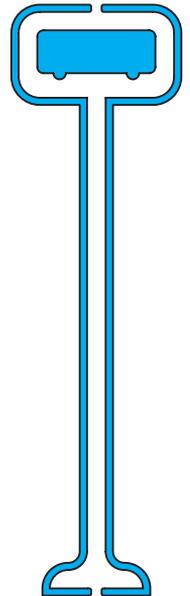
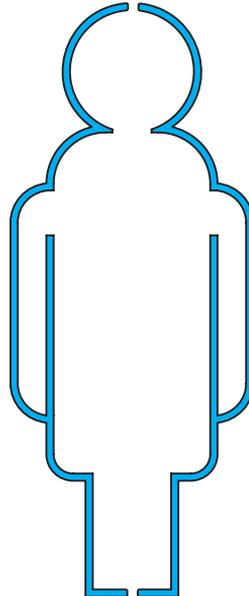
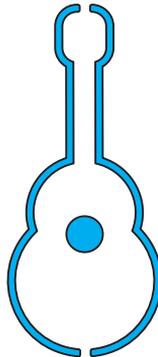
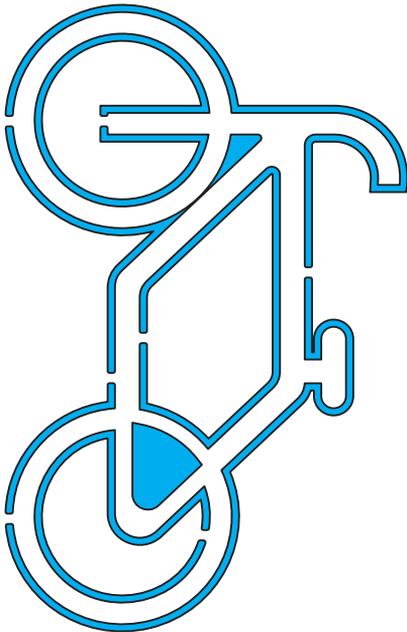
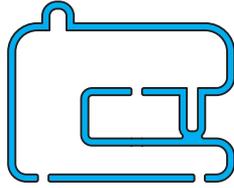
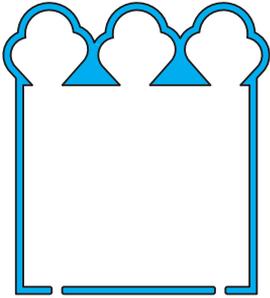


# A JOURNEY THROUGH ALTERNATIVE WAYS OF LIVING

a design approach for scaling up grassroots  
initiatives towards sustainability



Nicholas Torretta

This work has been a Master's thesis in the field of Sustainability and Design for the Creative Sustainability MA program in the Department of Design of the Aalto University School of Arts, Design and Architecture - Helsinki, Finland. Completed in Spring 2014

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# CONTENTS

<b>INTRO</b>	Abstract 7	Personal background & motivations 9	Introduction 11	Methodology 13
<b>Background &amp; Literature</b>				<b>A</b>
Aim of the study & first research question 39		Alternative ways of living 28	Design & sustainability 18	
<b>Field research</b>				
<b>B</b>		Interviews with key activists 42	Personal experiences 44	Description of context 48
				Field conclusion & second research question 90
<b>Design output</b>				
<b>D</b>		Prototyping experiences 106	Development of the design output 95	Design brief 94
<b>Discussions &amp; conclusion</b>				
Discussion 116				
Conclusion 117		Further work 118	Future prospects 118	
		Bibliography	120	
		Figures & tables	130	
		Appendices	132	

**INTRO**

# ABSTRACT

This study examines how an evolution towards sustainable ways of urban living can be achieved through small steps. In this way, a literature review on the fields of design, sustainability and alternative ways of living provides a frame for approaching design for sustainability as well as an historical overview on alternative social movements and its motivations. Consequently, a field research proves Helsinki area as a powerful agent on practices informing sustainable futures. This area exhibited strong activities on sustainable practices such as urban farming, waste reuse, time banking and many others supported by various local groups and events. As a consequence, the local context is depicted by describing the local practices, groups, events and networks and its interrelations. However, the small scale of the local active community proved necessary the development of means to disseminate the available practices. In this way, design was used as a way of activism and facilitation to transform the information gathered in the research for the creation of a “guidebook for urban freedom”. In order to prove the validity of the guidebook,

some of the practices featured in it were subject of experiments. In this way, experiments were held in order to analyze the acceptance and experience of “outsiders” engaging in alternative practices. For this, people were encouraged to engage into practices such as “urban farming” and “reusing discarded food” both alone and as a group. The conclusion drawn is that people are eager to engage into alternative practices. In this way, people tended to achieve better sense of autonomy and community when engaged in such practices. Furthermore, through the process, design proved to be a powerful tool for making visible and facilitating sustainable futures.

*Keywords: design for sustainability, social innovation, grassroots, self-sufficiency, alternative living*



photo by Nicholas Torretta

# I PERSONAL BACKGROUND & MOTIVATIONS

I was born in São Paulo, in a family divided between arts and social work. As a consequence, I kept interest and activities on both sides. When I went to Industrial Design University (FAAP), it was a matter of time to realize that the other part was missing. After some years working in several design studios I felt no motivation for keeping product design work as my profession.

Just in time, I discovered the Design Possível NGO (see [designpossivel.org](http://designpossivel.org)) which used design as a tool to improve society towards sustainability, a concept which is now known as “design for social innovation for sustainability”. Working in this NGO, teaching in underprivileged communities in Brazil, I got the art and the social work back together to my life. This leap into social design resulted in the development of a teaching methodology for teenagers from these communities as my bachelor thesis.

The methodology culminated in the creation of VOQ project (see [viraroque.blogspot.com](http://viraroque.blogspot.com)). Through this project I was able to hold workshops and lectures with several organizations in Brazil and in Finland. The experiences on the mentioned methodology and workshops can be seen in the published paper “Empowerment through design-doing experiences: Workshops on nurturing creative makers for sustainability”

written together with my study colleague and friend Hessam Pakbeen and published in the Kismif 2014 conference.<sup>1</sup>

However, I was not completely satisfied with the current state of design for social innovation and social work in general. This happened because these fields are focused mostly on integrating people into the mainstream economy. In the case of Design Possível this was made by teaching product development, management and craft in order to create economically self-sufficient groups within the communities.

However, whenever I visited a community (we do not use the word “favela” in Brazil anymore), I was amazed by the community feeling and thus the mutual help present between the inhabitants. Furthermore, there is a peculiar characteristic in these communities in Brazil when it comes to housing: they never build a proper roof on top of the houses and instead they make a slab ceiling. This is because when the family gets bigger (marriages or births) they build a new house on top. Therefore each floor houses a generation of the family. In this way, seeing those slabs, I kept thinking “Why don’t we teach them how to make urban farms and grow plants on the rooftops? We are now making these communities to become more dependent on the economy by making them to work as a craft group earning a little amount of money per product. Couldn’t social innovation be more liberating?”

Consequently, these questions led me to the

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1 *see [www.kismif.eventqualia.net/en/2014/home](http://www.kismif.eventqualia.net/en/2014/home)*

development of this study. I wanted to seek and understand the technologies and practices that the Social Innovation field could embrace in order to become more liberating. And further, to explore how design can be used to facilitate and disseminate these technologies and practices.

# II INTRODUCTION

Alternative movements have always been present throughout human history. Sharing the goal of achieving self-sufficiency, these “counter” movements have emerged to provide alternatives to the mainstream culture. Nevertheless, in different eras, these movements have emerged for different reasons. For instance, in the 18th century, alternative movements emerged to oppose the shift from agrarian to urban society (Nichols, 2006). More recently, in the 60’s, these movements emerged to oppose the increasing hierarchical and consumption-centered society (Turner, 2005). Accordingly, nowadays, alternative movements are rising to inform the needed change to achieve sustainable futures: that is, the environmental and social changes imposed to our society during the last decade triggered people to search for alternatives (Fuad-Luke, 2009, p.141). In this way, different contemporary social movements have emerged in order to tackle the sustainability agenda through different approaches. In the current scenario, the “grassroots” movement is seen as particularly effective for informing change towards sustainable futures (Goodman, 2013). These movements are gatherings of people aimed at acting for generating local change (Parker et al., 2007, p.119). In accordance to this, the Worldwatch Institute (2010) stated that achieving sustainability entails changes in every aspect of human action. In consonance to this social change, the field of design has also undertaken a change. In this way, design is moving from product-centered to process-centered through the roles of facilitation and activism (Fuad-Luke,

2009; Hillgren et al., 2011; Knott, 2013). For these reasons, this master’s thesis aims at using design as a tool of facilitation and activism to inform alternative ways of living. In this way, I am at analyzing local grassroots initiatives in order to discover a feasible “step-by-step” path of practices leading to sustainable ways of living. In this way, the goal is to create a guidebook for informing and inspiring a wider public to engage in such practices, therefore transforming the enormous change needed for sustainability into small culturally acceptable everyday practices. For that, this work is divided into four parts.

(A) The first part, A, is a literature review. This part starts by framing the study approach to design for sustainability. In this part, the undergoing change in the design focus becomes clear. In this way, design becomes perceived as a powerful tool when used as a way of activism and facilitation, especially when concerning social innovation towards sustainability. After this, the second section of the first part analyzes the topic of “alternatives way of living”. In this topic I analyze the common aspect of “self-sufficiency” through its definitions, practice and relation to human needs. In this sense, self-sufficiency is understood as an overarching topic embracing the concepts of autonomy and independence. Subsequently, this study steps into depicting the history of alternative movements. In this historical overview, the aspect of “community building” becomes clear as an underlying characteristic of alternative movements. For this, I further the topic by analyzing such aspect and then step into analyzing the motivations behind alternative movements. In this concern, it is understood

that motivation for such movements happens in two stages. The first is a feeling of dissatisfaction with the mainstream culture; consequently, the second is the will to move towards achieving self-sufficiency and inner development. Hence, this first part sets the tone and the focus areas for the field research.

(B) Therefore, the second part, B, presents field research carried in Helsinki. This section focuses on analyzing the alternative practices present in the area which are informing sustainable futures. In this concern, the first section presents interviews with key activists in Helsinki. These interviews reveal the motivations and the personal stories of this group of people. In this part, the same sources of motivation found in the literature are also found in the local activists. After this, I present my experiences in the local events and practices informing sustainable futures. As a result of this research, Helsinki was found as having a remarkable activity in alternative practices leading to self-sufficient sustainable futures, however, with a limited number of participants. Consequently, the third section of this part provides a description of the context by describing the practices, groups, events and websites and their local interconnections. In this part, the practices found locally are fitted into a set of twenty internationally known concepts such as “urban farming”, “time banking” and “commune”. Consequently, the knowledge gained from this research, together with the information from the literature review, frames the second research question: how to engage more people into alternative practices? This question is then used for the practical part of the study, which is

the third part (part C).

(C) Part C describes the creation of a guidebook for alternative urban practices. This part starts with the description of the design brief. This brief poses a need for creating a framework for the presentation of information in the guidebook. Therefore, the second section of this part summarizes research on the topics of “cognition” and “psychology”. These research findings raise issues such as the necessity of organizing the practices into a “pattern” and to provide “how-to” guidance for each one. Hence, part C continues by describing how the knowledge gained from part A and B were adapted to the resulting guidebook (see “a Guidebook for Urban Freedom”). Furthermore, the third section of this part presents reports of practical experiments carried on certain practices featured in the guidebook. These experiments were made to engage different groups of people into certain practices.

(D) Hence, part D concludes this study by stressing the relevance of alternative movements and how design can inform these movements towards sustainable futures. Furthermore, this section sheds light on the human need for self-sufficiency and on the gap between the current options of alternative practices and the willingness of people to engage in them. Hence, it is stressed the need of making these practices more visible. In this way, it is concluded that design is a powerful tool for facilitating and scaling up the realization of social change to sustainable futures. Further to this, I make observations on the need for scaling up these practices in order to make remarkable local changes such as affecting local politics and laws.

# III METHODOLOGY

This study is based on the action research method. Action research is a participatory research method aimed at producing “practical knowledge that is useful to people in the everyday context of their lives” (Reason and Bradbury, 2001, p.2 cited in Koshy, 2005 p.9). According to Kemmis and McTaggart (2000, p.595) cited in Koshy (2005, p.4) action research aims at solving local problems and thus, generating local change. For this, it happens in a spiral modus (figure 1) which includes analysis, plan, action and reflection in a continuous manner (Kemmis and McTaggart, 2000, p.595 cited in Koshy, 2005, p.4). Therefore, the research process is constantly redefined as knowledge emerges from each stage (O’Leary, 2004, p.141 cited in Koshy, 2005, p.5).

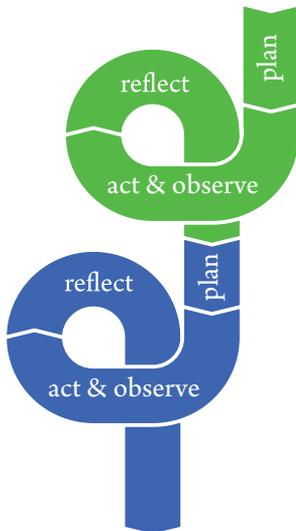


Figure 1  
Action research spiral (Koshy, 2005)

For this to happen, action research makes use of various tools such as “questionnaires, diaries, interviews and case studies” (Koshy, 2005, p.8). In the case of this study, for the collection of information and analysis needed for this research, I used ethnographic research methods as the main tool.

Ethnographic research is aimed towards exploring and examining societies and its cultures (Murchison, 2010). For this, the researcher has to become integrated to the studied society in order to gain “explicit knowledge” and thus being able to access “insiders’ perspectives” (Murchison, 2010). In this way, ethnography relies on several strategies for collecting information, which comprise both literature research and field observations and experimentations (Garison, 2013). In this way, I use the following ethnography research strategies: (1) “participant-observation”, seen as the “centerpiece” of ethnographic research, this method entails the researcher’s engagement with the studied society and its practices; (2) “Interview”, which is used to get direct knowledge and get clarifications over different aspects of the local society; and (3) “maps and charting”, which is a way of organizing and presenting

the information collected (Murchison, 2010). Furthermore, I finalize the research by testing the output through a design intervention which consisted of creating interaction between different actors for performing a practice. For this intervention, the method of design ethnography (Wasson, 2000) was used in order to collect information for informing the design output of the study.

As a consequence, the methodology of this study is as shown in figure 2. In this way, each part of the study's methodology contributed to narrowing down the research by reflecting on the knowledge gained and consequently defining the framework and goal of the subsequent parts.

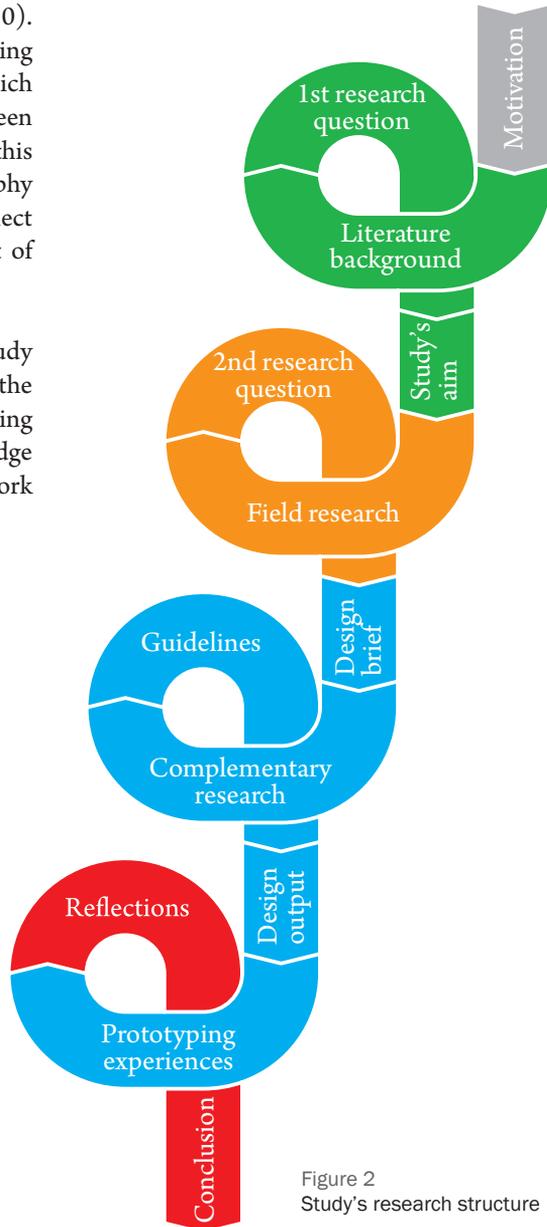


Figure 2  
Study's research structure



# A

background  
& literature

In this section I present the background and literature on the topics treated in this study. In the first part (A1) I frame the approaches to design (A1.1) and sustainability (A1.2). Consequently, the approach to design for sustainability used throughout the study process is presented in A1.3. Subsequently, in the second part (A2) I step into the topic of alternative ways of living which I start by analyzing the concept of self-sufficiency and its relation to alternative ways of living. In this way, the first section (A2.1) presents definitions of self-sufficiency and its relations to human needs. On the second section (A2.2) I analyze movements of alternative living in a historical context. Further, in A2.3, I shed light on the underlying motivations behind these movements in order to understand what can prompt people towards reaching more sustainable ways of living. Consequently, the part A3 I present the aim of this work and the first research question.

# A1 DESIGN & SUSTAINABILITY

## A1.1 - Design

Design, being an act of creating new solutions, is responsible for making visible local contemporary cultures and values (Chick and Micklethwaite, 2011; Fuad-Luke, 2009; Wenger, 1999). For this, design acts through the five capitals (Table 1) by converting the natural, human and financial capitals into man-made expressions. Therefore, the design profession renders as a translator of contemporary beliefs, where it can be influenced by - and influence on - local values, behaviors and culture. (Chick and Micklethwaite, 2011; Fuad-Luke, 2009)

*“Design is the act of deliberately moving from an existing situation to a preferred one by professional designers or others applying design knowingly or unknowingly” (Fuad-Luke, 2009, p.5).*

However, design, for the most part, is in discordance with the ongoing socio-cultural and environmental changes. While human aspirations are converting towards needs of self-expression and autonomy, and the environment is imposing limits on human action, design still praises the old goals of capitalism and free trade originated from the Industrial Revolution. (Fuad-Luke, 2009; Atkinson, 2006 and Csikszentmihalyi, 1981 cited in Hoftijzer, 2012)

Nevertheless, a slight change can be seen in the design profession during the past decades. This happened with the emergence of “prosumerism” (“prosumer” - term coined by Alvin Toffler (1989)), DIY (do-it-yourself) and Maker movements. These movements stand for the engagement of the user in partial or complete production of goods to be consumed (Fuad-Luke, 2009, p.143; Mortati and Villari, 2013; Phillips et al., 2013; Tapper and Zucker, 2011). In this way, the rise of these movements may be due to the rising perceived human need for “autonomy”. Accordingly, Marx (1884) cited in Knott (2013, p.8) argued that “in order to live a truly human life, the free use of means of production is an essential condition”. In figure 3, Sanders (2004) cited in Fuad-Luke (2009, p.143) shows a clear shift from passive consumerism to “prosumers” (Toffler, 1989) and co-creation.

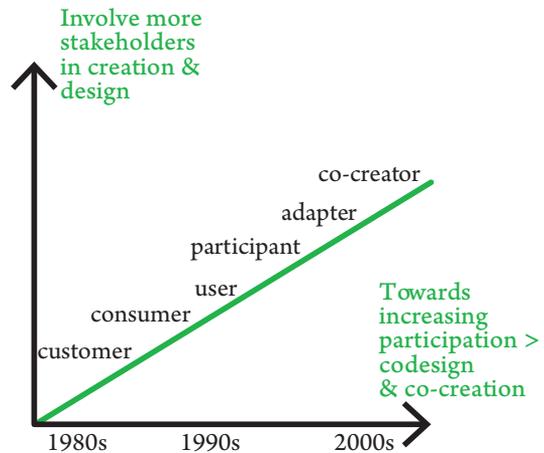


Figure 3  
From consumers to co-creators  
(Sanders, 2004 cited in Fuad-Luke, 2009, p.143)

### The five capitals

1 natural capital	Natural capital is any stock or flow of energy and material within the environment that produces goods and services.
2 human capital	Human capital consists of people's health, knowledge, skills and motivation. All these things are needed for productive work. Enhancing human capital through education and training is central to a flourishing economy.
3 social capital	Social capital is concerned with the institutions that help us maintain and develop human capital in partnership with others; such as families, communities, businesses, trade unions, schools and voluntary organizations.
4 manufacturing capital	Manufacturing capital comprises material goods or fixed assets that contribute to the production process such as tools, machines and buildings.
5 financial capital	Financial capital plays an important role in our economy, enabling the other types of capital to be owned and traded. Unlike the other types of capital, it has no real value in itself but is simply representative of natural, human, social or manufactured capital.

Table 1  
Five capitals (Forum for the Future, n.d in Chick and Micklethwaite, 2011, p.95)

However, as stressed by Knott (2013), these above-mentioned movements are not able to create the change needed in design and production to cope with the emerging human aspirations and environmental constraints. This happens because, to inform these movements, design and industry would only change the stage where they are located in the process of making products. This is, they would move from the making of complete products to the production of half-made products and tools to be used by the consumers. (Knott, 2013)

Hence, in order to align with the changing environmental conditions (natural capital) and socio-cultural landscapes (human, social and cultural capitals), design has to undertake a greater change (Hirscher, 2013, p.43; Scott et al., 2012). To complete this change, an evaluation and understanding of the impacts of design is needed in order to move “redirective practice” towards “more sustainable solutions” (Willis, 2008, cited in Fuad-Luke, 2009, p.87).

To use design towards more sustainable solutions, many authors argue for a more holistic and systemic approach. For instance, Scott et al (2012) defends a shift towards practice-centered design. Accordingly, Manzini (2006) states that design should turn towards creating systems to enable “enable people to live as they like and in a sustainable way”, thus shifting from consumption-centered to experience-centered (Manzini, 2006, p.11). Furthermore, Neves and Mazzilli (2013,

p. 4) state that for the development of systems, design has to acquire a holistic modus, one which considers and connects all the involved capitals and stakeholders.

By having a holistic view and acting closely to society, design becomes a powerful tool for changing environmentally and socially harmful behavior (Chick and Micklethwaite, 2011; Fuad-Luke, 2009). Behavior change informed by design happens through two main design roles: (1) the tailoring of messages and (2) the facilitating of practices. Some activities that fall under tailoring of messages are also widely known as “design activism”, while the second stands for the designer’s role as facilitator of practices and community building. Nonetheless, it is important to notice that these two design roles are also used complementarily in many cases. (Chick and Micklethwaite, 2011; Fuad-Luke, 2009; Hillgren et al., 2011; Knott, 2013)

### **A1.1.1 Design activism**

According to Fuad-Luke (2009), design activism is design applied to “create a counter-narrative aimed at generating and balancing positive social, institutional, environmental and/or economic change” (Fuad-Luke 2009, p.27). To create this “counter-narrative”, activism happens by altering the perception of the five capitals. This is made by giving greater focus to one capital over the others, therefore identifying and stressing problematic situations related to that specific capital in order to generate positive action through design methods focused on behavior and attitude change (Fuad-Luke 2009). Consequently, design activism has a strong political characteristic and is therefore explicit about the cause it is supporting (Chick and Micklethwaite, 2011, p.59).

According to Fuad-Luke (2009), design as activism dates back to 1850 and the emergence of the British Arts and Craft movement. This movement opposed the rise of industrialized product by favoring “beautiful and useful” craft products. Following the Arts and Craft movements, many other arts and design

movements emerged as forms of activism. Nevertheless, the communicative power of design for behavior change was first exploited by the Vienna Workshop and the Deutscher Werkbund in the early 20th century. (Fuad-Luke 2009, p.38)

Communication is nowadays the most prominent part of design activism. This form is often through graphic campaigns such as the ones by World Wide Fund for Nature (WWF, see [www.wwf.org](http://www.wwf.org)). For this, the whole of design is to find new way to communicate and simplify the messages to be transmitted. (Chick and Micklethwaite, 2011; Fuad-Luke, 2009, p.87)

### A1.1.2 Design as facilitator

Another design role for promoting behavior and attitude change, both for fostering existing positive behavior and for diminishing detrimental ones, is the role of design as a facilitator. According to Phillips et al. (2013) and Hoftijzer (2012), design already has a tradition of facilitation. This tradition rose in the 60's in DIY field, where the designer was always the one who facilitated activities by either “creating the easy to use machinery (tools), or designing software, providing tutorials, manuals and kits or (...) by offering assistance through magazines and blogs” (Hoftijzer, 2012, p.9). Consequently, the foundation of the design role as facilitator is to encourage and instigate creativity and collaborative action by the users. In this sense, this design role acts closely to human aspirations. In other words, Csikszentmihalyi, (1998, cited in Hoftijzer, 2012) states that “humans have an innate urge to be creative” and thus, humans experience a more meaningful life and satisfaction of the need of autonomy when involved in creative processes. (Csikszentmihalyi, 1998, Nieuwenhuys, 1969, Ruskin, 1853 and Thompson and Schlehofer, 2008, cited in Hoftijzer, 2012)

By using design as a facilitation tool, the designer opens the solution making process to include all the stakeholders and to generate participation. Participation and openness is the core of what is known as “social innovation” (Hillgren et al., 2011, p.170). According to Mulgan et al. (2007, p.8) and Hillgreen et at. (2011, p.169), Social innovation is a field which aims at developing new ideas and solutions to satisfy human and social

needs. Therefore the role of design as a facilitator is inherent to the practice of design for social innovation (Manzini, 2006). For this practice, design acquires a metadesign characteristic. Metadesign is defined by Fischer (2003, cited in Fuad-Luke, 2009, p.151) as “objective techniques and processes for creating new media and environments that allow the owners of problems to act as designers”. In this sense, design is seen as wieldy especially when concerning the creation of networks, visualizations and prototyping experiences for the users to be able to create their own solutions (Hillgren et al., 2011).

Moreover, Jégou and Manzini (2008, cited in Hillgren et al., 2011, p.170) and Mortati and Villari (2013) argue that design has, not only to create stakeholder networks, but also to support these networks by designing connectivity. In its turn, designing connectivity requires an understanding of the stakeholders, the environmental context and the tools involved (Mortati and Villari, 2013, p.11). By creating connectivity and collaboration, design becomes a community builder which “enable[s] actors to continually adapt and create” (Hillgren et al., 2011, p.171). Consequently, the role of design as a facilitator in design for social innovation is to “either be a better player or to set the rules that others want to play” (Knott, 2013, p.63).

## A1.2- Sustainability

The topic of sustainability has been given rising attention in the past decades. The most common definition for sustainability originates from the Brundtland report from 1987, which defines sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987 cited in Parker et al., 2007, p.277). Later the World Conservation Union, in 1991 reinforced this concept stressing

the environmental concerns, stating that sustainability is to “Improve the quality of human life while living within the carrying capacity of supporting ecosystems” (IUCN et al., 1991; Parker et al., 2007, p.277). Whichever the focus of the definition, it is understood that sustainability has three dimensions; they are: (1) Social, (2) Environmental and (3) Economic (Chick and Micklethwaite, 2011, p.82). These dimensions have been organized in many different ways to define when sustainability can happen. These different arrangements can be seen below:

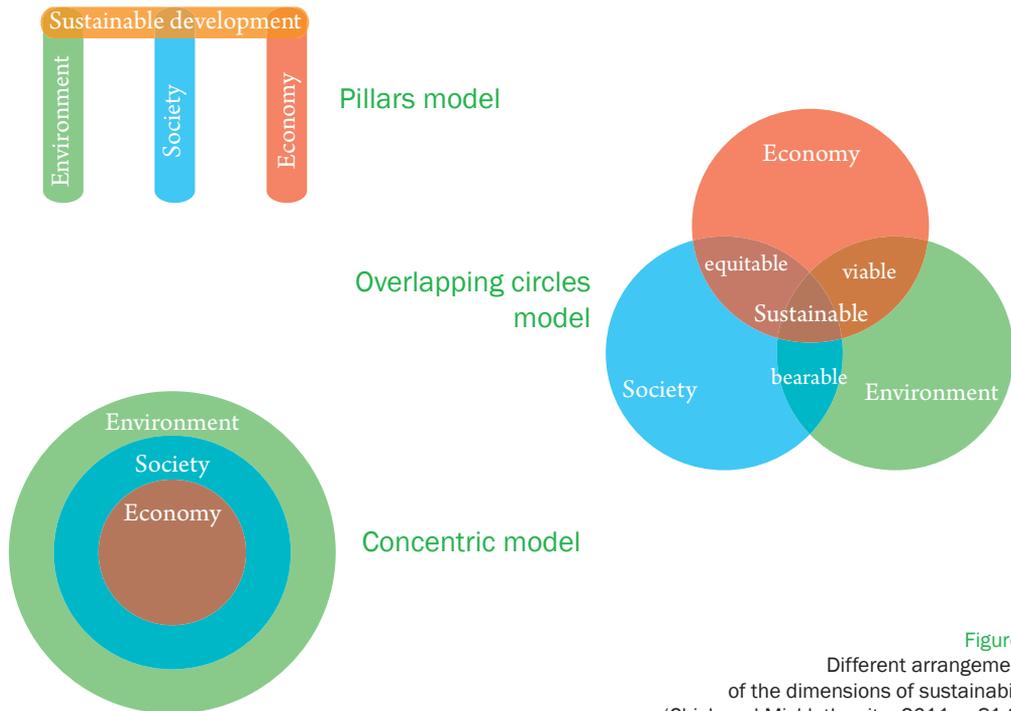


Figure 4  
Different arrangements  
of the dimensions of sustainability  
(Chick and Micklethwaite, 2011, p.81-83)

However, the practice of sustainable development and sustainability is nowadays predominantly economic-centered (Schumacher and McKibben, 2010). According to Schumacher and McKibben (2010, p.9) this happens because the dominant belief is that “universal peace” can only be achieved through “universal prosperity”. However, research proved that, after a certain level of wealth, economics (money and consumption) fail to fulfill human needs and aspirations and therefore do not contribute to the creation of peace or happiness (Lane, 1991 and Easterlin, 1995 cited in Cherrier and Murray, 2002, p.245). This happens because, through only economic development, people cannot develop other aspects of life such as self-development and relationships with others (Csikszentmihalyi, 1981 cited in Hoftijzer, 2012, p.7).

*“If however, economic ambitions are good servants, they are bad masters”  
(Schumacher and McKibben, 2010, p.1)*

Furthermore, the sustainability models fail to acknowledge the relationships between the different dimensions. For instance, these models do not take into consideration that humankind is a part of nature. In fact, humans are a very fragile part of nature and completely dependent on it. Consequently, the sustainability discourse translates into strategies for sustaining human life on earth (Chick and Micklethwaite, 2011, p.79). However, a rapid glance at the current state of our world’s society is enough to realize a plethora of problems ranging from violence and poverty to

ethical and human-rights issues (Crocker, 2008, p.1). Therefore, Chick and Micklethwaite (2011, p.79) states that one should question *“what do we want to sustain?”*.

Consequently, the sustainability discourse should shed light on societal problems in order to reach a desirable condition to be sustained. Accordingly, Matsuura (2001, cited in Chick and Micklethwaite, 2011, p.83), argues that the “cultural” dimension should be added to the sustainability discourse, stressing that “cultural diversity is as necessary for humankind as biodiversity is for nature”.

*“Our system of meaning shapes our presence in the world”*

*(Leitão et al., 2013, p.7)*

Culture is responsible for the way we perceive our world (Ostrower, 1977). In this way, it is what defines the sets of values, ideas, beliefs and techniques of a society. Sen (1999, cited in Leitão et al., 2013, p.5) argues that, to understand the culture of a given society, one has to analyze its surrounding environment. This happens because the development of a culture relies on the locally available resources and barriers to be overcome. For this reason, culture is intrinsically connected to the environment where it is located. (Leitão et al., 2013)

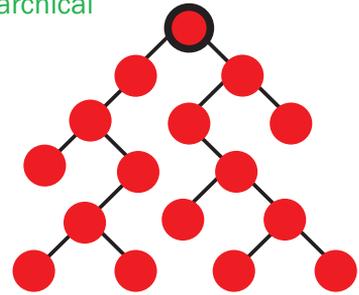
As a consequence, given the biological and cultural diversity present on earth, many authors suggested that sustainable societies can only be achieved through a small-scale and decentralized approach (Walker, 2006, p.55). Accordingly, Manzini and Vezzoli (2002) argue that there will be a wide diversity of sustainable societal models rather than one unified model. Further, they argue that each society will develop their own model of sustainability according to their surrounding environment and culture.

The concepts of small-scale and decentralization are seen as powerful for the development of sustainable societies for two main reasons: first, for its organization models and secondly for generating rapid evolution and development towards sustainability.

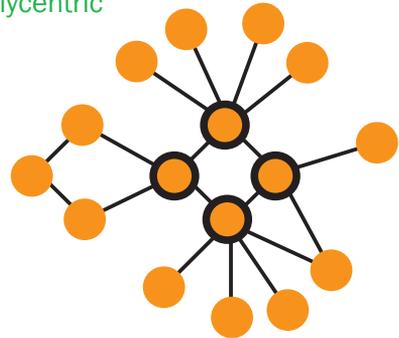
### A1.2.1 Decentralization

Decentralized organization is seen as *sine qua non* for the efficient development of sustainable societies. In comparison to hierarchical and polycentric types of organization, network types of organizations are seen as more efficient. For instance, research by Ostrom (2009) demonstrated that non-hierarchical systems tend to work better than hierarchical ones. Figure 5 shows three types of organization: (a) hierarchical, (b) polycentric and (c) web.

(a) Hierarchical



(b) Polycentric



(c) Web

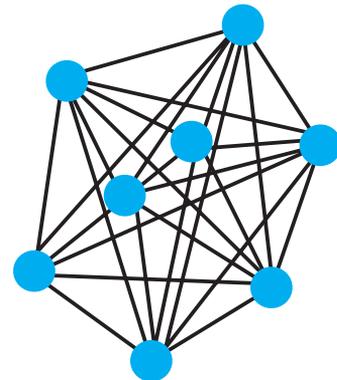


Figure 5  
Types of organization  
(Stocker et al., 2001)

The advantage of web-like organizations is the lack of dependency on other actors (nodes) within the web. In a hierarchical or polycentric organization, due to its “tree” arrangement” actors which are positioned in lower stages of the hierarchy are dependent on the ones in higher positions. Therefore, the functioning of the whole systems is dependent on the higher position. In this sense, if a high node fails or is removed, the whole system is compromised. On the other hand, while web types of organization are still sensitive to the removal of nodes, the nodes are not in a dependency relation between each other. Therefore the removal or failure of nodes does not compromise the activity of the system as a whole. (Stocker et al., 2001)

Nevertheless, an important aspect in any kind of structure is connectivity. For instance, Macy (1998, cited in Stocker et al., 2001) stresses the importance of cooperation between the different nodes. Further, Ostrom (2009) argues that efficiency in self-organized (non-hierarchical) settings is only possible if there is effective communication within the web. As a consequence, high connectivity and cooperation between nodes leads to greater ability to change and adapt. This happens because, as noted by Marsden (2000, cited in Stocker et al., 2001), highly connected nodes can affect the behavior of the neighboring nodes.

Hence, highly connected webs of self-organized nodes (societies, communities or actors) can generate more rapid and effective changes towards sustainability. Consequently, as decentralized, web-like organizations means the division of

hierarchical structures into smaller independent units, actions in this area entail inevitable focus on smaller scales.

