

COMPASSIONATE LIVING

Societal Transformation in Action



CHALMERS

Compassionate Living

Societal Transformation in Action
EEVA-MAARJA LAUR

© Eeva-Maarja Laur, 2019.

Contact: eeva.maarja@gmail.com

Final seminar: 22.05.2019

Examiner: Kristina Grange

Supervisor: Henrietta Palmer

Keywords: action-research, learning spaces, societal transformation,
transformational learning, regenerative culture, community resilience

Master's Thesis at Chalmers School of Architecture

Master's Programme in Architecture and Planning Beyond Sustainability (MPDSD)

Chalmers University of Technology

SE-412 96 Gothenburg, Sweden

Phone +46 (0)31-772 10 00

Compassionate Living

Societal Transformation in Action

EEVA-MAARJA LAUR

Department of Architecture and Civil Engineering
CHALMERS UNIVERSITY OF TECHNOLOGY
Gothenburg, Sweden 2019

I dedicate this thesis to my inspiration, my motivation, my strength David François Rey (05.05.1983-08.09.2018).

Thank you for your encouragement and support!!
My parents Merle and Urbo, my parents-in-law Joëlle and Jean François, sister Marie, flatmates Particia and Stanislav, neighbours Eli and Toke, Kostas, Alexandros, Sia, Mick, Sofia, Dani, friends from Vegan Movement, collectives Makvärket, Bolsjefabrikken, Trädet, and Toftegaard Gardens.

Thank you for being inspirational and for giving me the chance!
Henrietta Palmer, Lena Falkheden, Kristina Grange, Nils Björling, John Helmfridsson, Lisa Bomble from Chalmers, and Quentin Gausset, Jens Hoff, Simon Westergaard Lex from the COMPASS research team.

Thank you Alfred Ots Scholarship Fund Committee for supporting my master's studies!

ABSTRACT

The dominant worldview of modern society is based on a need for certainty, control, and prediction. The change towards a regenerative culture requires a shift to a world view of 'radical ecologism' that embodies the complexity and unpredictability of a dynamic ecological world (du Plessis, 2012).

The aim of this thesis is to explore the possibility of facilitating the collective shift from the current sustainability paradigm to regenerative culture through transformational learning and understanding how space relates to and impacts these learning processes. "Transformational learning is about a fundamental change in the way we see ourselves and the world in which we live." (Merriam, Caffarella & Baumgartner, 2007, p. 130).

This thesis ends with an Action Plan consisting of the New Theory of Transformational Learning Spaces and the Building Course Material. The Action Plan will be put into practice after the thesis semester in an allotment garden by building a guest house.

The first part of the research focuses on transformational learning theories, that are centred on individual and social learning but are not considering interaction with a space as part of a learning process.

Thus, the second part of the research is located in the Culture and Environmental Collective Makværket, which is a phenomenon of social transformation in practice. It is a project I have been part of over the past four years in Denmark. The collective is intuitively following principles similar to transformational learning theories, with an exception of acknowledging the space as part of a process of doing activities together.

I am using my position as a member of Makværket, and as an individual with a holistic knowledge from experience in socio-cultural movements and education in sustainable development, to contextualize and create the New Theory of Transformational Learning Spaces.

The Building Course Material includes investigation of the allotment gardens community, preliminary design proposal for the guest house, building workshops schedule and the narrative of applying the New Theory of Transformational Learning Spaces on the course, which will be facilitated by friends from Makværket in summer 2019 in Denmark.

Keywords: action-research, learning spaces, societal transformation, transformational learning, regenerative culture, community resilience

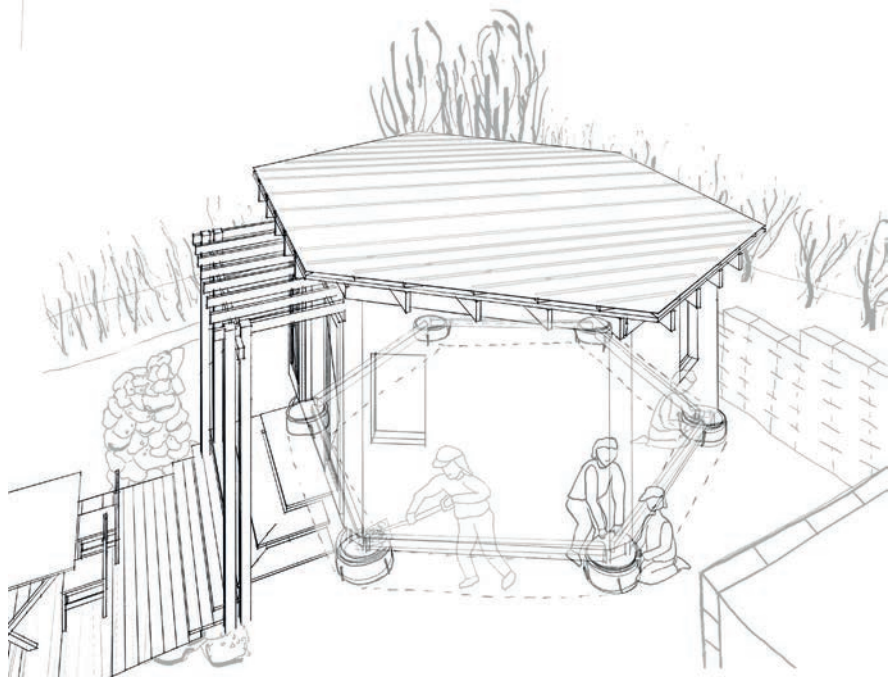


Figure 1. Community building the guest house - 'space to learn on'

TABLE OF CONTENTS

Chapter 1. Introduction	
Introducing the author	8
Introducing the case study - Makvärket	9
Introduction to the shift from current sustainability paradigm to regenerative culture	10
Aim and research questions: forming the Action Plan	12
Timeline for my master's thesis (MT) process and possible future scenario	14
Description of methods	15
Chapter 2. Makvärket research	
Overview of the case study - What is Makvärket?	16
Makvärket timeline	18
Summary	24
Chapter 3. Learning theories	
Learning as a process	26
Concept of social change - Transformational learning theories	28
Critical reflections - spatial and social context in learning theories	29
Transformational learning stages in theory	30
Summary	32
Chapter 4. New Theory of Transformational Learning Spaces	
Transformational learning spaces	34
'Spaces to learn on'	36
'Spaces to learn from'	38
'Spaces to learn in'	40
Transformational learning stages in Makvärket	42
Tools for transformational learning in the Action Plan	44
Summary	48
Discussion I - on research material	
Chapter 5. Community research	
Sense of belonging	50
Transformational learning spaces in the Action Plan	53
Summary	54
Chapter 6. Action Plan	
Proposal for the guest house design	56
Transformational learning stages in the Action Plan	58
Transformational learning process in the Action Plan	60
Narrative of the building course	62
Summary	66
Discussion II - on the Action Plan	
Chapter 7. Final discussion and conclusion	
Chapter 8. References	
APPENDIX	
Daily schedule	79
Building course timeline	80
Foundation workshop	82

Chapter 1. Introduction

This master's thesis is about exploring the learning spaces in a collective practice and how does it relate to the surrounding society. The thesis is divided into two major parts, first the research chapters 2-4, finalising with the discussion I, and second the Action Plan chapters 5-6, finalising with the discussion II. These parts have been written in parallel and are complementing each other, thus they can be read in any order.

The first chapter introduces the departure point, the background story and the process of the thesis.

Additionally, the side-notes are giving the reader a brief description of the context to fully understand the topic; they are labelled as practical, academic or method.

Introducing the author

ARCHITECT AND HITCHHIKER

I have studied 3-years of Architecture and Urban Design in the Estonian Academy of Arts with a focus on creativity, supported by engineering skills and knowledge of architectural history. In between the studies, I have complemented my education with hitchhiking throughout Europe and learned hands-on knowledge of traditional building technologies like timber construction and earth-bag foundation. Through these cross-cultural experiences, I have developed critical thinking about '*current sustainability paradigm*' (see side note) and a growing interest in bottom-up social actions focusing on regenerating and revitalizing existing environments by working on solutions questioning the norms of lifestyles and habits.

ARCHITECT AND ACTIVIST

In 2016 I was working with architecture in extreme environments at MAP Architects in Copenhagen while collaborating with sociocultural movements in Denmark, like Transition Network local node Omstilling Nu, Culture and Environmental Collective Makværket, organising regular People's Kitchen dinners (see side note), and started the Food Sharing Copenhagen (see side note). Tapping into a network of social movements in Denmark and globally, I often noticed activist groups being focused on a narrow topic and lacking a holistic view of the context they are working in. This led me to initiate Food Sharing Education Lab (see side note), where participants co-create informal learning around the dinner table to share experience, knowledge and form new collective solutions to emerging societal challenges.

TRANSITION COMMUNITY MEMBER

I am a member of the Culture and Environmental Collective Makværket since 2015. Over the past four years, I have become part of the plenum group (see p. 17), carrying values and vision of the collective.



Figure 2. Photo of the author (adapted with permission)

Introducing the case study - Makværket

Makværket is a Culture and Environmental Collective nearby Copenhagen in Denmark (see figure 3), located in a former Knabstrup ceramic and brick factory of 2000m². The collective started in 2008 and has been organised by the voluntary involvement of local and international people coming together to share ideas, knowledge, and skills. The values have been formed around *working collectively together, norm-critical and empowering approach, creating local ecological solutions, consensus decision making, equality, inclusive and safe space for open dialogue*, and are continually evolving through new inputs from participants. The collective is known among activists in Denmark and functions as a hub for holding meetings and forming new collaborations, as well as reaching out to an international network of volunteers.

Makværket has evoked interest among associations, local municipalities, and foundations focusing on solving social problems by promoting sustainable development, new knowledge and innovation for current and future generations (Realdania, 2019).

The former factory building has been partially renovated and new structures have been constructed by volunteers using recycled or local natural building materials, and skills available among the present participants. The initiative is exploring methods like *the non-hierarchical working environment, consensus decision making, non-violent conflict resolution called Restorative Circle, gender-neutral social space, norm-critical approach to standard practices in the built environment and in the society*.

The collective Makværket is opening a space for critical discussions on lifestyles, hierarchies, and norms, and creating a ground for '*societal transformation*' towards environmental sustainability and planetary justice through collective movements.

ACADEMIC:

CURRENT SUSTAINABILITY PARADIGM

The current paradigm is based on a societal misconception of an ecological world - without acknowledging the 'limits of nature'. This calls for a radical systemic change, including the dominant worldview and the structures of modern society (du Plessis, 2012, p. 8).

PRACTICAL:

PEOPLE'S KITCHEN

The aim is to bring people together at the common table from every walk of life and background. This creates a space for starting new collaborations, projects, and discussions. It is organised by a group of people voluntarily coming together to prepare a common meal for people who show up at the event, the food is collected from Food Sharing or similar initiative and funding is donation based (D. Rey, interview, 2018).

PRACTICAL:

FOOD SHARING COPENHAGEN

The aim is to reduce waste, raise awareness of food waste and mobilise people for action. The local node in Copenhagen is unconditionally distributing food that would otherwise be thrown away. They organise anti-food waste campaigns, workshops and food sharing events (Food Sharing Copenhagen, 2019).

PRACTICAL:

FOOD SHARING EDUCATION LAB

This initiative started as a platform for the Food Sharing Copenhagen volunteers to participate in collective events involving activists from other movements and organisations. The aim is to educate the volunteers by bringing the discussions beyond food wastage to reach a holistic understanding of societal systemic problems, whereas food waste being one of the symptoms. Further on, the platform is aiming to involve a broader group of activists from other organisations and movements.

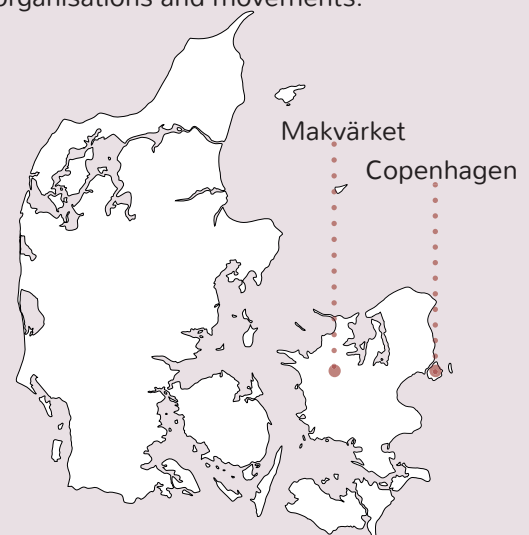


Figure 3. Map of Denmark, location of Makværket and Copenhagen

Introduction to the shift from current sustainability paradigm to regenerative culture

The early 21st century marks a period when the scientific community has arrived at a consensus on anthropogenic global warming. (Cook et al., 2013) Most, if not all, major life supporting systems are currently in decline (Earth Day Network, 2018), at the same time the human population is still growing (Brook, 2016). In other words, we are living in an era of sixth mass extinction, while the human population is continuously increasing in numbers without society acknowledging an ecological carrying capacity of the finite planet Earth.

Currently, the planetary ecology is already out of its dynamic equilibrium, thus the new approach needs to be regenerative to provide a ground for the ecosystem to recover. There is not one single solution, as the context is based on the world of complexity and unpredictability. It requires an innovative, integrative, whole-systems design solutions that are created through co-creative partnership and co-evolution with nature, based on strategies of adaptation, resilience, and regeneration (du Plessis, 2012; Wahl, 2012).

The dominant worldview of modern society is based on a need for certainty, control, and prediction. The change towards the regenerative culture (see *side note*) requires a shift to a worldview of '*radical ecologism*' that "represents a shift from seeing the planet as a deterministic clockwork system in which

humans are separate from nature to seeing it as a fundamentally interconnected, complex, living and adaptive social-ecological system that is constantly in flux" (du Plessis, 2012, p. 15). According to a report from the Intergovernmental Panel on Climate Change (2018, p. 24) "a wide-scale behaviour changes consistent with adapting to and limiting global warming need to be accelerated by education, information, and community approaches, including those that are informed by indigenous knowledge and local knowledge".

In the regenerative culture, society has to encourage lifelong learning and personal development through supportive community processes and ongoing dialogue, including understanding how our culture and education system shape our worldview and value system (Wahl, 2016).

In this era of global challenges, the designers are to facilitate the local transition to co-creation between the skilled people and the community. The cooperation has to contribute to forming a '*collective knowledge*' of how to regenerate diverse, locally adapted, thriving cultures in global collaboration, within the constraints of the planetary ecology. Such design practice contributes to society shifting to the regenerative culture. (Brown, V., 2008; Lerch, 2017; Wahl, 2016).

"A WIDE-SCALE BEHAVIOUR CHANGES CONSISTENT WITH ADAPTING TO AND LIMITING GLOBAL WARMING NEED TO BE ACCELERATED BY EDUCATION, INFORMATION, AND COMMUNITY APPROACHES, INCLUDING THOSE THAT ARE INFORMED BY INDIGENOUS KNOWLEDGE AND LOCAL KNOWLEDGE."

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, 2018

Regenerative culture is a prerequisite to community resilience. It can be described through a set of socio-ecological principles, which, according to Lerch (2017, p. 5) are the following:

- Collective decisions should be grounded in critical thinking, sober expectations, and acceptance of ecological carrying capacity.
- "Basic principles of systems thinking should be introduced to have an essential understanding of the systemic, complex challenges, and developing effective responses."
- "In a human community, identity is essentially determined by what people value about where they live; therefore, the people who inhabit a community must be at the heart of the resilience-building process."

For building an effective community resilience (*see side note*) the following six elements are essential: people, systems thinking, adaptability, transformability, sustainability, and courage.

In other words, "it is about making connections between the way we live and the way others suffer, between unnecessary industrial development and the destruction of the planet. It involves a commitment to work non-violently for change, promoting lifestyles that are possible for all the world's people, sustainable within the resources of the planet, environmentally friendly and free of all exploitation of animals and of people" (Movement for Compassionate Living, 1984).

ACADEMIC: REGENERATIVE CULTURE

"A regenerative culture will have to facilitate the healthy personal development of a human being from ego-centric to socio-centric, to species-centric, to bio-centric, and cosmos-centric perspectives of self." Education and healthy personal development should be guided by questions rather than answers. "We need to live these questions individually and collectively to co-create a new narrative" (Wahl, 2016 p. 40).

ACADEMIC: COLLECTIVE KNOWLEDGE

"To re-align the multiple knowledges in a way that allows for collective thinking and collaborative practice. The multiple knowledges, meaning, in which Western thinking has become divided: individual, community, specialised, organisational and holistic ways of thinking" (Brown, V., 2008, p. 1).

ACADEMIC: COMMUNITY RESILIENCE

"In resilience science, a community and the ecosystem it makes use of are together considered a unified social-ecological system. The system's adaptability is a function of general characteristics like diversity, innovation, and feedback as well as its ability to cope with vulnerabilities specific to its situation and make deeper transformations if needed" (Lerch, 2017).

Aim and research questions: forming the Action Plan

This thesis is aiming to explore transformational learning spaces in a collective practice and how does it relate to a societal transformation. The objective of this thesis is to build an Action Plan (see figure 4).

One part of the Action Plan is the Building Course Material for organising the building workshops, including number of participants needed, required building materials, initial design sketch, and description of the building parts.

Another part of the Action Plan and a result of this work, is the New Theory of Transformational Learning Spaces. This theory is a consolidation of research on existing learning theories and the case study Culture and Environmental Collective Makvärket.

My intention is to stimulate the transformational learning process in building with the local community. The Action Plan will be put in practice after the thesis semester in an allotment garden by building a guest house with the community, located in Denmark. The expected outcome of the process is to be a step closer to a resilient community.

At the end of the thesis is a narrative illustrating the Action Plan in practice, describing 'the societal transformation' process taking place in the 'collective social learning' building course.

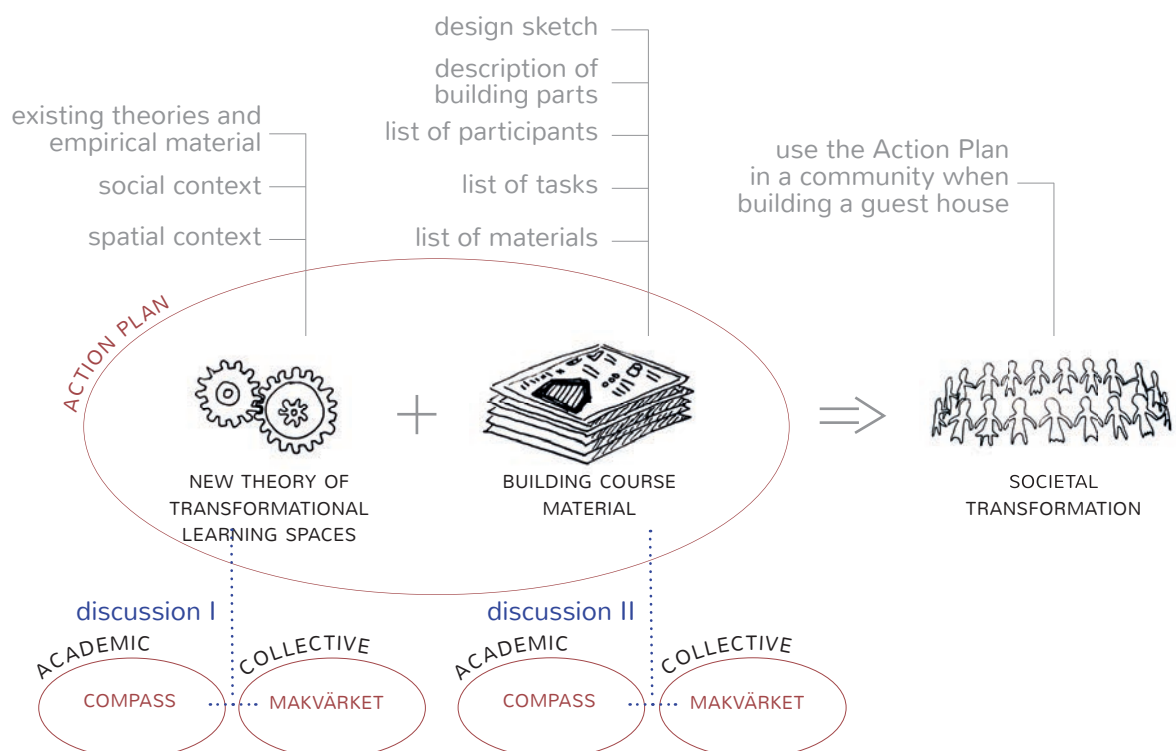


Figure 4. This scheme is describing the parts of the Action Plan, and showing the inputs from academic and collective perspectives

The underlying aim of this thesis is to create a new identity of an architect striving for societal transformation.

