



COMMON GROUND

A TOOL FOR DIALOGUE AND DECISION-MAKING
 TO ENCOURAGE SUSTAINABLE LIFESTYLES IN THE CITY NEIGHBOURHOOD

NATALIE NOVIK





CHALMERS

COMMON GROUND

A tool for dialogue and decision-making
to encourage sustainable lifestyles in the city neighbourhood
Natalie Novik

© NATALIE NOVIK, 2017.

Final seminar: 23rd of November 2016
Examiner: Lena Falkheden
Supervisor: Emilio Da Cruz Brandao

Master's thesis at Chalmers Architecture
Master's programme Design for Sustainable Development
Chalmers University of Technology
SE-412 96 Gothenburg, Sweden
Telephone + 46 (0)31-772 1000

ACKNOWLEDGEMENTS

Thanks to Emilio Brandao for never ending support, ideas and guidance, to Lena Falkheden for valuable input and understanding, and for being an inspiration during the whole master's programme.

Thanks to Charlotta and all people in Fridhem community for help with the workshop in Stjärnsund, to David and Elisa for running wonderful permaculture project which brought me to Stjärnsund.

Thanks to Åsa Rinström for help with organisation of workshops in Skattungbyn. To Richard and all "Hansens" people for inspiration and positive mood. To students at Mora folkhögskola course 2016 for their honesty in opinions and input.

Thanks to all people who were kind to meet me for interview and share their ideas and visions.

Thanks to Karen Høstmark, Klara Mörk and Erica Alatalo for proofreading and useful comments. To my friends and classmates for supportive talks, help with testing the tool prototype, giving feedback and just being around.

Thanks to Peter Selberg and Siddharth Radhakrishnan for support and help with making a logical story of my project.

Thanks to CSS group for testing the final version of the game for the first time and giving a feedback.

Thanks to people attending workshop during the Inspiration festival 2016 and giving their feedback.

Thanks to Mikaela, Frida, Razjan and Eve, students of MPDSD studio "Design and planning for Social Inclusion" 2016, for collaboration on the project in Hammarkullen and organising final workshop. Thanks to Amanda for participation and inspiration.

Thanks to Anders Kyrkander, Lisa Bomble and all people attending final seminar on 23rd of November for useful discussion, ideas and feedback.

To all of you, thank you! Without you this works would never be completed.

ABSTRACT

Historically cities were developed as places to share. But in a time of vast economic growth and increased living standard, when society has become more mobile and individualism has grown stronger, sharing has become a sign of the poor. The social norm of owning things individually took root during the development of modern lifestyles. The design professions have a direct connection to this process, and as an architect it is important to rethink what we design and start to focus on sustainable lifestyles in the living environment.

Collaborative consumption is one of the ways to “have more while possessing less”, and this thesis is an exploration of how collaborative consumption could be applied to urban planning. In this thesis I investigate how common spaces in neighbourhoods can be shared, and how “sharing spaces” can become places to develop social connections, decrease individual consumption and encourage the process of building trust.

Who is responsible for this process - authorities or inhabitants? How to build a common ground between groups who often do not collaborate?

One of the methods that I am using in the thesis is based on learning the approaches of low-impact living from “practicing experts” (people living in intentional communities in rural areas). From there I get inspiration to develop a collaborative design tool.

The result of this master’s thesis is the “Common Ground” game, a tool for dialogue and decision-making. The game is developed to understand the needs and possibilities of the community and area, and to develop a scheme for different sharing facilities particularly for the inhabitants of that area.

I hope to raise a discussion on the topic of sustainable living in an urban context, and create an initiative to develop city neighbourhoods to be both human and nature friendly using collaboration as the main tool.

KEY WORDS

SUSTAINABLE LIFESTYLES COLLABORATION SHARING LOW-IMPACT
URBAN DESIGN AND PLANNING
PARTICIPATORY METHODS NEIGHBOURHOOD DIALOG

ABOUT NATALIE

Natalie has a degree in architecture from the Belarusian National Technical University, where she worked on a variety of projects ranging from the fields of housing architecture, urban planning, landscape architecture and industrial architecture. Her diploma project was within the Department of Industrial Architecture on the topic “Industrial Landscapes: Transformation of an Old Industrial Area in Minsk to an Art Space”. She also has work experience from urban planning and architecture, as well as in the cultural sector.

“I always had a big interest in DIY (Do It Yourself) architecture, which came and developed during my experience as a volunteer in the culture centre Stanica in Žilina, Slovakia. There, I was mainly working in the field of cultural management, but I was also responsible for the ceramic atelier. It was the place where I met a lot of inspiring people working within the topic of recycled or community based architecture.”



Further Natalie continued her studies at Chalmers, Architecture Department, within the programme Design for Sustainable Development, where she has been working on projects touching aspects of sustainable lifestyles and participatory practices throughout her studies.

CONTACT

✉ natalie.novik1@gmail.com

📱 +46 760532711

INSPIRATION

Sustainable ways of living have always been my passion, and it has just increased while being enrolled in the master’s programme Design for Sustainable Development at Chalmers Architecture.

The wish to explore the topic came from personal experiences. Where would I like to live: in the countryside with the intention of living self-sufficiently, surrounded by co-thinkers or do I want to stay in the city with all its opportunities and cultural life that it offers? If a person chooses to downshift, where is the place to be? Why do people wishing to lead low-impact lives tend to move to rural areas, and quite often end up creating their own small-scale communities? Is community more important than a personal approach to self-sufficiency? Is it possible to create sustainable living models in the city? And how can the design professions add to this topic?

Throughout my studies I have worked on projects with a focus on participation. Many of them included participatory workshops with children from various backgrounds: in Angered (a suburb in Gothenburg) while participating in the design studio “Design and Planning for Social Inclusion”, in Kenya while working on a project within the “Reality

Studio”, in Skara municipality during the “Design and Planning for a Sustainable Development in a Local Context “ studio. During these design studios the workshops have both been about gathering and grasping opinions as a way to understand the needs of the users, as well as co-design workshops, where we developed the program or the design concept together with the participants.

During the “Design and Planning for a Sustainable Development in a Local Context” studio, our group developed a board game aiming at being a tool to encourage sustainable living within the municipality of Skara. The project was very well received, and showed us a new way of working with participatory processes through a game-based approach. The process of this project encouraged me to follow up the work on the development of the tools as a dialogue method.

Common Ground is a continuation of my previous work at Chalmers, and I hope to be able to develop these topics and tools even further in the future and in my professional practice.

TABLE OF CONTENTS

INTRODUCTION	9
WHY? WHAT? FOR WHOM?.....	12
AIM, PURPOSE.....	13
QUESTIONS.....	13
METHODS.....	14
PROCESS.....	15
DEFINITIONS.....	16
READING INSTRUCTIONS.....	18
PART I. UNDERSTANDING THE CONTEXT	
CHAPTER 1. BACKGROUND	22
HOW DO WE LIVE AND WHAT WE CONSUME.....	25
ROLE OF VALUES IN CONSUMPTION THEORY.....	28
APPLICATION TO URBAN CONTEXT.....	30
CHAPTER 2. SHARING IS CARING	32
WHAT IS SHARING.....	35
SHARING ECONOMY AND COLLABORATIVE CONSUMPTION.....	36
WHO SHARE? WHAT TO SHARE? WHY SHARE?.....	38
CRITICISM OF SHARING ECONOMY. PLATFORM COOPERATIVISM.....	40
<i>example: Brazil</i>	41
SHARING CITY.....	42
SHARING PARADIGM.....	44
<i>example: Amsterdam</i>	46
<i>example: Los Angeles</i>	47
WHAT IS THE SHARING CITIES NETWORK?.....	48
GOTHENBURG CONTEXT.....	48
CHAPTER 3. LOW-IMPACT LIVING	52
SUSTAINABLE LIFESTYLES.....	54
LOW-IMPACT LIVING.....	55
LOW-IMPACT SETTLEMENTS.....	55
<i>Ecovillages</i>	56
<i>Transition towns</i>	58
CONCLUSIONS.....	59

CHAPTER 4. LEARNING FROM PRACTICING EXPERTS	60
INSPIRATION AND CHOICE OF PLACES.....	62
WORKSHOP I.....	66
WORKSHOP II.....	72
WORKSHOP III.....	78
CONCLUSIONS.....	84
REFLECTIONS.....	90

PART II. DESIGN	94
CHAPTER 5. ALL YOU NEED IS LESS	96
THEORETICAL FRAMEWORK.....	98
COMMON GROUND.....	100
APPROACH.....	104
WHAT.....	112
WHERE.....	118
WHO.....	120
HOW.....	120
<i>strategies</i>	124
<i>design criteria</i>	127
CONCLUSIONS.....	

CHAPTER 6. A TOOL FOR DIALOG	128
A TOOL FOR DIALOG: IDEA, AIM, WHO CAN PLAY.....	130
THREE MAIN PRINCIPLES.....	135
CONTENT.....	138
ELEMENTS OF THE GAME.....	139
MANUAL.....	142
CONCLUSIONS.....	144

CHAPTER 7. TESTING SESSIONS	146
ABOUT TESTING.....	148
TEST I . <i>Chalmers campus</i>	150
TEST II <i>Inspiration festival</i>	160
TEST III <i>Re:Challenge</i>	166
CONCLUSIONS.....	177

CHAPTER 8. CONCLUSIONS AND REFLECTIONS	178
CONCLUSIONS.....	180

REFERENCES	184
APPENDIX I WORKSHOPS MATERIAL	198
APPENDIX II CARDS FOR TOOL	202

INTRODUCTION

LET'S

SET UP

A STAGE

WHY:

80 % of the European population is urban, and cities have become islands of consumption and the main producers of emissions. Our growing environmental footprint and use of resources pose a threat to the Earth and to humanity. We have made our planet incredibly vulnerable with our own actions. During the Anthropocene, the climate on the planet started changing more rapidly, oceans are acidifying and losses in biodiversity are significant (WWF, 2016), therefore the driving force behind the transition is exceptional. Achieving sustainable patterns of resource use is therefore a key part of achieving sustainable development (SERI, 2009).

The concept of planetary boundaries, for estimating a safe operating space for humanity with respect to the functioning of the Earth System is going to influence our lifestyles and societies. Filling knowledge gaps will require major advancements in Earth System and resilience science (Rockström et al, 2016). Redirecting our path toward sustainability requires immediate fundamental changes in the most important systems: energy, food and resource consumption (WWF, 2016).

In order to become responsible Earth inhabitants and use less of the planet's resources we should learn one easy thing - to have less stuff. In our modern culture, having less have become synonymous with having a

poorer quality of life, but this, however, is not true. There are many other ways to "have" without possessing. How to reach this will be discussed in this thesis.

WHAT:

Through history, collaboration was the way for the humans to survive tough conditions. It was a necessity to form groups to grow and harvest food, to work together, share skills, to reach common goals. Cities essentially were developed as places to collaborate too. I suggest the idea of "sharing spaces" in the neighbourhood and will investigate how collaboration can encourage more sustainable living and consumption in the neighborhood.

FOR WHOM:

This project addresses municipalities, housing companies and housing cooperatives, tenants organisations and various groups of inhabitants. Those are the target user groups for the tool. However, the tool has also an educational part, therefore it can be used by vast variety of people, who are not aware of the benefits of sharing facilities yet but can be inspired by the tool.

AIM

The overall aim of this thesis is to explore the concepts of collaborative consumption, sharing cities and low-impact living in relation to urban planning and design.

*The aim is further to develop a **dialogue tool** in order to facilitate sharing on a neighbourhood level.*

PURPOSE

To increase collaboration between stakeholders in order to reach common understanding on the importance of sharing facilities in the city neighbourhood.

To encourage sustainable consumption habits for city dwellers.

RESEARCH QUESTIONS

<> How can sharing and low-impact ways of living be implemented in the city district?

<> How can design professionals learn from low-impact living initiatives?

<> How to facilitate a dialog between stakeholders in the neighbourhood in order to develop more sharing facilities for city inhabitants?

DESIGN QUESTIONS

<> What spaces could be shared in the neighbourhoods and how would it work?

<> How can architectural planning inspire collaboration and lower consumption?

<> What are the new sharing facilities which can function in the city neighbourhood? Where can they take place?

METHODS

ANALYSIS:



literature studies
case studies
observation
comparison
evaluation

LEARNING FROM "PRACTICING EXPERTS"



study visits
interviews
survey
mapping
workshops

DESIGN :



sketching
mapping
diagramming
prototyping
creating models

TESTING:



testing
evaluating
concluding

During the work with this thesis I have been using a variety of methods.

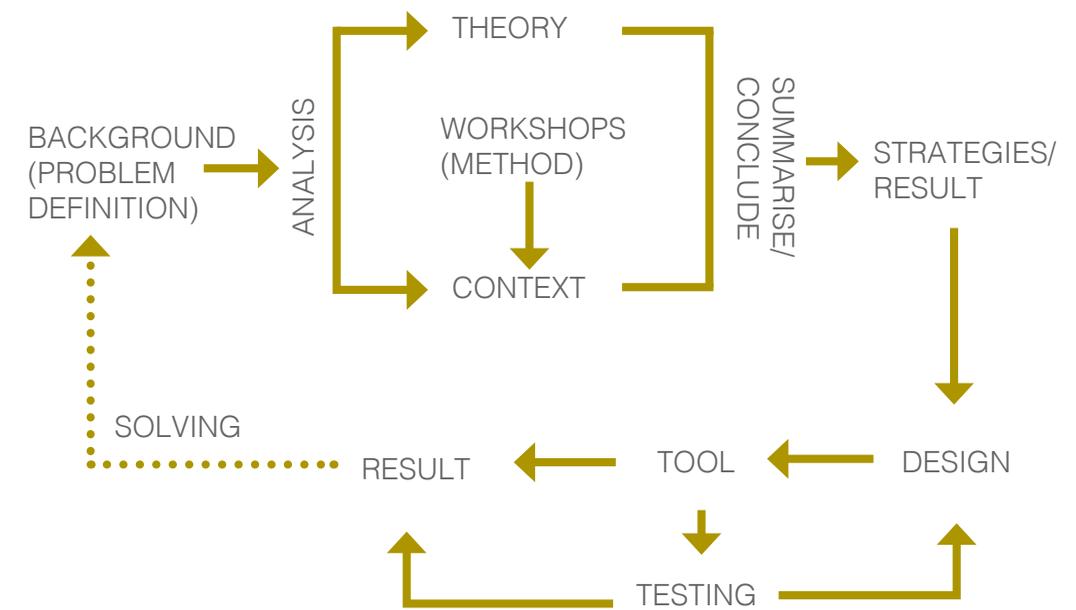
Analysis have helped to understand the current state, global trends and movements, as well as what initiatives already exists on the topic of sustainable living. For this I have been using literature references such as scholarly articles, books, and interviews with professionals in the investigated field, documentary films, etc.

As the main method for participatory design I have chosen to work with Practicing Experts. According to the definition, Practicing Experts are people who are living according to principles of sustainable living, who tend to downshift, and are actively involved in the life of the local community. Mostly, in my case studies represented people who live in small-scale rural communities.

Design requires creative thinking, a lot of sketching, mapping, diagramming, drawing, as well as developing prototypes and models.

Not the least important is testing and developing further prototypes based on the results. Concluding and evaluating is an inseparable part of the work.

PROCESS



My process starts from defining the problem I want to work with concerning overconsumption and high impact lifestyles in the western world.

The process starts from the analysis of the current situation based on data research, followed by an investigation of low-impact lifestyles as an alternative to the consumer society. This is investigated through literature, study visits and interviews.

Through various participatory workshops I have gathered information and reflections from people who practice low-impact living, and use the results to conclude the strategies and guidelines for design proposal.

Instead of making an architectural design proposal, I have designed a tool for dialogue in order to facilitate the process of creating networks for sharing facilities in the neighbourhood in order to reach more sustainable lifestyles.

DEFINITIONS

ALTERNATIVE LIFESTYLE

is a lifestyle diverse in respect to mainstream ones, or generally perceived to be outside the dominant cultural norm. Sometimes refers to the word “subculture”

COLLABORATION

is the action of working with someone to create or achieve something.

COLLABORATIVE CONSUMPTION

is an economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership. It is reinventing not just what we consume but how we consume.

CONSUMER SOCIETY

is a society in which the buying and selling of goods and services is the most important social and economic activity (Oxford dictionary)

CONSUMPTION

is the action of using a resource (according to Oxford dictionary)

CO-OPERATIVE

(also known as co-op, cooperative or coop) is an autonomous association of people united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled business.

ECO-VILLAGE

is an intentional or traditional community using local participatory processes to holistically integrate ecological, economic, social, and cultural dimensions of sustainability in order to regenerate social and natural environments.

GAMIFICATION

is a learning approach when elements of the game are applied to non-game setting.

INTENTIONAL COMMUNITY

is a planned residential community designed from the start to have a high degree of social cohesion and teamwork, where people share responsibilities and resources. The members of an intentional community typically hold a common social, political, religious, or spiritual vision and often follow an alternative lifestyle. Examples of intentional communities include collective households, co-housing communities, ecovillages, communes, survivalist retreats, kibbutzim, ashrams, and housing cooperatives.

LOW-IMPACT LIVING

is a lifestyle that aims to use as little resources as possible and reduce the impact on the environment.

NUDGING

to push something or someone gently. In contemporary behaviour science it is concept of indirect suggestions instead of rules to influence people’s behaviour.

SHARING

is the joint use of a resource or space. It also refers to the process of dividing and distributing. Sharing can also mean giving or gaining something, often relating to the process of jointly enjoying something.

SHARING CITY

is a concept developed by McLaren and Agyeman, and introduces the city as an inclusive and open place to share and collaborate.

SOLIDARITY ECONOMY

is an economy based on efforts that seek to increase the quality of life of a region or community through not-for-profit endeavours.

SUSTAINABLE LIFESTYLE

is a lifestyle that uses as little resources as possible and causes the least amount of environmental damage for future generations to deal with.

VOLUNTARY SIMPLICITY,

or simple living, is a way of life that rejects the high-consumption, materialistic lifestyles of consumer cultures and affirms what is often just called ‘the simple life’ or ‘downshifting.



READING INSTRUCTIONS

The report is divided into two parts:
Understanding the Context and Design
Implementation.

PART I. UNDERSTANDING THE CONTEXT

Chapter 1: “WE LIVE LIKE TEENAGERS WITH PARENT’S CREDIT CARD”

The chapter contains background information about how we live, what we consume and the role of values in consumption theory.

Chapter 2 SHARING IS CARING

The chapter describes the phenomena of sharing, the history of sharing, and the benefits. Further on, it includes a discussion of how sharing is implemented in contemporary life, the concept of the Sharing Economy and Collaborative Consumption, as well as contrary theories. Lastly, the concept of Sharing City is introduced in this chapter, and shown through different case studies.

Chapter 3 INITIATIVES ON SUSTAINABLE LIVING

The chapter introduces sustainable lifestyles and what measures are taken to reach them. The concept of low-impact living and low-impact settlements are also described in this chapter. It highlights Eco-Villages and transition movements, and information about the case studies is presented to develop a deeper understanding of the topic.

Chapter 4 LEARNING FROM PRACTICING EXPERTS

The chapter is where work with “practicing experts” is presented. In this chapter you find an extensive description of the method, as well as the results of the workshops and conclusions from the study trips.

PART II. DESIGN

Chapter 5 ALL YOU NEED IS LESS

This chapter is a bridge between conclusions from analysis part and further design. The concept of “Common Ground” and “Sharing Space” are presented in this chapter, as well as an analysis of what, where and with whom we can share in the neighbourhood.

Chapter 6 A TOOL FOR DIALOG

The chapter describes the process of designing a tool and the final result. Further, a list of all the elements of the game, the game manual as well as some conclusions are presented.

Chapter 7 TESTING SESSIONS

The tool was tested three times. In this chapter you can find descriptions of the testing sessions, context and conclusions made after each session

APPENDIX I

Finally you can find material from the workshops

APPENDIX II

Where you find the cards for tool which can be printed out and used together with a board.

UNDERSTANDING
THE
CONTEXT

PART I

CHAPTER



“WE LIVE LIKE

TEENAGERS

WITH PARENT'S

CREDIT CARD”

*Our present urban lifestyles, in particular our patterns of division of labour and functions, land-use, transport, industrial production, agriculture, consumption, and leisure activities, and hence our **standard of living**, make us essentially **responsible** for many **environmental problems** humankind is facing .*

(Aalborg Charter, 1994, p. 1).

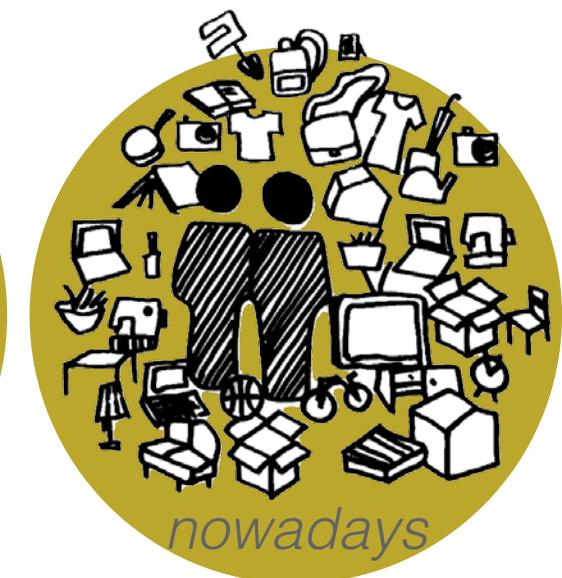
HOW WE LIVE AND WHAT WE CONSUME

Our lifestyles represent our visions and perceptions of the world, our systems of value and therefore our idea of where we live, how and with whom we spend our time, and what we possess. A big part of our lifestyles is the way we consume. What, where and how much. And perhaps the most important is why.

As a society we consume resources, and as a result we produce waste and emissions. The global consumption has increased a six-fold since the 1960's. If the global population doubled, the consumption per capita would be tripled (SPREAD, 2012). Currently the production of internationally traded goods, that are vital to the economic growth, account for approximately 30% of the global CO2 emissions according to UNEP (2010). Directly or indirectly, overuse of natural resources leads to many of the global threats such as climate change, air and water pollution, deforestation, destruction

of ecosystems and biodiversity and degradation of soil. But more than that, it also leads to health and food insecurity, diseases, inequality, exploitation, etc. As consumers we influence not just our local area which we live in, but we also influence other parts of the world, especially developing countries where a lot of the goods we consume are produced.

The consumption patterns around the world are not equally distributed. Thus, Europeans consume three times more than Asians and four times more than Africans. However, it is still less than inhabitants of the US, Canada and Australia. Therefore, "in short -to-medium term the way for the wealthy parts of the world to meet their obligations to 2°C is to cut back very significantly on the consumption. That would therefore mean a reduction in our economic activity, i.e. we could not have economic growth." (Hopkins, 2013, p.26)



HOUSEHOLD CONSUMPTION

Lately, the household consumption has increased rapidly in the western world. It is a result of many factors, such as the availability of attractive credits, advertising, mass media promotions of certain lifestyles, etc. In addition, higher incomes paired with a lack of free time creates consumption-intensive lifestyles as well as higher levels of stress amongst individuals (SPREAD, 2012). Thus, consumption has become the way that people replace the absence of time for personal development and social connections.

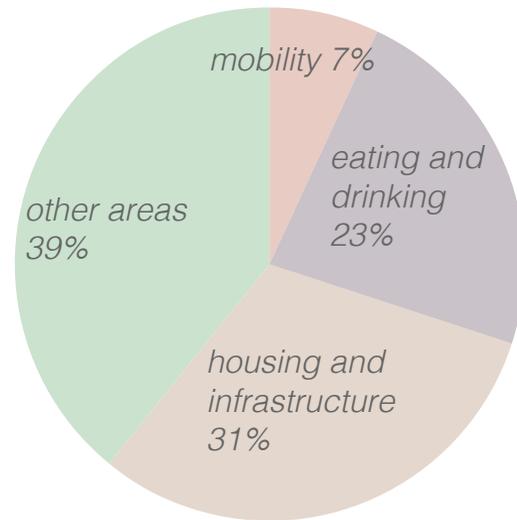


Figure 1.
Distribution of European resource use.
According to SERI (2009),

While the number of the products on the market is increasing, their useful lifetime is decreasing (Cooper, 2002). Repairs are not economical anymore due to the increase of labour costs in developed countries. Due to this they can't compete with comparatively low prices on new imported products. A lot of out of date products, like electronics and household equipment end up at the landfills in developing countries, destroying the nature environments and introducing toxic emissions.

*There are three main elements of household consumption which accumulate **75%** of household impact: **food, mobility and housing.***



* Europeans use more and **more space for living.**

Average household size in Europe has decreased from 2.8 to 2.4 individuals. The average floor area of dwellings has increased from 81 to 87 m² since 1990, while the number of people per household has decreased from 2.8 to 2.4*

* Europeans **travel more kilometres** by car. Car ownership increased by 35% from 1990 to 2007. Although cars on average have become more fuel-efficient, overall fuel consumption for private cars have barely gone down, mainly because more kilometres are driven*

* **Meat and dairy products** production have a large environmental impact. Meat imports in Europe increased by 120% from 1990 to 2007*

* Production of goods indirectly uses a lot of **water**. For instance it requires 132 litres per one cup of coffee (125 ml)**

* Current consumption leads to **unsustainable waste levels**. In 2008, every citizen on average threw out 444 kg of household waste, and indirectly generated 5.2 tonnes of waste in the European economy. And this is just in the EU - no data are available on waste generated from producing products and materials which are imported from other regions*

*Source: European Environmental agency.

**More examples to check at <http://waterfootprint.org/>

ROLE OF VALUES IN CONSUMPTION PATTERNS

CONSUMER SOCIETY

Consumption patterns include not just the three main categories: food, mobility and housing, but also the consumption of the variety of goods that we want to have in our everyday life, like electronics, gadgets and devices, cosmetics, toys and an assortment of goods that are developed rapidly every day. Consumption of goods nowadays is a feature of our globalized culture and reinforced by dominant cultural paradigm: consumerism (Assadourian, 2010).

In economic theory, consumption creates the demand, and determines the economic patterns in the society. However, we cannot assume that consumption appears by the free will of individuals. Most likely it is a result of many factors including mass media, marketing and social norms. All these causes lead to the model that humans live in right now: a consumer society.

Consumer society is a society in which the buying and selling of goods and services is the most important social and economic activity (Oxford dictionary)

ROLE OF VALUES

Interdisciplinary studies of consumer habits show that human decisions and actions are shaped by a wide range of political, economic, social, psychological, technological and infrastructural factors that are outside of the control of individual factors.

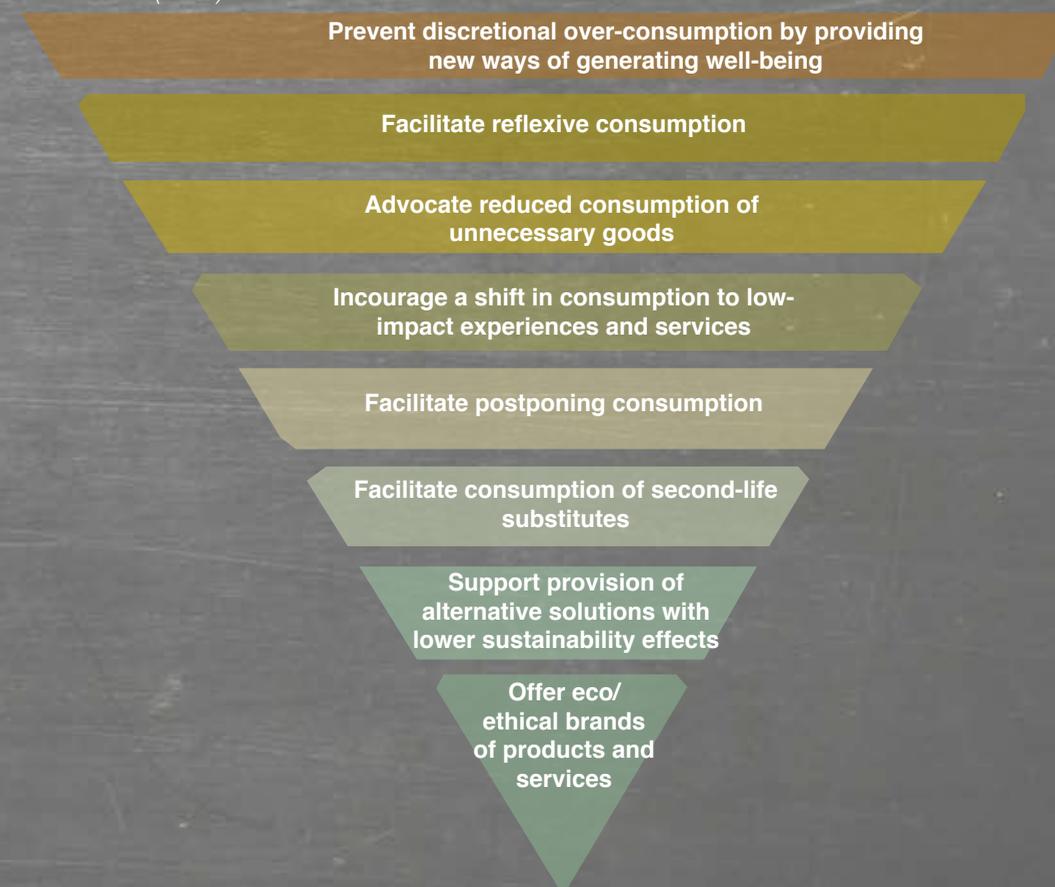
(Jackson, 2005) Thus, “governments and policy makers are constantly shaping social norms, through mechanisms and signals such as the structure of the education system, planning guidelines for public and social space, employment policy, trading standards, regulations of the advertising and the media, and support to community initiatives etc.” (Jackson, 2005, cited by Mont et al., 2013 , p.37)

We use consumption as a sign of belonging to a certain social group. Our choices are shaped by the societal norms much more than we can imagine. Those norms are generally agreed rules, typically created by the mainstream society. Mont et al. (2013) claim that predominant social norms often promote less sustainable patterns of behaviour like car usage, diets containing a lot of meat and dairy products, long distance air travelling, overconsumption of the everyday goods like garments, cosmetics products, toys, household goods etc. In this manner, mass culture makes many individuals, who prefer sustainable choices, to feel stressed about it and be outsiders from the dominant society, since it is a significant barrier for belonging to a certain group. That is why policymaking is essential in the process of reaching more sustainable lifestyles. According to Assadourian (2010), to transform cultural norms is a long-lasting process which occurs through redirecting key cultural institutions such as education, business, media, social movements and, not the least important, long-lasting human traditions.