### A1.2.2 rapid evolution in small-scale

*“think globally, act locally”*

Geels (2002), from the field of social and systems innovation, argues that radical innovations aimed at big scale problems are more likely created in smaller groups. This author argues that small scale groups are more effective for the creation of sustainable innovations. According to him, this happens because small-scale settings are more supportive of experimentation and learning. Therefore, due to this freedom of experimentation, small groups can create more innovative solutions to access big scale problems (Geels, 2002). Accordingly, Holling (2001) explains that, in comparison to bigger scale settings, smaller scales are faster and more adaptive to changes in the environment. As a consequence, innovations generated in smaller settings can be transmitted to bigger scales. (Geels, 2002; Holling, 2001) As a consequence, taken that evolution is “a process of unfolding and reconfiguration” (Geels, 2002), aligned small-scale innovation can create a regime shift. That is, global change towards sustainability is more likely to be achieved through small-scale, decentralized, innovations.

### A1.3 -Approach to design & sustainability for this study

*“The planet is a self-adjusting system, it will certainly outlast us”*

*(Chick and Micklethwaite, 2011, p.79)*

According to research by Pelletier and Sharp (2008, p.212), people are aware of the changing environmental conditions, however, the gap between awareness and action still remains problematic (Pelletier and Sharp, 2008, p.210). At the same time, human aspirations are rising towards realization of autonomy and self-sufficiency (Deci and Ryan, 2008). Hence, for this study, I approach sustainability by focusing on its social dimension. This means, I place greater focus on creating changes in the social dimension of sustainability, nevertheless, also informing the other dimensions (environmental and economic). For this I focus on scrutinizing small-scale groups and practices within the local culture.

Moreover, I concentrate on arts and design-based initiatives which are generating community development, empowerment and urban self-sufficiency through everyday sustainable practices.

For this, here I take the position of a designer activist and facilitator. Here I use design to identify the local context in order to frame messages and generate guidelines to promote positive social changes. In this scenario, I act together with the local community to inform people towards engaging on a path towards community based self-sufficiency in urban landscapes.

*“Design to make sustainable attitudes easy”*

*(Chick and Micklethwaite, 2011, p.103)*

# A2 ALTERNATIVE WAYS OF LIVING

## A2.1 – Self-sufficiency

The discourse of “self-sufficiency” inevitably incites the concepts of “autonomy” and “independence”. While these three terms can be seen as different concepts, there is an enormous overlap in their definition and practice. In terms of language definition, to be “self-sufficient” is defined by the Merriam-Webster Dictionary as “[to be] able to maintain oneself or itself without outside aid”. At the same time, “autonomy” is defined as “the state of existing or acting separately from others”; whereas “independence” is defined as “freedom from outside control or support” (Merriam-Webster, n.d.). Therefore, all three concepts entail a high degree of isolation, a state of existing without outside connectivity.

When it comes to practice, these terms, especially “autonomy” and “self-sufficiency”, are found in the discourse of many pro-environmental initiatives (Parker et al., 2007). However, although overlap is still present, these concepts are not as rigid as in they seem in theoretical definitions.

Autonomy, for instance, is defined in psychological terms by Deci and Ryan (2008b) as “to act volitionally, with a sense of choice”. According to these authors, autonomy is a basic psychological need of human beings (Deci and Ryan, 2008b). Furthermore, “autonomy” is widely known for its relation to the concept of Anarchism (Ward,

2004). Anarchism is a political theory which opposes the ideas of governance, hierarchy and control (Parker et al., 2007, p.9; Ward, 2004). In this way, anarchism praises “individual autonomy” united to “voluntary cooperation” (Parker et al., 2007, p.9). In this sense, anarchism defends the actualization of self-governing, autonomous communities connected in non-hierarchical modus (Ward, 2004). Consequently, the practice of autonomy can be summarized as “the ability to act by one’s own will, whether alone or interdependently as a group”.

At the same time, self-sufficiency is defined by Parker et al. (2007, p.251) as to “provi[de] for one’s own need without outside aid or exchange; and involves producing one’s own food, energy, clothing and so on”. However, the author argues that the practice of self-sufficiency occurs in levels. In this sense, he states that there are degrees of self-sufficiency rather than absolute or no self-sufficiency. Further, he states that its current practice is based on community living and non-hierarchical organizations through the creation of networks (Parker et al., 2007, p.251). Consequently, self-sufficiency can be summarized as “the ability to self-provide the means to fulfill needs either as an individual or as a group”. In this sense, the achievement of degrees of self-sufficiency can lead to the realization of autonomy. What I mean is: e.g., when someone can provide for her own need for electricity, this person can autonomously decide how to use this electricity.

Furthermore, as can be seen, “connectivity” plays an important role in the practice of self-sufficiency and autonomy. As a result, for this work, I use the term “self-sufficiency” as an overarching concept which embraces the ideas of autonomy, independence and interdependence. In this sense, my definition of self-sufficiency for this work is: “connected group action with the purpose of achieving degrees of autonomy and independence from the surrounding systems in order to develop towards sustainable ways of living”.

Nowadays, the understanding of human needs is central to the idea of sustainability. This importance rose especially after the Brundtland report, which directly linked sustainability to satisfying human needs (see sustainability in section A1.2). While human needs theory dates back to Plato, nowadays, two are the most accepted theories: (1) Maslow’s Hierarchy of needs (figure 6) and (2) Max Neef’s table of needs and satisfiers (table 2). (Jackson et al., 2004)

### A2.1.1 Self-sufficiency and needs

All humans have needs. Human basic needs are common to every member of the species and therefore cannot be altered by cultural or conscious wills. (Ekins and Max-Neef, 1992,p.182 cited in Hirscher, 2013, p. 24)

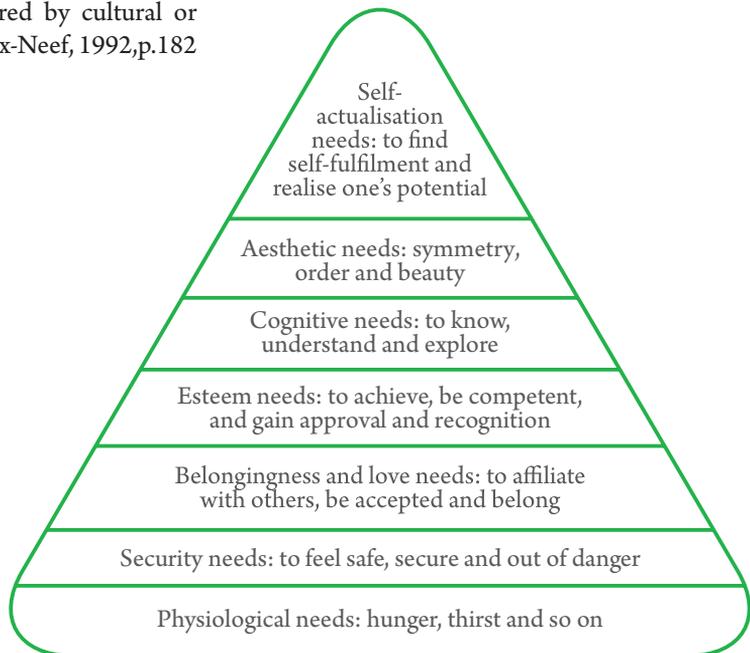


Figure 6  
Maslow's Hierarchy of needs (Maslow, 1954, cited in Jackson et al., 2004, p.8).

	Being	Having	Doing	Interacting
Subsistence	1 Physical health, mental health, equilibrium, sense of humour, adaptability	2 Food, shelter, work	3 Feed, procreate, rest, work	4 Living environment, social setting
Protection	5 Care, adaptability, autonomy, equilibrium, solidarity	6 Insurance systems, savings, social security, health systems, rights, family, work	7 Co-operate, prevent, plan, take care of, cure, help	8 Living space, social environment, dwelling
Affection	9 Self-esteem, solidarity, respect, tolerance, generosity, receptiveness, passion, determination, sensuality, sense of humour	10 Friendships, family, partnerships, relationships with nature	11 Make love, caress, express emotions, share, take care of, cultivate, appreciate	12 Privacy, intimacy, home, spaces of togetherness
Understanding	13 Critical conscience, receptiveness, curiosity, astonishment, discipline, intuition, rationality	14 Literature, teachers, method, educational policies, communication policies	15 Investigate, study, experiment, educate, analyse, meditate	16 Settings of formative interaction, schools, universities, academies, groups, communities, family
Participation	17 Adaptability, receptiveness, solidarity, willingness, determination, dedication, respect, passion, sense of humour	18 Rights, responsibilities, duties, privileges, work	19 Become affiliated, co-operate, propose, share, dissent, obey, interact, agree on, express opinions	20 Settings of participative interactions, parties, associations, churches, communities, neighbourhoods, family
Leisure	21 Curiosity, receptiveness, imagination, recklessness, sense of humour, tranquillity, sensuality	22 Games, spectacles, clubs, parties, peace of mind	23 Day-dream, brood, dream, recall old times, give way to fantasies, remember, relax, have fun, play	24 Privacy, intimacy, spaces of closeness, free-time, surroundings, landscapes
Creation	25 Passion, determination, intuition, imagination, boldness, rationality, autonomy, inventiveness, curiosity	26 Abilities, skills, method, work	27 Work, invent, build, design, compose, interpret	28 Productive & feedback settings, workshops, cultural groups, audiences, spaces for expression, temporal freedom
Identity	29 Sense of belonging, consistency, differentiation, self-esteem, assertiveness	30 Symbols, language, religions, habits, customs, reference groups, sexuality, values, norms, historical memory, work	31 Commit oneself, integrate oneself, confront, decide on, get to know oneself, recognise oneself, actualise oneself, grow	32 Social rhythms, everyday settings, settings which one belongs to, maturation stages
Freedom	33 Autonomy, self-esteem, determination, passion, assertiveness, open-mindedness, boldness, rebelliousness, tolerance	34 Equal rights	35 Dissent, choose, be different from, run risks, develop awareness, commit oneself, disobey	36 Temporal/spatial plasticity

In this pyramid, Maslow presented human needs in a hierarchical modus. In this way, he argued that the basic categories of needs should be met first. Therefore, one can only fulfill the higher needs if all the previous lower stages were satisfied (Jackson et al., 2004, p.7). Further to this, it is important to notice that issues related to this work's definition of self-sufficiency are present in many levels of Maslow's pyramid. For instance, community involvement is listed in the third level "belongingness" and continues to the fourth level as "gain approval and recognition". At the same time autonomy-related issues appear in the higher level, as needs of "self-actualization" and "self-fulfillment".

At the same time, Max Neef (1991, 1992) cited in Jackson et al. (2004) places self-sufficiency related issues throughout his table of needs and satisfiers. For instance, he cites autonomy as a satisfier to the needs of "protection", "creation" and "freedom". Simultaneously, he cites community belonging as a complete category of needs satisfier. In accordance to this, the "self-determination theory" (STD) (Deci and Ryan, 2008a) lists three basic psychological human needs, respectively: competence, autonomy and relatedness (Deci and Ryan, 2008a). Therefore, this re-stresses autonomy and community belonging as basic human needs.

As a consequence, by seeing aspects of self-sufficiency as basic needs satisfier, the achievement of degrees of self-sufficiency is desirable for social and personal development. Indeed, the pursuit of self-sufficiency was an underlying motivation for the development of alternative ways of living. For this reason, in the following chapter I analyze movements of alternative ways of living in history, and later, in section A2.3, I go deeper into analyzing the motivations behind these movements.

#### Table 2 <

Max Neef's table  
of needs/satisfiers  
(Jackson et al., 2004, p.10)

## A2.2 – Movements of alternative ways of living

Due to the rapid change in human life during the past decades, many people sprouted into searching for alternative ways of living (Fuad-Luke, 2009, p. 141). Nevertheless, these movements are not recent. For instance, Gregg (1977) cited in Zavestoski (2002, p.150), dates alternative ways of living back to ancient figures such as Buddha, Jesus, Lao-Tse and others, as well as to philosophies such as Stoicism (Gregg, 1977 cited in Zavestoski, 2002, p.150).

From a historical perspective, experiments in alternative communal living became popular especially during the eighteenth century (see figure 7). During that century and beyond, a wide range of communities were founded - each with different values, organizational systems and ideals. For example, in 1772, Mother Anne Lee migrated from England to America together with nine other people and established the Shakers community (Nichols, 2006). This religion-based community grew and nowadays it is believed that around 20,000 Americans had lived in such a community during a certain period of their lives (Nichols, 2006). Another well-known religious centered community started in that period was the Amish (Parker et al., 2007, p. 7). These communities have endured for three centuries and, nowadays, have a population of over 249,000 inhabitants divided into several settlements (Scoloro, 2010). Furthermore, among other well-known community experiments of that period is the New Harmony commune, founded in 1804

by George Wrap; and the Nashoba community founded in 1826 (Nichols, 2006).

However, a “formal statement” about alternative ways of living did not appear until Henry David Thoreau’s texts on the Transcendentalism movement in the nineteenth century (Zavestoski 2002, p.150; Nichols, 2006). Added to this, Nichols (2006) argues that Transcendentalism was the first historically documented “countermovement” especially in terms of “off-grid communal living” (Nichols, 2006).

Transcendentalism was started by Ralph Waldo Emerson in 1836 in the USA and served as a base for many commune experiments. The central figures of this movement were Ralph Waldo Emerson and Henry David Thoreau (Nichols, 2006; Parker et al., 2007, p. 306). Moreover, the main idea of this movement was that human beings are at their best when independent and self-reliant (Nichols, 2006).

Among the various off-grid and communal living experiments based on Transcendentalism, the most well-known were “Brook Farm”, “Walden Pond”, and “Fruitland”. Brook Farm was established in 1841 by George Ripley in West Roxbury in Massachusetts - USA. This community aimed at progressing intellectually and spiritually by at creating a class-less society and reducing labor through sharing activities. Even though this community collapsed after a devastating fire in 1846, the members argued that they were successful on developing alternatives to free people from domestic labor and to promote justice and education.

Walden Pond was Thoreau’s solo experiment on

off-grid living by the side of Walden Pond near Concord, Massachusetts - USA. This experiment started in 1845 and lasted for two years, two months and two days, resulting on the publishing of Thoreau's book "Walden; or, life in the woods" in 1854.

Fruitland, another transcendentalist attempt of alternative living, was founded by Amos Bronson Alcott in 1843 in Harvard, Massachusetts - USA. This commune had a strong naturalistic ideal: its members denied the use of artificial light; drank only water and lived based on farming, to which no animal labor was allowed. However, Brook Farm existed for only seven months. (Nichols, 2006)

*"The reality is often  
not the same as the idealized"*

*(Nichols, 2006)*

Nevertheless, Nichols (2006) argues that Transcendentalist community experiments were designed to explore new ways of interacting, and therefore the short duration of each utopia was inevitable. Moreover, he argues that Transcendentalism as a whole was "beyond individuals", and that the results of the alternative living experiments influenced several communities throughout history. (Nichols, 2006)

Whether influenced or not by Transcendentalism, the establishment of alternative communities continued during the following centuries. For instance, during the first half of the twentieth century was established the Kibbutz communities

in Israel (Parker et al., 2007, p. 143). The Kibbutz communities are based on common-ownership, agriculture, and socialism. The first one was established in 1909, and later spread around Israel reaching a total of 270 communities in 2010 (Rifkin, 2010).

Nevertheless, it was only in the late twentieth century that another social movement generated mass exodus to self-sufficient communities. In this period, emerged the "counterculture" movement as an opposition to the ever increasing hierarchical society and the mainstream consumer culture and economics (Turner, 2005, p.41). Within this movement was the group of "new communalists" (Turner, 2005). The new communalists were the portion of the counterculture movement which moved away from the cities seeking for communal living and self-sufficiency (Turner, 2005; Agnew, 2004). A very famous commune created during that time, which still endures today, is Findhorn. This community started in 1962, in Scotland, and had around 400 members in 2005 (Parker et al., 2007, p.100). Nonetheless, the heart of the counterculture movement was in the USA. There, the exodus of new communalists became known as the "back-to-the-land" movement (Agnew, 2004).

The "back-to-the-landers" (Agnew, 2004) were a "major sector" of the American society in the early 70's and consisted of educated middle-class young adults (Foner, n.d cited in Agnew, 2004, p.5). This portion of the society gave up urban life (jobs, houses, health insurance, industrialized food, etc.) to homestead in the countryside. Even though this movement was famous for

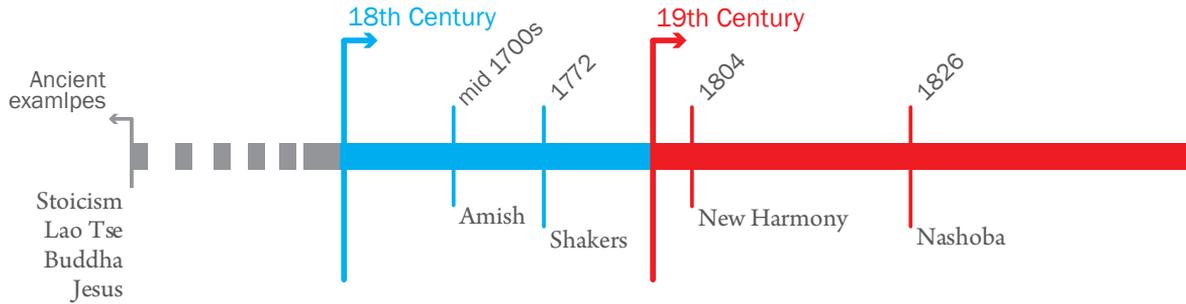
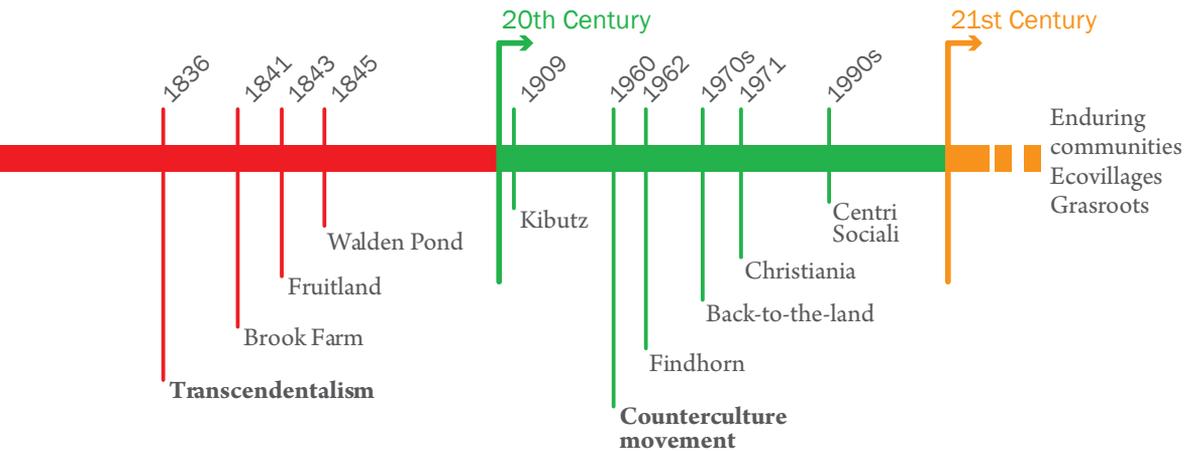


Figure 7  
Timeline of alternative movements

its magnitude, it became more famous for its failure. Eleanor Agnew (2004) a participant of this movement, described in her book “Back From the Land” the stories and reasons behind the rise and fall of this movement. Firstly, Agnew argues that the back-to-the-landers were denying the world which permitted them to experiment with new alternative ways of living. In this way they were pursuing self-sufficiency, in order to have more free time for self-development and leisure activities. However, she argued that they had a “fantasy idea” of homesteading which was provided by magazines and television. Furthermore, Agnew (2004) stated that, in the 70’s, before the invention of cellphones, going back to the land implied on a “serious disconnection” and therefore a “greater exposure to the wild” (Agnew, 2004, p.10). Moreover, the participants of this movement had no previous knowledge or experiences of homesteading. Therefore, when they moved to the land, they faced countless

daily tasks which had to be manually performed - such as collecting water, washing, taking care of fields, animal slaughtering, maintenance of house and equipment and countless others. In this way, homesteading became non-stop work, which eliminated free-time. The author confesses that isolation and the never ending work “had taken all the romance out of the back-to-nature life” (Agnew, 2004, p.83). Even further, Agnew (2004) stated that, in order to cope with occasional expenses, they had to work in temporary jobs which were not “commensurate to [their] talents, goals and education” (Agnew, 2004, p.141). Consequently, the disappointments and stress created in such way of living brought about conflicts between members of the majority of the communes. As a consequence, the vast majority abandoned the countryside and went back to urban life, office jobs and mainstream economy and culture (Agnew, 2004).



Simultaneous to the back-to-the-land movement was the establishment of the free town “Christiania” in Copenhagen, Denmark. Christiania originated in 1971 from a mass squat in an old military area of the Danish capital. Since then, Christiania functions as a free neighborhood of Copenhagen. Despite their connections to the local government, which includes the payment of taxes and utility bills, this commune has its own laws and government. Their laws are based on common ownership and the administration is made through open meetings (Parker et al., 2007, p.43). Nowadays the community spreads over a total of 85 acres and houses around 1000 inhabitants (Christiania.org, n.d.).

Later, in the 90’s, was the creation of the “Centri Sociali” in Italy. These “social centers” were created based on collective living and Anarchist ideas. Initially, these communities consisted of people who left their jobs and families to live collectively

in squatted buildings. Moreover, in the beginning, the maintenance of the Centri Sociali was based on the performance of precarious jobs and the collection of discarded food. Nevertheless, these communities spread around Italy, and nowadays can be found varying from small centers to complete city-like settings. The Centri Sociali are now regarded as “laboratories of cultural innovation and political subversion”. (Parker et al., 2007, p.42)

Nowadays, alternative movements continue to exist. Besides the enduring communes cited before, contemporary alternatives appear around two main concepts: (1) “ecovillages” and (2) “grassroots”. Both are examples of intentional communities; i.e., communities which were planned before being established (Dawson, 2010, p.185; Parker et al., 2007, p.132). In the case of ecovillages, alternative ways of living are achieved through the establishment of settlements

harmlessly integrated to nature (Gilman, 1991 cited in Dawson, 2010, p. 185 - see section B3.2 for further explanation). In this sense, ecovillages do not remarkably differ from the Transcendentalist communes and the Back-to-the-land movement.

On the other hand, the grassroots movement consists of gatherings of citizens aimed at changing the local conditions (Parker et al., 2007, p. 119). In this sense, grassroots can be formed around various topics, such as human rights, alternative currencies, urban farming, environmental protection, sustainability and countless others. Therefore, the basic difference between ecovillages and grassroots is their directionality of change. What I mean is: ecovillage initiatives aim at forming a group and moving to a different place in order to achieve change within the group, which can further reflect on the surrounding community. On the contrary, grassroots aim at creating a local group to directly change the surrounding community and environment.

*“The hope lies in the global grass-roots movement that is growing, demanding serious action to halt climate change before it is too late”*

*(Goodman, 2013)*

In this sense, grassroots are seen as more effective for rapid social and cultural changes (Goodman, 2013). Nevertheless, alternative movements as a whole have always been actors of local change. For instance, research by D’Andrea (2007)

proved that countercultural communities in Ibiza (Spain) and Goa (India) had strong influence on local laws. In this sense, the author reported that local laws had to be changed in order to include both government and countercultural interests (D’Andrea, 2009, p.223). Similarly, Free Town Christiania, since its creation, has been involved with the local government to create agreements about their interaction, laws, duties and rights (Parker et al., 2007, p.43; Christiania.org, 2005).

Further to this, it is important to notice that, whatever the period of history, alternative movements have emerged from within the society and culture they stood against. Moreover, the actors of these diverse movements generally share the characteristic of being educated, derived from middle and upper classes and often connected to artistic, cultural and economic elites (Agnew, 2004; D’Andrea, 2009, p.122). Nonetheless, there are two attributes common to all alternatives movements: (1) The first is the desire of reaching degrees of self-sufficiency, especially concerning autonomy. (2) The second is to achieve these desires through collective action (Agnew, 2004; D’Andrea, 2007; Nichols, 2006; Zavetoski, 2002). In this sense, Deleuze and Guattari (1980) cited in D’Andrea (2007, p. 69) state that alternative settings occur as highly connected small-scale aggregations rather than big-scale organizations. For this reason, in the following section I shed light on the “community” issues present in alternative movements.

### A2.3 - Collective action for alternative ways of living.

Humans are social beings (Wenger, 1999). According to Lawrence and Nohria (2002) cited in Fuad-Luke (2009, p. 115), one of the drives of human beings is “to establish long-term bonds with others based on reciprocity, of mutual caring commitment”. However, capitalist culture preaches isolation through individual consumption and financial development (Turner, 2005, p.8) in a competition-like environment. For this reason, alternative movements have focused on experimenting ways of living and acting together. For instance, Nichols (2006) states that the Transcendentalist commune experiments had the goal of creating small social groups in order to produce better methods for shared property, education and social life in general (Nichols, 2006). Accordingly, Agnew (2004, p. 164) argued that the underlying aim of the back-to-the-land movement was to create niches to interact with like-minded people in order to experiment with new ways of living which could serve as examples for future generations (Agnew, 2004, p.164). Similarly, D’Andrea (2007, p. 51) stated that members of the counterculture which engaged in alternative living had the tendency to network in order to create a supporting community.

Social gatherings are important because they encourage both autonomy and the feeling of belonging (Deci and Ryan, 2008b). In this way, alternative movements grow stronger when supported by a community of like-minded people (Agnew, 2004). This happens because interactions favor mutual learning (Wenger, 1999)

and incremental development of common goals and group identity (Mortati and Villari, 2013, p.8). Accordingly, Mortati and Villari, (2013, p.6) argue that the importance of interaction between people is the creation of mutual learning to be applied for the development of new solutions. Consequently, these types of gatherings can be defined as “communities of practices”. According to Wenger, (1999) communities of practice are social gatherings centered on the development of a certain activity. In this way, communities of practice do not necessarily imply living together or intermittent interaction; on the contrary, they can happen through occasional meetings between members over a continued time. While communities of practice means continuous communities with occasional interaction, social gathering can also become “temporary communities of makers” (Mortati and Villari, 2013). This latter concept was introduced by Mortati and Villari, (2013) meaning “groups of actors that share a common objective and gather together for a limited time” (Mortati and Villari, 2013).

*“In the modern age, where everything is connected to everything, the most important thing about what you can do is what you can do with others”*

(Ashdown, 2012)

In this way, whether the interaction is occasional or continuous, social gatherings, through mutual learning and support, are responsible for developing new solutions for given problems. In this sense, they are responsible for creating new “cultural patterns” and thus generate cultural change. (Leitão et al., 2013)

## A2.4 – Motivations for new ways of living

Humans are genetically determined to fight for survival (Nicholson, 1998). In this sense, humans are prompted to seek for better alternatives when a threatening signal is identified. Since the Industrial Revolution, humankind has witnessed enormous change in the environment as well as in terms of social organization. Consequently, authors like Fuad-Luke (2009, p. 141) and Nichols (2006) have argued that these rapid changes induced people to seek alternatives (Fuad-Luke, 2009, p. 141, Nichols, 2006).

*“Individuals who realized they are unsuccessfully meeting their self-needs through consumption seek alternative means of self-fulfillment”*

*(Zavestoski, 2002, p.160)*

Motivation for change happens in different stages (figure 8). Initially, motivation derives from perception of “a society at risk” (Cherrier and Murray, 2002). Deriving from the perception stage comes a phase of analysis. In this phase, motivation comes from a feeling of dissatisfaction with the current state. Zavestoski (2002, p.151), by analyzing adepts of alternative ways of living, state that people experience fatigue, stress, unhappiness and dissatisfaction and connect those to the consumption and media driven society (Zavestoski, 2002, p.151). For Debord (1983) cited in Cherrier and Murray (2002), people fail to identify with this “society of the spectacle”. Similarly, Agnew (2004, p.7) argued

that the back-to-the-landers shared a disaffection with current American and Western culture of the 70’s. In the same way, D’Andrea (2007, p.56) analyzed expatriates who joined countercultural movements and identified an underlying willingness to escape from stress.



Figure 8  
Phases of motivation for change

After the analysis stage comes a decision phase in which people decide the directionality of the change. In this regard, Zavestoski (2002, p. 161) argues that the choice to engage in alternative ways of living is a “logical outcome of a rational decision-making process” (Zavestoski, 2002, p.161). In this phase, the majority of research made in the field found that people decide to act towards achieving a more meaningful life by pursuing self-sufficiency, autonomy and freedom (Agnew, 2004; D’Andrea, 2007; Cherrier and Murray, 2002; Pravet, 2013; Zavestoski, 2002). In this way, Nohria (2002) cited in Fuad-Luke (2009, p. 115) states that people are driven by the will to realize and defend their own values. Accordingly, D’Andrea (2007) found the issues of achieving an “expressive life” and of creating an identity within a group of like-minded people as central to the aim of adepts of alternative ways of living (D’Andrea, 2007). Similarly, Agnew (2004, p.25) stated that the goal of the back-to-the-landers was self-sufficiency.

For the above mentioned reason, it becomes clear that the current focus on economic development and industrialization is failing to allow an expressive and meaningful life for a growing number of people. Consequently, there must be a development of means to facilitate people to meet needs related to self-sufficiency. However, it is important to bear in mind the failure of the back-to-the-land movements and other homestead-based movements. In this way, Chick and Micklethwaite, (2011, p.79) argue that we should “resist any urge to return to a romanticized pre-industrial past”. Therefore it is important to notice the growing urbanization and the consequent growing urban culture and develop ways to ally this urbanization with the satisfaction of human and environmental needs. In this way, Nørgård (2013, p.66) states that alternatives should be developed not to get away from the mainstream systems, but to find a balance between mainstream and alternative practices which can inform sustainability and human inner satisfaction.

*“I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover I had not lived”*

*( Henry David Thoreau, n.d  
in Parker et al. 2007, p. 306)*

## A3 AIM OF THE STUDY & FIRST RESEARCH QUESTION

“How to progress gradually towards urban based self-sufficiency?”

As a consequence, the aim of this study is to identify a path of practices towards urban-based self-sufficiency. In this way, I aim at identifying small-scale grassroots initiatives which are focused on alternative ways of living informing sustainability. From this, I use design activism and facilitation methods to make visible and encourage the engagement of new people into those practices.

Nevertheless, for the research and design output to be effective, I take a regional focus. Here I focus on the initiatives present in Helsinki, Finland. Nonetheless, I keep the local action with global focus, in order to create a path to urban self-sufficiency which can be applied in Helsinki and adapted to elsewhere. For that the identification of practices are made simultaneously in field and in literature research, which are then used to create a consistent (and operational) explanation of each practice.

B

field  
research

In this part of the work I present the field research. This was conducted to gain knowledge about the local practices and solutions for sustainable urban living and to gather information about the history and motivations behind them. For this, the first part (B1) presents the main findings derived from interviews made with key activists in Helsinki. In sequence, (B2) I describe the insights gained from personal experiences in the practices and events held in Helsinki during 2013. As a consequence, the third part (B3) describes the context found in the region based on these findings and on literature. The result is then consolidated into a second research question presented in the conclusion part of this section (B4).

# B1 INTERVIEWS WITH KEY ACTIVISTS

In this section I present a summary of findings from interviews made with ten activists from the Helsinki area. Even though more interviews were made during the field research, I here present the ones with people identified as “key activists”. In this way, the people featured in this section were found as having roles vital for the existence of the groups and events in the region. For the selection of these activists, I used a “snowball” sampling method, where activists were recommended by others.

The semi-structured interviews were held between April and December 2013. In this way, the interviews rendered as open conversations happening around five areas: First, to understand the personal “activist biography” of the interviewed; second, to understand the motivations behind the activist’s actions; third, to know the problematic issues identified during the activism projects; fourth, to know the current aim of their activism; and fifth, to gather qualitative information about the existing groups, events and practices in the Helsinki region.

This summary is based on the first four items - the personal stories, motivations, problematic issues and current aims. This was done to consider the relation between the literature research and the local scenario, therefore providing a better

Activist	Organization /initiative	Source of motivation	Problematic issues identified	Current aim
Andrew Gryf Paterson	Pixelache	The increasing recurrence of environmental topics in his activities	(1)Lack of time – group of activists in Helsinki is very active but small and too busy , and (2) difficulty to create cooperation with agenda-based NGOs	Adaptive organizations, sustainability of activism work
Arto Sivonen	School of Activism & Måndag	Dissatisfaction and feeling of “no value” in previous work	Lack of time – too busy local group of activists	Enable the sharing of knowledge about alternative ways of living with the neighboring countries
Becky Hastings	Permaculture	Punctual experienceL	Lack of time and interconnection between local activists	Strengthen the connections between local activists & help people to reconnect with nature

Emma Kantanen	Trash reuseE	education and familyC	cultural acceptance	Doing things without money
Jon Sundell	Made in Kallio	Punctual experience and feeling on “unsustainability” in previous work	Waste of resources in mainstream work	Developing new ways of doing things together and without money
Mikko Laajola	Pixelache & Kääntöpöytä	EducationD	dependence on funding for realization of projects	Developing self-sufficient communities and alternative agriculture
Päivi Raivio	Kääntöpöytä & Pixelache’s Trashlab	Experimentations in arts	Skepticism of local society to engage in activities which are not explicitly legal	Growing the repair movement
Petra Jyrkäs	Dodo, Wärk:fest & Urban Farming	Dissatisfaction and feeling of “lack of meaning” in previous work	Agreements with Helsinki City, local laws & responsibility of the users of the urban farming initiative	Explore possibilities of roof-top gardening
Ruby van der Wekken	Stadin Aikapankki (Helsinki timebank)	Education and family	Agreements with tax office	Movements of global justice, commons and solidarity economy
Harri Hämäläinen	Hki Hacklab & Wärk:fest	Interest in DIY projects	Finding places and funding for alternative workshop spaces	Create communities of like-minded people and disseminate the DIY movement to a broader audience

Table 3  
key findings from interviews

understanding about the particularities of the Helsinki alternative practices scene. The fifth item – qualitative information - was used to develop the lists of practices, groups, events and networks, and their consequent explanation is found in section B3 of this study. Table 3 summarizes the key findings on each item according to each of activists interviewed – for the full interview reports see Appendix 1.

As a result of the interviews, the following aspects of the local activist scene were identified: (1) An alignment of the activist’s motivations with the literature research; (2) the small scale of the community, and; (3) the willingness to create interconnections and gather a bigger group of people around the practices.

(1) The motivations which prompted the local activists into alternative practices towards sustainability were aligned to the ones found in the literature (section A2.4). In this regard, the issues of “dissatisfaction” and feeling of “valueless” in mainstream jobs were frequently cited as a source for moving towards alternative ways of working and living. Further to this, the activists also cited timely happenings, such as becoming aware about the problematic environmental conditions, as well as education as sources of motivation.

(2) Further to this, the local community rendered as very active but very small. In this concern, most of the activists were involved with more than one group or initiative, creating a noticeable overlap of members. At the same time, the number of practitioners was very small.

(3) Hence, another issue found was the activists’ willingness to gather a wider audience in order to have a more supportive community. In this concern, many of the activists stated the aim of creating connections between other local activists in order to create mutual support for their activities; and, consequently have more energy and free time to dedicate towards disseminating and developing the activities.

## **B2 PERSONAL EXPERIENCES**

In this section I present the key insights derived from personal experiences and observations of the local events and practices. The following report focuses on reflecting aspects such as attendance, atmosphere and activities involved in each event and practice. Moreover, qualitative information acquired during these experiences was used for the creation of part B3 of this study and is, therefore, not featured here. The following table summarizes the types of experiences, their focus areas and attendance rates – the full experience reports are featured in Appendix 2.

