because the internet connection was not strong enough to transmit both audio and video signals, which is also a disadvantage of online communication that Hay-Gibson (2009) emphasizes.

Memo Writing

Memo writing is an important part of the grounded theory approach and functions as a documentation tool to capture data aside from conventional data generation methods. As Breckenridge et al. (2012) assert, memos are also helpful for the researcher to reflect one's experiences, assumptions, and pre-existing knowledge and to compare these with the data retrieved from the interviews. Throughout the research project, about 15 memos were being produced and utilized in the analysis and comparison process.

Data Analysis

Data Management and Coding

The author transcribed all interviews entirely. The availability of complete documents allowed a constant comparison process through reading and re-reading as practiced in grounded theory. Doing so, the author could delve back into the meanings of the CUFs and become sensitive to their experiences and compare with the other respondents' narratives.

The collected data was qualitative, which asks for a systematic data analysis process to ensure validity. The most prominent strategies are being formulated by Strauss and Corbin (1990), which inhibit open, axial, and selective coding. Similarly, Charmaz (2006) proposes a process of coding in two phases – initial and focused coding. Since both approaches are quite similar, but Charmaz' proposal is more simplified, her procedure has been followed. Strauss and Corbin (1990) furthermore recommend to code first by paragraph and then by sentence. Emerging categories and themes from one transcript were recorded (Babbie & Benaquisto, 2009) and utilized for the coding of the following transcript. Already existing categories could then be extended by new themes (Stolhandske, 2001).

The computer program N-Vivo, a qualitative data management software and a standard tool used in the social sciences, has been utilized for the data management and the successive data analysis. N-Vivo simplified the storage and coding of the interview content. At the same time, the mono-dimensional work surface of N-Vivo, as with other computer programs, was limiting when entering the stage of concept and theory formation. This process asked for more creative thinking. Using tools with haptic properties, such as pen and paper, enriched this phase of analysis. Codes and categories arising from each interview were gradually written on post-it notes, clustered or connected through arrows or sketched in a notebook.

Comparative Analysis

A crucial component of theory generation in Glaser and Strauss' methodology is the process of "constant comparison" or the general method of "comparative analysis" (Glaser & Strauss, 1967, p. 21). This means that the researcher continually compares the characteristics, that is, similarities and differences, which yields properties for the construction of categories. In this regard, theory generation is focused towards on-going development rather than the finalization of a static, product-like explanation (Glaser & Strauss, 1967). This type of analysis, embedded in the iterative and circular process of grounded theory, continues until theoretical saturation has been achieved, that is when new empirical input will likely lead to only marginal modifications in the overall emerged theory. (Glaser & Strauss, 1967).

Limitations and Critical Appraisal

As with any research carried out, the researcher must reflect on the chosen research design, methods, and tools utilized, as well as her potential biases and vantage points. The following segments will provide a critical review of the methodological choice, the practical and ethical limitations and considerations, and a contemplation on the researcher's position.

Generalizability, Validity, and Methodological Questions

Grounded theory methodology, so Glaser and Strauss (1967), does not ask the researcher to subscribe to a definitive and predetermining ontological and epistemological doctrine. Instead, it enables the explorative investigation, unbound from any, potentially limiting, philosophical stance and organizes the emerging theory by generating categories and codes in concert with a multitude of existing theoretical concepts. However, specifically within social science research, Grix (2002) argues, it is more and more expected to make the conceptual vantage point explicit before the investigation. In this regard, grounded theory defies with common grant proposals, where potential funders must be abreast about the adopted philosophy. However, the university context, in which this work has been composed, provided inviting pre-conditions for methodological experimentation, without the pressure associated with grant proposal processes.

The second important consideration concerns generalization and validity. Even though Glaser and Strauss underscore that "one of the requisite properties of grounded theory is that it be sufficiently general to apply to a multitude of diverse situations within the substantive area" (1967, p. 237), the small sample numbers make a generalization of the research results difficult is not impossible (Bryant & Charmaz, 2007). While this is a general dilemma in qualitative research, Patton (1990) asserts, that the chosen data collection *technique* is just as important as the *sampling design* for substantive theory. Some researchers address this challenge by using adjacent work on the topic. Douglas suggests, that "the grounded theorist […] must carefully consider the particular findings of others and their transferability and generalizability on a more case-for-case basis" (2004, p. 64). This suggestion is in concert with Glaser and Strauss (1967), who promote the use of "anecdotal comparison," a tool, which uses "own experiences, general knowledge, or reading, and the stories of others" to gain and compare data from other groups (p. 67). Caution must be applied here, though. Bryant and Charmaz (2007) accentuate that secondary sources ought to be treated with care and critical appreciation to prevent bias.

Lastly, appropriate terminology and interpretation must be recognized as crucial in guaranteeing high-quality research. In their hospital studies, Glaser and Strauss (1967) encountered linguistic challenges that could equally be extrapolated to other inquiry types. Such barriers occurred regarding profession descriptions, that is, "doctor,“ "physician,“ "therapist“ or "practitioner“ were often used interchangeably. Similarly, in this study, the term "entrepreneur" has been perceived differently. For instance, while

one CUF mentioned in the interview that she did not have entrepreneurs in her family, she corrected herself in an ensuing e-mail exchange, mentioning, that she was not sure whether being self-employed would be equal to entrepreneurship. Therefore, the author decided to extend the terminology used in the semi-structured interviews, by accompanying "entrepreneurship" with similar vocabulary like "self-employed," "having one's own business."

Ethical Considerations

Since participants disclose much personal information, confidentiality was of utmost importance. Therefore, the author utilized several mechanisms to ensure the respondents' anonymity and awareness about their rights.

The standard practice in social science research is the use of informed consent forms which include remarks regarding intellectual property, right to withdraw, unintended deception, the accuracy of portrayal, confidentiality, and financial gain (Plummer, 2001). Both parties sign these forms before the interview. The online interviewing technique, however, limits the ability to do so. While some researchers suggest to use hard copies of consent forms even in the case of online research (Hamilton & Bowers, 2006), others argue that more emphasis should be put on the process of informing the study participants about the objectives of the investigation and the interviewees' rights rather than the form. That is, whether informed consent is gained through a paper or digital document or a recorded discussion before the interview is inferior (Hooley, Wellens, & Marriott, 2012). In this study, the participants received a consent form one day before the meeting. This time was chosen strategically, so they had sufficient time to familiarize themselves with the research outline, yet close enough to the interview to still have the crucial points in mind. Participants were briefed about the purpose of the study and their rights to withdraw during and after the data collection.

The keep the anonymity of the respondents, all names mentioned in this work are pseudonyms. It was taken care that names do not disclose the origin or age of the respondents and impede the ability to associate them to a specific context. Names are female and the pronoun "she" refers to all CUFs, regardless of their actual gender. Appendix 2 lists pseudonyms and interview dates for a better overview. Furthermore, once the thesis was completed, the respondents were given an opportunity to read and review the results and ask for changes if necessary.

Reflexivity and Situating in the Research Project

In qualitative research, a critical reflection on the researcher's position is crucial (Charmaz, 2006). One of the key opportunities (and key challenges) in grounded theory research is the reliance on indefinite openness and creativity for the construction of new categories and theories. Nonetheless, Strauss and

Corbin (1998) acknowledge also the relevance of the researcher's pre-existing experiences for the process of being creative: “The theories we carry with us in our heads inform our research in multiple ways“ (Strauss & Corbin, 1998, p. 47). Since it is difficult or almost impossible to withdraw these experiences, the researcher must at least remain sensitive to this limitation and communicate her values and assumptions to the reader. As Breckenridge et al. (2012) emphasize, memos are valuable tools that aid in this process.

For this study, several farmers have been contacted who were known to the author before the study from other research projects. Therefore, his might have created preconceptions or expectations on both, the researcher’s and the respondent’s end. Also, the fact that the interviews could only be carried out in English must be declared as a limitation and potential bias. Furthermore, the finite time with the informants and the geographical distance, bridged by video and audio calls, might have decreased the trust of those formerly unknown in comparison to known participants.

Lastly, the author has been engaged in the domains of urban agriculture, urban food systems, and rural-urban linkages in from a personal and an academic perspective. Anecdotes from informal and formal encounters with actors involved in and working with respective subjects build a foundation of knowledge, expertise, and familiarity. While this holds benefits in approaching the field with a better understanding of relevant actors and concepts from the outset, it might have also limited a higher degree of abstraction.

Chapter 4 - Results and Discussion

CUF blends multiple aspects of rural and urban practices. Hence, the respective profession should not be regarded as a conventional entrepreneurial endeavor. The objectives of the upcoming chapter, which is separated into two distinct subchapters, are to explain the drivers behind the occupation of CUF as an entrepreneurial activity and the role and relevance of the city. The first subchapter describes the studied CUFs, which depicts their educational, professional, and entrepreneurial capacities, and the factors that inspired them to work with urban agriculture. The successive subchapter elaborates on the role of the city in the CUF formation. Even though the subchapters are divided for the sake of overview, it must be emphasized, that both build on each other and must be regarded systemically, rather than linear. The literature on entrepreneurial development and locational choice, which has been postponed avoiding research bias, is now being brought into the discussion. Hence, both subchapters are enriched by a brief theoretical input that enhances the theory development. Finally, substituting a more extensive and elaborate portrayal of each CUF interviewed at this point, the matrix in Appendix 3 proposes a more concentrated and comparative illustration.

Characterizing the CUF

A growing number of people is sharing awareness and concern about societal and environmental issues. What distinguishes CUFs, however, is the path they chose to engage commercially within these realms.

Gartner's theory (1985) describes an interrelation between different factors that foster the generation of entrepreneurial activity by forming a new business: the entrepreneurial process, the individual personality traits of the given entrepreneur, the external environment, consisting of short- and medium-term conditions that require the entrepreneur's adaptation capacity, and the organization, that is, the type of institution the entrepreneur aims to engage in. Similarly, Sriram, Mersha, and Herron's (2007) model of entrepreneurship, initially developed for investigations on urban entrepreneurship among ethnic minorities in US inner cities, proposes a similar theory. Here, a combination of traits and values ("motivation"), and aptitudes and learning ("skills"), lead to entrepreneurial behavior and subsequent achievement if sufficient resources continuously support this behavior before the formation and during the business development phase.

A plethora of research has been conducted on the motivations of entrepreneurs, listing both pull and push factors, such as autonomy (Roberts & Wainer, 1971; Watkins, 1971; Stanworth & Curran, 1973; Storey, 1982; O'Connor, 1983; Cromie, 1987; Kirkwood & Walton, 2010, 2014), frustration with the last job or career (Susbauer, 1972; Rothery, 1977; Brockhaus, 1980; Weinrauch, 1980; Cross, 1981; Gibb & Ritchie, 1981; Storey, 1982; Murray, 1983; Cromie, 1987), encouragement by and inspiration from the close family or friends (Freire-Gibb & Nielsen, 2014; Kirkwood & Walton, 2010, 2014), inheritance (Cromie, 1987; Kirkwood & Walton, 2014). Specifically in ecopreneurship research, "green values" (Anderson, 1998; Kirkwood & Walton, 2010, 2014) and meaning (Mincyte & Dobernig, 2016) have been identified as decisive. However, these theories do not provide indicators for engagement in farming entrepreneurship activities and are not exhaustive when it comes to the personal geographical and educational background. Yet, concerning the categories that emerged in the grounded theory process, they do offer interesting points of juxtaposition. The following paragraphs provide a more in-depth look on the characteristics of CUFs which enable the reader to recognize similarities, differences, and extensions to these theories.