A survey among 1,000 Swedish consumers found that people dispose off their clothes after 2–4 years, and that the main reason for this is that they are considered to have gone out of style (Ungerth 2011). The study also reports that 70% of the respondents were positive towards a more regulated system for collection of used garments (Mont et al., 2013).

Conclusion:
it needs to be a shift in the consumption habits, to not just buy more “eco-friendly” , but to challenge the whole way of how we live including development of new value systems, through education and leisure time activities.

Figure 2. A suggestion for a consumption hierarchy (in the order of priority) Mont et al. (2013)



APPLICATION TO URBAN CONTEXT

Another important aspect of shaping people's behaviour is how the built environment and infrastructure influence the habits of different individuals. How to identify different lifestyles according to the built environment is quite obvious. The patterns of the urban fabric create certain models of behaviour amongst individuals. A healthy environment creates, or at least encourages, a healthier lifestyle and more sustainable choices.

The question about reconsidering cities into ecological settlements is essential in the contemporary urban planning field. In the 20th century mostly predominated the system thinking and big scale and with big visions. Architects tended to have an engineering background, and planning was mostly focused on creating clear infrastructure systems and a unified built environment. As a result, we see various examples of modernist architecture, which quite often does not have a human scale, and that was created with the focus of machines in the industrialised era.

Now, we increasingly talk about cities as service for healthy communities, and about including nature into the spatial organisation. Low (2007) argues that planning processes should start "from the door" and not from the big vision, and suggests to put more emphasis on the participatory practices in planning:

instead of starting with the whole pattern and working down to the units of which it is composed, he suggests to start with the units and then work up to the systems in which they are organized. Otherwise in a system-wide perspective, small but not least important parts are easily neglected.

In developing the models for sustainable cities the point is to reduce waste and avoid over-consumption, without reducing the quality of life. The quality can even increase with focus on social interaction and networks between people. Waldinger (2015) claims that good relationships and strong social contacts are much more important for the human well being than financial prosperity and fame.

However, the challenge is that "the planning system unreflectively expresses the norms of the culturally dominant majority, including the norms of how that majority likes to use space" (Sandercock 2003, cited by Bradley, 2009, p.349). Architects and planners, typically being representatives of the predominant cultural majority, embody social norms that they bring into the planning practice. That is why it is vital to consider diversity in terms of class, gender, sexuality, age, political views and even rural, urban or suburban backgrounds (Bradley, 2009).

To enable large-scale transitions into sustainable lifestyles, current promising practices point to two important areas for further work:

Understanding and supporting **individual behaviour change; and
* Creating and enabling **environments and infrastructures** that stimulate and support more sustainable ways of living**

*SPREAD, 2012

CHAPTER

2

SHARING

IS

CARING



photo by Stanica Zarecie

WHAT IS SHARING

One of the solutions for a more efficient use of resources and decrease consumption is sharing.

Sharing is the joint use of a resource or space, or a joint possession with others. Sharing also refers to the process of dividing or distributing. It can also mean giving or gaining something, and often it relates to the process of jointly enjoying something (Oxford dictionary).

It is useful to understand sharing as a cultural discourse as well as a practical phenomenon. "As a discourse sharing is obtaining social power - constantly framed in the terms of openness, honesty, empathy and social relations. On the other hand, in terms of cultural impact mainstream sharing practice can bring the shift in cultural norms, reconstructing from the past" (McLaren, Agyeman, 2015)

HISTORY

From generation to generation people used to share and collaborate, and it was an integral part of life in the community. Historically, people started to gather in groups to survive in harsh conditions. Later on, bartering, swapping and exchanging became an effective way of trading goods. Collective use and ownership of goods, spaces, tools, etc. was an integrated part of everyday life. As society became more complex, people lost the need for social sharing and today we rely on the default social and economic systems we live in. The pattern started to change

SHARING CAN BE:

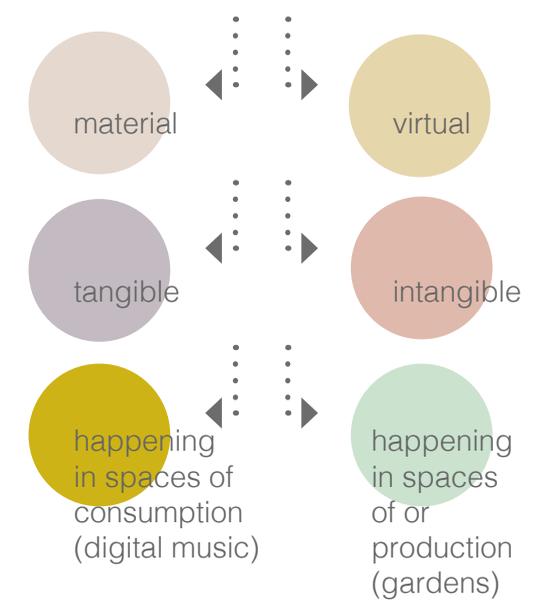


Figure 3.
Dimensions of sharing
McLaren and Agyeman, 2015, p.7

during the raise of industrialisation and capitalism. Increased wealth may decrease sharing (Crocker and Linden, 1998, cited by Agyeman and McLaren, 2013). The capitalist era of individualism and consumerism promotes well-being through economic growth and individual wealth, and in these conditions personal possessions have replaced sharing. Sharing started to become a "sign of the poor", as it is assumed that collective ownership only occurs when individual ownership is not affordable. The ability to do things yourself or asking your neighbour for advice or expertise has vanished, putting trust on monetary service systems.

SHARING ECONOMY & COLLABORATIVE CONSUMPTION

In a time when consumerism is flourishing around the world, and the economic growth is faster and faster, a lot of people in different parts of the world have started to change their habits and make more sustainable choices. They have made a choice to go back to socio-cultural sharing. And the name for this trend is the “sharing economy”.

Nowadays we notice a huge raise of the sharing economy, a new post-industrial economic concept that promotes sharing instead of individual ownership. The philosophy behind the term refers to the trust between people and the establishment of stronger social connections. It also refers to taking care of the environment and our natural resources by reducing personal possessions.

Sharing is the motto of a whole new generation. People gladly travel with Airbnb and Couchsurfing, get rides with Uber and BlaBlaCar, go to home restaurants, use tool libraries etc. It feels like the right thing to do - choosing to share, to care about the environment and to have less, but in truth, what is the sharing economy?

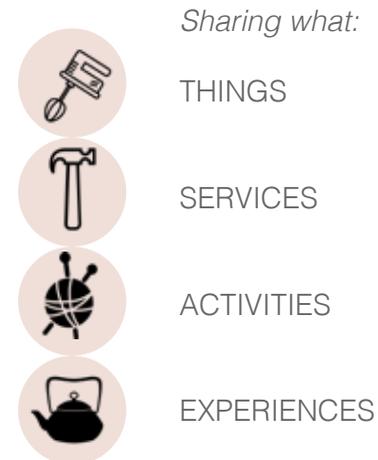


Figure 4.
Sharing what?
Botsman and Rodgers, 2009

Sharing economy is a hybrid market model (in between owning and gift giving), which refers to peer-to-peer-based (P2P) sharing of access to goods and services, typically coordinated through community-based online services. According to Botsman (2009) the sharing economy focuses mostly on the P2P marketplaces to share underutilized assets, including spaces, skills and things.

Hamari, Sjöklint and Ukkonen (2015) claim that the sharing economy is a technological phenomenon, because it works typically through online platforms. Nowadays, the sharing economy has started to become a corporate business model spreading across the world.

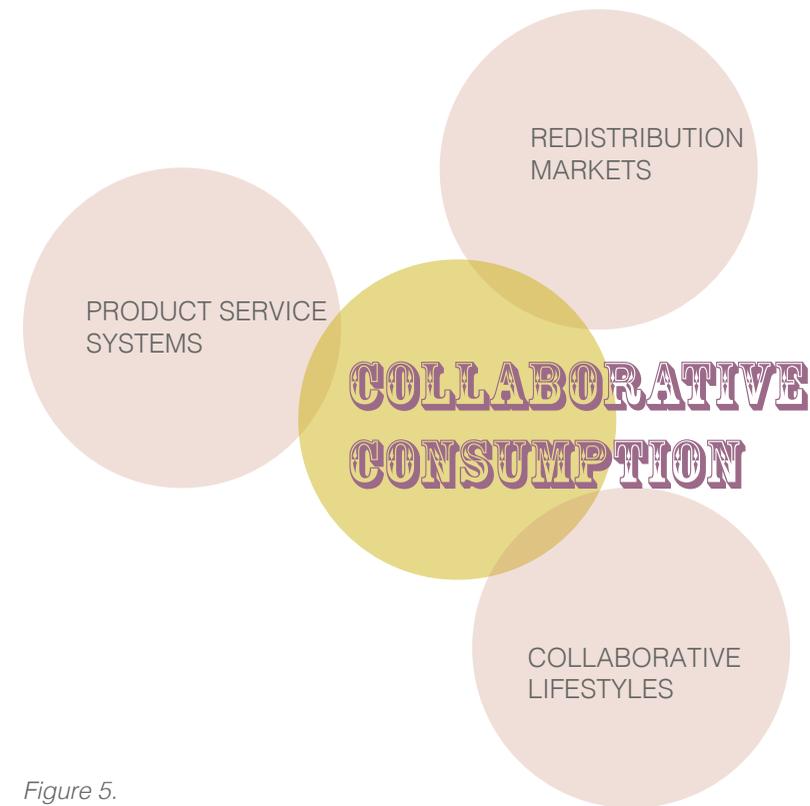


Figure 5.
Collaborative Consumption Systems,
Botsman and Rodgers, 2009

According to Botsman and Rodgers there are four main principles that are essential for collaborative consumption to work:

Another term describing sharing is collaborative consumption, recently used even more due to the book “What’s Mine is Yours” by Botsman and Rodgers, (2009). Collaborative consumption works as a model for bartering, swapping, lending and renting through collaborative networks. The aim of the model is to enable borrowing over owning. Community plays a major role in collaborative consumption, as it is essential for networks to be formed. Typically, suppliers and consumers are the same group of individuals and they are connected by mutual benefit.

IDLING CAPACITY	CRITICAL MASS
BELIEF IN COMMONS	TRUST BETWEEN STRANGERS

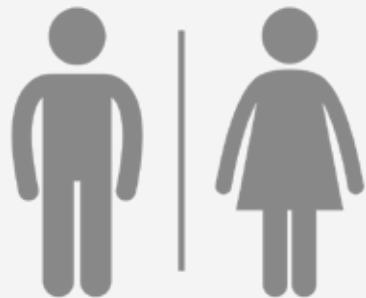
WHO WANTS TO SHARE?

68% More than two-thirds of global respondents are willing to share or rent their personal assets for financial gain.

66% Two-thirds of global respondents are likely to utilize the products and services from others in a sharing community (Nielson, 2013).

There is the widespread presumption that it is just younger generations who are involved in the sharing economy. However, Nielson Global Survey of Share Communities (2013) has shown which age groups in Europe are willing to participate in communal sharing:

- 3%** GENERATION Z (UNDER 20)
- 17%** MILLENNIALS (21-34)
- 14%** GENERATION X (35-49)
- 8%** BABY BOOMER (50-64)
- 2%** SILENT GENERATION (65+)



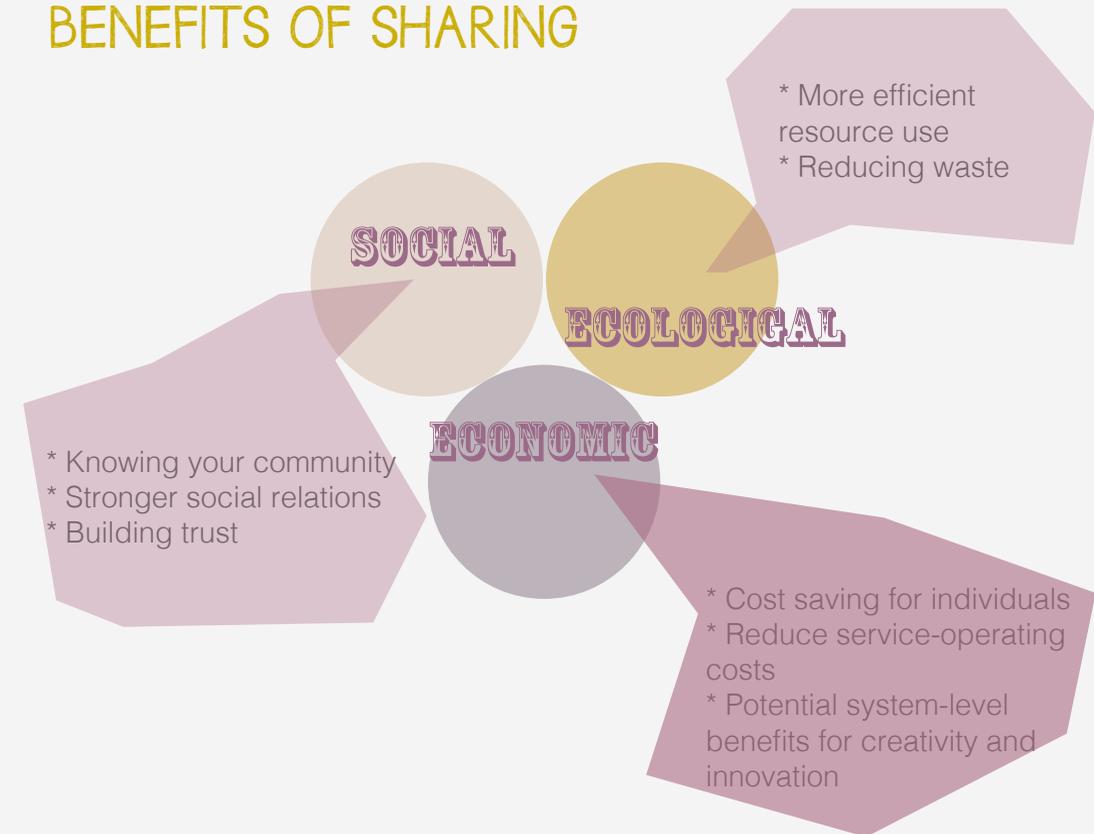
Among the 44 % of European respondents who would rent products from others, the genders are evenly split with 22 % each (Nielson, 2013).

WHAT TO SHARE?

Electronics, lessons/services and power tools are favoured properties for sharing (Nielson, 2013).

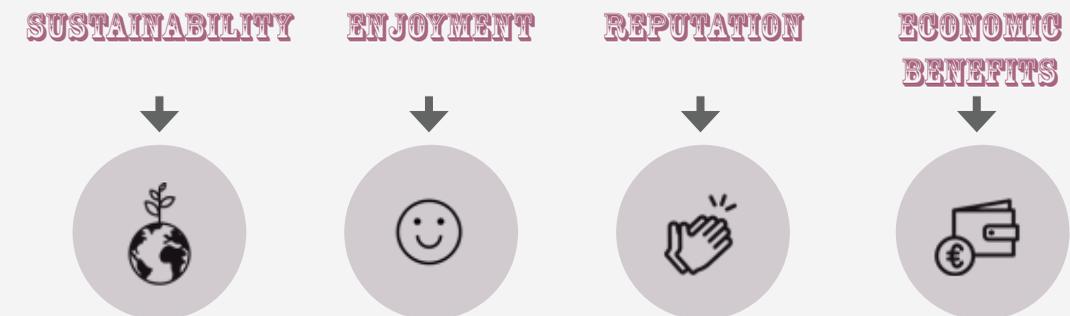


BENEFITS OF SHARING



WHY SHARE?

Hamari, Sjöklint and Ukkonen (2015) propose to identify four possible categories of reason for people to share, namely:



CRITISM OF SHARING ECONOMY

On the other hand, the sharing economy nowadays meets a lot of criticism, mostly for being a new and exclusive business model and it has been accused of “Green Washing”.

Scholz (2016) criticizes the sharing economy, and claims that it is a new way of emancipating workers through different online platforms. He argues that “new sharing economy is not really about sharing at all, it is rather an on-demand service economy that is spreading market relations deeper into our lives”. The sharing economy indicates a massive, global push in favour of “digital bridge builders”, promoting online services and distant jobs. The online platforms, offering sharing services, are logistics companies that require participants to pay up to the middleman. This aspect of the sharing economy is broadly discussed nowadays. Is “fee” sharing really still sharing? Can lending, or renting, or even selling services be called sharing?

PLATFORM COOPERATIVISM

Instead of the so-called cooperative shared economy, Scholtz suggests the concept of “**platform cooperativism**” as a new owning model where the workers create their own platforms.

Cooperatives, however small, can “function as ethical, self-managed counterparts that provide a model for businesses that don’t have to rely on the exploitation of their workers. Cooperatives can bring creativity not only to the consumption of products but also to the reorganization of work” (Scholtz, 2016, p. 13).

Scholtz have developed ten principles of platform cooperativism, and raises the question of how alternative-learning institutions could better prepare youth for cooperative working and living today?

EXAMPLE

Sweden:

According to Hjalmanson (2012) Swedish Cooperative Centre (SCC) was founded in 1958 with the intention of expressing its solidarity from the simple idea of helping poor people to improve their lives. SCC is today one of the most important development agencies in Sweden. The work is based on the principle ‘help for self-help’ with the vision for ‘a world free from poverty and injustice’. Main focus is on the unprotected groups of workers, for example farmers.

Cooperatives combine democracy and social responsibility with business development and economic activities. As other actors in the economic system, cooperatives are affected by competition. They need to be skilled and they need support from development agencies.

EXAMPLE

Brazil

The Solidarity economy is based on democratic control and social justice. It includes growing communal forms of sharing and collaboration in social infrastructure, and services such as education and health. The solidarity economy is based on self-management with more equal working relationships, which is especially beneficial for vulnerable groups of people. There are small production groups with no employers and employees. Moreover, the solidarity economy model attempts to combine social change with environmental awareness, and it is exploring new ways of reducing inequality. This model also decreases the environmental footprint and promotes responsible consumption, taking into account the whole supply chain under fair trade basis (Nobrega, 2013).

The solidarity economy boomed in the 1990s, when Latin America was facing an economic crisis and high unemployment rates (Nobrega, 2013). People looking for alternative sources of income began to cluster into groups, co-operatives and associations. The model helped decrease poverty in Brazil and the country became a world model for a solidarity economy, where 1.8 million people are involved in the new working system and 20 000 enterprises operating within this model (Nobrega, 2013). The poverty rate fell by 57% between 2001 and 2011, according to the Brazilian Institute of Applied Economic Research.

But it is not just about creating new jobs. It is a way of rethinking an economic model, that takes environmental concerns and social injustice into consideration. However, the solidarity economy is an uncertain model and has its difficulties, such as lack of government support and limited access to credits, as well as low consumer awareness.

WHAT IS SHARING CITY

Historically, cities were places to share and collaborate. Nowadays, elaborate infrastructures and services help to use resources more efficiently. Marketplaces, health care and education institutions are not only public services, but also meeting and cultural spots. However, cities are also hotbeds of consumption and the main producers of emissions. As the future of the humanity is most likely urban, architects and planners should see the possibilities in creating cities as clusters for sharing, equity and justice as a response to global challenges.

In the book “Sharing Cities” by McLaren and Agyeman (2015) the concept of Sharing City is described. According to them traditional “socio-cultural” sharing happens everywhere, but it has largely broken down in modern cities in the face of the commercialization of the public realm. Additionally, gentrification and land use injustice that have lead to segregation in the public space.

With new opportunities for sharing there is a possibility to enhance trust and rebuild social capital.

by McLaren and Agyeman (2015)

Moreover, it is important to stress the need of attention to the fact that the majority of existing shared programmes were not designed with equity and social justice in mind, and low-income people are not involved in the visioning or design of such programs. Talking about “green cities” we mostly mention “eco-friendly” design, as well as attractive public space. However, the question is who is using it and has the right to public space. Moreover, it is also a question of who has an opportunity to spend time in the “green city”. The concept of green and sustainable cities tend to be an exclusive model for the “aware” and well-educated group of middle class users. Instead, Agyeman and McLaren (2015) suggest that “sharing the whole city” should become the guiding purpose of the future city.

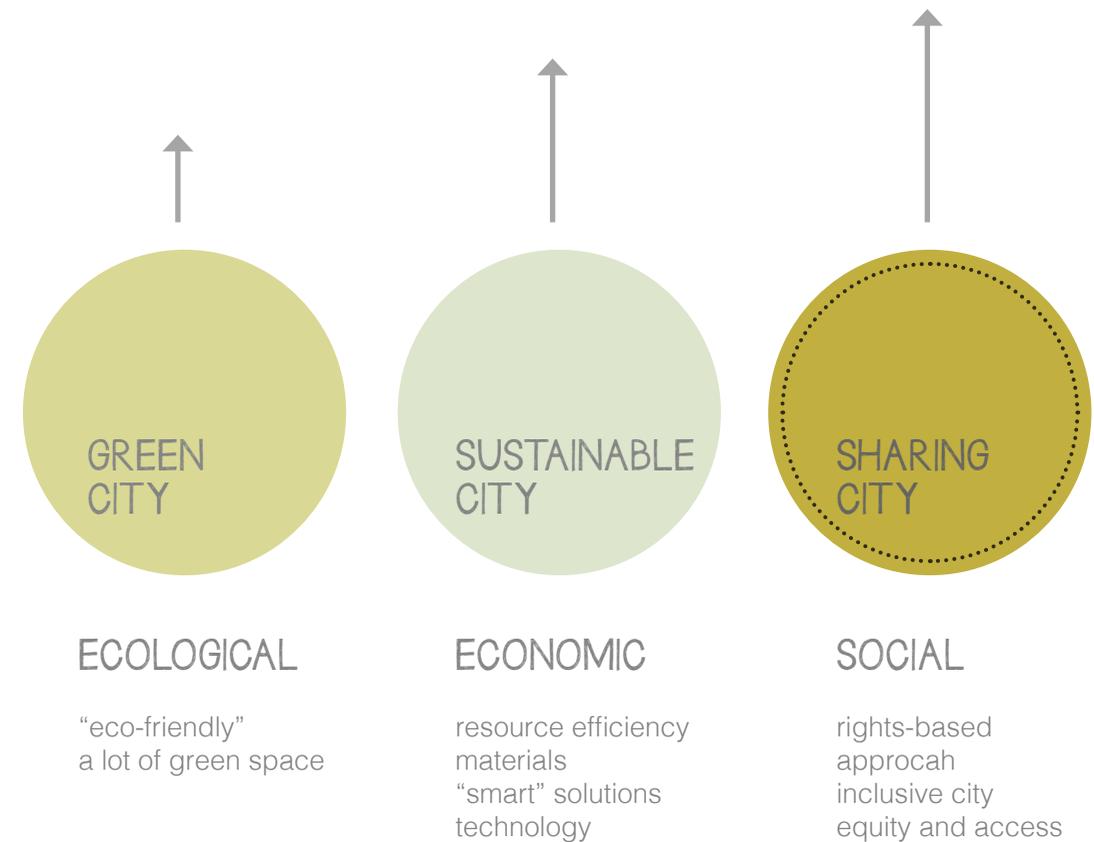


Figure 6.
Sharing Cities,
Agyeman and McLaren
(2015)

SHARING PARADIGM

		Things	Services	Activities
Individual	swapping bartering gifting	ridesharing couchsurfing	skill sharing	
Collective	car-clubs toolbanks fab.labs	childcare credit unions time banks crowdfunding	sport clubs, social media open-source software	
Public	library freecycling	health services public transport	politics public space	

Figure 7. Sharing paradigm
Agyeman and McLaren (2015)

The **“Sharing Paradigm”** is a concept developed by McLaren and Agyeman to broaden the concept of “sharing economy”. They believe that sharing can be something more fundamental than just a new economic system, and emphasise the importance of societal development. It is based on the understanding of the term **well-being**, potentially more fulfilling than ordinary consumption.

“The best way to manage resources is through public management, but it is important to recognise it’s collective, shared nature” (Agyeman, McLaren; 2015)

April Rinne from the Collaborative Lab team presents the TOP 10 things to change a city into a shareable city. She talks about the importance of mapping all the spots for shareable assets in the city, and creating a strong network between them in order to develop a new economic ecosystem in the city. The importance of the policy in this part is crucial, and it touches all the sectors of city life such as housing, transportation, food production, etc.

To transform the regulations and encourage more collaborative lifestyles is the task of global politics, local politics and local communities. Just mutual collaboration on this topic can lead to the results.

EXAMPLE:

Amsterdam

On February 2nd 2015, the capital of the Netherlands was named the first 'Sharing City' of Europe. With this, Amsterdam positions itself as an European leader in the field of the sharing (or 'collaborative') economy. According to Harmen van Sprang (2015), 84% of the 'Amsterdammers' are willing to participate in the sharing economy.

Amsterdam Sharing City is a joint initiative in which 'ambassadors' from all corners of the city will work together: from start-ups to corporates, from community centres to public libraries, and from knowledge institutions to the municipality (Harmen van Sprang, 2015). 'The city is a source of abundance', said Daan Weddepohl, founder of sharing economy platform 'Peerby.' The number of ambassadors is growing, and recently reached 35 ambassadors constituting Amsterdam Sharing City. From a shared vision they start collaborating on concrete projects.

The purpose of 'Amsterdam Sharing City' is to use the possibilities that the sharing economy offers for the city in the areas of sustainability, social cohesion and economy, as well as understanding the challenges of the new system and finding the ways to fight them.

Definition 'Amsterdam Sharing City':

Amsterdam Sharing City recognizes the sharing economy as a key driver of sustainable and economically resilient city rich in social capital and acknowledges the need to consider sharing economy principles and incorporate them in the process of recreating the political, economic and social landscape.

EXAMPLE:

Los Angeles, USA

Los Angeles is a beautiful city, but faces a lot of challenges: high cost of living, many vulnerable populations (immigrants, underemployed), as well as a constantly growing income gap. LA is one of the worst cities in regards to income inequality (Luna, 2015).

Arroyo Sustainable Economies Organization (ASECO) works to transform LA into a community-oriented and resource sharing city for everyone. ASECO works with education in sustainable choices and promotion of time-banking for empowerment through relationship building and community involvement. "Seeing how this incredibly low cost model can actually be a hugely effective service delivery mechanism for community resiliency, it makes sense to offer it in every neighbourhood as part of a city-wide strategy to promote more social connection" (Luna, 2015, interview with Sarah McGowan Dear, ASECO). Nowadays other initiatives like Local Economy Incubator, The California Federation of Time Banks and others are growing in LA.

"When you have a network of individuals, organizations, and city departments all supporting a structure that allows for the efficient distribution of resources sharing, everything changes, and the community instantly becomes more resilient because the need for resources outside the community shrinks" (Luna, 2015).

One of the ASECO members admits that the most challenging part is to work with the City Hall. The "sharing economy" is so new to them, and so explaining it and integrating it with the existing city services is a challenge, but also an amazing opportunity (Luna, 2015).

WHAT IS THE SHARING CITIES NETWORK?

Fifty cities around the world began mapping their shared resources in October and November 2013 during Shareable's first annual Map Jam (Shareable, n.d.). The project aims to provide a services database to the city dwellers in order to encourage collaborative lifestyles in the cities. Gothenburg is one of these cities.

GOTHENBURG CONTEXT

Kollaborativ Ekonomi Göteborg (KEG) is a newly created NGO that works to create the networks between all sharing initiatives in the city. The main aim of KEG is to create a map of the city, representing all the places where people can go for sharing, swapping, etc. This is a way to involve more people to participate by mixing the user groups. The map was completed and announced on the 17th of November 2016 during the Gothenburg Sustainability Award.

KEG aims to create dialogue and cooperation between the civil society, the government and the private sector. Within the framework they carry out surveys, lectures, workshops and

events. The mission of KEG is to create and facilitate more spaces for sharing in the city with access for everyone, to make it known and make collaborative consumption the "norm".

"Gothenburg has the highest amount of cooperatives in the whole of Sweden, and it has been this way historically. Social innovation is also more developed in Gothenburg than in comparison to other places in the country", says Emma Öhrwall." The challenges for the spread of collaborative consumption in Gothenburg is the critical mass, which is important for networks to function; segregation and exclusiveness of certain models. Creation of more physical space for sharing can bring people together and encourage collaboration.