These experiences reinforced many aspects cited in the interview with key activists presented in the previous section. In this concern, the number and diversity of events present in Helsinki showed the active local scenario of alternative practices. However, the audience of these events consisted mostly of people who were already engaged in the practices supported in each event. Therefore, this reinforces the need to disseminate the practices, groups and events to a wider audience.

Nonetheless, the atmosphere in all these events was very active, lively and with an underlying “community feeling” where people interacted by exchanging knowledge and helping each other. Therefore, the “community” aspect described in the literature (section A.2.3) as fundamental for alternative ways of living was also confirmed through these experiments. Further to this, the

importance of connecting with like-minded people and to a supporting community was identified as crucial for the success of the events and to the development of my experiences in the practices of Voluntary Simplicity and Timebank. (Full experience reports are in Appendix 2)

Name	Type	Focus area	Duration	Attendance	Fees	Events visited
Trashlab fixing event	Event – workshop	Fixing of objects	One afternoon	Low: from 4 to 12	Free	5
Recycling Olympic Games (ROG)	Event - competition	Reuse of discarded objects	One week	Very low: 8 (only the group of organizers and activists)	Free	1
Siivouspäivä (Cleaning Day)	Event	Sale and purchase of second hand items	One day	Very high – spreads around the city	Free	2
Make(able)	Event - workshop	Making of clothes	One afternoon	Moderate: around 15	Free	3
Harvest Fest	Event – celebration	Urban farming	One evening	High: around 100	Free	1
Wärk:fest	Event	Showcasing DIY groups	One weekend	High	20€	1
Kierrätystehdäs (Recycling Factory)	Event	DIY, recycling and sale of upcycle objects	One weekend	Very high: over 3000	Free	1
Timebanking	Practice	Using time as currency	One month	--	Free	One transaction
Voluntary simplicity	Practice	Needing less to live, doing things without money	--	--	Free	Furnishing one room

Table 4  
Summary of personal experiences



Kierrätystehdas (recycling factory)



Kääntöpöytä



Sivouspäivä (cleaning day)



Mak'fest



Trashlab repair event

## B3 DESCRIPTION OF CONTEXT

The fieldwork, through the previously presented interviews and experiences, revealed a wide range of communities of practices in Helsinki. In this sense, these initiatives can be classified as what Wenger (1999, p.127) describes as a “constellation of practices”. Constellations of practice are groupings of different practices, which may not be similar but share issues such as historical roots, related enterprises, similar causes, common members and geographical relations (Wenger, 1999, p.127).

As a result of the field observations and the literature research (Part “A” of the study) a list of practices and groups was created. The list was as follows (in alphabetical order):

*Book crossing, building own objects, car free day, city harvest, collaborative work, communes, DIT (do it together), DIY (do it yourself), Dodo, ecovillages, exchange products, Fablab, fixing clothes, fixing own things, Hacklab, Harvest fest, Helsinki Green maps, Instructables, Kaupunkiverstas, Kääntöpöytä, Kierrätystehdäs, Kierrätyskeskus, less waste, Made in Kallio, Make(able), Måndag and School of Activism, more bicycle, more public transportation, Netcyclers, no buying new, no impact project, no impact week, permaculture, Pixelache, Preppers, Prototype Helsinki, repair café, ROG (Recycling Olympic Games), Roskalava HKI, Satokartta, second-hand, sewing own clothes, shared spaces,*

*Siivouspäivä, Stadin Aikapankki (Helsinki time bank - STAP), timebank, Trashlab, urban farming, voluntary simplicity, waste reuse (dumpster diving) - for materials, objects or food, Wärk:fest, wikihow, window farming and zero waste homes.*

Subsequently, the next step was to consolidate the list in order to be simultaneously globally-connected and reflect Helsinki’s scenario. For this reason, the items were divided into four categories: (1) “practices”, which consisted of practices and action performed by people; (2) “groups”, consisting of organizations and communities of people working around certain practices; (3) “events”, meaning the happenings in the Helsinki area; and (4) “websites”, denoting the online websites which inform the practices, groups and events. The result of this separation is illustrated on the next page.



Figure 9  
Division of practices, groups, events & websites

### B3.1 Creating a set of practices

The items in the “practice” category were then further clustered according to the relatedness between practices and their relevance in the Helsinki area. This was done in order to eliminate repetition of practices (like “fixing objects” and “fixing clothes”) by finding overall definitions

for groups of practices, thus creating a clear and condensed set of practices. The following figure shows the finding of “umbrella” practices and their related items from the list.

During this stage of clustering, different aspects of the practices were highlighted. These aspects resulted in a filtering of the items. Consequently,

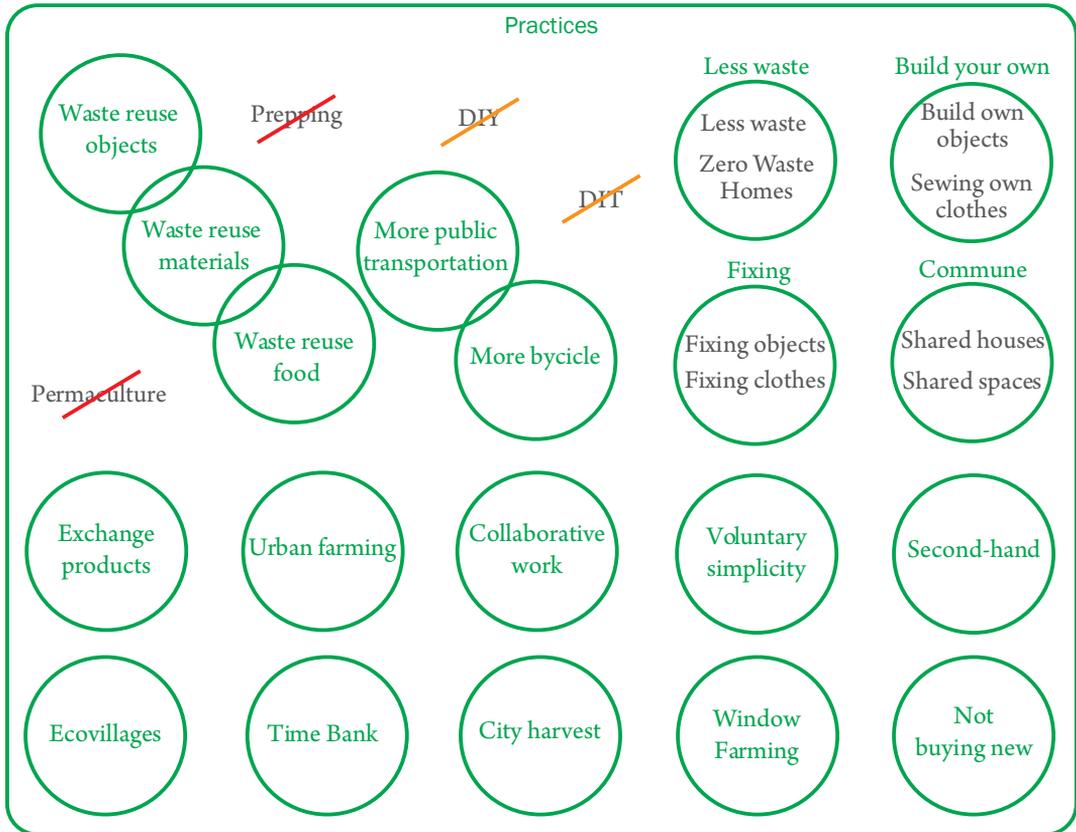


Figure 10  
Clustered practices

three groups were excluded: (1) prepping, (2) DIY and DIT, and (3) Permaculture, for the following reasons.

(1) First, the “prepping” practice (see description in fig 12) was excluded from the practice list. This happened for two main reasons. The first reason was geographical: this practice happens mostly in the USA and was not found in the Helsinki region. The second reason was because of its underlying goal: it is not aligned to the idea of self-sufficiency and sustainability embraced in this study. That is, even though “Prepping” can be seen as an alternative way of living it is not focused on creating an enduring alternative to the mainstream way of living. As can be seen in Madison et al. (2012), even though many “preppers” try to achieve independence from mainstream systems, this effort is made to thrive for a limited time span. In this way, they have the goal of sustaining an alternative way of living during a catastrophe period and turning back to mainstream life when this period is over. Furthermore, this practice entails a high degree of violent isolation: prepping is strongly centered on the idea of “fighting for survival”. In this way, the presence of guns, weapons and the development of fighting skills to protect one’s own survival is common among its practitioners. (Madison et al., 2012) Therefore prepping is neither a long-term alternative way of living nor a practice aimed at sustainability and coexistence.

Figure 11  
Doomsday preppers

### Doomsday preppers

The “doomsday preppers” or simply “preppers” are people preparing for the apocalypse. The majority of practitioners are located in the USA. The Preppers - families, individuals or groups - perform different acts to prepare (prepping) for different apocalyptic scenarios. Some are “prepping” for a fail in the power grid, others for the magnetic inversion of the poles, and others for the eruption of volcanos, among many other reasons. Therefore, each “prepper” has a particular idea of the “apocalypse scenario” and its resulting unique strategies for survival. In order to prepare for this eventuality, preppers engage in activities ranging from learning botanics and storing food to building fortresses and learning war and fight strategies. In this way, people are preparing to fight against others to protect their family and close friends. As an argument, Preppers state that, when the catastrophe happens, a war-like environment will take over; therefore they have to be prepared to fight for their survival by any means. (Madison et al., 2012) The Preppers community includes an online network, publications and mobile apps (see [www.prepperwebsite.com](http://www.prepperwebsite.com))

Recently, this group of people was featured in a reality show by the National Geographic Channel called “Doomsday Preppers”(see [channel.nationalgeographic.com/channel/doomsday-preppers/](http://channel.nationalgeographic.com/channel/doomsday-preppers/)).

(2) The second exclusion was of the DIY (do-it-yourself), DIT (do-it-together) practices. These items were left aside because they represented a “characteristic” of a practice rather than a practice itself. This means the practices found in Helsinki can be defined as DIY or as DIT. In this way, DIY means a practice which can be performed alone and therefore does not depend on the help or presence of others. Consequently, DIT means practices where mutual engagement and cooperation are necessary. Nevertheless, it is important to notice that there is no clear-cut line between these concepts in the Helsinki region: we found many DIY types of practices being

performed mostly through group gatherings. In this way, figure 12 shows the local practices sorted under the themes of DIY and DIT.

(3) The third exclusion of the “Permaculture” item was done because, as argued by Becky Hastings (interviewed in chapter B1) and as seen in Parker et al (2007: 211) and in Mars and Ducker (2005), Permaculture is a design approach to practices rather than a practice on its own. In this way, it renders as a method to perform different practices (see figure 13 for description).

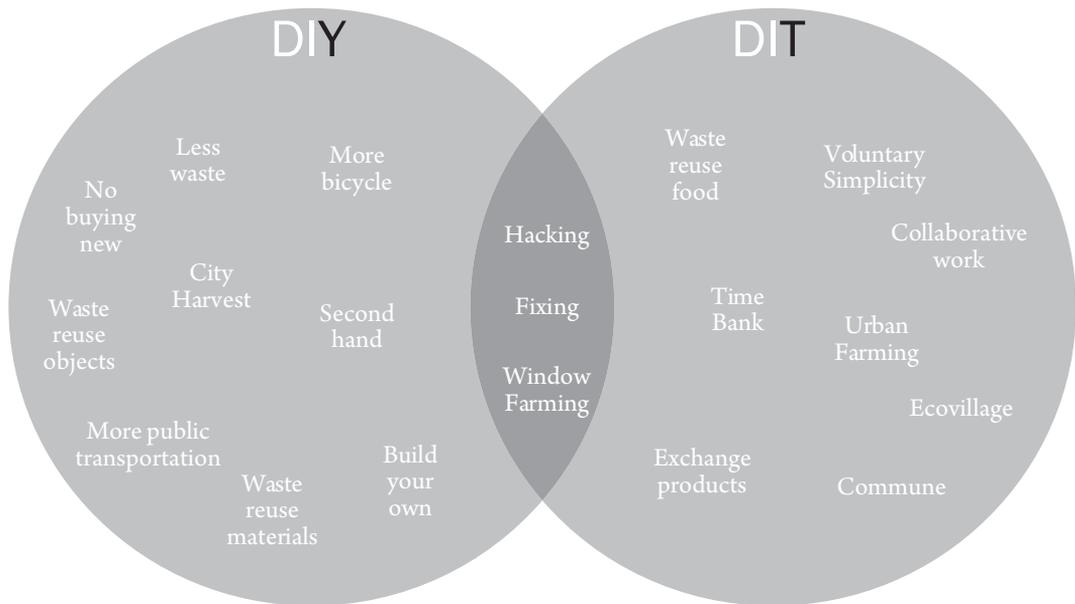


Figure 12  
Local practices sorted  
under the themes of DIY and DIT

## Permaculture

Permaculture is an approach to creating sustainable ways of living and practice (Mars and Ducker, 2005, p.1). In this way, permaculture focuses on the observation of the natural processes and systems in order to develop fair cooperation between the social and environmental systems (Parker et al., 2007, p.211). This method focuses on using natural means over technological ones by finding a way to gain maximum effect from minimum effort (Parker et al., 2007, p.211). Furthermore, while the concept started as “permanent agriculture”, it is now understood as “permanent culture” and therefore is an approach for all human activities (Mars and Ducker, 2005, p.1).

Figure 13

Description of Permaculture

Further to these exclusions, the practice of “waste reuse”, which appeared three times but with different focus (objects, materials and food) was left as three different - still interconnected – practices. This was done first because, in Helsinki, each of these practices was related to different groups and second because each one of these

happens in different contexts and therefore entails different information and skills to be performed. (The connections between the groups, practices, events and websites can be seen in part B3.3 of this study) The following figure illustrates the resulting set of practices:

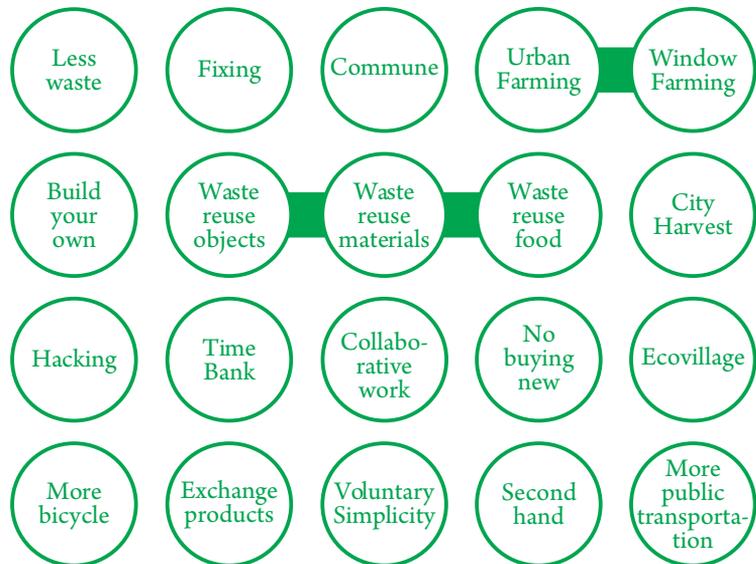


Figure 14

Final set of practices

## B3.2 description of practices

In this section, I present the explanation of each practice in the final set. In this way, these represent the practices for the path towards urban-based self-sufficiency envisioned in the first research question. Each explanation is divided into two sections: (1) “Description” and (2) “Supporting groups, events and websites”. The first part (description) describes the practice and examples of how it is performed. This part is informed by the field research (section B1 and B2) and literature references. The second section (supporting networks, groups and events) provides a list of the groups, events and websites found as most relevant to each given practice in the case of Helsinki. Nevertheless, each group, event and website is explained further in boxes 1, 2 and 3 in the end of this section.

### B3.2.1 - More public transportation

This practice consists of commuting via shared and public means of transportation. For instance, Vale and Vale (2009, p.358) argue that choosing to use public transportation over private cars is one of the attitudes one should take to progress towards sustainable living. There are two possible approaches to this practice. One is for private car owners and the other is for the current users of public transportation. Either one is highly facilitated by the infrastructure of Helsinki.

The first approach consists of two options: to share their car by “ride sharing” or to leave the car and use the public transportation system. For the first option, ride sharing can be done in Helsinki via the Green Riders initiative ([www.greenriders.fi/en](http://www.greenriders.fi/en)). For the second option, the public transportation system of Helsinki (HSL) provides various kinds of public transportation, such as buses, metro, trams and trains. For any of these, HSL provides information and route planning services via their website (see [www.hsl.fi/en](http://www.hsl.fi/en)) and the “Journey planner” website (see [www.reittiopas.fi/en](http://www.reittiopas.fi/en)).

The second approach, for current users of public transportation, consists of choosing more carbon-neutral transportation within the public transportation system. This audience can take a step further by choosing the most environmentally friendly options within the HSL system. For this, the Journey planner website provides CO2

emission comparison between the suggested route and private transportation. Furthermore, when clicking on the image of the CO2 emission comparison, the service provides a chart provides CO2 emission and calorie expenditures for all available means of transportation.

### Supporting groups, events and websites

Groups No impact project

Events Car free day, No impact week

Websites Reittiopas, HSL, Green riders, No impact project, Helsinki green maps

### B3.2.2 - More bicycle

This practice consists of choosing to commute by bicycle instead of motorized means of transportation. The bicycle is seen as a healthy and almost no-polluting transportation method. Based on this belief, there is a growing worldwide movement around making cities more “bicycle-friendly”. These movements advocate the use of bicycle as a more sustainable way of transportation. In this way, Vale and Vale (2009:358) classify the use of the bicycle as one practice that one should perform to progress towards a sustainable way of living.

Many cities around Europe provide bicycle sharing services, known as “city bike” - such as the “Bicing” in Barcelona ([www.bicing.cat](http://www.bicing.cat)) and the “Velib” in Paris ([en.velib.paris.fr/](http://en.velib.paris.fr/)). However, this service is not available in Helsinki. Nevertheless, HSL states to be planning to implement a City Bike system in the coming years (see [www.hsl.fi/en/information/sustainable-modes-transport/cycling-and-walking](http://www.hsl.fi/en/information/sustainable-modes-transport/cycling-and-walking)). Nevertheless, bicycle paths

are present on most of the streets and people are allowed to take their bikes into the metros and trains. Also, the Journey planner website provides an option for planning a journey by bicycle (see [pk.reittiopas.fi/en/](http://pk.reittiopas.fi/en/)). In this section of the website, the service provide different route profiles (faster, shorter, only cycling paths) and journey options such as “scenic routes”, “touring routes” and “shore routes”, as well as a list of points of interest to check during a journey.

There are two basic approaches to this practice: The first one is to start using bicycle for short commutes and for connecting with the public transportation. By doing this one gets used to the idea of constantly using a bicycle. As a consequence, this provides an entrance point to the practice.

The second approach is to substitute all means of local transportation for the bicycle. Currently, there are many adepts of this approach, i.e. Emma Kantanen (see interview in section B1). Furthermore, Helsinki city, together with Måndag (see [mandag.fi/](http://mandag.fi/)), is organizing a “winter cyclers” campaign ([www.vuodentalvipyorailija.fi/](http://www.vuodentalvipyorailija.fi/)), a campaign focused on encouraging people to cycle during the snowy months. In this project, a group of five volunteer cyclers – which includes the Deputy Mayor of Helsinki – were chosen to share videos and blog posts about their bicycle rides during the winter. In accordance to this growing movement, the “No Impact Week” project ([noimpactproject.org](http://noimpactproject.org), see event description in the end of this section), which happened for the first time in Helsinki in 2013 through Hanken

School of Economics (Pravet, 2013), has a “day theme” on transportation. On this day, the project encourages people to change their transportation habits to more environmentally friendly ones.

### Supporting groups, events and websites

Groups No impact project, HSL, Måndag & School of activism

Events Car free day, No impact week, Winter cyclers

Websites Journey planner, Helsinki green maps

### B3.2.3 - Less waste

The practice of “Less waste” means to diminish the amount of daily generated waste. Even though trash collection - and recycling – systems are present in almost every city in the world, the amount of trash generated continues as a major environmental issue. In this concern, many authors state the problematic aspects of waste in our society both concerning products (Thomas, 2012; McDonough, 2002) as well as food (Gustavsson et al. (2011, p.4). . The time for disposing a product is perceived through various factors. One is the end of a product’s usability by malfunction. Another is the release of new items on the market. However the concept known as “planned obsolescence” – programing the life span of a product - lies behind most of these factors (Dannoritzer, 2010).. For this reason, many of the discarded products nowadays are still usable when discarded and only 1/5 of them is recycled (Thomas, 2012).

When it comes to waste generation in households, human behavior is a key issue to be tackled (Vale and Vale, 2009). In this way, for example, the

Food and Agriculture Organization of the United Nations (FAO) lists a series of actions a person can do to reduce food waste like making weekly menu plans, reusing leftovers, freezing surplus items and composting (FAO, n.d.).

These guidelines can also be transferred to inform other types of waste. In this way, general guidelines would be as follows: to buy more consciously, to use products until they become useless, and to reuse products and parts. Nonetheless, there are other approaches one can take to perform this practice. For instance, the No Impact Week (NIW), for their “trash” theme day, suggest actions such as the analysis of the daily waste according to how long the wasted products were used and the creation of a travel kit with reusable items such as cutlery, cups and bottles (No Impact Project, n.d). Furthermore, donation appears as a way of diminishing waste. In this concern, in Helsinki, the Kierrätyskeskus (Recycling center) the Siivouspäivä (Cleaning Day) and Kierrätystehdäs (Recycling Factory, see explanations in the end of this section) are large groups and events for selling and exchanging used products.

### Supporting groups, events and websites

Groups Kierrätyskeskus, No impact project

Events No impact week, Kierrätystehdäs, Siivouspäivä

Websites Wikihow, No impact project, Helsinki green maps.

### B3.2.4 - Second-hand

This practice consists of purchasing second-hand (used) products instead of new ones. These products can range from clothes to furniture and electronics. Whereas the previous practice focused mostly on reducing one's footprint by reducing the output of waste, this practice focuses on the "input" of products. As shown by Dannoritzer (2010) and Thomas (2012), many of the discarded products are still functioning when discarded. This means products are mostly thrown away not due to malfunction but to be replaced by newer models. Therefore, this practice focuses on accessing the environmental damage created by fashion obsolescence, which is seen as a major issue behind the excessive waste generated by our society (Dannoritzer, 2010; Thomas, 2012).

In this way, authors such as Vale and Vale (2009:358) advocates the buying and selling of second-hand products as a needed practice to inform sustainable development. This happens because, when buying second-hand products, one extends the lifespan of a product and consequently diminishes the environmental impact per person per product.

Consequently, performing this practice entails taking on a critical view of material culture, especially about understanding the difference between the "real need" for a product and the "imposed need" of products – ones created by fashion and the market economy. In this way, , one starts to understand when is the appropriate time to dispose of and acquire products and furthermore when this can be done via second-

hand channels. Hence, the main approach to this practice is to check second-hand shops before going to regular shops when in need of acquiring a product.

Concerning the local scenario, this practice is widely facilitated by the local culture. An enormous amount of second-hand shops and flea-markets (kirpputori) are found around the city of Helsinki as well as online – such as huuto.net and tori.fi. Further, the products found in these places in Helsinki are usually of good quality and relatively new. For example, Carolina, one interviewee in the practice, stated: "The second-hand shops here are luxury; I find things which are new, and that I would never dream of finding in the second-hand shops in Germany". Further to this, in Helsinki, events like Siivouspäivä (Cleaning day) and Kierrätystehdäs (Recycling factory) are big events around the commercialization of used products.

#### Supporting groups, events and websites

Groups Kierrätyskeskus

Events Kierrätystehdäs, Siivouspäivä

Websites Tori.fi, Huuto.net

### B3.2.5 - Exchange Products

This practice consists of swapping products with others without the use of money. This practice places the concept of “need” higher than the value of money. Hence, based on needs and wants, people engage in exchange and are autonomous to judge it as being fair or not. In this way, this practice can be similar to bartering.

In Helsinki, websites like “netcyclers.fi” is a strong medium for the exchange of products. Through this website a person can either sell or swap products according to needs and wills by listing the products she wants to give away and the ones needed. Furthermore, the Kierrätystehdäs (Recycling Factory) event has a section dedicated to the free exchange of products (see event explanation in the end of this section and experience in section B2). Nevertheless, another approach to this practice is the one of sharing and circulating products. In this sense, a good example is the Book Crossing initiative (bookcrossing.com) (see group explanation in the end of this section). The Book Crossing initiative is one of the groups represented in the Kierrätystehdäs event.

#### Supporting groups, events and websites

Groups Netcyclers, Book crossing,  
Kyerätyskeskus  
Events Kierrätystehdäs  
Websites netcyclers.fi and bookcrossing.com

### B3.2.6 - No buying new

This practice means giving up purchasing new things (besides food), by either buying second-hand or exchanging products. Therefore, this practice is a combination of the two previous practices. For instance, Beavan (2009) undertook the challenge of not buying anything new, besides food, for a year. His experiment resulted in the No Impact Project and its related No Impact Week event (see explanation in the end of this section).

In Helsinki, besides the NIW project, the Recycling Olympic Games (R.O.G. – see explanation in the end of this section) is another event which facilitates experimenting with this practice.

#### Supporting groups, events and websites

Groups Netcyclers, Book crossing,  
Kierrätyskeskus, Pixelache  
Events Kierrätystehdäs, R.O.G.  
Websites Netcyclers.fi, Huuto.net, Tori.fi &  
Bookcrossing.com

### B3.2.7 - Fixing

This practice entails the repairing of broken products. As seen in the previous practices, products are often made in order to brake after a short period of time (Dannoritzer, 2010).. As a reaction to consumerism and its resulting “throw-away” society, and as these objects are often easy to repair (Dannoritzer, 2010), the repair movement is rising as a way of rethinking consumption (Revés, 2012). According to Revés (2012) this movement, which consist of social gathering for fixing products, started in 2008 in the Netherlands and spread all over the world (see the repair movement world map at repair.crowdmap.com). In this way, these gatherings are usually composed of a set of “experts” on different areas (such as woodwork, electronics, sewing and so on) and tools which are available to inform and guide the public through different fixing processes. In accordance to this global movement, Helsinki has also its version, called “Trashlab fixing events”, which was initiated by Päivi Raivio through the Pixelache organization’s Trashlab initiative (see event explanation in the end of this section).

It must be noted that, after an interview with the organizers of “Café Concerto Repair Café” in Santos, Brazil (see [andesbrasil.org.br/portfolio/cafe-conserto-repair-cafe](http://andesbrasil.org.br/portfolio/cafe-conserto-repair-cafe)), it was discovered that the “Repair Café” name has become a brand. In this way, groups involved in the repair movement have to pay a fee for using the “Repair Café” name. Nevertheless, as a counterpart these initiatives are featured in the international repair movement map.

### Supporting groups, events and websites

Groups Pixelache, Kaupunkiverstas, Fablab, Trashlab, Kierrätyskeskus

Events Trashlab repair café, Kierrätystehdäs

Websites Instructables, Wikihow, Repaircafe.org

### B3.2.8 - Build own stuff

This practice entails the making of products by the users.. This can be done either by planning and making a product or by following pre-made instructions. In this concern, this practice can start at a basic level, like cooking one’s own food, and develop to a more advanced and skill-intensive level such as building one’s own furniture, electronics and software. Nowadays this practice has a strong linkage to the internet, where, various websites such as “Instructables”, “Wikihow” and an extensive list of blogs (like, for example “VOQ” – see [www.viraroque.blogspot.com](http://www.viraroque.blogspot.com)) provide tutorials on how to build and modify objects.

In the case of Helsinki, the Finnish education system creates an easy way for people to engage in this practice. This is because, in schools, various handcraft skills are taught to the students since an early age. Further to this, Helsinki region is seeing a rise of digital fabrication spaces such as the Aalto Fablab (see [fablab.aalto.fi](http://fablab.aalto.fi)), Kaupunkiverstas (see [www.kaupunkiverstas.fi](http://www.kaupunkiverstas.fi)) and the Helsinki Hacklab group (see [helsinki.hacklab.fi](http://helsinki.hacklab.fi)). The “Digital fabrication” concept stands for the production of digitally made design into a “physical object through a computer-controlled fabrication system” (Bull et al., 2010).

(see explanations at the end of this section).

Further, the Make(able) (see [makeable4u.wordpress.com](http://makeable4u.wordpress.com)) and the Wårk:fest events (see [warkfest.org/en](http://warkfest.org/en) and explanation at the end of this section) provide an entrance point for do-it-yourself (DIY) culture.

### Supporting groups, events and websites

Groups Fablab, Hacklab, Kaupunkiverstas

Events Wårk:fest, Make(able)

Websites Instructables, various blogs, WikHow

#### B3.2.9 - Hacking

Even though the word “hacking” is more known as connected to the field of electronics and software, nowadays, it is acquiring a new meaning for the DIY community. In this way, Hacking now assumes the meaning of doing things with unconventional materials or means, as argued by Harri Hämäläinen (co-founder of “Helsinki Hacklab”, see interview in section B1). Furthermore, this new meaning can be seen under the name of “life hack”, a term coined by Danny O’Brien in 2004 (Trapani, 2005), which is defined as a way of “cutting through an apparently complex system with a really simple, nonobvious fix” (O’Brien in Trapani, 2005). In practice, this usually appears as the use of simple products to solve and ease daily activities.

Therefore, this practice can be performed via two approaches: (1) one is to use alternative materials to create products, by using materials which are not common for that specific object; (2) and the second is to put products to unconventional uses

by using objects to perform a task they were not primarily designed for.

In the case of Helsinki, the Hacklab group and the Trashlab initiative, even though not strictly focused on the hacking activity, are strongly connected to the ideal of reusing objects and material in alternative ways.

### Supporting groups, events and websites

Groups Helsinki Hacklab, Pixelache and Trashlab

Events Wårk:fest, Kierrätystehdäs

Websites Instructables, WikiHow and various blogs.

#### B3.2.10 - Waste reuse

Waste reuse is the act of collecting discarded things and putting them to new uses. This practice is also known as “dumpster diving” (Hoffman, 1993) or “bin diving”. However, for this work, I decided to change its name to make it more appealing and understandable. The change was made because, in the field research, the majority of people who tried the practice for the first time (see chapter C3) said they thought “dumpster diving” would include diving into dirty places. Furthermore, some stated not to have related the name “dumpster diving” to the act of collecting trash. This happens mainly because this expression was created in the USA and therefore reflects the local culture and lexicon, hence creating misunderstanding when placed in a different cultural context.

This practice is here divided into three categories: (1) objects, (2) materials, and (3) food. Even though the nature of the practice is the same in each one, there are “local context” and the “difficulty and challenge” involved in each made necessary the division. Concerning the local context, waste reuse appears as one of the strongest practices in Helsinki. However, besides online-based groups (Facebook groups) there are no formally organized groups devoted only to this practice. Nevertheless, waste reuse appears as an underlying method informing most of the groups in this region, such as for example, e.g. the Helsinki Hacklab, Käätöpöytä and Pixelache.

Furthermore, in terms of “difficulty and challenge”, each category has a different perspective and therefore a different set of challenges involved. In this way, collecting objects is a practice that can be performed in any place one finds a trash container. Therefore, the challenges are simple and there is no bigger risk in performing it. Consequently, this practice can inform the previously presented practice of “no buying new”. At the same time, collecting materials does not differ much from collecting objects. However, the only difference is that one has to use the collected material to build new objects. Thus, it relates to the practice of “building own stuff”, which is more complex than the “no buying new” practice due to the skills needed for it. For this reason, the collection of materials comes as the second category. Consequently, the third category, collecting food, represents the most challenging use for collecting waste. This is because, many times, performing it entails entering closed/private spaces. Furthermore, there is a taboo around food waste

especially concerning “eating from the trash”. The details about each category are presented further when they are explained separately.

Nevertheless, despite the division, the waste reusing community has a set of three main rules that are applied to all the categories: (1) The one who arrives first, gets the first bits, (2) Take only what you need – leave for others, and (3) Leave the place cleaner than it was (Seifert, 2010; Hoffman, 1993).

Further to this, it is important to notice that, even though this practice leads to degrees of self-sufficiency, especially when concerning dependence on money (Hoffman, 1993:7), it does not inform a bigger change towards a sustainable way of living. What I mean is: reusing waste relies on the existence of the wider systems and their current modus operandi. Therefore waste reuse has to be treated as a “transition practice”, which can be performed as a transition towards more “complete” practices of sustainable self-sufficiency and therefore has to be abandoned after one achieves more sustainable practices.

In the following I explain each category and how it appears in the local context.

### ***B3.2.10.1 - For objects***

This category of waste reuse represents the collection of entire objects, meaning to collect - from trash containers, recycling rooms or streets - objects which can be readily used or which need just a simple repair. The object will then be reused for the same purpose it was initially designed for. Being myself in the practice for over 8 years,

Helsinki is a perfect place to perform it. What I mean is, when reusing waste from the streets of São Paulo and Santos in Brazil for my VOQ project (see [viraroque.blogspot.com](http://viraroque.blogspot.com)), all that could be found were broken products to be used as material, such as pieces of wood from broken chairs. However, in Helsinki I found it very common to find good functioning products ranging from televisions to printers, computers, lamps and furniture (see the personal experience of “room for one euro” in the section Appendix 2 for more details).

Further to this, in Helsinki, an important and active group in this practice is the “Roskalava HKI” Facebook group (see [www.facebook.com/groups/roskalava.helsinki](http://www.facebook.com/groups/roskalava.helsinki) and the group explanation in section at the end of this section)

### Supporting groups, events and websites

Groups Pixelache, Trashlab, Hacklab  
 Events R.O.G., Wårk:fest,  
 Websites Roskalava HKI, WikiHow

#### **B3.2.10.2 - For materials**

This category of waste reuse represents the collection of materials to be put to new uses. In this case “material” can be defined either as a part of a product or a piece of raw material. Collecting materials from trash containers can provide an easy and cheap source of materials for the making of products. In this concern, many of the interviewees, such as Mikko Laajola stated to be adept of this practice for realizing personal projects (see interview in Appendix 1). Further than using the materials for projects, one can use them for selling. This approach was used, for example, by the Pixelache group (see

description in the end of this section) in their “copper scavenging waste expedition” event (see [www.pixelache.ac/blog/2013/copper-scavaging-waste-expedition-with-ore-e-refineries/](http://www.pixelache.ac/blog/2013/copper-scavaging-waste-expedition-with-ore-e-refineries/)). In this event, a group of people went collecting disposed copper pieces and then sold the gathered material to a local buyer. Further to this, this practice is also facilitated by the Roskalava HKI Facebook group mentioned in the previous category.

### Supporting groups, events and websites

Groups Pixelache, Trashlab, Hacklab  
 Events R.O.G., Wårk:fest,  
 Websites Roskalava HKI, WikiHow

#### **B3.2.10.3 - For food**

This category of waste reuse deals with food waste and consists of collecting discarded food products. In most cases, as in the case of Helsinki, this practice consists of collecting food products disposed by local supermarkets – nevertheless, some people also collect food discarded by restaurants. Due to laws and food regulations, supermarkets are obliged to throw away products which are near to the expiry date or that will not be bought by costumers the next day – such as fruits with bruises. However, these discarded products are usually still edible because expiry dates are set to “guarantee extreme freshness” and not the absolute final consumption date (Seifert, 2010).

Furthermore, this is a practice which has a big taboo around it. As presented in the short movie “Surfing the Waste” (Aflalo, 2011), “many people think it is disgusting, shocking, weird” and consequently many of its practitioners have

faced prejudice (Alfalo, 2011; Hoffman, 1993). However, through the experiences described in section C3, these preconceptions were proved to be related to awareness: people who had never tried or had strong opinions against this practice became more receptive and even started performing it after a first experience, especially by seeing the quality of the packaging and the clean manner in which the food is being disposed of by the supermarkets.