The following questions are exploring the Culture and Environmental Collective to identify a prevailing narrative of a societal transformation in practice:

The first question is aiming to contribute to an understanding of how a personal transformation is happening in the collective. It entails an exploration in the collective practice to propose an Action Plan to stimulate a societal transformation in a group.

The second normative question is investigating scaling-up the collective proposition into society. It requires a recommendation of how to spread the collective knowledge and values beyond the group.

Next two descriptive question are exploring the phenomenon of societal transformation in the Culture and Environmental Collective:

The first question is analysing how space is contributing to embedding the collective principles and values in the experience.

The second questions are analysing how a personal transformation is happening in the collective space and what is the underlying relation between societal transformation and learning space.

WHAT IS THE ROLE OF AN ARCHITECT STRIVING FOR SOCIETAL TRANSFORMATION?

HOW TO PUSH FOR SOCIETAL TRANSFORMATION WITH A CULTURE AND ENVIRONMENTAL COLLECTIVE?

HOW TO SPREAD THE KNOWLEDGE AND WORLDVIEW OF A CULTURE AND ENVIRONMENTAL COLLECTIVE INTO THE SURROUNDING SOCIETY?

HOW ARE SOCIO ECOLOGICAL VALUES TRANSLATED IN SPACE?

HOW DOES A DEEP FUNDAMENTAL CHANGE IN INDIVIDUAL'S WORLDVIEW HAPPEN IN THE LEARNING SPACE?

Timeline for my master's thesis (MT) process and possible future scenario

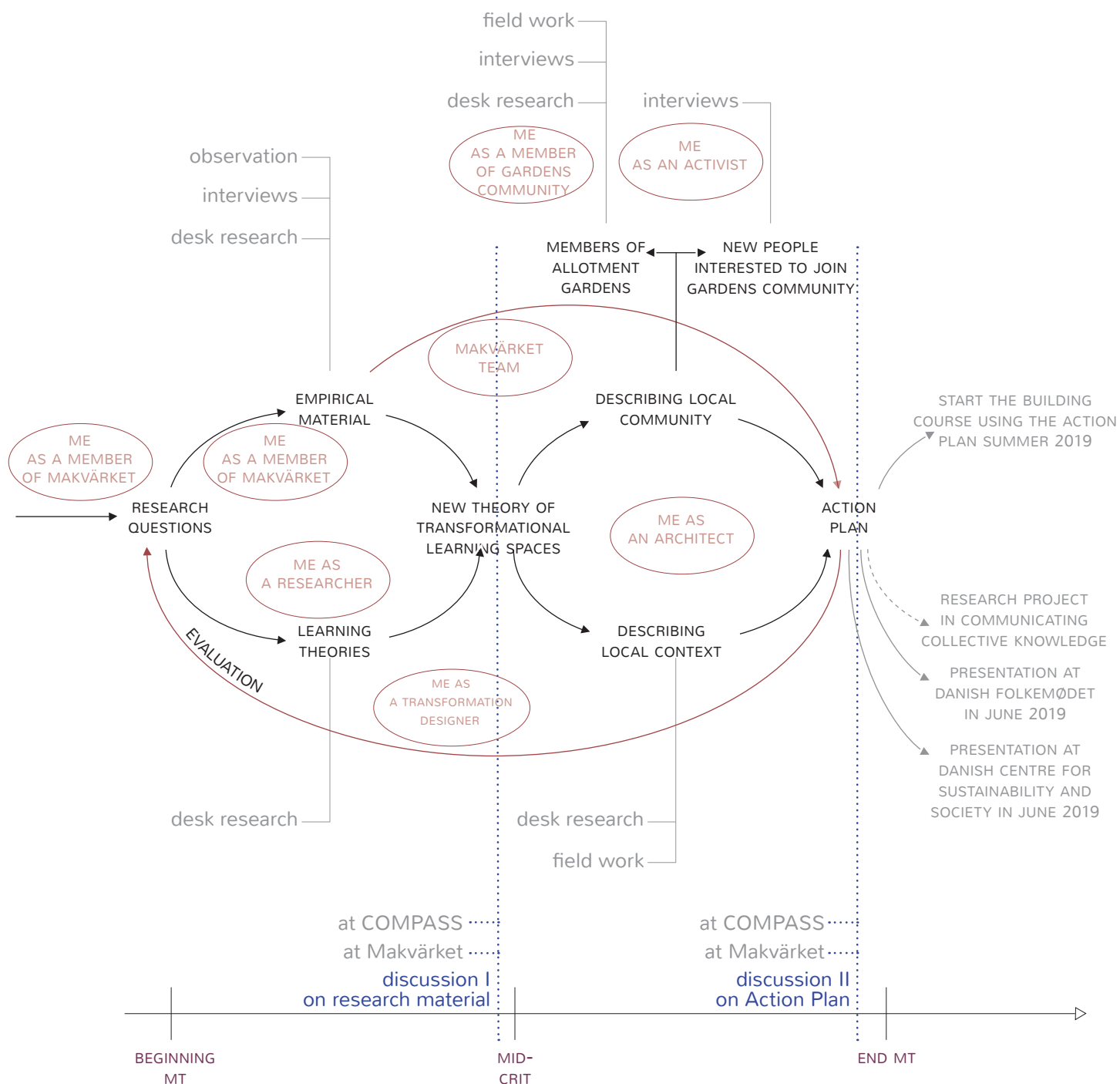


Figure 5. This scheme is describing my master's thesis process

Description of methods

This is an action-research project (*see figure 5*), where the researcher (me) is working with the community to identify problems and work out a proposal that would be implemented with the community.

First, I collected empirical material in the collective Makvärket by interviewing members, observing daily collective life and reading through digital monthly meeting protocols of the organising group since 2011. In parallel, I researched existing learning theories from a perspective of learning as a process from cognitive, behaviourist, social-cognitive, humanist and constructivist orientations, and transformational learning theories of Jarvis, Mezirow, Freire and O'Sullivan.

Second, I created the New Theory of Transformational Learning Spaces, including social and spatial components, consisting of transformational learning tools, learning process, and defining three types of learning spaces. The new theory is combining the learnings from the empirical material with the research of learning theories.

Third, I organised a discussion focused on the research material at the monthly meeting with collective Makvärket. Additionally, I had a discussion about the same material with COMPASS (*see the side note*) research team at the University of Copenhagen.

Fourth, I analysed and described the local context and learning spaces of the community, where the Action Plan is going to be put in practice, and developed a proposal for the Building Course Material.

Fifth, I wrote an Action Plan combining the New Theory of Transformational Learning Spaces and the Building Course Material.

Finally, I had a discussion on the Action Plan at the collective Makvärket and with the COMPASS research team.

The thesis was finalised with the presentation, discussion, and reflections on the thesis process and the presented material at the final critique at Chalmers.

Each chapter starts with a short description of methods used to collect or develop the material and finalises with a brief summary.

The final chapter is dedicated to critical reflections on the contribution of the thesis to a discussion of societal transformation. Additionally, it is evaluating the research methodology of the thesis process, collected material, the outcome of the analysis and contribution to answering the research questions. Eventually, the chapter is finalised with thoughts on further research needed to conclude the discussion of the role of an architect in societal change.

ACADEMIC:

COMPASS

"Collective Movements and Pathways to Sustainable Societies (COMPASS) is an ongoing research project at the University of Copenhagen. The focus is on studying environmental movements to understand how they influence environmental behaviour, social norms, and social institutions." The research is focusing on a social context in the communities, creating strategies based on the collectives' experiences, evaluating the relations between the strategies in use in the community and their carbon footprint. "The aim is to contribute to reducing our ecological footprint by helping grass-roots environmental movements to develop and upscale their local, regional and national impact." (COMPASS, 2017)

Chapter 2. Makväcket research

In this chapter is the empirical material from Culture and Environmental Collective Makväcket; collected through interviews with members, observations of daily practice, participation at the meetings and workshops, and desk research reading the monthly meeting protocols since 2011.

The material has been selected through a subjective perspective as I have been part of the collective of Makväcket for four years; during this period I have taken the responsibility of having an overview of the project, have accepted international volunteers, represented the collective at a conference of Autonomous Movements in Europe, introduced the current and upcoming social and building projects to visitors, participated in renovating and building common spaces, and strengthened local community by helping to organise regular monthly People's Kitchens.

This chapter describes the context and narrative of the Makväcket phenomenon to give the reader a deeper understanding of the collective. The pages are set up in chronological order, starting from the first years when Makväcket started in about 2008. In parallel, on the right-hand pages are narratives and values of the collective. In the side notes are short descriptions of the methods used in Makväcket.

At the end is a summary and reflections on Makväcket collective practice.



Figure 6. Makväcket 'living room'

Overview of the case study - What is Makväcket?

Makväcket does not have an agreed definition. It is constantly changing and evolving based on the current participants' interests, skills, and knowledge, the group dynamics in place, spatial context, available resources, etc. There are some changes that are slower, like evolving the collective values and principles, which have been formed over a long time based on people getting involved in the project, emerged situations, conflict resolutions, etc.

Makväcket is envisioned as an open space for art and ecology in the former ceramic factory, where people are working, living, building and dreaming together in different constellations, groups, and situations. The sustainable ideals of the group are including ecological solutions for building, waste handling, growing food, etc. Additionally, the collective has a wish to experiment with the economy outside of the growth-mania, and together with this taking care of each other and the ecology (Makväcket Collective, 2016).

Makväcket's values and principles are not a set of rules, but they are actively used in the decision-making process and in the everyday life of the collective. These statements are the base for dialogue and action to form the society the collective would like to be part of (Makväcket Collective, 2016).

The collective is aiming to create an inclusive space for dreams and discussions by welcoming people with any kind of experiences and identities. It is a place to challenge norms that are creating hierarchies and giving privileges to people who live up to them, and to support individuals in recognising and questioning their own privileged positions, ideas and understandings (Makväcket Collective, 2016).

The social dynamics in Makvärket are working in two dimensions, which are intertwined: the plenum group and the factory group (see figure 7).

The collective consists of the plenum group, who in different ways have a long-term-relationship to the project, and the factory group, who participate as volunteers and guests for a short time. The permanent group of long-term members is spread between working groups, like garden group, booking group, accounting group, and short-term task-oriented groups like a festival group and construction group. The groups need to get a mandate from the plenum to take decisions within their field. The collective meets once a month for a plenum meeting, where discussions and organising future plans are taking place.

The factory group is people, who currently stay, live and volunteer in the factory, and contribute to the project in various ways. This group is self-organising in welcoming new members, establishing

the daily life and working habits in the frames of the values, principles, and decisions from the collective (Makvärket Collective, 2016).

Additionally, there are guests and temporarily inactive members of the plenum, who may attend the monthly meeting once in a while, but have no responsibilities.

Another large group is supporting members, who are not actively part of the daily life at the factory nor the organising and decision part of the collective. This is the network of people, who are currently not committed to Makvärket but have an interest in the collective or its activities like dance, theatre, music, woodwork, metal work, permaculture gardening or any other ecological and cultural experimentation. For instance, in the case of focused activities like workshops, building festivals, organising people's kitchen dinners or when Makvärket needs extra skills or support for a project, people from this group are volunteering to take short-term responsibilities.

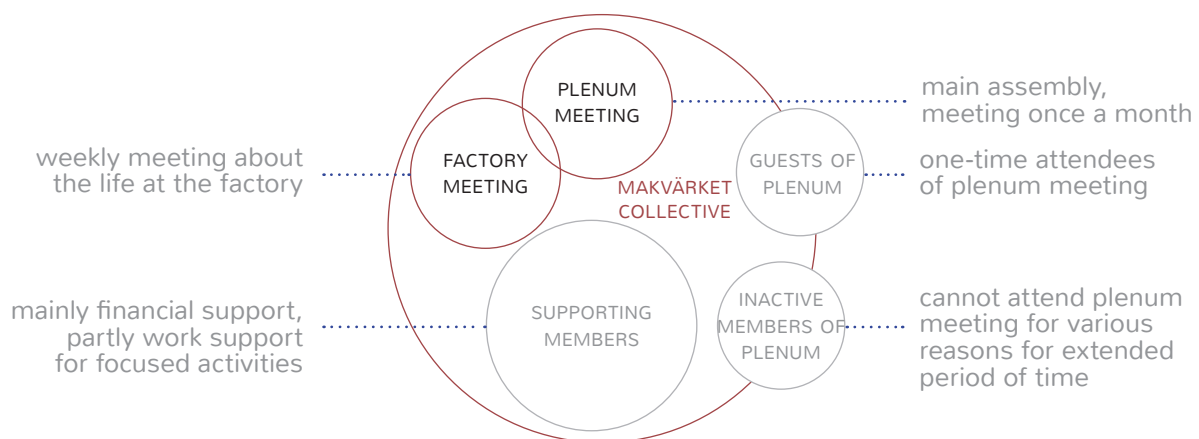


Figure 7. This scheme is describing Makvärket collective structure

Makvärket timeline

Everyone is welcome to join and find their place in Makvärket!

Makvärket is a culture and environmental working collective that functions as a meeting place for alike minded people from all over the world.

Makvärket is like a retreat for the activists from Copenhagen to come and restore their strength after political battles and the city life!

Here people are doing things together while learning from each other!

It is a local hub for collectives and groups to come together, to support and help each other in their political and cultural struggles.



<2008 Knabstrup ceramics and brick factory



2011 Makvärket south-facade



2011 building a greenhouse



2009 collapsed building in north courtyard



2010 north courtyard clean up, recycling bricks



2010 north courtyard, reusing roof structure



2010 cleaning up and recycling materials



2010 ovens room clean up



2010 future multi-hall, clean up

Figure 8. Photos of Makvärket

NARRATIVES OF THE DEVELOPMENT PROCESS

To work together effectively Makvärdet collective is organising by distributing tasks between the members. People often tend to take tasks they can do most effectively and feel most comfortable with. This situation reinforces roles and requires responsibilities from the person according to a role one has taken or developed in society. In this way, the collective is unintentionally reproducing gender roles and various hierarchies in the work process. As a result, the collective decided to work more consciously on questioning social norms, hierarchies, and power structures. This includes that every person should challenge themselves as well as other group members by questioning the taken roles and distribution of tasks (Makvärdet Collective, 2016).

Knowledge can form hierarchies as opinions of more experienced people are considered more relevant, thus this contributes to an elementary power structure. Collective Makvärdet acknowledges knowledge hierarchies and uses consensus decision making to balance it, additionally to working together, which in long-term results in sharing and spreading the knowledge over the group.

VALUES

- Take decision through consensus process
- Initiate activities to do together instead of individually
- Identify power structures and privileges
- Share specialised knowledge



Figure 9. Cleaning up, establishing, envisioning

METHOD: CONSENSUS DECISION MAKING

"Decisions in all fora, groups and in the collective are made by consensus, which means looking for solutions everyone can accept. Better discussions and decisions come from dealing with all concerns instead of outvoting them." (Makvärdet Collective, 2016, p. 6)

METHOD: DOING TOGETHER

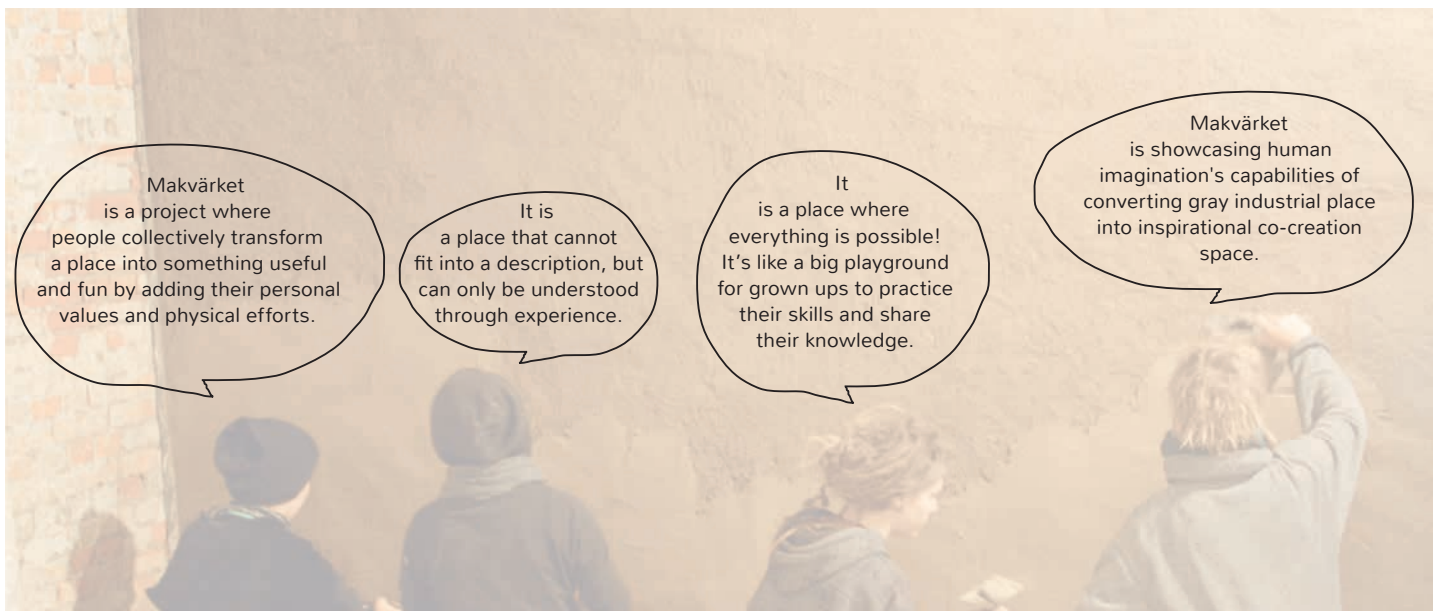
"Doing it together is about refusing the individualism, taking back power and having fun while we're at it. This should as often as possible slide into magical social situations. The process is as important as the goals, so we try not to rush, even though we want so much to happen." (Makvärdet Collective, 2016, p. 5)

METHOD: RESISTANCE AND SOLIDARITY

"Makvärdet is anti-authoritarian, opposing both government and capitalism. We work actively for alternatives to consumption, commercialism, exploitation and a political system where people have no influence." (Makvärdet Collective, 2016, p. 5)

METHOD: KNOWLEDGE SHARING

"Free knowledge sharing - pluralisation of specialisation: possibility of trying new things (you don't need to be skilled to enter) while working together. Contribute to an atmosphere of initiative, activity, caring and cooperative thinking-acting. Inspiration for change - copyable solutions to spread new systems." (Makvärdet Collective, 2013)



2012 greenhouse of recycled materials finalised



2011 north courtyard, building pizza oven



2014 north courtyard finalised



2012 applying clay-render to walls



2011 building multi-hall mass oven



2015 north courtyard during festival



2014 two stories high multi-hall finished



2014 concert in multi-hall



2012 multi-hall mass oven finalised, built with recycled bricks from the factory

Figure 10. Photos of Makvarket

NARRATIVES OF THE DEVELOPMENT PROCESS

Currently, in modern society, there is an evident (neo)liberal ideal to be an independent individual. This often means that needing help from others is understood as weakness or disability. Collective Makvärket is encouraging recognition that everyone is dependent on each other and where asking for help and helping each other is essential to taking part in the community. This results in an awareness of creating accessibility when building spaces, and acknowledgment of possible boundaries for some bodies that may be an easy way to move for others (Makvärket Collective, 2016).