"We want to share our gadgets, accommodation, time, space, knowledge and act as a catalyst for change"

Kollaborativ Ekonomi Göteborg (KEG)

COLLABORATIVE GOTHENBURG. SMART MAP

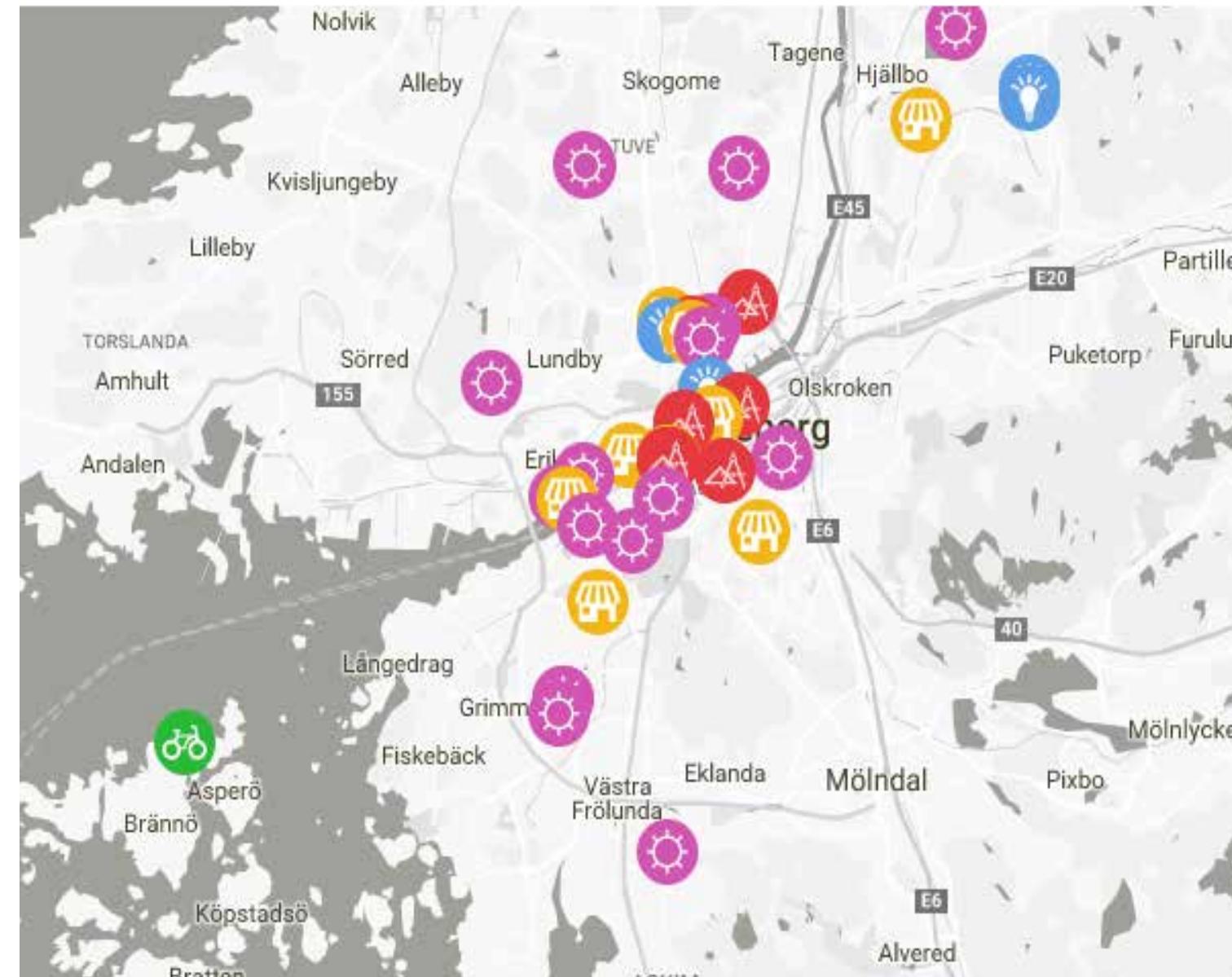


Figure 8. Smarta kartan. Source: <http://smartakartan.se/>

COLLABORATIVE KNOWLEDGE & MEETINGS

EXAMPLES:

- 📍 E-hive - Startup monday!
- 📍 Workshop Inn
- 📍 Tikitut
- 📍 TNB
- and 2 more

COLLABORATIVE FINANCE & TIME

EXAMPLES

- 📍 2Lång crowdfunded

COLLABORATIVE PRODUCTION AND WORK

EXAMPLES

- 📍 Kajkontoret
- 📍 Cykelköket
- 📍 KO:working
- 📍 Gothenburg Hackerspace
- 📍 Mikrofabriken
- 📍 Johannebergs gardening assosiation
- 📍 Frilagret
- 📍 Tikitut
- 📍 Lärjeåns gardens
- and 6 more

COLLABORATIVE TRANSPORT

EXAMPLES:

- 📍 Göteborgs Bilkoop
- 📍 Angereds bilkooperativ
- 📍 Bagarbil
- 📍 Hisingens bilkooperativ
- 📍 Masthuggets Bilkooperativ
- 📍 Brännö Cykeluthyrning

COLLABORATIVE CONSUMPTION

EXAMPLES

- 📍 Recreational Bank Angered
- 📍 Free-shop Högsbo
- 📍 Free-shop Majorna
- 📍 Klädoteket (cloth library)
- 📍 Llama Lloyd
- 📍 Tool Library
- 📍 Återbruket
- and 2 more



Figure 9. Categories of sharing.
Source: <http://smartakartan.se/>

“Like any other practice, sharing with equity and justice at the core can naturally shift cultural norms - in this case toward trust and collaboration”

Agyeman and McLaren, 2015, p.5

3

CHAPTER

INITIATIVES ON

SUSTAINABLE
LIFESTYLES AND

LOW-IMPACT LIVING

SUSTAINABLE LIFESTYLES

As a part of humanity, we always affect the environment. Though different actions can have a more or less negative impact on the environment. That is why decreasing the impact and changing towards more sustainable lifestyles is urgent in modern circumstances.

To address this issue SPREAD Sustainable Lifestyles 2050 was run during 2011-2012. SPREAD is a European social platform project which aims to suggest guidelines and scenarios of sustainable living for policymakers

According to SPREAD (2012) sustainable lifestyles refers to patterns of action and consumption which meet basic needs, provide better quality of life, minimise use of natural resources as well as the production of waste and do not jeopardise the needs of future generations. Sustainability strategies has become a hot topic for the UN as well as the EU environmental unit, and a lot of countries are adopting new environmental strategies with focus on low-impact living. However, the process of turning our modern lifestyles to more sustainable ones takes time and effort and it meets a lot of obstacles on the way. For example lack of coordination within the UN, governments, the private sector and civil society; international imbalance between environmental governance and trade and finance programs; inadequate regulations and planning rules, as well as a lack of environmental awareness and a shared vision.

Despite this facts, certain movements and ideas are successfully developing, striving for a better future for coming generations. Low-impact lifestyles are practiced by many people in different parts of the world, mostly driven by individuals or communities from a bottom-up basis.

Some examples of low-impact living movements are:

VOLUNTARY SIMPLICITY MOVEMENT
SLOW FOOD / SLOW LIVING
COMMUNITY AGRICULTURE
URBANISM
DOWNSHIFTING/ DOWNSIZING
ECOVILLAGES
TRANSITION TOWNS
RETROFITTING
COLLECTIVE LIVING/CO-HOUSING

Low-impact living, not necessary but often, refers to self-sufficient living, meaning an individual household or community, capable of providing for one's own needs with their own abilities and resources. Generally, low-impact or "green" living is considered to be an "alternative lifestyle", going beyond socio-cultural norms. Often people following low-impact living principles tend to cluster in groups and create intentional communities. Intentional communities then provide a place where many members "feel comfortable, accepted, safe and at home" (Meijering L., Huigen P., van Hoven B. 2007). Sometimes low-impact settlements are associated with utopian settlements (Miles, 2005).

LOW-IMPACT LIVING

Low-impact living touches upon various parts of everyday human life, such as building techniques, water and energy systems, transportation, food, health, work, crafts and hobbies, everyday habits and personal development. Low-impact settlements are focused on developing local economies and organic food production. It's about smaller size of the living place, sensibility, but also touches upon the aspects of democracy and decision taking.

ECOVILLAGES

Ecovillages is one of the most known examples of low-impact settlement. The Global Ecovillage Network defines an ecovillage as an intentional or traditional community using local participatory processes to holistically integrate ecological, economic, social, and cultural dimensions of sustainability in order to regenerate social and natural environments.

Ecovillages appeared as a response to global environmental problems and the inability of the governments to solve the problems (Litwin, 2014). According to Dr Caroline Lukas ecovillage movement was born when the ancient idea of intentional communal living met international "green movement" in 1960's and 70's.

An ecovillage is a type of a low-impact settlement, which aims to simplify design, reduce needs and costs, and as much as possible use local and

recycled materials. Ecovillages are seeking to build small scale locally based economies, refusing mass production in a globalised world. Ecovillages can be spiritual or secular; rural, urban or suburban and they vary between low-tech or ecological high-tech solutions.

According to Dawson (2006) there are several models which have been developed in the ecovillages around the world:

- 1 The design of low-impact human settlements
- 2 Promoting sustainable local economies
- 3 Organic, locally based food production and processing
- 4 Earth restoration
- 5 Revival of participatory, community-scale governance
- 6 Social inclusion
- 7 Peace activism and international solidarity
- 8 Holistic, whole person education

EXAMPLES

AUROVILLE

Auroville is probably one of the oldest eco-villages, created as an intentional community in 1968. Situated near Pondicherry, south India, it is a place of attraction to a lot of people searching for alternative ways of living. Created originally as a spiritual community with the intention to grow into an alternative town-settlement based on the principles of self-sufficiency and local economy, it has a population of around 2000 residents from 35 countries with the intention to become a town with 50 000 residents. The community turned out to be very successful due to: 1. A strong spiritual impulse; 2. It's based on the voluntarism and mutual effort of the individuals; and 3. The development of a strong solidarity economy model with a well functioning way of redistributing the financial wealth.



SVANHOLM

Svanholm is an intentional rural small size community located near the village of Skibby, 60km from Copenhagen on the isle of Sealand in Denmark. It is a secular community started in 1979. The basis was formed by common ideals concerning ecology, income-sharing, communal living and "self-government", meaning the idea of stimulating dwellers, trainees and workers to be more involved in decision-making and feel responsible for the outcomes. Svanholm functions on the base of collective economy. Sharing is the essence of Svanholms life. Decision taking is based on the principles of direct democracy. Children upbringing is also pretty unique: they live with their parents, but are close to many other adults, and participate in nearly all sides of Svanholm life. The focus of childcare at Svanholm is to give the children an opportunity to participate in a broad scale of activities and events including working life, to give them room to develop their individuality and self-governance skills, and by this developing "modern competences". Svanholm's agriculture is among the pioneers of organic farming, and helped launch Organic Denmark in 1981. There is 230 ha of arable land cultivated by Svanholmers. Moreover, there is a number of companies run by the inhabitants of the village. For example doing bee-keeping, a café, courses in arts, crafts and permaculture among other.

ECOVILLAGES IN SWEDEN:

In Sweden the ecovillage movement is also big. The settlements started to appear in 1970's with the so called "green wave". Some communities have already been functioning for a long time, others are just starting their way. I visited one of the villages and met one of the founders of the community.

Study visit:

UTSIKTEN EKOBY, was founded in 2001. The plan was created in 2003 and the building process started in 2006. It is not an example of collective living or closed community. People have their own households and own interests - gardening, bee-keeping, crafts. A lot of people work outside of the village. The initiative group of the project met in the city of Göteborg and driven by common interest - to live a more sustainable and natural lifestyle,- started to search for the land where it will be possible to manage. Everybody in the village owns their own piece of land and the association Utsikten owns common places. There are 13 members in the association and 17 houses in the village. There is an elected board in the ecovillage which takes main decision about the maintenance of the village. People are practicing low-impact building techniques, such as straw-bale houses. They host volunteers and hold workshops from time to time. A lot of people are involved into developing sustainable energy systems, water treatment etc. According to Marie, one

of the villagers, people in Utsikten are connected by common vision but have quite separate lives. "It works more as a working collective than a spiritual commune" says Marie.



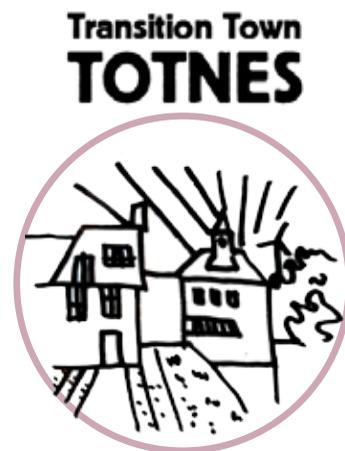
TRANSITION MOVEMENT

The Transition Movement is a compilation of grassroots initiatives that strive to build resilient communities in the face of global challenges as peak oil, climate change and economic instability. Unlike other sustainability and “environmental” groups, Transition initiatives are characterised by the intention to mitigate global environmental problems by engaging their communities in strengthening local economies, citizen-led whole-person education, small action and multi-stakeholder planning to increase local self reliance and resilience. Localizing economy, the local production of goods is seen as a way for developing grassroots movements and diminishing dependence on fossil fuels.

“Transition” is a change we need to make to get to a low-carbon, socially-just, healthier and happier future, which is more enriching and more gentle on the earth than the way most of us live today (Transitionnetwork.org, n.d.). Nowadays, a lot of towns around the globe are taking the initiative to turn into transition towns.

The first transition town developed is Totnes in UK. Transition Town Totnes (TTT) is a dynamic, community-led

initiative started in 2005. A community scheme led by Transition Town Totnes that encourages groups of neighbours in the town to embark on a low-carbon path together, saving money and carbon. TTT is community of local volunteers divided in smaller teams, who come together to work on projects. Anyone can be involved. The projects include such topics as increasing low impact affordable housing, sharing skills, creating livelihoods, reducing energy costs and carbon emissions, growing local food economy and working in partnership with other local projects. Focus is on no-cost-actions run by the town dwellers.



CONCLUSIONS

A particular feature of sustainable living initiatives is that they mostly start from the grassroots. All the actions are driven by the people who are willing to be highly engaged in their local community development. It concerns ecovillages, transition movement, guerrilla and urbanism projects. Even the movement of downshifting and tiny houses living. People create intentional communities to escape the “norm” of living, or to challenge that norm. Mostly those, who are involved in low-impact living initiatives are well-educated or activist people with a high level of environmental awareness and real knowledge about the state of the world.

Nevertheless, to reach more sustainable lifestyles, local governments and planners should develop solutions which will include all residents of the settlements to practice low-impact living, enhance benefits of those models and encourage local initiatives.

All examples of low-impact lifestyles are much less individualistic than conventional contemporary lifestyles and much more focused on sharing and the willingness to collaborate with other people. A sense of community is the most important factor to make any of those initiatives work.

“It’s about what you can create with the help of the people who live in your street, your neighbourhood, your town. If enough people do it, it can lead to real impact, to real jobs and real transformation of the places we live, and beyond.”

Rob Hopkins, by Flintoff J.P., 2013



CHAPTER

LEARNING FROM

“PRACTICING
EXPERTS”

METHOD:

LEARNING FROM “PRACTICING EXPERTS”

Being inspired by all the nice initiatives, I decided to gain knowledge from the people living in the communities, practicing a low-impact living in their everyday life. I call those people “practicing experts” -people who have chosen to live in intentional communities, to follow low-impact living principles and who have gained knowledge through practical experience. The term is in contrast to “academic” or “scientific” experts, who gain knowledge through theory and scientific investigation.

CHOICE OF PLACES

In the summer 2015 my plan was to volunteer at an organic farm. That is how I found Stjärnsund. I volunteered in the permaculture community gardens and got to know people living in the village. The week after my stay in Stjärnsund, I visited Skattungbyn during the Inspiration festival, and got acquainted with people working with permaculture, a self-sufficiency course and the tiny house movement. Those meetings encouraged me to use contacts from particularly those communities, although there are a lot of others.

STUDY TRIPS

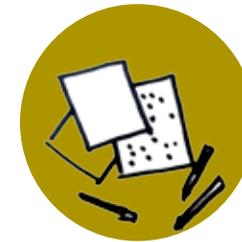
In the winter 2016, I visited the two villages again - Stjärnsund and Skattungbyn. During that time I organised and held three workshops with various groups of participants. I also interviewed individuals and groups who are active in the community life in the villages.

My aim was to investigate everyday life in the community; history and development; opportunities and challenges of living there, personal motivation of the inhabitants to chose their lifestyle. More than that, I was curious about the driving forces for creating the community, or joining one.

The emphasis of my explorations was on sharing, both tangible and intangible, and the connection between sharing and sustainable lifestyles, as well as the linkage to community living. In creating the templates for workshops, surveys and interviews, I was using the information I learned from the theory about collaborative consumption, the concept of sharing city and low-impact living. More information and detailed plan of the workshops can be found in appendix (p. 192-193)

STRUCTURE OF WORKSHOPS

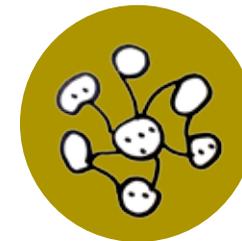
WORKSHOPS CONSIST OF FOUR PARTS:



SURVEY



MAPPING THE LOCAL CONTEXT

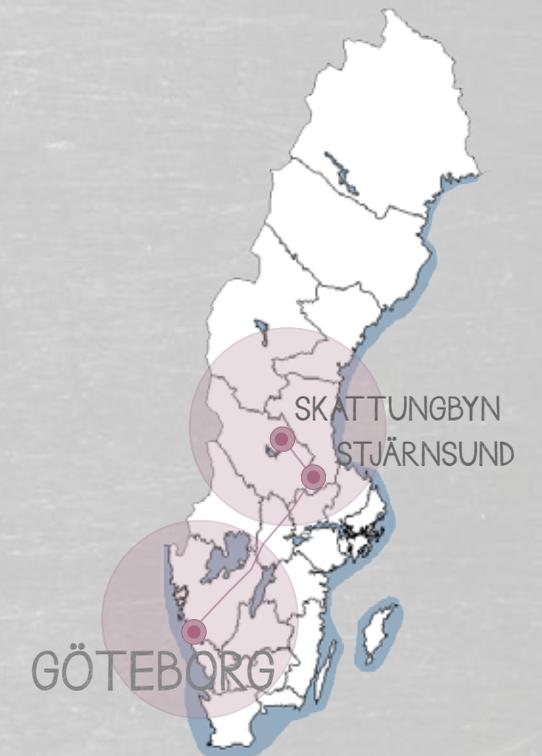


MENTAL MAPPING ABOUT SHARING

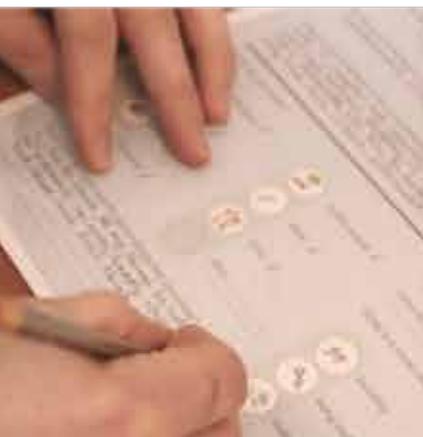


APPLICATION TO URBAN CONTEXT

WHERE



*More precise description of the workshops plan can be found in appendix (p. 186)



WORKSHOP | STJÄRNSUND

DATE: 26TH OF FEBRUARY 2016

PLACE: FRIDHEM

The workshop took place in Stjärnsund, a beautiful old industrial village in Southern Dalarna, Sweden. Stjärnsund was founded in 1700 by inventor Christopher Polhem, who was famous in both Sweden and other countries for his revolutionary mechanical inventions. The village was vibrant until 1930- 1940's. Later on, closure of industries led to extensive emigration from the village, which occurred during 1950- and 1960's.

The trend was reversed in the early 1980's when a number of young families moved to Stjärnsund with the aim to create an intentional community with a base at Fridhem. At the start, Fridhem was a common house for living. Nowadays it is a community center for events and activities, and a meeting place for the villagers. In 2011

a new group moved to Stjärnsund and started a project called Permaculture Stjärnsund in collaboration with Fridhem. They developed permaculture gardens and organized both courses and festivals which brought new energy to the community. Nowadays the community of Fridhem and Permaculture Stjärnsund successfully coexist together.

Today Stjärnsund is a diverse place whose residents have different backgrounds and approaches to life. The population of the village is about 430 permanent residents and it increases during the summer time. Being a historical heritage site Stjärnsund attracts plenty of tourists.



PARTICIPANTS

- * 7 people participated in the workshop
- * both genders are represented in the group
- * age of the participants varies from 27 to 70
- * duration of living in the village varies between 3 month and 31 years

Some of the participants were involved in the foundation of Fridhem in 1980', some joined the community later and have been actively involved in the community life. Others came in recent years and have been mostly involved in permaculture activities. Both the organisations of Fridhem and Permaculture Stjärnsund host volunteers, many of them stay for a longer time in order to check the ability to live in the community.

About living:

The majority of the participants who have lived in the village for a long time, don't live in collectives or shared houses, even though they did back in the 1980's. "People start to live more separately after they build families and get children", says one of the participants, who have lived in the village for 31 years. Younger participants however, and those who have come to the village more recently, mostly share houses with other people, but have separate rooms, and do not share economy, meals, etc. I assume it happens mostly for economic reasons and housing shortage in the village.

About moving around:

The participants mostly live around Fridhem and usually meet there. For some of them it is a workplace as well. The area around includes gardens, shared sauna, outdoor kitchen and shared bicycle parking. There are more meeting places in the village, for example a church, a shop, a concert hall, folkets hus (*culture house) etc.



PERMACULTURE GARDENS

CHURCH

LOCAL CAFE

FRIDHEM

HERRGÅRD

SMEDJAN

SHARED BIKES

COMMON GREENHOUSE

OUTDOOR KITCHEN

Jonas
Stuart
Charlotta
Ingemar X
Marianne
Mona

Swimming place
church

Walk between houses
Walk to main houses (Kiosk etc)
Walk around Sorbo lake
Walk along garden
Walk to swimming places
Walk around the pond
Walk in the forest
Walk in the English Park
Pony riding

cafe
mansion
Herrgård

restaurant
courses
exhibitions

public swimming place

public spaces

Herrgård
Other people
Fridhem
Kiosken
Herrgård (Mansion)
Kyrkan
Församlingstornet
Smedjan
Café Stumma
Elevskola
Folkets hus

Smedjan
concerts

English Park

• - living place
X - meeting points

Lake Sorbo
Korshyttan
2-8 km
Domsjö/kloster

RESULTS OF MENTAL MAPING

About sharing:

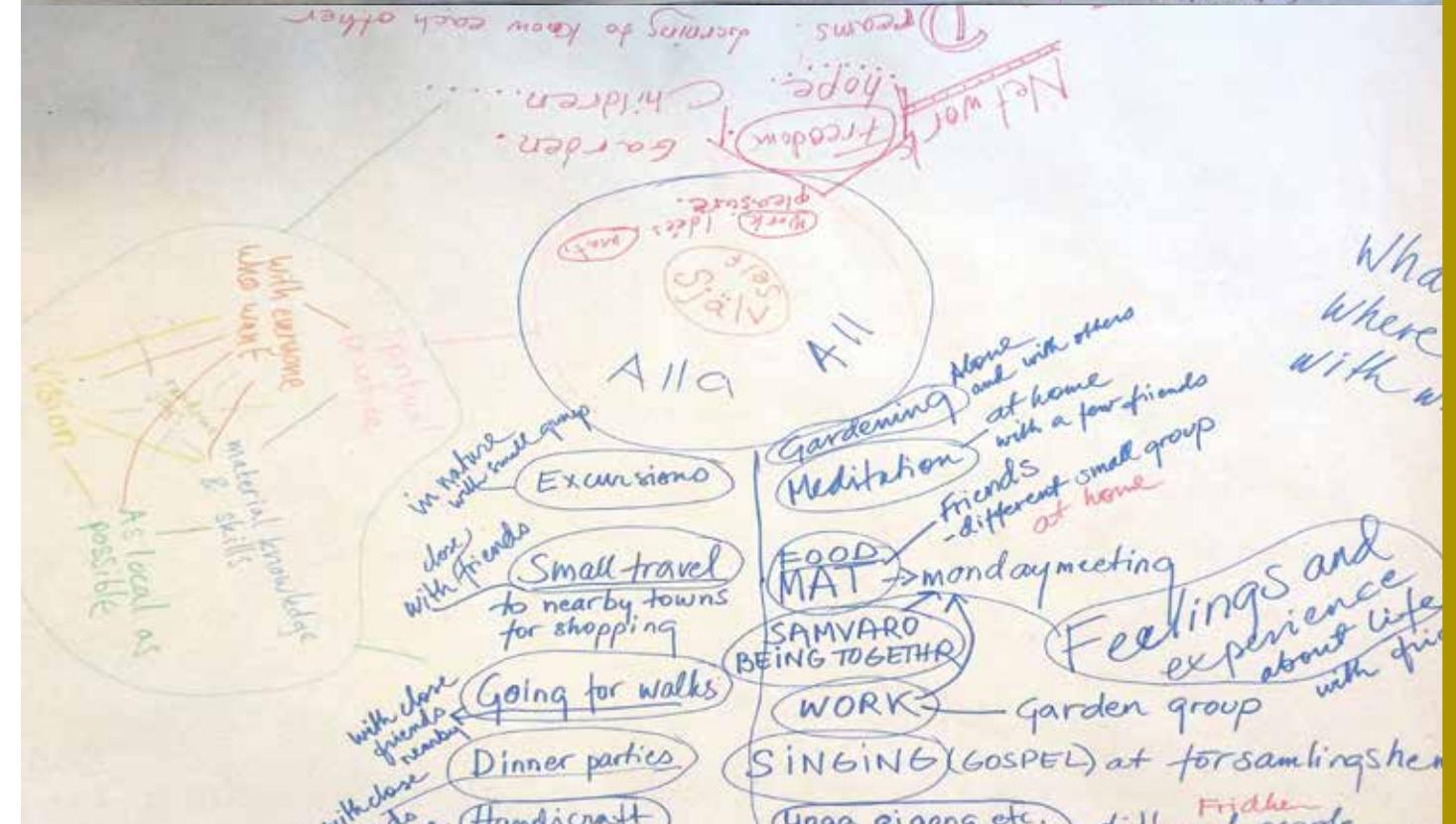
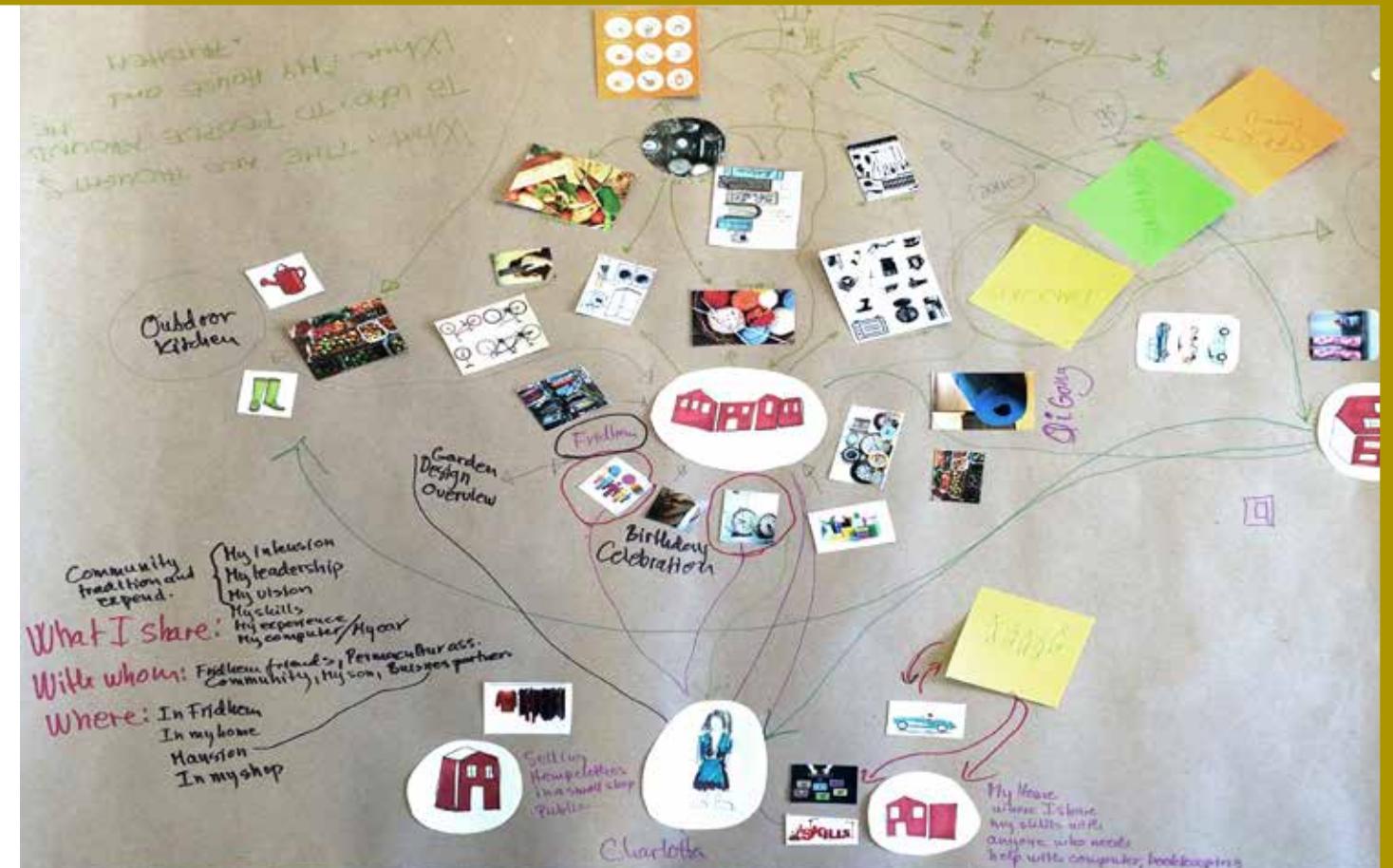
There are both tangible and intangible things shared in the community. The two groups of participants had different approaches to the process. One of the groups started making a diagram from an individual perspective: their own home and things they share, get or give to others. Slowly they came to Fridhem in the middle, which is the main magnet for the community in Stjärnsund. The other group on the other hand started their mind map from the middle, where they put a common vision, an intangible value driven connection point. Their discussion started from portraying the community as a group of co-thinkers, people driven by the same values, where values are a connection point between people. For them, talking to each other, sharing thoughts, giving advice, sharing skills and competences are the main principles of sharing in the community. Through describing intangibles they slowly came to the tangible things that they share, but the impression was that mostly tangible things are shared due to understanding

of the values of sharing and having less attachment to the physical stuff. They refer a lot to spirituality and through it understanding the values of nature and human relationships.

The groups didn't just talk about what they gain from sharing but also about what they contribute with. A lot was said about the maintenance of Fridhem, which is handled together, on a voluntary basis. Moreover, participants emphasize the importance of sharing skills and expertise, learning from each other and sharing knowledge.

About moving to the community:

The participants mentioned several reasons for moving to the countryside. Among them are closeness to nature, intention to live in the community and an interest in farming. Some people also mentioned connection to Fridhem or the permaculture group as reasons and some of the participants came as volunteers and decided to stay.



WORKSHOP 2

SKATTUNGBYN

DATE: 2ND OF MARCH 2016

PLACE: HANSENS

Skattungbyn is a village in the region of Dalarna, with a population of around 350 inhabitants. The place is situated in a very picturesque landscape, attracting a lot of tourists during the summer period, especially for its famous traditional midsummer celebration.

Apart from that, the village is known to host the course in organic farming and self-sufficiency in Mora folkhögskola. The course has run in Skattungbyn every year since 1978. Every year twenty students are involved for a period of twelve months.

In the summer, "Inspiration festival" takes place in the village. The festival has already been organised 10 years in a row. The festival includes music, dance, yoga sessions, lectures and culture walks on various topics such as permaculture, herbal medicine, beekeeping and social sustainability.

PARTICIPANTS

7 participants were involved
Both genders were represented
All of the participants are involved in the running of a culture hub named "Hansens" situated in the middle of the village.