Growing the "Farming Entrepreneur" Spirit

Awareness of food issues and the opportunities to work in agriculture arose differently in every case. Courses on societal change and food sovereignty, along with work excursions to countries in the Global South (Anna), university courses on the topic of sustainable cities (Iris), backpacking trips and short-term jobs on farms (Lina, Paula) count as sources of inspiration. Furthermore, awareness also rose through a landscape engineering education, together with experiences from close family members in the agricultural sector (Carla). Iris initially just wanted to grow basil for her pesto and "found a place close

to where we live and started there with 20 square meters of land and went crazy for a few years." More inclined to community food systems and issues related to food security, Helena became interested in food production and community gardening while she was running an emergency food pantry. An operating urban farm in another city introduced her to aquaponics farming, which she implemented enthusiastically in her community gardening and food pantry project, and later in her CUF business. Susanne, whose mother is from a farming community, has always been interested in agriculture but did not know how to approach the farming profession. As an expat, she worked for an NGO, mainly keen on agricultural issues. A small private garden lot served as a substitute until she would establish her urban farm later. The only indoor farmer interviewed explains that her interest for vertical farming has been inspired by her curiosity for solving food issues, and "the futuristic perspective […] and the idea of being able to grow food anywhere and anytime, using new technology. I never thought of becoming a traditional farmer" (Karen).

Karen's last thought, who herself has an urban upbringing, is being shared by many CUFs, even though most of the them are raised in rural areas or small towns (Iris, Carla, Paula, Elisa) or on an island (Lina), where agriculture is prevalent. Among the studied CUFs, some also grew up in middle and large sized cities. These were brought up in mainly blue-collar neighborhoods (Helena, Karen). No CUF has entered urban agriculture with a significant farming background or in-depth education, neither in conventional nor alternative agriculture[4]. Nevertheless, some CUFs knew gardening from their parents or grandparents, who cultivated decorative plants or vegetables and fruit for their consumption (Susanne, Elisa, Lina, Iris), as well as from cousins and uncles who still run farms (Carla, Karen, Susanne). Additionally, some CUFs participated in agricultural programs for children (Iris) or followed obligatory gardening classes in a Rudolf-Steiner-School[5] (Paula). In this sense, some CUFs encountered agro-ecological practices early on in their lives.

Those who actively experienced the rural life in their childhood, where agriculture is more prevalent, seem to have very different perceptions of the farming profession. Paula explains her rationale for not becoming a farmer:

> I remember that people asked me when I was younger if I didn't want to become a farmer, but because I grew up in the countryside and I saw the farms… they looked like factories, I mean, industrial, and grey and there was a lot of concrete and cows, that where kept really sadly. So, I didn't know an alternative to that. I thought that's what it's like being a farmer. I didn't want to do that. (Paula).

Susanne is the only CUF, who did not grow up in the countryside herself, but has rural family relationships, and was not reluctant to becoming a farmer per se:

[4] It is questionable, however, to what extend this knowledge could have helped, as the type of farming that CUFs practice often varies from conventional agriculture.
[5] Rudolf-Steiner-Schools, also referred to as Waldorf schools, provide alternative education methods, that include environmental education.

> I liked the gardening, but what I was really fascinated in… my mum was from [region], which is a big ranching community. Very large scale with a huge ranch and they drove tractors and rode horses. I really loved that lifestyle. Just having all that land and growing food. And I had this idea that I wanted to be a farmer, but I really had no idea how to go about that. (Susanne).

Originating from a city, she followed the same path as most young people, who attend university and pursue graduate school or jobs. After an almost two-decade-long career in a large european city, she aimed to pursue farming professionally, but faced constraints for several reasons: first, the opportunities the city offered for her young family were more favourable and second, urban agriculture was not widespread at that time and difficult to realize. Even though she did have significant knowledge from her gardening activities, she decided to excel those skills and later took advantage of the slowly rising popularity of and awareness for urban agriculture.

Turning awareness into business

Becoming a CUF and following a somewhat unusual career path was not foreseeable. Most CUFs were full-time or part-time employees in private and public, small-scale and multi-national organizations such as NGOs, banks, or retailers, and in research. Likewise, younger CUFs who were still on the educational track or had just graduated followed side jobs in cafés, bars, and restaurants.

The reasons or experiences that eventually fostered the decision to turn their interest into urban farming are diverse. Helena, who ran an emergency food pantry with a community garden, decided to develop the community farming idea further

> [I] then decided to start my own farm as well as go back to school and complete the original plan, which was to get an urban planning degree. But because of my experiences with the food pantry, I changed my focus from economic development to the design of community food systems. (Helena).

Carla got to know her co-founder through a job at a university. During this employment, a travel grant enabled Carla to attend urban farming conferences in New York and Seattle, through which she acquired inspiration for her future urban farm. After a planning period, both founders received their first funding, which led to the company's establishment. What fostered Anna's idea to grow more professionally, arose from her first gardening experience in a private garden lot. Gradually, she and her friend developed the desire to larger quantities, which was followed by the participation in an extensive farming course at a specialized school. Just like her CUF partner, Iris aimed to combine her practical and theoretical knowledge from her studies in Urban Human Ecology, reaching beyond recreational farming (Isabell, Iris). Elisa, after she had finished her one-year training in permaculture during a sabbatical, read about

a business incubator program in the local newspaper and joined the program to grow for her consumption. Once the test phase of one year had passed, she was being asked to commercialize her activities. After her initial disappointment, since she did not want to make money with the food she produced, she changed her mind and founded a business together with adjacent CUFs from the same project. Similarly, Paula first wanted to grow for self-consumption, yet, during her permaculture course, she discovered her passion for growing food and teaching urban citizens. Lina was studying at the time of the business establishment and wished to gain more practical experience, which she missed in her university courses. Karen's attention for his type of farming business was being raised during a time of unemployment when she attended a conference and met an inventor of a vertical farming growing system. Like many others, who were never planning on or even considering becoming a farmer, Karen acknowledges that his occupation in CUFs is based on "a series of incidents and events that got me to where I am."

Similar to the CUFs' non-farm family background, their training was not or only remotely related to the growing occupation. Subjects studied, either as single courses, or whole programs, consist of economics, computer science, human ecology, theology and religion, behavioral sciences, landscape engineering and architecture, social work, languages, agricultural economics, urban planning, social anthropology, philosophy, psychology, and printing. Not all CUFs graduated, but either quit for good or changed to a different field. Occupational or professional education, as well as courses on specific topics, in non-university institutions, also belong the learning opportunities CUFs took advantage of. Such programs comprise of photography (Lina), or classes on people's movements, change, and food sovereignty, accompanied with work excursions to countries in the Global South (Anna).

Yet, CUFs almost always entered the business with some agricultural skills. In many cases, the relevant farming techniques and knowledge had been acquired through one-year programs in specialized schools, which focused on organic, (Elisa) bio-dynamic or permaculture farming (Anna, Susanne, Paula), as well as internships and summer jobs (Paula). Self-study with books and online tutorials (Susanne, Iris, Helena, Karen), and "trial-and-error" (Helena, Karen) were also learning strategies. An exception is Karen, who planned her business idea before acquiring the relevant skills through self-study and expert input.

Oftentimes, not only the realization of a specific idea lead to the foundation of a CUF, but also the lack of career plans (Anna, Paula), dissatisfaction with the current job (Iris), and the pull-factor "to walk the talk" (Iris, Isabell) (which will be further explained in the succeeding chapter) were essential co-factors for the search for alternative occupations within an entrepreneurial sphere. However, it must be emphasized that these reasons were not necessarily the cause for entrepreneurship, but instead additional driving factors in the resolution to become a CUF. The cross-case review among different CUF reveals that not everyone was moving to the CUF job due to dissatisfaction with the prior position. For instance, Elisa and Susanne spoke enthusiastically about their former professions. Indeed, autonomy is a major motivator. In some cases, this quest for independence is grounded twofold: a fundamental aversion towards authority and the desire to realize own ideas instead of working for someone else (Isabell, Iris, Paula, Karen).

Starting a business has not been inspired by role models. Very few CUFs have close social relationships with entrepreneurs, both in their family or among friends (Elisa, Anna, Paula, Susanne, Isabell, Carla, Lina): “something like that didn't even occur to me, that I could do something like that on my own” (Anna). In fact, CUFs perceive the step to commercialize their growing activities as “big decision,” since role models were absent in the own social environment (Elisa). Those, who have other entrepreneurs in their social environment like Iris or Helena, do not perceive this circumstance as influential in their decision to start a business[6].

Not retrieving inspiration from role models, however, shall not suggest that CUFs have never engaged in entrepreneurial activities before. Anna, for instance, has been living in South America for two years, where she founded a café, after she had realized that

> behind everything, small or big, a company, a business, there is a person and that person might as well be me. […] you don't have to be an engineer, you don't have to be a lawyer, you don't have to have financial blablabla or education for ten years. It's pretty easy: you have to make more money than you spend and then it's ok. That's really basic. (Anna).

Likewise, Iris was engaged in managing an innovative urban farm before, where she held sheep and invited urban citizens to grow food:

> That was an idea I had with another guy, and then we sort of did it. And I believe that that experience made me think: [once you’re] having an idea, it is not that impossible to do it. Many people just don't dare to do stuff because they I don't think they have the, I don't know, the know-how, but maybe even not the belief in themselves that they can do something about it. I think I got that from that experience and had that kind of motivation and self-belief going into my own company. (Iris).

Worth highlighting is her statement about self-consciousness, which raised her confidence to found another urban growing project. Helena reports that she has always engaged in entrepreneurial activities, like independent direct sales and the foundation of an internet café.

However, while some CUFs wanted to turn their hobby into a full-time job (Susanne, Isabell, Iris, Anna), offer community services (Helena), pursue a meaningful work by developing new growing techniques (Karen) or tackle food issues (Carla) others did not adhere to this goal from the beginning (Elisa, Paula), but had to grow slowly into this rationale which, by now, makes them proud.

[6] It is not advisable to build causal relationships at this point, though. Whether CUFs with entrepreneurs or self-employed family members are more likely to become more commercially oriented farmers and have better economic prospects must yet to be determined and studies.

Supporting Factors

Founding and managing a CUF business with its complex agricultural practices is not an easy endeavor and requires specific knowledge as well as the skills to operate an enterprise, which does not always exist right from the start (Atkins and Bowler, 2002). Susanne mentions that the creation of a crop plan is of utmost importance, yet very challenging. To complete this essential task, she and her co-founder are helping each other. Other cases show that farmers can also complement each other: “I am very bad with numbers, for example. She is very good with numbers and […] planning and stuff like that. She has a good mind. I am very impressed” (Isabell). Some of these tasks can also be taken over by external consultants, advisors, and incubator programs (Karen, Elisa, Anna, Lina, Iris, Isabell), as well as parents (Iris) or siblings (Karen). The psychological support, that is, encouragement in times of demotivation or failure and the ability to discuss and work on ideas together (Anna, Isabell, Susanne) are crucial, too. Several CUFs emphasize that they would not have started the enterprise on their own, as they did not feel experienced enough to run a small-scale farm and take full responsibility (Lina, Susanne, Elisa, Iris, Isabell). However, the latter has also been mentioned as an advantage by Karen, who enjoys the full control about strategic decisions.

Among those CUFs who have co-founders, partnerships are characterized by non-hierarchical relations. Conversation on the same level is prioritized to authority: “But I don’t see him as my boss. That's the difference. It's a dialogue” (Isabell). Indeed, hierarchy or patriarchy has already led to the dismissal of a potential partnership (Karen). It is, therefore, crucial to find the “right” partner. In this regard, the city is an ideal place to find like-minded people and test the compatibility and resilience within a CUF business. Herewith, the CUFs distinguish themselves clearly from the rural farmers who mainly lead family farms, where partners are often from within the family.

CUFs aim to generate revenue from their farms but confess the difficulty to realize this solely based on food provision. For instance, Carla’s business creates income through visitors or the own restaurant, fostered by high media attention. Some CUFs furthermore receive financial aid from public sources. For instance, Anna and Elisa obtained a grant from the municipality, which supplemented their income for one year. Helena has been supported by a local community center to hire young interns from the neighborhood to teach them farming and gardening skills.