Instead of tolerating transgressions of norms of how one is supposed to act or look according to the gender they were given at birth, the collective would like to create a space where the cisnorm is questioned. Therefore, people in Makvärket space are encouraged not to expect that they can tell from someone's body and looks how they identify or what they prefer to be called, for instance, "they", "it", "she", "he" etc. Asking instead of assuming is preliminary (Makvärket Collective, 2016).

VALUES

- Become aware of ecological carrying capacity of the life supporting environment
- Build community resilience
- Establish dialogue-oriented approach to grow trust between people
- Increase diversity in group to improve inclusion
- Introduce non-hierarchical organisation to grow equality



Figure 11. Constructing

METHOD: ECOLOGY AND RESOURCEFULNESS

"Makvärket recognizes the immense ecological dangers of our time but refuses a conservative pureness-seeking attitude towards these. In many ways, we need to get into the dirt to develop and adapt in the rapidly changing ecology that we are part of. As for organizational ecology, Makvärket wants to build up resilience concerning resources and organization. Resourcefulness in humans and materials." (Makvärket Collective, 2016, p. 7)

METHOD: TRUST AND DIALOGUE

"Makvärket works continuously for creating an atmosphere based on trust and dialogue. We value personal responsibility for the project and respect for the buildings and the collective decisions." (Makvärket Collective, 2016, p. 7)

METHOD: INCLUSION

"Inclusion - global and local network, diversity - not subculture. Acknowledge strength in diversity (gender, religion, age, social and financial position, educational level, physical ability, cultural and ethnic background)." (Makvärket Collective, 2016, p. 7)

METHOD: EQUALITY

"Makvärket is organizing without leaders and aims to be a non-hierarchical and egalitarian space. This means looking out for indistinct power structures that appear and giving empathetic effort to dissolving it, and being generally aware of social roles we give and take." (Makvärket Collective, 2016, p. 5)



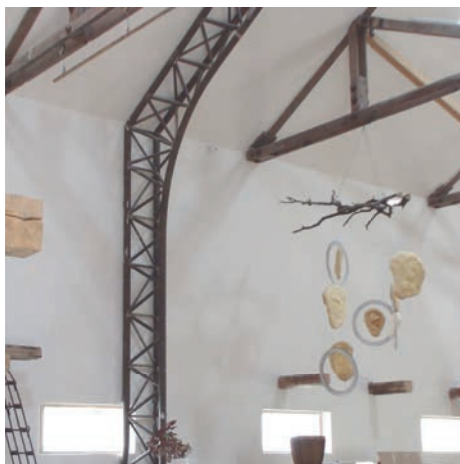
2015 greenhouse gardening



2015 north courtyard art exhibition



2015 north courtyard music performance



2015 multi-hall decorations



2015 multi-hall performance



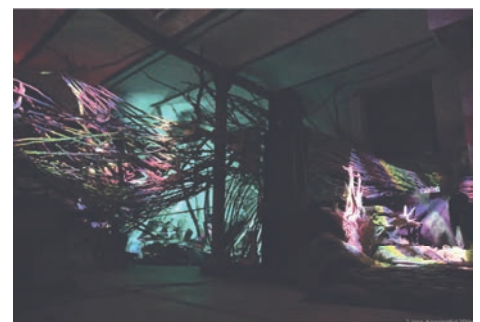
2014 wall mosaic in dining hall



2015 multi-hall concert



2015 light-corridor north entrance



2015 light show in deteriorated factory space



2019 Makvärket south-facade

Figure 12. Photos of Makvärket

NARRATIVE OF THE DEVELOPMENT PROCESS

Whenever people interact, there is a justice system in place. The collective is trying to co-create a conscious, restorative process for dealing with conflicts by aiming to use a method that is comprised of community agreements that are dynamically evolving and feedback-informed. It is a reflective dialogue designed to 'accompany' conflict so that everyone feels heard. The aim of this system is to support people in creating a safe space, caring both for the well-being of individuals and of the community. Conflicts are to be learned from, to be respectful to each other, to be heard and understood, and to become more aware (Makvärket Collective, 2016).

VALUES

- Respect the people and the place
- Avoid rushing and appreciate the process
- Communicate openly disagreements through Restorative Circle process to reinforce understanding and create safe space
- Initiate a flashlight round
- Create space for diversity of creative expressions
- Practice long-term thinking



Figure 13. Arts

METHOD: NO HARMFUL BEHAVIOUR

"No harmful behaviour: violence and domination free. Respect for the people and the place." (Makvärket Collective, 2013)

METHOD: CONSTANT DEVELOPMENT PROCESS

"Makvärket is not about coming from A to B, nor A to Z. It will never be finished." (Makvärket Collective, 2016, p. 7)

METHOD: RESTORATIVE CIRCLE

A practice emerged from violent conflicts in Brazil between police and inhabitants from the slums. It consists of facilitator(s), and people impacted by the conflict directly and indirectly. The process is opening space for participants to express their understanding of the situation and feelings involved, and to explain their point of view. The outcome does not need to be an agreement, but arriving at understanding and relating to each other's perspective through discussions, where everyone is heard and appreciated. (Banks, 2016)

METHOD: MEETING CULTURE

At Makvärket, meetings begin with 'flashlight round', where everyone at the meeting has a chance to briefly express their current personal position in life to the rest of the group. This is a method to acknowledge each other's emotional predisposition to ease relating to one another throughout the meeting.

Summary

In reflection, I believe the collective Makvärket has prevalent normative ethics, established over the past 10 years based on principles from members who have been involved in the plenum group. Some of these underlying values have been identified and are communicated as collective values. Some, are still embedded in the collective norms and are difficult to pinpoint. Often, at the plenum meeting some members bring up an underlying conflict between the values and the collective decisions. As a resolution to the conflict some propose a re-evaluation of the agreed principles. This is an ongoing discussion, thus, I am interested to explore further the hidden embedded values of Makvärket.

From the perspective of a long-term member of Makvärket I intend to investigate the hidden values and personal transformation process in the collective. The underlying belief of the plenum group is that people participating in the activities gain an experience that will help them to learn the collective values and support their personal transformation. I would specify, the long-term members are the translators of the hidden values, and that newcomers learn by socialising or engaging in collective activities with the long-term members. In addition, I think the experience is acquired both, from social interactions, and from the space. For this, further analysis of Makvärket collective spaces in relation to the personal transformation process is needed.

In relation to the spaces, the factory has a distinct characters: deteriorated utility room; dark and deep corridor full of recycled and rescued building materials; semi-organised dusty ceramic-molds storage; detached building with metal-workshop full of scrap material and metal working machines; large dark space with wood working machines and a soft sawdust covering the floor like the first snow; cold

sanitised-looking art room with colourful paintings on the wall; large and bright empty space with exposed load bearing structure and a wide chimney; tiny bright room with warm wooden floor, bookshelves and a sofa; deep bright room full of second-hand items exhibited as in a store (*see figure 14*); a deep room with multi-use sewing-machines and board-games corner (*see figure 15*); another large space with soft mattresses and a red painted wooden dome structure in the middle of the room; 80m long three stories high entrance-corridor with a glass roof, even a huge multi-hall that is suitable for circus as it's built through two stories, - just to mention some. These spaces need to be examined further to explore their role in Makvärket collective activities.

In relation to having a societal impact, the collective is rather pre-cautious. Subjectively, I see the cause in missing a clearly set common aim(s). Some members wish Makvärket to be more political and support the network of socio-cultural movements, others want to open up for more diversity of interests to engage people with different backgrounds in the collective activities. I think the collective should position itself in relation to the societal transformation, and provide a platform to strengthen the movements and individuals working towards a collective shift to regenerative culture. This approach could be discussed further in the last chapter.

In conclusion, from this chapter, I take into the New Theory of Transformational Learning Spaces the identified values of Makvärket, examine further the hidden values, and use them as tools in the Action Plan.

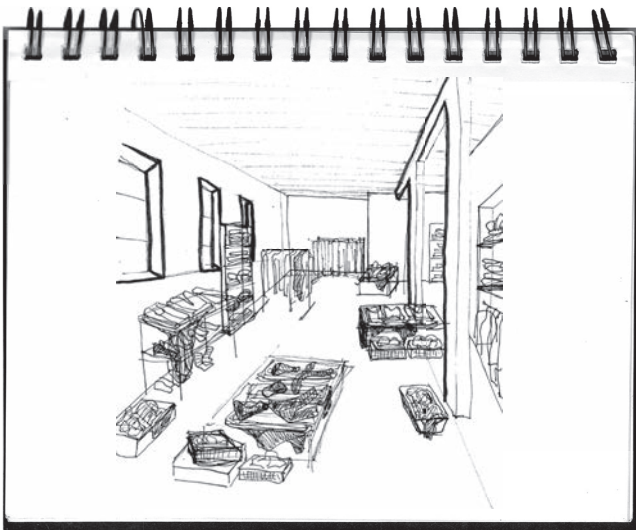


Figure 14. Makvärket 'free shop'

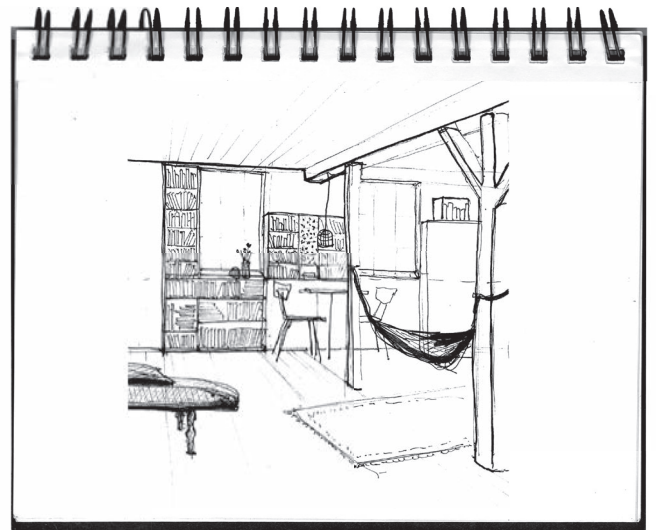


Figure 15. Makvärket 'hobby space'

Chapter 3. Learning theories

There are many theories of learning. To narrow it down, learning could be discussed as an outcome or as a process; *in both case, the desired end result is to recognise some sort of a change* (Gould, 2017) (italics in original).

This chapter includes an introduction of five learning theories from the perspective of learning as a process, and five Transformational Learning theories (see side note). Next is the analysis of the spatial and social context of the learning theories, and an interpretation of the transformational learning stages described by Jarvis (2006).


Additionally, to help the reader to follow the development of the chapter, the side notes are giving a short description of the concepts used in the text; they are labelled as practical, academic or method.


At the end of the chapter is a summary with the findings and reflections on the learning theories.


Learning as a process

To understand what is learning and how does it happen in Makvärket, I explore the approaches to define learning (see figure 16). Plato and Aristotle were the original philosophers to investigate the nature of knowledge (about 369 BC); Plato's 'rationalism' was focusing on knowledge emerging from self-analysis and Aristotle's 'empiricism' was saying all the knowledge comes through the senses. Furthermore, I am interested to find the relation between personal transformation and learning. Thus, I reflected on Kegan (2000), who divided learning between informational and transformational, an extension of cognitive capacity and fundamental change in existing concepts, respectively (Merriam, Caffarella, and Baumgartner, 2007).

To narrow down the understanding of learning, I read five fundamental theories: behaviourist, humanist, cognitive, social cognitive and constructivist, which were summed up by Merriam et. al. (2007).

 In behaviourism (see side note), based on Skinner (1938), knowledge is constructed by reinforcement and repetition - experiencing through the senses; change is an extension of a cognitive capacity by building up the knowledge base by adding new information. Behaviourism theory is the base for most western institutional education systems.

 The humanistic perspective (see side note), like Rogers (1946) and Maslow (1943), emerged in the 1960's. The knowledge is centred on experience; personal growth and development is the change that occurs in learning. Principles of the humanistic theory are at the core of self-directed learning where the learner has primary responsibility in the process.

 Cognitive orientation (see side note), based on Gestalt schools of thought (Koffka, 1935), is describing knowledge as a mental process, where change is happening in the process of learning how to learn to increase competence. For instance, the areas of study include mathematical learning theory models, artificial intelligence, and the study of expertise.

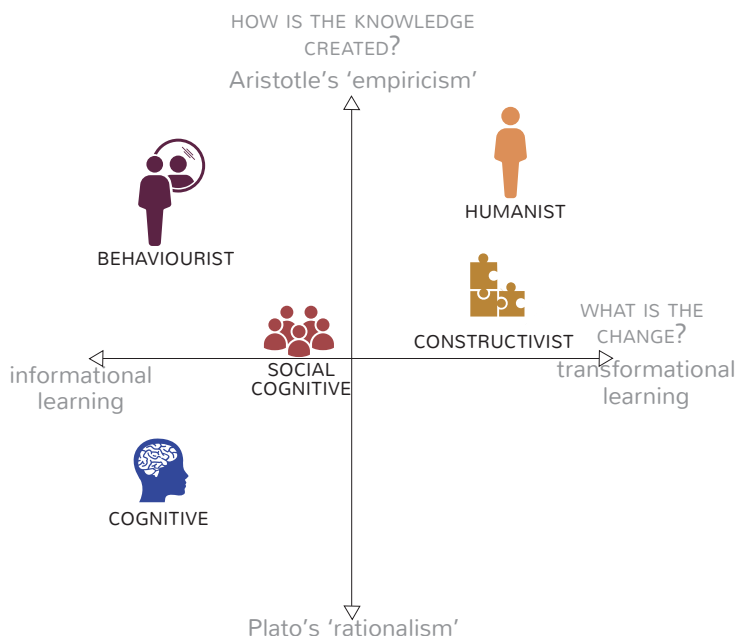


Figure 16. I created this scheme where I qualified the orientations on axes 'what is the change' and 'how the knowledge is created', to understand the learning taking place in Makvärket



Social cognitive theory, based on Bandura (Bandura, Ross, D., and Ross, A., 1963) (*see side note*), explains that knowledge is created in a social setting by observing others; the change in a person's behaviour occurs in interaction with the environment.



Constructivism theories (*see side note*) comply that learning is a process of constructing meaning, making sense of one's experience; they differ in understanding the nature of reality, the role of experience, the choice of knowledge, and if the meaning-making process is primarily individual or social (Steffe & Gale, 1995).

In Makvärket working together while transforming the physical environment is an essential part of the collective social activities, thus, I intend to explore the role of a spatial context in the learning process. On one side, behaviourist and social cognitive orientations recognise the environmental and some social aspects, but consider learning as an informational process, thus, the underlying aim is to extend the cognitive capacity of the learner and the learning environment is predefined, as in a formal learning space. On the other side, constructivism and humanism are addressing transformational learning, but constructivism fails to take into account the context where the process is taking place - the environmental setting, in both social and spatial meanings. Although humanism is emphasizing the importance of a supportive environment, it is not making a division between social and spatial context.

In summary, I understand the learning theories are focusing on formal, meaning, the institutional learning, thus, the majority of them aim to improve the student's ability to learn academic knowledge. The first four theories have a distinct approach and they are opposing one another. Constructivism is intending to holistically combine the complementary principles of the four theories, and humanism is centred on the interests of the self-directed learner. Thus, I will explore further the constructivism and humanism perspectives of the learning process by researching transformational learning theories.

ACADEMIC:

TRANSFORMATIONAL LEARNING

Learning is transformation through two processes, altering first the sensations of the external world into an experience and then changing the experience into an element of our biography, which could be knowledge, skills, attitudes, values, beliefs, emotions or the senses - or any combination of them. (Jarvis, 2006, p. 87)

ACADEMIC:

BEHAVIOURISM

Three basic assumptions of behaviourists: learning is manifested in a change in behaviour, the environment shapes the behaviour, the importance of contiguity and reinforcement in learning (Grippin & Peters, 1984).

ACADEMIC:

HUMANISM AND ROGERS

Rogers was a major figure from the humanist orientation. His "client-centered therapy" is often equated with student-centered learning, highlighting the need for an environment that provides genuineness, acceptance, and empathy (Merriam et. al., 2007, p. 283).

ACADEMIC:

COGNITIVISM

The core principles of the cognitive or information-processing learning theory are the following: memory system is an active processor of information and importance of prior knowledge in the learning process (Gredler, 1997, p. 144). Learning is an internal process in the learner's mind.

ACADEMIC:

SOCIAL COGNITIVISM AND BANDURA

With Social Learning Theory Bandura posits that humans learn by watching others, observing the consequence of the behaviour and evaluating its viability to the environment. He introduced the importance of environmental factors, among behaviour and personality, to be influential in a learning process - "people influence their environment, which in turn influences the way they behave" (Merriam et. al., 2007, p. 289).

ACADEMIC:

CONSTRUCTIVISM AND PIAGET

In the Theory of Cognitive Development Piaget defined three processes in learning: assimilation, accommodation, and disequilibrium. He said, "all learning is motivated by a desire to maintain a state of equilibrium" (Proulx, 2006). Disequilibrium is the base condition for a radical change to occur in meaning schemes and perspectives. He believed knowledge is created through dialogue, collaborative learning, and cooperative learning.

Concept of social change - Transformational learning theories

Vygotsky (*see side note*) (1934) and Piaget (1932) were the first theorists to recognise the role of the social interactions in a learning process.

Jarvis (2006) explained, the paradigm of scientific research, as a rationalism and scientific objectivity, has been recently evolving towards qualitative and subjective research, which has created more interest in learning-related social science projects. Consequently, experiential learning theories have emerged, including the transformational learning theories.

The first, Transformative Learning Theory, created by Mezirow, was focusing on an individual's deep change of worldview. He explained that one needs to become critically reflective of their assumptions and aware of their context - the source, nature, and consequences of taken-for-granted beliefs - to transform the frames of reference (Mezirow, 2000).