Hansens house is privately owned and rented to the Hansens association. The place exists for several years. There are learning circles, music concerts and jams, meditation sessions, art and craft events etc. The venue is run on voluntary basis by the active inhabitants and is open for everybody to participate or organise activities. Next to the house there is a "Free shop", which is actively used by all groups of inhabitants and managed by Hansens association.



***About moving around**

Participants live in different locations, but meet in a variety of shared spaces. Skattungbyn is quite a unique village - collaboration and mutual help historically was a feather of local life. The shop works on the cooperative basis since the previous one was closed by the municipality. The villagers put their efforts together and created a self-managed community shop. It is one of the main meeting places in the village, with free wi-fi and a place for meeting and workshops. The school had the same destiny: it was closed by the municipality. The next day

villages started to run a community school themselves. During the days it works as a regular school and preschool, during the evening hours it is opened for the dwellers as a gym, yoga class, and place for art and craft courses. Bystugan is an official meeting place in the village. That's where events, concerts, public lectures, movie screenings and dance classes among other things takes place.

***About living:**

Some of the participants live in shared housing, some live in a community farm outside the village, some live in self-built tiny houses (cabins). All of them share common sauna in the village for showering and washing clothes. Three of the participants share one house "I feel it is easier to list what we do not share", says one of the participants.

Due to the housing shortage in the village, the self-built cabins, "tiny houses" became a solution for a lot of young people. Nowadays, there are tiny houses "villages" in several parts of Skattungbyn. People living in the tiny houses share outdoor kitchen, blocks of showers and toilets, gardens and common spaces.





***About sharing:**
 Both sharing tangible and intangible things are equally important to participants. They talked a lot about household - sharing housing, communal areas, firewood, food, etc. Sharing is obviously an important part of their everyday life. They also talk a lot about intangibles, sharing ideas, visions, common lifestyle. They share entertainment and leisure time, as well as work in Hansens and Free shop. Their next step is to create a "bike kitchen" and develop a community bicycle sharing.

The free shop was an important part on the map. It is widely used by inhabitants.

Among the reasons of moving to the village participants mention: course/school, strong social connections, co-thinkers and like-minded people, nature, vibrancy of the place.

Conclusions:
 Majority of the participants were relatively young and I may conclude that for many of them sharing is an economic choice of managing living. It seems that work and leisure are closely related for the participants. Half of the participants were taking the self-sufficiency course in the village, got inspired, fell in love with the place and stayed. The course is an important part of the village life.

WORKSHOP 3

SKATTUNGBYN

DATE: 2ND OF MARCH 2016

PLACE:
MORA FOLKHÖGSKOLAN

The course provides practical knowledge of how to live more resource conscious, handle the challenges that arise when managing houses, farms, collaborating in groups etc. The aim is to give knowledge and encouragement to live more sustainable, in solidarity with nature and humans.

The course consists of several parts: cultivation theory; cooking, baking, food preservation; building techniques, renovation; basics of economics and political science focused on environmental aspects; democracy, decision making and group dynamics, crafts, and additional projects according to personal interests. Duration of the course is 12 month.

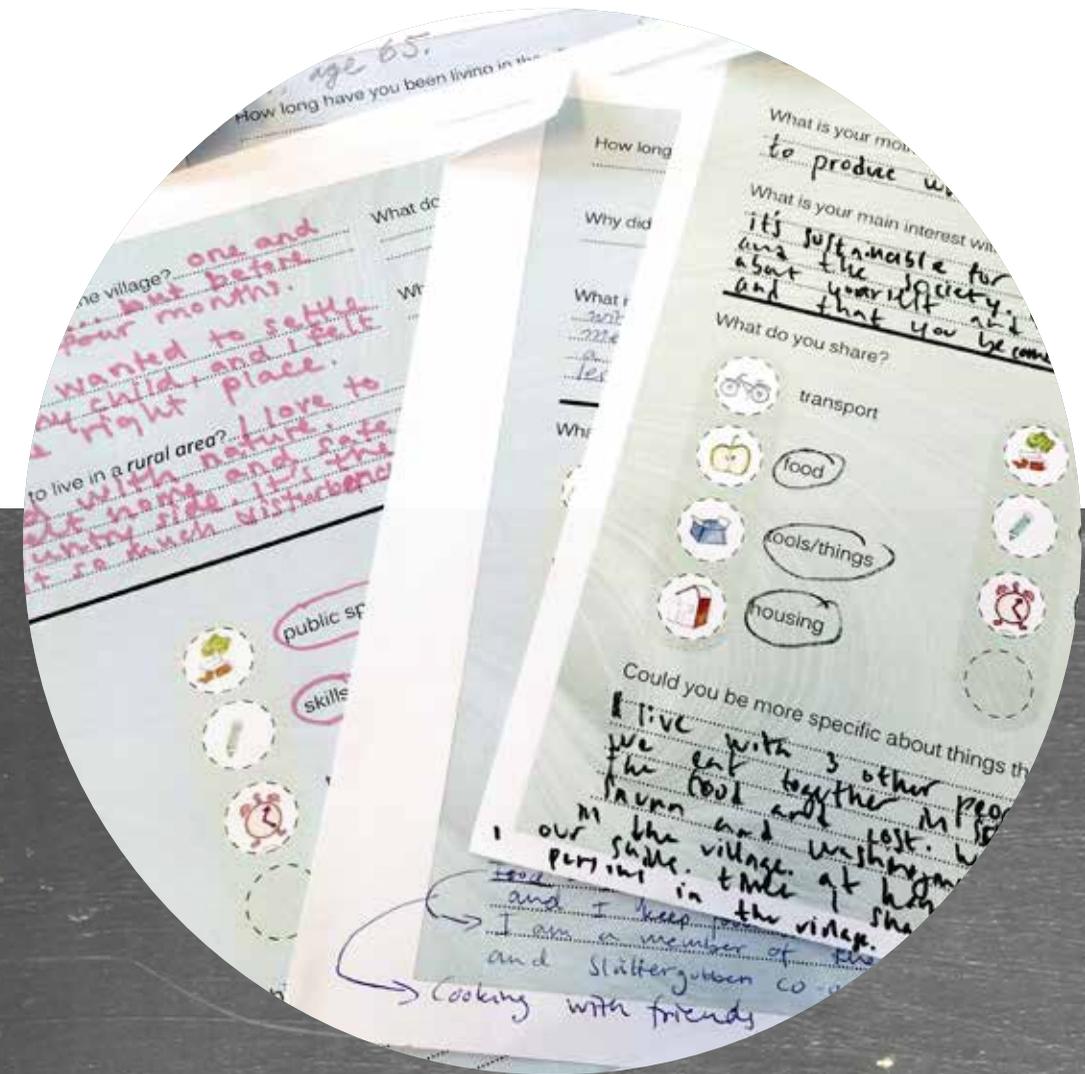
The course participants have great involvement and personal responsibility for their studies. Every morning starts with a mandatory morning meeting where all the

decisions about studying and everyday life are taken; common meals are cooked in groups and managed by students. Living as a community is an important part of the course.

PARTICIPANTS

one teacher from the course
one student from the course.

Students suggested evening time for the workshop in order for everybody to be able to participate. However, after 8 hours working day, they did not have the energy to come. Therefore there were only 2 persons who came: one teacher and one student. However, they found the idea very interesting and suggested to do the workshop in the class themselves and mail the results afterwards. Despite not having a proper workshop, I find the result being positive since they showed interest in continuing the work independently.



WHAT DO YOU GET IN THE VILLAGE:

MUTUAL HELP **Silence**
calmness
SPACE TO GROW FOOD
TRANQUILITY **COMMUNITY**
Feeling of belonging **Nature**
FREE SHOP Skills
I know everybody





WHAT DO YOU MISS FROM THE CITY:

CULTURE:

CINEMA

DIVERSITY:

Queer meeting

COFFEE SHOPS
RESTAURANTS

PUNK SCENE

Christ community

Literature

theater DIRECT ACTIVISM

PUBLIC SERVICE:

ACTIVITIES:

street lights

Climbing hall

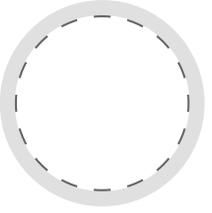
PHARMACY

SPORT ACTIVITIES

Transportation

CONCLUSIONS FROM WORKSHOPS:

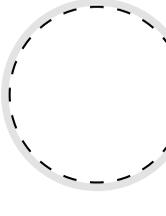
WHAT IS SHARED:

 <p>Transport: including rides and free bicycle lending</p>	 <p>Skills: sharing knowledge, organisation skills,</p>
 <p>Tools/ things: garden tools, sport equipment, things in “free shop”</p>	 <p>Space: gardens, nature, common meeting places in the village</p>
 <p>Food: common lunch once per week, food from the common garden</p>	 <p>Among other things were mentioned: ideas, thoughts, advice, visions, intentions, free time, entertainment, spiritual meetings,</p>
 <p>Housing: collective housing, common kitchen, outdoor kitchen, sauna, laundry room</p>	

WHERE IS IT SHARED:

Participants admit that most of the sharing takes place in meeting places - Fridhem and Hansens. It concerns both tangible and intangible things. Also people share in their households and in the public spaces. There are free bike rent in both of the villages; a second-hand shop in Fridhem and a “Free shop” in Skattungbyn.

WHAT PARTICIPANTS HELP EACH OTHER WITH:

 <p>Building</p>	 <p>Gardening</p>
 <p>Fixing stuff</p>	 <p>Advice/expertise</p>
 <p>Baby sitting</p>	 <p>Moving/caring stuff</p>
 <p>Driving</p>	 <p>Other: organising activities, volunteering with refugees,</p>

WITH WHOM IS IT SHARED:

Most commonly participants share with neighbours and roommates in case they live in collective housing. Some of the participants say they share with “everybody who wants”. Both groups of the participants emphasize that mostly they share within their community. However, they would like to involve more people. The free shop in Skattungbyn is used by a majority of inhabitants.

SHARED SPACES



WHERE

FREE SHOP
SECOND-HAND STORE
SAUNA
OUTDOOR KITCHEN
BIKE GARAGE
FRIDHEM
HANSENS
COMMUNITY GARDEN
BYSTUGAN
VILLAGE SHOP
SCHOOL
ECO-SHOP
SHARED HOUSE/VILLA
OUTDOOR SPACE
CHURCH



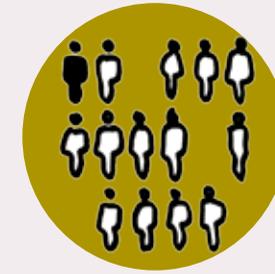
TANGIBLE THINGS

BIKES
TOOLS
COMPUTERS
CARS
KITCHEN STUFF
ROOMS
FOOD
EQUIPMENT
ELECTRONICS
BOOKS
CLOTH
TOYS



INTANGIBLE THINGS

IDEAS
THOUGHTS
HELP
HUGS
LOVE
LEARNING
ADVICE
SKILLS
SUPPORT
REPAIRING STUFF
MOVING AROUND



WITH WHOM

PARTNERS
ROOMMATES
FRIENDS
NEIGHBOURS
COLLEAGUES
VOLUNTEERS
VILLAGERS
VISITORS
EVERYBODY

Based on the outcomes of workshops and interviews with “practicing experts”, I can conclude main categories which create together the concept of “sharing facilities”. Those categories are :

1. Where are the things shared? The list can vary in different context, however the main types of places are public or semi-public spaces.
2. What things are shared? It includes both tangible and,

not least important, intangible things. Tangible things represent ability to downshift, possess less and therefore have a lighter lifestyle. In its turn, intangible things represent common visions, ability to share opinions and ideas, ability to find compromises and build dialog.

3. With whom are the things shared? Variety of groups with whom people are sharing or willing to share is broad and quite often depends on the size of the community and the context (whether it is a small community where people have closer social relations, or more individual lifestyle in the city).



CONCLUSION 1

A COMMON MEETING PLACE IS CRUCIAL

In both villages there are meeting places which work as spots of attraction for different groups of people. Important is the fact that a meeting place should contain a lot of functions and activities to fulfill as many needs of the inhabitants as possible. Diversity creates a higher level of involvement.

"You can do it in the city for sure. But then you need a place to meet, like we have Fridhem here. You need the place open for everyone, where people can share"

CHARLOTTA

CONCLUSION 2

"It is easy when everything is under the building process and things are developing, then everybody is busy and excited. But after time you need to have a common vision, common goal to continue being a community. That is a challenge"

CHARLOTTA

Quite often people starting an intentional community are inspired and motivated by certain lifestyles. Awareness, both social and environmental, spiritual development and intention to live as a working collective are seen as main features. Together those features create a common vision for certain groups of people. However, after a time if people realise differences in ideas and visions, it is harder to keep "togetherness".

CONCLUSION 3

COOPERATION AND MUTUAL HELP ARE SEEN AS MAIN FEATURES OF SUSTAINABLE LIVING.

The next day after municipality closed our school we created a cooperative and since that day we manage our village school together. That what happens when people are getting together.

KÅRE

In many cases cooperation in the village is seen as a way to unite in order to reach common goals. An example of this is co-op shop and community school in Skattungbyn. People managing facilities on a community basis have higher resilience to external threats and are more self-reliant in everyday life.

CONCLUSION 4

VOLUNTEERISM AND PERSONAL INVOLVEMENT IN THE LIFE OF THE COMMUNITY IS CRUCIAL

Voluntarism is an important part of life in an intentional community. Obviously, majority of people are having their personal lives, families, jobs and duties. Though, when it comes to maintenance of common areas, running community events, managing a co-op store and cleaning common areas, responsibilities are shared equally among the members of the community. The inhabitants fulfill many tasks on voluntary basis.

I volunteer in the eco store every week. It is not a big deal to work several hours during weekend. And I meet all the villagers. It is a good way to spend Saturday.

LIEF

FINAL REFLECTIONS FROM THE WORKSHOPS.

Three workshops were held with different groups of participants, representing various backgrounds, experiences, knowledge and visions. The first group consisted of people mainly in their 60's, who have vast experience in creating community and developing it. I can conclude from the workshop and interviews that their visions change over time. The concept of the "community" was developed and transformed. They still have a common vision, as well as challenges to face. Running the culture house Fridhem started to be more of a job. It has a good level of organisation and attracts a lot of people from outside. People do not live as a "commune", although they have a very strong feeling of local community. They collaborate a lot, work together, gladly help each other and openly ask for help. The level of individualism and independence is much lower than in an ordinary urban lifestyle due to closer connections between people. The possibility to share values through talking and expressing them seems

to be an important factor in reaching close connections, Fridhem is a main meeting point for sharing. People in the Fridhem community obviously possess less physical stuff or have less attachment or less intention to get it. The practice of sharing things is very common, including cars, tools and equipment. Despite the fact that most participants live in independent households nowadays, sharing is an important part of their everyday life.

The second group of participants represents people of younger age, mostly in their 20's and 30's. The group is more passionate about community living and some of them share the same house. Almost all of them share common facilities - sauna and showers, laundry room, kitchen etc. In this case I would assume that it is a combination of economic needs and a desire to live in the community. Younger people without established life tend to share more than older participants and those with a more settled lifestyle. The second group of participants probably could remind to the first one 30 years ago. Although, the idea of Hansens is

very similar to Fridhem. The venue is still under development and searching ways to attract people, to form the management groups and to organize the program.

The third group held a workshop by themselves without me being a part of it. I received the documents that they produced later.

In general, it was a fascinating experience of collaboration. It is an inspiring way of living. People are driven by the values of voluntary simplicity and low-impact living. It is all about conscious choices and awareness. They have more fun, work together, share and live closer to the nature. It is easy to do it and it makes you happy.

However, all groups of participants admit ambiguous attitude of the native villagers to their activities. It is much milder in Stjärnsund nowadays, and feels more in Skattungbyn. Participants admit that their lifestyle seems to be "alternative" to regular inhabitants and not always appreciated. However, the reasons for it are mostly external differences: appearance.

PARTICIPANTS REFLECTIONS:

All groups of participants find the model of the workshop being interesting, educative and inspirational. It raised a lot of discussion among the participants about their visions of community living. Normally people do not share their views in everyday life, but the topic turned out to be "hot" for each group of participants. In the final reflections all groups said that they will use the principles of the workshop to develop their common visions for the venues they are working on. They all showed great interest in the topic and were positive about the idea of implementing community living and sharing principles in the city district. Participants found the method being inspirational, and were gladly surprised that academia is interested in the topic of community living and sharing.

DESIGN

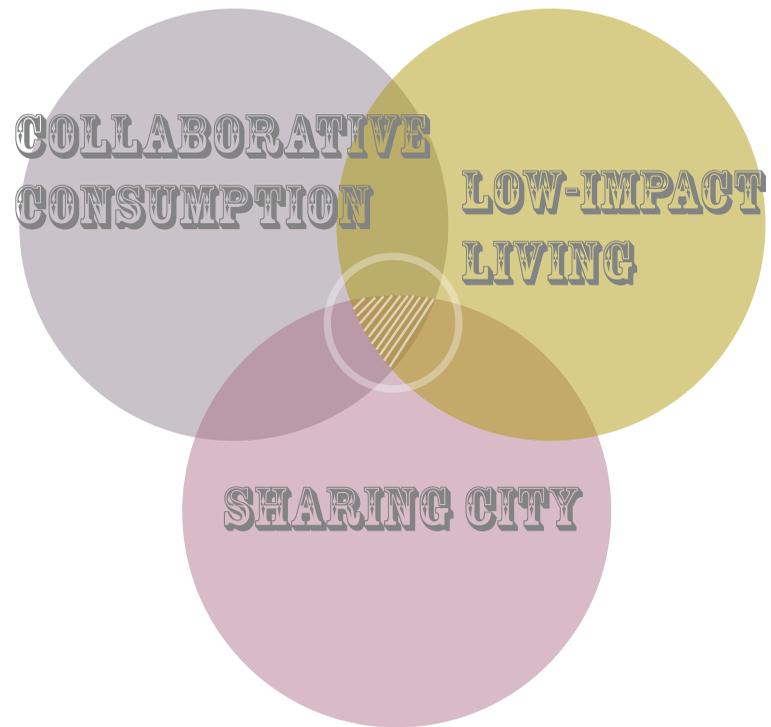
PART II

5

CHAPTER

ALL
YOU NEED IS
LESS

THEORETICAL FRAMEWORK



In order to develop the concept of “sharing spaces”, the three most important aspects based on the theoretical framework - collaborative consumption, low-impact living and sharing city - need to be taken into consideration. The concept of “sharing spaces” is developed as an intersection in the middle of these three theories as an intersection of them.

The theoretical framework introduces various aspects - social justice and inclusion, sustainable choices and downshifting in everyday life, openness and voluntarism, and desire to participate in the life of the community. Further and it shows that all together these socio-economic factors create a basis for sustainable lifestyles in the neighbourhood context. Further design is based on this compilation.

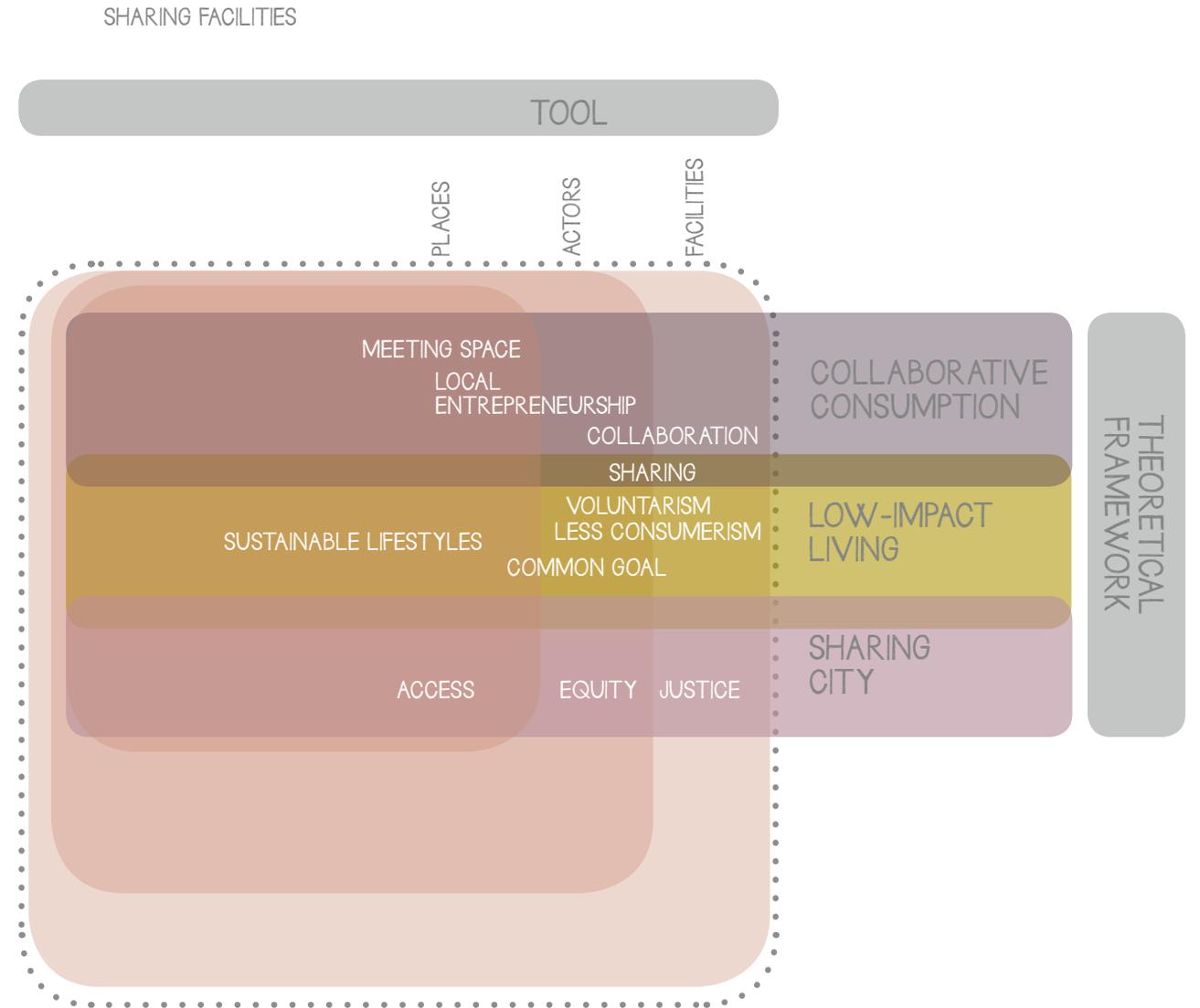


Figure 10. Sharing facilities. Theoretical framework and its application to the tool

CONCEPT



TRUST

Trust is essential for encouraging people to share and collaborate. It is one of the major aspects that is needed for collaborative consumption to function successfully. Trust between strangers creates a feeling of safety and a sense of belonging to a place.

VOLUNTARISM

Voluntarism is important in order to create a sense of belonging to the place. Volunteering broadens social connections and contributes to collaboration and mutual help within the neighbourhood.

COMMON GOAL

Common goal is important in order to connect people. Dwellers of every neighbourhood belong to various groups according to age, gender, occupation, beliefs or even ethnicity. A common goal creates connections between various groups and makes them collaborate in order to reach this goal.

VISION

Vision refers to the system of values. Values are essential for sustainable lifestyles and collaborative consumption. A common vision gives common understanding and helps develop strategies for development.

APPROACH:

NUDGING

for low-impact ways of living

Changing human behaviour is a complex process. Education is relatively effective but challenging way. According to UNESCO, consumer education is practical, touching the daily lives of people near and far away. Local consumer action can have a global, social, economic, and environmental impact, both today and tomorrow. A relatively new way to influence behaviour in a sustainable direction without changing the values of people is nudging. Nudging means carefully guiding people's behaviour in a desirable direction without using either carrot or whip (Mont, 2014). It is a soft way of "pushing" people slowly to change their habits and choices. Since the process is complicated and includes collaboration between policy makers, designers, architects, and social scientists, a vast variety of methods are needed in order to achieve successful results.

GAMES-BASED APPROACH

Game-based approach is a powerful method for developing social interaction in the planning process. Gaming process and gaming tools can be used to increase dialogue among citizens. Moreover, it is an effective way to grasp inhabitants' opinions in a playful way. By participating in these social practices, game players have an opportunity to explore new identities and to learn by doing methods. Games visualise in an interactive way how people can use the land, who has the right to public space and how the space can be developed. Games and simulations create conditions where participants are encouraged to learn more thanks to gaining unique experiences in the process of the game. Learning is mostly a process that leads to a change in behaviour or understanding, rather than a quantitative increase in knowledge or storing information that can be reproduced (Lamerous, 2014).



WHAT

WHERE

WHO

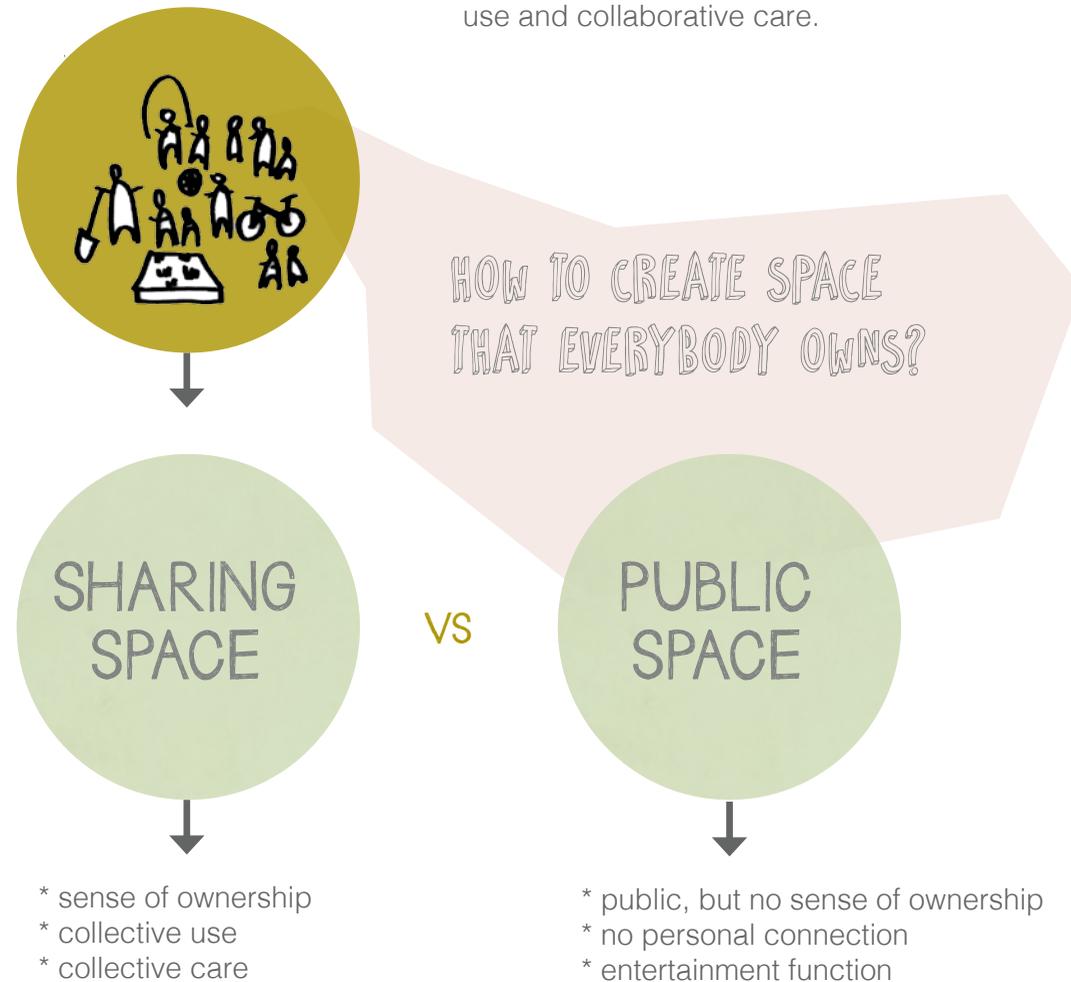
HOW

RESULT

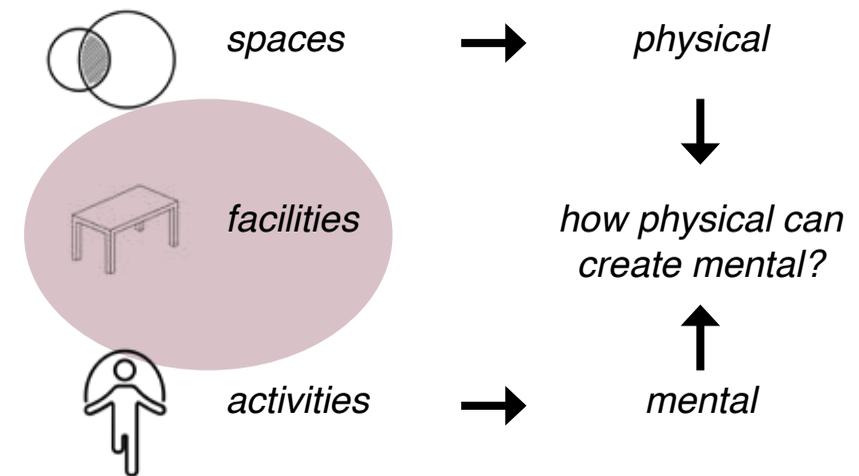
WHAT

SHARING SPACES

“Sharing space” is a concept that goes beyond “public space” and recognises urban commons in a broader sense. Quite often, public spaces are underused or created for particular groups of inhabitants. The concept of “sharing space”, on the other hand, creates a place that has a collaborative use and collaborative care.



WHAT CAN BE SHARED IN THE NEIGHBOURHOOD



In order to encourage sharing and sustainable choices in the neighbourhood, new types of activities are needed in the neighbourhood and they demand new spaces. This process of creating activities and spaces is interconnected.

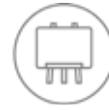
Existing activities attract inhabitants and create interest, and growing activities in the area in turn require physical places. At the same time, a lot of spaces without particular functions remain empty or even feel unsafe and unfriendly.

Spaces for sharing in the neighbourhood aim to encourage collaboration and building trust, as well as encourage more sustainable choices among dwellers through the promotion of swapping, reusing, recycling, donating, exchanging, remaking, rethinking and other actions that support a change of consumption habits. These new functions demand new types of facilities in the neighbourhood. “Facility” as a combination of space and function, adds meaning to the word “space” and makes it be active and alive.