Since few CUFs can make a living from the food they sell, additional financial support from parents (Karen) or partners (Iris, Anna, Elisa) is often required. The supplementation of income through other jobs is in most cases a prerequisite for the continuation of the CUFs businesses. For some CUFs, the proximity to the city is therefore vital to supplement their income from farming, for instance, through bartending, waiting, vending, or office jobs. On the other side of the scale, some urban farmers also hold positions that are location independent, such as editing. Living in a shared flat in the city is also a way to decrease expenses (Karen). For Helena, having a side job was instead a strategic decision to accomplish three distinct goals:

> I do need a side job and I somehow always kind of factored that in. One goal is to prove that this type of business can be viable. The second goal for me is to be an employer, and I am more interested in earning enough money to pay somebody to work on the farm than I am earning enough money to pay for myself. And the other thing that I have started to realize over the next couple of years, especially with the education that I've gotten, I can grow the farm faster if it doesn't have to support me. (Helena).

She recognizes, however, that her dependence on many different activities to secure her income leaves less time for neighborhood engagement, which she rates as highly relevant to her.

Remaining an Urban Farmer

Several driving factors influence the decision to become a farming entrepreneur. Yet, what should not be forgotten are those factors that make CUFs remain in this field despite diverse challenges.

Food and Connection to Nature

Urban agriculture is an endeavor that requires a sense for nature and inclination for practical work. However, CUFs are not indifferent about the specific type of environment they work with but commit themselves intentionally to agro-ecology. CUFs like Elisa emphasize that growing food according to her standards, in concert with nature, is one of the biggest drivers. Likewise, Anna points out:

> But what really drives me is growing the vegetables. I don't know. It's hard to explain what it is. It's a lifestyle, you know, where you enter the circular way of being instead of the linear "just going forward" all the time. It connects you to nature; it just makes me feel very good. Very happy. And the vegetables are much yummier, and I want my kid to have good food. (Anna).

Here, Anna articulates another influential factor, namely, being connected with nature and working outside with plants, which she shares with Isabell. Living a "circular lifestyle" is furthermore of great importance to Susanne. She underlines that she derives pleasure from her work rhythm following the four seasons. The challenges she encounters concerning unpredictable weather conditions and the inherent difference between the on and off season labor, even appear to foster her drive, rather than diminish it. She also mentions the ability to learn continuously, as well as developing and using senses she did not discover in a prior job.

Isabell provides an interesting narrative, explaining what makes this connection to nature so imperative. She points out the superiority of ecological processes and human kind's dependency on them, and construes ecology as "real" and "true." Therefore, working within these domains of "basic" processes renders their work "real" and "true," and less abstract than social constructs:

> […] for me, the soil is the capital, the food we grow is my capital. It's the absolute truth, compared to maybe the stock market, where we deal with air and hope and lust and grief. It is air, and it's not connected to anything. It's not based on anything. Except when you're rich, then your wealth is grounded in gold and Picasso pictures. (Isabell).

This logic forges ground for a "meaningful" career path: "[…] that's part of my worldview. I choose this because it's logical and I have an interest in it. You try to create meaning, wherever you find it" (Isabell). Finding meaning in the work they do, in fact, is being shared among almost all studied CUFs and expressed both, explicitly and implicitly.

Yet, this pursuit of "real" values and meaning also engenders expectations that are immanently associated with the individual's worldviews. What drives this CUFs can just as well become a trap: "But this is, it is existential for me because this is where I find roots. Which means I want it to be true because otherwise, my whole life falls apart" (Isabell). On one side, her affection fosters ecopreneurship, but can likewise mature into a potential for increased pressure or even burn out, since the goal of the company is firmly bound to the individual's dreams and personal world perspective. For example, Carla is concerned that, in the case of closure, she would have to fire her staff and return to a "normal" job.

Pride and Positive Feelings

While some of the causes as mentioned above could also be found among recreational gardeners, CUFs reveal what they find compelling about the commercial production and distribution of their produce:

> If I don't grow food on the field, I can grow a little bit here on my garden, but not enough. […] I am very proud of the fact that you actually work in the field to feed 30 families, which is a lot. It's not many, I mean, [city] is very big. But at least you see that in this little place… because it's 2.000 square meters, which is nothing, and you can feed 30 people. If you would do it more efficient, especially with greenhouses, then you can cover ten months a year, which is amazing in Sweden with quite a Nordic climate. So, […] that remains for me a very very big motivation. (Elisa).

This signifies that the economic exchange and the ability to provide many people, other than family and friends, with high-quality produce, are essential sources of satisfaction retrieved from this profession. Likewise, the connection with CSA shareholders and the feeling of collective action is mentioned as driving force (Anna, Susanne). Susanne further explains, that her way of growing not only produces food as a by-product, like in many social projects, but can feed urban families.

CUFs and their Relationship to the City

Cities are dynamic spaces of economic experimentation and creativity (Scott, 2000; Florida, 2002). Concerning alternative food systems, which includes CUFs, cities provide a place, space, and scale where alternative or "different" food geographies can emerge due to increased demand for respective products and services (Donald & Blay-Palmer, 2006). However, as primary sector entrepreneurs, (Florida, 2002a, b; Wojan et al., 2007; Storper & Scott, 2009), they pose a rather rare phenomenon in cities. Farming, specifically in cities, is not comparable to conventional entrepreneurship as it depends on particular spatial prerequisites. In their choice of location, CUFs must yield ground and adapt to confining environmental conditions, zoning laws, and hygienic concerns. In addition to the low profitability, CUFs must often overcome much more complex spatial challenges, which raises the question as to why CUFs cultivate food in cities rather than the outskirts like conventional farmers.

In the context of conventional entrepreneurship, Mueller and Morgan (1962) argue that "[…] the assumption of profit maximization is too restrictive for an analysis of location decisions" (p. 204). Proximity to the private residence is, according to Dahl and Sorensson (2009), often a more important factor in the entrepreneur's locational choice. However, this idea explains only the distance between home and office. Alternatively, Greenhut's (1956) concept of "psychic income" takes the personal determinants into consideration, which favor specific desired life standards, even though the location does not necessarily promise the highest income achievable. Applied to entrepreneurship, this theory suggests that founders prioritize venture locations suiting their personal preferences and expectations rather than generating the most monetary profit. Similar theories in human migration also provide compelling vantage points. For instance, the economist Sjaastad (1962) implements "non-money costs," a concept that is principally similar to Greenhut's psychic income. Sjaastad's theory contains two types of non-money costs: "psychic costs[7]" and "opportunity costs[8]." These two concepts could be summarized as "location-specific capital" (DaVanzo, 1981), which describes factors that "tie" an individual to a specific area or place (p. 116). This type of capital is often used to explain why people do not move away from their location and "refers both to concrete and intangible assets whose value would be lost or would steadily diminish if the person moved somewhere else: for example, job seniority, an existing clientele (as in the case of a well-regarded doctor or carpenter), a license to practice a particular profession in a certain geographic area, property ownership, personal knowledge of the area, and community ties and close friendships." (DaVanzo, 1981, p. 116).

A more food producer oriented example is being provided by Ilbery and Kneafsey (1999). They studied Welsh, Scottish, and Irish people who enter local alternative food networks without an agricultural background, so-called "incomers" and "blow-ins." This group of people establishes their businesses and living places consciously in areas that, for them, provide the desired quality of life. In concert with

[7] Costs associated with negative feelings about moving away from social relations and familiar milieus.
[8] Money that could have been earned while organizing a new employment.

Mueller and Morgan (1962), Ilbery and Kneafsey (1999) characterize these entrepreneurs as “profit sufficers“ in comparison to “profit maximizers.“ As “profit sufficers,“ the individuals are content with lower incomes in exchange for the opportunity to pursue environmental goals and act according to their values. In the process of starting a farming business, respectively, making decisions on a place of living, market and lifestyle considerations merge. Principally, these farmers realize what Guelke calls “form of life“ (1989), a concept that it is being used “in a geographical context and is intended to convey a set or combination of elements that together give a specific pattern of living its distinctive character.” He further explains:

> The idea of a form of life implies the concrete pattern of activities that are generated by people living their lives in specific historical and social conditions and the meanings these conditions have for them. Many of these patterns of activities are associated with people making a livelihood, but the concept of ‘form of life’ is not restricted to economic activity, and seeks to incorporate the traditional concern of human geography to understand human activities in their physical and regional settings. (p. 291).

As the following pages will show, some elements found among CUF correlate with these theories. What they lack, however, is a more comprehensive explanation of the negotiation processes that occur and how a location decision is being justified in detail.

The “Urban” as Potential

Physical and Institutional Infrastructure

One of the reasons why growing in cities is a viable and attractive perspective is the accessibility to land to grow on of decent size in comparison with the countryside:

> The main reason is because you get the opportunity to start small. Out in the countryside, the land is divided already, among all the other farmers. And there is not one farmer who says like: ”Ah, if someone wants some land, please come and here you have it,” you know. […] I would never have started on a big piece of land because you don't know what it means “being a farmer”. (Elisa).

Susanne also values the chance to grow on a small and yet commercial scale:

> Firstly, it was small community gardens and even just helping people plant on their balconies or helping restaurants grow food or setting up school gardens, and now it's a much bigger project which is this CSA. […] And now I feel like “Ok, this is about the scale that I was aiming at, to begin with” and it's still very urban farming cause it's within Amsterdam's city limits, but it's a huge amount of space that we have out there. (Susanne).

Often, reasoning the urban location is accompanied by pointing to the drawbacks of the countryside. Isabell explains that she grows in the city

> Because the countryside is very un-ecological as well. People are far away from each other. I mean I grew up in the countryside, and you need a car in the countryside. You need it. In the city, I have no idea why we have cars in the city. (Isabell).

Elisa mentions that she would not grow on agricultural land in the countryside as it is "polluted with chemical stuff," referring to fertilizers, pesticides, herbicides, and fungicides to foster plant growth and protect the crop from destruction through pests. In contrary, Elisa describes the land that she and her co-founder grow on as fertile, safe, and productive. However, such a condition is highly context-dependent. While this CUF business benefits from its remote and overall un-impacted urban location, other CUFs have more difficulty finding an appropriate place to grow outdoors in the city. Specifically, in post-industrial cities, which are subject of this study, urban land is often highly contaminated due to prior industrial activities without proper regulations or lax enforcement (Susanne). Producers who grow on or in buildings do not encounter contamination or lack of empty spaces but institutional and architectural barriers. As this type of growing is even more innovative, zoning codes often do not permit agricultural activity in buildings or are legal grey zones. Negotiations with city councils and building owners are required, who often have conflicting opinions about the CUF venture (Karen). Similarly, Carla's rooftop farm is being scrutinized by engineers, as the capability to carry a farm safely without detrimental impacts on the building substance is being questioned. However, institutional and societal changes can also open doors, such as in the example of Susanne who benefited from the arising favorable conditions in Amsterdam for urban farms. Hence, CUFs can also be regarded as pioneers who pave pathways for future farming entrepreneurs.

Even though there are considerable costs associated with the establishment of an urban farm, specifically when it involves buildings, the investments required for a rural farm are much higher and reach beyond the financial capacities of CUFs (Elisa, Carla). Even in cases where sufficient monetary resources would be available, it is argued that lower investments in the city reduce the risk for financial distress in case of failure (Elisa).

The physical vicinity, from urban farms to urban customers, is often mentioned as advantageous. Anna emphasizes this benefit:

> Well, the biggest advantage really is the proximity to your customer base, and since it is - for [country] - a rather big city, there are a lot of people. There is always a way to sell your vegetables, and you won't have to deal too much with logistics. (Anna).

Her remark is particularly thought-provoking because she acknowledges not only the lower physical distance but also a higher quantity of potential customers. Helena extends this: "It's where I have access, and it's definitely much easier to manage. Time spent driving to a farm site is time I am spending not farming or not at home. So, I think it is important in order to maintain my sanity to be close to home."