The other group of transformational learning theories focusing on socio-cultural transformation has several branches (*see figure 17*): social-emancipatory (Freire), cultural-spiritual, race-centric, and planetary (O'Sullivan). The first is described in Freire's (1970) theory, Pedagogy of the Oppressed, which

emerged from the context of oppression and is set in the framework of radical social change. Through discussions, the learner raises one's awareness about their life situations and becomes an active agent in constructing a different, more just reality (Merriam et. al., 2007).

O'Sullivan contributes with a broader planetary understanding of transformational learning, which "involves a shift in our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class, race, and gender; our body awarenesses, our visions of alternative approaches to living; and our sense of possibilities for social justice, peace and personal joy" (O'Sullivan, Morrell, & O'Connor, 2002, p. 11).

Throughout time further developed perspectives of transformational learning have arisen, Dirkx (1998) emphasises the importance of a full understanding of the social, political, and cultural context of the learner, in meaning-making. As Dirkx described: transformational learning is more of a way of *being* rather than a teaching-learning technique (Comstock, 2018).

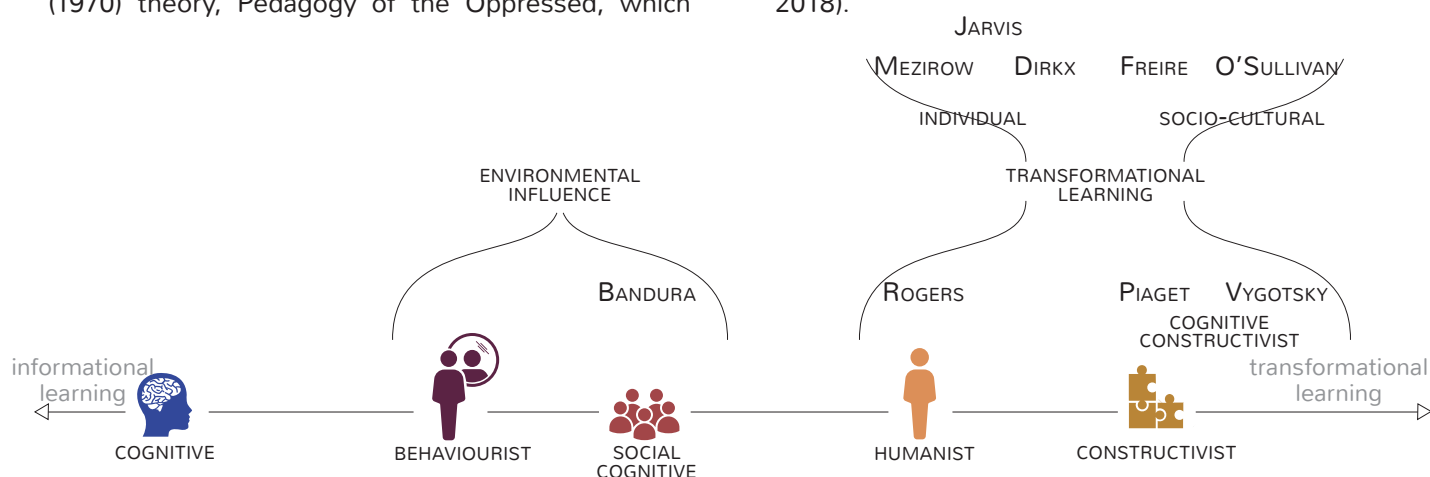


Figure 17. I developed further the previous scheme (*see p. 26*) and qualified the orientations on an axis of transformational learning

Critical reflections - spatial and social context in learning theories

Based on my experience in Makvärket, I aim to explore the spatial and social environment in the learning process. The majority of fundamental learning theories don't recognise an environment as part of the learning process. Although some may take into account the context of the learner, they don't make a division between spatial and social environment. Traditionally, learning takes place in an institutional education - most of the fundamental learning theories have been developed with an aim to improve the performance of children in formal education. I believe the limitations of formal educational spaces are part of the reason why the spatial environment is a predefined constant in the background of learning theories. Thus, I inquired what are the other learning settings aside from formal education and how they relate to spatial context. Learning can also occur in a non-formal contexts as in community places, and informal situations as in everyday life activities. Situated learning (*see side note*) occurs in non-formal context, where learning and practice take place in the same community. Transformational learning happens in a social context, which could be accommodated in formal, non-formal or in-formal situations (Merriam et. al., 2007). In Makvärket, the collective activities are using the spatial context as a predefined space or as an experimentation ground. The space-transforming interactions are not described in any learning context. Thus, I will explore the transformational learning process (*see p. 30*) to identify the link between learning and interactions with spatial context.

Additionally, in Makvärket the collective activities are situated in a social context, which is an elementary part of the learning process. Further on, I attempt to define the core principles of the social background. When critically assessing personal perspectives, we need to understand the values we grew up with (Taylor & Cranton, 2012). Our meaning-making (*see side note*) is embedded in our culture, as through acquiring language the culture is incorporated into our

self-identity. Through active dialogue with others, we arrive at a better understanding of the meaning of an experience (Mezirow, 2000). "Culture is all the knowledge, skills, attitudes, beliefs, values and emotions that we, as human beings have added to our biological base" (Jarvis, 2006, p. 55). The social environment is a broad and complex element in transformational learning. Thus, I limit my further research in the transformational learning process (*see p. 30*) by inquiring the relation between the spatial and social environment.

In summary, to discuss the relation between the spatial and social environments, and the link between learning and interaction with spatial context, I will investigate the transformational learning process according to Jarvis.

ACADEMIC:

LEV VYGOTSKY

In the Social Development Theory he underlines the fundamental role of a community in the development and growth of a person through meaning-making. Personal development cannot be understood without the socio-cultural context within which it is embedded, thus his work focuses on the role of culture, language and social interaction in the construction of knowledge. (Kretchmar, 2017)

ACADEMIC:

SITUATED LEARNING THEORY

Learning occurs when the learner is situated in a community of expertise or practice, within an authentic activity, context, and culture, allowing the learner to begin to construct knowledge of an experience through increased social interaction with others in that 'community of practice' which embodies certain beliefs and behaviours to be acquired (Comstock, 2018; Lave, 1991).

METHOD:

MEANING-MAKING

The cognitive process of creating one's own understanding of a phenomenon, meaning-making is related to language as it is the cultural foundation for individual's understanding of the world and memorising the concepts for later use.

Transformational learning stages in theory

For further discussion of the relation between the spatial and social environments, and the link between learning and interaction with spatial context, an investigation of the transformational learning process according to Jarvis follows. The diagram includes different aspects in the learning stages, described by Jarvis. For instance, experience could be defined as an action, thought or emotion.

The learning process, as drawn on *Figure 18*, is not necessarily linear and can involve several components and stages at once.



First, there has to be a situation in a social context, that creates an experience - some sort of a sensation - in the person. This sensation needs to trigger a moment of awareness: "The possibility to learn begins with the awareness of ignorance" (Jarvis, 2006, p. 78).



Second, this moment of realisation is the base condition, which Piaget (1932) calls disequilibrium, Mezirow (2000) a disorienting dilemma, and Jarvis (2006) disjuncture. It is often described as a 'time would freeze', when one becomes highly aware of the surrounding world. In essence, disequilibrium occurs when in the situation that one experiences, the habitual automatic reaction is no longer sufficient; it creates awareness, consciousness, 'unease' or tension between the person and the environment (Jarvis, 2006).



Third, according to Fosnot (1996) human mind has a tendency to assimilate new information, only when it is contradicting the prior knowledge, the learner has to accommodate the prior knowledge to return to equilibrium (Proulx, 2006). Thus, the learner will try to make sense of the experience in the frames of the current knowledge, but may need to adapt the existing knowledge by going through the learning process, where some type of learning will occur. If occurring learning is a critical reflection on the experience, the learner will be able

to challenge the assumptions from prior knowledge (Jarvis, 2006). There is a variation in the learning process depending on the source of the influence. For instance, experience occurring in the mind of the learner will result in a learning process, but if the experience is a reaction to the external situation the learner may choose to ignore the disequilibrium (non-learning).



Fourth, after resolving the disequilibrium the learner needs to memorise the outcome. In a practical situation the outcome can be tested and the result can be internalised to the biography of the learner. In a non-practical situation the learning can create new knowledge or appreciation of new sentiments, which can be reintegrated to the biography.



Jarvis (2006, p. 13) concluded transformational learning as follows: "human learning is the combination of processes whereby the whole person - body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses): experiences a social situation, the perceived content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the person's individual biography resulting in a changed (or more experienced) person".

According to the description of the learning stages, I pinpointed three potential locations in the learning process that in principle could relate to social, spatial or both learning contexts. Additionally, in these points, the transformational learning process could be complemented with interactions with space.

In summary, the spatial and social contexts are intertwined in the transformational learning process. To complement the description from Jarvis, with additional information, further reflection in comparison to Makvärket is needed (see p. 42).

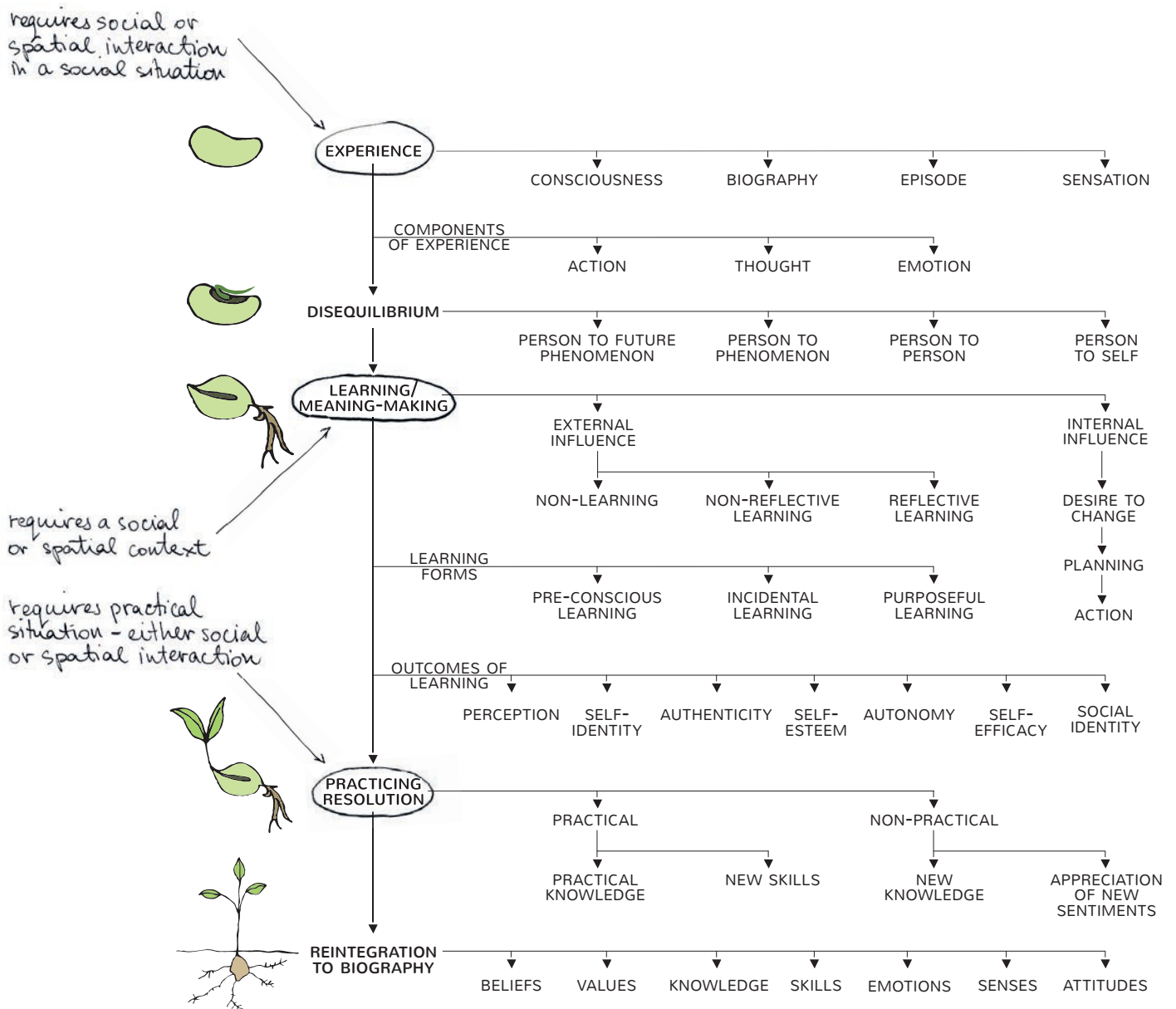


Figure 18. Transformational learning stages, pinpointing the possible locations of relations to social and/or spatial context of the learner; adapted from Jarvis (2006)

Summary

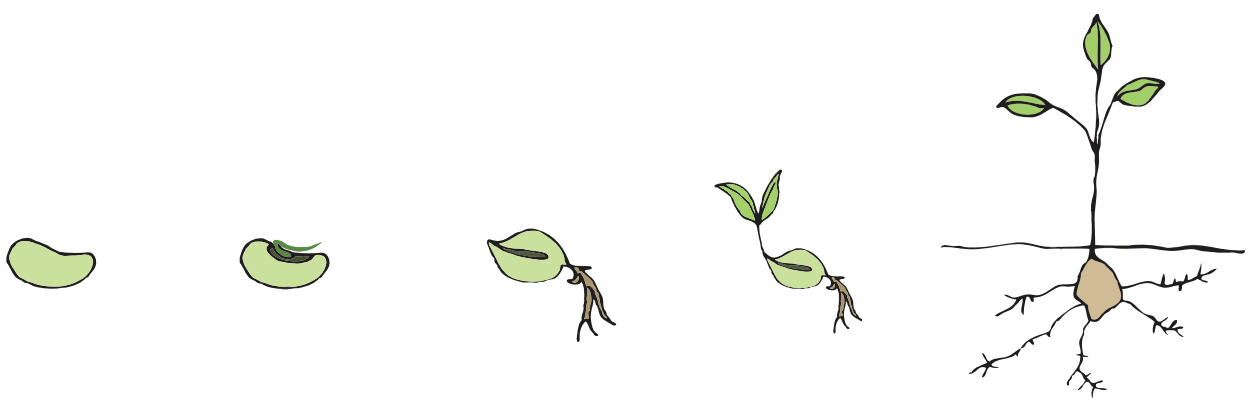
This chapter aims to capture the essence of the learning theories - to understand the basic principles of human learning by analysing the fundamental and transformational learning theories. When reading the academic literature, I was reflecting on Makvärket to select relevant content.

In reflection, the learning process depends on the context - most of the theories are limited by the formal learning environment. Inspired by Makvärket, I was searching for a learning space that would allow space-transforming interactions. As there is little attention put on the spatial environment in the social learning theories, a further contribution is needed to understand the role of interactions with a learning space in the learning process.

In my opinion, the learning process at Makvärket, involving personal transformation is described in transformational learning theories. Nevertheless, transformational theories are lacking in defining the relation between spatial and social environment. Thus, further research in connection to Makvärket is needed to understand and describe the relations between the spatial and social context of the learner.

To take a step further in the discussion of relations of learning spaces to the learning process, and spatial and social contexts of the learner, I investigated the transformational learning stages according to Jarvis. In reflection, the theory of transformational learning is not considering the role of learning spaces and the learning contexts. Thus, this is the entry point of my explorations in the spatial aspect in the transformational learning process.

In conclusion, in the next chapter, I will investigate the role of learning spaces, and the spatial and social learning contexts, with an aim to reflect on Makvärket and propose the new concepts that are missing from the transformational learning theories. Furthermore, I take into the Action Plan the embodied specialised knowledge of social learning theories to enrich the approach of the collective building course.



Chapter 4. New Theory of Transformational Learning Spaces

This chapter proposes the New Theory of Transformational Learning Spaces. First, I examine the role of the spaces in Makvärket in relation to a personal transformation process to describe the new concepts: 'spaces to learn on', 'spaces to learn from' and 'spaces to learn in'. Next is an interpretation of the transformational learning stages in Makvärket, which is enriching the concept from Jarvis (*see p. 30*) with relations to spatial and social contexts, and learning spaces. Last, transformational learning tools are introduced.

At the end of the chapter is a short summary and reflections on the New Theory of Transformational Learning Spaces. Additionally, there is a discussion, focused on the research material. These discussions were held at Makvärket collective and at the COMPASS research meeting, where, I presented the thesis progress and continued with a group discussion of the research material.

Transformational learning spaces

Reflecting on transformational learning stages from Jarvis, I pinpointed the stages, where spatial and/or social interactions are required in the learning process. Furthermore, I am describing the learning spaces that are needed to accommodate spatial and social interactions to enhance transformational learning.

Throughout the learning process different types of learning spaces are needed - sometimes proving an experimental space for learning through transforming the spaces (space to learn on), in other examples creating a supportive environment for observation and raising questions (space to learn from), or bringing up a provocative social situation to challenge the status quo of the learner (space to learn in).

These three types of learning spaces are characterised by different rations between social and spatial interactions (*see figure 20*). This describes what kind of context - spatial or social - this space provides for the learner.

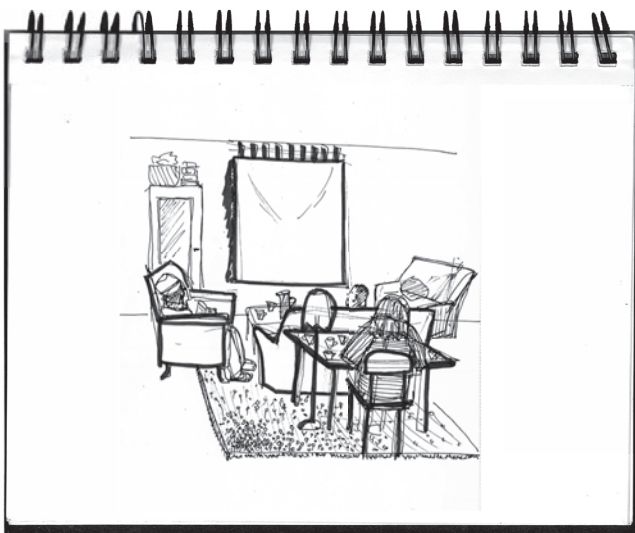


Figure 19. Makvärket 'cinema'

For example, in spaces to learn on, social interaction between a skilled person and less skilled learners requires a space that will be transformed during the learning activity to put the skills in practice. Thus, the primary context of the learning process is spatial.

In spaces to learn from, for observation of the existing context to critically reflect and discuss the subject, a supportive social environment is needed, so the learner is heard and can express personal reflections freely to enhance the learning process. Thus, in this example, social and spatial contexts have an equal role in the learning.

In spaces to learn in, the social context has to carry unconventional norms to provoke the learner to reflect on their personal conditioning to challenge the status quo. Thus, the critical social context is outweighing the role of the spatial environment in the learning process.

On the following pages, the three types of transformational learning spaces are described further and illustrated with examples from Makvärket.