COMMONS THAT WE ALREADY HAVE



PUBLIC TRANSPORT



PUBLIC EDUCATION



WASTE MANAGEMENT



CULTURE INSTITUTIONS



WATER SYSTEM



HEALTH CARE SYSTEM

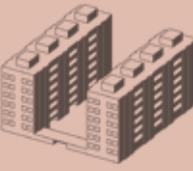
There are plenty of commons we use in the urban life. These are well developed and functioning systems for sharing that are often taken for granted in the urban setting. Public transportation, health care systems, educational institutions and cultural centers are inseparable parts of everyday life.

Generally, these commons can be divided according to scale: city, neighbourhood and block. On the city scale it is infrastructures, city parks, city halls, museum, public spaces, libraries; on the neighbourhood scale playgrounds, parks, recycling stations; on the block level laundry rooms, bike garages, meeting rooms, storage rooms.

All of these places and facilities fulfil certain needs of the neighbourhood dwellers. However, new types of facilities should be added in order to encourage sharing and discourage consumerist behaviour. These facilities can be divided into four main groups: food, transport, work and leisure, which represent various aspects of the inhabitants' lives.

ALREADY SHARED

TO ADD

	ALREADY SHARED	TO ADD
CITY	 <p>INFRASTRUCTURE CITY MUSEUM CULTURE HOUSE PUBLIC PARK PUBLIC SQUARE</p>	<p>car pool events, lectures workshop, co-work</p> <p>MAKERSPACE TOOL LIBRARY swapping</p> <p>OUTDOOR KITCHEN cooperative gardens, local food business POP-UP PROJECTS POP-UP PROJECTS</p>
NEIGHBOURHOOD	 <p>LIBRARY OFFICES PARK SCHOOL CHURCH GARDENS</p>	<p>tool library, tool pool co-work space</p> <p>develop and create a cooperative gardens, possibilities for local food business use school rooms for evening activities for the neighbourhood inhabitants</p> <p>INCUBATOR WORKSHOP</p> <p>food co-op COMMUNITY GREENHOUSE</p>
BLOCK	 <p>RECYCLING STATION BIKE ROOMS LAUNDRY ROOMS STORAGE MEETING ROOMS</p>	<p>SWAP EVENTS upcycling workshop FREE SHOP</p> <p>bike kitchen</p> <p>use of the ground floors of the living block for local activities</p> <p>CREATIVE CLUSTER makerspace</p>

FOOD



- COMMUNITY GARDEN
- FARMERS CO-OP
- LOCAL FOOD CO-OP
- COMPOST STATION
- POP-UP CAFE
- OUTDOOR KITCHEN

WORK



- CO-WOR LAB
- MAKERSPACE/HACKERSPACE
- INCUBATOR
- CREATIVE CLUSTER

NEW TYPES OF FACILITIES IN THE NEIGHBOURHHOD

TRANSPORT



- CAR POOL
- BIKE KITCHEN

LEISURE



- TOOL LIBRARY
- OUTDOOR LIVING ROOM
- REPAIR CAFE
- SWAP/FREE SHOP
- TIME-BANK



FOOD

Sustainable local agriculture is essential for the positive transition and benefits a community economically, ecologically and socially. It help to develop food security and decrease biological waste as well as raise awareness about food production and consumption. Plenty of space in contemporary neighbourhoods can be used for urban farms and community gardens. Food production facilities can encourage cooperation between people, give the possibility to use farming skills, provide inhabitants with local food and the most important, create jobs in the food production industry, especially in areas with high rates of unemployment and where a large percentage of the population belongs to vulnerable groups.

LIST OF FACILITIES:

COMMUNITY GARDEN
FARMERS CO-OP
LOCAL FOOD CO-OP
COMPOST STATION
POP-UP CAFE
OUTDOOR KITCHEN



TRANSPORT

Transportation consumes about one third of global energy and at the same time causes huge amounts of emissions. Sharing private transport, instead of excess usage of single driver rides, is a more sustainable solution in areas where public transportation does not provide enough coverage. Carpools and various shared ride schemes in the neighbourhood can help to manage more efficient use of transportation. Besides lowering the environmental impact, sharing private transport also helps people get to know each other, create neighbours relationships and build trust in the neighbourhood. Facilities such as bike kitchen or public bike sharing scheme in the neighbourhood decrease the use of cars and encourage cycling. Creation of those facilities will help to encourage usage of second-hand bikes and give more possibilities to various groups to get access to bikes.

LIST OF FACILITIES:

CAR POOL
BIKE KITCHEN



WORK

Work environments are important for sustainable life in the neighbourhood. To create vibrant neighbourhoods and fulfill different needs of humans lives diversity is crucial. Work opportunities are a large part of it. In the suburban areas, where absence of working places leads to solitude in the urban setting, creation of local jobs sets up more friendly living surrounding, besides local business encourage people to take care of the environment and invest into development of the local community. In the neighbourhoods, where live many young people, it is suitable to create spaces for start-ups and creativity projects. In this case, you need to focus on the possibilities for cooperation and social entrepreneurship. This can create new jobs in the neighbourhood for both youngsters and adults.

LIST OF FACILITIES:

CO-WOR LAB
MAKERSPACE/HACKERSPACE
INCUBATOR
CREATIVE CLUSTER



LEISURE

Leisure time activities are important parts of the life in the neighbourhood. The way we spend our free time largely determines the ways we live and consume. The activities based on sharing and collaboration encourage inhabitants to be more involved in the life of the neighbourhood and develop a sense of belonging. Skills sharing or repairing events create a common ground in the neighbourhood and invite people from various groups to meet. Moreover, education activities and spreading knowledge about practical skills help to create environmental awareness and conscious consumption. It leads to more sustainable and environmentally friendly lifestyles in the neighbourhood.

LIST OF FACILITIES:

TOOL LIBRARY
OUTDOOR LIVING ROOM
REPAIR CAFE
SWAP/FREE SHOP
TIME-BANK

WHERE

TO FIND PLACES FOR FACILITIES

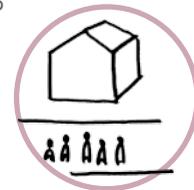
Every neighbourhood consists of a variety of spaces: public, semi-public, semi-private and private. Detailed mapping of an area helps to understand the diversity of spaces and the potential to improve their quality. Those spaces can be divided into six main groups: houses or blocks, open spaces, diy or pop-up (temporary) places, educational institutions, cultural institutions and business institutions.

In these circumstances, there is no particular need to develop new facilities and build new structures, and moreover, understanding the existing potentials of the neighbourhood can create new functions in existing buildings and enrich socio-cultural life in the area.

Many spaces in the neighbourhoods, such as schools and offices, are only used during the daytime, but there is a potential to use these spaces for other needs as well.

Spaces that everyone knows and everyone owns are the most attractive ones to create trust between people and encourage collaboration.

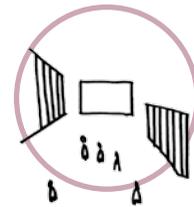
* UNDERUSED SPACES



* SPACES USED PART-TIME



* PUBLIC SPACES WITH LACK OF FUNCTION



* TEMPORARY SPACES



HOUSES/BLOCKS



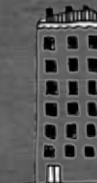
EDUCATIONAL INSTITUTIONS



CULTURAL INSTITUTIONS



BUSINESS INSTITUTIONS

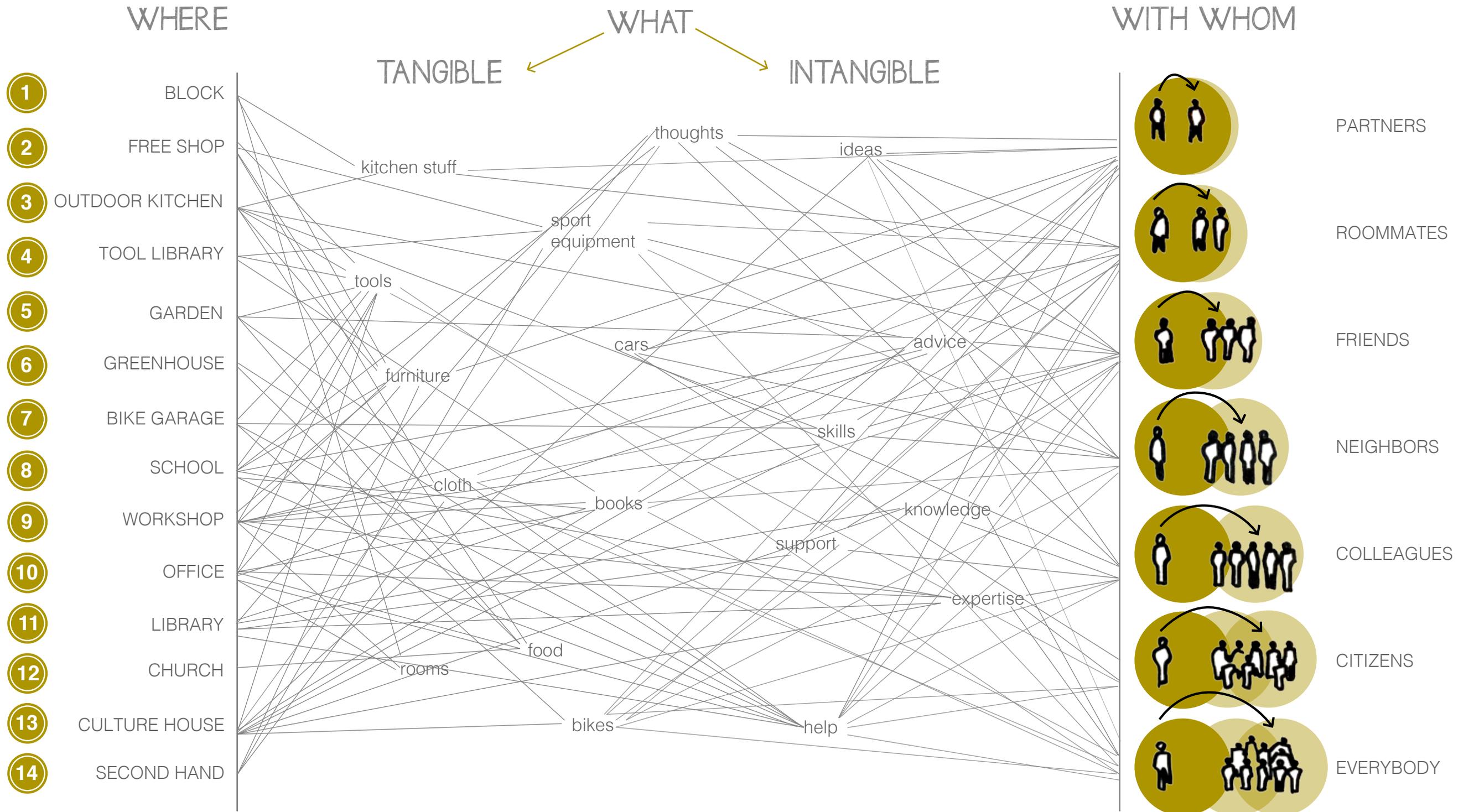


OUTDOOR SPACES



POP-UP & DIY SPACES





The diagram is based on the conclusions from the chapter 4, "Learning from practicing experts" and represents reflections on the results of the workshops and interviews. The diagram shows the variety of places where sharing is happening, what people are sharing

and with whom. This diagram emphasises the fact that sharing is common with people who are close to us (partners, friends, roommates), but ,in truth, sharing with strangers creates a bigger network and a bigger diversity of things for sharing.

	COMMUNITY GREENHOUSE	FARMERS CO-OP	OUTDOOR KITCHEN	POP-UP CAFE	BIKE KITCHEN	CAR POOL	MAKER-SPACE/HACKER-SPACE	CO-WORK LAB	INCUBATOR	TIME BANK	TOOL LIBRARY	CLOTH LIBRARY	REPAIR CAFE	SKILLS POOL
BLOCK				●	●	●	●	●	●		●	●	●	●
OFFICES OF ORGANISATIONS					●		●	●	●					●
CULTURE HOUSE				●	●		●		●		●	●	●	●
LIBRARY					●	●	●	●	●		●	●	●	●
DIY ARCHITECTURE		●	●	●	●		●	●	●		●	●	●	●
PARK	●	●	●	●	●				●				●	●
SQUARE	●	●	●	●	●	●								
SCHOOL					●	●	●	●	●		●	●	●	●

 VERY SUITABLE
  SUITABLE
  MIGHT BE SUITABLE

This diagram shows an approximate example of how sharing facilities can be distributed in the neighbourhood's physical places. The aim is to show the flexibility of spaces and encourage to use existing resources of the area.

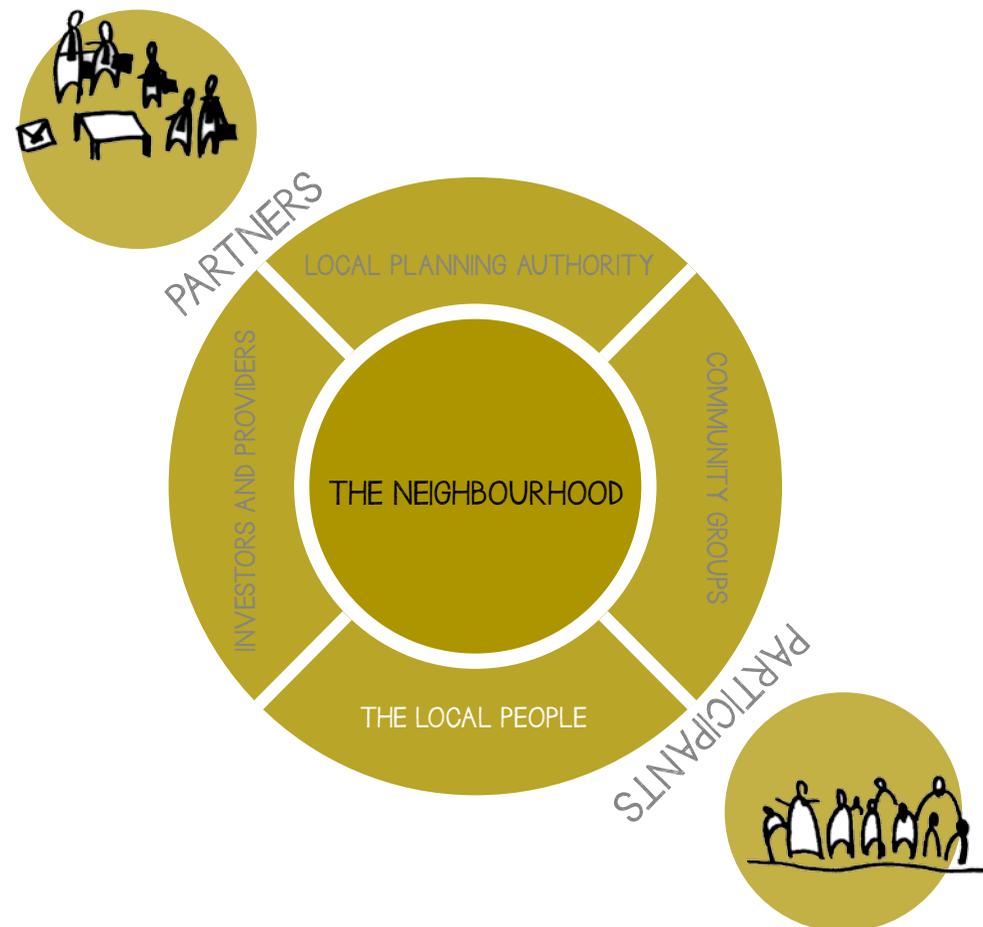
WHO

As was mentioned in the previous chapters, people's habits are shaped by various factors, hence changing and influencing these habits is likewise a task of different actors.

In order to encourage more sustainable lifestyles in the neighbourhood, all levels municipal, household be considered, because together they shape our modern lifestyles. Proper communication of the main objectives

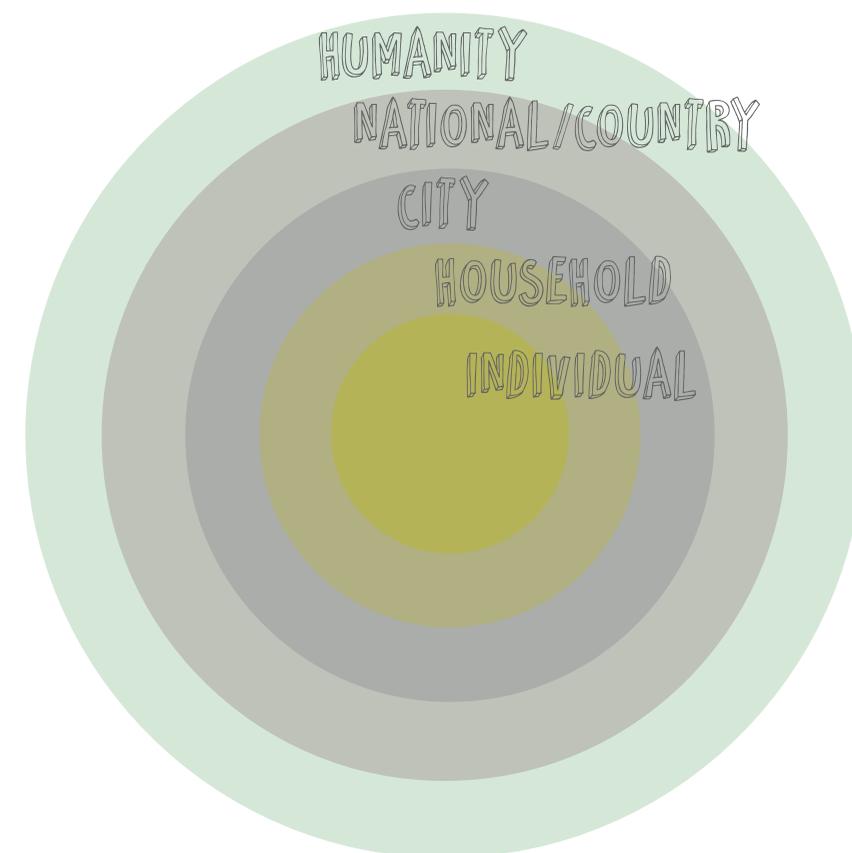
between stakeholders can lead to good results. However, a lot of neighbourhoods fail to develop good planning processes because of lack of clarity about who should be actively involved in the planning (Barton, Grant and Guise, 2003).

The neighbourhood stakeholders consist of several groups representing different types of power and relations in the area.



Interest in sustainability and low-impact living increases in society. However, in order to facilitate the process, new actors should be developed. In order to keep a constructive dialogue between the stakeholders and decision-makers (partners) and users (participants), it is important to create an atmosphere of understanding and mutual goals, which can be executed by the "third" actor.

A facilitator, in these circumstances, is an organization which aims to enable sharing and collaboration between citizens and performs as a pioneer on the topic.



HOW

STRATEGIES

how to reach more sustainable living in the neighbourhood

- 1 Increase cooperation
- 2 Raise awareness about environmental issues
- 3 Encourage social connection and build trust
- 4 Encourage sharing and develop spaces to facilitate it
- 5 Develop practical skills
- 6 Encourage local entrepreneurship
- 7 Acknowledge the power of DIY (do it yourself)

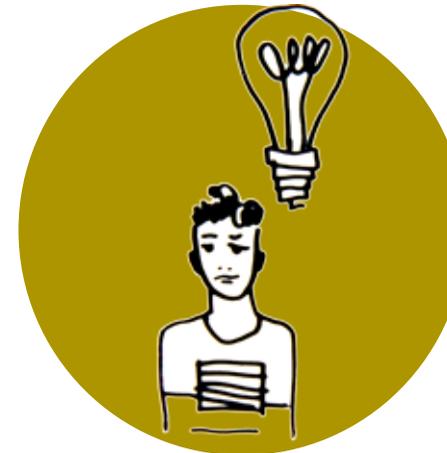
1 INCREASE COOPERATION

Humans are an example of a group-oriented species that evolved thanks to the ability of cooperating with others. Cooperation is, likewise, an important skill for sustainable lifestyles.

One of the really attractive things about cooperatives is social benefits - people learn how to do teamwork, how to handle and organise leadership and how to make decisions together.

“People involved into co-ops tend to be much more involved in their communities, they participate in local organizations and take part in the boards, participate in credit union, or parents organizations, they might get more socially involved because they are more used to speak up. They get used to the transparency on coop and they start to expect it other parts of their lives” (<https://www.youtube.com/watch?v=ZfaFriFAz1k>)

2 RAISE AWARENESS ABOUT ENVIRONMENTAL ISSUES



Awareness is important in order to start acting and it is the first step in making a lifestyle shift. Awareness helps understand global problems and encourages making smarter choices.

It can be implemented in the system of education since young generations are very important to focus on. Awareness also spreads among social groups and through events and activities.

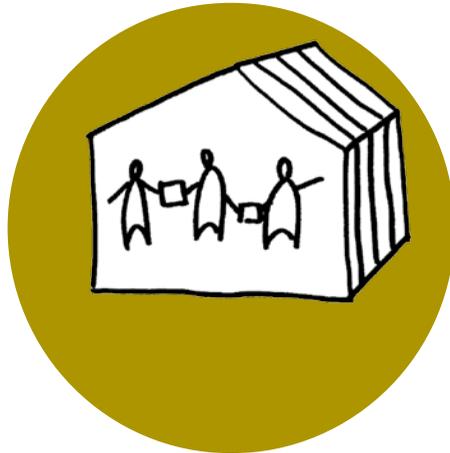
3 ENCOURAGE SOCIAL CONNECTION AND BUILD TRUST



Social connections are essential for human well-being and integration in society. Likewise, social sustainability is important for the development of the neighbourhood.

Strong social connections develop a sense of safety in the living area. Knowing your neighbours and the possibility to contact them for help or social interaction creates a feeling of trust in the neighbourhood.

4 ENCOURAGE SHARING AND DEVELOP SPACES TO FACILITATE IT



Sharing is important in order to lower consumption and increase well-being at the same time. Sharing has a lot of benefits, including environmental, economic and social aspects. Because of modern individualistic lifestyle in the city neighbourhoods, the habit of sharing has been lost and substituted with buying and possessing things and services. However, developing sharing can decrease consumption and in this way lower the environmental impact. Moreover, sharing develops social connections.

5 DEVELOP PRACTICAL SKILLS



In industrial society, when machines started to take over human labour, practical skills started to be lost. However, today we see an increasing interest in craft and hand-made things. Historically, “slöjd” or “hand craft”, is an important part of the Swedish culture, and it is a part of school education since 1955 (Wikipedia). In order to create facilities where people can develop their practical skills, exchange knowledge in creative solutions and just meet and learn, it is necessary to develop awareness, change consumer habits and support local businesses.

6 ENCOURAGE LOCAL ENTREPRENEURSHIP



Local entrepreneurship is important for both social and economic sustainability. Moreover, goods and services produced in close proximity have less environmental impact. Furthermore, people working closer to the places where they live take better care of the surroundings and the waste from their business. This helps develop a sense of belonging and trust.

Having working places in close proximity to the living area helps involve younger generations and introduce them to the work environment. Moreover, developing opportunities for young adults to start their own business projects is important for the development of suburban areas with high rates of youth unemployment.

7 ACKNOWLEDGE THE POWER OF DIY (DO IT YOURSELF)



DIY (do it yourself) is a popular practice, or creating something without expert or professional help with available materials and easy methods. Methods of DIY help to get exactly what is needed for the community with its own resources. It is a flexible and low-cost way to create solutions by local activists and together with the inhabitants.

DESIGN CRITERIA



TRANSPARENT

The structure of the spaces should be clear and transparent in order to engage participants. Since the spaces are situated in the neighbourhood, transparency might develop a sense of belonging and a clear understanding for people how the structure works.



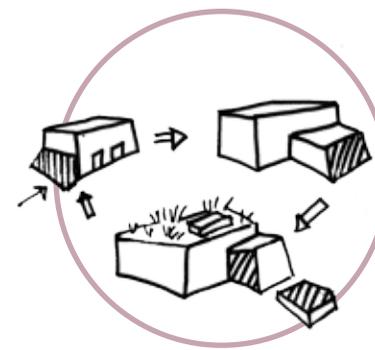
VISIBLE &
INSPIRATIONAL

Visible and attractive in order to encourage people to come in and participate. It should attract attention and look welcoming for the people in order to strengthen local participation, inspire lifestyle changes and make the benefits of sharing and cooperation visible.



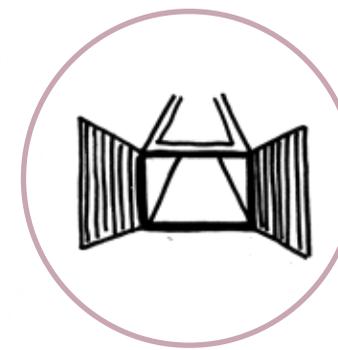
FLEXIBLE &
MOBILE

Some structures can be mobile and movable, changing location in the neighbourhood. This can encourage more people to participate and it works as a good promotion of the venue. Mobility in this case is the way to reach more people.



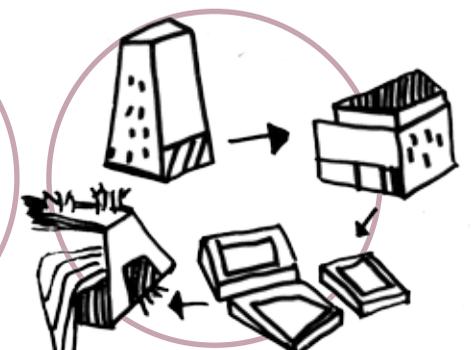
INCREMENTAL

Incremental architecture is not quick, immediate or complete, but it is a step-by-step process, where choice remains with the users. It starts with a core center and develops gradually around it, with the users controlling the expansion based on their needs and resources. Incremental architecture is an affordable method that gives maximum flexibility in decisions.



OPEN

The spaces should be welcoming for users from all backgrounds and they work as connection points. They should also be accessible for people in different conditions. A sense of openness may increase a feeling of belonging and being welcome.



ADAPTABLE

There should be capacity to respond to changing conditions, and the design should support change and reuse. This characteristic is essential in the time of global challenges, and the feature of adaptability is one of the most important for sustainable development.

CONCLUSIONS:

*How to make all the stakeholders collaborate? What are the relevant approaches?
How to communicate the topic of sharing, downshifting and low-impact living?
All of these questions are essential for shifting urban lifestyles.*

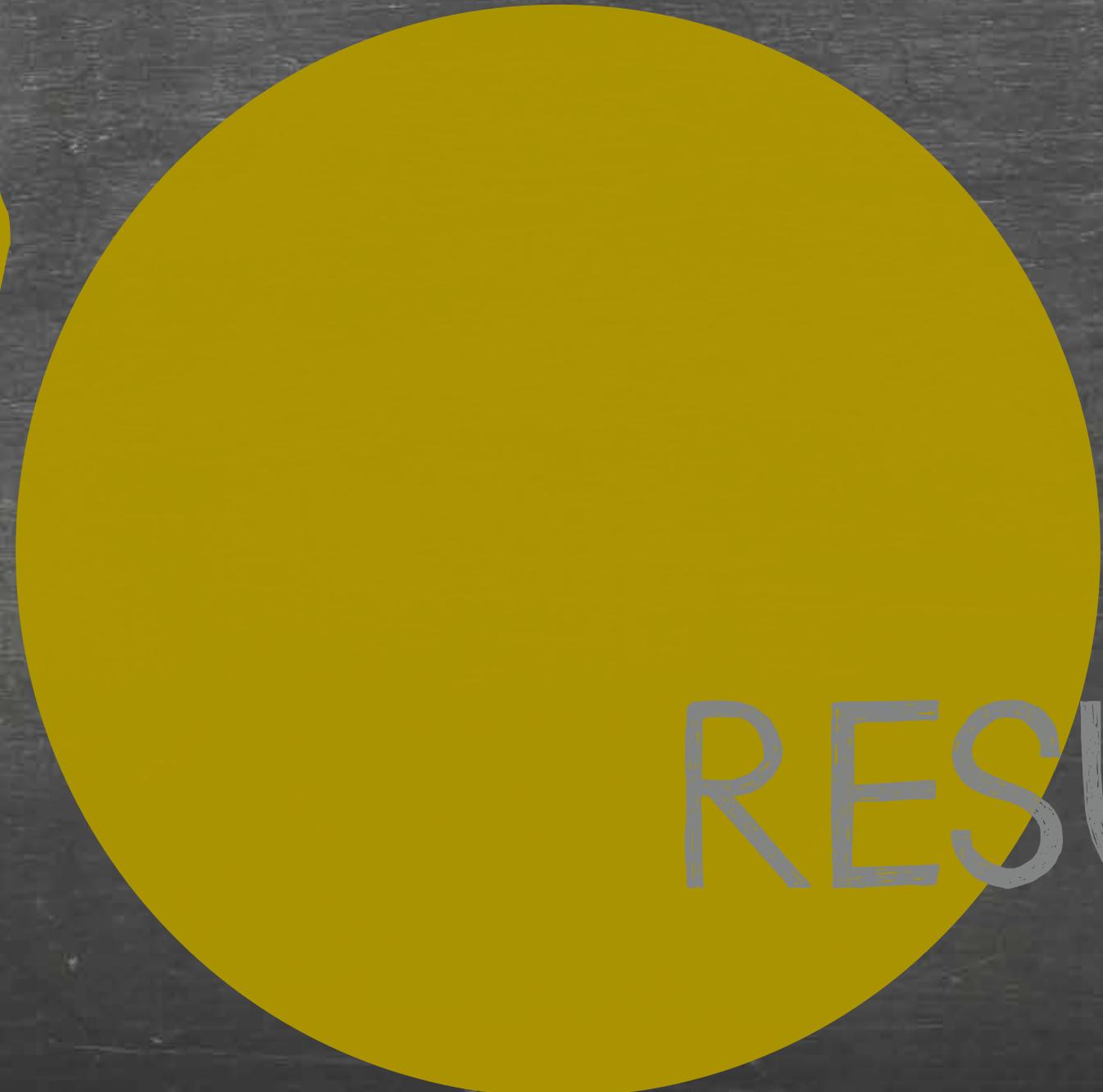
Instead of developing an architectural design proposal, it is more relevant to develop a method - a tool for decision making - in order to create common ground in the neighbourhood and to see the needs and potentials.