The proximity between farm and residence of a CUF is furthermore important concerning the business model and required (or desired) side occupations:

> Most farmers who are in the city, they are driving a couple of hours of round trip to the sides they are growing on. But they've got a different model because they are supporting themselves from their farming. That's all they are doing. But with me, and all of the stuff that I am involved in, I need to keep my farming activities as close to home as possible. (Helena).

From a more socially oriented perspective, rather than a personal or business view, Iris explains that she and her co-founder envision having an urban farm located in every urban neighborhood since easy access and convenience are regarded as crucial factors in behavioral pattern change.

Lastly, the efficient use or re-use of urban resources, land, and nutrients is furthermore a motivation to establish a CUF in urban rather than in rural areas (Helena, Isabell). Moreover, dormant or abandoned urban land is likely to cause detrimental effects on the community (Helena). Accordingly, CUFs not only strive to play a role in the organic, but also in the human urban metabolism.

Politics, Activism, and Spill-Over Effects

Systems critique, change, and transition, activism, and political engagement are additional, often-pronounced drivers:

> Growing food is obviously really fun, but that also has everything to do with if you want to be part of the transition movement do you believe in a different kind of society. More local and organic and... It just feels like growing the food is at the core of all that stuff. (Anna).

Being not only part but being active is the core of her argument. Likewise, Isabell emphasizes that she does not want to wait for change:

> I think we have to do it. We have to go out and find space, start growing and base this discussion on the practical space. If we are going into an office and talk to them, they are like: “wow, that sounds beautiful,” nothing happens. Absolutely nothing happens, which I understand. (Isabell).

Her co-founder Iris adds:

> [We] have been so tired of just talking about it and studying on how to create a sustainable city, but no one actually dares to do something about it. So, that has always been the vision or the motivation to create a good example. I think the activist part, to actually do something and not just talk about it is really an important aspect, for sure. So, I think,

> both, being an activist but at the same time, being a good example, inspire others to do it themselves. (Iris).

She links her drive to encourage people by providing a good example with her educational background in behavioral sciences. Likewise, Helena's goal is to create a proof of concept that encourages more people to establish an urban agriculture business themselves by duplicating and replicating the profit model, which will help the movement to grow. She points out that, in a free market economy, a bullet-proof and profitable business concept is the only way to increase urban agriculture's momentum.

CUFs also acknowledge their role in and their contribution to this movement: "My job is not to make our transport system anything better, but I think my job is to maybe make cities better than... and to connect people through food and to produce ecologically sound food" (Isabell). Helena fills the role regarding community development. Her concern about peak oil led her to add community capacity building around food to her entrepreneurial, political, and activist agenda. She focusses on the transfer of skills and produce to communities of lower financial means in contrast to the often elitist food movement: "As this movement gained growth and intensity, I wanted to make sure that low-income households have just as much opportunity to take advantage of this as economic benefits that are around the corner." Growing in her urban community is her approach to relocate benefits closer to the people she wants to serve, rather than fostering the economies of remote and disconnected rural spaces. Nevertheless, she acknowledges the importance of rural agriculture as a productive complement to urban farming, and the two spheres' interconnectedness.

Clearly, not all rationales are necessarily restricted to the urban space. Yet, the quantity of people that can be reached in cities is being regarded as decisive for starting a debate, disseminating ideas, and initiating change:

> You can take the extreme left or whatever: I'm gonna move into the forest and live on blueberries and... But I mean, this is reality, this is what we have to work with, we have to have a discussion. And you don't start a discussion, you don't get people to know each other and talk and share views if you move into the forest and live on blueberries. You don't. So, it's better to exist here in the city. (Isabell).

Considering increasing urbanization trends, Isabell and Iris emphasize the obligation to connect, inspire discussions, and exchange ideas about the future of the city. This goal is better accomplished in urban areas, where movements spread faster (Isabell). Isabell and Lina also acknowledge the capacity for spontaneity in the city which could foster such processes: "Here, it can happen spontaneously. If people are in a small space, close together, things will naturally happen. Hopefully. But there is a bigger chance in the city than in the countryside" (Isabell). Iris furthermore regards the city as a starting point for people to go back to the countryside: "Every potential farmer in the countryside moves into the city, so we have to find them in the city and inspired them to maybe farm in the city or go back to the countryside and farm there. We need more producers, for sure" (Iris).

Lastly, even CUFs without CSA models appreciate the social proximity to their customers and the global and local exchanges and encounters in the city (Isabell). Indeed, what distinguishes farming in rural from growing in urban areas is the exposure of urban citizens to and interaction with food systems and their social actors.

The juxtaposition with activism in more "conventional" urban agriculture, that is, community gardening, provides an interesting counterpoint concerning the political targets. Veen et al.'s (2012) study of community gardens reveals, that, while activism has been a major driving force of the movement, political missions or actions often stand behind recreational planting and harvesting: "People may be politically motivated but not act upon it. People may join an initiative for hobby reasons with little reflexive thoughts. Practical motivations play a role too. Is there enough time to cycle to the garden? Will it rain today?" (Veen et al., 2012, p. 380). Commercial farms, as mentioned above, is characterized by strong political ideas and realized through activism, which has been institutionalized. Anti-capitalism, on one hand, is being promoted and yet, the businesses must follow certain economic rules:

> I definitely define myself as an urban farmer in, you know, kind of a social entrepreneur way, but the focus is really to solidify the business model, because I know that if I can prove that you can basically earn money off of a profit model, growing food in the heart of the city, then it will get duplicated and replicated and grow the movement. But it's the only way... in my opinion, it's the only way it's gonna happen on a large scale. A lot of the projects that are out there are practically being operated by non-profits. In a society that is built around a free market economy, if you want to get this stuff to proliferate, you've got to show that you can make money out of it. (Helena).

This statement exemplifies the tensions between the visions of this specific type of social and ecoentrepreneurship and the appropriate ways to realize them, accounting for drawbacks and compromises. Therefore, it remains subject to negotiation about the course, intensity, and impact of intended and realized protest and systems change.

Collaborations and Finding Like-Minded People

The sub-chapter "supporting factors" already discussed the relevance of collaboration, while the previous one indicated the role of spontaneous urban encounters. The combination of both can also provide fertile ground for the formation of CUF businesses. Iris provides an illustrative example:

> I was doing the urban gardening and a friend of mine that ran a company got involved in [a] part of the city, a temporary area. They wanted to do something with it, and their part was, to involve different people. I was asked if I was interested in doing something with urban gardening […]and just at the same time, I was eating at this restaurant in [city], and I heard about some guy who just started a rooftop farm on this restaurant. I asked the waiter if I can get the contact info of this person, [who] was Isabell […]. A

> week or two after, I contacted him and we both went down to this spot. And I think we discussed quite directly on how we are gonna do this. We both had the same kind of motivation and ambition on what we were going to do. We just started. And both were, I think, in the same part of life. We didn't know what we're gonna do; he was working as a bartender and also trying to figure out how to live a meaningful life in the city. (Iris).

This quite lengthy narrative describes the chain of encounters happening in the city that can lead to multiple unique CUF opportunities, such as finding like-minded people who function as co-founders of CUFs or acquiring land through social relationships (Isabell, Iris, Susanne, Paula, Anna, Elisa, Carla).

Connections with other urban growers can also yield efficiency effects. For instance, Karen purchased a delivery truck, which required high investments. To increase efficiency and to help paying off her car loan, she collaborates with other urban farmers in her city with the same customers and offers delivery services in exchange for a fee.

Social relationships play a vital role in the business model development. In several CUF cases, the CSA model was purposively chosen to establish and maintain close contact with the customers, who share similar interests and concerns. Accordingly, the relationship between CUF and consumer is not only based on economic exchange, but also on inspiration, encouragement, and stimulus (Susanne, Paula, Anna, Elisa). Serving to local communities in close physical proximity, these connections are also being regarded as financially valuable since the harvest can be supported by shareholders or volunteers, which reduces labor costs. Likewise, consumers who pick up their weekly share minimize time spent on distribution for CUFs (Susanne, Elisa, Carla). In case the food is not sold directly to the consumer, but to food service enterprises, access to those partners along the food chain must be granted, too:

> Many of the farmers we meet today, […] it's so hard for them to find these collaborations with chefs or with other companies. For us, it's so easy, living and working where other people live and work. I think a huge part of the success is being where people live and making it easy to collaborate and inspire each other. Create a strong movement. (Iris).

The Urban Experience

Beyond these more business-oriented reasons, some CUFs appreciate links to and amenities in the city, which benefit them personally and which they avoid abandoning accordingly. As reported by Iris, the conscious choice of living and farming in the city does not contradict living in the countryside. Another depicts her urban life, in comparison to the rural, as "more fun", "less lonely", and "convenient, with more opportunities", even though those opportunities are not fully exploited: "You can go to the cinema and the theatre, but we don't do it very often, right? So why live in the city? It's not because we do it

very often, it's just because we have the opportunity, right? Having that opportunity means something, I guess" (Carla). The same CUF describes a push factor that is keeping her away from the countryside:

> I go to the rural landscape, and I see the decay, I see that nothing is happening there. It's so dead. [...] I get homesick if I get out into this rural landscape, into these small cities. If I stay there for more than a day, I feel homesick. [...] I've been there, I've seen it. You know, it's hard to explain. [...] I am not sad that I am from the rural landscape, but I've just been there, and I see more opportunity in staying in the city. (Carla).

However, this CUF lives in an urban allotment garden, which provides the nature that other CUFs often seek. Self-reportedly, a typical urban apartment without this amenity would decrease her well-being, hence, might have a profound impact on her choice to stay in the city. Karen, who grew up in the city, never planned on moving away. Isabell, with a rural up-bringing, even mentions the feeling of shame associated with living in the countryside: "I mean, I come from a generation where you felt ashamed if you continued to live in the countryside, but I also wanted to move, I wanted to do something" (Isabell).

Other CUFs who grew up in rural areas felt the desire to experience the city life, where they had friends and siblings, before returning and finally settling in the countryside (Paula). "Experiencing the urban" is also a crucial element for Susanne, who quit her international career in favor for urban farming to connect more with the city:

> I didn't feel very rooted in [city] at all, and my [language] wasn't very good, and it's yet another reason why I wanted to get involved in the local urban farming. [...] And then for the last years, I really did get to know the city because I was just biking around everywhere. (Susanne).

The "Urban" as Compromise

The last sections described rationales that point towards the city as an enabling space and fertile ground for commercial urban agriculture. While for certain CUFs the given opportunities, their contribution to urban development, their political agendas, and their desire for an urban lifestyle are decisive motivations to remain in the city, others are less inclined to the urban realm:

> The answer to that for me is because I live in the city right now. It's not a conscious choice because I think urban farming is going to change the world. [...] So, for me it's just a matter of fact that I live here in the city. [...] I can see a lot of benefits to urban farming, but they are more social than food production and that's a part that I like, but it's not the foundation of what I am trying to do. (Anna).

Elisa, who lives in the countryside, is not an advocate of CUF either. For her, the location is inferior to the practice: "If someone had offered the land here in my backyard, [...] I would have done it as well. So, for me, the city was not the point" (Elisa). Anna further emphasizes that the inability to acquire land

property for farming and the dependency on public institutions and their supervision and influence poses challenges for her. She expects to find more benign conditions in the countryside. At the same time, she acknowledges the risk, and related fear, of leaving the city:

> But it's also scary to make that leap in general, because you know what you have, but you don't know what you get and I don't know exactly where to go, I don't know what it will mean for my family... so it's a big change. On the other hand, if I stay in [the region], it's not far anywhere and you can always catch a train to [city] and transportation is great, so... it's not so dangerous, it's not like moving up North and living 10 hours driving from the nearest neighbour. (Anna).