Furthermore on this issue is its legal aspect (Hoffman, 1993; Seifert, 2010). Collecting waste food for free can be seen as a threat to the supermarkets and the entire food production system. In this way, many of these establishments around the world prevent people from accessing their trash bins by adding padlocks, fences or even by pouring poisonous substances on the disposed food (Hoffman, 1993; Seifert, 2010). Nevertheless, in the Helsinki area some markets seem to sympathize with the practice by leaving the way to their bins clear and the padlocks open. Even further, some of the interviewed people stated to have visited supermarkets' trash bins during their opening hours and collected food while employees were around. However, this does not apply to all the markets in the region, since some are adding padlocks and fences to their bins.

Nevertheless, there are many people who live from collecting disposed food, such as Emma Kantanen (interviewed in section B1). Accordingly, there is a big community involved in this practice and it is therefore usual to meet other practitioners while performing it. However, even if one can get a considerable amount of food through this

practice, one cannot ensure a varied diet through it: the products found in the waste vary every day. For this reason, most people getting their food from the bins are adept at what is called Freeganism. Freeganism is defined by Edwards and Mercer (2012, p.175) as alimentation based on ethical issues around food waste which embraces cooperation, freedom, social concern, sharing and community building. In this way, freegans use the collection of food waste as a way of accessing food waste and therefore do not apply restrictions to their alimentation (Edwards and Mercer, 2012:175).

In the Helsinki area, there are no groups directly linked to this practice. The main reason for this for this is due to the legal issues involved and the consequent “secrecy” of the practice in order not taint the places by rising supermarket’s awareness about it. For this reason, this practice is rendered as a “hidden dynamic” in the city, in which knowledge is spread by word-of-mouth.

In this way, the “Diving in Helsinki” Facebook group, created during the experience part of this study (see section C3 and Appendix 4) is the only local group dedicated to this practice. Further to this, events like R.O.G also relates to this practice

### Supporting groups, events and websites

Groups Pixelache, Trashlab, Diving in Helsinki Events R.O.G.

Websites WikiHow, Diving in Helsinki





Kääntöpöytä's Harvest fest

### B3.2.11 - City Harvest

This practice consists of harvesting edible plants from the city, such as fruits, nuts, vegetables, berries and mushrooms (Reynolds, 2008).

City harvesting is deeply rooted in Finnish culture. From early on, schools teach their students which are the edible mushrooms and berries that can be harvested from public space, forests and parks. Further than the local knowledge, the “Satokartta” (Harvest map - see [satokartta.net](http://satokartta.net)) in Helsinki is an entrance point for this practice. Furthermore, via the Satokartta initiative, Dodo also promotes “harvesting bicycle rides”, called “Urban foraging rides (Sadonkorjuupyöräilyt)”. These gatherings of city harvesters are open for everyone to join and happen during August and September, which is the main harvest period in Finland (Satokartta, n.d.).

Moreover, the “Harvest fest” event, organized by Dodo’s Kääntöpöytä initiative (see description in box 1 at the end of this section) in September is a good place to meet like-minded people and exchange experiences and information about city harvesting and urban farming.

#### Supporting groups, events and websites

Groups Dodo, Kääntöpöytä

Events Harvestfest

Websites Satokartta

### B3.2.12 - Urban Farming

This practice consists of growing food in urban areas. Also known as “Urban Agriculture”, this practice entails the reclaim of unused urban spaces to be used for growing food (Glover 2004; Saldivar-Tanaka and Krasny 2004 cited in Battersby and Marshak, 2013, p. 450). According to Reynolds (2008), continuous access to agriculture has been a right defended by many social movements. As urbanization and rural exodus placed a major threat to this access, social movements, especially during the social reform in the nineteenth century, started to claim the right for agriculture in urban centers (Battersby and Marshak, 2013).. In accordance to this, , one of the growing movements for urban farming is the one known as “Guerilla Gardening”, which consist of cultivating urban land illicitly (Reynolds, 2008 p. 16).

Whether legally or illegally made, urban agriculture represents a step towards self-sufficiency by reducing dependency on supermarkets and by allowing people control over the food they consume (Reynolds. 2008 p. 38). Moreover, urban farming, as argued by Battersby and Marshak (2013 p. 448) and witnessed in the field research, is strongly tied to community building and thus social interaction due to the knowledge sharing and mutual interaction present in urban farming areas.

In the case of Helsinki, according to Päivi Raivio and Petra Jyrkäs (see interviews in section B1 and Appendix 1), the urban farming movement started in 2009 through Dodo and today has around 1000 participants in different areas of the city.

To join Dodo's urban farming, one needs to send an email via the website "kaupunkiviljely.fi". This email is answered by a coordinator of the initiative who, according to the location of the applicant, advises on joining an existing space or initiating a new urban farming area. According to Petra Jyrkäs, there are more people interested than places available. Dodo's urban farming has support from the local government and the Biolan Company to provide the needed infrastructure. This infrastructure consists of sacks filled with soil, a water container, a bio-composting container and watering cans; for which Dodo Charges a fee of 20€ per year per sack. Furthermore, Dodo's urban farming initiative counts with the Kääntöpöytä space and its Harvest Fest event

However, due to the local weather, this practice can be performed only during the warmer months (from April to October).

### Supporting groups, events and websites

Groups Dodo, Kääntöpöytä

Events Harvest fest

Websites kaupunkiviljely.fi

### B3.2.13 - Window Farming

Window farming is the practice of converting windows into small-scale farms. Tracey (2011, p.40) defines Window Farming as "a way to grow up to 25 plants in the space of a typical 4' x 6' window" and furthers her argument by citing examples of what can be cultivated: "lettuce, spinach, basil, cherry tomatoes [and] beans" (Tracey, 2011, p.40). Therefore, window farms represent a feasible way of growing food throughout the year even in places with severe climate conditions such as the winter in Finland, because a window farm relies on the household temperature while taking advantage of the sunlight through the window. In this concern, according to a study on solar incidence in Europe carried by the European Commission, Helsinki has the same amount of sunlight per year as Poland, Czech Republic and higher amount of sunlight than the UK, the Netherlands, Belgium, Denmark, Sweden and Norway (European Commission, n.d.). Nevertheless, during winter months, in case of insufficient sunlight, one can add LED lights which are made specifically for growing plants. By being LED based, however, these lights consume a small amount of energy, and further research should be done to compare the environmental impacts between consuming food from hydroponic window farming powered by artificial light and from imported mass-produced agriculture sources.

In Helsinki, many of the local activists, especially the ones connected to Dodo, Pixelache and Kääntöpöytä, such as Mikko Laajola, have been experimenting with alternative ways of indoor farming. Furthermore, this practice was identified

as strongly informed by the practices of Waste Reuse and Hacking, because most of the window farming projects are made by reusing discarded objects and materials.

As a source of “how-to” guides, websites like “windowfarms.org” (our.windowfarms.org) (Tracey, 2011 p. 41) and Instructables (www.instructables.com) are repositories of open source designs and guides for building a window farm.

### Supporting groups, events and websites

Groups Dodo, Kääntöpöytä

Events Harvest fest

Websites Instructables, Windowfarms.org

### B3.2.13 - Independent collaborative work

This practice consists on creating workspaces where independent professional work together in an altruistic mode. This practice is based in the concepts of community, collectivism and cooperative work.

Community is defined by authors such as Parker et al. (2007, p.57) and Wenger (199, p.72) as a limited group of people which has mutual engagement and share similar goals and repertoire. Furthermore, communities are a “more natural form of social organization” (Parker et al., 2007, p.57). At the same time, “Cooperative” is defined by the International Cooperative Alliance (ICA), cited in Parker et al. (2007), as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise” (ICA

as in Parker et al. 2007:61). Further to this, the idea of Collectivism is based on the belief that individuals can achieve most autonomy when acting within a group (Parker et al., 2007:49).

However, differently from the above-mentioned concept of “cooperatives”, in the case of this practice, the professionals involved do not need to be working on the same professional area and the profit generated by each is not shared among others.

Consequently, the practice of “independent and collaborative work” can be defined as: to create a group of autonomous workers which are at the same time independent and interconnected by sharing the workspace and voluntarily exchanging knowledge and skills. Therefore, in such a group, individuals share the motivation of pursuing values of autonomy and cooperation in their professions.

In the case of Helsinki, there are many shared workspaces, such as Kulmahuone, HUBHelsinki and Made in Kallio. Nevertheless, the group which perfectly reflects this practice is the Made in Kallio. (see explanation in the end of this section and the interview with Jon Sundell in Appendix 1)

### Supporting groups, events and websites

Groups Made In Kallio

Events Wärk:fest, Make(able), Trashlab repair café

Websites Helsinki green maps, Prototype Helsinki

### B3.2.14 - Time bank

Time Bank is a type of Local Exchange Trading System (LETS). As defined by Collom (2011, p.146), LETS are a form of complementary currency which presents a local alternative for the “exchange of services and goods” (Collom, 2011 p. 146). According to Parker et al. (2007, p. 155), LETS are created when groups get together and build a common currency to be used between the members of this group. Subsequently, the exchange products and/or services happen independently from the official currency. Hence, LETS work without interest or profit and “is based on collective and self-help” (Parker et al., 2007:155). Accordingly, Ruby van der Wekken (see interview in section B1) stated that LETS are based on abundance rather than on scarcity, which is the base of the current monetary system.

According to Meeker-Lowry (1996) cited in Collom (2011, p.146), there are three different types of LETS: Local Exchange Systems, Hours Systems and Time Banks. Nevertheless, there are many hybrid models, since communities shape the networks according to their own needs. Timebank is seen as the most flexible of these types, because it is based on a central database through which members freely exchange products and services (Collom, 2011, p.146).

This last type is the one found in Helsinki; therefore I here focus on describing further only this type of LETS. In Timebanks, the “the unit of exchange is time rather than money” (Parker et al., 2007 p.284). Therefore, every person’s work has the same value no matter its nature. The first development of this concept was the “Time

Dollars” in 1980 by Edgar Cahn (Parker et al., 2007 p. 284). Afterwards, in 2003, a group of activists in Australia created the Community Exchange System Organization (CES - community-exchange.org) aiming to bring the LETS concept to a digital platform (Jenkin, 2011). The CES online platform, nowadays (2014), facilitates the existence of 660 time bank groups around the globe (Community Exchange Org, n.d.).

One of the time bank networks under the CES platform is the local time bank network “Stadin Aikapankki (STAP Helsinki Time Bank - stadinaikapankki.wordpress.com, see group explanation in the end of this section).

#### Supporting groups, events and websites

Groups Stadin Aikapankki

Websites Community-exchange.org,  
Stadinaikapankki.wordpress.com

### B3.2.15 - Voluntary Simplicity

This practice consists of simplifying one’s way of living. According to Zavestoski (2002) the roots of Voluntary Simplicity (VS) dates back to ancient philosophies and religions. However, he argues that it was reborn in the 70’s with the “back to the land” movement and has nowadays a growing number of adepts (Zavestoski, 2002 p. 151). VS is both a system of beliefs and a practice, which is “centered on the idea that personal satisfaction, fulfillment, and happiness result from a commitment to the nonmaterial aspects of life”. Therefore, it aims at discovering “the essentials of life” and confronting one’s values (Mazza, 1997, p.12, cited in Zavestoski, 2002, p.150).

In this way, the feeling of unhappiness and discontent towards the mainstream culture leads people to pursue differentiation and autonomy (Cherrier and Murray, 2002; Zavestoski, 2002, p.151). Therefore, VS adepts move “from an externally identified self to an internally identified self” (Gergen 2000, cited in Cherrier and Murray, 2002) by basing their life goals on happiness, intellectual development and well-being rather than economic growth and consumption (Cherrier and Murray, 2002; Zavestoski, 2002, p.149).

Further, despite the autonomous and decentralized character of VS, it has a strong tie to community building. This happens because, by pairing with like-minded people, VS adepts find the support and inspiration to maintain and confirm their way of living. (Cherrier and Murray, 2002)

In consonance, this practice was also found in Helsinki. Even though there are no groups dedicated exclusively to voluntary simplicity in the region, VS was identified in most of the key activists. In this concern, people stated to be engaged in a combination of the above practices as a mean of needing less to live and having more free and joyful time. Hence, VS can be seen as a way of living which embraces different practices and therefore renders as a result of the combination of the previous practices

### **B3.2.16 - Commune**

This practice consists of living based on sharing and common-ownership (Parker et al., 2007, p.52) According to Parker et al. (2007, p. 52), this can vary from sharing living spaces, economic activities to childcare, income and even marriage. Moreover, the size of a commune can range from “a household of a handful of people, a village of hundreds or a town of thousands” (Parker et al. 2007, p.52). Communes play an important political role on the articulation of movements like environmentalism, anti-capitalism and anarchism. Moreover, they are seen to “address concerns for social justice and environmental sustainability” and, consequently, represent a powerful alternative to the current social order. (Parker et al. 2007, p.52)

For this study, I use as foundation of this practice the sharing of small-scale living spaces, to which different types of sharing can be added to Hence, it aligns with the concept of “intentional communities”, which stands for a community which was designed to encourage certain kinds of interaction (Parker et al.,2007, p.132) Therefore, a commune happens when a group of like-minded people come together and decide to share a living space motivated by issues like friendship or the development of certain practices. In this concern, the group plans the commune before its establishment and consequently the decision power about the rules and the entrance of new member lies in the members’ hands. For these characteristics, “commune” cannot be defined as a mere practice, but as a “way of living” which can embrace various practices.

It is important to stress, however, that student apartments do not fit to this concept due to the absence of the “voluntary” nature and the “planning phase” in student housing as well as due to. Moreover, also due to the members’ lack of control of the entrance of new tenants and the rules in force.

There is no group in Helsinki dedicated strictly to alternative communal living even though many communes can be found throughout the city. For instance, the activists Harri Hämäläinen and Emma Kantanen stated to be living in communes.

#### Supporting groups, events and websites

Websites [Gen.ecovillage.org](http://Gen.ecovillage.org), [Off-grid.net](http://Off-grid.net)

### B3.2.17 - Ecovillage

This practice consists of creating and maintaining ecofriendly living communities. According to Gilman (2010), cited by Dawson (2010, p.185), ecovillages are “human-scale, full-featured settlements in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future” (Gilman, 2010, cited by Dawson, 2010, p.185). Furthermore, according to Dawson (2010, p. 185), ecovillages are large scale intentional communities which have strong focus on sustainability. Eventhough the size of an ecovillage varies, it is always limited to a size where all members can know and interact with each other (Parker et al., 2007, p.84).

Ecovillages seek the transformation of values

through four ways: (1) Firstly, by delinking growth and the accumulation of material good from well-being. (2) Secondly, by strengthening the connection between people and place via the development of local, self-sufficient ways of living. (3) Thirdly, by “affirming indigenous values and practices” by encouraging and allowing diversity. (4) Fourthly, through education consisting of the sharing of the ecovillage’s values through “environmental education based on systems thinking”. (Dawson, 2010, p.188-189)

In this sense ecovillages are accessing issues of anti-capitalism and are providing examples of sustainable ways of living. As a consequence, this practice was listed in 1998 by the UN as one of the 100 best practices for sustainable living (Parker et al.2007, p.84). Moreover, studies proved that the quality of life is higher in ecovillages when compared to regular mainstream urban settlements, despite the fact that the income level was considerably lower in ecovillages (Dawson, 2010). However, although the concept may sound too connected with agriculture, there were remarkable ecovillage (and commune) experiments which were established around businesses, such as, for example the Massachusetts Bay Colony and Oneida in the US (Parker et al, 2007).

Hence, ecovillages represent in this study the final step towards reaching an expressive, meaningful and sustainable way of living. For this reason it is a concept which embraces many practices, especially the ones around sharing, community, agriculture and anti-consumption. For this reason, even though ecovillages are not present in

Helsinki area, many aspects and practices related to it are being held by the various local groups. Nevertheless, this kind of settlements can be found in the Finnish countryside, as shown in the “ecovillage world map” created by the Global Ecovillage Network (GEN – see [gen.ecovillage.org](http://gen.ecovillage.org)).

Accordingly, local activists such as Mikko Laajola are involved in developing self-sufficient technology and villages in other Finnish cities.

### Supporting groups, events and websites

Websites [Gen.ecovillage.org](http://Gen.ecovillage.org), [Off-grid.net](http://Off-grid.net)

## Box 1 - Explanation of Groups.

Here I present a short description of the existing groups in Helsinki. Since the focus of the study is the practices, the groups’ explanations presented here aims at providing an overview about what the group is and what kinds of activities they run. In this way, the descriptions below are based on data from the interviews made with key activists as well as on personal experiences in the groups (volunteering, visiting and observations) and information from the groups’ websites. However, information about the motivations and history of each group can be seen in the interviews in Appendix 1.

It is important to notice, however, that not all of these groups have a physical location. This happens especially in the case of Book Crossing, Netcyclor and Stadin Aikappanki groups, which work through virtual platforms. Yet, they are included in the “group” categories because their websites render as a facilitation tool for personal interaction, thus differing from the “websites” category (explained later in box 3) where the websites are passive and serve simply as reference sources - without any direct relation to physical interaction or activity.

### 1 - Book Crossing

Book Crossing ([bookcrossing.com](http://bookcrossing.com)) is a book sharing system. The group defines itself as “the world’s library”. This initiative started in the US and is now present in 131 countries, including Finland, which figures as the 5th country within the “top 10 book crossing countries” (Book Crossing, n.d.).

In this system, just as in a library, people can take and give books. However, the difference is that Book Crossing has no specific place for collecting and returning books. In this way, books are found and left anywhere around the city. Furthermore, another difference is that there is no centralized collection or authority responsible for the books. This means all the books available are provided by the users by registering in the Book Crossing website and consequently adding a BookCrossing ID to the item. Therefore all the actions made with a book (collecting or delivering) have to be registered in the website, thus providing other users with the capability to track the location of every book.

## 2 - Dodo

Dodo is an “urban NGO” located in Helsinki. This NGO focuses on “making the city a better place to live” by accessing issues related to environmental change. This open, volunteer-based organization represents the most active group in Helsinki. With a remarkable amount of initiatives, Dodo is the organizer of the local urban gardening movement, the city harvest map, the Kääntöpöytä space, events like Megapolis, as well as projects abroad, such as, for example, Sinsibere (in Mali) (see [dodo.org](http://dodo.org)). Further to this, the core group of this NGO figures as active members of many other groups in Helsinki.

## 3 - Kääntöpöytä

Kääntöpöytä (from Finnish “turntable” - [kaantopoyta.fi](http://kaantopoyta.fi)) is a greenhouse, cafeteria and event space held by Dodo. This space represents the hub for urban gardeners in Helsinki. Located on an abandoned turntable in the old train lines near Pasila railway station, this greenhouse space was built in 2012 with funding from the World Design Capital Helsinki 2012 (WDC 2012). This site is the same where Dodo first experimented with urban gardening in 2009. Kääntöpöytä organizes events such as brunches, the Harvest Fest and other events, where they serve food made with ingredients grown in their greenhouse and its surrounding urban farming boxes. In this way, the place includes a greenhouse, urban farming boxes areas around the turntable, and two beehives. Further to this, Kääntöpöytä holds educational sessions on topics related to urban gardening, such as permaculture, aquaponics and hydroponics.

## 4 - FabLab

A Fab Lab is a digital fabrication space. Initiated in MIT, Fab Labs are open laboratories for people to experiment with and produce with computer aided production tools (International Fab Lab Association, n.d.). These tools vary from laser cutting machines, 3D printers, CNC milling machines to sewing machines and power tools. Helsinki has a Fab Lab located in Aalto University’s Arts campus. This space is open to the public on Tuesdays, when everyone can learn and produce by using the infrastructure available. However, during the other days of the week it is open only for Aalto students. Furthermore, machines’ usage is free of charge, but material costs are charged when over 5€.

Besides being a workshop space, Aalto Fab Lab also provides courses related to electronics, computer aided design and software. In this way, it has been a place for many events such as the Trashlab repair café (see event explanation in part box2).

## 5 - Helsinki Hacklab

Helsinki Hacklab is a “hackerspace” or “makerspace”. These spaces “are community-operated physical places, where people can meet and work on their projects” (Hackerspace Organization, n.d.). In makerspaces, amateurs get together to explore, exchange knowledge and build their own gadgets by using raw materials or reusing parts of discarded objects (Saini, 2009). The Helsinki Hacklab (see [helsinki.hacklab.fi/](http://helsinki.hacklab.fi/)) has open

days every Tuesday from 18:00pm. During this time people can visit and get to know the people, the place and the projects which are being developed there. Nevertheless, membership for the Hacklab is open for everyone. According to a board member of the organization, there are two types of membership: One type is the “key holder” membership, which costs 40€ per month and gives free access to the space at any time. The other type of membership costs 20€ year and does not include the possession of a key. This membership grants access to the Hacklab during the open days (Tuesdays), the “hacking weekend” (every second week of the month) and whenever a “key holder” member is present. Nonetheless, all the members are allowed to use the materials available in the Hacklab as well as the wide variety of machines such as woodwork tools, 3D printers and laser cutters.

The group has now 30 “key holder” members and a total of 108 members. However, they argued that the active group is around 30 people.

### **6 - Kaupunkiverstas**

Kaupunkiverstas is, just as the Aalto Fab Lab (see description above), a digital fabrication space. This workshop is held by the City of Helsinki as a service of the City Library number 10. The difference between this space and Aalto Fab Lab is that Kaupunkiverstas is open to the public every day while the previous is open for public only once a week. However, while Fab Lab does not charge fees for machine usage, Kaupunkiverstas charges small fees for every machine according to the amount of material used. Another difference is the absence of CNC milling machines in Kaupunkiverstas. Nevertheless, further than a workshop space, this group also holds events such as Trashlab Repair café and discussion events on topics related to digital fabrication (see [www.kaupunkiverstas.fi](http://www.kaupunkiverstas.fi))

### **7 - Kierrätyskeskus**

Kierrätyskeskus, the “Helsinki Metropolitan Area Reuse Centre”, is a non-profit organization centered on the issue of waste reuse (Kierrätyskeskus, n.d.). In this way, this organization collects repairs, borrows, rents and sells used products. In their shops, a big variety of products can be found, ranging from clothing products and furniture to musical instruments and electronics. Furthermore, the Reuse Centre also provides services such as lending containers and non-disposable dishes as well as transportation services for collecting used products. Furthermore, this group organizes the “Kierrätystehdäs” event (Recycling factory – see description in Box 2).

### **8 - Made in Kallio**

Made in Kallio is a co-work space located in the Kallio neighborhood. This group rents spaces for many different independent professionals ranging from shoe designers and photographers to woodcrafters and web designers. Following the co-work ideology, the independent workers within this group collaborate altruistically with each other’s projects. According to Jon Sundell (see interview in Appendix 1), founder of the group, the availability of work space is published in their website (see [www.madeinkallio.fi](http://www.madeinkallio.fi)). However

the available spaces are usually rapidly occupied via their network of friends, which keeps the group in a “friendship-based” connection.

Furthermore, this group has a cafeteria space where the productions of its various professionals are exhibited and sold. Nevertheless, further to their own production, the group holds and organizes different workshops and events such as Make(able) workshop, Trashlab Repair Cafés and other events around topics related to DIY, maker culture, off-grid living, alternative living and sustainability. In this way, in the Helsinki area, Made in Kallio is becoming the most important hub for people related to these topics.

### **9 - Netcycler**

Netcycler is a swapping service initiated in Finland. Working via a website (netcycler.fi), the Netcycler allows people to list their wants and offers and then negotiate with other users to achieve fair transactions on swapping all kinds of products. However, while the Group defines swapping as an alternative currency, through their service, users are allowed to buy and sell products using euros. Further to this, Netcycler is now available in the UK, Germany and Finland, counting with over 110,000 users (Netcycler, n.d.).

### **10 - Pixelache**

Pixelache Helsinki is “a trans-disciplinary platform for developing and presenting experimental art, design, research and activist projects since 2002” (Paterson, 2012). According to Paterson (2012), Pixelache is also an “organized network of people – currently approximately 12-15 association members, 3-4 staff (2-3 part-time and 1 full-time), plus 10-20 regular friends or unaffiliated associates, not all based in Finland”. This group does not have a simple definition, according to Paterson (2012); Pixelache is used in different ways by its members. Some see it as a way to present their professional productions (whether artistic, technologic or research based), while others use it as a hobby to try and experiment with different projects (Paterson, 2012 p. 2). While the main focus of this group is on experimental art, they are currently directly linked with activities around the topics of sustainability and environmentalism. Andrew Paterson, responsible for Pixelache’s educational program “Pixelversity”, states in his article that the topic of sustainability came into the scope of the group through the interests of the various contributors of the group (Paterson, 2012). Relating to this topic, the Pixelache group is responsible for organizing different events and initiatives such as Trashlab – with its related fixing events, Trash talks and Copper-Scavenging expeditions – as well as the annual “Pixelache Festival” which featured, in 2013, events such as the Recycling Olympic Games (see events explanation in box 2).

### **11 - Trashlab**

Trashlab is Pixelache’s initiative working on the issue of trash and its reuse. This initiative, initially proposed by Antti Ahonen from the Koelse group (experimental electronics - koelse.org), consisted of a series of “monthly lectures and maker-gathering events” with the objective of building a community around the topic approaching waste in creative ways (Paterson, 2012 p. 9). Over time this initiative changed its scope and

now embraces different activities such as expeditions and repair workshops (see Trashlab Repair Café event explanation in Box2).

### 12 - School of Activism & Mandåg

Mandåg is an advertising company ran by Arto Sivonen, which focuses on pro-environmental campaigns, such as, for example, the “Winter Cyclers” ([www.vuodentalvipyorailija.fi](http://www.vuodentalvipyorailija.fi)). The connection between Mandåg and the School of Activism is that both have the same person as a key activist behind them (Arto Sivonen, see interview in section B1). The School of Activism was created during the World Design Capital Helsinki 2012 and had activities only during that year (see [www.schoolofactivism.com](http://www.schoolofactivism.com)). Arto argues that the School of Activism has plans for holding new activities; however none is being done now due to a lack of time on the organizers’ side. For this reason both initiatives are presented together in this study, especially because the activism for sustainability done by Arto is mostly through Måndag rather than via the School of Activism.

### 13 - Stadin Aikapankki

Stadin Aikapankki (Helsinki time bank) is Helsinki’s local time bank (see practice explanation in section B3.2). This group started in 2009 and today counts with over 3000 users – however, the active portion of these users is around 500. Stadin Aikapankki (STAP) works under the Community Exchange System Organization (CES - [community-exchange.org](http://community-exchange.org)) and is free for everyone to join. In STAP the currency used is called “tovi”, where 1 tovi stands for 1 hour of work. By using this currency, members are free to exchange services and products. For these exchanges to happen, every user creates a list of “offers” and “wants” when registering in SAP which is shared weekly to all other members.

When a person makes a transaction in STAP, for example, paying 1 tovi for a service from another user, the amount of 1.02 tovis is debited from the contractor’s account. At the same time, the person providing the service gets a credit of 0.98 tovis. The remaining 0.04 tovi from the transaction is divided to two destinations. One part (0.02 tovi) goes to the STAP organizing team and is used by them to cope with the time used in the maintenance of the network. The other part (0.02 tovi) is sent to an actor inside the network (such as cooperatives and NGOs) which is chosen by the provider of the service in the transaction.

## Box 2 - Explanations of events

Here I present a short explanation about the events present in Helsinki based on the information gained from the field research and online information. However, these descriptions are presented in a concise manner, limited to the description of the events’ core characteristics and goals. For details on how the events were in 2013, see the field research (section B2 and Appendix 2) and for details about the organization – and motivations – of the events, see the interviews in Appendix 1.

## 1 - Car free day

Car free day is a worldwide event aiming at making people to try living in car-free cities for a day. This event happens annually around the 22nd of September and consists not only of encouraging people to not use cars, but also a wider set of happenings around the “car-free city” topic, such as exhibitions and local events. For example, Car Free Days usually include cheaper tickets for public transportation and the closing of areas of the city to be used only by pedestrians. However, the World Carfree Network only provides guidelines for the event. Therefore, the complementary events have to be arranged by the local organizers of the event (World Carfree Network, n.d.).

## 2 - Harvest Fest

The Harvest Fest is an event organized by Dodo’s Kääntöpöytä initiative. This event happens in September and celebrates the end of the urban farming season. The harvest fest brings together urban farmers and interested people in a party-like environment. This party includes live performances by various bands and DJs and food made with ingredients produced in Kääntöpöytä’s local greenhouse, urban gardening boxes and bee hives. This event is open for everyone to join.

## 3 - Kierrätystehdäs

Kierrätystehdäs (Recycling Factory) is an event organized by Kierrätyskeskus (Reuse Centre) which happens annually in May. This event is a gathering of practices around the topic of waste reuse. It is divided into four focus areas. One part of the event concentrates on workshops and classes of various types, such as, for example, repairing and making products. Another area is a market-like space which features various groups selling up-cycle design items. The third area is a “free market” where people can freely give and take products. The last area is an exhibition space which features groups like Book Crossing and Kierrätyskeskus (see explanation in section box 1) and features spaces for presentation by the groups involved in the event, such as fashion shows and lectures. The Recycling Factory lasts for a weekend and is free to join.

## 4 - Make(able)

Make(able) events are workshops centered on the topic of half-made fashion products. Organized by the designer Anja-Lisa Hirscher, these workshops aims at helping people to experience the process of sewing their own clothes. Each workshop has a specific garment as a theme and, according to this theme, a group of organizers provide precut patterns in different sizes to be finalized and customized by the participants. The organizers charge a material fee of 5 euro and provide guidance during the whole process. This event happens each time in a different place, which is announced in the event’s website (makeable4u.wordpress.com).

## 5 - No Impact Week (NIW)

No Impact Week is an initiative by the No Impact Project which promotes a one week experience of living with no environmental impact. This experiment was started by Colin Beavan in Manhattan, USA, after he and his family decided to live without environmental impact for a year. The resulting non-profit organization “No Impact Project” facilitates the experience of living in this manner for the period of a week. For this facilitation, the project sets different themes for each day in an incremental way, so that the last day consists of a combination of all the themes of the week (No Impact Project, n.d.). Further, the No Impact Project provides, for a 250 dollar fee, guidebooks and instructions for organizing the event in schools, companies and communities. Nevertheless one can try the event alone via their website [www.noimpactproject.org](http://www.noimpactproject.org) (No Impact Project, n.d.).

## 6 - Recycling Olympic Games (ROG)

The Recycling Olympic Game (ROG - <https://www.facebook.com/pages/Recycling-Olympic-Games-ROG/148386755369284>), initiated by activists from Culture Factory Polymer (Tallinn, Estonia, see [kultuuritehas.ee](http://kultuuritehas.ee)), was organized for the first time in May 2013 as part of the Pixelache Festival. This event consisted of a week-long competition between teams for the prize of “Upcycling Champion of the Gulf of Finland” (ROG, n.d.). During this week, teams competed for the daily challenges of “shelter, kitchen, power generation, invention, fashion and endurance” which had to be met by using only waste collected in Helsinki (ROG, n.d.).

## 7 - Siivouspäivä

Siivouspäivä (from Finnish “cleaning day” – [siivouspaiva.com](http://siivouspaiva.com)) is a one day event organized twice a year which “turns cities into giant secondhand markets” (Siivouspäivä, n.d.). During the “cleaning day”, people are allowed to set up second-hand sales points anywhere in the city. For this, the event organizer provides a mapping service in their website where people can list the location of their sales point. Nevertheless, this registration and mapping of sale point is not mandatory. However, this listing facilitates people to find objects they are searching for, since the Siivouspäivä’s website provides search and filtering tools.

## 8 - Trashlab repair café

Trashlab repair café, initiated by Päivi Raviio, are “social occasions to gather and try to fix the things you have that are broken” (Pixelache Helsinki, n.d.). Organized by the Trashlab initiative of the Pixelache group (see explanation in box 1) these events provide tools and knowledge (experts on different themes) to create a base for people to get together and repair broken products. The Trashlab Repair Café events happen once a month, each time in a different location around Helsinki region. Nonetheless, despite the “nomadic” characteristic of the event during 2013, in 2014 it will happen monthly in the digital fabrication space Kaupunkiverstas (see box 1).

## 9 - Wårk:fest

Wårk:fest is the DIY festival of Helsinki. Started in 2012, the event has been held annually by a group of organizers (see interview with Harri Hämäläinen and Petra Jyrkäs in Appendix 1) with the aim of gathering “creative individuals and communities and offer them a place to share their interests and skills” (WÅRK:fest, n.d.). This event is open for groups and individuals to sign up and show their DIY productions by holding workshops, giving lectures and/or exhibitions. For this reason, the event is divided into four different spaces: (1) an exhibition space consisting of tables where different groups exhibit their productions, (2) several workshop spaces (stages and rooms), (3) a stage for lectures and (4) cafeterias and restaurant. The Wårk:fest lasts for a weekend and the entrance fee is around 20€ for the entire weekend, which entitles the participant to take part in every happening inside the event. This event is a big meeting space for the DIY community and features many local groups and events such as Helsinki Hacklab, Made in Kallio, Make(able) and others.

### Box 3 - Explanation of “websites”:

Here I present a short description of the websites. It is important to notice, however, that a complete list of websites related to the topics of sustainability, DIY, alternative ways of living and the other topics relevant to this study is practically impossible to achieve. This happens because, due to the freedom and flexibility of the internet, a plethora of new websites on these topics is being created and removed every day. For this reason, I here focus on a concise list of those websites which were more often cited and used by the groups and activists in the Helsinki region.

#### 1 - Diving in Helsinki

This website – a Facebook group – focuses on facilitating activities of collecting waste food in supermarkets around Helsinki. The Diving in Helsinki website was created as a result of the experiences carried in the section C3 of this study (see Appendix 4). The group online-reference has been active in organizing waste collection activities as well as providing a space for discussion around the topic of food waste. However, due to legal issues, the group privacy had to be set to “secret group”, so that people can add friends to the group but one cannot find it by oneself.

#### 2 - Ecovillage.org – gen-ecovillage.org

This website is the online space for the global network of ecovillages. Alongside mapping and listing the various ecovillages around the world, this website renders as a repository of resources (articles, discussions, contact information and educational items) around the topic of environmentally friendly living.

#### 3 - Helsinki Green Maps – greenmaps.fi

This mapping service, part of the global “Green Maps” initiative (see [www.opengreenmap.org](http://www.opengreenmap.org)), provides

geographical information about places (groups and initiatives) centered on environmental topics in Helsinki. Via this website one can find places within the sections of “vege & organic”, “mobility & energy”, “design”, “urban”, “nature” and “sports and health”.

#### **4 - Instructables – [instructables.com](http://instructables.com)**

Instructables is nowadays one of the main websites for the DIY community. This open platform allows people to publish step-by-step tutorials about the making and/or hacking of any product. Further, this website allows the search of guides by object or material name. The organizers of Instructables also promote DIY competitions and events throughout the year.

#### **5 - No Impact Project - [noimpactproject.org](http://noimpactproject.org)**

The No Impact Project website is the central resource for the No Impact Week. In this website people can sign up to the experiment, exchange information, knowledge and experiences about the experiment and its related topics.

#### **6 - Prototype Helsinki – [prototypehelsinki.org](http://prototypehelsinki.org)**

This website aims at gathering the “most important new urban culture actors active in the city as one network” in order to create interaction between those actors and therefore create a stronger community (Prototype Helsinki, n.d.). This website provides a list and the respective links of the different groups involved in alternative living such as Made in Kallio, Pixelache, School of Activism, Siivouspäivä and others.