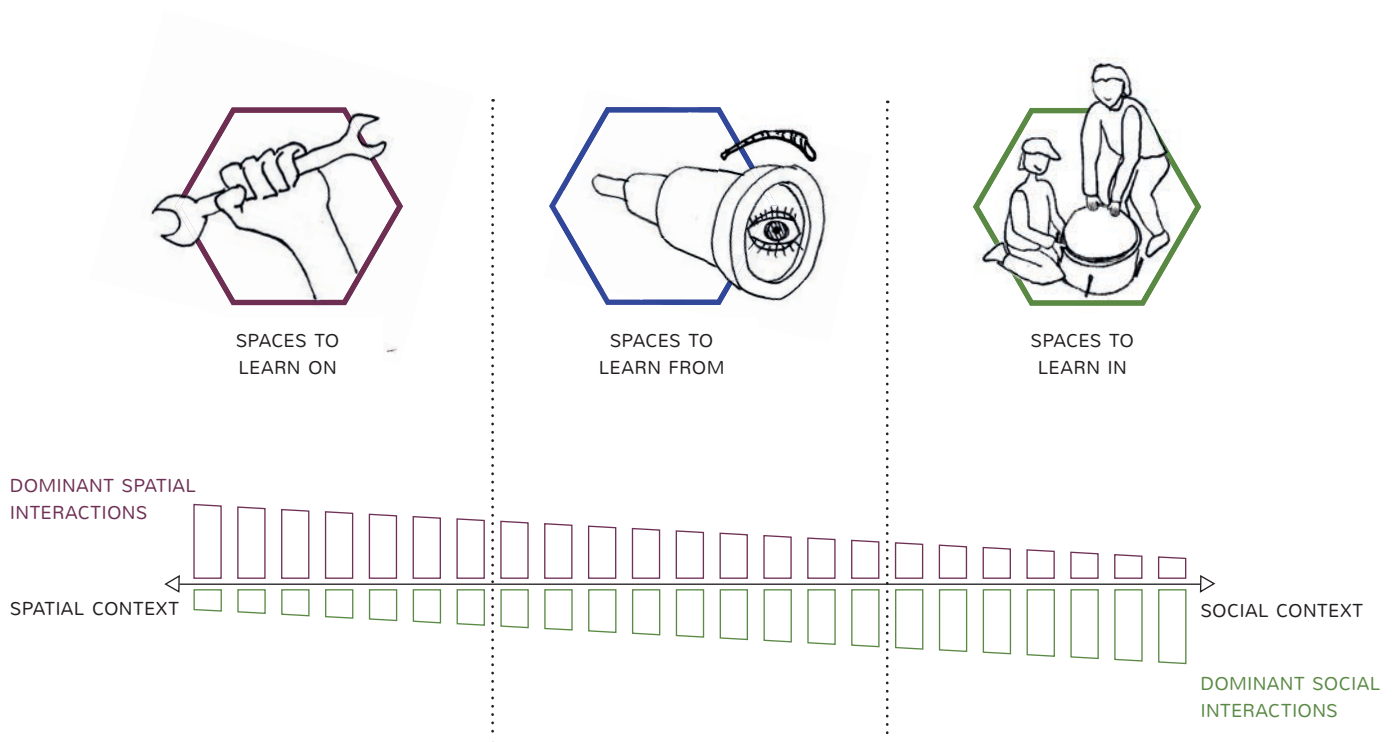


Figure 20. Learning spaces in relation to the importance of spatial or social context to support the transformational learning process



'Spaces to learn on' 'learning by doing'

Spaces to learn on (see figure 22) are co-creational experimental playgrounds for sharing knowledge and learning together from trial and error. In these spaces, the experiences and new concepts can be learned as well as practiced on the same space.

Figure 21 is showcasing the space to learn on as people are building a mass-oven with recycled bricks from the factory. They are sharing professional knowledge, learning new techniques and tools, and putting in practical use their new concepts.

Additionally, they built a cosy 'warm bench' of clay and bricks between the oven and the chimney. This oven functions as a 'rocket stove'. The 20m high chimney creates a strong draft that uses the hot air efficiently as it is being stored in the long bench. The bench becomes warm and radiates the heat into the room for another day after the oven has been in use or it can be a cosy seat in a cold winter season.



Figure 21. Photos of Makvärket 'building a mass-oven'



learning together to build a
permaculture raised garden bed



learning together to create a
mural in mosaic technique



sharing carpentry knowledge while
learning to build a wooden staircase



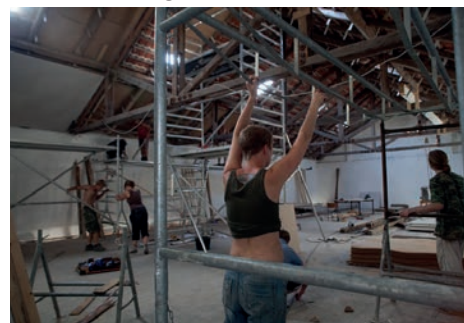
learning together the cob technique
while building a pizza oven



learning together to build with
recycled bricks and wood, upcycled
metal, natural materials, and
sharing wood crafting knowledge



learning together clay and
lime rendering technique
with natural pigments

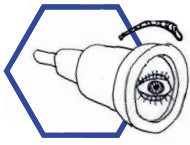


learning together to renovate with
recycled and natural building materials



sharing bricklaying knowledge
while learning to build a staircase
with recycled bricks from the
factory and using clay mortar

*Figure 22. Photos of Makvärket
'spaces to learn on'*



'Spaces to learn from' 'learning in/on the building'

Spaces to learn from (see figure 24) are the spaces, where the room concepts and functions are self-evident, these have been built by the volunteers with ideas and skills that were in the group at that time, using recycled and natural construction materials. These spaces embody the values and history in their story, but to understand it, a long-term member needs to translate it into a narrative.

Figure 23 is an example of a space that has formed into a clear concept - the multi-hall. This room can be used for functions like concerts, theatre, large dinners and meetings, festivals, weddings, acro-yoga, and martial arts workshops and conferences; and is even suitable for circus, as it has a strong metal frame for

attaching lines and objects, and an extra high ceiling that jugglers need for their performances.

Inspecting the elements of this space and listening to the stories from the collective member, one can learn about the history of the collective, the building materials and techniques used and the people involved. It was a several-year project that was self-evolving into a multi-hall. There have been many skilled people involved and even more of them learning new skills in the process. For instance, the load bearing metal frame was built when a volunteer expressed an interest to use metal structures from the factory and his metalworking skills, thus, the design of the space was reconsidered during the construction stage as the intermediate floor could be removed.

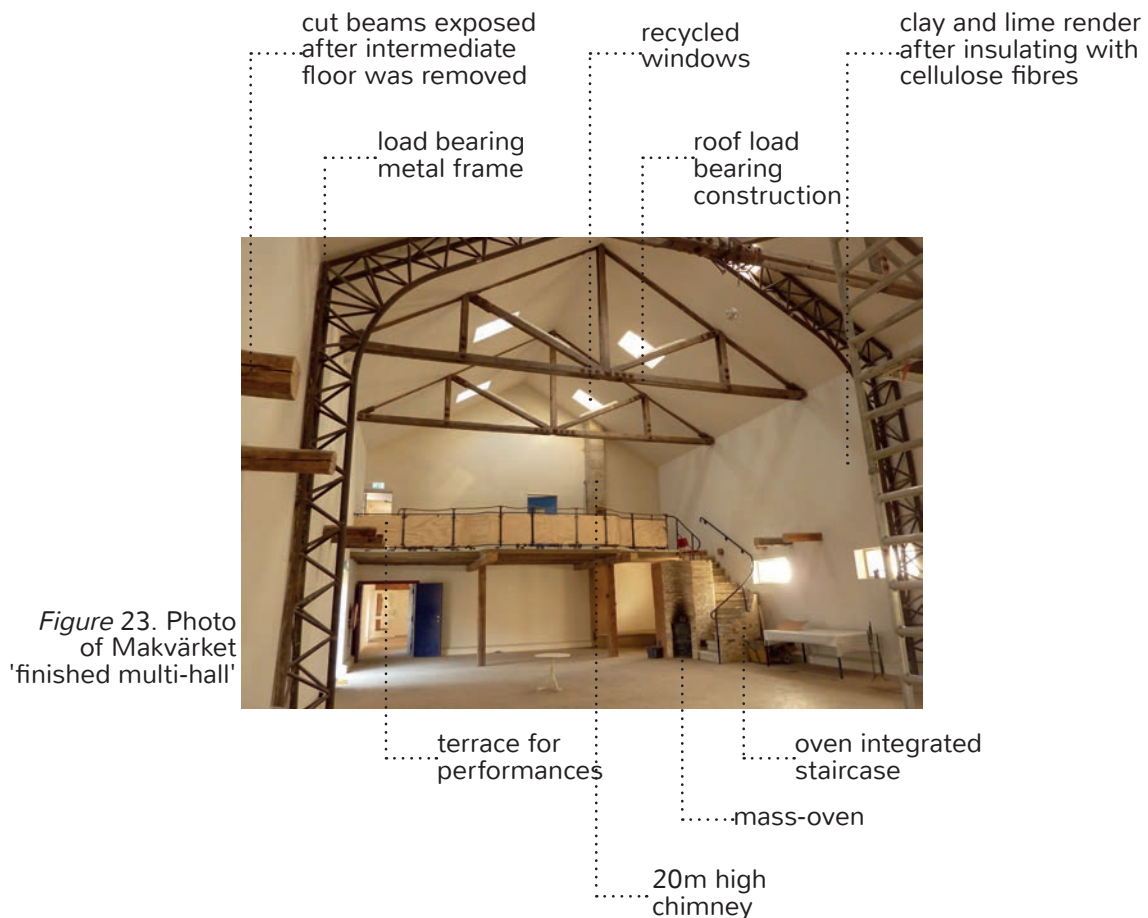


Figure 23. Photo of Makvärket 'finished multi-hall'



permaculture garden



bunk beds built with recycled and natural wood



multi-hall renovated using recycled materials and natural materials



south-side light-corridor renovated with recycled bricks from the factory



north-side light-corridor renovated with recycled bricks from the factory and up-cycled metal for bridges



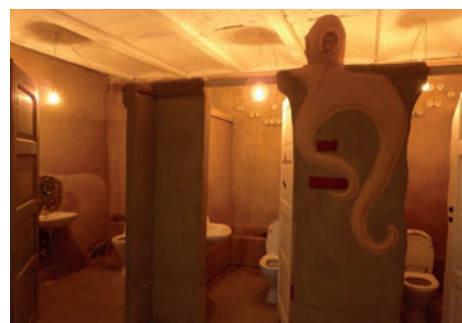
kitchen built with recycled wood, tiles, windows, and using natural paint



rocket stove built with recycled bricks from the factory and using clay render



kitchen bar built and carved from wood



rest-rooms built with recycled materials like wood and upcycled doors, and natural materials like clay and lime render

Figure 24. Photos of Makvärket 'spaces to learn from'



'Spaces to learn in' 'learning from each other'

Spaces to learn in (see figure 26) are places where people develop and learn new skills and knowledge in a social context. These spaces can accommodate social learning like sharing knowledge about cooking, arts, performances, gardening, producing juice, dancing, develop metal and woodworking or sewing skills, express collective values, principles, and worldview through storytelling or common activities.

Figure 25 is describing some learning activities in Makvärket that are taking place in the space to learn in. In this example the social interactions are an elementary part of the spatial context, for instance, the creative learning space is the same in every example, but the interactions and learning tools are different. People can learn to make music, creating handcrafted presents from recycled materials or practicing acrobatics, every time there are different materials and technologies involved in this learning process.



guitar as a
learning tool



empty cans and
plastic-wrap as
learning tools



acrobatic's
rope as a
learning tool

Figure 25. Photos of
Makvärket activities



poetry and open-mic evening
to learn public performance



people's kitchen dinner, sharing
experiences and stories



'dumpster diving' to learn about food
waste and to open a critical discussion
about personal consumption patterns



greenhouse for learning to grow
plants and take care of them



quiet office space for focusing
on personal projects and
holding meetings



turning apples donated from
neighbours into apple juice



recreational workshop for any age
to learn movement of the body



wood workshop to learn carpentry
and develop woodworking skills



sharing the skills of sewing
techniques and experimenting with
upcycling fabrics into clothes

*Figure 26. Photos of Makvärket
'spaces to learn in'*

Transformational learning stages in Makvärket

To investigate the role of the learning spaces, and the spatial and social learning contexts, I reflected on my experience from Makvärket. Additionally, the scheme illustrates which learning space is supporting which learning stage. The following is a description of *Figure 27* in relation to spatial and social contexts.



First, when someone arrives at Makvärket for the first time, a long-term member of the collective is introducing the project and the spaces to the guest by giving a tour around the factory (space to learn from). Sometimes, the person has already participated in the collective activity and got experience from working on something in Makvärket (space to learn on).



Second, often on this tour people are impressed, surprised or overwhelmed - they experience a cognitive conflict, as they don't have a concept that would match what they receive through their senses from the spatial and/or social context (space to learn from). Cognitive conflict is the base condition for transformational learning to occur. To stimulate the disequilibrium, the discussion needs to provoke social interactions that are reflective and critical, at the same time creating a supportive and safe atmosphere (space to learn in, space to learn from).

* At this point, collective social norms play an important role: the person may not agree with the content of the experience, but as there is no major personal responsibility involved and the social environment is supportive and action-oriented, the person may as well choose to do what the collective proposes (space to learn on).



Third, the person is reflecting on self while experiencing the spaces, activities (space to learn from, space to learn on) or values (space to learn in) of Makvärket, while trying to fit one's own identity in the unfamiliar context.

* * In this stage the person may be feeling disappointed or unbearably uncomfortable with the situation, thus sometimes the path of transformational learning ends here when the person decides to leave Makvärket collective spaces or chooses the non-learning path by trying to disregard the feeling of confusion and disequilibrium.



Fourth, the collective provides a creative atmosphere for learning. Every space carries its own story, which it exhibits to the visitor, who passes through it. The story is always an interpretation by the person passing by, and no story is alike. Some space, more than others, have got refined by the humans' constructive mind, thus becoming a recognized concept, - like the multi-hall has become a concept that carries meaning and a function. These spaces have become 'spaces to learn from' and 'spaces to learn in'. The other spaces that are still far from any clear concept, are the 'spaces to learn on'. These three are the learning spaces in Makvärket. In addition, Makvärket is a social space, where people are learning from each other (space to learn in) and by doing activities together (space to learn on), thus at this stage the person can 'try on' different point-of-views of others.



Fifth, the person is learning from these point-of-views (space to learn from, space to learn in) to make sense of the world and to try new approaches (space to learn on) based on the new perspective. This is often an exciting process as it feels liberating to detach from the constraints of the old paradigm of the personal worldview and to have 'fresh eyesight'. From here on the learner can either find their space in Makvärket collective and become a long-term member or leave and start new initiatives with other groups of people or individually.

In conclusion, the learning spaces, and the spatial and social contexts are intertwined in the learning process. The following pages are describing the spatial and social interactions that are taking place in the three types of learning spaces in Makvärket, for further description on the learning stages in the Action Plan see page 58.

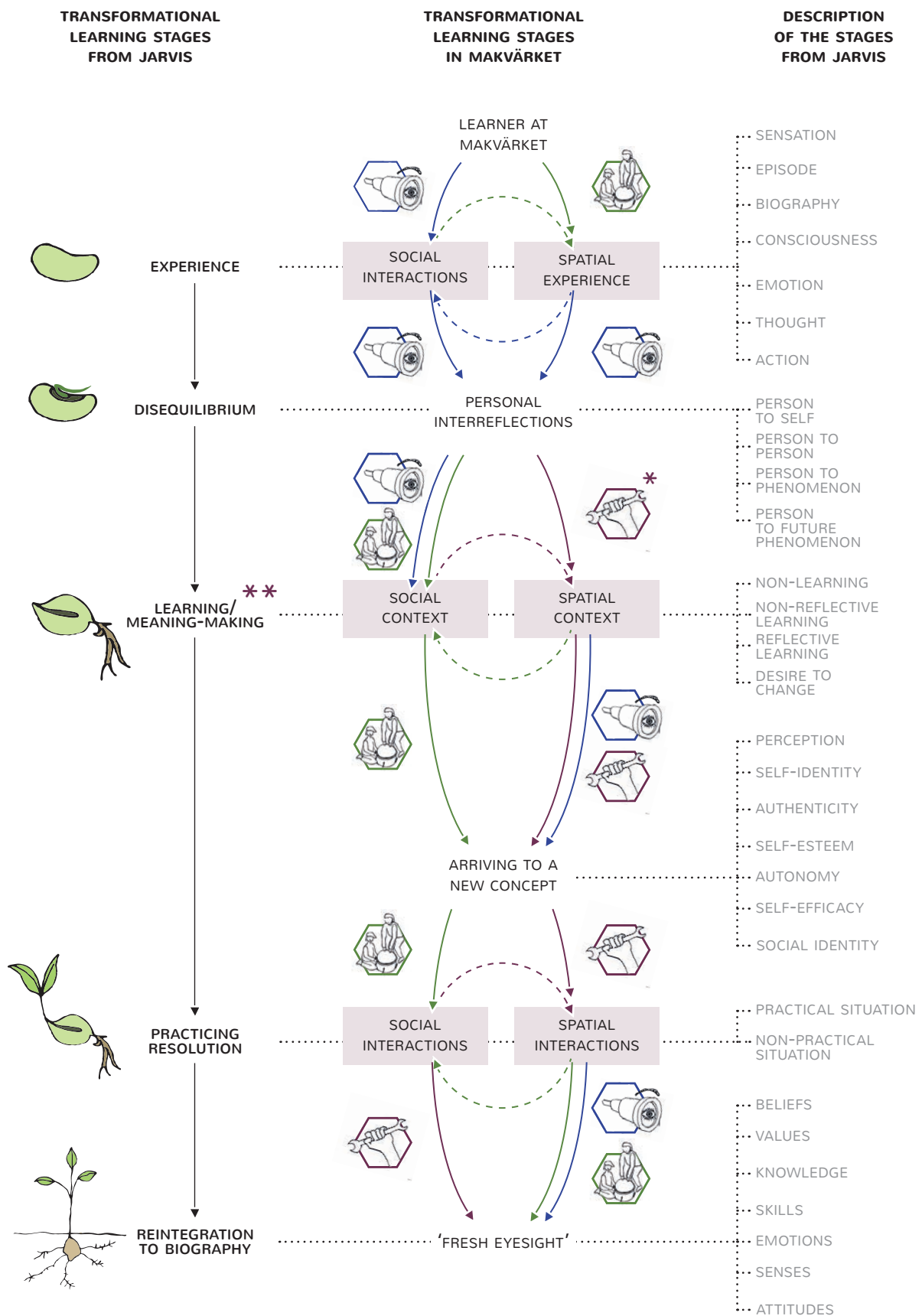
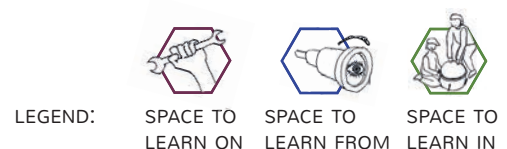


Figure 27. In this diagram of learning process I interpreted transformational learning stages in relation to spatial and social context in Makvärket



Tools for transformational learning in the Action Plan

To understand what induces the transformational learning process in the learning spaces, I investigated the spatial and social interactions. I interpreted the values from Makvärket as transformational learning tools and proposed additional tools from reflections on the learning theories.

Figure 28 is illustrating the relations between learning spaces and learning tools that can support the transformational process in the learning space.