On the other hand, certain CUFs searched for an opportunity to experience the urban environment, yet, their interest dropped gradually while the "pull" to rural areas increased. Paula, for example, despite the curiosity that drew her to the city, aims to leave after the CUF CSA project has finished:

> I really long for the countryside again [laughs]. More nature and hills and trees. It's hard to find here in [city]. But I will continue here of course, because I promised for three years and I also like to see the developments here. I mean, I like to see the place change. So, I'll be here for at least two more years, two more seasons. And after that, I'd really like to go South I think.[…] or close to the city is also ok, but I like to have more nature around and good landscapes. (Paula).

Similarly, Susanne lost the connection and initial interest for the city at some point:

> Every day I am going out to the farm which is just a road outside the city. So, I don't go to the city very much anymore. And I'm always surprised when I go in to see. It's actually not great 'cause I go into the city, and I think "I don't like it." So, for me, my next move is to try to figure out how to get out of the city. My kids are getting older, so I think at some point I have to convince my partner that we should go and buy an old farm somewhere and live there. (Susanne).

Actually, through her experience and the time she spent in her urban farming community, Susanne has built up a circle of friends with whom she is planning to commence a collaborative housing project in the countryside. She links her farming skills, acquired through the urban commercial growing, with this vision:

> We have this idea to find a place where we could be together, so our kids wouldn't have to worry about us all that much. […] My role in the community would be to grow the food for everybody, which would be just great. I mean, that's my dream actually to grow the food for my friends, but live at the place where I am growing it. That's the next step for me... after this. And now that I am gaining this experience and I really know how to

> grow food for a lot of people, that would be the next big challenge, trying to figure out how to do it outside of the city for my friends. (Susanne).

Therefore, the city as a place to find like-minded people, as has been brought up earlier, is not merely an advantage for urban agriculture, but can also be a point of departure for prospective collective efforts in rural areas.

Chapter 5 - Synthesis and Model Building

After the results have been presented and discussed, it remains to synthesize these outcomes and answer the research questions: Why do people become CUFs and why do they farm in the city? The following paragraphs' summaries and models aim to provide a clearer understanding of the rationales of CUFs.

Farmer or Entrepreneur? Characteristics of CUFs

The path towards CUF enterprises evolves from several, often coincidental, encounters, and experiences which inspire to pursue this type of self-employment. Different than in family farms, inheritance or generational shifts are not a way to enter this labor force. On the contrary, CUFs' exposure to farming practices in the immediate social network ranges from no exposure at all, over small-scale subsistence growing within the family, to having professional farmers in the extended family. Entrepreneurial role models in the immediate social environment are also either non-existent or sparse. Few CUFs have first-hand entrepreneurial experience from non-farming or even urban farming projects that they can utilize. While a lack of career plans, the aim to develop skills, the aversion towards authority, or dissatisfaction with the current job pose rationales for becoming self-employed, the study also finds CUFs, who had gratifying full-time jobs and careers over several decades. This, combined with the awareness for environmental and social aspects of food issues, which they developed through secondary education, on the job, or through family members, forms the basis for their entrepreneurial growing activity.

Given the current low profitability of small-scale alternative farming schemes, supporting systems around CUFs are crucial, both, before and during the operation of the farm. Partnership belongs to the essential factors just as much as financial assistance, even though autonomy and independence are values that are sought for among the studied CUFs. The existence of a CUF business also depends on a good match between CUF founding or growing partners. Equally influential factors, however, consist of the values and positive experiences they gain through the distribution, exchange, and close relationship with their customers, along with their ability to use and transform natural resources and their embeddedness in and work with natural cycles.

Lastly, the immaterial values and positive experiences that CUFs retrieve from growing, in particular, but not limited, to commercial agriculture, are being mentioned as paramount incentives to continue. In

most instances, these values have only been disclosed and recognized after the establishment of the CUF business. This fact points towards the hidden and underlying motivators that extend beyond recreational and reach into commercial farming as a full-time or more sophisticated part-time occupation with income or knowledge generation intentions.

Why CUFs Farm in the City Rather than in the Countryside

This question is somewhat more complicated to answer due to its complexity. Donald and Blay-Palmer (2006) suggest that the urban center and its civic, political, and economic state fosters innovation in new realms and facilitates niche opportunities. The study results indicate that CUFs admittedly take advantage of these opportunities. At the same time, the city as a domain of favorable circumstances to establish and run a venture like CUF is ambivalent. Built on their needs and expectations, CUFs seek for a specific "form of life," as Guelke illustrates. CUFs in the cities are evidentially pursuing this form of life through growing food, but with distinct aspirations.

On the one hand, the city and its amenities in the physical and social space are anticipated as an opportunity to pursue their personal and professional goals. Ergo, "the urban as a potential" refers to all advantages that CUFs find in the physical and institutional infrastructure, the political and activist atmosphere, the social networks and collaboration opportunities, and, among some CUFs, even the urban lifestyle experience that manifests their activities within and outside of CUF. Linking to the antecedent sub-section, the lack of prior entrepreneurial or agricultural expertise also fosters uncertainty, which can be diminished by like-minded and supportive co-founders, which are found through urban social platforms and mediums, such as work at universities, newspapers, restaurants, or community gardens.

While respondents share akin notions in this regard, CUFs must engage in negotiations between their economic capabilities, the geographic location, and the more society-oriented visions they commit themselves to. This leads to a subdivision of two groups: "urbanists" and "bargainers".

The first group is being presented in the model below (Figure 4). Urbanists enter the field with their specific set of experience and values (1), through which they perceive and manage their urban agriculture activities as experiment, discovery, and attempt for change towards more sustainable urban food systems. Commercial urban agriculture, according to their interests and capabilities, is the tool they chose for this endeavour. As actors in their distinct urban economies and benefiting from urban amenities, they aim to contribute to this target and achieve their visions through food, employment, and technological advancements (3). While they consciously commit to the urban environment, and its favorable and limiting physical and social anatomy, they reject the rural as a place to farm. Hence, growing food is equally or even less important than the building of social relationships, educating, and developing an economically and ecologically sound business model, that includes urban resources. This antagonism rests on personal relations and community commitment, the conscious avoidance of rural life and the countryside due to its perceived unsustainability, and the lack of opportunities on social and economic

levels, or a mixture of those reasons (2). Their agricultural practices in the city lead furthermore to an increase in their experience (knowledge and skills) (4), which flows back into the improvement of their urban agriculture venture (5) and feeds into the cycle (2) (3) (4). In addition, they aim to contribute through their example and lessons learned to the scaling-up and scaling-out of urban agriculture businesses and raise the attraction for this occupation (6).

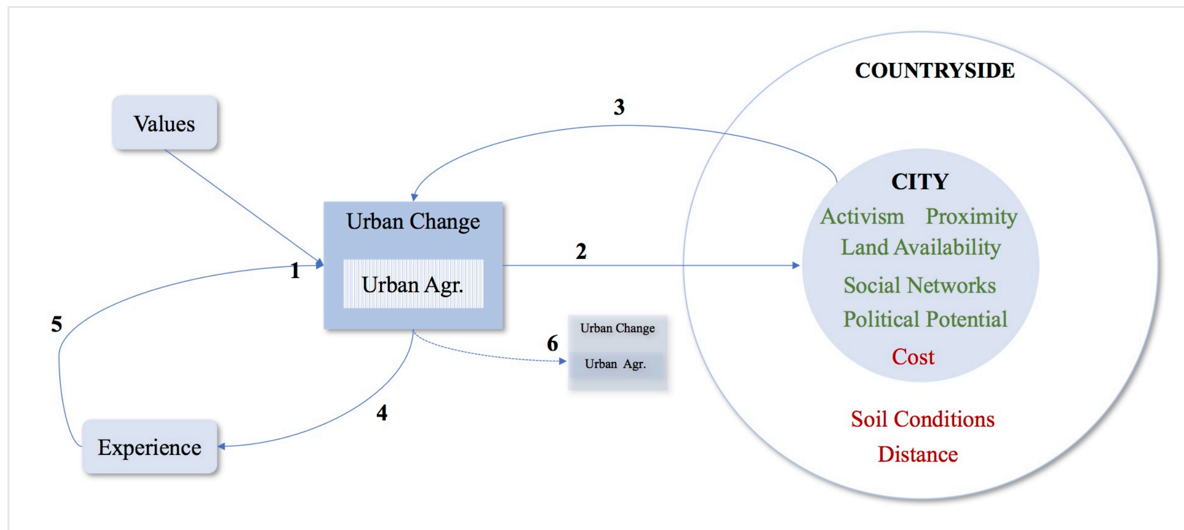

Figure 4 Logical model of urbanists on locational and occupational choice (1-6) and favorable (green) and unfavorable (red) conditions in the city and the countryside.

On the other scale of the spectrum, one can find the bargainers (Figure 5). Like their counterparts, they bring in certain values and experience (1), but the motivation to contribute to or influence the urban sphere is less articulated. Instead, the growers are more committed to the agricultural activities they are practicing. Certain CUFs in this group critique the crowdedness, dependence and the feeling of "being at the municipalities mercy." Therefore, freedom and independence are what some seek in rural areas, while others aim to escape from the urban environment and "go back to nature" (2). For this group, living and working in the countryside is embedded in their visions of the ideal "form of life," and they strive to relocate to more peri-urban or rural areas. The accomplishment of this vision, however, is impeded by present responsibility for family members, the fear of leaving the city or the lack of sufficient financial resources to acquire land. Running a business in the countryside stipulates not only a piece of land to grow on but adequate logistical infrastructure (cars, trucks, etc.) and appropriate living space with sufficient income opportunities for partners, educational offers for children, and a satisfying social environment (3).

Even though the bargainers contemplate the countryside as a more pleasurable place to live, the opportunities the city offers to realize their wish for non-subsistence growing on a small, professional scale are reason enough to negotiate the shortcomings they encounter with living an urban life. Some CUFs associate urban commercial agriculture with lower investments and entry barriers in comparison with rural agriculture, where, depending on the context, the acquisition of rural agriculturally productive land

is harder due to competition, regulations, and contamination with pesticides or artificial fertilizers. The social costs for not farming at all are higher than farming in the city. Their form of life is being generated in a way that offers them the most benefits with the least drawbacks (4).

In contrast to the urbanists, they regard urban growing as "a means to an end" to progress eventually to small-scale rural agriculture, once the conditions are more benign or alternatives can be found. Among this group of CUFs, a distinction must also be made between those, who show general adversity against the city life and those, who relinquish curiosity for the urban, even though this initial enthusiasm diminishes and turns into disinterest for the city or even a feeling of overextension or overload.

Like the urbanists, bargainers retrieve valuable experience from this urban venture (5) and reintegrate it back into their urban farm (6). In the long-run, their target is to move to the countryside in order to practice their farming there (7).

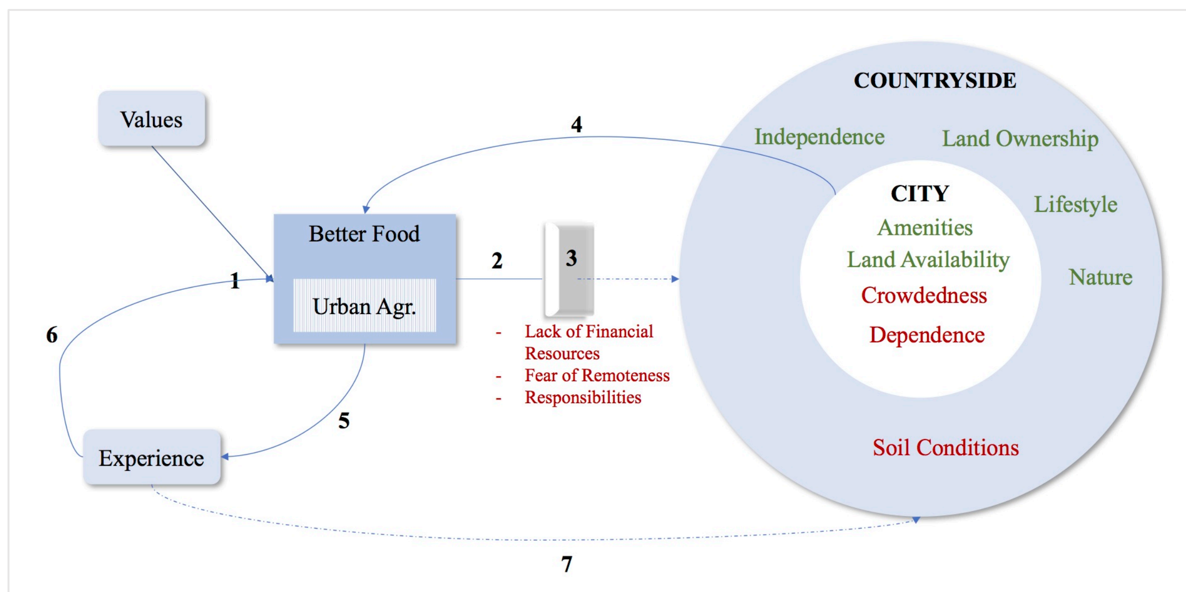

Figure 5 Logical model of bargainers on locational and occupational choice (1-7) and favorable (green) and unfavorable (red) conditions in the city and the countryside.