#### **7 - Roskalava HKI - [www.facebook.com/groups/roskalava.helsinki](https://www.facebook.com/groups/roskalava.helsinki)**

This website – a Facebook group – represents an “information center” about the location of trash containers in Helsinki. This information about useful trash in the city usually contains pictures, address and a short list of the objects found in the container. The group has (on 8th of November 2013) 11,746 members and an intense daily activity.

#### **8 - Satokartta - [satokartta.net](http://satokartta.net)**

This website is the mapping system of Dodo’s city harvest initiative. This website features a map with tags of the harvestable plants found in Helsinki. Also, via this website, people can get information and sign in for the “urban foraging rides”.

#### **WikiHow – [wikihow.com](http://wikihow.com)**

Wikihow is an open repository of “how-to” guides. While it contains a diverse variety of topics ranging from “fishing” to “sleeping”, it is a valuable resource for guidance and advice about practices listed in this study, such as waste reuse, window farming and many others.



### B3.3 Interconnections in Helsinki

Here I present a set of maps showing the connections between the practices, groups, events and websites in Helsinki. The aim of these maps is to shed light on the interactions and the network currently present in Helsinki. As the field research demonstrated that Helsinki has a very active yet small community of active people and groups, these maps were made in order to understand how the groups, events, practices and websites are connected.

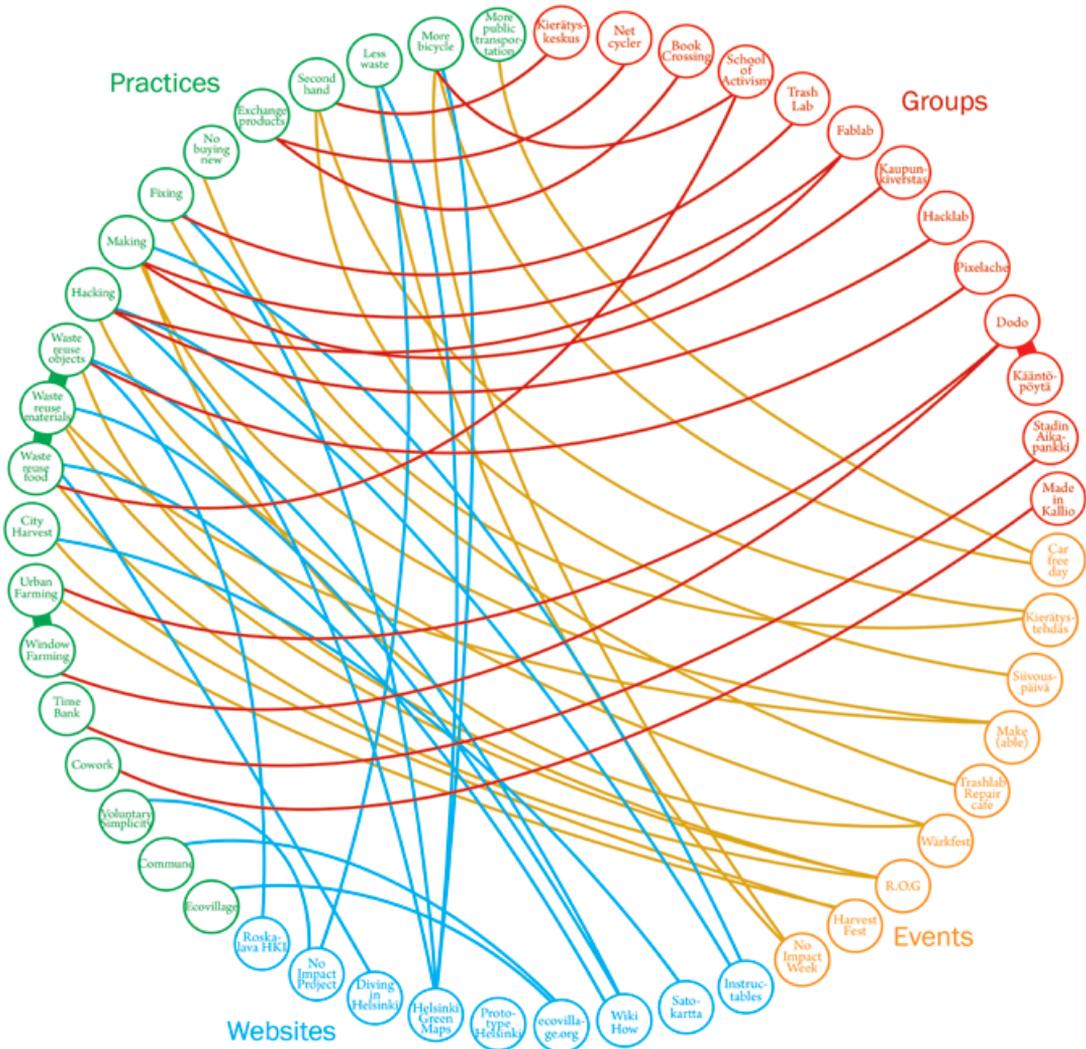
In this way, I aimed at identifying which are the “hubs” for alternative ways of living in the region and which are the focus topics they are acting on. The first map presents all the existing interconnections; however, due to the genuine complexity of these connections, the other three maps show the interconnections from the perspective of the practices (map 2), the groups (map 3) and the events (map 4).

> Figure 15

Map 1 - All interconnections in Helsinki



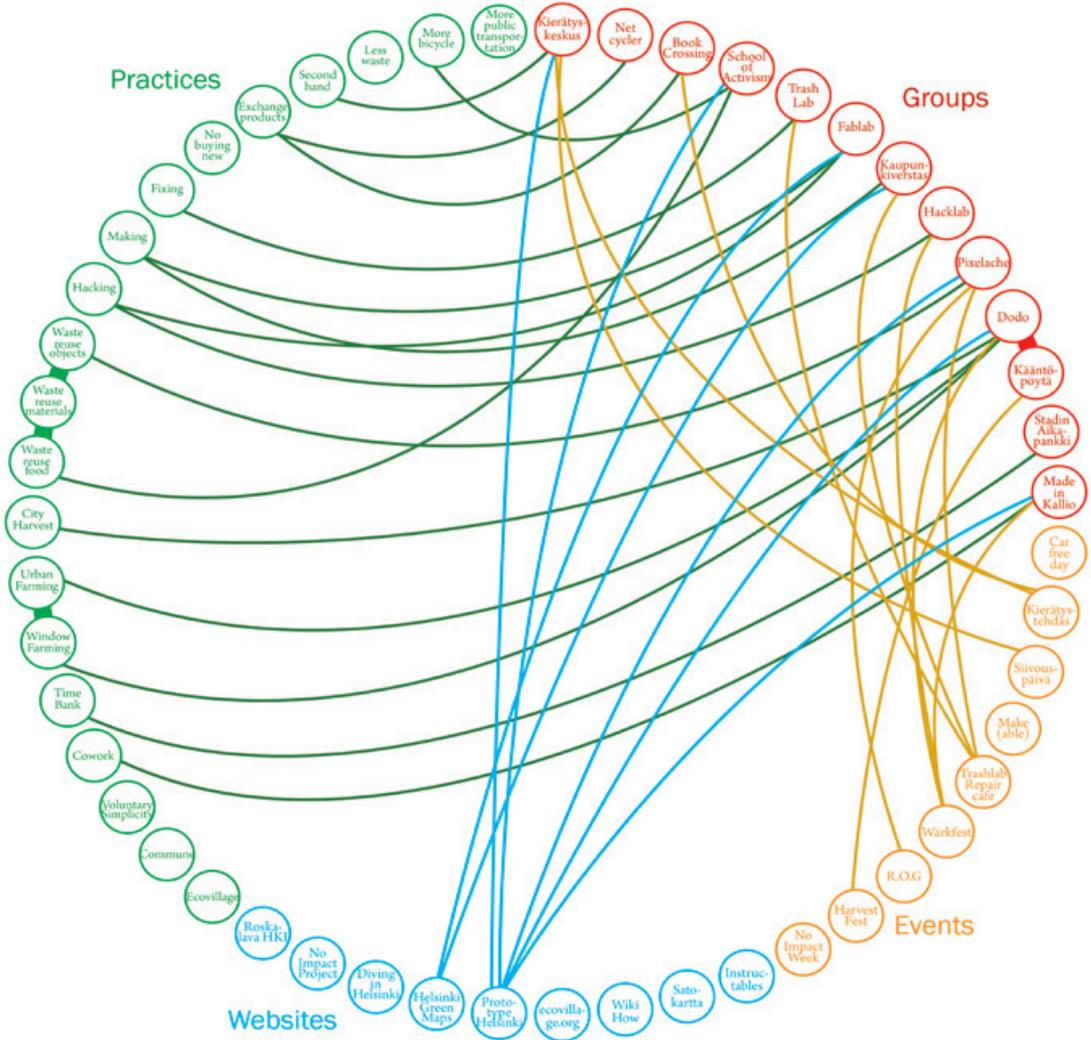
## Map 2 - Practices' perspective



This map makes visible the focus of the Helsinki-based groups and events on the topics of DIY (making, hacking, fixing and waste reuse) and Urban Agriculture (city harvest, urban farming and window farming). Furthermore, it shows how the local based practices are informed by the websites, which also reveals a tendency of the latter towards the practices of waste reuse and community living. Also, it reveals the “local” and “global” characteristics of the practices. In this way “local” means the practices which have more connections to the local groups, while “global” means that practices are more connected to events and websites.

Figure 16 <  
Map 2 - Interconnections  
from perspective of the practices

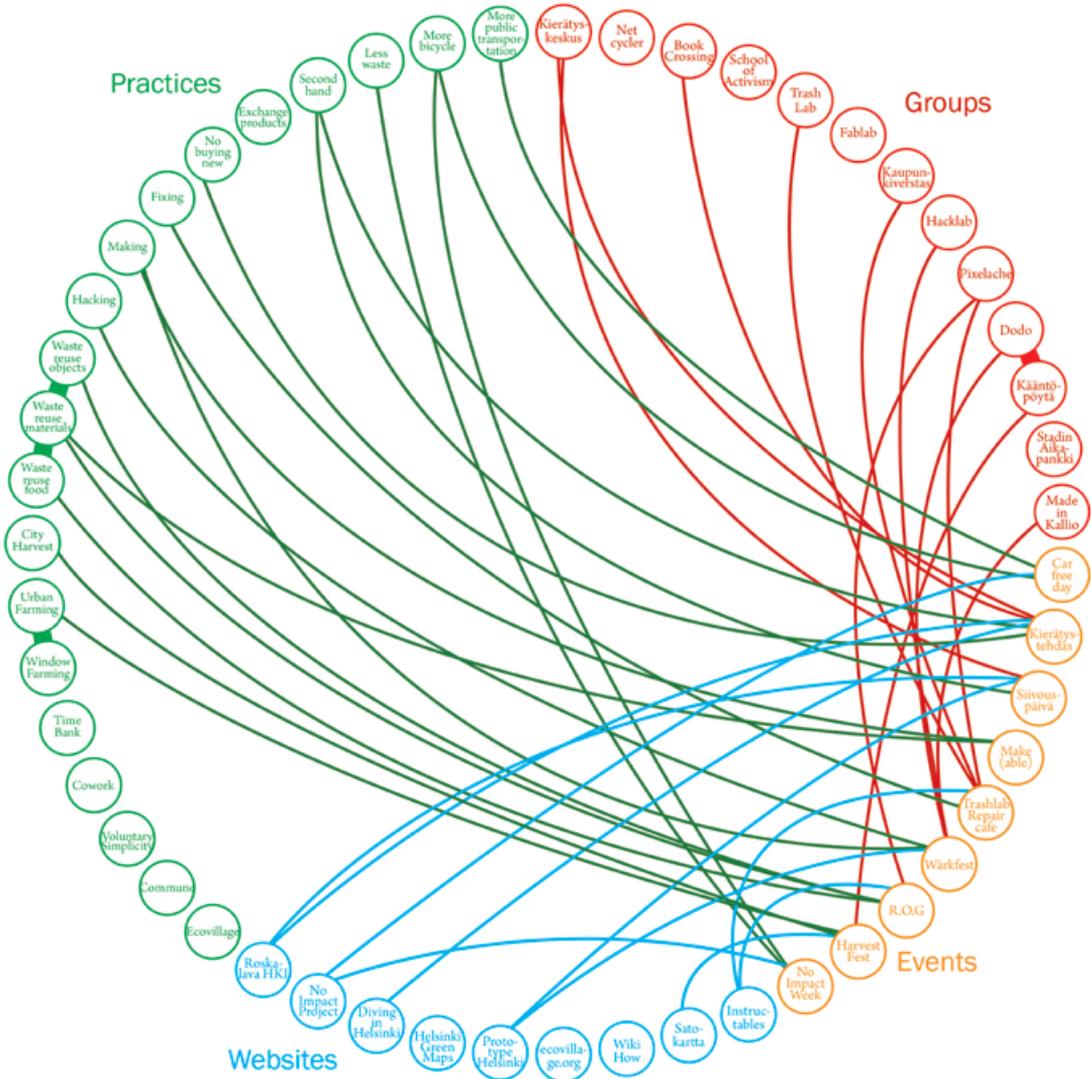
### Map 3 - Groups' perspective



This map makes visible which groups are more active in the local landscape of alternative ways of living - in this case Dodo and Pixelache. Besides this, it reveals “Prototype Helsinki” and “Helsinki Green Maps” projects, as well as the “Wärk:fest” event as convergence places – both online or physical - for the different groups.

Figure 17 <  
Map 3 - Interconnections  
from perspective of the groups

Map 4 - Event's perspective



This map, besides shedding light on the groups involved in organizing and participating in the events, makes clear the existence of two types of events: (1) The first type is the “diverse” events, which means the ones embracing a more diverse set of topics: that is, the ones who appear as connected to different groups and practices, such as Kierrätystehdäs and Wärk:fest. (2) The second type is the “topic-specific events”, meaning the ones focused on one specific topic, such as the Harvest Fest and the Make(able) events.

Figure 18 <  
Map 4 - Interconnections  
from perspective of the events

## B4 FIELD CONCLUSION & SECOND RESEARCH QUESTION

During the field research I got into the local community by interviewing the activists and by trying the existing practices. The knowledge gathered from these experiences resulted on a final set of practices representing the steps towards sustainable and self-sufficient ways of living and on an understanding of the local scenario. Consequently, these processes framed the second research question and the subsequent development of a design output.

Regarding the interviews, they allowed a comparison between the literature and the current local scenario. In this concern, the continuous existence of alternative movement was proved real, especially concerning the contemporary global trend of grassroots movements. Furthermore, the motivational aspects found in the literature research (section A2.4), such as the feeling of dissatisfaction and the search for self-sufficiency were frequently cited by the local activists. Therefore, this shows an alignment between the literature, the global landscape and Helsinki scenario.

Furthermore, the constellation of practices found can be regarded as powerful for generating social transformation towards sustainable futures. In this concern, according to the United Nations Environmental Program (UNE), food, housing and transportation are the key issues to be tackled for developing towards sustainable futures. As a consequence, the engagement in the practices listed can make people to re-evaluate their actions and thus contribute to attitude and behavior change for achieving sustainable futures.

However, the analysis of the local interrelations between the groups, practices, events and websites proved a lack of people engaged in the practices. In Helsinki, the “overlapping members” aspect cited by Wenger (1999) as one characteristic of constellations of practices was found as predominant. This is, whereas the local groups and events cover a wide range of practices and have strong and continuous actions in different areas, the number of participants is low. The same activists were found as key people across different groups and initiatives. Helsinki thus proves to have a strong activity of alternative movements, however held by a strong but small “core” group.

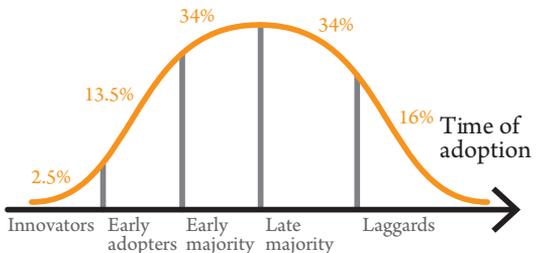


Figure 19

Adopter categories based on relative time of adoption of innovation (Rogers, 1962 cited in Robertson, 1967, p. 16)

Furthermore, the small amount of participants and “outsiders” in the activities poses a threat to the existence of the groups especially in what concerns financial sustainability. For this reason, a key factor to be tackled is the diffusion of the previously-mentioned practices, groups and events to a wider public. In terms of diffusion of innovation, Rogers (1962) cited in Robertson (1967, p.16), defines the process of adaption of innovation as a gradual process (fig 20). This process starts with the “innovators”, meaning the ones who created the issue to be disseminated. After this, the given innovation grows to the group defined as “early adopters”. Subsequently, in the “early majority” the innovation reaches its wider state of dissemination. After that, it starts to decay in order to be replaced by another innovation (Rogers, 1962 cited in Robertson, 1967).

Bearing in mind the global nature of the practices and events found in Helsinki, the local group renders as early adopters which are struggling to disseminate their activities to a wider public. For this reason, the second research question is framed to promote the dissemination of the practices and its related groups, events and websites to a wider group.

“How can we get more people into the existing practices for sustainable urban ways of living?”



e

design output

In this section I present the development of the design brief and its subsequent design output. For this, I present (C1) the design brief, (C2) complementary research made to inform the design process, (C3) the process of adapting these two items according to the field research results and, (C4) two study cases carried in order to test the acceptability of alternative practices.

# C1 DESIGN BRIEF

The preliminary guidelines for the design output were traced in a concise design brief (figure 20). Departing from this, further research was found necessary: more information had to be gathered about how to exhibit information in order to effectively generate behavior and attitude change. For this, the topics of cognition, psychology, behavior change and message framing were covered. Therefore, the following section (C2)

presents the key findings in these topics and continues by presenting how the knowledge gained from the literature and field research (part A & B) were adapted according to these key findings in order to create the design output.

## Design brief

**What** A media for disseminating the existing alternative sustainable practices in Helsinki

**Why** To get more people into the practices - shift from early adopters to early majority

**Audience** People who are not involved in the practices

**How** Introducing the practices through a simple and easy to understand way and relate them to the local groups and events

**Prerequisites** The design output has to fit the audience's language and culture in order to become acceptable by the audience. Further, it has to be interactive – promote mutual learning between its users. Moreover, it has present a “perspective” not a “recipe” for the actions, as defended by Wenger (1999, p.9).

**Color Scheme and aesthetical concerns** “Playful” images, vivid colors, no “DIY” or “hippie” aesthetics

Figure 20  
Design brief

# C2 DEVELOPMENT OF DESIGN OUTPUT

## C2.1 Theoretical Foundation - cognitive and psychological research

### C2.1.1 - Cognition – how the brain absorbs information.

The mind has a limited attention span. The focus of this span depends on the previous information presented and its past learnings in general. In this way, the mind follows a sequential modus of information organization. In this sense, information is absorbed in small bits, which are added as a continuation of the previous absorbed bits. Therefore, the mind organizes information into patterns. Consequently, if the mind will absorb certain information or not depends more on “how it is presented rather than how it is interpreted” (De Bono, 1990, p.28-29). Consequently, if one new bit of information presented is too divergent from the previous ones the mind can block. Hence, it can only add this divergent bit if it stops and reorganizing all he previous information into a new pattern. (De Bono, 1990)

Further, the pattern of information is created according to the easiest way possible: that is, according to the most common pattern for the person. Whereas the mind works through patterns, it does not create the patterns. On the contrary, the mind just identifies patterns, even

when there is none. In this way, the mind gets used to certain patterns and consequently tries to organize everything into the same patterns. Further, when one pattern of information organization gets established, other patterns are ignored. Hence, information used as part of one pattern cannot be used for another. In this case, any small change presented to a pattern creates a huge change in the future (De Bono, 1990, p. 28-35). Therefore, the addition of odd items to a pattern in terms of information presentation, such as different colors or innovative ways of visualization, enhance attention and make the information more likely to be remembered afterwards (Berlyne and Ditkofsky, 1976). For this to happen, the pre-organization of information is crucial. Thereof, information has to be arranged in an easy to understand pattern which is familiar to the audience, nevertheless, still containing innovative ways of presentation (De Bono, 1990, p. 28-35).

### C2.1.2 - Psychology – understanding sources of motivation

In this section, the “Self-Determination Theory” (SDT) (Deci and Ryan, 2008a, 2008b) is taken as a base for understanding how human motivation functions. This “macro theory of human motivation” (Deci and Ryan, 2008a) lists three cross-cultural basic human psychological needs. These needs are: competence, autonomy and relatedness. Based on this, the theory assumes that people are naturally “self-motivated” and “active” but can also be “alienated” and “disaffected”. In this sense, SDT argues that the “type of motivation is more important than the amount”

(Deci and Ryan, 2008b). Further, this theory defends that motivation is directly connected to the “socio-cultural space” and is therefore influenced by the local scenario. Consequently, STD divides motivation into two types: (1) “casuality orientations” and (2) “aspirations or life goals” (Deci and Ryan, 2008a).

(1) The first type of motivation is related to the person’s connection to the surrounding environment and its regulations. Therefore it is divided into three aspects: autonomous, controlled and impersonal. Autonomous motivations are the ones people identify with and, as a result, achieve a sense of “self-endorsement”, such as the willingness to learn a new activity. Controlled motivations are linked to external regulation related to the result of rewards and punishment, such as competing for a prize. Impersonal motivations are related to external regulations concerning willingness to “[avoid] shame, ego-involvement, contingent self-esteem and approval motive”, such as performing certain actions for being accepted by a social group. (Deci and Ryan, 2008a)

(2) The other type of motivation, “life goals”, is related to long-term goals which guide people through the activities they perform (Deci and Ryan, 2008a). This type of motivation is divided into “intrinsic” and “extrinsic” aspirations. Intrinsic aspirations are related to the person’s inner goals, such as being healthy or happy, and consequently result in higher curiosity, exploratory behavior and devotion for improvement. Extrinsic aspirations relate to life goals imposed by outside factors such, as being

wealthy or famous. Table 5 shows these different types of motivation and how they contribute for meeting the three basic psychological needs mentioned before. (Deci and Ryan, 2008a)

Furthermore, research carried by Vansteenkiste et.al. (2004) cited in Deci and Ryan (2008b) and by Pelletier and Sharp (2008) proved that people motivated by issues such as “fear” and “monetary rewards” had worse performance and learning outcomes in comparison to people who performed the same task with the belief that it would contribute to personal growth (Vansteenkiste et. al., 2004 cited in Deci and Ryan, 2008b; Pelletier and Sharp, 2008). Moreover, Pelletier and Sharp (2008) argued that the combination of intrinsic and extrinsic motivation is counterproductive when compared to only intrinsic motivation. In order to trigger autonomous and intrinsic motivation, “awareness” was identified as crucial. In other words, to achieve autonomous motivation, a person has to know what is happening and the available set of options (Deci and Ryan, 2008a). Further, it is necessary to provide information about how and where to act in a chosen option (Pelletier and Sharp, 2008).

Type of motivation	Description	Subdivisions	Outcome
Casuality orientations	Motivation derived as response to the current state of the surrounding environment.	Autonomous	Satisfaction of all three basic psychological needs.
		Controlled	Satisfaction of the need for competence and relatedness, but a frustration of the need for autonomy.
		Controlled	Frustration of all three basic psychological needs.
Aspirations or life goals	“long-term goals that people use to guide their activities”.	Intrinsic aspirations	“Greater health, well-being and performance”.
		Extrinsic aspirations	Frustration of all three basic psychological needs.

Table 5  
Self Determination Theory's types of motivation, sub divisions and results based on Deci and Ryan (2008a).

Deci and Ryan (2008b, p.18) also stated that people achieve more freedom and intrinsic motivation when their autonomy is supported. In this way, they argue that autonomous and intrinsic motivations lead to better outcomes such as greater psychological health, more effective performance, well-being and long-term persistence in an activity (Deci and Ryan, 2008a). Simultaneously, social gatherings are seen as supportive of autonomy (Deci and Ryan, 2008b; Mortati and Villari, 2013; Wenger, 1999). Therefore, connectivity to like-minded individuals becomes essential for enhancing intrinsic motivation.

### C2.1.3 - Behavior change – how to change habits

Behaviors can be kept even after becoming harmful (Jackson, 2005 cited in Pravet, 2013). This happens because keeping habits diminishes decision-making and generates high efficiency in daily tasks (Verplanker and Wood, 2006 cited in Pravet, 2013). Nevertheless, it is possible to generate behavior change. Many authors argued that behavior change happens in three phases. The first phase is the “detection” phase, where people learn about an issue and determine if there is a problem or not. The second is the “decision” phase, where people decide whether to take action or not and which action to take. Following, the third phase is the implementation phase, where people decide about how to act and how to maintain the new behavior (Burkholder and Evers, 2002, Rosen, 2000 and Rothman and Salovey, 2007 cited in Pelletier and Sharp, 2008).

Consequently, to encourage behavior change, messages have to be tailored according to each phase. Nevertheless, simply informing the existing option for the new behavior is not enough and thus has limited impact for changing one’s behavior. For this reason, in order to be effective, information has to be combined with implementation guidelines (Pelletier and Sharp, 2008). However, there is a risk that the new behavior may not be maintained. In this concern, research proved that this can happen if the outcomes are based on future costs (Pelletier and Sharp, 2008, p.213-214). Also, a new behavior may not be taken if its adoption incites high costs (Carrigan & Attala, 2001 cited in Hirscher, 2013, p.23). However, the opposite was also proven

true: when behavior change entails no costs, it is more likely not to be adopted (Subbotsky, 2010).

*“(...) curiosity is a compulsive desire to see and to know, to investigate something secret.”*

*(Mulvey, 1996, p.64)*

In this way, research by Subbotsky (2010) proved that exploratory behavior is only adopted when the costs involved are neither too high nor too low. Further, the author stated that “novelty” is a major fact in evoking exploratory behavior because it raises intrinsic motivation (Cahill-Solis and Witryol, 1994 and Mendel, 1965 cited in Subbotsky, 2010). Moreover, he states that the attractiveness of the information is more important than its degree of novelty. In this way, the presence of “unusual” issues in the presentation of information proved essential for more effective behavior change and the consequent maintenance of this behavior (Subbotsky, 2010).

### C2.1.4 Message Framing – how to communicate effectively

Pelletier and Sharp, (2008, p.213) argue that messages have to be strategically tailored to enhance self-determined motivation. For this, messages have to aim at a certain phase of behavior change and focus on intrinsic benefits of a practice. Further, these tailored messages have to “fit the characteristics of individuals” (Pelletier and Sharp, 2008). Accordingly, De Bono (1990, p.26) states that communication happens through codes and, therefore, the code of a message has

to be known by the audience. What he means is, language, being a code, has to be aligned in order to fit the language used by the audience.

Moreover, the message has to be complete to a point that encourages the individual to think about the subject. That happens because, if people are not able to think through the issue presented, they may develop a blockage and fear towards the given information. In this sense, it is indispensable to add guidance about forms of implementation (Pelletier and Sharp, 2008). For this, simplifying the messages through easy-to-understand graphics and images is important for visibility, perception and usage of the information by the audience (Fuad-Luke, 2009).

### **C2.1.5 - Guidelines for the development of the design output.**

As a result of this research, more detailed guidelines for the development of the design output could be traced. First is the “pattern” issue: in this sense, the different practices found in the field research have to be organized as such. Consequently, this pattern has to present incremental bits of information. In this manner, the practice pattern has to be made so that each new practice represents one step further to the previous one. Nevertheless, freedom and autonomy have to be encouraged. In this sense, other means have to be provided to allow users to create personal paths through the practices. Furthermore, the provision of implementation instructions appeared as mandatory both in

psychological needs and for behavior change. Also, outcomes and benefits gained from each practices must be listed. However, they have to be focused on personal growth and with less focus on monetary outcomes in order to stimulate intrinsic motivation. Furthermore, the design output has to facilitate interaction between like-minded individuals.

Overall, since research proved that people are aware of the threatening environmental conditions (Pelletier and Sharp, 2008, p.212) the design output has to focus on the second and third phases of behavior change: that is, focusing on providing information about the available options and how to act on each. Nonetheless, it has to be simple (use simple language) yet attractive by presenting information through appealing ways of visualization. Consequently, especially due to the issue of presenting “how-to” information, the media chosen for the design output was a “guidebook”. In this way, the user can carry it while trying the practices, make field notes and share it with others.

## C2.2 Creation and adaptation of content for the guidebook

Consequently, the information gathered from the fieldwork had to be adapted to the above cognitive and psychological research. As the resulting set of practices presented before in section B3 are a rather condensed set, each practice renders as a “framework” instead of a “rule” for action. In other words, they present a concept to be performed and that can be adapted by the users of the guidebook according to their needs, preferences and skills. Therefore, it leaves more space for customization of the action. Consequently, the design process becomes a facilitator of behavior change by “setting the rules for the game” (Knnott, 2013, p. 63). Nevertheless, several changes had to be made for the bringing the information from the research to a guidebook. The following sections describe the changes and adaptations made for the creation of the guidebook.

### C2.2.1 – Additional information and language change for the practices

For the guidebook, the explanations of practices (presented in section B 3.2) had to be changed in two ways: first, to be presented in direct, clear and informal language and second, to feature further explanations about how to engage and perform each practice.

Firstly, the practice explanations were adapted to informal language and to focus on intrinsic motivators. In this way, the names of the practices

were changed in order to mean “direct actions” instead of passive concepts. Table 6 shows this change and the resulting names of each practice. (See the guidebook for these adapted texts.)

Secondly, each practice explanation had four sections added in order to provide “how-to” guidance and to incite intrinsic motivation. These items were: (1) “What do I get out of it?”,

Former nameA	adapted name
More public transportation	Use more public transportation
More bicycle	Use more bicycle
Less waste	Generate less waste
Second-hand	Use second hand stuff
Exchange products	Exchange your stuff
No buying new	Do not buy new things
Fixing	Fix broken products
Build your own	Make your own stuff
Hacking	Repurpose everything
Waste reuse - objects	Reuse trash objects
Waste reuse - materials	Reuse trash materials
Waste reuse - food	Resuse abandoned food
City harvest	Harvest the city
Urban farming	Grow food in your city
Window farming	Grow food in your house
Colaborative work	Work independently with people you like
Timebank	Use time as money
Voluntary simplicity	Simplify your life
Commune	Live with people you like
Ecovillage	Live environmentally friendly

Table 6  
Adapted names of each practice

(2) “How to start?”, (3) “Tools you need” and (4) “Challenge of the practice”.

(1) The first new section, “What do I get out of it”, presents a short list of motivations and benefits people are obtaining by engaging in a given practice. (2) The “how to start” section consist of step-by-step action one can take to engage on a given practice. (3) The “tools you need” section presented a list of tools necessary for performing the practice. (4) As a continuation, the fourth section, “challenges of the practice”, provides a list of challenges to be added to the practice in order to make it more stimulating. This was made in order to elicit curiosity and exploratory behavior if the practice is not appealing enough for the reader. Nevertheless, these sections were developed according to the findings from the literature and field research. However, in order to avoid repetition, these sections are featured only in the guidebook.

Further to this, the explanation of groups, events and websites featured in section B3.2 of this study is present also in the guidebook. This overlap of information was made because this section proved to be essential to the reader of the study as well as to the users of the guidebook.

### C2.2.2 - Creating a pattern of practices

The second phase of change was the creation of a pattern of practices. For this, the resulting set of practices was divided into themes. These themes were set according to the issue they addressed in each practice regarding self-sufficient ways of living. For this reason, they were divided into the following five groups: (1) Start, (2) Stuff, (3) Food, (4) Work and, (5) Living. Figure 21 shows the organization of the practices into different themes (the explanation of each practice is featured in section B3.2)

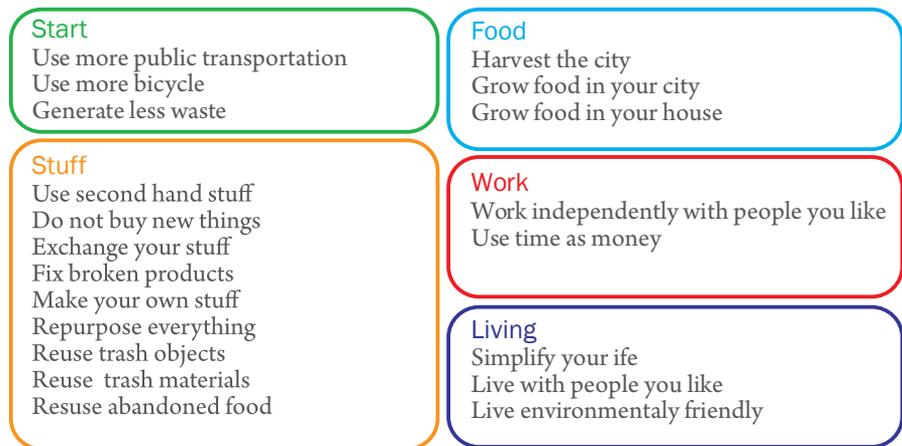


Figure 21

Practices organized in different themes

(1) The first group, “Start”, encompasses practices related to diminishing pollution and thus cleaning the environment. They are also the easiest practices to engage with; therefore they present an entry-point to the pattern of practices. The importance of an entry point for patterns is defended by Bono (1970, p.154) as being of “upmost importance” for changing behavior and mindset, or, as he states, for “insight restructuring” (De bono 1970 p. 154 to 168). The practices in this group share the characteristic of being connected and supported by the present infrastructure of the city. In other words, they do not necessarily need the engagement with groups and are connected to daily life tasks. In this way, the practices from this group represent slightly new ways of performing common daily activities. For this reason, the amount of novelty for a person who is not engaged in any kind of sustainable practice is very little. Hence, this group of practices was chosen to be the starting point because they cope with the issue of “presenting small pieces of information at a time”, seen as crucial for understanding in psychological and cognitive senses (De bono, 1970).

(2) The second group, “Stuff”, is the one accessing our material world. As a continuation from the previous group, this set of practices also relates to mainstream everyday life. Products are present in a big portion of the daily life of the majority of world’s population (Forty, 1986 p. 6; Norman 1998 p. V). Therefore, by presenting this group as the second set in the pattern, it continues with the characteristic of incremental information building. The practices in this group represent increasingly new approaches for acquisition

and maintenance of products, therefore adding novelty and complexity at each new practice.

(3) The third group, “Food”, relates to modes of acquisition of food. This group presents increasingly challenging alternatives for this action – shifting from the purchase of food and the reuse of waste food (in the previous group) to natural modes of food acquisition related to growing own food in urban landscapes.

(4) The fourth group, “Work”, deals with ways of organizing and understanding labor, values and hierarchy. This group represents a change from the “individualistic” practices presented before, to the ones intrinsically related to social interaction and interpersonal collaboration. This group presents different ways of understanding values of working hours and altruism.

(5) The fifth and last group, “Living”, is the one relating to ways of living concerning both living spaces and values related to living profile. This group figures as the last group for the reason that the realization of any of the practices presented in it embraces a combination of different practices presented in the previous groups.

This organization into theme groups resulted into the creation of an incremental pattern of practices. Further, for the representation of this pattern, the “board game” graphic style was chosen because it made clearer the relatedness and incremental continuity between the practices. Also, this way of representation allowed the exhibition of the above mentioned theme groups. In this way, the pattern starts from the simplest practice - use

more public transportation - and ends with the more complex one - live environmentally friendly (ecovillage). The resulting pattern can be seen in figure 22.