Furthermore, the transformational learning tools that I propose are defined on the following pages. They are described with a reference to a learning theorist and as a learning objective in the transformational learning process. These tools are later proposed in the Action Plan (see p. 56) to stimulate the transformational learning process when building with the local community.

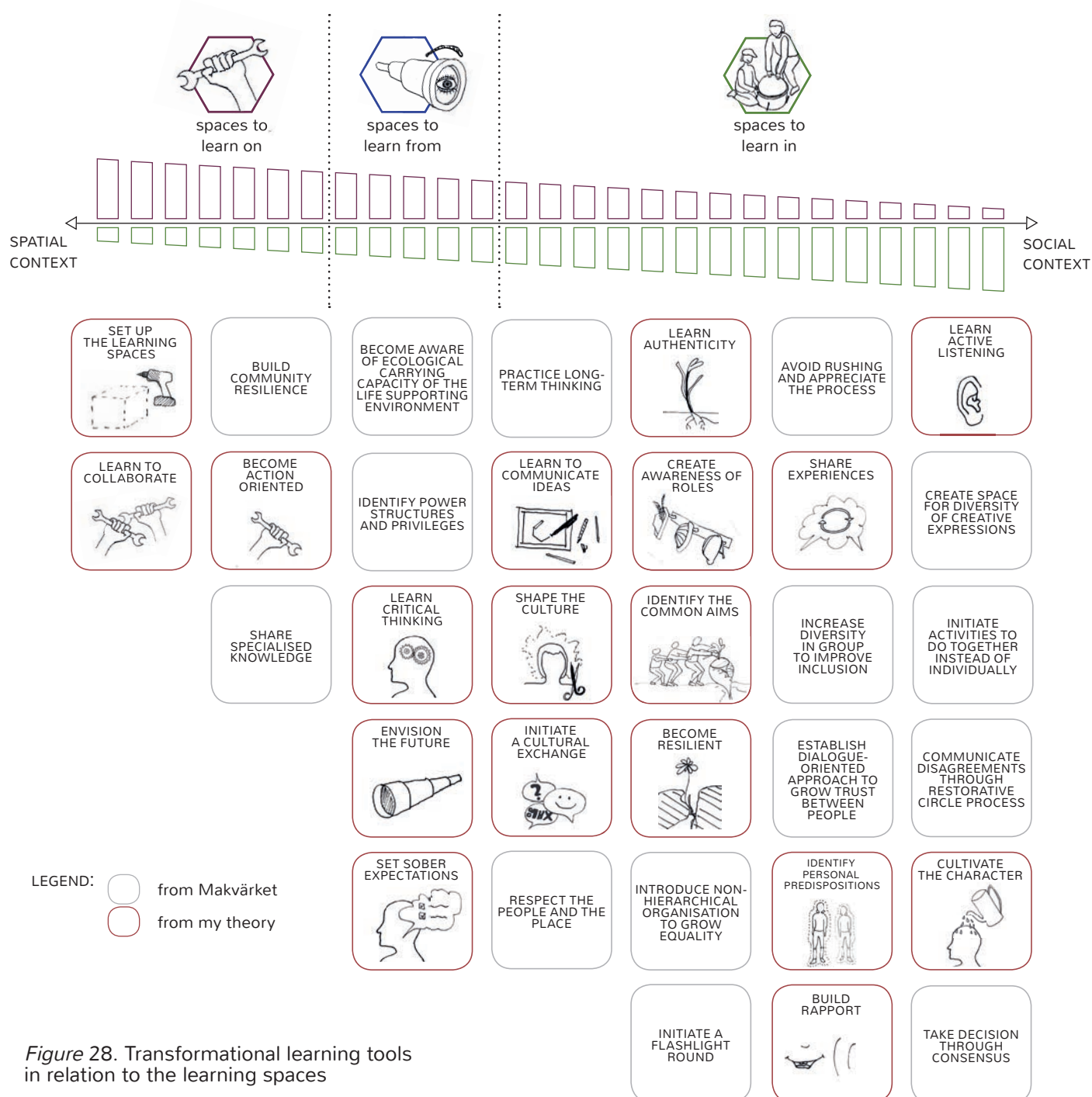


Figure 28. Transformational learning tools in relation to the learning spaces




Tool

Reference


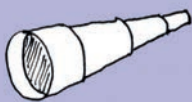

Learning objective

Action Plan

SPACES TO LEARN ON

<p>SET UP THE LEARNING SPACES</p> 	<p>"Knowledge is, situated, being in part a product of the activity, context, and culture in which it is developed" (Brown, et. al., 1988, p. 1).</p>	<p>Learn to create spaces that evoke new experiences by enabling interactions with(-in) the spaces and adaptations of the setting where the learning is taking place.</p>	<p>Set up the spaces to learn in, to learn on and to learn from to enable different activities, interactions and contexts to develop diverse knowledge.</p>
<p>LEARN TO COLLABORATE</p> 	<p>"Personal transformation leads to alliances with others of like mind to work toward effecting necessary changes in relationships, organizations, and systems, each of which requires a different mode of praxis" (Mezirow, 1992, p. 252).</p>	<p>Learn to connect individuals by encouraging social learning situations where people can reflect and learn to relate to each other's perspective to find similarities and form alliances.</p>	<p>Organise working tasks in teams of two or more to become accustomed to trusting and counting on one another.</p>
<p>BECOME ACTION ORIENTED</p> 	<p>"By actively engaging with real objects the knowledge is created; in the process of communication the participant is refining and reconstructing their experience" (Rogers, 1969; Dewey, 1916).</p>	<p>Learn to encourage action orientation by supporting problem solving through experimentation, reflections on the process and learning from own and other's mistakes.</p>	<p>Encourage taking design decisions and solving problems throughout the building process instead of detailed pre-planning and abstract discussions based on opinions.</p>

SPACES TO LEARN FROM

<p>LEARN CRITICAL THINKING</p> 	<p>"Dewey emphasised the expansion of students' capacities for observation, foresight, and judgment, and their ability to integrate new experiences in light of their own unique gifts and interests" (Weinel, 2019).</p>	<p>Learn to encourage reflective learning and personal development of new concepts by exercising collective problem solving.</p>	<p>Initiate a workshop to collectively take a design decision for the following construction stage.</p>
<p>ENVISION THE FUTURE</p> 	<p>"Imagination is central to understanding the unknown; it is the way we examine alternative interpretations of our experience by "trying on" another's point of view" (Mezirow, 2000, p. 20).</p>	<p>Learn to be tolerant and open to other perspectives, to enrich one's imagination with different ways of thinking, which develops problem solving skill when creating new concepts for the future.</p>	<p>Propose a workshop where everyone can draw together, express and describe the personal visions of the future society using different means of communication.</p>
<p>SET SOBER EXPECTATIONS</p> 	<p>Dewey (1916) emphasised to focus on individual students' perception of their needs and active agency in framing perceived problems and devising means for their solutions.</p>	<p>Learn to support others in setting realistic and personally relevant expectations and goals by empowering the learner to take informed decisions.</p>	<p>Initiate an introduction round, where everyone can state their expectations for the course and how they would like to contribute to fulfilling their aims.</p>







Tool



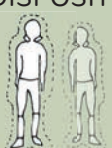



Reference

Learning objective

Action Plan

SPACES TO LEARN IN

<p>LEARN TO COMMUNICATE IDEAS</p> 	<p>"Formulating more dependable beliefs about our experience, assessing their contexts, seeking informed agreement on their meaning and justification, and making decisions on the resulting insights are central to the adult learning process." (Taylor & Cranton, 2012, p. 74).</p>	<p>Learn to communicate ideas and new concepts clearly and effectively to support new reflections and thoughts in the audience.</p>	<p>Hold a PechaKucha Night, where everyone can present a topic to the rest of the group to experiment with communication techniques and fast delivery of ideas.</p>
<p>SHAPE THE CULTURE</p> 	<p>"According to Tannen (1998) in modern culture we aim to win an argument rather than to understand different ways of thinking and frames of references, to search for common ground, to resolve differences to get things done" (Mezirow, 2000, p. 12).</p>	<p>Learn to shape the norms in the group towards understanding and relating to different ways of thinking by collectively deciding on and establishing new social expectations and standards.</p>	<p>Aim at reducing abstract discussions, instead encourage doing together, so there is more social space for reflecting on experiences and discussing concrete examples.</p>
<p>INITIATE A CULTURAL EXCHANGE</p> 	<p>"Cross-cultural relationships expose people to different ways of thinking and being in the world," which is part of the spiritual-cultural transformational learning (Merriam, Caffarella & Baumgartner, 2007, p. 142).</p>	<p>Learn to initiate discussions on critical topics to help each other in understanding their cultural paradigms.</p>	<p>Initiate cultural exchange evening with a topic within the field of the course and society, for instance, a perception of comfortable living within the limits of ecological carrying capacity.</p>
<p>LEARN AUTHENTICITY</p> 	<p>"To reach authenticity in the way we live and work, we need to develop a sense of free agency and to realize how our lives are shaped by our social contexts" (Taylor & Cranton, 2012, p. 9).</p>	<p>Learn to break down societal expectations by creating a supportive environment based on curiosity, transformational learning and a low threshold of expectations to allow creative experimentations.</p>	<p>Initiate a day of random rebellious actions to have a sense of freedom, and end it with a thorough reflections on the roots of our unplanned behaviours.</p>
<p>CREATE AWARENESS OF ROLES</p> 	<p>"Continuous learning is encouraged by opposing harmony and presumptions that are non-learning stages" (Jarvis, 2006).</p>	<p>Learn to generate learning situations where people understand the roles in play by communicating the emerging patterns and opening discussion to re-evaluate presumptions.</p>	<p>Initiate a meeting every morning for everyone to choose a task and an activity for the day. Acknowledge and openly communicate emerging patterns in people's choices.</p>
<p>IDENTIFY THE COMMON AIMS</p> 	<p>"The community can prosper as all the members can develop their talents and capabilities in pursuit of common aims" (Dewey, 1916).</p>	<p>Learn to support the group in pinpointing their common aims by helping them in communicating and creating concepts of their personal visions.</p>	<p>Initiate a workshop of pinpointing common interests, expectations, skills and knowledge to understand what we would like to collectively achieve throughout the course.</p>

Tool	Reference	Learning objective	Action Plan
BECOME RESILIENT 	<p>"According to Piaget people have the ability to construct their own world and sense of reality, and that people are born with intelligence that is capable of adapting to whatever environments people find themselves in" (Gould and Howson, 2017).</p>	<p>Learn to encourage development of confidence and integrity in changing circumstances by sharing personal experiences and narratives.</p>	<p>Encourage sharing adaptation concepts and techniques that participants have come up with during the course to acclimatize to the environmental conditions.</p>
SHARE EXPERIENCES 	<p>"Culture is all the knowledge, skills, attitudes, beliefs, values and emotions that we, as human beings have added to our biological base" (Jarvis, 2006, p. 55).</p>	<p>Learn to share personal reactions and encourage openness to reflect and discuss experiences to collectively learn from them and eventually create a new culture.</p>	<p>At the end of the workshop series initiate a gathering for sharing experiences, reflections and feedback openly with the new participants to create new norms and expectations.</p>
IDENTIFY PERSONAL PREDISPOSITIONS 	<p>Support people in learning their individual assumptions, beliefs, and values, and empower them in transforming their disposition into a new perspective or level of consciousness (Mezirow, 2000; Freire, 2000).</p>	<p>Learn to contribute to identifying personal predispositions and non-learning stages by encouraging people to express their thoughts and drawing attention to their existing patterns.</p>	<p>Initiate a 'flashlight round' to create a safe, comfortable and supportive collective atmosphere to encourage people to speak up their mind and be open to receive constructive feedback.</p>
BUILD RAPPORT 	<p>"By breaking the ice, and creating the experience that other participants are friendly (or at least civil), it makes it easier to interact in a freer and more personal manner" (Jordan, 2014, p. 59).</p>	<p>Learn to create peaceful, safe and friendly atmosphere by establishing relationships based on trusts, openness and feeling comfortable within the group.</p>	<p>Organise working in teams based on rotation, so after a while partners are shifted to strengthen the relationships in the group.</p>
LEARN ACTIVE LISTENING 	<p>"Belenky et. al. (1986) emphasised active listening, absence of domination, where reciprocity and cooperation are prominent, and judgment is withheld until one emphatically understands another's point of view" (Mezirow, 2000, p. 14).</p>	<p>Learn to stimulate transformational learning process in a social context by advocating for a respectful attitude, patience, active listening and reflective feedback.</p>	<p>Practice active listening by inviting participants to express openly their opinion about a conflicting topic in the course with an aim to arrive at a consensus decision.</p>
CULTIVATE THE CHARACTER 	<p>"A more dependable frame of reference is one that is more inclusive, differentiating, permeable (open to other viewpoints), critically reflective of assumptions, emotionally capable of change, and integrative of experience." (Mezirow, 2000, p. 19).</p>	<p>Learn to be a team member, who displays attitudes of courage, curiosity, empathy, lightness, patience, humility, boldness, and generosity.</p>	<p>Initiate a workshop to openly discuss personality traits that have helped participants in collaboration and understanding of situations around them.</p>

Summary

In this chapter, the concepts from learning theories and practical learning from Makvärket are tied together. As the social learning theories have not described the spatial context in the learning process, reflecting from Makvärket, I defined three types of learning spaces. Two of them, 'spaces to learn from' and 'spaces to learn in', may be familiar concepts from museums, exhibitions, and practical workshops, but the third, 'spaces to learn on', is not an acknowledged learning environment. To examine the societal transformation in the learning spaces, further investigation of the relations in the learning spaces is needed.

Reflecting from Makvärket, I aimed to illustrate the transformational learning process in the collective spaces by developing further the social and spatial contexts, interactions, and experiences, in the learning stages diagram. As the social and spatial contents of the learning process are intertwined, further examination of social and spatial interactions is needed to comprehend the societal transformation.

Further on, I explained some of the social interactions in the learning spaces in the example of Makvärket. These interactions are presented as tools, that are carrying the values of the collective. The tools are suggesting changes in behaviours, habits, and attitudes of the group through individual transformational learning.

In conclusion, from this chapter, I take to the Action Plan the concepts of transformational learning spaces and tools. Additionally, the learning stages need to be adapted to the community in the Action Plan.

REFLECTIONS ON DISCUSSION I

The discussion at Makvärket plenum meeting took a reflective direction and brought up the visionary topic - the collective is missing a clearly described purpose. The conscious choice of not defining the purpose of the Culture and Environmental Collective, in favour to principles as inclusion and openness, in controversy, is limiting the diversity of people who can identify with the collective.

In the discussions, both, collective and academic perspectives acknowledge that a member leaving the movement, is part of the learning process, as some people are taking the vision further by creating independent initiatives, fitting into a similar worldview.

The research finding at COMPASS, the challenges with up-scaling has been resolved in Makvärket through community support for the members creating independent initiatives.

In Makvärket, the collective has an approach reflecting action-orientation, doing together, and learning through mistakes. The academic research group is more reflective and methodological.

DISCUSSION I - on research material

This is a discussion on the research material from the previous chapters, taking place at two occasions with two different groups, contributing with different kinds of knowledge and worldviews - academic and practical.

Makväcket 16th of March

- People learn from each other by doing together and in trial and error.
- Makväcket is a meeting place for many different people, who come, share experiences, learn, and then depart to different directions where they came from.

- Create more diverse activities and initiatives at the environmental and cultural collective to involve more people.
- Establish a support network between initiatives working towards a common aim.

- Individual development takes place in the dynamics between experimenting by doing and social learning from each other.

- Social context is an elementary part of spatial context in Makväcket - people learn the principles from each other in interactions with(-in) the space.

HOW TO SPREAD THE
KNOWLEDGE AND WORLDVIEW
OF (A CULTURE AND
ENVIRONMENTAL) COLLECTIVE
INTO THE SOCIETY?

HOW TO PUSH FOR SOCIETAL
CHANGE WITH (A CULTURE AND
ENVIRONMENTAL) COLLECTIVE?

HOW DOES A DEEP
FUNDAMENTAL CHANGE IN
INDIVIDUAL'S WORLDVIEW
HAPPEN (IN THE LEARNING
SPACE)?

HOW ARE SOCIO ECOLOGICAL
PRINCIPLES TRANSLATED IN
SPACE?

COMPASS 18th of March

- The finding of the research is that the green movements are functioning as a learning institution, an incubation lab - to get connections, new ideas, and move on creating new projects, NGOs, green business startups, etc.

- There is a challenge with up-scaling - the green movements are in need of re-envisioning the perception of organisational growth.

- The research is discussing that in green movements people are learning values and practical skills like changing their way of talking and listening to each other, learning how to think about sustainability and (inter-)act within the society.

- There is no recognised separation between spatial and social environment in the green movements.

Chapter 5. Community research

My learning theory is going to be put into practice in an allotment gardens community in Denmark (see *figure 29*). In the frames of this master's thesis, I interviewed the members of allotment gardens and new people interested to join the gardens community. I researched the available material online and through fieldwork at the community.

This chapter is written as a reflective summary of the discussion I had with the interviewees. The local context is analysed from both, spatial and social perspectives. Eventually, the existing learning spaces in the community are located on the map of the community.

At the end of the chapter, I summarise the findings and reflections.

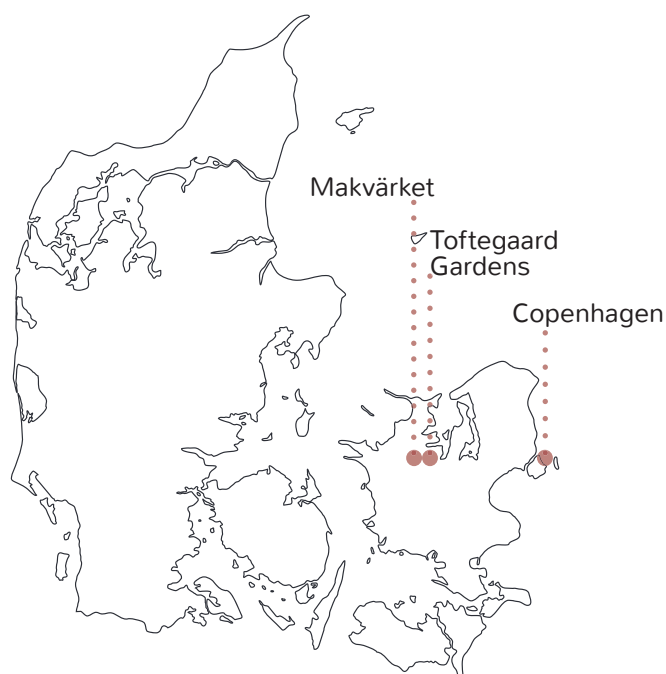


Figure 29. Toftegaard Gardens are 5km from Makværket and 65km from Copenhagen

Sense of belonging

The allotment gardens project started in 1968, when the farmer, who had an old apple orchard converted it into a gardens area, where people could bring their caravan or a tent, or build a small house. It started with 12 gardens, one building with common facilities and one street. The demand for gardens was growing, so already in three years the area expanded up to 151 plots with several blind alleys; currently, there are 177 gardens, owned by the Toftegaard Gardens Association (Toftegaard, 2012).

Toftegaard gardens are for people to enjoy their holidays in the countryside, and for some, to reconnect to nature by being surrounded by the natural setting and doing gardening. It has a winter season while it is closed and a long seven months season when many prefer to leave the city and live in their garden house instead. To date, the longest-term member has been staying in her garden every summer for 41 years.