Figure 6 summarizes the differences and similarities between these groups. This indicates that, while they are distinct in their specific goals, preferred locations, the perceived urban opportunities, they share the same tool and occupation, as well as the general goal to work in the ecological realm.

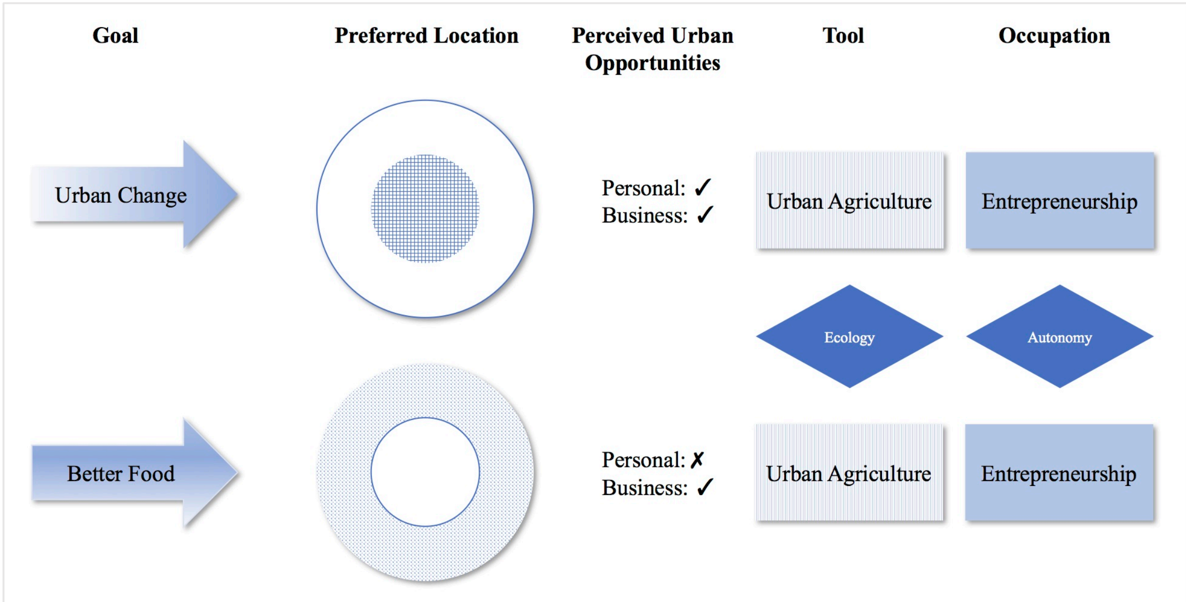

Figure 6 Differences and similarities between urbanists and bargainers.

Undoubtedly, even though many allocate on one extreme of the scale, it is not possible to assign all interviewed CUFs to either category without neglecting fluidity in concepts. While specifically the urbanists allocate on one end of the bar, others are hybrids (Figure 7).

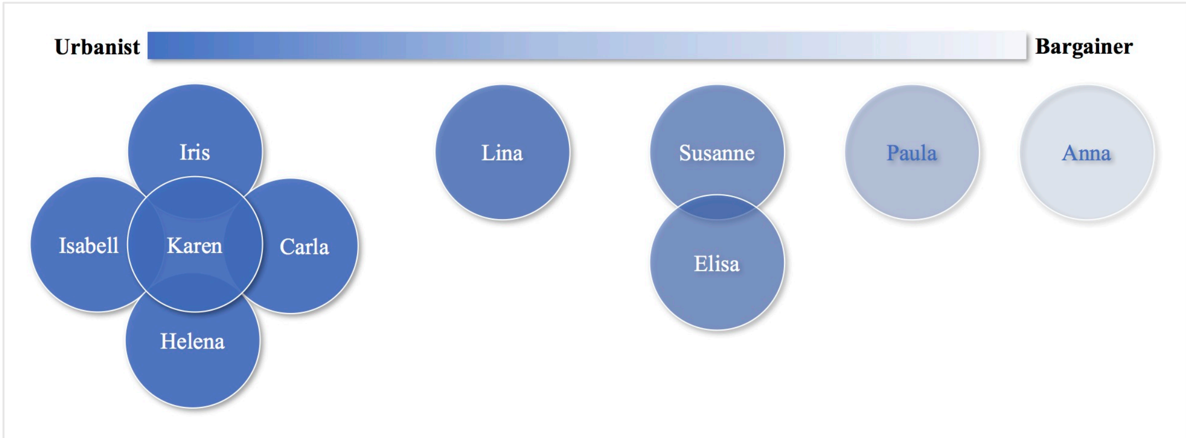

Figure 7 Allocation of interviewees along the scale between urbanist and bargainer status.

CUFs, with and without idealistic ties to the city, are connected by a fundamental question the author encountered in this study: How decisive is “the urban” for the foundation of an urban farming enterprise? While this question might raise eyebrows, and provoke initial confusion, it goes beyond the choice of “urban” or “rural” as the business location but extends to whether these agricultural entrepreneurs would even exist without the city. Would individuals become farmers also if it was not in cities?

The attentive reader might have sensed the partial overlaps emerging in the presented summary. CUFs do not only become entrepreneurs for the sake of entrepreneurship but furthermore to experience the satisfaction that comes with their occupation and to reduce the barriers and opportunity costs associated with the realization of their personal and societal goals. The city enables this due to its social and physical urban infrastructure and is therefore chosen as the business location. Depending on the affiliation with either urbanist or bargainers, or the hybrid version, the occupation of commercial grower would not be enacted outside the urban context at this point. Hence, location defines opportunities, location "makes" the farming entrepreneur.

Chapter 6 - Conclusion

In CUF, two counter-movements merge: people are A) aiming for and creating a job in the small-scale agricultural sector and B) managing productive agrarian enterprises within the city boundaries which are usually allocated in the countryside. Two main takeaways can be retrieved from the study that can contribute to urban agriculture scholarship:

First, CUFs form and enter the occupation without thorough entrepreneurial or agricultural background. As urban agriculture is barely profitable at this point, they rely heavily on external support factors, yet prevail personal challenges in virtue of the immaterial values and experiences they seize from their commercial farming businesses.

Second, the city, as a space for food growing activities is interpreted in two distinct ways: as a space of potential and a platform for change or as a space that functions rather a compromise for the location in the countryside. This leads to the separation of CUFs into urbanists, CUFs who "feel" urban and see the city as their project, and bargainers, whose urban location is more a concession and suggests, that commercial growing in urban areas is neither a purely idealistic, nor a pragmatic decision. CUFs are actors whose existence is seemingly based on the urban economic, environmental, and social infrastructure, processes of negotiation between costs and benefits, and, especially for the bargainers, the prospects, that urban farming is a prelude for prospective rural life.

Based on this study, the author suggests several subsequent fields of exploration:

The quantity of farms in Europe has been decreasing steadily since the 1970s (EU, 2011), with a sharp acceleration after the Millennium (EU, 2014). The aging farming population is yet another factor for the drop of people engaged in this occupation. Among European farmers, merely 7.5 % are under the age of 36, and, at the same time, every third farmer is older than 65 (EU, 2016). Since some CUFs are inclined to farming, regardless of the location, this could lead to new paths of educating young people who first commence food production businesses in the city on a smaller scale, which are later shifted to rural areas. Therefore, farming would be a mobile occupation, making use of the benefits of the city and the country, depending on the stage of life.

DuPuis and Goodman (2002), Hinrichs (2003) and Goodman (2000) argue that alternative food networks have the capacity to provide an entrance to the food provisioning sector in a more democratic manner. Translated into urban agriculture, as a part of such systems, this would suggest that urban agriculture opens the farming profession to people without significant farming background. On a different note, in this study, most of the CUFs are well-educated and pursued or graduated from university programs, while some even developed international careers. This suggests a lack of socio-economic diversity. Future work could investigate cases of CUFs with weaker economic backgrounds and immigration status.

Based on the observable activities of CUFs, it is easy to categorize them as entrepreneurs and their work as entrepreneurship. Yet, the study reveals, that their perception of themselves varies significantly: those, with a distinct entrepreneurial drive, call themselves "community entrepreneur," "social entrepreneur" or "developer" while rejecting the notion of "gardener." Others refer to themselves as ecologists or food activists. Some do not perceive themselves as urban farmers out of respect for "the real farmers," while others hope that at some point urban agriculture would be so common, that there is no distinction between urban farmer and farmer anymore. The same CUF emphasizes that this specific terminology has not only a representational, but also a psychological value. It creates a sense or feeling for legitimacy and existence: "*You are what you call yourself*." Furthermore, the status of an entrepreneur is often regarded as "empty," stigmata-laden or even intimidating, and functions rather as "a means to an end." Therefore, while their occupation suggests an entrepreneurial and even ecopreneurial nature, it seems relevant to acquire more in-depth knowledge about the self-perception of CUFs.

In the introduction, the back to the land movement has been mentioned as a counterexample to the urban agriculture movement. The "land" stood (and still stands) for the "countryside," a geographical and social space, which has been constructed through characteristics that differentiate it from the city, such as "nature," "openness," "wildness," "remoteness," and "agriculture." Therefore, the logic of going back to the pastoral "nature" and leaving the city behind, both physically and metaphorically, is a thought that has been picked up by Nathaniel Hawthorne, Henry David Thoreau, and Ralph Emerson, who urge that manual labor in socio-ecological arrangements, such as in farming and gardening, offer a refuge from the modern urban life and its ills (Brown, 1990; Betjemann, 2011). In contrast, Raymond Williams (1973) calls for attention in romanticizing the rural lifestyle as virtuous, noble, and wholesome in comparison to the urban way of life, which is often wrongly being said to bear alienation, conflict, deprivation, dispossession. In concert with William's thought, this study proposes that city and country, departing from a professional farming perspective, are gradually redefined and should be investigated more as the urban agriculture movement is gaining momentum.

Urban commercial agriculture distinguishes itself from other enterprises by its dependence on municipal support, coding schemes, environmental impacts, just like it differs from conventional farms by the mere location, the scale and the experience of the farming entrepreneurs. CUFs respatialize and resocialize

food production, distribution, and consumption (Jarosz, 2008). Applying classical business and entrepreneurship theory, respectively, agricultural and rural sociology for both research questions could have hindered the unbiased investigation. Applying a grounded theory approach was, therefore, a valuable and constructive way to decipher the rationales and reasons behind CUF practices.