The process should be facilitated by the architect, but mutual collaboration of all the stakeholders in the neighbourhood should be a basis for the future proposal. The result of workshops with a tool can give ground for decisions and the transition of the living neighbourhood to the sharing space in order to reach more sustainable lifestyles.

Further process of designing a tool is described in the next chapter.

6

CHAPTER



RESULT

A TOOL FOR DIALOG

IDEA

To change the norm of living and our perception of our lifestyle is not an easy process. It is ambitious to claim that spatial planning can influence the way people live and consume, however certain models of planning an environment can lead to a change of mindsets, inspire people to share and collaborate.

How can one create a model for a well-functioning low-impact neighborhood? How should planners and architects act at the level of the built environment and infrastructure? Can design create awareness or encourage sustainable choices and sharing?

It is important to recognize the bottom-up urbanism practices and open-source platforms, through which people reconsider their environment. Instead of accepting places as they “are”, this is a way to indicate what they can ‘become’ (Massey 1995, by Agyeman and McLaren, 2013).

The choice to develop the tool for decision taking, which can work as a mechanism facilitating the process of creating “sharing spaces” in the neighbourhoods, was determined by the idea that a common goal can be achieved just with a certain level of collaboration. Moreover collaboration should be developed not between partners, but between partners and participants. Space as possibility is a way of depicting a ‘Right to the City’, Harvey’s idea that such a right should be seen not as “an exclusive individual right, but a focused collective right” (Harvey 2011, p137, cited by Agyeman and McLaren, 2013). Moreover, It should go beyond particular types of architecture used for particular kind of activities, but encourage to create space according to needs and combine functions within them.

AIMS

- 1 To develop the dialog between all the groups and find the common ground.
- 2 To start a discussion about the concept of sharing spaces in the neighbourhoods.
- 3 To develop new facilities in order to encourage sharing and sustainable living through openness and accessibility.
- 4 To make all the participants understand the benefits of sharing and find common goals.
- 5 To catalogue the commons for sharing which can be developed according to the needs.
- 6 To activate underused spaces and acknowledge self-managed architecture practices. To develop spaces that already exist in the neighbourhood.

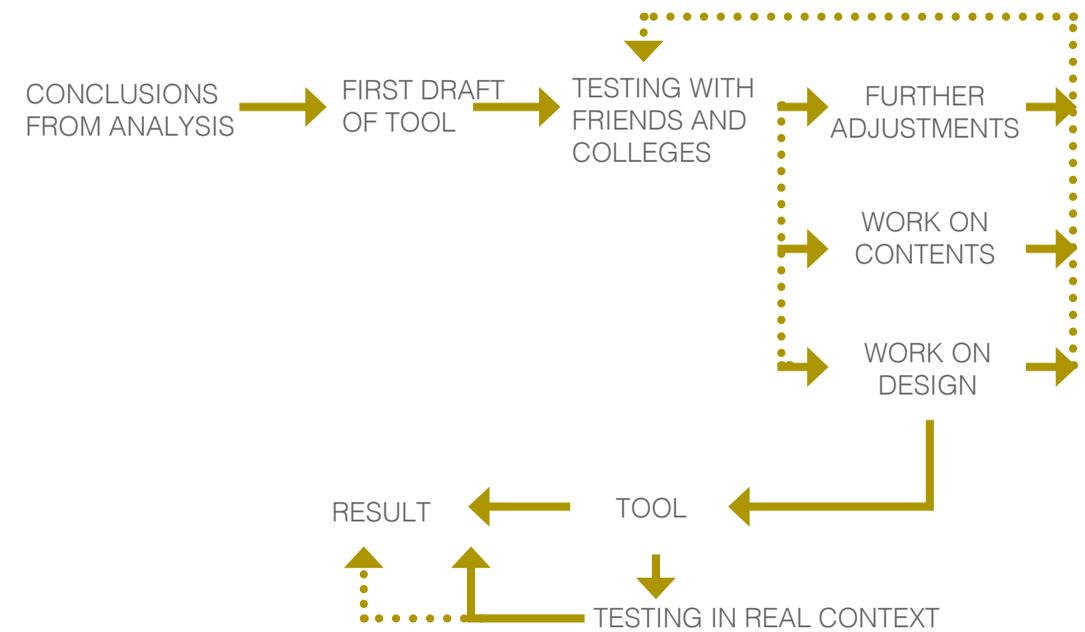
WHO THE USERS ARE

The game is a tool to facilitate a dialogue. The participants of the workshop should/could be representatives of the various groups of stakeholders. It is important to understand the stakeholder groups:

Housing companies or housing cooperatives, municipalities, planning offices politicians, culture houses, local youth groups, gardener’s organisations, NGOs, tenants associations, etc. can all take part in the process.



HOW THE TOOL WAS DEVELOPED



The process of designing a tool is circular. The main conclusions from the theoretical framework and workshops help to find a ground for the concept idea. After the first draft is ready it is necessary to test the tool and make conclusions. The tool was tested several times with different participants

The content, the graphic design and the system of playing is a simultaneous

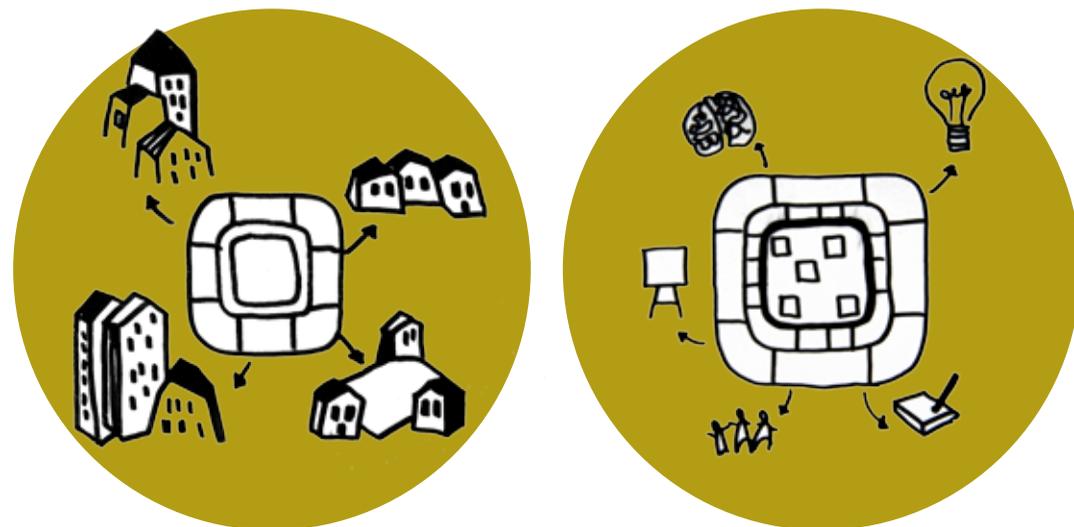
work process. All of these components are equally important for the final result. After the draft model was tested and proved to work well, the final model prototype of the game was created.

The final prototype of the game was tested three times with various groups to understand advantages and realize which improvements can be done.

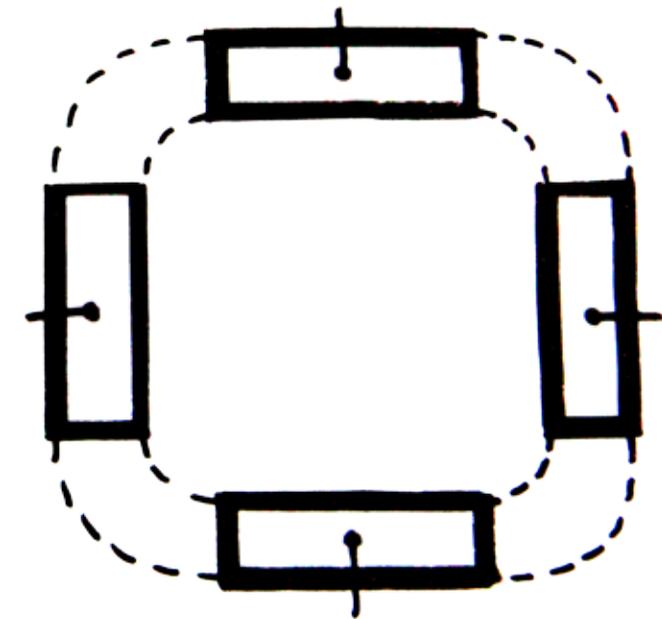
THE TOOL

The game doesn't have any direct connection to a specific physical place, therefore it can work as a dialogue tool in any urban or rural setting despite its location. The specific conditions of each location can be identified and discussed by the participants.

The game has both interactive and educative sides. The playful way of using the tool can encourage the decision takers to take into consideration social needs and problems of the neighbourhoods in the planning process, with a focus on the benefits of sharing.



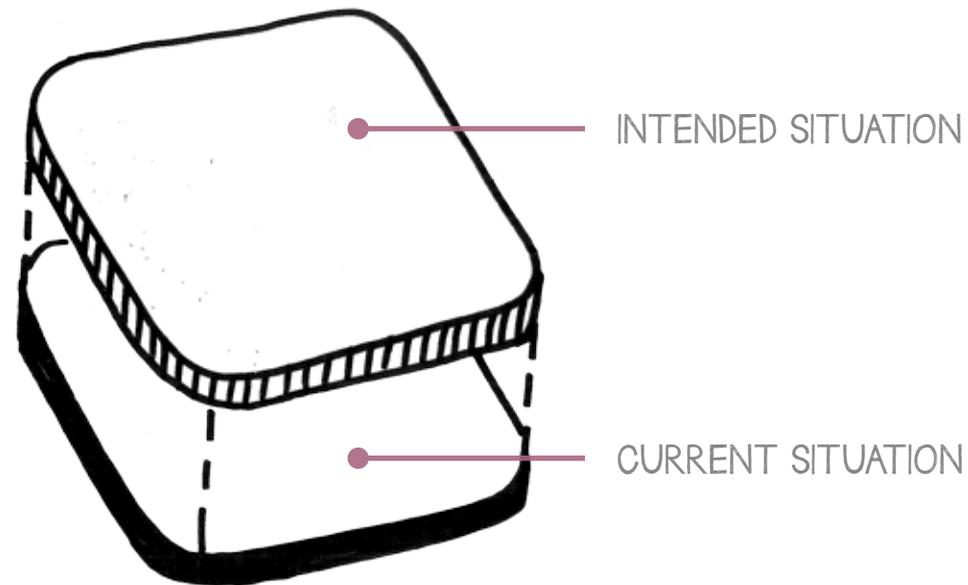
THREE MAIN PRINCIPLES



The tool is based on four main categories of sharing: food, transport, work and leisure. The categories are concluded from the previous analyses of sharing theories, as well as the workshops described in chapter 4.

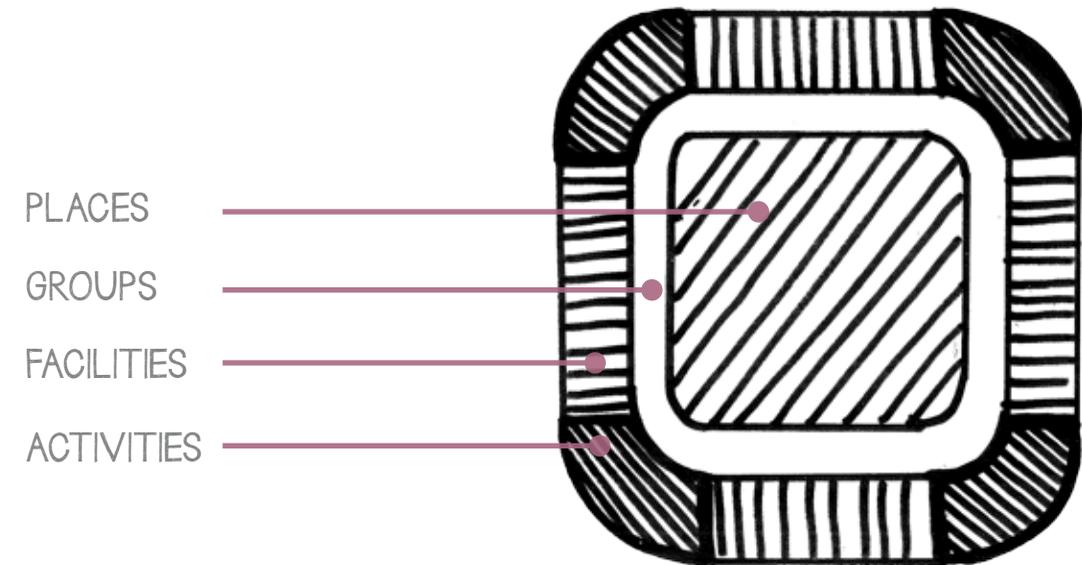


2



The tool is designed in two levels: The first level is the existing situation and the second one the intended situation. The aim of this approach is to use existing features and resources of a specific neighbourhood or settlement in the process of building up sharing facilities. In this way the needs of the inhabitants of the neighbourhoods are taken into consideration.

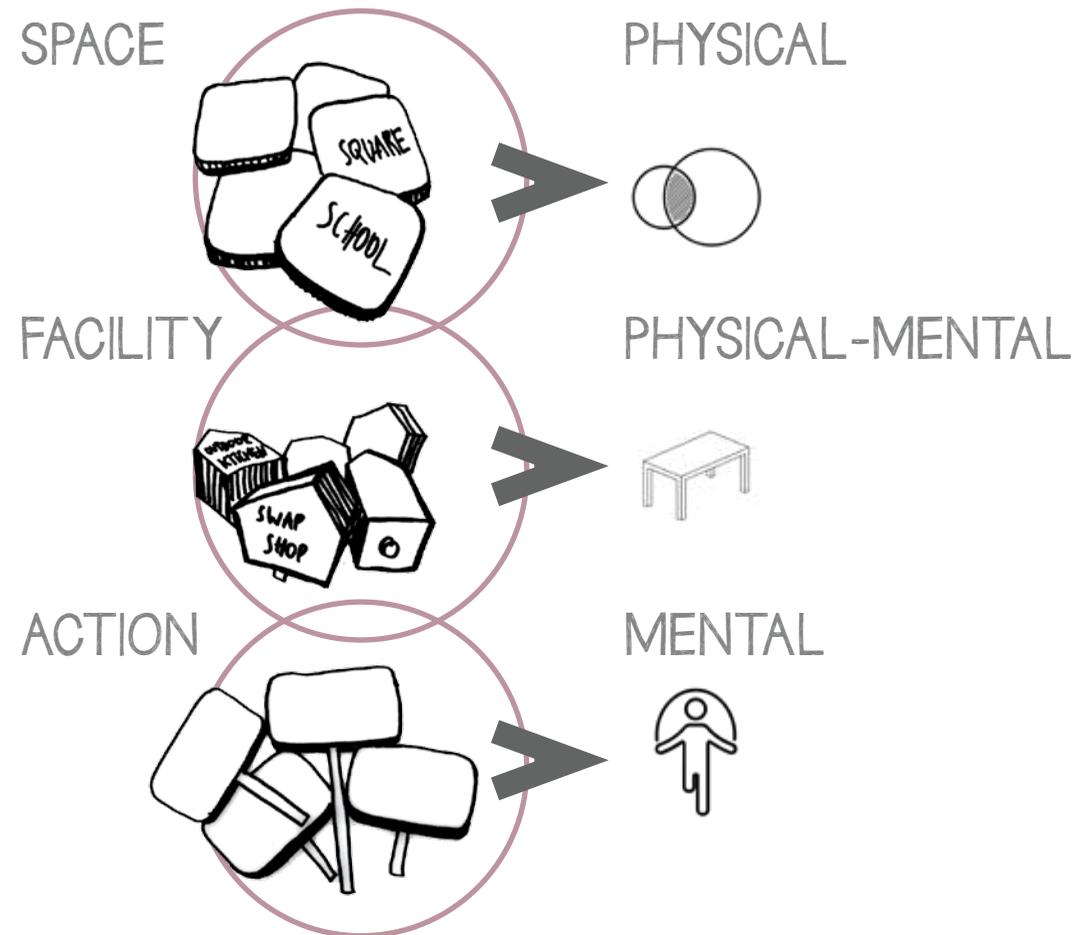
3



Each level is divided into four parts: physical places; groups of inhabitants or initiatives in the neighbourhood; facilities for sharing and activities. This structure helps to see the connections between the four aspects of life in a neighbourhood, and to find ways to build connections using both physical resources and human resources.

CONTENT

The content are based on a combination of three main parts: space, facility and action.



ELEMENTS OF THE GAME

BASE LAYER

The first layer is solid and represents the current situation

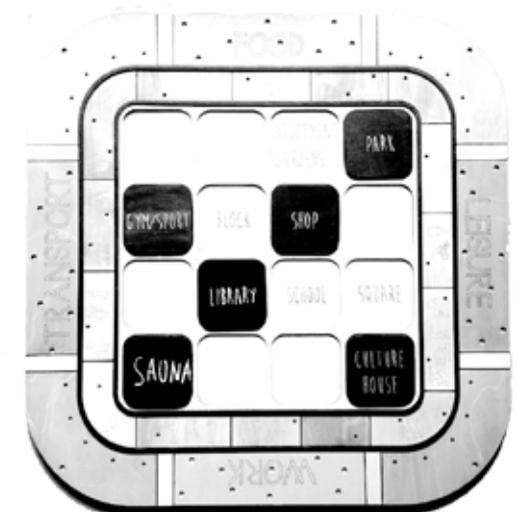
“WHAT WE HAVE”



TOP LAYER

The second layer is transparent and represents the desired situation

“WHAT WE NEED”



ELEMENTS OF THE GAME



PLACES:

Places boards represent physical places available in the neighbourhood. There are premade boards and empty black ones where participants can write with chalk.



ACTORS:

Actors are organisations or groups of inhabitants in the neighborhood connected by a common idea, interest or activity.



FACILITIES

Facility is a physical space or online platform for facilitating certain activities in the neighbourhood.



FACILITY BRICKS

Facility bricks represent each facility and are put on "physical spaces" to show where the facility is situated in the context.



ACTIVITIES:

Activity boards show main activities or interests happening in the neighbourhood, connected to inhabitant groups



STEP CARDS

There are four steps to set up a level



CATEGORIES

Four main categories cards give information about sharing and provide a list of facilities within each category.



FACILITY CARDS

Facility cards describe each facility and have an educational role.



BENEFIT CARDS

Benefit cards describe the benefits of sharing in different levels. It is an educative part of the game where participants can get information about sharing and discuss it.



QUESTION CARDS

There are two sets of question cards: "Problems and threats" and "Social needs and possibilities". They are used in the second step of the game.

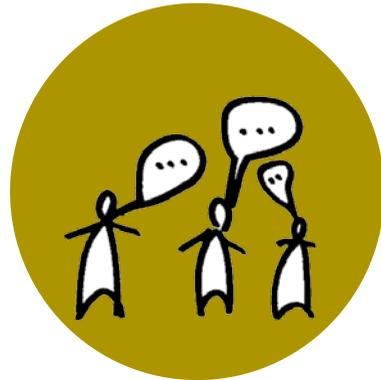
MANUAL

STEP 1 Set up a scene	STEP 2 Discussion part	STEP 3 See the benefits of sharing	STEP 4 Set up an ideal state
<p>1: Places</p> <p>2: Local groups</p> <p>3: Facilities:</p> <p>4: Activities</p> <p>Definitions:</p> <p>PLACE: physical space in the neighbourhood.</p> <p>LOCAL GROUPS: organisations or groups of inhabitants in the neighborhood connected by the common idea, interest or activity.</p> <p>FACILITY: a physical space or online platform for facilitating certain activities in the neighbourhood.</p> <p>ACTIVITY: something that a person or a group of people are doing.</p>	<p>1: Problems and threats</p> <p>Questions: What are the main challenges for your neighbourhood? What do you lack in the neighbourhood? Why? Which places are not used? Which spaces feel unsafe or unfriendly?</p> <p>2: Social needs and possibilities</p> <p>Questions: What works well in the neighbourhood? What improvements can be done? Which places are used and do have potential? Which groups are the most active in the neighbourhood and how do they benefit the neighbourhood?</p>	<p>Take the benefit cards, read them carefully and discuss. Find the connections with what you were discussing before and proceed to the next step.</p>	<p>See the activities in the corners of the boards and try to find physical places for them.</p> <p>2. Discuss what facilities can benefit your neighbourhood. Take into consideration the local groups, needs and threats of the neighbourhood. Discuss and analyse. Take facilities from the “idea box” and put it on the sides.</p> <p>3. Take facility bricks and discuss where to place them on the black boards. This is how you find the physical places for the facilities. Try to see the potentials of the neighbourhood and its possibilities, as well as take into consideration who is involved.</p> <p>4. Now you have plenty of bricks on the black “place” boards. See which ones are the most active, you can still discuss and move the bricks.</p>
<p style="text-align: center;">↓</p> <p style="text-align: center;">STEP 5 Conclude</p>	<p style="text-align: center;">↓</p> <p style="text-align: center;">STEP 5 Conclude</p>	<p style="text-align: center;">↓</p> <p style="text-align: center;">STEP 5 Conclude</p>	<p style="text-align: center;">↓</p> <p style="text-align: center;">STEP 5 Conclude</p>

WHAT DOES THE TOOL SOLVE

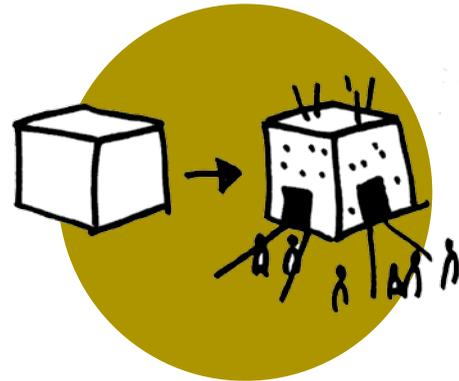
1

FACILITATE THE DIALOGUE



2

ACTIVATE UNDERUSED SPACES



3

ACKNOWLEDGE SELF-MANAGED ARCHITECTURE PRACTICES



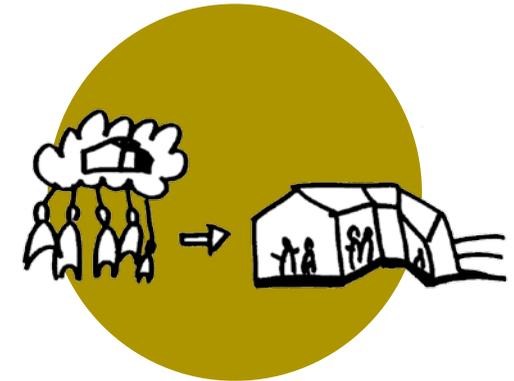
4

ENCOURAGE SHARING AND SUSTAINABLE LIVING



5

CREATE SPACES ACCORDING TO NEEDS



6

CATALOGUE THE COMMONS FOR SHARING



7

CHAPTER

HOW

WE PLAYED

THE GAME

TESTING SESSIONS

After developing physical model of the tool I planned testing sessions. My essential idea was to test the tool in the city neighbourhood with stakeholders and then, based on the conclusions and outcomes, to develop a design proposal for the area which will include shapes for sharing in particular neighborhood.

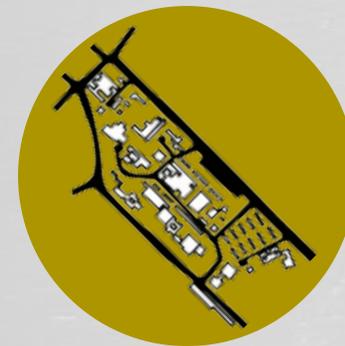
However, during the working process the idea changed and I decided to test the tool in various surroundings and with diverse groups of people. My intention was to emphasise the flexibility and adaptability of the tool to carry the discussion in different circumstances.

The tool was tested three times: two times in Gothenburg and one time in Skattungbyn.

The conditions and aims for the testing session were very unlike. Each session had a physical site that we “played” around and discussed. All cases had different scale, programme, aims to reach, actors involved. In each situation the tool was solving slightly different problem.

First test was a discussion about Chalmers campus, second session was held during the festival in Skattungbyn and last, but not the least, test took place in Hammarkullen, a suburb of Gothenburg, where different stakeholders discussed creating of Returnum.

TEST I



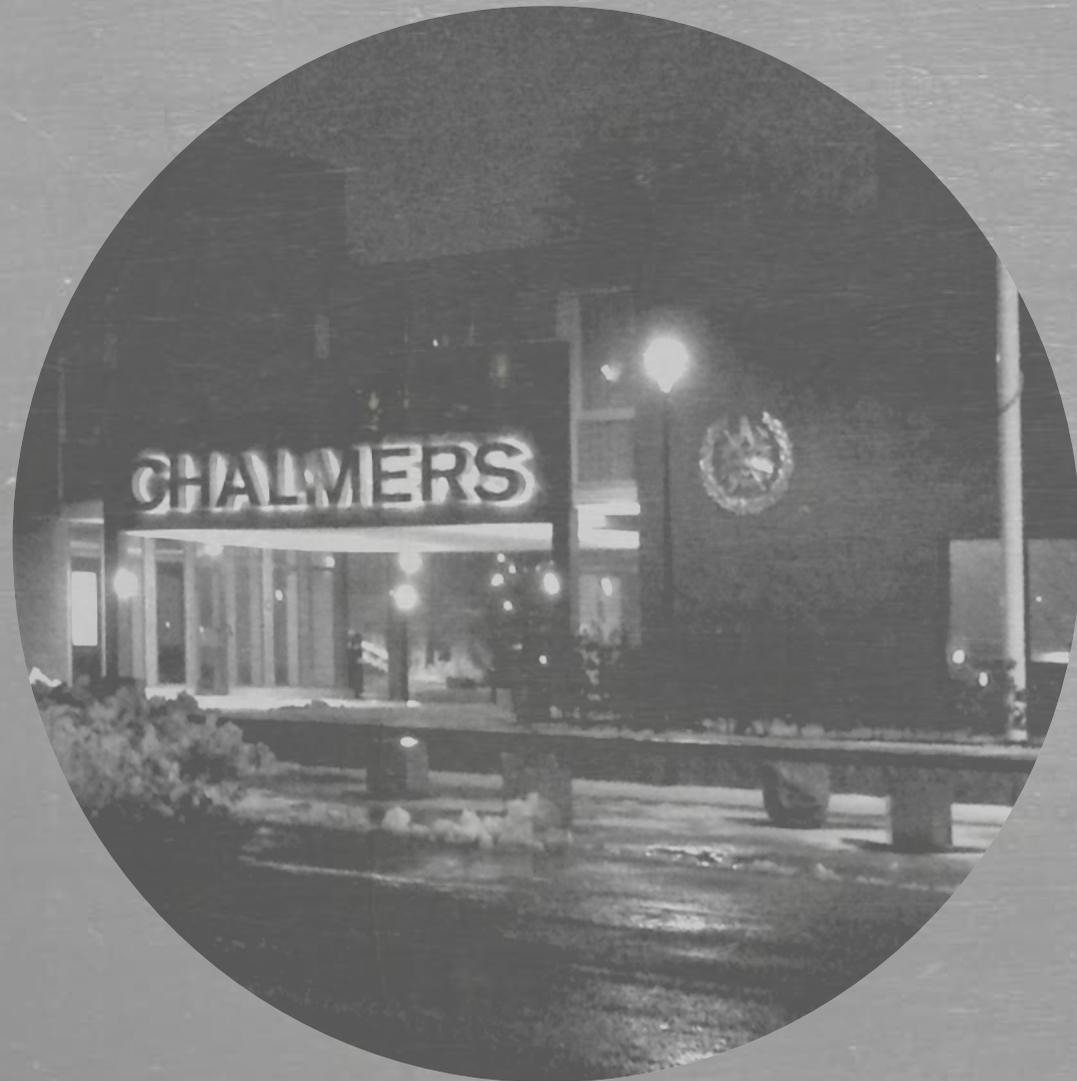
TEST II



TEST III



TEST I



CHALMERS STUDENTS FOR SUSTAINABILITY

ABOUT:

Chalmers Students for Sustainability (CSS) is an student organisation functioning in the Chalmers University and connecting people interested in sustainable development. Organisation runs a lot of projects and events, touching upon technology, society and environment. Organisation does not have physical office space yet. But the members are convinced that it can become a platform and meeting place for sharing in the campus.

WHEN AND WHERE:

10th July 2016
Boden

AREA

Chalmers,
Johanneberg campus in Gothenburg

NUMBER OF PARTICIPANTS:

4 representatives of
CSS
(Chalmers Students
for Sustainability)



AIM:

<> To find a place for CSS office in the campus and discuss what functions should it contain

<> To develop a list of sharing facilities for students in the campus and analyse the potential places

<> To test the "Common Ground" tool and give feedback

WORKSHOP

THIS IS WHERE WE PUT WHAT EXISTS NOW. WE NEED TO UNDERSTAND OUR RESOURCES.

WHAT WE WANT TO REACH IN THE FUTURE



PLACES
 HSB LIVING LAB
 K&R HUSET
 LIBRARY
 OFFICES
 CHALMERS INNOVATION
 CHALLENGE LAB

FACILITIES

- BIKE KITCHEN
- SWAP SHOP
- TOOL LIBRARY
- REPAIR CAFE
- FOLK KITCHEN
- CO-WORK LAB
- MAKERSPACE
- HACKERSPACE



GROUPS

- STUDENTS
- TEACHERS
- RESEARCHERS
- POTENTIAL STUDENTS
- WORKERS
- YOUNG PEOPLE
- EVERYONE
- NEIGHBOURS



STUDENT UNION BUILDING

Student Union building as a main meeting places for students in the campus can add some facilities for swapping things, books and devices.