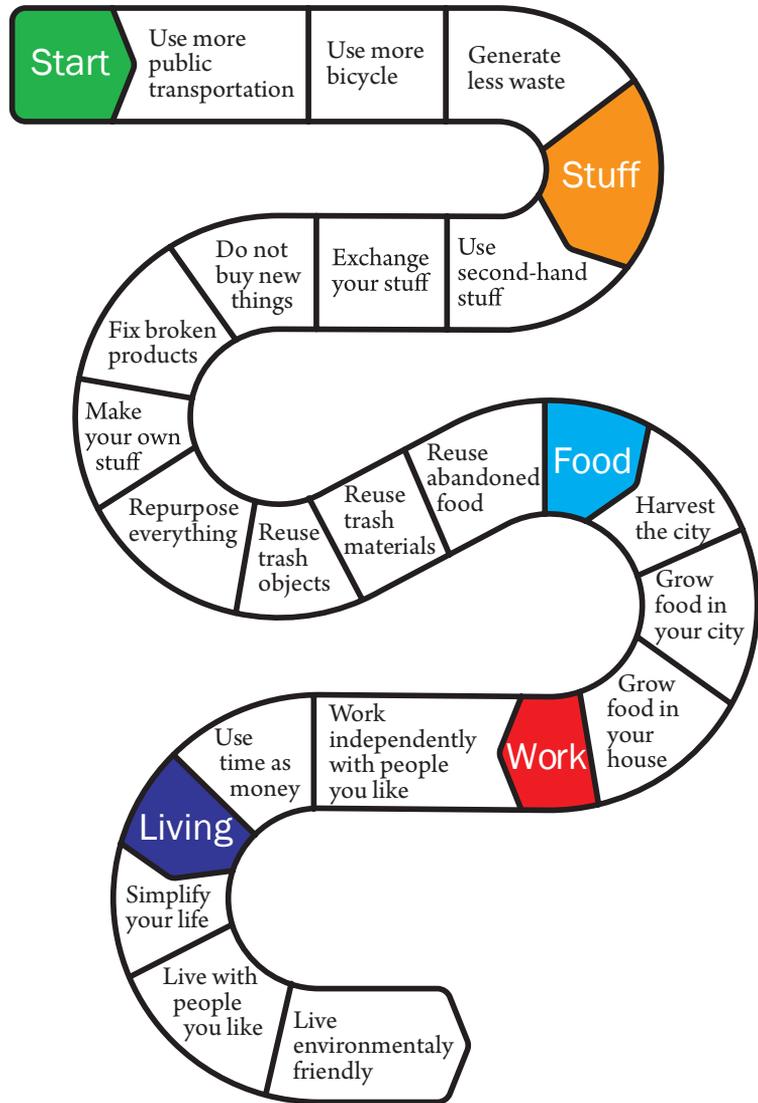


Figure 22  
Final pattern of practices

### **C.2.2.3 – Facilitating interactivity**

Further to these changes and additions other items had to be added in order to meet the need of interactivity. For this, two other items were added for the guidebook. The first section is the “related groups, events and websites” presented previously in section B3. This part was added to provide information about how and where to find groups of like-minded individual in the local scenario. Further to this was created a section called “open space”. This section consists of a blank space for each practice in which people can write their experiences or advice on the practice for later readers of that guide. In this way, the guidebook was planned to encourage sharing. For this, the cover of the guidebook was planned in order to contain detachable figures. These figures are detached by each reader and serve as a community icon. Furthermore, by the number of detached items on the cover, the new user can see how many people had already used the guidebook.

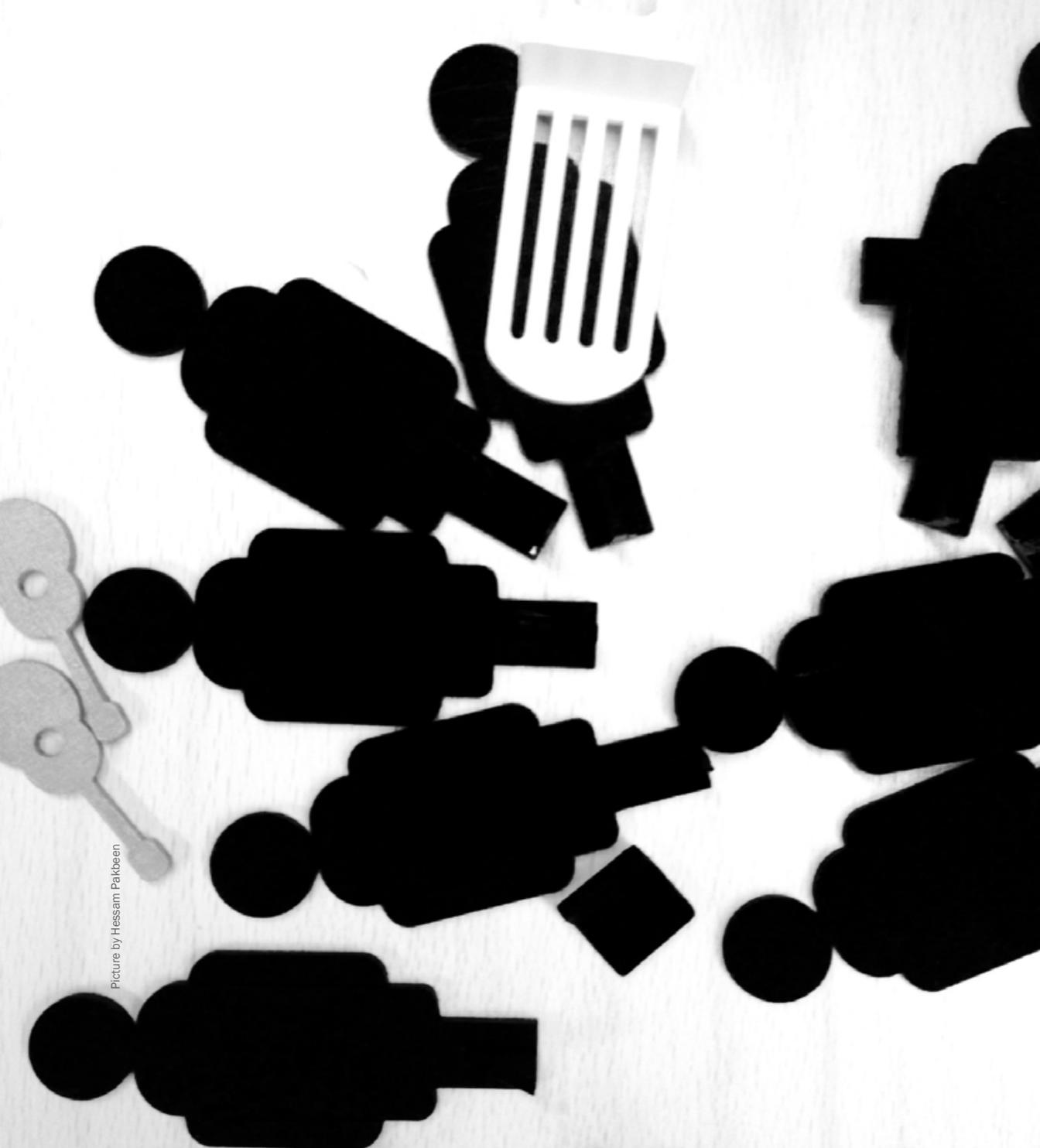
### **C2.2.4 – Aesthetical concept**

The aesthetical concept of the guidebook was created following the same guidelines originated from the cognitive and psychological research. For this, the aesthetics are based on the use of simple shapes and colors. This choice was made to reflect the well-known minimalist design style present in Finland. At the same time, based on the noticeable Finnish tradition of woodwork and its use in design, the practices were visualized by using pictures of wooden figures. These pictures present a main character and key items involved in each practice. The main character was made as

a three dimensional and articulated mannequin, whereas the other items were based on simplified two-dimensional visualizations of the various objects. In this way, the pictures exhibit the essential characteristic of each practice while also keeping the mannequin-practitioner highlighted. Moreover, the decision of using pictures of 3D figures instead of illustrations or real-life pictures was made in order to avoid issues of identification of the user with the illustrated figure. Furthermore, as the main character becomes a symbol of the guidebook, its silhouettes are the detachable items mentioned in the past section (C.2.2.3 – Facilitating interactivity). Images about the creation of the figures can be seen in Appendix 5. Furthermore, as the main character becomes a symbol of the guidebook, its silhouettes are the detachable items mentioned in the past section (C.2.2.3 – Facilitating interactivity). Images about the creation of the figures can be seen in Appendix 5.

### **C2.2.5 - Strategies for dissemination**

The main strategy to disseminate the guidebook to its target audience is to create a crowd funding campaign for the printed guidebook. In this way, the campaign will aim at raising funds for printing the guidebook and creating an online forum for its users to interact. However, as this may reach only a group which has an interest on alternative practices, the complementary strategy is to distribute open source digital versions for free in the internet. Further to this, another strategy is to use the featured practices, such as Book Crossing, to circulate the guidebook.



Picture by Hessaam Pakbeen

## C3 PROTOTYPING EXPERIENCES

In order to test how average people experience the practices featured in the guidebook, I carried out two case studies. (1) In the first case, people were encouraged to join an existing initiative or event. (2) The second case, called “Trash meal” consisted of the organization of an event around one practice. These experiments were aimed at understanding how people experience a practice through several factors: first, the mindset change during the experience (expectations versus reality); second, if the person would repeat the action afterwards; third, if the person performed the practice by him/herself after the experience; and fourth, if that person would recommend the practice to other people. In the following, I report the results of these experiments based on interviews and field observations. And later, I conclude these experiments by analyzing how they contributed to the development and refinement of the design output. For the complete reports see Appendix 3 and 4.

### C3.1 - Case one: People encouraged to try the practices.

For this first case, two persons were encouraged to experiment with local practices and events. Mira Martinaho, 50, was encouraged to join the Urban Farming practice and Roman Lihavtshuk, 26, was encouraged to join a Trashlab fixing event. In both cases, they had previous interest

but no experience on the practice. Following this, I present the key findings from this case; nevertheless, for the complete reports, see Appendix 3.

Concerning the mindset change, in both cases they stated that the experience exceeded expectations. For instance, Roman stated to have expected “people seated repairing things”; however, after the experience stated that the event was “fun and more like a social event than real repairing”. Accordingly, Mira stated that she did not expect to harvest as much as she did, which inspired her to increase her urban farming areas by creating farming spaces in her apartment’s balcony. Moreover, they stated to have changed their opinion about the practice. In this concern, Roman said that if he knew about the event before, he would have repaired many of the broken objects he had thrown away. As a consequence, both stated the willingness to repeat the experience. In this concern, Mira stated that, now that she is into the practice, she wants to “keep it forever”. At the same time, Roman stated that he would join the event again if he had a “difficult object” to repair. In this concern, he said that the Trashlab fixing event is a great source of knowledge for learning new skills.

From this experience, both have been encouraging other people to join the practices. For instance, Mira has engaged her son in the practice and has also suggested it to many friends. Similarly, Roman stated to have recommended the events several times.

Furthermore, the “community” aspect was cited as very important in both cases. Mira and Roman said that their experiences were very “social” and that they had learned a lot by talking, helping and exchanging knowledge with the other participants involved. Further to this, both reported a better

sense of autonomy from the experience: Mira stated that urban farming gave her a “better sense of control over the quality and source of the food she eats”; while Roman said that the experience gave him more confidence about fixing objects by seeing how “primitive” the objects are.



Mira's son in the urban farming area in Pasiia

### C3.2 – Case two: “Trash meal” event

Further to the individual experiences presented above, an event was organized in order to engage a group of people into alternative practices. The difference from the previous case was that this aimed at reaching people who had no previous motivation for engaging in such practices.

For this case, the practice chosen was the reuse of discarded food. This choice was made for three main reasons: (1) for the existing taboo around trash and its reuse, especially when concerning food; (2) for the growing amount of discussions around the topic of food waste; and (3) because collecting waste is a relatively easy task to perform. Hence, due to the broadness of the topic, this practice rendered as effective for gathering a diverse group of individuals from different backgrounds, interests and experiences. Consequently, this diversity represented an effective way for attracting people with no past experience with alternative practices. Further, in order to motivate the different interest groups to engage in the alternative practice, the event was planned as a social gathering aimed at reaching a common goal. In this way, the goal was to create a dinner from discarded food to be served during the screening of the movie on the topic of the practice.

The event was based on an existing happening called “CS on Movies” (see [csonmovies.wordpress.com](http://csonmovies.wordpress.com)). These events comprise the screening of a sustainability-related movie and a subsequent discussion about the topic treated in the movie. These events have been organized by students of the Creative Sustainability program in Aalto University School of Arts, Design and Architecture since 2012. This event was chosen especially due to its noticeably diverse and broad audience in the past. The movie chosen for the event was thus the documentary “Dive!” (see [www.divethefilm.com](http://www.divethefilm.com)), which examines the topics of food production, transportation, waste and reuse.

In order to analyze the behavior and how different people experience the practice, the participants were clustered into three groups. These groups were designated according to the participants’ previous knowledge and experience on the given practice: (1) the “Activists”, consisting of people with expert knowledge and experience on the practice; (2) the “Aware” group, consisting of people who were conscious about the practice but had never tried it, and; (3) the “outsiders” group which comprised people who were not aware or disliked the topic of waste reuse. Consequently, the “activists” were responsible for guiding the other groups. In this way, an entry point was created for the “aware” group to experience the practice. Therefore, due to the amount of people joining and the social pressure to contribute to the common goal, the “outsiders” group was prompted to contribute by either joining the trash

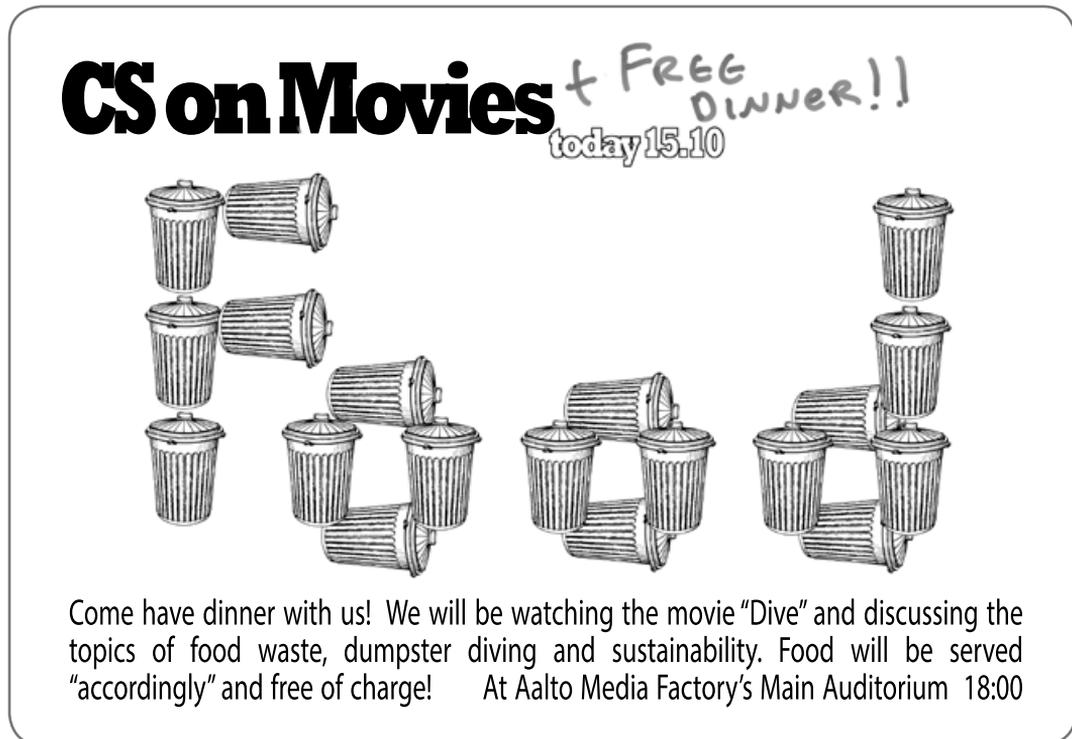
collection sessions or by performing related tasks, such as documenting or cooking.

To achieve the envisioned interaction and collaboration between the different groups, the experiment followed these steps: (1) create an active conversation between the different groups; (2) set schedules for “waste collection gatherings”,

(3) prepare a meal with the collected food, (4) watch the movie while eating the food, (5) discuss about the diving and cooking experience and the topic of food waste. Following, I present the key findings from this case; nevertheless, for the step-by-step report see Appendix 4.

Figure 23

Poster made for the trash meal event







Trash, leaf process - pictures by Hessam Pakbeen

Concerning the mindset change during the practice, all the participants reported that the experience was beyond their previous opinions and expectations about collecting discarded food. In this concern, members of the “aware” group stated that experiencing was completely different from the former idea they had about the practice derived from articles, documentaries and friends. For instance, one member of the “outsiders” stated: “I thought that discarded food would be dirty, with something spilled on top” but after performing, he was surprised with the “freshness and packaging of the food”. In this concern, another participant said that “it is the same food; It was just located on a different place”.

Overall, the participants stated to be impressed with the amount, diversity and especially the quality of the food found in the supermarket’s trash bins in Helsinki. In this way, they stated that the experience was “eye opening”; for instance, one participant said: “it changed the way I see trash bins, now I see possibilities in them”. Further to this, the “adventurous” feeling was seen as an attractive aspect of the practice. In this concern, one participant stated: “I didn’t know that it would be like an adventure, and after I experienced it and felt this adventurous feeling, it became more attractive”.

Concerning the repetition and continuation of the practice, “outsiders” stated to be eager to repeat the practice especially due to the social part of it. Accordingly, participants of the “aware” group stated to have continued the practice and even encouraged and guided others to join it. In this way, many participants went from “aware”

or “outsiders” to “activists”. In accordance with this, people who joined only the screening event declared a rising willingness and curiosity to try the practice. However, these people argued that would like to have an “experienced” person to guide them in their first time.

Further to these topics, the “community” issue was evident throughout all the stages of the case. For instance, the initial conversation between the different groups provided a “supportive community” which prompted people into action. Similarly, many participants declared the “social” aspect of the practice as one of the attractive aspects of it. For instance, one participant argued that would continue performing the practice to “have a social gathering and enjoy it with people I like”.

*A video was edited about the whole process. However, due to legal issues involved, such as the addresses and places of food collection, the video is not public. Please contact me if you want to have access to the video.*

### C 3.3 – Conclusion of the prototypes and considerations for the design output.

During these experiments, many aspects noted in the literature and in the field research were again reported by newcomers to the practices. In this concern, the most prominent were the community aspect and the resulting feeling of autonomy. Furthermore, these experiments showed that people tend to enjoy and have a consequent willingness to continue in the practice after a first experience. Hence, this confirms that alternative practices can be culturally accepted by a broader audience, therefore reinforcing the validity and need of creating a medium for their dissemination.

Nevertheless, concerning the effects of these for the development of content for the design output, three main prerequisites were noticed: (1) to support the connection to a community of like-minded individuals, (2) to present the practices in a way that incites curiosity and exploration, and (3) the need for providing expert knowledge and guidance which can be used during the practice. Consequently, while the first two items directly reflect the cognitive and psychology research presented before (section C 2.1), the third item suggests the need to have the guidebook as a physical object which can be used as a “manual” while performing a practice. This reinforces the validity of distributing the guidebook both as physical object and as digital copy which can be printed and taken as a manual for performing a practice.

The result of the design process can be seen in the complementary volume to this study “A Guidebook for Urban Freedom”.

# D

Discussions  
& conclusions

In this section I present the discussion and conclusions drawn from this study process as well as suggestions for further work and future prospects.

# D1 DISCUSSION

In this study I analyzed the existence of alternative movements informing sustainability and how design can help foster engagement with these movements in order to create positive social and environmental change. This was done due to a motivation to find ways through which Social Innovation could be more “liberating”. For this, I started the action-research spiral through a literature review in order to analyze the existence of alternative movements and to frame my approach to design for sustainability. This research found the recurrent focus of alternative movements in aspects of “self-sufficiency” and “autonomy”, which validated the alignment of alternative ways of living with the envisioned aspect of “liberation”. Furthermore, it revealed the emerging design role of activism and facilitation, which render as beneficial for informing alternative sustainable futures.

From this emerged the first research question, which focused on finding a gradual way to progress towards sustainable and self-sufficient futures. In order to achieve an operational result, I took a regional focus in Helsinki region, where I carried out my field research. This field research was made through interviews with key activists and personal experiences on the local groups, events and practices. The findings echoed the literature review in many aspects, such as the existence of alternative scenarios in Helsinki and its underlying motivations and focus. As a result, the intersection of the literature and the first hand experiences in the field research allowed

me to answer the first research question through the construction of a set of twenty practices leading to sustainable futures. However, these experiences revealed the limited characteristic of the local groups, which resulted on the second research question: how to disseminate alternative sustainable practice to a broader audience?

Subsequently I used the role of design as activist and facilitator to gather the knowledge gained in the literature and field research to create an operational approach for disseminating the practices. Nevertheless, to effectively frame this approach, I went into researching the areas of “cognition”, “psychology”, “behavior change” and “message framing”, which allowed me to create a practice-based guidebook for informing people about the practices, how to perform them and where to seek further information.

In order to validate the acceptance of alternative practices by a broader public, I carried “experience prototypes” where people were encouraged to experiment with alternative practices for the first time. These provided valuable information about how people experience these practices and how they create mindset change and the resulting psychological outcomes. This again reflected the first literature review as well as the psychology research, especially concerning the perception of feelings of autonomy and self-sufficiency as beneficial as well as the community aspect of

such practices. Consequently, this answered the second research question through the creation of a media for disseminating alternative practices informing sustainable futures. Hence, I feel optimistic about the possibility of scaling up these practices. However, one issue concerning the outcome of the guidebook remained unanswered. That is, if it will be culturally acceptable and if it will effectively represent an “entry point” to these practices.

## **D2 CONCLUSION**

Counter-movements have always been present throughout history as a means for suggesting alternatives to the mainstream models. These movements have emerged from within the culture they stand against, motivated by a feeling of dissatisfaction towards the latter. As a consequence, they have advocated the search for self-sufficiency, autonomy, inner development and the realization of one’s own values. For this, alternative movements have shared the characteristic of building a supportive community by connecting to like-minded individuals. In this way, they have experimented with new ways of social organization, working together, personal relationships, technologies and relationship to the environment. Consequently, they have represented an effective way of addressing change towards equitable and sustainable futures. Nevertheless, these movements continue to exist today, especially under the concepts of ecovillages and grassroots movements.

In accordance with this, the Helsinki region proved to have an active movement of grassroots organizations promoting alternative practices for achieving sustainable urban futures. However, a remarkable disparity was found concerning the number of active groups, practices and events and the number of engaged people. The region showed a very limited group of activists engaged in the development and promotion of a plethora of groups and events while the amount of practitioners is still very limited. Hence, while this proved the continuous existence of alternative movements, it also proved that such movements are still marginalized.

As a consequence of this marginalization, the different types of research proved that local laws still pose a barrier to the development of these movements and their envisioned sustainable future. For instance, in Helsinki, even though interaction and agreements between the groups and the local government were recurrent, this has not been enough to significantly influence the laws. For instance, the Helsinki Time Bank

case with the Tax Office and Dodo's urban farming agreements with the City of Helsinki government proved the local government's will to rather influence the local practices to fit their law than to adapt the laws to these emerging social movements. In this way, the local practices still have to develop considerably in order to have the strength to affect the local laws, as has happened in the cases of countercultural practices in Goa and Ibiza presented by D' Andrea (2007) as well as other cases such as the back-to-the-land movement and Freetown Christiania.

Nonetheless, the role of designer as a facilitator and activist proved to be of major importance for disseminating these practices and therefore the generation of social and cultural change. In other worlds, as argued by Fuad-Luke (2009, p.38), design is responsible for making things "culturally acceptable". In this concern, experiments proved that people are willing to join alternative practices and that they perceive beneficial outcomes such as autonomy, independence and community feeling when performing them. Hence, this shows the feasibility of scaling up alternative practices to a broader audience and therefore progress towards sustainable futures.

## **D3 FURTHER WORK**

While this study gathered valuable information which can inform other areas of knowledge, the broad scope of the literature and field research allows the possibility of further work on evaluation of the impacts of each of the practices. Moreover, it is important to notice that, due to my background in design, the resulting practices were biased towards this field, therefore leaving aside other possible practices such as alternative medicine. Moreover, further work should be done on the outcome of the Guidebook in order to evaluate its cultural acceptance and if it meets the goal of providing an "entry point" to alternative practices.

## **D4 FUTURE PROSPECTS**

As a consequence of this research, the future development aims at using the practices discovered here as a base for creating infrastructures for sustainable urban living. Bearing in mind the growing urban culture and the past failure of isolated communes as seen in the literature research, my future aim is to bring the aspect of collective inter-dependence to the urban context by designing infrastructural and cultural possibilities for alternative and off-grid urban living.



Siivouspäivä



Kääntöpöytä's Harvest fest

# BIBLIOGRAPHY

Aflalo, P., 2011. *Surfing the Waste: a Musical Documentary about Dumpster Diving*. [online video]. Available at <<http://vimeo.com/27673416>> [Accessed 9 October 2013]

Agnew, E., 2004. *Back from the land: how young Americans went to nature in the 1970s, and why they came back*. Chicago: Ivan R. Dee.

Ashdown, P., 2012. *The Global Power Shift*. [online video]. Available at <[http://www.ted.com/talks/paddy\\_ashdown\\_the\\_global\\_power\\_shift.html](http://www.ted.com/talks/paddy_ashdown_the_global_power_shift.html)> [Accessed 20 September 2013]

Battersby, J. and Marshak, M., 2013. Growing Communities: Integrating the Social and Economic Benefits of Urban Agriculture in Cape Town. *Urban Forum* 24(4), p.447–461. .

Beavan, C., 2009. *Book TV: Colin Beavan, "No Impact Man"*. [online video]. Available at <[http://www.youtube.com/watch?v=kZeBhbuQFC8&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=kZeBhbuQFC8&feature=youtube_gdata_player)> [Accessed 25 September 2013]

Berlyne, D.E. and Ditkofsky, J., 1976. Effects of Novelty and Oddity on Visual Selective Attention. *British Journal of Psychology* 67(2), p.175–180. .

Book Crossing, n.d. *About Us* [webpage]. Available at <<http://www.bookcrossing.com/about>> [Accessed 5 December 2013]

Bull, G., Maddox, C., Marks, G., McAnear, A., Schmidt, D., Schrum, L., Smaldino, S., Spector, M., Sprague, D. and Thompson, A., 2010. Educational Implications of the Digital Fabrication Revolution. *Journal of Research on Technology in Education* 42(4), p.331–338. .

Cherrier, H. and Murray, J., 2002. Drifting away from excessive consumption: a new social movement based on identity construction. *Advances in Consumer Research* 29(1), p.245–247. .

Chick, A. and Micklethwaite, P., 2011. *Design for sustainable change: how design and designers can drive the sustainability agenda*. Lausanne: Ava.

Christiania.org, 2005. *Christiania Guide*. [pdf]. Christiania Org. Available through: [Christiania.org](http://www.christiania.org/info/christiania-guide-english/) <<http://www.christiania.org/info/christiania-guide-english/>> [Accessed 23 February 2014]

Collom, E., 2011. Motivations and Differential Participation in a Community Currency System: The Dynamics Within a Local Social Movement Organization I: Local Social Movement Organization Dynamics. *Sociological Forum* 26(1), p.144–168. .

Community Exchange Org, n.d. *What is the CES?* [webpage]. Available at <<https://www.community-exchange.org/docs/whatces.htm>> [Accessed 13 November 2013]

Crocker, D.A., 2008. *Ethics of global development: agency, capability, and deliberative democracy*. Cambridge: Cambridge University Press.

D' Andrea, A., 2007. *Global Nomads Techno and New Age As Transnational Countercultures in Ibiza (Spain) and Goa (India)*. London: Routledge.

Dannoritzer, C., 2010. *The Light Bulb Conspiracy*. [movie]. Available through <<https://www.youtube.com/watch?v=AfzQzGNYaiU>> [Accessed 5 July 2013]

Dawson, J., 2010. *Ecovillages Transformation Values*. [pdf] In: Worldwatch Institute, 2010. *State of the World 2010: Transforming cultures: from consumerism to sustainability*. London: Norton. pp. 185–230. Available through: Gaia Education Org <<http://www.gaiaeducation.org/docs/Ecovillages%20Transformation%20Values.pdf>> [Accessed 14 October 2013]

De Bono, E., 1990. *Lateral thinking: a textbook of creativity*. London: Penguin Books.

Deci, E.L. and Ryan, R.M., 2008a. Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology* 49(3), p.182–185. .

Deci, E.L. and Ryan, R.M., 2008b. Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology* 49(1), p.14–23. .

Edwards, F. and Mercer, D., 2012. Food waste in Australia: the freegan response. *The Sociological Review* 60(S2),p.174–191. .

European Commission, n.d. *Regional PV potential estimation utility*. [online]. Available at <<http://re.jrc.ec.europa.eu/pvgis/apps/pvreg.php?lang=en&map=Europe>> [Accessed 12 November 2013]

FAO, n.d. *What governments, farmers, food businesses – and you – can do about food waste* [online]. Available at <http://www.fao.org/news/story/en/item/196377/icode> [Accessed 1 November 2013]

Forty, A., 1986. *Objects of desire: design and society, 1750-1980*. London: Thames and Hudson.

Fuad-Luke, A., 2009. *Design activism: beautiful strangeness for a sustainable world*. London: Earthscan.

Garison, G.D., 2013. *Ethnographic Research*. [e-book] 2013 ed. Asheboro: Statistical Publishing Associates. Available through: Statistical Publishing Associates website <<http://www.statisticalassociates.com/ethnography.htm>> [Accessed 10 March 2014]

Garison, G.D., 2014. *Focus Group Research*. [e-book] 2014 ed. Asheboro: Statistical Publishing Associates. Available through: Statistical Publishing Associates website <<http://www.statisticalassociates.com/focusgroups.htm>> [Accessed 10 March 2014]

Geels, F.W., 2002. Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. *Research policy* 31(8,9), p-1257–1274. .

Goodman, A., 2013. *Climate-Change Protests Heat Up*. [online]. Available at <[http://www.truthdig.com/report/print/climate-change\\_protests\\_heat\\_up\\_20130925](http://www.truthdig.com/report/print/climate-change_protests_heat_up_20130925)> [Accessed 18 November 2013].

Gustavsson, J., Cederberg, C., Sonesson, U., van Otterdijk, R. and Meybeck, A., 2011. *Global food losses and food waste-FAO report*. [pdf]. Düsseldorf: FAO. Available through <<http://www.fao.org/docrep/014/mb060e/mb060e00.htm>> [Accessed 1 November 2013]

Görlitz, D. and Wohlwill, J.F. (Eds.), 1987. *Curiosity, imagination and play: on the development of spontaneous cognitive and motivational processes*. Hillsdale: Lawrence Erlbaum Associates.

Hackerspace Organization, n.d. *HackerspaceWiki*. [webpage]. Available at <[http://hackerspaces.org/wiki/Hacker\\_Spaces](http://hackerspaces.org/wiki/Hacker_Spaces)> [Accessed 9 December 2013]

Hillgren, P.-A., Seravalli, A. and Emilson, A., 2011. Prototyping and infrastructuring in design for social innovation. *CoDesign: International Journal of CoCreation in Design and the Arts*, 7(3-4), p.169-183. .

Hirscher, A.-L., 2013. *Joyful participation in new ways of designing and making clothes*. Master's Thesis. Aalto University School of Arts, Design and Architecture.

Hoffman, J., 1993. *The art & science of dumpster diving*. Port Townsend: Loompanics Unlimited.

Hoftijzer, J., 2011. Sustainability by do-it-yourself product design: User design opposing mass production. In: DRS (Design Research Society), *Uncertainty Contradiction Value*. Bangkok, Thailand, 1-4 July 2011. Available through: Design Research Society Org <<http://www.designresearchsociety.org/docs-procs/drs2012/drs2012-4.pdf>> [Accessed 30 September 2013]

Holling, C.S., 2001. Understanding the Complexity of Economic, Ecological, and Social Systems. *Ecosystems* 4(5), p.390–405. .

International Fab Lab Association, n.d. *Fab Lab - What is it in essence*. [webpage]. Available at <<http://www.fablabinternational.org/fab-lab/what-is-it-in-essence>> [Accessed 6 December 2013]

IUCN, UNEP, WWF, 1991. *Caring for the earth*. [pdf] Gland. Available through: IUCN union portal <<https://portals.iucn.org/library/efiles/edocs/CFE-003.pdf>> [Accessed 13 February 2014]

Jackson, T., Jager, W. and Stagl, S., 2004. Beyond insatiability: needs theory, consumption and sustainability. *ESRC - Sustainable Technologies Programme Working Paper Series*. 2004(2), p.2-32. .

Jenkin, T., 2011. *The Community Exchange System - Reinventing Money* [online]. Available at <<https://www.community-exchange.org/docs/show.asp?doc=ddd.html>> [Accessed 13 November 2013]

Kierrätyskeskus, n.d. *Pääkaupunkiseudun Kierrätyskeskus - The Company*. [webpage]. Available at <[http://www.kierratyskeskus.fi/in\\_english/the\\_company](http://www.kierratyskeskus.fi/in_english/the_company)> [Accessed 9 December 2013]

Kierrätystehdas, n.d. *Kierrätystehdas*. [webpage]. Available at <[http://www.kierratystehdas.fi/?lang=en\\_us](http://www.kierratystehdas.fi/?lang=en_us)> [Accessed 6 November 2013]

Knott, S., 2013. Design in the Age of Prosumption: The Craft of Design after the Object. *Design and Culture* 5, p.45–67. .

Koshy, V., 2005. *Action research for improving practice: a practical guide*. Thousand Oaks: Paul Chapman Publishing.

Laajola, M., 2012. *Helsinki Green Drinks*. [Audio recording]. Helsinki.

Leitão, R.M., Marchand, A. and Coninck, P.D., 2013. Craft as a Means of Overcoming Distressful Circumstances: The Case of the Caiçara Craft Cooperative in Guaraqueçaba, Brazil.[pdf]. In: European Academy of Design, *10<sup>th</sup> Conference: Crafting the Future*. 17-19 April 2013, Gothenburg, Sweden. s.l.: s.n. Available through: Crafting the Future website <<http://www.craftingthefuture.se>> [Accessed 26 September 2013]

Madison, A., Cromley, K., Sharp, M., 2012. *Doomsday Preppers*. [online video]. Available at <<http://channel.nationalgeographic.com/channel/doomsday-preppers>> [Accessed 26 September 2013]

Manzini, E., 2006. Design, ethics and sustainability: Guidelines for a transition phase. in: Sotamaa, Y. Nantes, Cumulus Working Papers 16 June 2006, Helsinki, Finland. Available at <[http://www.cumulusassociation.org/images/stories/Working\\_papers/WP\\_Nantes\\_16\\_06.pdf](http://www.cumulusassociation.org/images/stories/Working_papers/WP_Nantes_16_06.pdf)> [Accessed 31 March 2013]

Manzini, E. and Vezzoli, C., 2002. *The development of sustainable products* (in Portuguese). Sao Paulo: EDUSP.

Mars, R. and Ducker, M., 2005. *The basics of permaculture design*. White River Junction: Chelsea Green Publishing Company

McDonough, W., 2002. *Cradle to cradle: remaking the way we make things*. New York: North Point Press.

Merriam-Webster, n.d. *Merriam-Webster Online Dictionary*. [online]. Available through <<http://www.merriam-webster.com/dictionary>> [Accessed 19 February 2014]

Mortati, M. and Villari, B., 2013. Connected Communities Of Makers.[pdf]. In: European Academy of Design, *10<sup>th</sup> Conference: Crafting the Future*. 17-19 April 2013, Gothenburg, Sweden. s.l.: s.n. Available through: Crafting the Future website <<http://www.craftingthefuture.se>> [Accessed 26 September 2013]

Mulgan, G., Tucker, S., Ali, R., Ben Sanders, 2007. *Social innovation: What it is, why it matters and how it can be accelerated*. London: The Young Foundation

Mulvey, L., 1996. *Fetishism and curiosity*. Bloomington: Indiana University Press.