Urban farming as commercial practice, for the sale of vegetables and other products grown on urban land, is spreading, but not yet a common entrepreneurial practice. From a political vantage point, this study conceptualizes CUF also as a tool to fulfil food and sustainability goals which could be promoted in several ways. On the one hand, space, resources, and collaborations could be released for urbanist growers, who focus on circular urban bio-economy and teaching. On the other hand, commercial growing in cities could be a starting point for eager but unexperienced self-made farmers and be supported by means that could otherwise not be accessed in the countryside. This could also lead to the scaling out of more sustainable middle-scale agriculture and could give rise to a new generation of farmers while fulfilling different ecological and economic goals concerning agricultural practices. This should be supported by adequate financing schemes, such as eco-system service subsidies.

References

Ackerman, K. (2011). The Potential for Urban Agriculture In New York City: Growing Capacity, Food Security, and Green Infrastructure. New York, NY: Urban Design Lab, Columbia University.

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, 61–75.

Anderson, A. (1998). Cultivating the Garden of Eden: environmental entrepreneuring. Journal of Organizational Change Management 11(2), 135-144.

Atkins, P., & Bowler, I. (2001). Food in Society: Economy, Culture, Geography. London: Arnold Publishing and New York: Oxford University Press.

Babbie, E., & Benaquisto, L. (2009). Fundamentals of social research. 1st Canadian Edition. Scarborough, Ontario: Thomson Canada Ltd.

Banwo, A.O., Du, J., & Onokala, U. (2017). The determinants of location specific choice: small and medium-size enterprises in developing countries. Journal of Global Entrepreneurship Research 7(16): doi.org/10.1186/s40497-017-0074-2

Betjemann, P. (2011) Talking Shop: The Language of Craft in an Age of Consumption. Charlottesville: University of Virginia Press

Berger, P. L., & Luckman, T. (1989). The Social Construction of Reality: A Treatise in the Sociology of Knowledge. New York, NY: Anchor Books

Berges, R., Optiz, I., Piorr, A., Krikser, T., Bruszewska, K., Specht, K., Henneberg, C. (2004). Urbane Landwirtschaft: Innovationsfelder für die nachhaltige Stadt? Schrumpfende Städte. Band 1.

Berkes, F., & Folke, C. (1998). Linking social and ecological systems for resilience and sustainability, in: Berkes, F., Folke, C. (Eds.), Linking Social and Ecological Systems. Cambridge University Press, Cambridge.

Breckenridge, J.P., Jones, D., Elliott, I., & Nicol, M. (2012). Choosing a Methodological Path: Reflections on the Constructivist Turn. Grounded Theory Review 1(1).

Brockhaus, R.H. (1980). The effect of job dissatisfaction on the decision to start a small business, Journal of Small Business Management 18, 37-43.

Brown, G. (1990). Domestic Individualism: Imagining Self in Nineteenth-Century America. Berkeley: University of California Press.

Buehler, D., & Junge, R. (2016). Global Trends and Current Status of Commercial Urban Rooftop Farming. Sustainability 8(11), 1-16.

Cabannes, Y. (2012). Financing urban agriculture. Environment and Urbanization 24, 665-683.

Carland, J., Hoy, F., Boulton, W.R., & Carland, J.C. (1984). Differentiating Entrepreneurs from Small Business Owners: A Conceptualization. Academy of Management Review 9(2), 354-359.

Cater, J.K. (2011). Skype a cost-effective method for qualitative research. Rehabilitation Counselors & Educators Journal 4, 10-7.

Centner, R. (2008). Places of privileged consumption practices: Spatial capital, the dot-com habitus, and San Francisco's internet boom. City & Community 7, 193–223.

Charmaz, K. (2006). Constructing Grounded Theory: a practical guide through qualitative analysis, Sage, London.

Cohen, N., Reynolds, K., & Sanghvi, R. (2012). Five Borough Farm. Seeding the Future of Urban Agriculture in New York City. New York, NY: Design Trust for Public Space.

Cromie, S. (1987). Motivations of Aspiring Male and Female Entrepreneurs. Journal of Occupational Behaviour 8(3), 251-61.

Cross, M. (1981). New Firm Formation and Regional Development, Gower, Aldershot, Hampshire.

Dahl, M.S., & Sorenson, O. (2012). Home sweet home: entrepreneurs' location choices and the performance of their ventures. Management Science 58(6), 1059–71.

DaVanzo, J. (1981). Repeat Migration, Information Costs, and Location-Specific Capital. Population and Environment 4(1), 45-73.

Deakin, H., & Wakefield, K. (2013). Skype interviewing: Reflections of two PhD researchers. Qualitative Research 14(5), 603-16.

Dougherty, D. (2002). Grounded theory research methods. In Baum, J. A. C. (Ed.), The Blackwell Companion to Organizations: Padstow, UK: Blackwell.

Douglas, D. (2004). Grounded Theory and the 'And' in Entrepreneurship Research. Electronic Journal of Business Research Methods 2(2), 59-68.

DuPuis, E.M., & Goodman, D. (2005). Should we go ''home'' to eat? Toward a reflexive politics of localism. Journal of Rural Studies 21, 359–371.

Eakin, H.C., & Wehbe, M.B. (2009). Linking local vulnerability to system sustainability in a resilience framework: Two cases from Latin America. Climate Change 93(3–4), 355–377.

Edmondson, A., & McManus, S. (2007). Methodological fit in management field research, Academy of Management Review 32(4), 1155-79.

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review 14(4), 532-50.

Ernstson, H., Barthel, S., Andersson, E., & Borgström, S.T. (2010). Scale-crossing brokers and network governance of urban ecosystem services: The case of Stockholm. Ecol. Soc. 15(4), 1-9.

EU (2011). EU Agricultural Economics Briefs. Accessed online: 13 March 2018. http://ec. europa.eu/agriculture/rural-area-economics/briefs/pdf/03_en.pdf.

EU (2014). Family Farming in Europe: Challenges and Prospects. Accessed online: 13 March 2018. http://www.europarl.europa.eu/RegData/etudes/note/join/2014/ 529047/IPOL-AGRI_NT(2014)529047_EN.pdf

EU (2016). Agriculture Statistics - Family Farming in the EU. Accessed online: 13 March 2018. http://ec.europa.eu/eurostat/statistics-explained/index.php/Archive Agriculture_statistics_-_family_farming_in_the_EU#Structural_profile_of_ farms_according_to_the_extent_of_the_family_labour_force_.E2.80.94_an_ analysis_for_the_EU-28.

Feenstra, G.W., McGrew, S., & Campbell, D. (1999). Entrepreneurial community gardens: Growing food, skills, jobs and communities. In University of California agriculture and natural resources publication. Oakland, CA: University of California, Division of Agriculture and Natural Resources.

Fielding, N. (2010). Virtual fieldwork using access grid. Field Methods 22, 195-216.

Florida, R. (2002a). Bohemia and economic geography. Journal of Economic Geography, 2(1).

Florida, R. (2002b). The rise of the creative class (2004 Paperback ed.). New York, NY: Basic Books.

Freire-Gibb, L.C. & Nielsen, K. (2014). Entrepreneurship Within Urban and Rural Areas: Creative People and Social Networks 48(1), 139-53.

Garnett, T. (1996). Farming in the city: The potential of urban agriculture. Ecologist 26(6), 299-307.

Gartner, W.B. (1985). A conceptual framework for describing the phenomenon of new venture creation. Academy of Management Review 10, 696-706.

Gartner, W.B. & Shane, S.A. (1995). Measuring Entrepreneurship Over Time. Journal of Business Venturing 10, 238-301.

Gibb, A. & Ritchie, J. (1981). Influences on entrepreneurship: A study over time. In: Bolton ten year's on, Proceedings of the UK Small Business Research Conference, Polytechnic of Central London, London.

Glaser, B.G. (1992). Basics of grounded theory analysis. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2005). The grounded theory perspective III: Theoretical coding. Mill Valley, CA: Sociology Press.

Glaser, B., & Strauss, A. (1967). The Discovery of Grounded Theory - Strategies for Qualitative Research, Aldine Publishing Company, Chicago.

Goodman, D. (2000). Organic and conventional agriculture: materializing discourse and agro-ecological managerialism. Agriculture and Human Values 17, 215–19.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness American Journal of Sociology, 91(3), 481-510.

Greenhut, M.L. (1956). Plant location in Theory and Practice, Chapel Hill: University of North Carolina Press.

Guelke, L. (1989). Forms of life, history, and mind: an idealist proposal for integrating perception and behaviour in human geography. In: Frederick W. Boal and David N. Livingstone (eds). The Behavioural Environment: Essays in Reflection, Application, and Re-evaluation. New York and London: Routledge, 289-310.

Hamilton, R.J., & Bowers, B.J. (2006). Internet recruitment and E-Mail interviews in qualitative studies, Qualitative Health Research, 16(6), 821–35.

Hay-Gibson, N.V. (2009). Interviews via VoIP: benefits and disadvantages within a PhD study of SMEs. Library and Information Research 33(105), 39–50.

Hedin, D.I. (2015). The Business Models of Commercial Urban Farming in Developed Countries. Master's thesis. Swedish University of Agricultural Sciences, Uppsala.

Hendrickson, M.K., & Heffernan, W.D. (2002). Opening spaces through relocalization: locating potential resistance in the weaknesses of the global food system. Sociologia Ruralis 42(4), 347–69.

Hinrichs, C. (2003). The practice and politics of food system localization. J of Rur Stud 19, 33–45.

Hooley, T., Wellens, J., & Marriott, J. (2012). What is Online research? Using the Internet for social science research. New York: Bloomsbury Academic.

Ilbery, B., & Kneafsey, M. (1999). Niche markets and regional speciality food products in Europe: towards a research agenda. Environment and Planning A 31, 2207–22.

Issak, R. (2002). The making of the ecopreneur. Greener Management International 38, 81-91.

Jacob, J. (2003). Alternative Lifestyle Spaces. In: Andrew Leyshon, Roger Lee, Colin C. Williams (eds) Alternative Economic Spaces. London: Sage. 168-192.

Jansma, J.E., Sukkel, W., Stilma, E.S.C., & Visser, A.J. (2012). The impact of local food production on food miles, fossil energy use, and greenhouse gas emission: The case of the Dutch city in Almere. In: A. Viljoen and J.S.C. Wiskerke (eds): Sustainable food planning: Evolving theory and practice. Wageningen Academic Publishers, Wageningen, the Netherlands, 307–22. doi:10.3920/978-90-8686-187-3_26

Jarosz, L. (2000). Understanding agri-food networks as social relations. Agriculture and Human Values 17(3), 279–83.

Jarosz, L. (2008). The city in the country: Growing alternative food networks in Metropolitan areas. Journal of Rural Studies 24(3), 231-44.

Jones, A. (2001). Eating oil. Food supply in a changing climate, 89 pp. Berkshire, UK: Sustain and Elm Farm Research Centre.

Kaufman, J. & Bailkey, M. (2000). Farming inside cities: Entrepreneurial urban agriculture in the United States. Working paper, Lincoln Institute of Land Policy, Cambridge, MA.

Keogh, P., & Polonsky, M. (1998). Environmental commitment: a basis for environmental entrepreneurship? Journal of Organizational Change Management 11 (1), 38-49.

Kirkwood, J., & Walton, S. (2010). What motivates ecopreneurs to start businesses? International Journal of Entrepreneurial Behavior & Research 16(3), 204-28.

Kirkwood, J.J., & Walton S. (2014). How green is green? Ecopreneurs balancing environmental concerns and business goals. Australasian Journal of Environmental Management 21(1), 37-51.

Knapp, L., Veen, E., Renting, H. Wiskerke, J.S.C., & Groot, J.C.J. (2016). Vulnerability Analysis of Urban Agriculture Projects: A Case Study of Community and Entrepreneurial Gardens in the Netherlands and Switzerland. Urban Agriculture and Regional Food Systems 1, 1-13.

Lovell, S.T. (2010). Multifunctional urban agriculture for sustainable land use planning in the United States. Sustainability 2, 2499–2522.

Mailfert, K. (2007). New Farmers and Networks: How Beginning Farmers Build Social Connections in France. Journal of Economic and Social Geography 98(1), 21-31.