This place has developed from apple trees plantation with long sights through the area into an area with dense coverage of trees and shrubs divided by the small wooden houses with their gardens. It is a peaceful place with many kinds of birds, whose song is the ambience of the allotment gardens. The entrance to the area is from a countryside road, which is separating the gardens and the neighbouring school of horse-riding. The birds are singing together with the calming whispers of three windmills towering over the horse field. On the opposite side of the gardens rises over the small houses a bright yellow rapeseed field. At the main entrance is a map of the area, with three colours marking the buildable area of the plots - 24, 30 or 40 m². When carrying on the walking-tour up the hill the path ends in a small forest area (see *figure 30*), where some people have initiated a beginning of a food-forest by gathering fallen branches and leaves to garden beds. On the other end of the path

is a football field size area for any dreams and ideas the association may have. There have been initiatives to start a communal gardening project or a summer festival area.

A place like this with people living seasonally side by side has to accommodate a diversity of expressions and point of views, which is a challenge for many allotment garden associations. Currently, there are some people that contrast with each other: some having a strong wish for rules that govern the interactions between the neighbours, and some with a collective mindedness, who attempt to solve disagreements with peaceful and respectful communication. It feels as if it's natural for some to express their disappointment towards a neighbour at the annual common meeting, thus the gathering rapidly escalates from practical discussions

to contest of personal quarrels, and offers great entertainment for other discontent comrades. At the same time, people come together around a common aim of enjoying their summer holiday in a peaceful, safe and friendly neighbourhood.

In one neighbourhood a social transformation has taken place when more people moved in. It is a group of people with relations in the network of activists and socio-cultural movements in Copenhagen and Makværket. They have brought in their integrity and point of view into the complex dynamics between the old neighbours and created a peaceful, safe and friendly community in their immediate neighbourhood. These relationships are based on care, sharing and compassion. It is a playful dynamics of taking care of each other's pets or gardens, occasional babysitting,



Figure 30. Situation plan describing the area of the allotment gardens and future intentions of the community

borrowing tools or lending a hand, having common dinners or just passing-by-to-say-hej. In addition, the small community is sharing a car and is organised to buy a few common plots for shared facilities like a guest house, sauna, flexible working space that could accommodate large dinners, and a common garden. These intentions are also a call-out to many other friends, who have been visiting the place and have shown an interest in having an allotment garden in the Toftegaard's gardens association to join the community.

One wish of this neighbourhood community is to spread the peaceful, safe and friendly atmosphere. On one side, they are occasionally holding a public food sharing stand for free vegetables, fruits and sometimes flowers and seeds; introducing concepts like 'dumpster-diving' and permaculture (see figure

33, p. 55); helping others using their professional skills in plumbing, electricity, farming, gardening, cooking, painting, body-therapy, medicinal plants, building constructions, carpentry and giving architectural counselling (see figures 31, 32).

On the other side, they are actively introducing this place to their friends, who are looking for closeness to nature and a peaceful garden house in a safe and friendly community. With the first visit a person can right away experience the significance of the natural environment, but getting the sense of the community feeling takes some more time. For this, the little community wants to have a common guest house, where friends coming for a visit could stay for some time and experience how it would be to become part of the garden houses community.

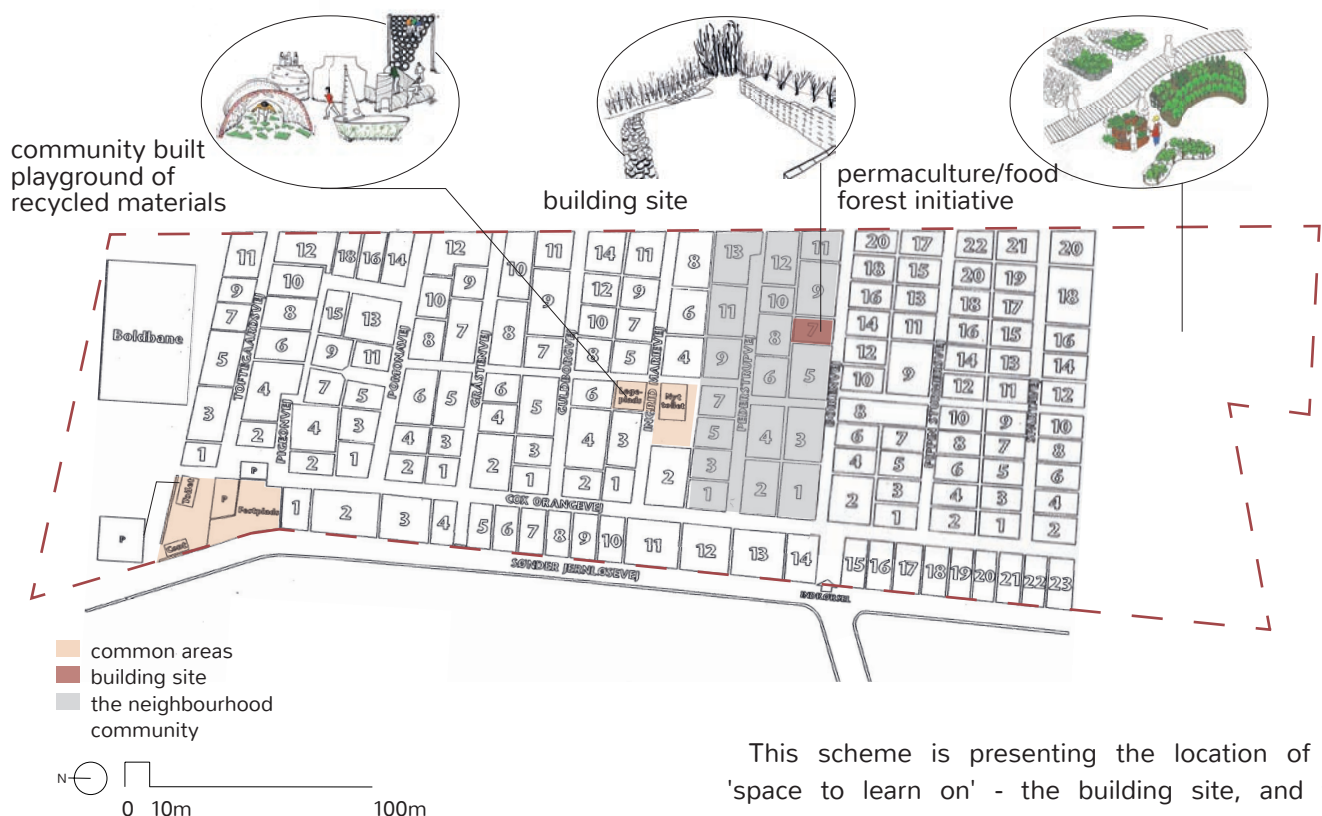


Figure 31. Allotment gardens with common areas

This scheme is presenting the location of the 'space to learn on' - the building site, and two experimentations from the community, which have been collectively realised in the common spaces. Now, these are 'spaces to learn from'.

Transformational learning spaces in the Action Plan

This map indicates the three types of learning spaces in the neighbourhood. Some neighbours are hosting *spaces to learn in* as they want to share their knowledge, skills and facilities. Other group has been experimenting with their garden and want to share reflections and present their observations in a *space to learn from*.

As the neighbourhood didn't have a *space to learn on*, it had to be introduced by proposing an activity that includes interactions with the spaces, as building the guest house.

These spaces are part of the neighbourhood community and are functioning as supportive spaces for the transformational learning process in the Action Plan.

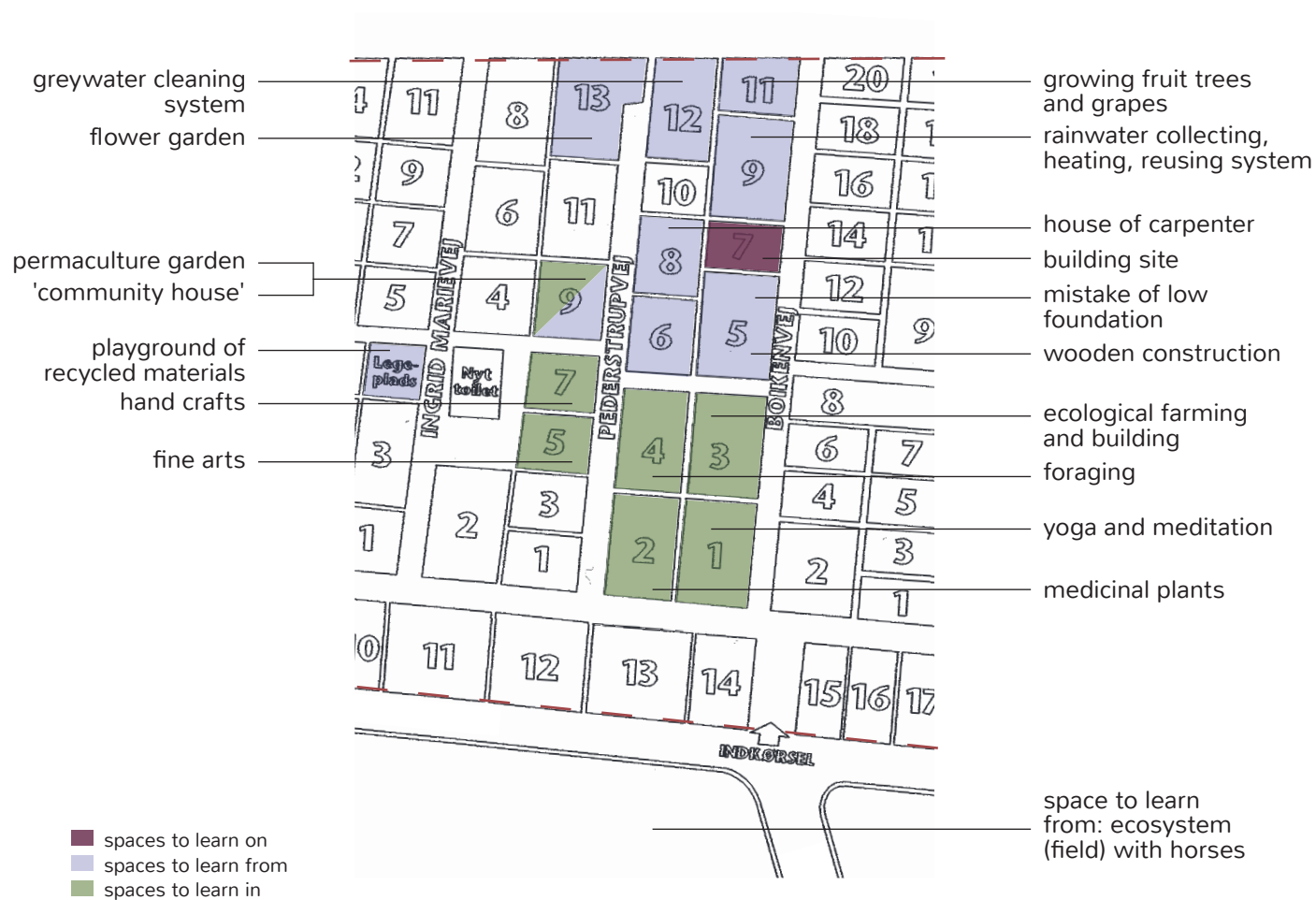


Figure 32. Neighbourhood learning spaces

Summary

In the area of Makvärket are several communities, lead by people relating to the collective - it is an ongoing process of naturally changing the norms in the surrounding society by spreading the values and principles through multiplying the independent initiatives, fitting into a similar worldview. Allotment gardens community is one of the examples.

The people of the neighbourhood community are envisioning a place with a peaceful, safe and friendly atmosphere. This means both, introducing the worldview to the other members of the allotment gardens and inviting more people to join. There is no chosen path towards the vision, but trust, collaboration and naturally learning through trial and error. For the community to grow stronger and have more shared spaces, they have a list of common facilities they want to build, one of them being the guest house. I as a member of the neighbourhood community, propose to start with the guest house as it will give a chance for the newcomers to get a unique experience of the community feeling while staying in the guest house.

The neighbourhood has already built up their relationships by sharing their skills, knowledge and facilities (identified in the Action Plan as the learning spaces), which is an important step towards the underlying aim of establishing a resilient community.

Furthermore, an investigation is needed to propose how the worldview could be introduced to the surrounding society - this will be part of the Action Plan, supported by the learning spaces and relationships the community has established.

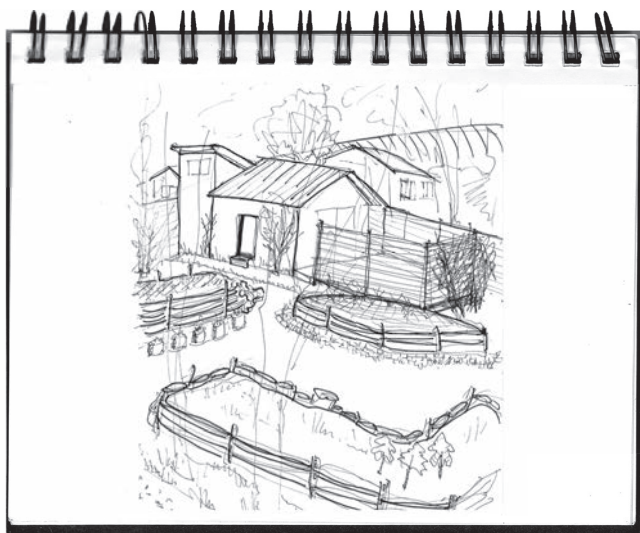


Figure 33. Permaculture garden



Figure 34. View over the gardens

Chapter 6. Action Plan

In this chapter I combine the material from the previous chapters and the research of the community into a practical Action Plan and Building Course Material, illustrating how the New Theory of Transformational Learning Spaces could be applied on the building course. Eventually, the course is described as a narrative of daily life and social situations.

At the end of the chapter is a short summary and reflections on the Action Plan. Additionally, the group discussions were held first at Makværket and then at COMPASS, focusing on the Action Plan. The summary of the discussion is presented at the end of the chapter.

Proposal for the guest house design

The neighbourhood community is interested to build a shared guest house to invite the newcomers to experience the allotment gardens community life.

The requirements for the house from the community are to keep it small (24m²) and provide a possibility to shower in the house. My preliminary proposal (see figures 35-37) is fulfilling the request by proposing a tiny house including a private shower and with windows facing every direction to create a feeling of being connected to nature. The wide doors to the garden open the access to an outdoor space that seasonally functions as an additional room. As the guest is a visitor of someone in the community, a kitchen is not part of the house; the meals are regularly shared at other member's houses, thus, the design is encouraging the interactions with the community to experience the social atmosphere and the feeling of belonging.

Essentially, the design is about to change, as soon as the community of participants are involved.



Figure 35. Situation plan

The construction is designed to be built with local natural materials like straw, clay and wood, and recycled materials, like window frames. The walls are built with strawbales between wooden structure, following a technique called CUT (Rijven, 2018) and are covered both inside and outside with clay render.

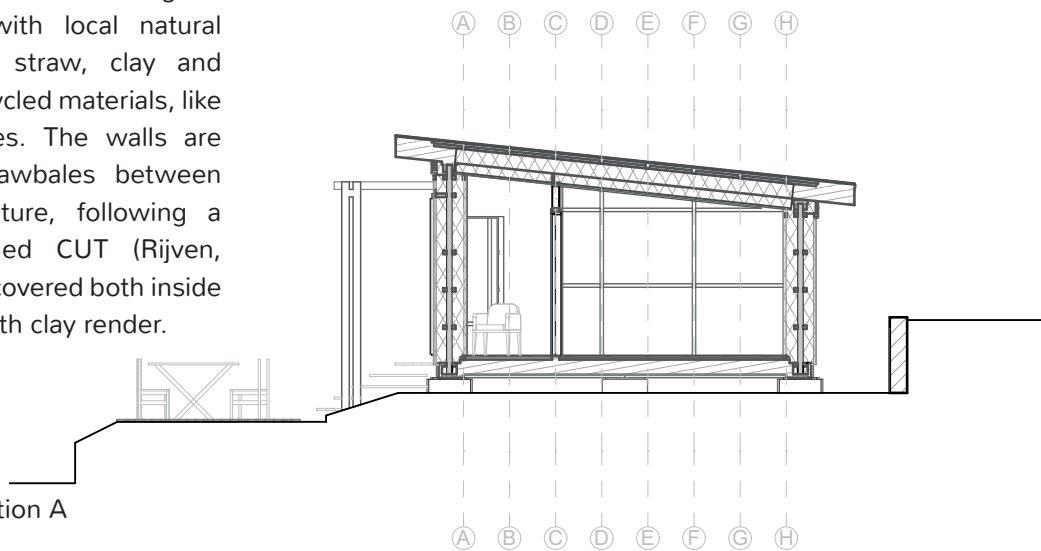


Figure 36. Section A

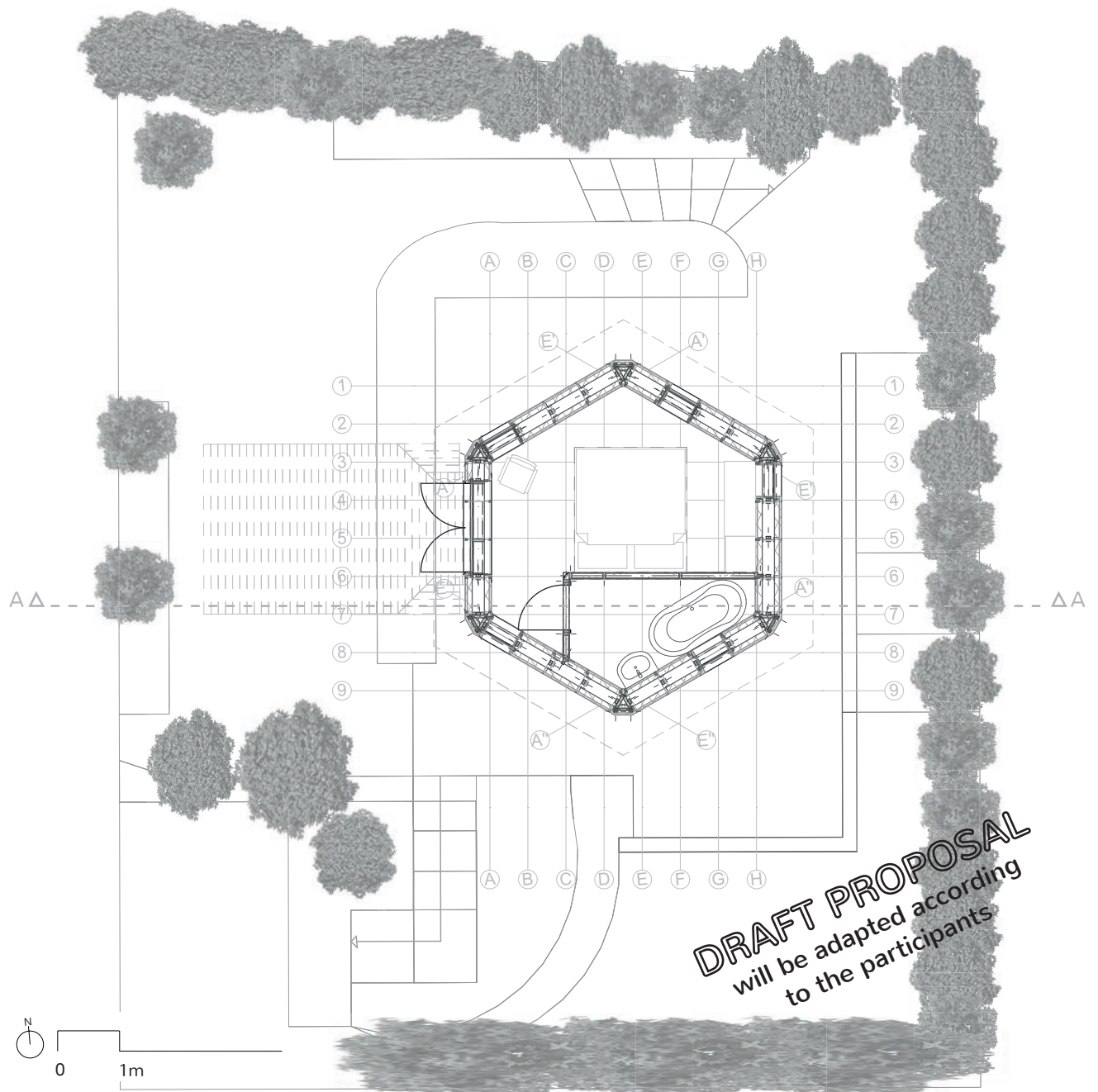


Figure 37. Site plan

Transformational learning stages in the Action Plan

To stimulate transformational learning at the building course at the allotment gardens, I reflected from the learning stages diagram in Makvärket (see figure 27, p. 43) and adapted it according to the neighbourhood community. Following is a description of Figure 38 in allotment gardens community.