LIBRARY

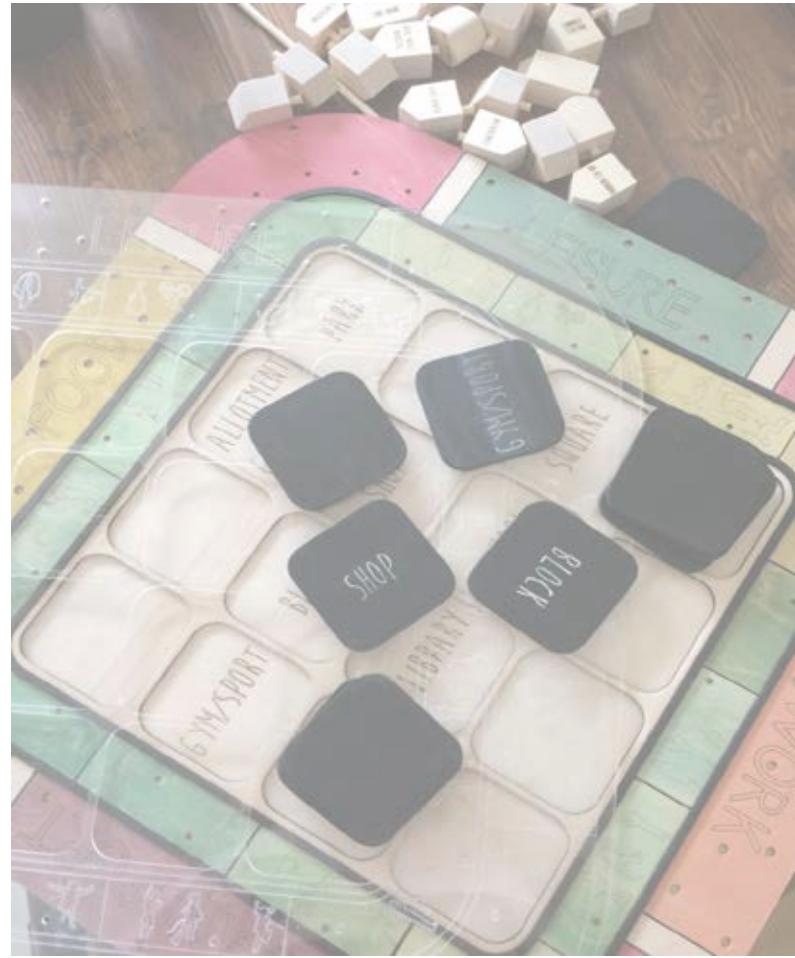
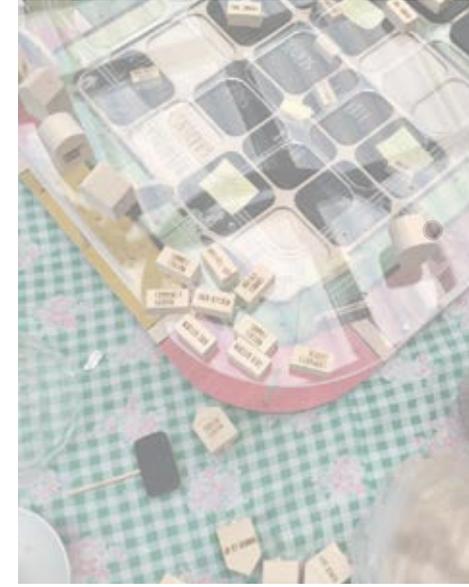
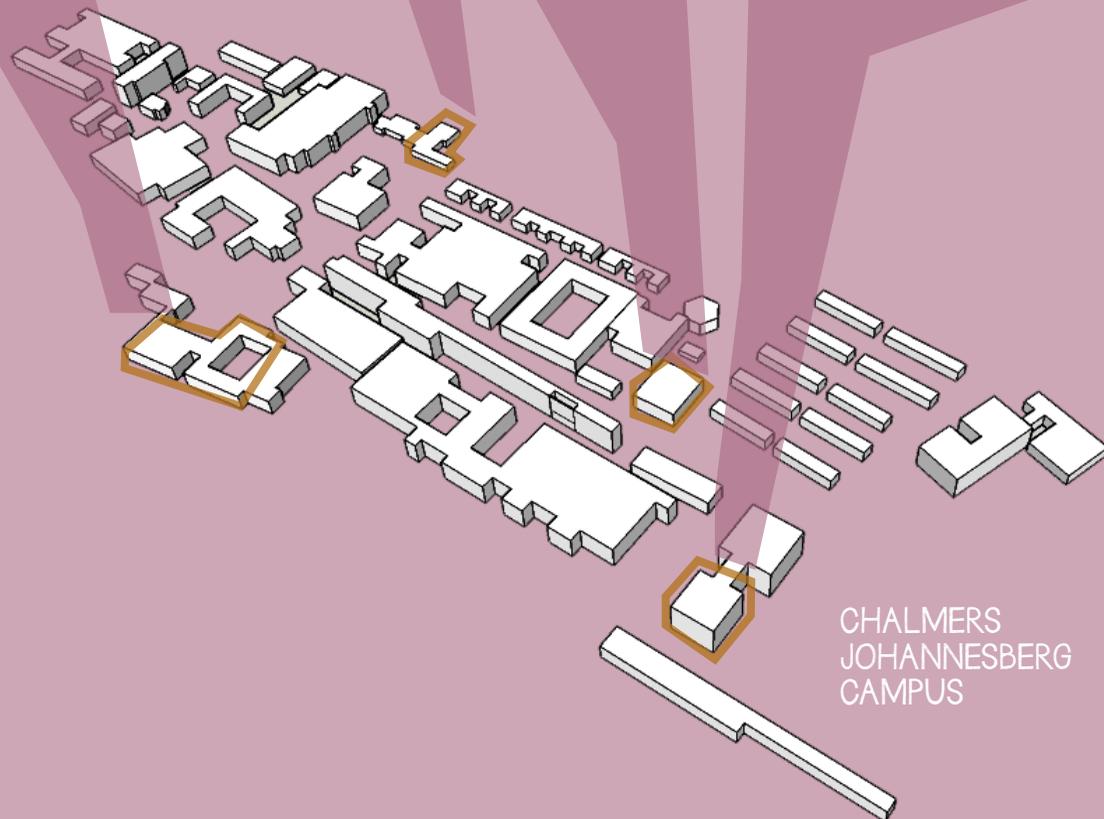
Library can add a swapping option where students can exchange books. As well library can start having a section for borrowing tools and equipment.

HSB LIVING LAB

Living Lab is still under the development and there are vacant places for student to use. that can be a good option for CSS office, where it is possible to combine office, workshop, free shop for students.

CHALLENGE LAB

Challenge Lab can be a place to hold events and activities for students involved in CSS projects







CONCLUSIONS

A campus is by definition a shared area, however more facilities can be added to encourage students for sustainable choices. CSS already works with the topic of sharing managing projects with recycling and upcycling, sharing and swapping.

The most discussed facilities for sharing were bike kitchen for students, a swap shop, tool library, common workshop (existing ones have limited access), campus garden. find common places: Student Union Building, Living Lab, library, suggestions for the outdoor spaces etc.

The topic of sharing spaces in campus was discussed for a long time, but the “Common Ground” tool provides a framework and the outcomes of discussion are more relevant.

The tool helped to structure the combination of spatial possibilities in campus and social needs of students - facilities for sharing.

Participants gave a positive feedback about the session. “The most valuable part is a structured discussion”, they state. “We talked so much about it before, but it is hard to catalogue the conclusions. This game helped” says one of the participants.

TEST 2



INSPIRATION FESTIVAL

ABOUT:

Inspiration festival has been taking place in Skattungbyn already for 10 years. Every year people interested in sustainable living come here to get inspiration, learn new things and get to know each other.

Since one of the workshop with practicing experts took place in Skattungbyn and people organising the festival contributed to the results of my

work, I was invited to present my thesis during the festival and held a lecture talking about my process and results and presenting the game.

Some people who had attended the lecture have been interested to test the game and play it in order to understand how does it work. Suggested area for the testing session area of the festival takes places.

WHEN AND WHERE:

15th July 2016
Skattungbyn

AREA

Festival area (Skattungbyn)

NUMBER OF PARTICIPANTS:

8

people from different part of Sweden interested in topic of community living

AIM:

<> To bring ideas about developing festival area in Skattungbyn to encourage more sharing

<> To discuss ideas about sharing

<> To test the "Common Ground" tool and give feedback

STAGE AREA

Main festival area with five barns where the major activities of the festival (concerts, lectures, workshops) take place

MARKET AREA

Area for selling and buying crafts, farmers products, as well included cafe and second-hand market

OPEN AIR

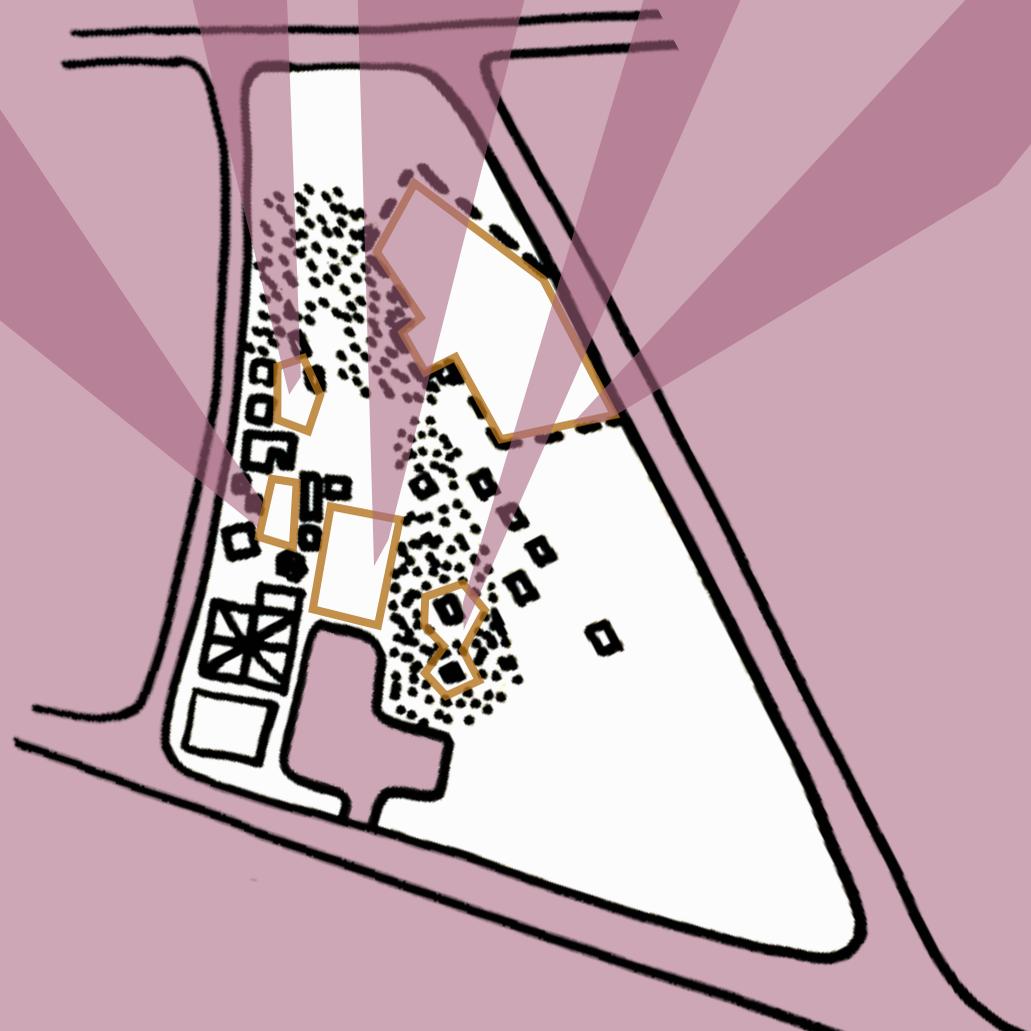
Area for sport and dance activities, it is the area for improvised activities, which are not included in the festival program (jam sessions, sharing circles etc.)

QUITE AREA

Peaceful area for discussions, seminars focused on spirituality. A place for meditation.

CAMPING

Loud area, a lot of movement, a lot of activities.



PLACES

FOREST
BARN
YOGA PLACE
FIRE PLACE
CAMPING
KITCHEN
FIELD

FACILITIES

SWAP SHOP
TOOL LIBRARY
REPAIR CAFE
FOLK KITCHEN
QUITE PLACE
COMMON KITCHEN WITH FACILITIES



ACTORS

VILLAGERS
ARTISTS
LECTURERS
VOLUNTEERS
ORGANISATORS
CREW
VISITORS



RESULT:

Participants of the testing session came for the lecture and presentation of the game. In my opinion testing the game in the festival conditions was tricky because participants come from different places and they do not know each other. However, people got inspired and suggested to test the game. They chose the location themselves: the festival area. It was familiar and understandable for everyone.

The result of the session was a deep discussion about how the festival can evolve and what works good and bad on the festival. We discussed common areas, needs of different groups, for example young people, families with children, older people, artists or lecturers, the organizing team, the local villagers.

How to encourage sharing during the festival was also discussed. The solutions were, for instance: to create more places for common cooking, swapping cloth or things, collecting lost things after the festival and give them to a free shop. The festival is already divided into quieter and more active areas. Participants discussed how this can improve.

Moreover, the game encouraged participants to share their experience in sharing from the place where they live. The discussion was educative, people reflected on how they can encourage sharing in the surroundings where they live.

REFLECTIONS:

This testing session was quite different from two other ones due to the festival context and absence of design goal. It was more of practicing the discussing and trying to find a common ground where it does not exist yet. This test does not represent the tool as a way for city planning, but it definitely shows the benefits of the tool as a facilitator for finding common decision through discussion process.

Inspiring was the fact that people are deeply interested in the topic of sharing and sustainable living and are willing to use facilities for sharing in the neighbourhoods they live.



TEST 3



RE:CHALLENGE

ABOUT:

Re:Challenge is a collaborative project between Miljöbron, Gothenburg city and other stakeholders which aims to develop facilities for sharing in the city neighbourhoods. There are six different sites within the project and different type of program is demanded: second-hand or free shop, recycling center. Some projects are more focused on fixing and repairing things, others on borrowing and swapping things.

I volunteered in the Hammarkullen project which is a collaboration with Kretslop och Vatten and it aims to develop a "Returum" (recycling center) in Hammarkullen. The project is dealing with questions of waste management and sustainable consumption habits. The project has a participatory approach, we did plenty of meeting and interviews and two workshops to find out the needs of the dweller and the aims of stakeholders.

WHEN AND WHERE:

1st December 2016
Hammarkullen, Gothenburg

AREA:

Hammarkullen

NUMBER OF PARTICIPANTS:

15 people from different part of Sweden interested in topic of community living

AIM:

- <> To brainstorm program ideas for Returum in Hammarkullen
- <> To discuss possible physical places for Returum
- <> To discuss network of future stakeholders who can be involved project



Miljöbron



Hyresgästföreningen



Bostadsbolaget

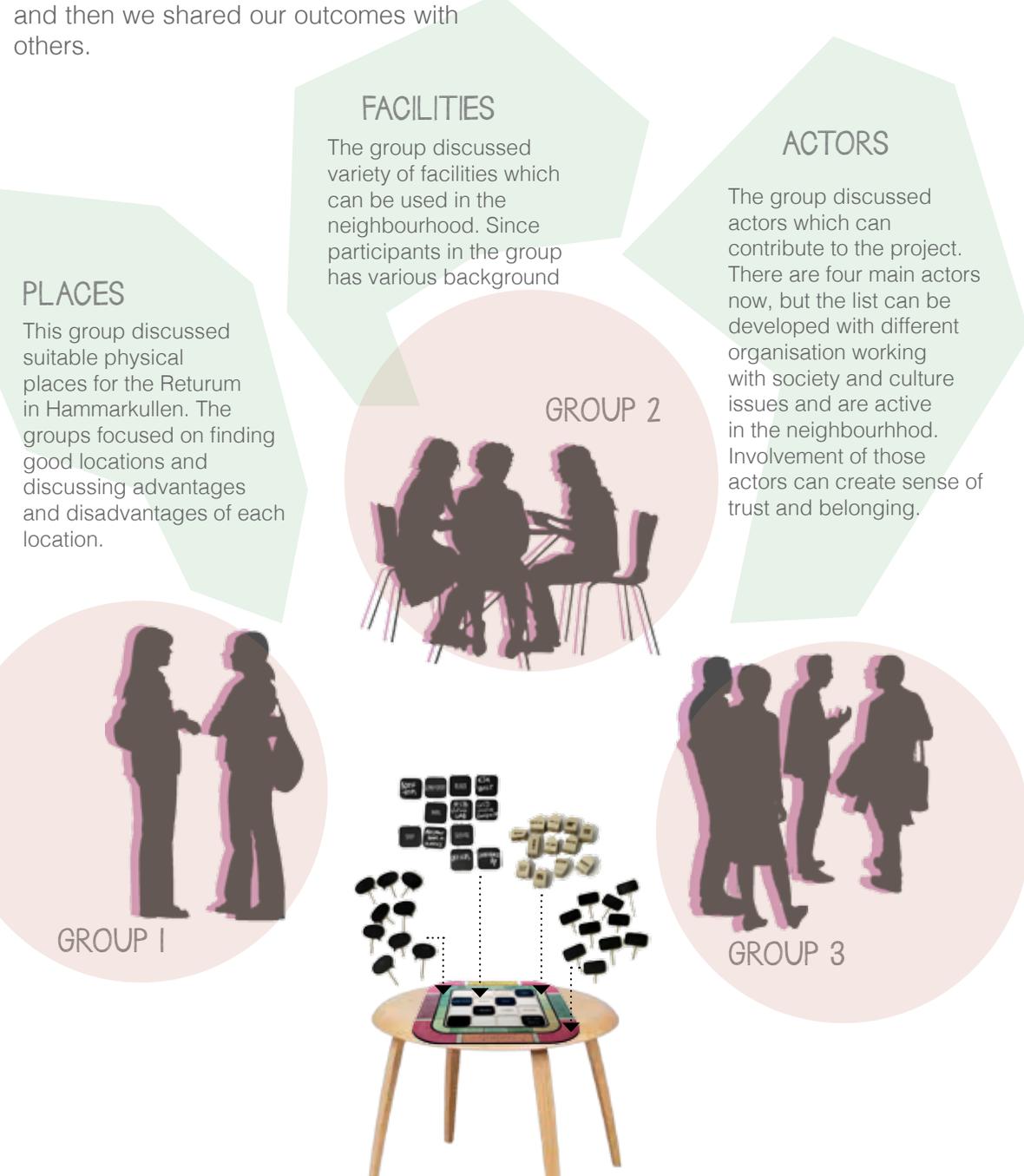


SDF Angered

WORKSHOP

Due to the big number of participants involved in the workshop, the decision was taken to divide people into three smaller groups: places, facilities and actors. Each group discussed their part and then we shared our outcomes with others.

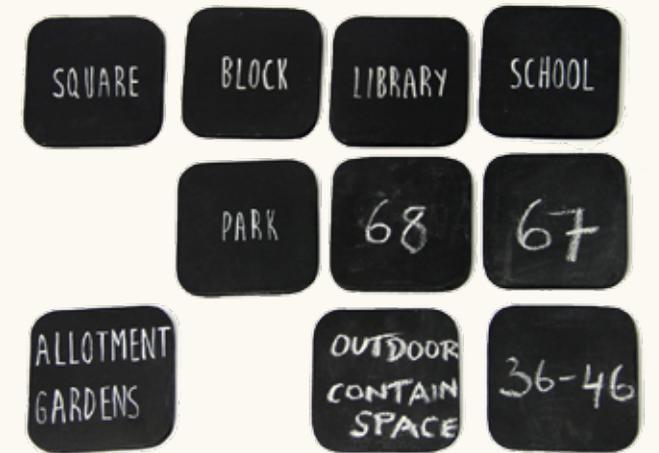
We used the game to visualise the results and make it clear what is the current situation in the neighbourhood and where we want to reach with Returnum project.



GROUP 1

PLACES:

SQUARE
PARK
ALLOTMENT GARDENS
68
67
36-46
OUTDOOR CONTAINER SPACE
LIBRARY
SCHOOL



GROUP 2

FACILITIES:

SWAP SHOP
TOOL LIBRARY
REPAIR CAFE
FOLK KITCHEN
TIME BANK
OUTDOOR LIVING ROOM
BIKE KITCHEN

OTHER IDEAS:

UPCYCLING WORKSHOP
OPEN FRIDGE
LOCAL KRETSLOP (RECYCLE PARK)
BIKE POOL
FOLKETSUS
CAFE
GREENHOUSE



GROUP 3

ACTORS NOW:

HOUSING COMPANY
HOPPET
TENANT'S ORGANISATION
INHABITANTS

ACTORS TO INVOLVE:

GRÖNA HAMMARKULLEN
HOPPET
HAMMARKULLEN FESTIVALEN
LIBRARY
SKÖNA KONSTER
STUDIEFÖRBUNDET



LIBRARY

Library already has a developed network of customers. More sections for borrowing tools, devices will create better consumption habits in Hammarkullen and help people to save money.

URBAN GARDEN

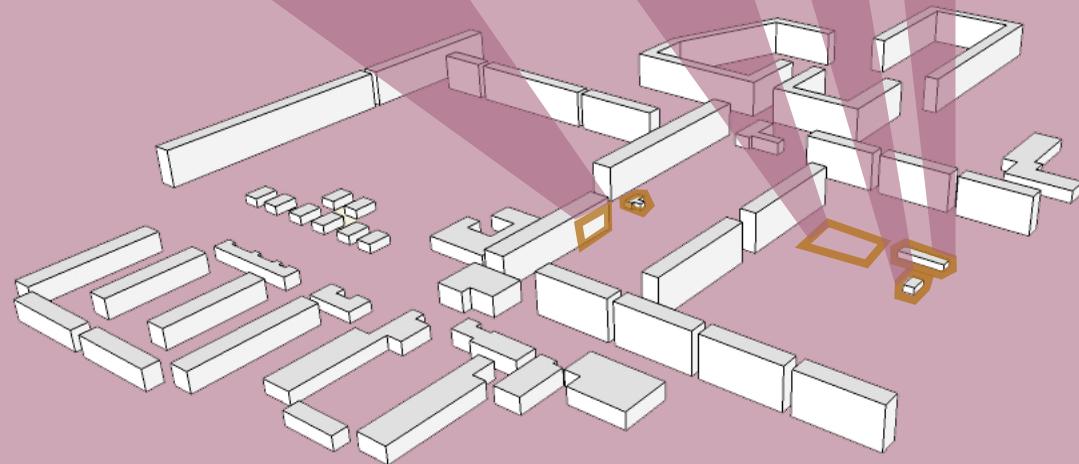
Urban farming is popular in the area. New gardens are build in this spot and in the future it can be a good connection to the recycling center.

68 BREDFJÄLLSGATAN

This structure is industrial and can be redesigned into a small version of Kretslop park (recycling park"), where people can bring bulky waste.

67 BREDFJÄLLSGATAN

The building can contain plenty of facilities. The kitchen inside can be used for "folk kitchen" and community events. There are several separated rooms which can be used for upcycling workshops, second hand store, tool library, swapping events etc.



HAMMARKULLEN



CONCEPT RETURNUM. PROGRAM.

1 MINI KRETSLOP-PARK

- <> waste collector
- <> bulky waste station

2 SHARING PLACE

- <> second hand store
- <> swap shop
- <> tool library
- <> community kitchen

3 WORKSHOP

- <> upcycling workshop
- <> repair cafe
- <> bike kitchen



During the workshop we discussed what is the existing situation in Hammarkullen, who are the actors involved in the developing Returnum project now. But what was more interesting is to discuss how the project can evolve in the future, who will be the new actors. Our conclusions were: local organisations, who have established networks but maybe not that much resources and physical location. This combination of authorities and local organisations can benefit to the development of necessary facilities for the inhabitants in the area.

From this point of view common ground tool showed perfectly two levels of “what we have” and “what we want” and helped to visualise the path for the project development.

Talking about the programme, I can admit that the discussion was very fruitful and inspiring. We talked about possible facilities in the area and came up with plenty of new ones. In this case the flexibility of tool was an advantage and we could add new facilities to the empty blocks. In addition, we discussed what facilities are the most necessary and should be implemented in the first place.

The group talking about physical spaces had several options which they discussed. One of the buildings was suggested by Bostadsbolaget, another is an existing industrial structure.

Moreover, we discussed other possible options like library and Folkets hus. Aim was to find the most suitable spot for the facilities.

Important was to find out the working model for the Returnum connecting these three parts: where should it be, who will be responsible for running it and what kind of functions (facilities) will it contain.

Our conclusions were that the Returnum should consist of three main parts:

1. MINI RECYCLING PARK to solve the problems with waste management and littering in the neighbourhood.

2. PLACE FOR SHARING which includes second-hand store, place for swapping events, tool library for borrowing tools equipment and toys, community kitchen that can be shared or even rented out for events.

3. WORKSHOP: upcycling workshop, repair cafe for fixing devices and things. The workshop can be connected to the tool library. As well, local artist organisations can be involved in the running activities here.

This place should be inclusive and open for different groups of inhabitants therefore it is important to run activities for the wide range of people: children, youngsters, elderly, etc.





CONCLUSIONS FROM TESTING SESSIONS:

The tool can be used within one focus group to find a common ground between the members of the same organisation. The test with CSS showed this process. On the other hand, it can work as a tool to find common ground between different participants (festival test or Hammarkullen test).

Interest in the topic emerged among participants even if it wasn't there before. The educative part of the game is working well and encourages discussions and sharing of experiences. People gladly discussed facilities they did not know before and thought about how they can be implemented in the area.

The results show that the tool can be used in different conditions and be applied to a variety of places. The campus area, the festival area or the area of any neighbourhood (for example Hammarkullen) can be taken as example to play the game.

It creates common interest and common goal. The game has a collaborative spirit and people start to be inspired by taking mutual decisions.

Based on the participants comments I can say that the game process and attractive graphic design makes people relax and be more open to the ideas of other people. It creates a dialog in friendly atmosphere. The feeling of the game and appealing details make people talk to each other in a calm manner.

CHAPTER
8

REFLECTIONS
AND
CONCLUSIONS

My ambition was to create a model which will apply low-impact community living in the city or any other, for example suburban, context. The project has transformed during the process and I found a lot of aspects I was not aware of before starting the research/design project.

Consciously, I have chosen not to create a design proposal of the Bergsjön area, but instead to create a tool for facilitating the design process and decision taking. It was motivated by a variety of examples in modern cities, when a design made with the best intentions still was not fitting the needs of the inhabitants, but proposing the mainstream idea of how the spaces in the neighbourhood should be. Contemporary sustainable living strategies rarely acknowledge the diverse needs, desires and motivations of individuals (SPREAD, 2012) and often target solving just one issue, creating a single solution or policy, or as in the case of architecture, a design proposal.

The result of my work is a tool for decision taking which aims to raise the question of sharing spaces to provide

facilities for collaborative consumption. The tool, in turn, will help stakeholder groups define their needs, the resources available and who can be involved in the process from the very beginning. I see the importance of the games-based approach and interactive dialog for decision takers. It is an efficient way to make people opened and relaxed for collaboration. Just mutual effort of all the stakeholders can lead to the valuable results in reaching sustainable lifestyles.

CHALLENGES:

One of the challenges was to analyse and conclude all the initiatives in low-impact living, with all the variations in rural and urban context. I understood in the process that the plan was very ambitious and it is more complicated than I could have imagined in the beginning. Rural and urban connect are really different in terms of scale, infrastructure, economic system, mobility etc. Rural is slower and smaller, it makes it quite hard to apply it urban context. However, I am quite proud that I managed to extract some principles and make a model of how it is possible to apply those in the city neighbourhood.

Low-impact living includes variety of aspects and obviously I could not work with all of the them in my master thesis. It took time to scale the project and choose the focus on sharing and consumption patterns.

My first intention was to test the tool in suburban area of Gothenburg with representatives of stakeholders, and to develop a concept design proposal based on the results. Unfortunately it did not happen. Instead I tested the tool three times with various groups and stakeholders, talking about different areas and contexts.

EVALUATION OF THE TOOL

The tool was tested in various conditions with different groups and it showed flexibility and adaptability as main features.

All three tests had different contexts, however the result was achieved in all cases.

The game can work as a facilitator on the first stage of the project and then as a problem solver on the further stages. This shows multifunctionality of the game.

To develop a particular planning and design of the neighbourhood, firstly it is important to find out the current situation and develop work based on the result. That is the aim of "Common ground" decision making tool.

For further steps in the redesigning neighbourhood the tools should be tested in the area with various stakeholders, the results should be categorised and concluded and used for the development of design project. In this case design will follow the real needs of the inhabitants and institutions operating within the area, it will create dialog between the stakeholders from the very beginning of the design process, and involvement of the local active groups who can complement to the creation of sharing spaces in the neighbourhood.

It might be challenging to use the tool with the groups who are absolutely now interested in sharing, on the other hand that would be an interesting experience to try testing in such conditions. In this case, it will be possible to figure out if the tool can encourage people and change mindsets, using the nudging approach of the game.

HOW TO DEVELOP TOOL FURTHER

During the process of testing, as well as during the discussion on the final seminar, I can to several conclusions of how the tool can be developed further:

1. There could be added more levels to the game. During the testing we found out that it is quite important to keep thinking in stages, what should come first in the design process, and what can be implemented later, the tool can be a useful instrument to show this stage thinning.
2. The tool is quite bulky and heavy and it is not convenient to carry it around, therefore it is important to develop a lighter version, probably from cartoon or other lighter materials.
3. To visualise the elements of the game better it is possible to use illustrations instead of text. This can create more easy and attractive graphical layout of the game.

ROLE OF AN ARCHITECT

During the working process I have quite many thoughts about my role as an architect in the planning process. Meeting people living in the communities and talking to them about their experience made me think that a lot of projects can be implemented without architects by people who are engaged in the community. In this case where is my role?

During the workshops with practicing experts I felt that I need to give something back to the people that sharing with me their experience, knowledge and perception of sustainable lifestyle. That is why I participated in the community meetings, trying to give a feedback on the future plans of development of common meeting place in the village. This process made me think that architect nowadays can act as enabler for the discussion and design process. The professional knowledge that we get during our education helps

us to have a holistic perspective on the development projects. Therefore, together with the community we could discuss both pragmatic strategic aspects, as well as more soft values that “practicing experts” are driven by. Collaboration, in this case, can create a set of working strategies for the comprehensive sustainable development of the settlements of different scale.

TO BROADEN THE TOPIC

The concept of “norm” and “alternative” living was mentioned in the thesis work but was not researched enough. I find it relevant to continue investigating how decisions are shaped by “norm” and how is it possible to work with this in the area of urban planning.

As well as I would like to investigate ore the bottom-up initiatives, and how they collaborate or do not collaborate with official practices.

WHAT HAPPENS NEXT

I would like to continue working on the development of the tool. Currently, I have a discussion with Chalmers Innovation Office to continue working on feasibility study about dialogue tools for city planners.

Further I would like to develop the concept into a research project, investigating effects and benefits of participatory practices in city planning, as well as investigating particular features of the dialogue tools and develop further models.