Manno, J. (2002). Commoditization: Consumption Efficiency and an Economy of Care and Connection. In Thomas Princen, Michael Maniates, and Ken Conca (eds.): Confronting Consumption. Massachusetts Institute of Technology, 67-100.

Mäkelä, M.M., & Turcan, R. (2018). Grounded Theory in Entrepreneurship Studies: Feasibility of the Method and the Design of Research.

McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. Local Environment 19, 147–71.

McElwee, G. (2006). Farmers as entrepreneurs: developing competitive skills. Journal of Developmental Entrepreneurship 11(3), 187–206.

McElwee, G. (2008). A taxonomy of entrepreneurial farmers. International Journal of Entrepreneurship and Small Business 6(3), 465-78.

McElwee, G., & Atherton, A. (2005). Publication trends and patterns in entrepreneurship. Journal of Small Business and Enterprise Development 12(1), 99–103.

McPhearson, T., Andersson, E., Elmqvist, T., & Frantzeskaki, N. (2015). Resilience of and through urban ecosystem services. Ecosystem Services 12, 152-56.

Mincyte, D., & Dobernig, K. (2016). Urban farming in the North American metropolis: Rethinking work and distance in alternative food networks. Environment and Planning A 48(9), 1767-86.

Moragues-Faus, A., & Morgan, K. (2015). Reframing the foodscape: the emergent world of urban food policy. Environment and Planning A 47(7), 1558-73.

Moreau, T., & Hodgson, K. (2012). Delta Community-Based Farm District. Prepared for Corporation of Delta and Century Group, 1–68.

Morgan, K. (2009). Feeding the City: The Challenge of Urban Food Planning. International Planning Studies 14(4), 341-48.

Morgan, K. (2013). The Rise of Urban Food Planning. International Planning Studies 18(1), 1-4.

Morgan, K. (2015). Nourishing the city: The rise of the urban food question in the Global North. Urban Studies 52(8), 1379-94.

Morgan, K., & Morley, A. (2014). The public plate: Harnessing the power of purchase. In Terry Marsden and Adrian Morley (eds.): Sustainable Food Systems: Building a New Paradigm. Routledge, 84-102.

Mougeot, L.J.A. (1999). Urban Agriculture: Definition, Presence, Potentials and Risks, and Policy Challenges. In Growing Cities, Growing Food. Retrieved 16 February 2018. https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/26429/117785.pdf?sequence=12

Mueller, E., & Morgan, J. N. (1962). Location decisions of manufacturers. American Economic Review 52(2), 204–17.

Norberg-Hodge, H., Merrifield, T., & Gorelick, S. (2002). Bringing the food economy home: local alternatives to global agribusiness. London, UK: Zed Books.

O'Connor, J. (1983). Issues in enterprise development: Business owners perceptions and experiences. Irish Journal of Business and Administrative Research 4, 31-43.

O'Connor, H., Madge, C., & Shaw, R., et al. (2008). Internet-based interviewing. In: Fielding N, Lee N and Blank G (eds) The SAGE Handbook of Online Research Methods. London: Sage, 271–289.

Ojiem, J.O., de Ridder, N., Vanlauwe, B., & Giller, K.E. (2006). Socio-ecological niche: A conceptual framework for integration of legumes in smallholder farming systems. Int. J. Agric. Sustain. 4(1), 79–93.

Osorio, A.E. & Ozkazanc-Pan, B. (2014). Defining the 'urban' in urban entrepreneurship: Implications for economic development policy. Discussion Paper, Academy of Management Annual Meeting, Philadelphia, PA August 1-5. Published online as Abstract proceeding. doi:10.5465/AMBPP.2014.12486abstract

Palich, L., & Bagby, D. (1995). Using cognitive theory to explain entrepreneurial risk-taking: challenging conventional wisdom'. Journal of Business Venturing 10, 425–38.

Pastakia, A. (1998). Grassroots ecopreneurs: change agents for a sustainable society. Journal of Organizational Change Management 11(2), 157-73.

Patton, M. (1990). Qualitative Evaluation and Research Methods. California: Sage.

Pesch, U., Vernay, A.L., van Bueren, E., & Iverot, S.P. (2017). Niche entrepreneurs in urban systems integration: On the role of individuals in niche formation. Environ and Planning 49(8), 1922-42.

Pfeiffer, A., Silva, E., & Colquhoun, J. (2014). Innovation in urban agricultural practices: Responding to diverse production environments. Renewable Agriculture and Food Systems 30(1), 79-91.

Poppinga, O. (1979). Produktion und Lebensverhältnisse auf dem Land. Wiesbaden, GER: Sprin Fach

Pothukuchi, K. & Kaufman, J.L. (1999). Placing the food system on the urban agenda: the role of municipal institutions in food planning. Agriculture and Human Values, 16(2), 213–24.

Pretty, J.N., Ball, A.S., Lang, T., Morison, J.I.L. (2005). Farmcosts and food miles: an assessment of the full cost of the UK weekly food basket. Food Policy 30:1–20.

Roberts, E.B., & Wainer, H.A. (1971). Some characteristics of technical entrepreneurs. I. E. E. E. Transactions on Engineering Management 18, 100-9.

Rothery, B. (1977). Men of Enterprise, I.I.R.S., Dublin.

RUAF. (n.a.) Urban agriculture: what and why? http://www.ruaf.org/urban-agriculture-what-and-why. Accessed 24 Mar 2018.

Scott, A. (2000). The Cultural Economy of Cities. London: Sage.

Schaltegger, S. (2002). A Framework for Ecopreneurship. Green Management International 38, 45-59.

Schumpeter, J.A. (1934). The theory of economic development. Cambridge, Mass.: Harvard Uni Pre.

Sjaastad, L.A. (1962). The Costs and Returns of Human Migration. J of Pol Econ 70 (5), 80-93.

Smith-Stoner, M. & Weber, T. (2000). Developing theory using emergent inquiry: a study of meaningful online learning for women. PhD Thesis, California Institute of Integral Studies, San Francisco, CA.

Sriram, V., Mersha, T., & Herron, L. (2007). Drivers of urban entrepreneurship: an integrative model. International Journal of Entrepreneurial Behavior & Research 13(4), 235-251.

Stanworth, J. & Curran, J. (1973). Management Motivation in the Smaller Business, Gower, Essex.

Stevenson, L.A. (1990). Some methodological problems associated with researching women entrepreneurs. Journal of Business Ethics 9, 439-46.

Stewart, K., & Williams, M. (2005). Researching online populations: the use of online focus groups for social research. Qualitative Research 5, 395-416.

Stieger, S., & Gortiz, A. S. (2006). Using instant messaging for internet-based interviews. Cyber Psychology & Behavior 9, 552-9.

Stolhandske, S. (2001). Urban Farming in Vancouver. Master's thesis. Simon Fraser Uni, Vancouver.

Storey, D.J. (1982). Entrepreneurship and the New Small Firm, Croom Helm, Kent.

Storper, M., & Scott, A. J. (2009). Rethinking human capital, creativity and urban growth. Journal of Economic Geography 9, 147-67.

Strauss, A. (1987). Qualitative Analysis for Social Scientists. New York: Cambridge University Press

Strauss, A., & Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage Publications.

Sullivan, J. R. (2012). Skype: An appropriate method of data collection for qualitative interviews? The Hilltop Review, 6, 54-60.

Susbauer, J.C. (1972). The technical entrepreneurship process in Austin, Texas'. In: A. Cooper and J. Komives (Eds), Technical Entrepreneurship: A Symposium, Centre for Venture Management, Milwaukee.

Sutherland, L.A., Darnhofer, I., Wilson, G., & Zagata, L. (editors) (2015). Transition pathways towards sustainability in European agriculture. Wallingford: CABI International.

Turner, B. (2011). Embodied connections: Sustainability, food systems and community gardens. Local Environ. 16(6), 509–22. doi:10 .1080/13549839.2011.569537

Van Veenhuizen, R. (2006). Cities Farming for the Future. In René van Veenhuizen (ed), Cities Farming for the Future, Urban Agriculture for Green and Productive Cities. RUAF Foundation. Leusden, the Netherlands. 2.

Veen, E.J., Derkzen, P., & Wiskerke., J.S.C. (2012). Motivations, reflexivity and food provisioning in alternative food networks: Case studies in two medium-sized towns in the Netherlands. International Journal of Sociology of Agriculture and Food 19(3), 365-82.

Walley, E., & Taylor, D. (2002). Opportunists, champions, mavericks..? A typology of green entrepreneurs". Greener Management International 38, 31-43.

Watkins, D.S. (1971). Encouraging the technical entrepreneur, R & D Management 1, 155-8.

Weinrauch, J.D. (1980). The second time around: Entrepreneurship as a mid-career alternative. Journal of Small Business Management 18, 25-32.

Williams, R. (1973). The Country and the City. Oxford, UK: Oxford University Press.

Wirth, L. (1938). Urbanism as a way of life. American Journal of Sociology 44, 3–24.

Wojan, T. R., Lambert, D. M., & McGranahan, D. A. (2007). Emoting with their feet: Bohemian attraction to creative milieu. Journal of Economic Geography 7(6), 711-36.

YPARD. (2018). The Agripreneur: A new breed of Young entrepreneurs combining their love of Farming and Agriculture with an acquired professional Business Approach. Accessed on 5 March 2018. https://ypard.net/testimonials/agripreneur-new-breed-young-entrepreneurs-combining-their-love-farming-and-agriculture-

Appendices

Appendix 1: Interview Guideline

<u>Questionnaire for Taxonomy</u>

Gender: Male/Female

Age: 20-30 / 30-40 / 40-50 / 50-60

Education:

Prior Job:

Origin:

<u>Business</u>

Type: Permaculture, Rooftop, Parcel, etc.

Founded: Year

<u>Question Guideline for Interview</u>

- Do you have a farming background?
- How did you get into farming?
- Do you have an entrepreneurial background?
- Why did you launch this business? What were the motivations to join?
- Why do you run this business?
- What are your expectations?
- What are the challenges?
- Do you have a side job?
- What do you hope to do in the future?
- How do they perceive your job?
- Why in the city?
- Would you open a rural farm? Why? Why not?
- Do you have a co-founder? Why did you chose to do so? Why did you chose this person?

Appendix 2: Interviewees Pseudonyms and Interview Dates

Pseudonym	**Date**
Isabell	09 March 2018
Anna	09 March 2018
Elisa	12 March 2018
Susanne	15 March 2018
Iris	21 March 2018
Lina	27 March 2018
Helena	30 March 2018
Paula	07 April 2018
Carla	12 April 2018
Karen	15 April 2018

Appendix 3: Interviewee Matrix

	1	2	3	4	5	6	7	8	9	10
Management Status										
Single Entrepreneur							X			X
Co-Entrepreneur	X	X	X	X	X			X	X	
Multi-Entrepreneur						X				
Gender										
Male	X				X		X		X	X
Female		X	X	X		X		X		
Age										
20-29						X				
30-39	X	X			X			X	X	X
40-49										
50+			X	X			X			
Expat										
Yes			X	X						
No	X	X			X	X	X	X	X	X
Context										
Sweden	X	X	X		X	X				
The Netherlands				X				X		
United States							X			
Denmark									X	
Canada										X
Activity										
Yes	X	X	X	X	X		X	X	X	X
Location of Farm										
Ground	X	X	X	X	X	X	X	X		X
Rooftop	X				X				X	
Indoor										X
Business Model										
CSA		X	X	X			X	X	X	
Regular sales through markets etc.						X	X			
Restaurants	X				X	X			X	X
Urban Resident										
Yes	X	X		X	X	X	X	X	X	X
No			X							
Business Establishment										
Year	2015	2015	2015	2015	2015	2017	2014	2015	2013	2015
Method										
Skype Video	X	X		X	X	X		X	X	X
Skype Audio			X	X			X			