Murchison, J.M., 2010. *Ethnography essentials: designing, conducting, and presenting your research*. San Francisco: Jossey-Bass.

Netcyclcr, n.d. *About the service* [webpage]. Available at <<http://www.netcyclcr.fi/page/info/>> [Accessed 9 December 2013]

Neves, H. and Mazzilli, C. de T.S., 2013. Open Design: a map of contemporary Open Design structures and practices. [pdf]. In: European Academy of Design, *10<sup>th</sup> Conference: Crafting the Future*. 17-19 April 2013, Gothenburg, Sweden. s.l.: s.n. Available through: Crafting the Future website <<http://www.craftingthefuture.se>> [Accessed 26 September 2013]

Nichols, A., 2006. *Emerson, Thoreau, and the Transcendentalist Movement*. [Audio book]. The Great Courses. Chantilly: Teaching Co.

Nicholson, N., 1998. How hardwired is human behavior? *Harvard Business Review* [online] 76, 134–147. Available through <<http://www.salescognition.com/articles/HowHardwiredIsHumanBehavioByNicholson.pdf>> [Accessed 24 February 2014]

No Impact Project, n.d. *How to Guide*. [pdf] Available at: <<http://noimpactproject.org/experiment/register/>> [Accessed 12 November 2013]

No Impact Project, n.d. *The No Impact Experiment*. [webpage]. Available at <<http://noimpactproject.org/experiment/>> [Accessed 11 December 2013]

Norman, D.A., 1998. *The design of everyday things*. London: MIT.

Nørgård, J.S., 2013. Happy degrowth through more amateur economy. *Journal of Cleaner Production* 38, p.61–70..

Ostrom, E., 2009. *Prize Lecture by Elinor Ostrom*. [online video]. Available at <<http://www.nobelprize.org/mediaplayer/index.php?id=1223>> [Accessed 25 September 2013]

Ostrower, F., 1977. *Creativity and creation processes* (in Portuguese). Petropolis: Vozes.

Parker, M., Fournier, V. and Reedy, P., 2007. *The dictionary of alternatives: utopianism and organization*. New York: Zed Books

Paterson, A.G., 2010. A Buzz between Rural Cooperation and the Online Swarm. *Affinities: A Journal of Radical Theory, Culture, and Action*. [online] 4, p.83-109. Available at <<http://www.affinitiesjournal.org/affinities/index.php/affinities/article/view/51>> [Accessed 27 May 2013]

Paterson, A.G., 2012. *Pixelversity 2011-2012: Towards an Eco-geographic Cultural Approach*. [pdf] . s.l.: s.n. Available through <<http://medialab.ufg.br/art/wp-content/uploads/2012/09/andrewP.pdf>> [Accessed 14 October 2013]

Pelletier, L.G. and Sharp, E., 2008. Persuasive communication and proenvironmental behaviours: How message tailoring and message framing can improve the integration of behaviours through self-determined motivation. *Canadian Psychology*. [online]. 49(3), p.210–217. Available through: Aalto University Nelli Portal <<http://www.nelliportaali.fi/>> [Accessed 30 September 2013].

Phillips, R., Silve, S. and Baurley, S., 2013. The practical maker: investigating the definitions and requirements of and exploring the motivations behind bespoke making. [pdf]. In: European Academy of Design, *10<sup>th</sup> Conference: Crafting the Future*. 17-19 April 2013, Gothenburg, Sweden. s.l.: s.n. Available through: Crafting the Future website <<http://www.craftingthefuture.se>> [Accessed 26 September 2013]

Pixelache, n.d. *Trashlab*. [webpage]. Available at <<http://pixelache.muistio.tieke.fi/pv13-trashlab?>> [Accessed 11 December 2013]

Pravet, I., 2013. *Deconstructing the No Impact Week Experience: a case study of a social marketing campaign aimed at sustainable consumption*. Master Thesis. Hanken School of Economics.

Prototype Helsinki, n.d. *Prototype Helsinki* [webpage]. Available at <<http://prototypehelsinki.org/in-english/>> [Accessed 11 December 2013]

Revés, I., 2012. Amplifying the fixers movement. *Domus*. 2 December [online]. Available at <<http://www.domusweb.it/en/design/2012/10/02/amplifying-the-fixers-movement.html>> [Accessed 6 November 2013]

Reynolds, R., 2008. *On guerrilla gardening: a handbook for gardening without boundaries*, New York: Bloomsbury

Rifkin, L., 2010. Adult Children of the Dream. *The Jerusalem Post*. [online] Available at <<http://www.nytimes.com/2013/03/10/opinion/sunday/living-with-less-a-lot-less.html>> [Accessed 22 September 2013]

Robertson, T.S., 1967. The process of innovation and the diffusion of innovation. *The Journal of Marketing* 31, p.14–19..

ROG, n.d. *Recycling Olympic Games* [webpage]. Available at <<http://www.pixelache.ac/pixeliversity/rog/>> [Accessed 11 December 2013]

Saini, A., 2009. DIY gadgetry. *BBC NEWS, UK Magazine*. [online] Available at <[http://news.bbc.co.uk/2/hi/uk\\_news/magazine/8107803.stm](http://news.bbc.co.uk/2/hi/uk_news/magazine/8107803.stm)> [Accessed 9 December 2013]

Satokartta, n.d. *Satokartta*. [webpage]. Available at <<http://www.satokartta.net/>> [Accessed 6 October 2013]

Schumacher, E.F. and McKibben, B., 2010. *Small is beautiful: economics as if people mattered*. New York: Harper Perennial.

Scolforo, M., 2010. Amish Population Growth: Numbers Increasing, Heading West. *Huffington Post*. [online] Available at <[http://www.huffingtonpost.com/2010/07/29/amish-population-growth-n\\_n\\_663323.html](http://www.huffingtonpost.com/2010/07/29/amish-population-growth-n_n_663323.html)> [Accessed 22 February 2014]

Scott, K., Bakker, C. and Quist, J., 2012. Designing change by living change. *Design Studies* 33(3), p.279–297..

Seifert, J., 2010. *Dive!* [movie]. Available through <<https://itunes.apple.com/us/movie/dive!/id444488078?ign-mpt=uo%3D4>> [Accessed 7 November 2013]

Siivospäivä, n.d. *Etusivu*. [webpage]. Available at <[http://siivospaiva.com/en\\_EN/](http://siivospaiva.com/en_EN/)> Accessed 11 December 2013]

Stocker, R., Green, D.G., David Newth, 2001. Consensus and cohesion in simulated social networks. *Journal of Artificial Societies and Social Simulation*. [online] 4(4). Available through <<http://jasss.soc.surrey.ac.uk/4/4/5.html>> [accessed 17 February 2014].

Subbotsky, E., 2010. Curiosity and exploratory behaviour towards possible and impossible events in children and adults. *British Journal of Psychology*. 101(3), p.481–501..

Tapper, J. and Zucker, G., 2011. *Craft activism: ideas and projects powered by the new community of handmade and how you can do it yourself*. New York: Potter Craft.

Thomas, S., 2012. The Great Recovery. *RSA Fellowship Digital Journal*. [online]. Summer 2012. Available through <<http://www.thersa.org/fellowship/journal/archive/summer-2012/features/the-great-recovery>> [Accessed 28 October 2013]

Toffler, A., 1989. *The third wave*. New York: Bantam Books.

Tracey, D., 2011. *Urban agriculture ideas and designs for the new food revolution*. Gabriola Island: New Society Publishers.

Trapani, G., 2005. *Interview: father of "life hacks" Danny O'Brien* [online]. Available at <<http://lifehacker.com/036370/interview-father-of-life-hacks-danny-obrien>> [Accessed 26 November 2013]

Turner, F., 2005. Where the counterculture met the new economy: The WELL and the origins of virtual community. *Technology and Culture*. 46(3), p.485–512.

UNEP, 2010. *Assessing the Environmental Impacts of Consumption and Production - Priority Products and Materials*. [pdf] Nairobi: UNEP. Available at <<http://www.unep.fr/scp/publications/details.asp?id=DTI/1262/PA>> [Accessed 3 April 2014].

Vale, R. and Vale, B., 2009. *Time to eat the dog: the real guide to sustainable living*. London: Thames & Hudson.

Walker, S., 2006. *Sustainable by design: explorations in theory and practice*. London: Earthscan.

Ward, C., 2004. *Anarchism: a very short introduction*. [Audio book]. Oxford: Oxford University Press.

Wasson, C., 2000. Ethnography in the field of design. *Human Organization*. 59(4), p. 377–388.

Wenger, E., 1999. *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.

World Carfree Network, n.d. *Global Network*. [webpage]. Available at <[http://www.worldcarfree.net/about\\_us/global/](http://www.worldcarfree.net/about_us/global/)> [Accessed 10 December 2013]

Worldwatch Institute, 2010. *State of the World 2010: Transforming cultures: from consumerism to sustainability*. London: Norton.

WÄRK:fest, n.d. *Call for WÄRKers* [webpage]. Available at <<http://www.warkfest.org/2013/08/call-for-warkers-2/>> [Accessed 11 December 2013]

Zavestoski, S., 2002. The social-psychological bases of anticonsumption attitudes. *Psychology & Marketing* 19(2), p.149–165.

# FIGURES & TABLES

## Figures

1	Action research spiral(Koshy, 2005)	13
2	Study's research structure	14
3	From consumers to co-creators (Sanders, 2004 cited in Fuad-Luke, 2009, p.143)	18
4	Different arrangements of the dimensions of sustainability (Chick and Micklethwaite, 2011, p.81-83)	23
5	Types of organization (Stocker et al., 2001)	25
6	Maslow's Hierarchy of needs (Maslow, 1954, cited in Jackson et al., 2004, p.8)	29
7	Timeline of movements of alternative ways of living	34-35
8	Phases of motivation for change	38
9	Division of practices, groups, events & websites	49
10	Clustered practices	50
11	Description of prepping	51
12	Local practices sorted under the themes of DIY and DIT	52
13	Description of Permaculture	53
14	Final set of practices	53
15	Map 1 - All interconnections in Helsinki	83
16	Map 2 - Interconnections from the perspective of the practices	84
17	Map 3 - Interconnections from the perspective of the groups	86
18	Map 4 - Interconnections from perspective of the events	88
19	Adopter categories based on relative time of adoption of innovation (Rogers, 1962 cited in Robertson, 1967, p. 16)	90
20	Design brief	94
21	Practices organized in different themes	101
22	Final pattern of practices	103
23	Poster made for the trash meal event	109

## Tables

1	Five capitals (Forum for the Future, n.d in Chick and Micklethwaite, 2011, p.95)	19
2	Max Neef's table of needs/satisfiers (Jackson et al., 2004, p.10)	30
3	Key findings from interviews	42-43
4	Summary of personal experiences	45
5	Self Determination Theory's types of motivation, sub divisions and results based on Deci and Ryan (2008a)	97
6	Adapted names of each practice	100

## Images

All images taken by the author, if not otherwise identified.

# APPENDIX 1

## INTERVIEW

### REPORTS

#### Andrew Gryf Paterson – Pixelache

Andrew Gryf Paterson is an artist-organizer, originally from Scotland but based in Helsinki since 2003. Andrew became involved in environmental issues around 1999. This happened in a series of workshops he held with teenagers under the theme of “digital art and the environment” in the UK. However, it was in 2002 in northeast England that he did his first workshop centered on the topic of sustainability. This workshop was for a project in partnership with the Friends of the Earth organization (see [www.foe.co.uk](http://www.foe.co.uk)).



Picture provided by Andrew Gryf Paterson

Later, after moving to Finland, he got involved with the ecodesign alternative cultural space Happihuone. According to him, this space was closely involved with the ecological art, design and crafts scene and with environmental concerns. Happihuone was an access point also people who were interested in sustainability issues, including Finno-Ugric cultural traditions such as foraging wild foods. [Actually I was not involved in this project]. Consequently, in 2009 his increasing relation to environmental topics triggered him to search for furthering his knowledge on this topic, including learning about ecosystems theory, and other forms of sustainability, such as alternative economy cultures. Andrew said that he started to seek and identify connections between the environmental issues, his work and how that could be applied to the organization of events, workshop and groups. In this way, he argued that there are different perspectives that can be taken in this concern; and consequently, his focus is on finding the connections and learning them. He got into involved with Pixelache first in 2004, organizing workshops within the group’s annual festival. His connection to this group grew, and since 2011, he has been coordinator and facilitator responsible for the Pixelache Helsinki’s outreach and educational program “Pixelversity” (see group description in section B3). He has also been one of the key persons involved in Pixelache’s “Trashlab” initiative (see description in section B3). About the later, Andrew said it was started as an idea from Antti Ahonen from Koelse group (see [www.koelse.org](http://www.koelse.org)) aiming at gathering more people around the topic of waste. In this sense, he said that, initially, it was strongly connected to the hacker scene with the focus of “mak[ing]

new things out of waste”. However, Andrew stated that this focus changed significantly with the introduction of the “Trashlab Repair Café” event (see even explanation in section B3). This event was proposed by Päivi Ravio (see interview further in this section) and opened the initiative to a wider public. In this way, these events provided a “social platform for people to learn and repair their things”. However, this change meant that the initial “hacking-centered” group withdrew more from the repair activities, as their interests may lay in taking things apart, and circuit-bending or making new things from the original use of consumer electronics. Nevertheless, Andrew Paterson said that he has been learning much by organizing the Trashlab repair cafés, especially due to the “nomadic” characteristic the event had in its first year during 2012. In this way, he states that the organizing group was able to understand more about who is the audience and their interests; and therefore know more about how, when and why to organize such events. Further, the experiences in those events taught them how to approach the “waste” topic in different settings. In this way, repair workshops such as the ones they organize are a potential for alleviating waste, especially in the emerging digital fabrication scenario. Furthermore, Andrew said that the goals of Trashlab now are: to involve the current and the former groups of Trashlab and to develop an “educational program about trash”.

Furthermore, about the local scene, he said there are very active people, but they are “few and very busy”. Therefore, it is a small but strong group; however, he stressed that this group often does not have time to interact and contribute to each

other’s projects. Further about interaction, he said that it is difficult to develop partnerships as a cultural organization such as Pixelache with “agenda-based NGOs”. According to him, there are three approaches to activism: art-based, design-based and agenda-based. In this way, the first focuses on creating awareness and generating discussion or provoking people to think about an issue. The second one (design) is also focused on awareness but aiming at achieving a goal or creating solutions to problem. And the third is aimed at changing people’s opinion in a “didactic way”. Sometimes these approaches overlap, but not always. Consequently, it “takes lots of effort to reach a common understanding”, especially when it comes to understanding each other’s motivations and way of working, and how to create mutual benefit in the collaboration. He said this is particularly difficult with Pixelache due to a so-far ambiguous mission and values statement. However, the organization has a positive “flexible” characteristic, where activities can assume different formats best suited according to the situation and the members’ interests, and adapt to changes.

About activism and initiatives in general, he believes that an initiative cannot be centered on one person. He says that people have to be able to change their approaches and relations; therefore, the sustainability of an initiative is very much based on its adaptability. Furthermore, concerning his activist role, he said it is difficult to maintain the energy force in the work. In this sense, he stresses the importance of community by saying that “peers to inspire you are necessary to keep the energy”.

## Arto Sivonen – School of Activism & Måndag

Arto Sivonen is the owner and initiator of the Måndag Company and the School of Activism group (see explanations in section B3). Arto has a background in advertisement and marketing. He said his motivation for environmental issues came from his past work in big advertisement companies. He quit his work in such companies for “ethical reasons”. In this way, he argued that these companies “do anything just for money”. Consequently, he felt dissatisfied with this way of working and decided to start acting according to his own values and beliefs. By the time he quit his job in the advertisement agency, he was volunteering in the NGO Dodo. However, he wanted to keep his activism-related work as his



Picture provided by Arto Sivonen

main source of income. In this concern, he stated that “people should be paid for this kind of job”: “if people were paid for the work done today as volunteering, they would focus more time to it, instead of only the free time”. Therefore, he argues that NGO work would be more effective due to the greater energy people would be able to apply.

Nevertheless, as advertising is his passion, he decided to “take a new angle” on it. For this, he started the Måndag company (see [mandag.fi](http://mandag.fi)), which he operates from the co-work space “Kulmahuone” (see [www.facebook.com/pages/Kulmahuone/264524116894713](http://www.facebook.com/pages/Kulmahuone/264524116894713)). This pro-environmental advertising company started with the presidential campaign of the candidate Pekka Haavisto (see [www.pekkahaavisto.net](http://www.pekkahaavisto.net)) in 2012 and grew towards promoting events and governmental initiatives. In this area, Måndag currently promotes many alternative initiatives around Finland.

Arto’s other way of activism is through the “School of Activism”. This group started in 2011 from a joint effort between Sitra and Demos Helsinki (see [www.sitra.fi](http://www.sitra.fi) and [www.demoshelsinki.fi](http://www.demoshelsinki.fi)). This partnership aimed to gather a group of the key activists in Helsinki to plan new ways of doing activism together in the region. This group was then sent to a conference in Berlin, where the idea of the School of Activism was born. Arto and two others decided to create this group aiming at connecting the different people and actors in the region; in other words, as Arto said: “to connect ideas to reality”. He said that the underlying reason for this motivation was to connect stakeholders with the surrounding actors in order to bring ideas

to practice. In this way he argued that creating a mixed community is essential for generating local action. However, the due to lack of time of the organizers, the School of Activism was active only during the World Design Capital event in 2012 in Helsinki (see [www.worlddesigncapital.com/world-design-capitals/past-capital-helsinki](http://www.worlddesigncapital.com/world-design-capitals/past-capital-helsinki))

Further to this, Arto said that his current goal is to enable the sharing of knowledge and the exchange of ideas on alternative ways of living with the neighboring countries. Furthermore, he stressed the importance that the practices developed in this study should be spread with a “simple” language, and in a way that can be applied not only in Finland but also in the neighboring countries.

## Becky Hastings – Permaculture

Becky Hastings is an activist focusing on the concept of Permaculture (see descriptions in section B3). Nevertheless, she sees her role “more as a guide than an activist”, through which she aims at finding “ways to reconnect people with the natural world that they seem to have forgotten that they are part of”. In this way, she focuses at encouraging and guiding people to take action to protect the natural environment.

Becky said she cannot point out exactly where her environmental concerns began. However, she knew that “things were not right” but did not know what she could do. In this concern, she stated that activism in the UK in the late 90’s and early 2000’s seemed to alienate people more than

enlighten them. As a consequence, aside from sorting her waste and trying to avoid disposable goods, she remained concerned but inactive. Nevertheless, a turning point in her awareness happened when she was travelling through Asia on the Trans-Siberian train. During this trip she saw beautiful natural landscapes but was saddened to the fact that “they were all filled with trash”. She felt that she could not just ignore it but had to do something. Hence, knowing that she wanted to leave the television production industry that she had been in for the last 10 years, she gradually set about educating herself on environmental topics. Through attending related talks and events, she met more like-minded people and found out about concepts such as off-grid living. During these experiences, the word ‘permaculture’ was recurrent, which consequently led her to take an introduction course to Permaculture.



Picture provided by Becky Hastings

Becky started to become more active after this course. In this concern she said that Permaculture focuses on “solutions rather than fighting against the tide”; therefore she started to realize where she

might be able to make a positive contribution. This led her to start training to be a wilderness guide, which she hopes to tie in with Permaculture and the facilitation of environmental education. In this sense, Becky stresses the three Permaculture ethics: “people care, fair share and earth care”. In this concern she argues that “the earth would take care of itself; it doesn’t need people on it and will be there after we’re gone”. Therefore, she defends that greater focus should be given to the social aspect of sustainability in order to make sure that people take care of the earth “if we want to stay here longer”.

*“People focus on saving the earth and forget that why we do it is because we want to live on it”*

Nowadays, by using her background in television production coordination and management, she sees a possibility to help create connections and strengthen networks between the local sustainability activists in order to help increase efficiency in their work. Furthermore, with the wilderness guiding she hopes to “lead by example and gently guide people back to nature, helping them see that it is not a scary place that is separate from us, but that it is essential for our wellbeing”.

## Emma Kantanen – Food reuse

Emma Kantanen was recommended to me as being a person who has been living for many years from reclaimed food from supermarkets’ trash bins. Emma dates her alternative practices back to her childhood. In this way, she said that her mother is an interior designer and was always looking into trash containers for materials and objects to repair and transform them into new products. Therefore, she grew up with what she defines as a “light type of dumpster diving”.



Picture provided by Emma Kantanen

Nevertheless, Emma stated that when she got to school, she met “some hippie people”, who introduced her to the practice of reclaiming discarded food. From this point on, she started collecting discarded food for her own consumption. Emma was vegetarian before getting into this practice; however, she argues that collecting discarded food changed her habits - “It is going to trash anyway, so it is more ethical to use it than to let it go, eatable, to the trash”. Emma

stated that she did not become involved in this practice due to financial issues, and that she keeps it because it “is easier”. In this concern, she stated: “I always find more food than what I need; I don’t spend money, I don’t need to waste time planning my meals and I don’t need to waste time standing in queues in markets.”

Over the years, she has become an “expert” in food scavenging. Emma said that in the beginning, she used to collect food during the night, after the shops were closed. Nevertheless, nowadays she connects the practice to her daily commuting routine. In this way, she knows many places from where she can get food in her daily routes. Furthermore, she commutes only by bicycle, based on the engagement to “cycle until my bike can stand by itself in the snow”. Furthermore, when it comes to traveling longer distances, she is adept at hitchhiking and couchsurfing (see [www.couchsurfing.org](http://www.couchsurfing.org)).

She recalls one period of her life when she stopped eating reclaimed food. This happened during exchange studies in Australia. However, she says that, after a few weeks of buying food from supermarkets, she got sick and visited a doctor. The doctor’s conclusion was that her illness was due to an abrupt change in her alimentation. Moreover, later during this period, she became homeless and found the urban exploration group “Cave Clan” (see [caveclan.org](http://caveclan.org)). Her relationship and experiences with this group were the subject of her BA thesis.

Overall, Emma bases her way of living on “doing things without money”. Nevertheless, she has

a rather equitable approach to it; she stated: “It is not a religion, you know? I do it because it is easier, but if I have to use money for something, I do, without any problem (...) I won’t let it affect my social life”. In this way, she has normal work, from which she pays her rent in a commune-like student apartment.

## Jon Sundell – Made in Kallio

Jon Sundell is the co-founder of the “Made in Kallio” co-working space (see descriptions in section B3). He started his alternative/ counterculture life at an early age. Around the 80/90’s, in his early teens, he was active in the local graffiti scene, which was a cradle for urban culture and activity. However, it is his later work experience that is responsible for his current activist role. With a degree in filmmaking, Jon went to work in the cinema industry in Hollywood. This work lasted for a decade and raised his perception about the issue of “unused resources”. Jon stated that there were good scripts with no funding at the same time that there was idle equipment and facilities, as well as unemployed professionals. Instead of waiting for capital to mobilize them, many of these films could be accomplished if people were to get together and then split the proceeds after the film is released. From this period in his life he became interested in how to make things together without money and even how to reinvent the concept of money.



Picture provided by Jon Sundell

Back in Finland, his friend, a local designer, needed help marketing his locally produced bookcase. Mia Lehti, Jon's girlfriend, who has retail experience from the fashion industry, realized it was completely produced in the Kallio neighborhood in Helsinki - "It was all made in Kallio". By seeing the possibility of local production and bearing in mind the ideals of wise use of resources and mutual help, they decided to start a collaborative workspace. Named "Made in Kallio", this shared work space is based on "synergetic relations and mutual help between people from different disciplines".

*"I am interested in new ways of doing things together"*

With the help of the network created by the cooperative, Jon is involved in multiple new projects, including one that focuses on "open hardware projects for nomadic living". This project aims at developing technologies to

enable self-sufficiency to enable nomadic and independent living (see <https://www.facebook.com/groups/146213962204307/?fref=ts>). Currently, he states that his interest is to find "new ways of doing things together; use resources wisely and prototype new ideas on a small scale so mistakes are never too big or debilitating".

## Mikko Laajola - Pixelache & Dodo

Mikko Laajola is an activist in Dodo's related networks and Pixelache (see explanations in section B3). Mikko dates his major turn towards alternative practices back to his art university period in Turku. During this period, he lived in a shared apartment where all the tenants used to collect discarded food. Mikko stated that they always had a surplus of food: "I even gained some weight". Later in his life, Mikko moved to Helsinki for an internship in Pixelache.

Through Pixelache, he got involved with the Hacking movement, especially concerning the making of art from discarded electronic equipment. However, he argued that he "lost the purpose of doing only aesthetical things". In this way, Mikko said that his interest shifted towards doing functional things, which also can be generating action for change. Nevertheless, he still uses "trash" as the main material for his work. In this concern, he stated that "trash is liberating" because it removes the dependency on funding and minimizes the exploitation of resources for new materials. Consequently, working with trash as the source of materials allows a greater

autonomy and freedom for realizing projects in Finland, where waste is abundant.



Picture by Tuomo Tammenpää

Further to this, he is also involved in urban agriculture projects. In this concern he has experimented with window farming, hydroponics and aquaponics. However, about indoor farming, he stated that “it is not good to grow basil in Finland in the winter if you have to grow them by using artificial lights, it is not the natural, real way to do it, and it is not yet economically sustainable in lowscale farming”. Furthermore, he initiated and contributed to an urban farming experimental project with Pixelache and Dodo’s Kääntöpöytä called ResAgri (resilient technologies for urban agriculture) (see [www.pixelache.ac/blog/2012/res-agri-process-begins](http://www.pixelache.ac/blog/2012/res-agri-process-begins)). This project consisted of an experimental approach to hydroponics, aquaponics and DIY agricultural technologies in urban environments. However, whereas the experimentations have had considerable success, the number of participants has been problematic.

In this concern, Mikko stated that, even though there were many interested people during the online conversations, very few were present in the activity days. Nevertheless, the project is still running as a part of his activities.

Furthermore, Mikko stated he bases his life on “needing less”. In this way, he always adapts his ways of living in order to be less dependent on the mainstream systems. Consequently, he is now focused on experimental ways of living, especially concerning land ownership, usage and experimental gardening. For this, he is developing a project on experimental off-grid, self-sufficient living. This project involves a wide network of like-minded people who are planning different workshops for experimenting in various places and environments. As a consequence, his major interest is to be able to create settlements to be able to live in different places at his own will.

## **Päivi Raivio – Kääntöpöytä & Trashlab**

Päivi Raivio is involved in Dodo’s urban farming movement and their Kääntöpöytä initiative as well as in the Trash Lab initiative operated by Pixelache (see descriptions in section B3).

Päivi began her path in activism and sustainability at an early age. She said there was no punctual event which prompted her into activism and that therefore she cannot define a specific date or age for its start. Nevertheless, she stated that one of her first actions she can remember was

the creation of furniture out of trash materials. This activity continued through the years, reaching a point where the majority of furniture and appliances in her house originated from discarded sources. Nonetheless, Päivi has always contributed to different activities at the same time, and consequently argues that her path in sustainable practices was “very organic”.



Picture provided by Päivi Räivi

Being involved in Dodo, Päivi was one of the pioneers of the Urban Farming movement in Helsinki (see “Urban Farming” practice explanation in section B3). In 2009 Dodo had the annual topic of “food and cities”. Inspired by cases of urban farms around the world, Päivi, together with a group from Dodo, decided to try urban farming in Helsinki. This first attempt was made by building, out of discarded pallets, a wooden

box to grow a variety of plants. This box was placed without permission near unused train lines in the Pasila neighborhood. Despite the guerilla nature of the act, the project was successful and became a permanent Dodo project. However, Päivi argued that, at first, this guerilla character of the practice posed a barrier for local citizens to engage. As a result the NGO had to start making (legal) arrangements for “official” land usage for their urban farming areas. Moreover she states that another barrier for the project was “logistics”, especially concerning the transportation of soil and water.

In 2012, still in Dodo’s urban farming initiative, with the coming of the World Design Capital event in Helsinki, they decided to apply for funding to build an urban gardening center. This application resulted in the creation of the Kääntöpöytä building next to the first urban farming box. Consequently, Dodo had to make legal agreements with the authorities for land usage and now pays for rent both for the building as well as the box’s area.

Further to her activity in Dodo, Päivi is involved with the Pixelache organization. In Pixelache, she was responsible for the initialization of the local repair cafe (see [repaircafe.org](http://repaircafe.org), see “TrashLab repair café” event explanation in section B3). Päivi stated that she was inspired with the growing “repair movement” in the U.K and U.S.A and proposed to start organizing such events in Helsinki under the “TrashLab” project held by Pixelache.

## Petra Jyrkäs - Urban Farming, Dodo, Wärk:fest

Petra Jyrkäs is involved in Dodo, the urban farming movement and the Wärk:fest event (see explanation in section B3). Petra dates her activist initiatives to a young age. She recalls participating in the Red Cross (see [www.redcross.fi](http://www.redcross.fi)) and other similar groups when young. “I am from a small city in Southern Lapland, so there weren’t many options”. However, her involvement in her current groups and events happened later. She said she got involved in Dodo during an autumn while she worked in a big media company. She stated that she did not feel any meaning in her work and therefore started searching for a hobby. In this period, around 2009, through Dodo’s mailing list, she saw an announcement about a development cooperation project in Africa. She decided to join that project and, afterwards, got involved in other Dodo projects, especially the ones concerning urban farming. From that period, she has contributed to Dodo and nowadays her work in this organization is her main occupation.

Nowadays Petra Jyrkäs is one of the volunteers in Dodo’s urban farming project (see descriptions in section B3). For her, urban farming is “easy and fast”. Further, she says that it is possible to grow a huge quantity of food in the areas provided by Dodo, however, not enough to reach complete food self-sufficiency. Nevertheless, she states that farming in the city means experimentation. In this concern she experiments to see how much food can be grown and stated that she is always amazed with the results. For her, the best part of the practice is the “doing together” characteristic.

In this sense she said that urban farming differs from normal gardening “where each one works isolated from others”. For her there is a sense of community in urban farming. And further, she argued she has developed a strong relationship with the place she is farming on. In this way Petra said that she got a higher sense of belonging to the area. Nevertheless, urban farming is a way of relaxing and learning to give more value to food.



Picture provided by Petra Jyrkäs

She argued that Dodo’s aim about urban farming is changing. Nowadays they are directly coordinating three urban farming areas, but they want to become a “consultancy” on urban gardening. She said this aspiration came from the fact that many people do not take responsibility for their crops: they often have to remind people to harvest. Further, many do not take care of their space and the cleaning and maintenance tasks involved. As a result, Dodo wants to shift from coordination to facilitation of urban agriculture.

Moreover, Petra said she is now interested in roof-top gardening. However, she stated that this topic is difficult to be developed in Helsinki due to the enormous amount of regulations imposed on buildings by the local government. Further to this, Petra stated that the Helsinki based groups lack ways of promotion and publicity, especially in English. Therefore she said that the development of a guide about the available initiatives would be beneficial for the local scenario.

### **Ruby van der Wekken – Stadin Aikapankki (Helsinki timebank)**

Ruby van der Wekken is co-founder of Stadin Aikapankki (Helsinki Time Bank - see descriptions in section B3) and involved in global justice, solidarity economy and commons movements. Ruby dates back her motivations for activism to an early age. In this way, she was raised with concerns about helping others and, especially, about the ‘Third World’. Ruby said that later “this perception of the core issue being one of helping became one of need to strive towards structural change”. In this way, she sees the need to act towards “social and ecological justice” pointing towards “interdependency between global south and north”. Therefore, she bases her activism as a “critique of development as advocated in the mainstream”. From these motivations, she has been involved in a few international movements defending global justice and democracy as well as environmental ones. For instance, she has been active in the World Social Forum, from which she links her experience in this forum to the

motivation for starting the Helsinki time bank group.

Ruby stated that the process of founding the local time bank was spontaneous. During a conversation with friends in September 2009, emerged the idea of creating an alternative currency for the Kumpula area in Helsinki. In this way she said that, during a visit to the 20 years-old exchange system in Helsinki called “Helsinki Vaihtopiiri”, she heard that they based their transaction on a value rate of 10Markka per hour (markka = former Finnish currency). Consequently, Ruby got inspired by the concept of “hours” and ended up discovering the international existence of various timebanks.



Picture by provided by Ruby van der Wekken

Following, this led her to get to know an operational platform for timebanks, the Community Exchange Organization (see [www.community-exchange.org](http://www.community-exchange.org)). As a consequence the group started a local time bank called Stadin Aikapankki (STAP- Helsinki Timebank) which then spread around the city, and now has over 3000 registered members.

Ruby states that the underlying concept of STAP is of an “economy to serve the community”. In this way STAP aims at supporting mutual help and at strengthening an egalitarian local society and economy: in other words, a society where “everyone is of equal value and has equal participation possibilities”.

Further to his, Ruby said that around 42 time bank groups were registered in Finland. However, “only a few are active today”. Moreover, STAP is now facing a barrier concerning legal issues. Despite the Helsinki City’s statement to support STAP, the Finnish Tax Office (wants to charge taxes) has come out with guidelines according to which taxation must be paid on skilled work received through STAP. In this concern, Ruby said there are many cases of alternative currencies around the world which have tax agreements with the government, such as cases from the Netherlands, USA and England. In this sense, Helsinki Timebank “wants to address the issue of taxation, but is critical of taxation in Euros - based on market value- as it destroys the equality basis of the timebank”. Furthermore, Ruby stated that, in such discussions, the internal “timetax” currently charged by organizing team to cope with their task would be interesting to be assessed. As such

a dialogue could take place, Ruby defends that a just agreement would be, e.g. if the tax collected would be used for overlapping agendas between Helsinki City and STAP.

Further to this, Ruby van der Wekken is currently working at the Siemenpuu Foundation (see [www.siemenuu.org](http://www.siemenuu.org)) and her involvement with STAP led her to be active in the subject of commons (see [www.common.fi](http://www.common.fi)) and the solidarity economy (see [www.solidaarisuustalous.fi](http://www.solidaarisuustalous.fi)).

## **Harri Hämäläinen – Hacklab and Wärk:fest founder**

Harri Hämäläinen is one of the founders of the Helsinki Hacklab group and the Wärk:fest event (see explanations in section B3). Harri is an activist in the hacker and maker scenes. Concerning his initiation in the field, Harri stated: “I was always interested in building things, and electronics are small enough, so that you can do it everywhere”. From this hobby, he became interested in discussions on 3D printing because this technology represented for him an easy way to create casings for his productions. For this reason, he got involved in a local online forum about the DIY 3D printer “RepRap” (see [repprap.org](http://repprap.org)). In this forum, he got involved in a discussion about Hacker spaces and, with two other people, decided to create the first Hacker space in Helsinki. Harri stated that his motivation was to be surrounded by people who had knowledge on electronics, so that he could learn more and exchange information.

This initial group of people started searching for a place to establish the “Helsinki Hacklab”. The first place that his group used was a squatted building in the Kalasatama region. He said it was a shabby building, “very underground looking”. Nevertheless, the local government agreed to provide free electricity and water, since many other groups had established projects in that building. Therefore they had no major costs to establish the hackerspace. However, Harri states that, most probably due to the characteristic of the place, it was very difficult to bring more people into the group. Nonetheless, as the building was planned to be demolished, they had to leave. Consequently, in December 2009, they started a Facebook event for finding a new place.