.....
The work on the master thesis was exciting and fulfilling, sometimes overwhelming, but in general very satisfying. I am quite happy with the result and hope it can be a starting point for the future research.

REFERENCES

- Aalborg Charter, 1994. *Charter of European Cities & Towns Towards Sustainability*. European Conference on sustainable Cities & Towns in Aalborg, Denmark on 27 May 1994. [pdf]. Available at: <http://portal.uur.cz/pdf/aalborg-charter-1994.pdf>. [Accessed 12 February 2016].
- Agyeman J., McLaren D., Schaefer-Borrego A. 2013. *Sharing cities*. Written for Friends of the Earth's 'Big Ideas'. [pdf] Available at: https://www.foe.co.uk/sites/default/files/downloads/agyeman_sharing_cities.pdf [Accessed 12 February 2016].
- Assadourian E. (2010) *The Rise and Fall of Consumer Cultures*. [pdf] Available at: <http://blogs.worldwatch.org/transformingcultures/wp-content/uploads/2009/04/Chapter-1.pdf>. [Accessed 16 January 2017].
- Barton H., 2000. *Sustainable Communities. The potentials for Eco-Neighbourhoods*. London: Earthscan Publications Ltd.
- Barton H., Grant M., Guise R. 2003. *Shaping Neighbourhoods for Local Health and Global Sustainability*. 2nd edition. Glasgow: Bell&Bain Ltd.
- Beatley T. 2000. *Green Urbanism: Learning from European Cities*. Washington, DC : Island Press, cop. 2000
- Botsman R., Rogers R., 2009. *What's Mine Is Yours. The Rise of Collaborative Consumption*. New York: Harper Collins Publishers.
- Bradley K., Hedrén J. 2014. *Green Utopianism: Perspectives, Politics and Micro-Practices*. New York : Routledge
- Bradley K. *Open-source urbanism: Creating, multiplying and managing urban commons* Footprint 9 (1), 91-107. [pdf] Available at: <https://www.kth.se/social/files/554116e3f276544dfab786b2/Bradley%20Open-Source%20Urbanism%20Footprint%20Journal%20Issue%2016%202015.pdf>. [Accessed 12 February 2016].
- Bradley K. 2009. *Planning for eco-friendly living in diverse societies*. Research article. Page 347-363 | Journal Local Environment. Volume 14, 2009 - Issue 4. Published online: 30 Mar 2009. [pdf] Available at: https://www.researchgate.net/publication/233130079_Planning_for_eco-friendly_living_in_diverse_societies [Accessed 12 February 2016].
- Cesare J., 2016. *What is the Sharing Economy*. Published April 12, 2016. [Blog]. Stokesshare. Available at: <https://stokeshare.com/blog/what-is-the-sharing-economy> [Accessed 24 April 2016].
- Damanhur. *What is Damanhur? A laboratory for the future of humankind*. Available online at: <http://www.damanhur.org/en/what-is-damanhur> . [Accessed 13 February 2016].
- Dawson J., 2006. *Ecovillages: New Frontiers for Sustainability* (Schumacher Briefings). Bristol: Green books Ltd.
- Ekelund L., Bradley K. 2015 "Sharing is new owning" . [Documentary film] Produced by LottaFilm 2015. [video online] Available at: <https://vimeo.com/127297293> [Accessed 18 February 2016].
- European environmental agency (EEA), 2012. *Unsustainable consumption – the mother of all environmental issues?* Published on 15th March 2012. Available on: <http://www.eea.europa.eu/highlights/unsustainable-consumption-2013-the-mother/#parent-fieldname-title> [Accessed 18 February 2016].
- European policy brief. *Emerging Visions for Future Sustainable Lifestyles*. Preliminary policy considerations from the SPREAD Sustainable Lifestyles 2050 European Social Platform project. Developing pathways to more sustainable living. First Policy Brief, February 2012. [pdf online] Available through: http://www.sustainable-lifestyles.eu/fileadmin/images/content/D3.2_PolicyBrief_SustainableLifestyles.pdf [Accessed 19 February 2016].
- Flintoff J.P., 2013. *Local, self-sufficient, optimistic: are Transition Towns the way forward?* The Guardian. Published on Saturday 15 June 2013. Available at: <https://www.theguardian.com/environment/2013/jun/15/transition-towns-way-forward> [Accessed 18 February 2016].
- Global Ecovillage Network. *What is an Ecovillage?* Available at: <http://gen.ecovillage.org/en/article/what-ecovillage>. [Accessed 19 February 2016].
- Goodwin N., Nelson J.A., Ackerman F., Weis T. *Consumption and the Consumer Society*. A GDAE Teaching Module on Social and Environmental Issues in Economics. Global Development And Environment

Institute Tufts University Medford, MA 02155 <http://ase.tufts.edu/gdae> [pdf online] Available at: http://www.ase.tufts.edu/gdae/education_materials/modules/Consumption_and_the_Consumer_Society.pdf [Accessed 21 February 2016].

Gray D., Brown S., Macanujo J. 2010. *Gamestorming. A Playbook for Innovators, Rulebreakers, and Changemakers*. [pdf online] Available at: <http://res.cloudinary.com/richbook/raw/upload/Free-Download-Gamestorming-Playbook-Innovators-Rulebreakers-Changemakers.pdf> [Accessed 21 February 2016].

Hamari J., Sjöklint M., Ukkonen A., 2015. *Why People Participate in Collaborative Consumption*. JOURNAL OF THE ASSOCIATION FOR INFORMATION SCIENCE AND TECHNOLOGY—•• 2015 13 DOI: 10.1002/asi. [pdf online] Available at: http://people.uta.fi/~kljuham/2015-hamari_at_al-the_sharing_economy.pdf [Accessed 21 April 2016].

Hamdi N. 2010. *The placemakers' guide to building community*. Earthscan Ltd. [pdf online] Available at: http://library.uniteddiversity.coop/REconomy_Resource_Pack/Community_Assets_and_Development/The_Placemakers_Guide_to_Building_Community.pdf

Hjalmarson L., 2012. Sweden: The co-operative advantage in fighting poverty CO-OPERATIVE NEWS / NEWS / SOCIETY / DEVELOPMENT / Posted online 1 January 2012. Available through: <http://www.thenews.coop/37084/news/development/sweden-co-operative-advantage-fighting-poverty/> [Accessed 4 April 2016].

Hopkins, R. 2008. *The Transition Handbook. From Oil Dependency to Local Resilience*. Vermont: Chelsea Green Publishing. 2014

Hopkins, R. 2013. *The power of just doing stuff. How local action can change the world*. Cambridge: UIT/ Green books.

Inman, M. 2010. *Has the world already passed "peak oil"?* National Geographic.com ; National Geographic. 9th November 2010. Available through: <http://news.nationalgeographic.com/news/energy/2010/11/101109-peak-oil-iea-world-energy-outlook/> [Accessed 3 March 2016].

Lameras P., Petridis P., Dunwell I., Hendrix M., Arnab S. and de Freitas S. 2014. *A game-based approach for raising awareness on sustainability issues in public spaces* [pdf online] Available at: <https://curve.coventry.ac.uk/open/file/1909c02d-4c02-45a3-a985-82ad57c21526/1/A%20game-based%20approach.pdf> [Accessed 13 March 2016].

LILAC. 2008. *Low Impact Living* Last Updated: Tuesday, 17 December 2013 19:11 | Published: Monday, 01 December 2008 11:51. Available at: <http://www.lilac.coop/concept/low-impact-living.html> [Accessed 11 February 2016].

Litfin K.T., 2014. *Eco-Villages. Lessons For Sustainable Communities*. Cambridge: Polity Press.

Low N., Gleeson B., Green R., Radovic D. 2005. *The Green City: Sustainable Homes, Sustainable Suburbs*. 2nd ed. UNSW Press Book with ass. Abingdon : Routledge. Taylor and Francis group.

Luna M., 2014. *Sharing Activists Reveal Plan to Turn Los Angeles into Sharing Mecca*. Posted online 31st August 2014 at shareable.net. Available through: <http://www.shareable.net/blog/sharing-activists-reveal-plan-to-turn-los-angeles-into-sharing-mecca> [Accessed 6 March 2016].

Manzi T., Allen J., 2010. *Social Sustainability in Urban Areas: Communities, Connectivity and the Urban Fabric*; London ; Washington, DC : Earthscan, 2010

McLaren D., Agyeman J., 2015. *Sharing Cities: A Case for Truly Smart and Sustainable Cities*. Cambridge, London: The MIT Press.

Meijering L., Huigen P., van Hoven B. 2007. *Intentional communities in rural spaces*. Journal of economic and social geography. Volume 98, Issue 1, pages 42–52, February 2007. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9663.2007.00375.x/full> [Accessed 26 March 2016].

Mont O., Power K.. 2009. *Understanding factors that shape consumption*. ETC/SCP Working Paper No 1/2013. European Topic Centre on Sustainable Consumption and Production Copenhagen. [pdf] Available at: http://www.scp-knowledge.eu/sites/default/files/knowledge/attachments/wp2013_1.pdf [Accessed 6 March 2016].

Mont O. 2012 *Collaborative Ways of Living and Consuming*. 19 April 2011 by Medea. [online] Available through: <http://medea.mah.se/2011/04/collaborative-ways-of-living-and-consuming/> [Accessed 26 March 2016].

Mont O., Heiskanen E., Power K., Kuusi H., 2013. *Improving Nordic policymaking by dispelling myths on sustainable consumption* [pdf] Available at: <https://norden.diva-portal.org/smash/get/diva2:702825/FULLTEXT01>. [Accessed 6 March 2016].

Nielsen N.V. (NYSE: NLSN) 2014. *Is sharing the new buying?* REPUTATION AND TRUST ARE EMERGING AS NEW CURRENCIES. [pdf online] Available at: <http://www.nielsen.com/content/dam/niensenglobal/apac/docs/reports/2014/Nielsen-Global-Share-Community-Report.pdf> [Accessed 6 March 2016].

Nobrega C., 2013. *Solidarity economy: finding a new way out of poverty*. The Guardian. Published on Wednesday 9 October 2013 11.01 BST. Available through: <https://www.theguardian.com/global-development-professionals-network/2013/oct/09/brazil-solidarity-economy-labour> [Accessed 6 March 2016].

Harmen van Sprang, 2015. *Amsterdam Europe's first "Sharing city"*. Posted in Antenna Featured Content on 4 February 2015 by:, Global Curator Team, The Netherlands. [online] Available at: <http://www.collaborativeconsumption.com/2015/02/04/amsterdam-europes-first-sharing-city/> [Accessed 6 March 2016].

Rinne A., *TOP 10 things a city can become a shareable city*. Posted 5 February 2014. Available online at: <http://www.collaborativeconsumption.com/2014/02/05/top-10-things-a-city-can-do-to-become-a-shareable-city/> [Accessed 6 March 2016].

Rockström, J., W. Steffen, K. Noone, Å. Persson, F. S. Chapin, III, E. Lambin, T. M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C. A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P. K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R. W. Corell, V. J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley. 2009. *Planetary boundaries: exploring the safe operating space for humanity*. Ecology and Society 14(2): 32. [online] URL: <http://www.ecologyandsociety.org/vol14/iss2/art32/>

SPREAD (2012). *SUSTAINABLE LIFESTYLES: TODAY'S FACTS & TOMORROW'S TRENDS*. Sustainable lifestyles 2050. D1.1 Sustainable lifestyles baseline report. [pdf online] Available at: http://www.sustainable-lifestyles.eu/fileadmin/images/content/D1.1_Baseline_Report_short.pdf [Accessed 2 February 2016].

SERI, 2009. *Overconsumption? Our use of the world's natural resources*. SERI, GLOBAL 2000, Friends of the Earth Europe, Published September 2009 [pdf online] Available at: <http://old.seri.at/documentupload/SERI%20PR/overconsumption--2009.pdf> [Accessed 6 March 2016].

Scholz T., 2016. *Platform Cooperativism. Challenging the Corporate Sharing Economy*. Published by the Rosa Luxemburg Stiftung, New York Office, January 2016. [pdf online] Available at: http://www.rosalux-nyc.org/wp-content/files_mf/scholz_platformcoop_5.9.2016.pdf [Accessed 15 February 2016].

Sandercock, L. 2003. *Cosmopolis II – mongrel cities in the 21st century*, London: Continuum.

Sharable, 2013. *Join us in building the Sharing Cities Network*. [video online] Available at: <https://www.youtube.com/watch?v=-trMdZpV8f0> [Accessed 25 March 2016].

Siegle L., 2011. *Totnes: Britain's town of the future*. The Guardian [online] Published on Sunday 6 February 2011. Available at: <https://www.theguardian.com/environment/2011/feb/06/totnes-transition-towns-ethical-living> [Accessed 15 February 2016].

The Transition Town Movement. Available at: <http://transitionus.org/transition-town-movement>. [Accessed 23 March 2016].
Transition Town Totnes. Available through: <http://www.transitiontowntotnes.org/> [Accessed 3 March 2016].

Transition Town Totnes wins green award. Ashden Awards for Sustainable Energy. The Guardian. Published on Friday 17 June 2011. [video online] Available at: <https://www.theguardian.com/environment/video/2011/jun/17/transition-town-totnes-ashden-award-video> [Accessed 3 March 2016].

UNEP (2010) *Assessing the Environmental Impacts of Consumption and Production: Priority Products and Materials*. A Report of the Working Group on the Environmental Impacts of Products and Materials to the International Panel for Sustainable Resource Management. [pdf online] Available at: http://www.unep.org/resourcepanel/Portals/24102/PDFs/PriorityProductsAndMaterials_Report.pdf [Accessed 25 March 2016].

UNESCO. *Sustainable Lifestyles*. [online] Available through: <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/sustainable-lifestyles/> [Accessed 25 March 2016]

Viden S., Hall T. (2005): *The Million Homes Programme: a review of the great Swedish planning project*, Planning Perspectives, 20:3, 301-328 [pdf] Available at: <http://www.ima.kth.se/utb/mj1501/2013/ES.pdf> [Accessed 5 March 2016].

Waldinger R., 2015. "What makes a good life? Lessons from the longest study on happiness". TEDx; filmed November, 2015. [video online] Available at: https://www.ted.com/talks/robert_waldinger_what_makes_a_good_life_lessons_from_the_longest_study_on_happiness?language=en [Accessed 3 March 2016].

Wikipedia. *Slöjd*. Available at: <https://en.wikipedia.org/wiki/Sloyd> <https://sv.wikipedia.org/wiki/Rymdtorget> [Accessed 9 March 2016].

Witkovsky P., Lundgren J., Nyström A., Säfström N. 2015. "Can We Do It Ourselves? A film about economic democracy. Documentary movie. [video online] Available at: <https://www.youtube.com/watch?v=ZfaFriFAz1k> [Accessed 23 March 2016].

WWF. 2016. *Living Planet Report 2016*. Risk and resilience in a new era. WWF International, Gland, Switzerland

GRAPHICAL MATERIAL REFERENCES:

Image 1. Page 6.
Author Johnathan Wilhelmsson

Image 2. Page 34.
Owned by Stanica Zarecie

Image 3. Page 56.
Auroville. Source: <http://www.theearthchild.co.za/inspiring-city-people-live-without-politics-no-religion-no-money/>

Image 4. Page 166.
Re:Challnege. Owned by Miljöbron.

Any other pictures in this Master's thesis is owned and produced by the author.

INTERVIEWS

DATE	NAME, ORGANISATION	PLACE	MAIN QUOTATION
17/02	BEATRICE KLEIN, HYRESGÄSTFÖRENINGEN	GOTHENBURG	I think people like sharing and it is an ongoing trend. It needs to be opened, it needs to have contact with people, to feel local and have local ownership.
20/02	MARIE HEDBEG, URSIKTEN EKOBY,	ORUST	We were seven when we started, but people when moving have different expectations. It is more like a working collective than a family. You need to be flexible.
23/02	EMMA ÖRWALL, KOLLABORATIV EKONOMI GÖTEBORG	GOTHENBURG	Being an environmentalist you think people share for the good, but no - they do it to save money, it is convenient, it's a good service. You need to find the driver, its the same when people consume traditionally. Social aspect is not something which is already there it is something that will come after.
25/02	TOBIAS JOHANSSON, FAMILJEBOSTADER	BERGSJÖN	I can be part of starting something, but I am representing real estate, what i would like - if the tenants can run initiatives themselves. If we start something I want it to be opened, transparent and something for the tenants.
25/02	CHARLOTTA EK-ÅHRBERG, FRIDHEM	STJÄRNSUND	"It is easy when everything is under the building process and things are developing, then everybody is busy and excited. But after time you need to have a common vision, common goal to continue being a community. That is a challenge"
29/02	MALIN AND RICKARD, HANSENS,	SKATTUGBYN	We want this place to be a meeting spot for everyone in the village. We want to make it an open platform where people can come and run the activities themselves. However it is not easy to reach people having different ways of living. Free shop works best for this.
29/02	JENS AND ANIKA, OFF GRID FARM	SKATTUNGBYN	We came here because of the community. It was a lot of work to built the farm with our own hands and you need a support of the cothinkers otherwise it is very difficult. Anika took a course here before that is why we knew some people here.

01/03	KÅRE OLSSON, FOUNDER OF SELF- SUFFICIENCY COURSE	SKATTUNBGYN	If you work together with other people, it creates relations in other qualitative way then if you just discuss things.
01/03	LOCAL LADIES, BYSTUGAN,	SKATTUGBYN	From old times it was always typical in the village to work together. Now we are old, can not work anymore, but we can volunteer and do crafts and help other people. We don't want to be useless. Mutual help was always part of our culture
02/03	ANNA, MARKUS, COLLECTIVE VILLA FLUR	SKATTUGBYN	Some of us live in the house, others in the tiny house cabins outside. It is nice to share. We have common garden and showers, we plan to build outdoor kitchen this summer. We also use barns for workshops.
11/03	PER OTTOSSON, GÖTEBORGS STAD, KULTURHUS BERSJÖN, PROJECT MANAGER	GOTHENBURG	Göteborg is pretty segregated and you want to create the movement in the city, not only people from suburbs go to the center, but also people from the center coming to the suburbs for culture events. That is why culture house should be an attraction point for other people to come. It should be not suburb culture center, but Göteborg's culture center.
12/04	LINUS, CYKELKÖKET	GOTHENBURG	The advantage of the place is that it is multidisciplinary . We can share knowledge and all get to know each other. That is the point of the creating this place, you come to repair a bike, but then you learn about hackerspace, next time you can come to learn how to fix your computer mouse, it's not a big deal, but it creates connections, new knowledge, value of doing things yourself, sharing. It creates sustainability
12/04	NICOLAS SAHLQVIST, HACKERSPACE,	GOTHENBURG	I could do it (build electronics) alone in my kitchen, but then I don't meet people, I don't get feedback on what I am creating. Hackerspace is about community of cothinkers.
26/04	AFRA NOUBARZADEH, TNB, BERGSJÖN	GOTHENBURG	We already met the value proposition. The awareness of social aspects and environmental aspects are already hindering economic growth. People start to understand that we should address these issues. But how do we work within the existing system? It is a challenge.

APPENDIX I

WORKSHOPS MATERIAL

WORKSHOP DESIGN

Workshop consists of four parts: survey, mapping in the real context, mental mapping and application to the urban context

0
INTRODUCTION:5-10 min:

I
SURVEY(see attachment) 20 min

II
MAPPING ON THE REAL CONTEXT 45 min

_where do you live- pin it
_how do you move during the day/week, what are your regular routes?
_what are the places where you mostly meet other people/interact
_what are the main meeting points in the village
_where do you go? for what?

III
MENTAL MAPPING 45 min work in two smaller groups

_what type of home do you live in?
(alone, in collective, shared house, other) ... pin it
_ what do you share with other people in the village?... pin
(you can pick from the pictures or you can draw something yourself, or you can just write a word on piece of paper if you do not want to draw
_ who do you share it with?... pin
(your colleges, neighbours, friends, people in the village, volunteers...etc)
_ where do you mostly share?... pin
meeting places, home, school, shop, etc

IV
APPLICATION TO THE URBAN CONTEXT
30 min

_ which principles discussed earlier could be implemented in the city?
_ which meeting places discussed earlier could be created in the city?
_ what things / stuff/ tangibles/intangibles can be shared by neighbours in the city?
_ in which urban context could it work better in your opinion (city core, suburbs, apartment housing, villa area, semi-detached housing, etc)?
_ what is needed to implement sharing in the city?

MASTER THESIS PROJECT
“COMMON GROUND”
COLLECTIVE LIVING AS A KEY FOR SUSTIANABLE LIFESTYLES

CO-DESIGN WORKSHOP

RESEARCH QUESTION:
your experience ON
COLLECTIVE LIVING

For more information and registration
please contact Natalie
e-mail: novik@student.chalmers.se

what do you
share
as the
community

how
collaborate

how
is connected to
sustainability

what is
collaborative
economy
for you



CHALMERS
ARCHITECTURE

APPENDIX II

CARDS FOR TOOL

FOOD

Sustainable local agriculture is essential for the positive transition and benefits a community economically, ecologically and socially. It help to develop food security and decrease biological waste as well as raise awareness about food production and consumption. Plenty of space in contemporary neighbourhoods can be used for urban farms and community gardens. Food production facilities can encourage cooperation between people, give the possibility to use farming skills, provide inhabitants with local food and the most important, create jobs in the food production industry, especially in areas with high rates of unemployment and where a large percentage of the population belongs to vulnerable groups.

List of facilities:

- Community garden
- Farmers co-op
- Local food co-op
- Compost station
- Pop-up cafe
- Outdoor kitchen

TRANSPORT

Transportation consumes about one third of global energy and at the same time causes huge amounts of emissions. Sharing private transport, instead of excess usage of single driver rides, is a more sustainable solution in areas where public transportation does not provide enough coverage. Carpools and various shared ride schemes in the neighbourhood can help to manage mores efficient use of transportation. Besides lowering the environmental impact, sharing private transport also helps people get to know each other, create neighbours relationships and build trust in the neighbourhood. Facilities such as bike kitchen or public bike sharing scheme in the neighbourhood decrease the use of cars and encourage cycling. Creation of those facilities will help to encourage usage of second-hand bikes and give more possibilities to various groups to get access to bikes.

List of facilities:

- Car pool
- Bike kitchen

WORK

Work environments are important for sustainable life in the neighbourhood. To create vibrant neighbourhoods and fulfill different needs of humans lives diversity is crucial. Work opportunities are a large part of it. In the suburban areas, where absence of working places leads to solitude in the urban setting, creation of local jobs sets up more friendly living surrounding, besides local business encourage people to take care of the environment and invest into development of the local community. In the neighbourhoods, where live many young people, it is suitable to create spaces for start-ups and creativity projects. In this case, you need to focus on the possibilities for cooperation and social entrepreneurship. This can create creates new jobs in the neighbourhood for both youngsters and adults.

List of facilities:

- Co-work lab
- Makerspace/hackerspace
- Incubator
- Creative cluster

LEISURE

Leisure time activities are important parts of the life in the neighbourhood. The way we spend our free time largely determines the ways we live and consume. The activities based on sharing and collaboration encourage inhabitants to be more involved in the life of the neighbourhood and develop a sense of belonging. Skills sharing or repairing events create a common ground in the neighbourhood and invite people from various groups to meet. Moreover, education activities and spreading knowledge about practical skills help to create environmental awareness and conscious consumption. It leads to more sustainable and environmentally friendly lifestyles in the neighbourhood.

List of facilities:

- Tool library
- Outdoor living room
- Repair cafe
- Swap/Free shop
- Time-bank

FOOD

COMMUNITY GARDEN



A community garden is an open association in the neighbourhood which connects people who are interested in farming. It is based on collaboration, all participants get a plot of land each that they are taking care of. A community garden increases cooperation and spreads knowledge about farming techniques. Moreover, it helps people to get to know their neighbours and build trust in the neighbourhood. Community gardens also provide a possibility to develop other facilities, like educational center, or entrepreneurial association etc.

POP-UP CAFE



A pop-up cafe or restaurant is a temporary place where food is served during certain times. It is an opportunity for the young chefs to start their own business without risk of immediate bankruptcy, a pop-up cafe can be shared by several cooks. This is a tryout spot and community meeting place at the same time. This kind of place helps to figure out the needs and demands of the neighbourhood and it promotes local chefs.

COMPOST STATION



Composting is a way of recycling organic waste converting it into a soil fertilizer that can be used for variety of plants. Compost station is space for collecting biological leftovers, normally situated in the closer connection to the gardens. A compost station can be a business idea for the local farmers in the neighbourhood.

OUTDOOR KITCHEN



An outdoor kitchen is an open outdoor facility equipped with basic or more advanced kitchen supply owned and used by the community. It is a place to organise events, community meetings with food etc. It is a way to share knowledge about cooking or processing food and a place to exchange skills and knowledge. It is also a natural meeting point where people get to know each other and develop social networks in the neighbourhood.

LOCAL CO-OP SHOP



Co-op shop is a store run by the community and does not depend on the commercial networks. It is easier to manage the assortment of goods in the shop, because the people in the community decide what they need. It is a good way for the local craftsman to sell their articles avoiding complicated procedures coming with commercial structures and farmers to sell their products in the local area.

FOLK KITCHEN



Folk kitchen is a community event where dwellers gather for common meals. The model is popular among people living in the collectives. Although it can work in the urban context: as a once per week community event where neighbours cook together and get to know each other. Kids are gladly participating in this happening.

TRANSPORT

CAR POOLING



A car-pool is a service, often operated through an online platform where people can offer or ask for rides. It is a good opportunity for the people living out of the center and commuting to work or studying at certain times during the day. It helps to reduce one-person car rides and decrease emissions from private transport.

BIKE KITCHEN



A bike kitchen is a community-run, usually non-profit cooperative, focused on the promotion of bicycle use. It is an open platform where volunteers help to fix and upgrade bikes, where you can borrow tools for fixing or get bike details, in some bike kitchen shops it is also possible to rent bikes.

WORK

MAKERSPACE



Makerspace is the co-working lab or workshop equipped with machines for various kind of creation. The machines are shared and free for participants to use. It is a perfect place for young designers and craftsman to work, meet and develop their projects.

HACKERSPACE



Hackerspace is a community operated workspace connecting people with interest in computers and electronics. Hackerspaces start appearing in different place of the world and the idea spread quickly. Hackerspace can be opened for public certain times per week, when people can come and volunteers can teach them how to repair computer, install the programme, or solder broken cable in the computer mouse.

CO-WORK LAB



A co-working cluster is an open platform where members can have an office space. Normally, the space is used by young companies working on the small projects or startups, or temporary projects. It is an easy way for the small young companies to have an office space without having big expenses. Co-work space is a way to meet new people, encourage collaboration on various projects and make use of multidisciplinary approach.

SWOP SHOP/ FREE SHOP



A swop shop is a way to exchange things you don't need with other people and get what you lack instead. There are several ways of organising the facility: it can be event based, for example once per month at a certain place in the neighbourhood. In this case, people bring their stuff and exchange it with other people. Another option is to have a free shop which is an open space where people can bring various things as well as come and pick the things any time.

LEISURE

TOOL LIBRARY



A tool library is an open platform where people can borrow tools, equipment or other materials they don't use everyday. It can work as a rental place or as a free service in the community. A tool library helps to change the consumption habits in the neighbourhood, people become more aware of the things they buy. It also makes people get to know each other and build trust.

CLOTH LIBRARY



A cloth library is a place where one can borrow cloth of different kinds for certain amount of time. It works the same way as a regular "book" library. Often people need elegant cloth for special occasions and there is no need to buy items to wear them once. Therefore, cloth library helps to avoid overconsumption of unnesesry garments and accessories. Also it is an opportunity for local community business.

REPAIR CAFE



A repair cafe is an event based activity. During the event people share their skills in DIY techniques, craft knowledge and different kind of repairing, e.g. machines, electronics, bikes, cars, cloth, etc. This is a community event where people of all groups can meet and interact. The event can take place every month or every second week. It is a possibility to meet your neighbours, get your things repaired and learn new skills. It increases the value of "just doing things", leads to more sustainable consumption habits and has an educational purpose.

OUTDOOR LIVING ROOM



An outdoor living room is a common meeting place for people in the neighbourhood which works as a community center. It is a place to organise events and activities, hold seminars and workshops, etc. An outdoor living room is of big importance for the people living in small apartments or tiny houses and it is more necessary to create it in the areas where people do not have other cultural meeting places or services. It is mostly needed in suburbs and rural areas.

LOCAL INITIATIVES OR GROUPS
2

SHARING FACILITIES IN CATEGORIES
3

EXISTING ACTIVITIES
4

EXISTING PLACES
1

POSSIBILITIES & SOCIAL NEEDS

PROBLEMS & THREATS

WHICH PLACES ARE NOT USED?

WHICH GROUPS ARE THE MOST ACTIVE IN THE NEIGHBOURHOOD AND HOW THEY BENEFIT THE NEIGHBOURHOOD?

WHAT WORKS WELL IN THE NEIGHBOURHOOD?

WHICH SPACES FEEL UNSAFE OR UNFRIENDLY?

WHAT ARE THE MAIN CHALLENGES FOR YOUR NEIGHBOURHOOD?

WHAT IMPROVEMENTS CAN BE DONE?

WHAT DO YOU LACK IN THE NEIGHBOURHOOD? WHY?

WHICH PLACES ARE USED AND HAVE POTENTIAL?

WHAT CAN BE SHARED?



SPACES/ PLACES



OBJECTS/ TOOLS



SKILLS/ EXPERTICE



BENEFITS OF SHARING

- * Learn to do new things
- * Have practical skills
- * Have fun
- * Get to know your neighbours
- * Be involved in the life of neighbourhood
- * Build social connections
- * Better mental health
- * Encourage people to help each other

- * Save money . sharing of the objects helps to reduce not-necessary consumption among people.
- * Creates more free space at home: sharing tools and objects helps you to reduce amount of not needed stuff at home.
- * Know your neighbour : if you don't store at home all not necessary tools, it's so easy just to knock on the door and talk to your neighbour
- * Create local jobs: tool library or any other facility is a good opportunity to develop local small business in the neighbourhood.

- * Possibility to use space more efficient
- * Meeting people, strengthening social connections
- * Developing the value of the neighbourhood - more diverse spaces create attractive surrounding
- * Develop social connections
- * Save money: sharing office space, or workshop space etc helps to reduce the rent and gives possibility to small business and initiatives
- * Connect more people working in the same field,
- * Develop more local businesses and initiatives
- * Create jobs for young people and vulnerable groups