Picture by provided by Harri Hämäläinen

This discussion quickly gathered 20 active people, and, within six months they found the place where Helsinki Hacklab is located today.

However, for that they had to rely on personal funding and the creation of a membership fee to cope with the rent price. Nevertheless, due to the good network that the starting group had, it was easy to acquire equipment. In this concern, they received donated equipment from companies and people, resulting in a surplus of equipment. Also, the group collected - and still does - materials from trash bins to be used for their projects. Furthermore, the Hacklab initiative continued growing and was featured in many local newspaper articles and events. For him the Hacklab is “an open and shared workshop for people interested in electronics” for which the core idea is community building and interaction. In this way, he defines “hacking” as “to use things in unconventional ways, to build new things from old parts.” Resulting from his experience with Helsinki Hacklab, he decided to organize a DIY event, the Wärk:fest. For this event, the goal was to open the maker and DIY scene to a broader audience.

Further to this, Harri lives in a 10-year-old commune-like apartment. In this space, people share living spaces and are equally responsible for the maintenance of it. For him, there are similarities between shared workshops (such as the Hacklab) and shared living spaces. In this way, Harri states that both are about gathering a group of like-minded people to establish and maintain a place.

# APPENDIX 2

## PERSONAL EXPERIENCES

### Trash Lab Repair café workshops

The Trash Lab repair cafés are social gatherings to fix objects (see description in section B3). For this study I visited a total of five of these events (in Kulmahuone, Siivouspäivä etköt, Arkadia Bookshop, Kaupunkiverstas and in Aalto Fablab). In this way, I experienced the different roles of observer, user and expert. Overall, these events have a very friendly and open atmosphere. The attendance rate was usually around 10 people, reaching up to 20 in the case of Kulmahuone.

However, the people present were almost always the same over the different happenings. This audience consisted mostly of the activists and organizers of the events plus friends and relatives. In this sense, the presence of “complete outsiders” was rare. In the same way, when I participated as expert (for woodwork repairs – in the Arkadia Bookshop event) most of the time was used to fix each other’s objects and for exchanging knowledge and ideas about maker culture-related topics.

Nevertheless, the Arkadia Bookshop event had one outsider who went to fix a hair trimmer. This person stated to be searching for “repair movements” in Finland for a long time. However,

as he had not found one, he was willing to start organizing such events. Nevertheless, he heard about Trash Lab Repair café from a friend and went to the event to get to know the people and fix some objects. This incident showed that the advertising and audience of these events are still problematic. Nevertheless, another reason for the low “outside” audience I found was cultural. What I mean is, while I was helping advertising the event, the vast majority of people stated not to have broken objects to fix. In this way, many people argued that the mainstream culture is a “throw-away” culture; therefore the majority of people are not used to or aware of the possibilities of keeping broken objects and repairing them in social gatherings. Hence, the increase of the attendance rate depends on first advertising (creating awareness) and secondly on behavior change.



Nevertheless, the “advertisement” aspect was strongly facilitated by the agreement between Pixelache and Helsinki City Library to hold these events monthly during 2014 in the Kaupunkiverstas space (see description in section B3). The regular organization of Trash Lab in this

city owned space provided official advertisement channels. Consequently, the event has witnessed an enormous increase of newcomers both to fix and to help fixing objects.

Nonetheless, these events provide great social and learning experiences. Through these experiences I could learn how to fix various objects, which certainly contributed to a degree of self-sufficiency and autonomy when it comes to the acquisition and maintenance of objects ranging from clothes to computers.

## Recycling Olympic Games (ROG)

The ROG competition was organized by Pixelache together with Error Collective (Tallinn, Estonia) and was held in the Suvilahti area in Helsinki. This event consisted of a week-long competition between teams for which the daily challenges should be met by using trash materials found in the city. The daily challenges were respectively: Olympic Village Construction, Kitchen, Power Generation, Invention, Trashion (fashion + trash) and Endurance recycling. In this way, the different teams should live in the Olympic Village during the week. However, due to the inability to commit full-time to the event, the obligatory full-time residing in the village was removed. Nevertheless, in order to be part of the event, one should attend at least three of the days. The application for participating was open and free of charge. However, the final set of participants consisted of the organizers (Pixelache staff + Error Collective members from Estonia) plus

me. For this reason, the group was divided into “home” and “away” teams. In this way, the “home” team had three participants and consisted of Pixelache-related people while the away team had four participants, the Error Collective-related members and me. As everybody was known to each other, the “competition” issue of the event was very low. Furthermore, since full attendance was not mandatory, the event became more like a diversion rather than a competition. However, as I expected a high level of experimentation and innovation due to the art and design background of the participants, I felt that the aim of the teams was to complete the tasks by repeating past achievements.



Further to this, this event rendered as an “intense” experience on waste reuse, food scavenging and urban living. Consequently, it demanded prior skill with waste reuse from the participants. Therefore, it does not represent an easy entrance point for enthusiasts on this topic. Nevertheless, it was possible to exchange knowledge with other participants and therefore improve one’s making skills and experiment alternative practices. For instance, through this event I got to know the places where it is possible to collect discarded

food from supermarkets, knowledge which served as the basis for an experiment described in section C3.

## Siivouspäivä (cleaning day)

The “Cleaning day” is an event which transforms the entire city into a second-hand market. The event was preceded by a week of warm-up workshops which featured happenings such as the Trash Lab Repair café.



During this day-long event people are free to establish a second-hand selling point anywhere in the city. Nevertheless, the participants are asked to tag their places in an online map and classify their selling points according to pre-established categories. However, even though the map and tags can easily be sorted in the website, it is difficult to find a specific selling point on the street. This happens especially due to the enormous amount of people who engage in the event. In this way, people tend to gather around

specific areas such as Kumpula and Karhupuisto in order to reach a bigger audience. For instance, the Kumpula neighborhood organizes a “walking street” for this day, for which a street is closed exclusively for the event. Nonetheless, there are many people and groups who organize their selling places near their houses, away from the most crowded areas. Therefore, selling points can be found in almost every street of the city. While flea-markets are popular in Finland, this event has several differentiations. For instance, this event has a stronger diversity than the formal second-hand markets. That is, probably due to the openness of Siivouspäivä, it is possible to find both used and new products. Furthermore, there is a considerable amount of food-selling groups as well as tables kept by very young children.

## Make(able) workshops

Make(able) workshops are sewing experiences with half-way products. For this study I visited three workshops during 2013. The attendance to all of them was considerably beyond expected.



That is, while the workshops were planned for around 12 people, all of them had more than 18 participants. However, most of the participants were acquaintances of the organizers from Aalto University.

Nonetheless, all the workshops had a very open, lively and busy atmosphere. Every workshop had a team of experts to assist the participants during the creation and customization of their products. In this way, many people – myself included - were successfully introduced to sewing techniques. Consequently it was natural to see participants from one workshop attend future ones in order to learn more and improve their new skills. Consequently, these workshops informed the sense of autonomy and control of one’s material life. It therefore represents an entrance point for maker culture in Helsinki (for more information about this initiative, see Hirscher, 2013).

## Kääntöpöytä Harvest fest event

The Harvest Fest marked the end of the activity year for the Kääntöpöytä group and Dodo’s urban farming movement (see group explanation in section B3). It was an open party to celebrate the year’s harvest. According to Kääntöpöytä’s members, the attendance to this annual event has always been high (over 100 people per event), and this year was not different. The Harvest Fest featured live bands and DJs and a variety of food originating from their greenhouse and urban farming spaces.

This year, from the beginning of the event, at 18:00 pm, many people were gathered around tables talking and eating the locally grown food while enjoying live music. Later, during the beginning of the night, the space was full of people dancing to the sound of a locally famous band.



However, there was no activity focused on propagating the urban farming movement – such as presentations or information places. Furthermore, the organizers said that there is usually a large number of “outsiders” at the event who are not connected to the urban farming scene. Consequently, due to its high attendance, especially concerning outsiders, this event has a strong potential to increase visibility not only on the urban farming movement, but to other initiatives centered on similar topics. Consequently, visibility of alternative practices in Helsinki could be informed by connecting the different events and groups.

## Wärk:fest

Wärk:fest is a one-weekend DIY festival. This was the second year of the event and this time was held in an old factory building in the Valilla neighborhood. Most of the previously researched groups were featured there, such as Helsinki Hacklab, Made in Kallio and Make(able). Besides those there were many city-owned initiatives such as “Nuorisokeskus” (youth centers) and “Kaupunkiverstas” (see section B3) as well as companies such as Sitra (the Finnish Innovation Fund) (see [www.sitra.fi](http://www.sitra.fi)) and a small tool store. Furthermore, Wärk:fest also featured groups from other cities of Finland such as maker spaces (Hacklabs) from Tampere and Turku.



Further to this, the event consisted of two types of spaces: an exhibition area and a workshop area – besides cafeterias and other services. The exhibition space consisted of tables on which the groups displayed their productions and interacted with the audience. In the workshop areas the featured groups took turns to hold various types of workshops. For instance, Helsinki Hacklab held an electronic workshop and Make(able) had a DIY backpack workshop, among many others.

The attendance of the event and its workshops was relatively high during the first day. However, most of the workshop participants were Wärk:fest staff members or members of other featured groups. Further, most of the visitors were already familiar with the DIY culture. On the other hand, on Sunday, the attendance was lower and the event finished one hour before planned. Nevertheless, it is a very important place for interaction between the different groups. Furthermore, due to its diversity of themes around the DIY topic and the amount of workshops held, Wärk:fest renders as the main DIY happening in Helsinki and therefore a strong entrance point to bring more people to DIY activities.

## Kierrätystehdäs (Recycling Factory)

Kierrätystehdäs (Recycling Factory) is an annual event organized by Kierrätyskeskus (Helsinki Metropolitan area reuse center, see section B3). This event aims to increase the visibility of eco-design initiatives. Therefore, since the Recycling Center is widely known in the Helsinki region, the visibility and thus the attendance of this event was very high – over 10,000 people according to their website (Kierrätystehdäs, n.d.). The event comprises workshops, such as the Trash Lab Repair café, a “free market” space, an exhibition space and a “commercial” area. The workshops were centered on the topic of waste reuse and provided diverse ways of assessing the topic. In this way, there were workshops aimed at making, repairing and raising awareness about the topic. On the other part, the free market was an area

where people could freely take and leave objects. Further, the exhibition area featured groups such as BookCrossing (see explanation in section B3), urban gardening and a catwalk for fashion exhibitions and lectures.



At the same time, the commercial area featured several companies and small producers selling and exhibiting their productions, most of them related to clothing and fashion accessories. However, the attendance among these different spaces varied. The biggest and most visited area was the commercial space. The free market and exhibition areas were not very busy yet not empty. However, the workshop area, in the second floor and outside part of the building, was the least visited. Nonetheless, due to its overall high attendance, the event provides an entry point for mainstream consumers to the sustainability and waste reuse topic. However, it does not necessarily directly influence behavior change since the core of the event is based on consumption.

## Time bank practice

After I interviewed Ruby van der Wekken (see interview in Appendix 1) I registered with Stadin Aikapankki (STAP - Helsinki Time bank). Following the steps needed for registration I first sent a request email through their website ([stadinaikapankki.wordpress.com](http://stadinaikapankki.wordpress.com)). Within 24 hours the STAP team answered with my credentials to the Community Exchange system ([community-exchange.org](http://community-exchange.org)). This international online platform is the basis for all STAP transactions. However, the interface is very confusing and unclear; therefore it demanded some practice to understand how it functions. When registering with the system, STAP asks the user to list three “wants” and three “offerings” to be uploaded to the common list. Therefore, I filled in these requirements and gained access to the lists. Overall, the listed offerings were related to personal skills, like handicraft or teaching languages, while the offerings were mostly related to basic needs such as taking care of pets and help with house maintenance. Nonetheless, there were also products listed both as “offerings” and as “wants”. Hence, due to the freedom and autonomy to choose what one lists, people assure they will perform only tasks that they actually enjoy.

A week after my registration I got a call from an STAP user. Since I had listed as offering the “maintenance of musical instruments”, he contacted me asking for help to fix a set of broken speakers. In this way, this user asked for guidance to find replacement speakers in the internet. We agreed to meet so that he could show me the broken items. After this meeting he asked me to

send him internet links to the available speakers he could acquire in order to make the replacement, which he would do by himself. Accordingly, I sent him a list of all the available options and we agreed to make the transaction through STAP. For that we had to meet again. This happened because, in order to complete a transaction in the community exchange platform, all the involved people have to be present and fill in the information on the website. In this way, he had to log in to his account and add the transaction information in order to give me the agreed credit of 1 hour.

Overall, the experience with “time banking” proved that alternative currencies can provide an efficient alternative to the mainstream and a higher sense of community through mutual trust. In this concern, online alternative currencies connect the openness and freedom of the internet to the practical part of daily life.

### **Voluntary Simplicity practice – a room without a Euro**

Inspired by the practice of Voluntary Simplicity (see section B3) I decided to attempt furnishing an empty room without using money. For this attempt I relied on a collection of discarded objects and on my network of friends. The first challenge was to acquire a bed. Since I had a mattress which was donated by a friend, I just needed a structure to hold it. For that, I collected two pallets from a trash container near Hakaniemi area and did the adjustments and finishing needed in order to create a steady structure for my bed –

the process can be seen in pictures X to XX. After this, I collected some pieces of a shelving system and four table legs found in the recycling room and adapted them to create a shelving unit and a small table.



After I had this basic furniture, the community aspect became very important. Close friends and acquaintances heard about the project and started to donate objects that were idle in their storage rooms. As a consequence, in one month span I had more furniture than I needed. I had received and found tables, lamps, linens, curtains, cutlery, dishes, chairs, posters and kitchen appliances. Furthermore, when I moved out from the room, all the furniture and items were donated to other people who were in need for them.

Overall this experience proved the importance of community. In this way, a supporting community can facilitate the performing of alternative practices. Further to this, this experience provoked a reflection about which kind of objects and necessary for one’s survival and which are superfluous. Moreover, it also raised a reflection about the amount of idle objects we are used to keep in our homes.

# APPENDIX 3

## PEOPLE ENCOURAGED TO TRY PRACTICES AND EVENTS

### Case one: Mira Martinaho – Urban farming in Pasila

Mira Martinaho, 50, got involved in Dodo's urban farming movement. She met the activist Päivi Raivio (see interview in section B1), who was planning an urban farming space near the apartment where she lives. Her initial goal was to grow vegetables from her home country (Brazil) which she does not find in Finland. Even though she has been successful in growing flowers and decorative plants inside her house, she had never heard about the urban farming movement before. Inspired to try, she got a sack to farm during summer 2013 in the Pasila urban farming area.



She started by planting seeds (such as tomatoes, savoy, lettuce, rucola and zucchini) and watering them regularly. However, when her plants started to grow, her sack was rapidly filled. By seeing the success of her crop, she got inspired to increase her farming area. For this, we had some conversations with others involved in that urban farming area and searched the internet to find alternative ways of urban farming. As a result, she got some discarded Styrofoam boxes and created a farming place in her apartment's balcony.

For Mira, urban farming was easy. She stated that she had to dedicate only ten minutes per day to water and harvest her crops. She harvested over one kilo of tomatoes and zucchinis, enough to feed herself and her son. Furthermore, she stated to have exchanged knowledge with other urban farmers - "I have learned a lot about how to grow plants and how to prevent bugs using natural techniques".

Nowadays she is enthusiastic about urban farming and stated to be proud of eating food she grew by herself. Also, she stated that by engaging in this practice, she achieved a better control over the food she eats. In this way she argued: "now I know that what I am eating is fresh and clean from pesticides."

Furthermore, she is enthusiastic about the next farming season, "I will definitely continue next year". Nonetheless, she has now searched for information about window and vertical farming and is planning to build such systems in her house for the coming farming period.

Further to this, she also engaged her son (14) in the practice. In this way he has been helping with watering, harvesting and general maintenance of the space. He stated he enjoys the practice and that “it seems that the food tastes better than from the supermarkets”. According to this, Mira defends that it is very valuable for her son to grow in contact with nature and have this farming experience.

## **Case two: Roman Lihhavtshuk – Trashlab fixing event**

Roman was encouraged to join the Trashlab fixing event in Arkadia Bookshop. He visited the event together with a friend who was willing to make a short film about grassroots initiatives. Roman took some broken objects – sunglasses, a toy and sunglasses case - and went to the repair café on a Saturday afternoon. According to him, the event was beyond his expectations: he was expecting “people seated repairing things”; however, he said that the event was “fun and more like a social event than real repairing”. In this way, he learned a lot by observing the objects being fixed and by talking with the people present in the event: “I saw how primitive all the objects are, they are just sometimes too small” – about repairing a laptop computer.

From this experience, Roman stated that he would join such an event again, especially for the social aspect. Nevertheless, he would join again if he had “something serious to repair”. For instance, he told about a problem he had with a laptop

computer some weeks before the event and said that, if he knew about the event, he would have taken it to be fixed instead of throwing it away. However he said that there is a “thin line” between things you need to take there to repair and things you do not. In this concern, he stated that the event is a valuable source of knowledge for repairing complex things. As a consequence, he has recommended the event to many people.

Further to this, Roman and a friend made a video about the experience (called Yellow & Trash) which can be seen in the Youtube link: <https://www.youtube.com/watch?v=YmwDMKFRAQE>

# APPENDIX 4

## TRASH MEAL

### EVENT

#### STEP-BY-STEP

#### REPORT

First, an online conversation was set between me, the activists Mikko Laajola, Päivi Raivio and Emma Kantanen (see interview summary in section B1), and two other people from the “aware” group. In this, the participants were encouraged to add others who they assumed to be interested in the practice or its related topics. As a consequence, in a two hour span, we were a total of 20 people in the conversation, from various interests and backgrounds. In this way, besides the initial participants, there were a group of outsiders consisting of the organizers of the CS on Movies event, the “Brown Bananas” group (a student initiated project about food waste; see [www.facebook.com/brownbananas](http://www.facebook.com/brownbananas)), and others.

The conversation between these different groups became very active, something that triggered people to take action. For instance, the Brown Banana group started calling local Supermarkets to ask about the destiny of their waste and if they could donate to the event. At the same time, other participants started sharing information about possible places to collect discarded food. As a consequence, people from the “outsiders” group started to show interest and curiosity

towards the practice. The participants started to organize days for collecting discarded food from the supermarkets’ trash bins during the two nights prior to the event. Initially, there were three people who confirmed presence for the first night. Nevertheless, when the time and place to meet was set other participants decided to join, completing a team of 8 people comprising all three groups. Therefore, this proved the issue of providing a “supporting community” as essential for triggering people into action.

The group met at 22:00 in Hakaniemi, which is the main area for the practice of collecting food waste in Helsinki. When reaching the trash bins of the first place, another group of people was already present. This group left saying - “time to change turns”, what confirmed the community feeling between the practitioners of this practice and its consequent mutual respect. However, at this first place of collecting food, the division of groups was noticeable: the “activists” were the first to reach the bins followed by some of the “aware”. At the same time, members from the “outside” group were mostly watching and taking pictures of the act. Nevertheless, after a while, the groups started to merge to the point where everyone was engaged in evaluating and collecting food. Concerning the food, the group found a diverse range of vegetables, bread, potatoes and cherry tomatoes.

After this place, the group headed to another nearby store’s trash bins. However, this place, besides being inside a courtyard, the supermarket had added padlocks on the containers, which made difficult the collection of food from that

establishment. Nevertheless, the group found half of a cabbage from a household waste container. After this, as the other nearby supermarkets were still open, the group decided to walk around the area in search for other places. During this search, participants who were before classified as “outsiders” were actively suggesting places. Nevertheless, besides the activists, all other members showed a slight sense of fear when entering new places.

After an unsuccessful search around Sörnäinen region, the group returned to the Hakaniemi area to reach another well-known food collection place. Whereas the other markets had small plastic bins for the discarded food, the trash bin of this establishment is one big container located in a parking lot. In this way, the condition demanded that someone entered the container in order to reach the products located in its center. Nevertheless, this was the most abundant and diverse place visited that night. From its container, the group found salmon, beef, chicken, a diversity of pastries and bread, as well as flowers and vegetables.

Due to this abundance, many of the participants collected products for their own house, as well as for immediate consumption. The experience finished at 23:30pm, and the participants took the collected food home to preserve until the event’s evening. Overall, the participants stated to be impressed with the amount, diversity and especially the quality of the food found in the supermarket’s trash bins in Helsinki. Moreover, participants from the “outsiders” group stated to be eager to repeat the practice again, especially

due to the social part of it.

On the following night a new group was organized to collect food. The group of five people comprised participants from the last evening and other “aware” and “activist” participants who had not joined the previous experience. This group met at 22:15 in Pasila and started by checking the biggest local supermarket’s trash bin. As this is also a well-known area for collecting discarded food, there were already people prior to our arrival. From this place the group found an enormous amount of fresh baked pastries, herbs, sausage, salami, bell peppers, broccolis and eggplants.

Two participants then had to return home; therefore only three continued to Hakaniemi, where they followed the same route made in the previous night. However, the quest was not as successful as during the previous night. Nevertheless, the group collected breads, pastries, herbs, potatoes and vegetables.

On the event’s morning the participants took the food collected during the previous night to the space where the event would happen (Aalto Media Factory). The bags from these nights were enough to fill the fridge. Nevertheless, the members of the Brown Bananas initiative had succeeded in creating an agreement with local supermarkets. In this way, this group collected more food donated by establishments near the Aalto Arts campus.

The event was advertised around the Aalto Arts campus and through the CS on Movies social media pages and posters. Since the event was

planned to start at 18:00 pm, at 16:00 pm a group of ten people, both participants of the food collection experiences and newcomers, gathered in the kitchen to help cook the food. This cooking process was open: everyone was allowed to suggest and prepare a dish. In this way, the final menu was:

#### Starters

- Ham and Cheese Croissant
- Salami pizza
- Meat pastries
- Assorted breads (white, rye and whole grain)
- Cheeses (blue cheese and herb cheese)
- Spiced cream cheeses
- Salami
- Finnish Bread cheese with cloudberry jam
- Oven backed potatoes with blue cheese
- Bell pepper slices
- Cold smoked salmon slices
- Rice and carrot Karelian pies

#### Main dish

- Smoked salmon
- Lettuce, rucola, water grass, tomato and bell pepper salad
- Steamed broccoli and carrots
- Eggplant and cabbage escabeche
- Potato and dill mayonnaise

#### Desert

- Sweet croissants with chocolate and orange paste
- Muffins
- Sweet buns

#### Drink

- Lemon flavored water

At 18:00pm people started to arrive for the event. There was an enormous amount of food prepared. However, as the CS event had had an overall attendance of 8 to 12 people, the group was worried with the amount of leftovers that could be generated. Nevertheless, a total of 51 people from various departments of Aalto University attended the event.

The starters were served prior to the screening of the movie and the rest of the menu was served afterwards. A minority of the participants were reluctant about eating the food. Nevertheless, by seeing the vast majority eating the available food, gradually all the participants engaged in eating the food made from collected ingredients. The event also featured a presentation by the Brown Bananas group on the topic. Consequently, during the last part of the event, the attendants were freely discussing about the topics treated in the event and a series of interviews were carried out with the participants. These interviews aimed at capturing issues such as the personal experiences with collecting the food, the interest in joining such a practice and the aspects of responsibility and ethics concerning food waste. These interviews are described in the following report.

## Interviews on the experience

The interviews about the experience were centered on four aspects of the experience: (1) the eating experience, (2) ethical issues involved, (3) the collecting experience and, (4) curiosity to engage.

(1) About the eating experience, we interviewed people who were not present during the collecting nights. I wished to shed light on this topic especially due to the initial reluctance of some participants to try the food. These participants, after trying the food, stated that the discarded food tastes like the normal food purchased from supermarkets. Vahid, who has a hobby as chef and therefore has a preference for high quality products, stated that the food was fresh and normal: “I thought that discarded food would be dirty, with something spilled on top”. In consonance, many people stated to be amazed with the quality, diversity and quantity of the food found. For instance, four other interviewees stated to be surprised with the “freshness and packaging of the food”; in other words, as Nadia said: “it is the same food. It was just located on a different place”.

(2) The experience raised a debate about the ethical aspect of collecting discarded food. The majority stated that this aspect depends on the surrounding community: whether there are people depending on that food for survival or not. In this way, the interviewees argued that this practice is ethical to be performed in Helsinki because the food is sent to landfills and there is no community depending on it. Furthermore, people

argued that, even if there were more people to take it, it would make a remarkable difference due to the amount of discarded food. Adding to that, Caroline said, “unethical is to take food which was produced, for example, in Africa, where there are hungry people, fly it all the way to Finland and then throw it in the trash here.” Moreover, Andrea stated: “it maybe has a bad side, of breaking some law, but it has a more important side, which is of saving the food”.



Picture by Glen Forde

(3) Further to this, people previously into the practice likened their motivation to environmental concerns. For instance, Saija argued: “By collecting discarded food I can have carbon neutral food, and also eat organic things I wouldn’t be able to buy at the store”. Accordingly, two other participants argued that taking food from the trash gave them the feeling of “saving the food”. At the same time, other interviewees linked the motivation to financial reasons and to the feeling of “adventure”. For instance, Johanna stated, “It had this adventurous, risky feeling of being alone in the dark, searching through the bins”. Accordingly, Mridu, who collected food for the first time for the event, argued: “I didn’t know that it would be like an adventure, and after I experienced it and felt this adventurous feeling, it became more attractive”.

In this way, members of the “aware” group stated experiencing was completely different from the former idea they had about the practice derived from articles, documentaries and friends. In this sense many stated that the experience was “eye opening”. For instance, Mridu said, “it changed the way I see trash bins, now I see possibilities in them”. Nevertheless, another topic that was constantly raised by the participants of the experiment was the “community aspect”. In this concern, many argued that “doing it together” was one reason that encouraged them to engage in the activity. In accordance, people who had not tried the practice yet said they would try if together with other people. Also, many argued that the social setting provides courage to overcome fear and shame barriers. Furthermore, Hesam liked his motivation for continuing in the practice to

“have a social gathering and enjoy it with people I like”.

(4) As a result of the debate created in the event, people from the group who had never tried the practice confessed a rising curiosity towards it. For instance, Antti stated to be willing to “take the challenge to do it”. However, the “community aspect” cited before was also recurrent in this group of people. Furthermore, many stated the need for someone or something to guide and show “how-to” perform the practice. For instance, Juan said, “I would like to have someone with experience to guide me”.

Further to this, after the experience provided by the event (and the related preparatory tasks) all the participants argued to be willing to try collecting discarded food. Besides the ones who do it regularly, the ones who used to do it in the past were encouraged to restart it. Moreover, the ones who did it for the first time for the preparation of the event stated a willingness to continue in the practice. For instance, Mridu, Amanda and Heidi are now performing the practice with new groups of people and discovering new places to collect food. In this way, they went from “aware” or “outsiders” to “activists”.

As a consequence, a Facebook based group was created in order to build a local community around the practice. This group, called “Diving in Helsinki”, was established for three main reasons: Firstly, due to the participants’ will to continue in the practice; secondly for the remarkable amount of people willing to join the practice; and thirdly because of the enthusiasm of the CS on Movies

event organizers to incorporate the “trash meal” into their event. However, the group had to have its privacy set as “secret group” in order not to spoil the food collection places by rising awareness of the supermarkets. This group has now (6.3.2014) a total of 50 members and became an active place for exchanging information about places for food collection as well as for discussions on the topics

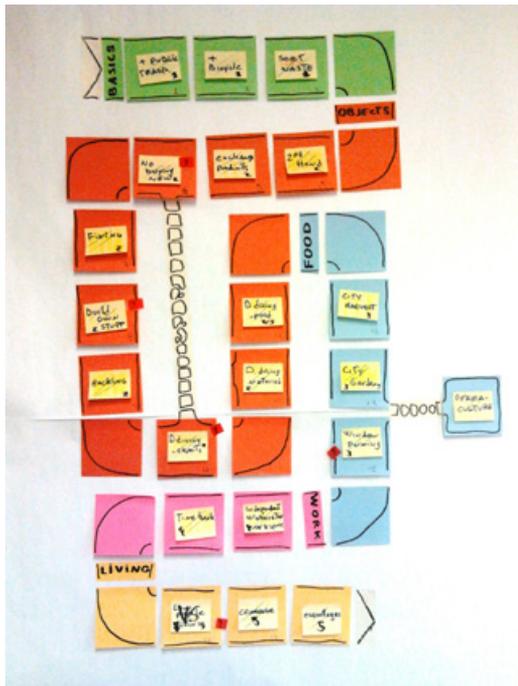
related to the practice. Furthermore, the “trash meal” model has been replicated monthly as part of the CS on Movies event. Adding to this, Vahid, who forcibly tried reclaimed food for the first time during this experiment, became official chef of the movie events and is now actively promoting the practice through workshops and lectures in different events.

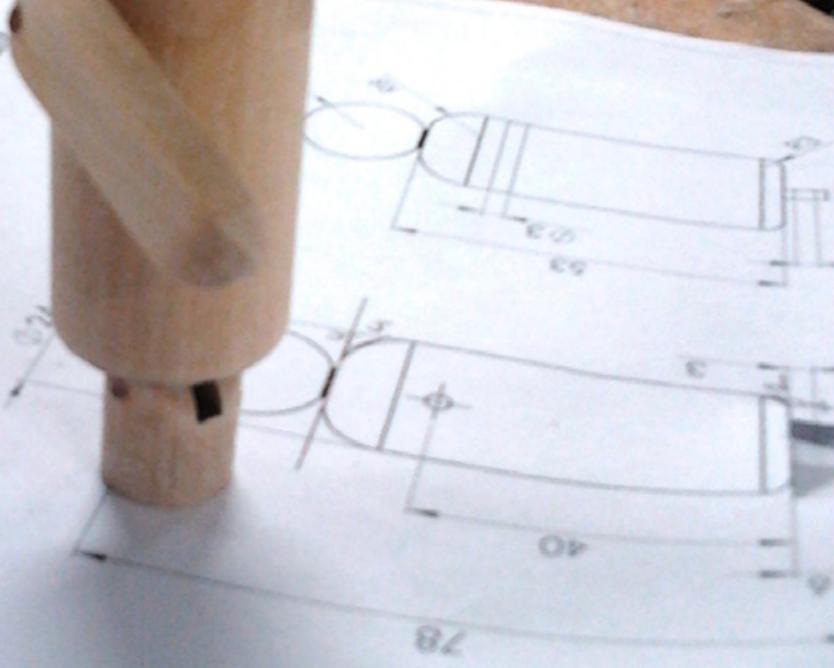
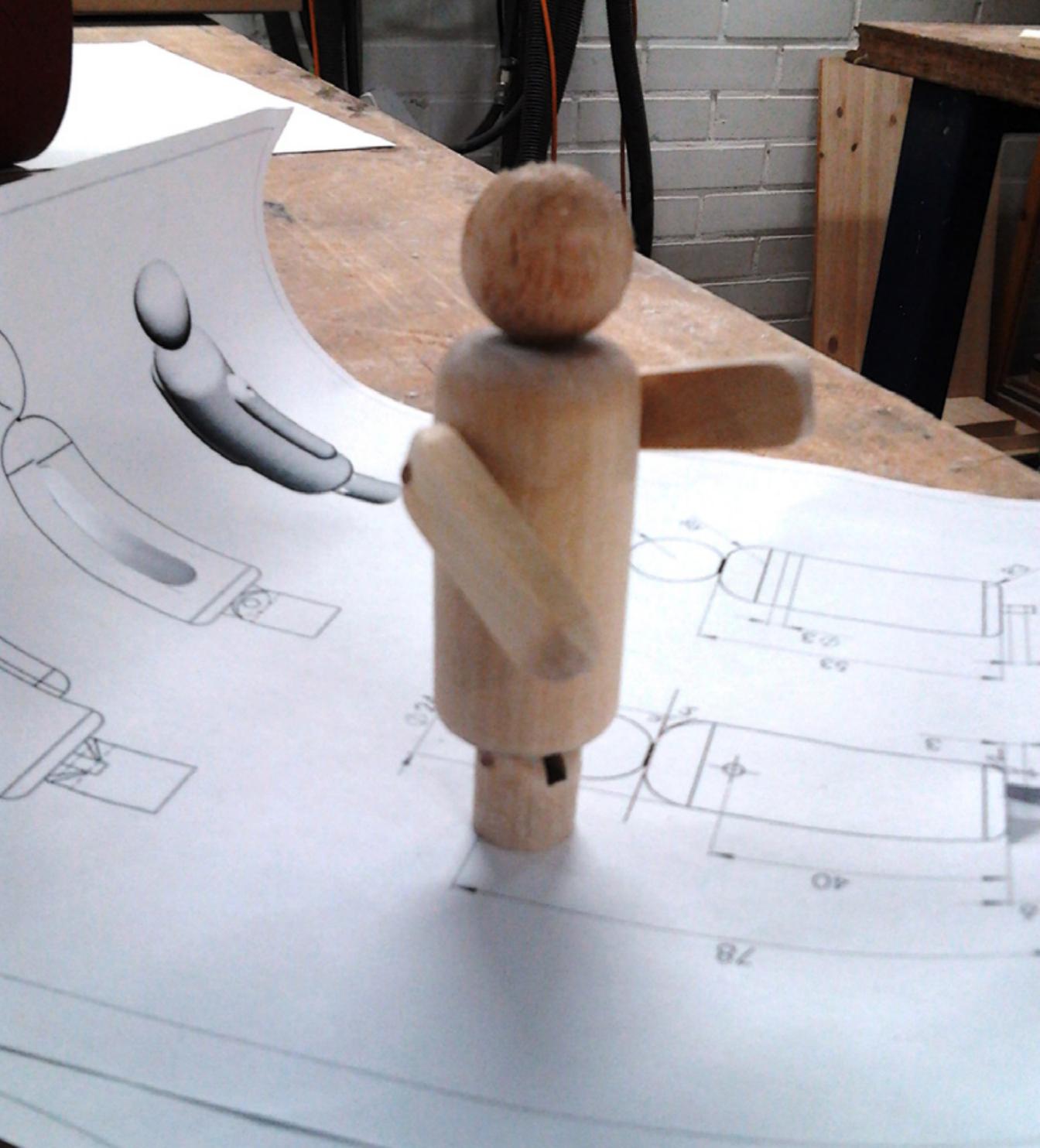


Picture by Glen Forde

# APPENDIX 5 IMAGES OF THE DEVELOPMENT OF THE DESIGN OUTPUT

Here I present few pictures about the development process of the design output, such as images of the creation of the pattern of practices and images of the production process of the figures used to illustrate the guidebook.







## **A Journey Through Alternative Ways of Living: a design approach for scaling up grassroots movements towards sustainability**

Given the growing world-wide urbanization and the need for achieving a sustainable way of living, there is an urgent need for developing possibilities sustainable ways of urban living. This study was carried to find the existing urban sustainable practices and to propose connections and complementarity between them. For this, this study was based on emerging design practices to foster and disseminate the practices to a wider public, which resulted on the creation of the “Guidebook for Urban Freedom”.

**Nicholas Torretta** graduated with his MA’s thesis “A Journey Through Alternative Ways of Living: a design approach for scaling up grassroots movements towards sustainability + A Guidebook for Urban Freedom” with a degree in Creative Sustainability through Aalto University in Helsinki, Finland. Nicholas has worked since 2008 with several NGOs using design as a tool to empower and develop communities towards sustainable futures. Creator of the VOQ project ([www.viraroque.blogspot.com](http://www.viraroque.blogspot.com)), he has been running DIY and creativity workshops in various places such as World Design Capital Helsinki 2012, Metropolia University (Vantaa, Finland), SESC (São Paulo, Brazil) and others. Currently he focuses on the use of design to enable off-grid and sustainable living in urban scenarios.

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