LEARNER AT THE
BUILDING COURSE



First experience during the introduction tour around the neighbourhood (space to learn from).

First experience from building activity (space to learn on).



Second, disequilibrium is caused by the received information on the introduction tour (space to learn from).

Socially provoking disequilibrium (space to learn in, space to learn from).



- * Submitting to collective social norms, the person may choose to do what the community proposes (space to learn on), although doesn't fully agree with it.

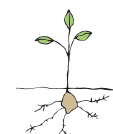


Third, self-reflection on the spaces, activities (space to learn from, space to learn on) or lifestyles (space to learn in) of the neighbourhood community.

- * * At this stage, the person may decide to leave the building course or chooses the non-learning path by trying to disregard the feeling of confusion and disequilibrium, thus the transformational learning stops.



Fourth, the neighbourhood community provides a creative atmosphere for learning (spaces to learn from). The neighbourhood has created a social space, where people are learning from each other (space to learn in) and by building together (space to learn on).



Fifth, the person is learning from other's point-of-views (space to learn from, space to learn in) to make sense of the world and to try new approaches (space to learn on) based on the new perspective.



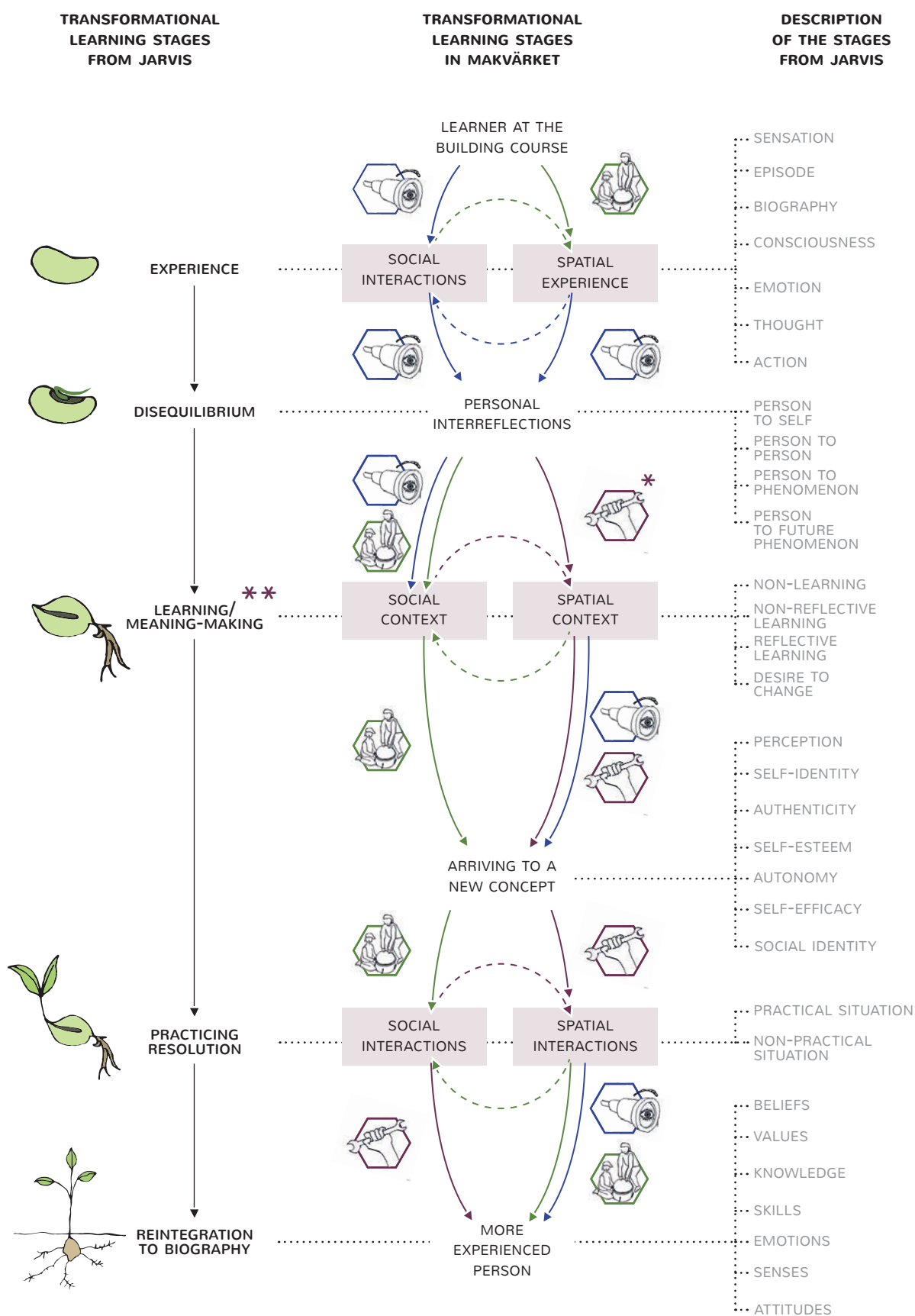
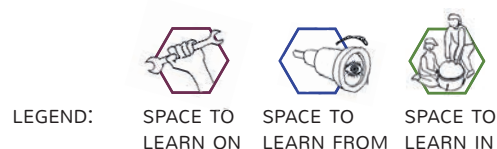


Figure 38. This diagram of transformational learning stages is in principle applicable both in Makvärket and at building course with the community at allotment gardens



Transformational learning process in the Action Plan

To interpret the transformational learning process at the building course, a workshop schedule has to be developed in parallel to the learning tools. For instance, the course timeline is divided into four building part based clusters (see figure 39), which have individual task related workshops, to create a course module, which begins with introduction, where knowledge between the participants and newcomers is passed on, and ends with *sharing experiences* to collectively reflect and give feedback to each other.

Additionally, the course begins with an introduction to the concept of transformational learning course and ends with a summarising and recreational celebration.

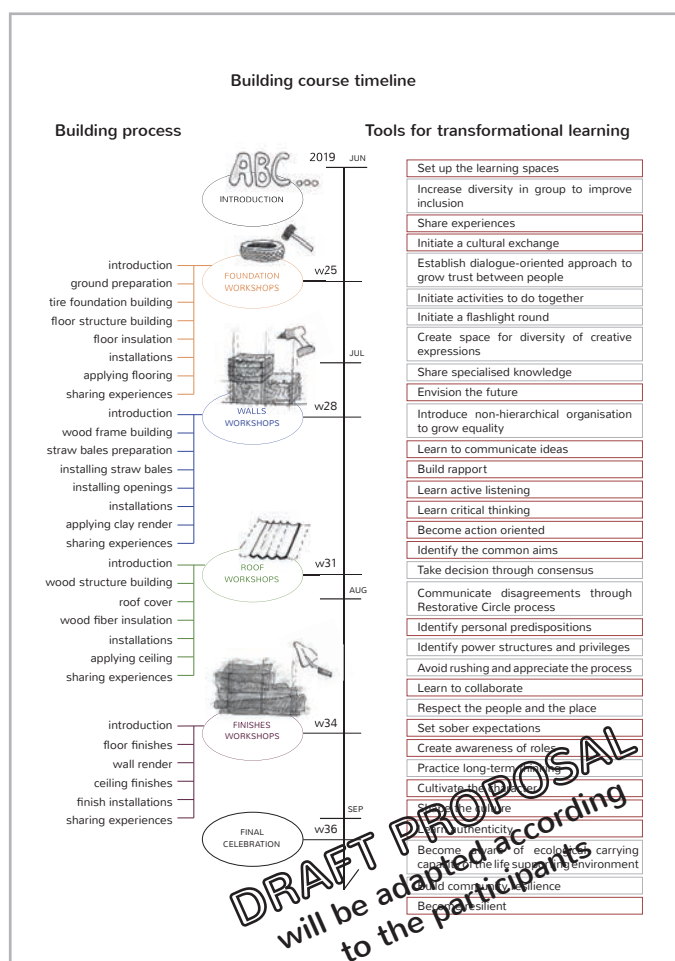


Figure 39. This timeline is describing the relations between the workshops and support from transformational learning tools (see Appendix - Building course timeline)

The transformational learning tools are supporting the learning process in the learning spaces (see figure 28, p. 44). For instance, first, the participants *set up the learning spaces*, which could employ a learning tool to *initiate activities to do together instead of individually*, thus, the working teams are formed to support each other, and naturally, participants start *building rapport*, where empathy and trust are being built in the group. Further on, working side-by-side and learning to relate to other people's perspectives is transformational learning of its own - like any other learning tool. Nevertheless, conflicts and misunderstanding can arise. In some circumstances, the collective learning process is interrupted, for instance in a conflicting situation, where parties are restraining their communication and resisting to acknowledge the conflict. In this case, as such interference is recognised in the group, another member could activate the tool to *communicate disagreements through restorative circle process* by consulting with a person, who took the daily task of being the contact person, so an external facilitator can be invited and the whole group could learn about the conflict resolution process. Furthermore, such collective experience could contribute to respect and trust in other people and their principles, as well as expand holistically over to the general sense of interdependencies between people and their surrounding (*respect the people and the place*).

Thus, the learning tools are available to be used as a support for the transformational learning process in case of interruptions to the natural sequence of the development in the group. Also, the list of tools is not exhaustive and can be added depending on the situation and the interests of the participants. Figure 40 is a mindmap offering an interpretation of a scenario of the learning process, supported by interconnected learning tools. As every tool embeds the transformational learning process, the sequence of learning tools is supporting the transformational learning in a larger societal context - in a group.

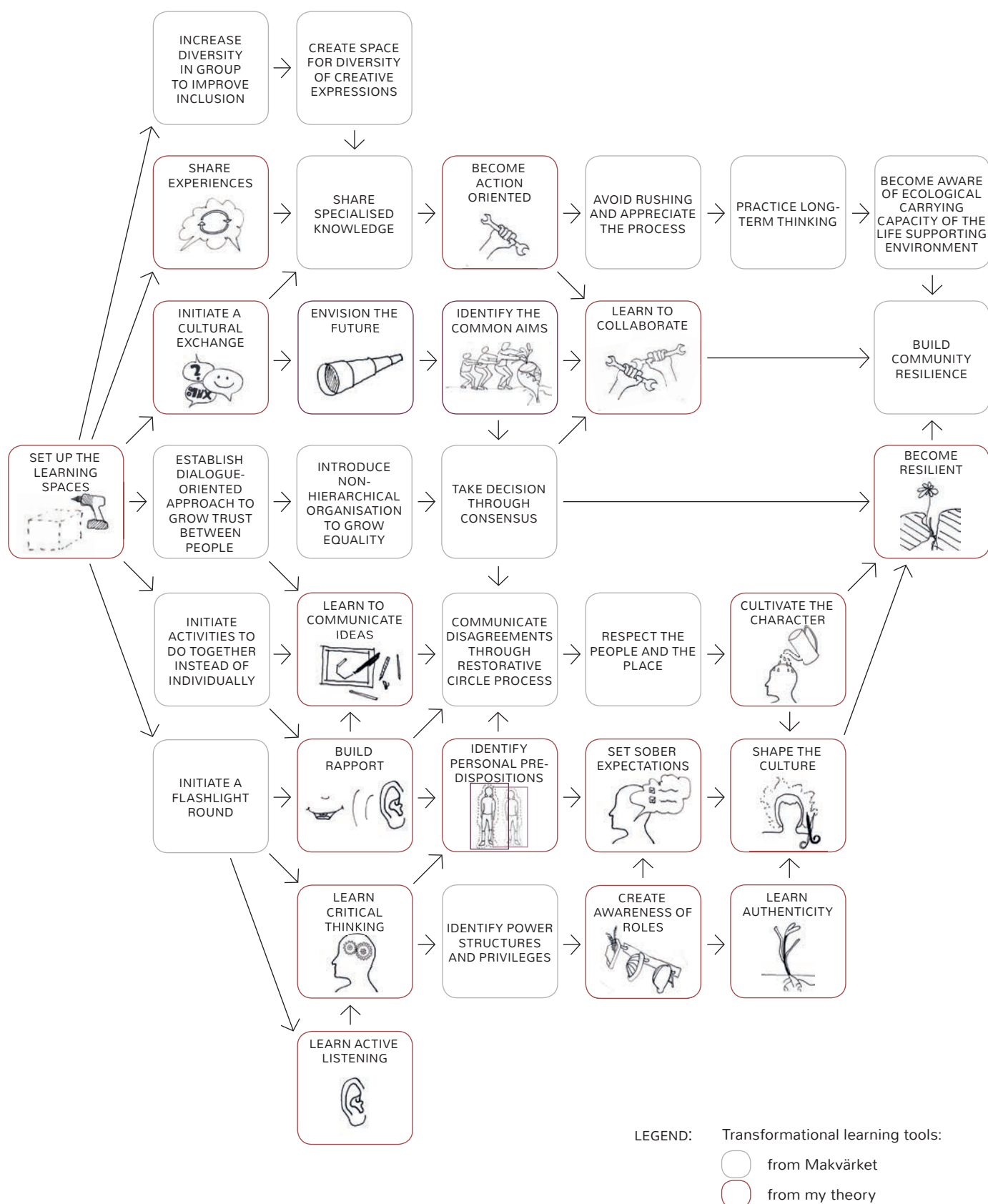


Figure 40. This is a simplified scheme of relations between the transformational learning tools, and learning stages

Narrative of the building course

To build the guest house, *Figure 41* is an example workshop page for building the foundation. The Building Course Material includes the list of tasks to finalise the building part, an optimal number of participants for each task, list of task-specific building materials needed for the workshop, and building related skills that will be learner through participating at the course.

With these workshop task guidelines, I intend to inform participants to empower them to make decisions and feel confident in taking responsibility.

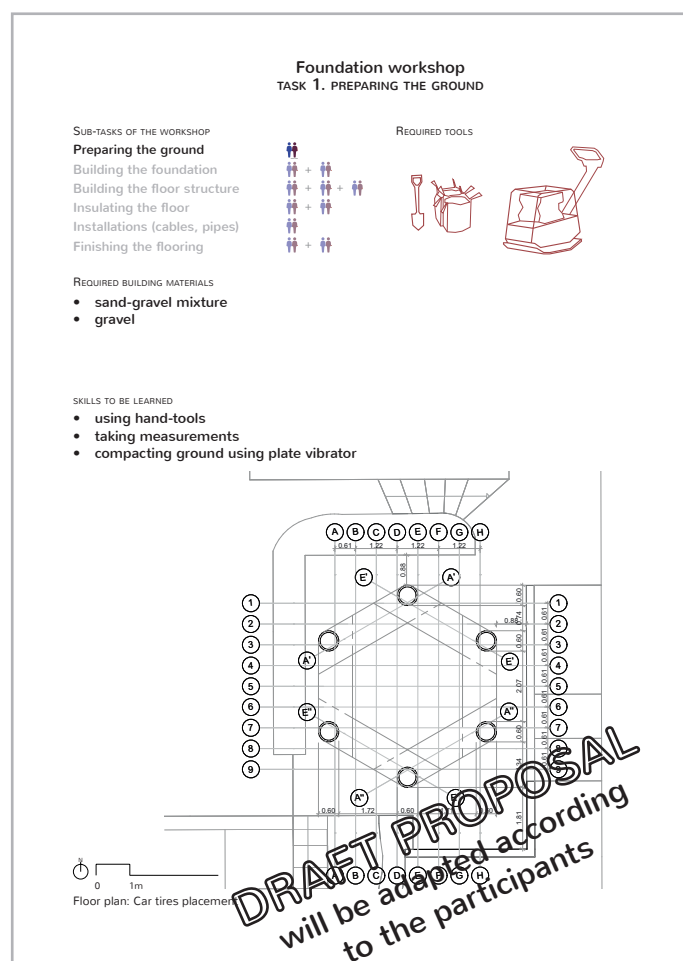


Figure 41. Workshop page from the Building Course Material (see Appendix)

Preparing the learning spaces for the course

Before starting the building course, the *space to learn in* needs to be set up. This is organised in a nearby garden, including a community house (see *figure 34, p. 53*) that can be used as a kitchen and an indoor meeting space. The indoor space to learn in is a 24m² garden house with a kitchen corner, seating for six people, a large table that can be flat-packed, a whiteboard for drawing, projector, internet and computer access.

At the construction site more *spaces to learn in* will emerge throughout the course according to what people want to learn about, for instance, a temporary rain and sun protected area for learning to use electric tools, or a visit to another garden for a presentation about rainwater system in use.

The *spaces to learn from* as examples of building with natural construction materials are bicycle distance away at Makvärket and in nearby collectives in the area. At the allotment gardens, the space to learn from is a permaculture garden, a few recently built houses with wooden construction, and some experimental building or water systems people are testing at their garden, for instance, a hot water system using rainwater. Also, there are many local examples to learn from how to not build with natural materials like wood.

Eventually, the *space to learn on* is created during the workshops as people are constructing the new building, experimenting with ideas, techniques and methods to solve the problems through trial and error, and learning from each other.

Introduction evening

On the evening before the first workshop day, all the participants are invited for an introduction evening. In this gathering I introduce the thesis work by showing the booklet and the presentation, I present the preliminary building project, construction workshops timeline, daily schedule, and tools for transformational learning including how to activate or use them. I invite everyone to comment, add inputs, and I clarify that the process as every part of this project is to be adapted, improved and changed collectively during the workshops according to the participants' ideas, experience, skills and knowledge.

As the first evening is for meeting each other, including the facilitators, everyone is welcome to participate in an introduction round to say something about themselves and express their expectations for the course, for instance, one participant is very interested to learn to work with clay and another is looking forward to learning to do wood carvings. For the rest of the evening, we have a common dinner and a hang out at the bonfire for mingling.

As we are working together collectively on the construction site and share a lot of time together, I propose a starting set of basic collective principles that should guide us in contributing to a peaceful, safe and friendly atmosphere - these shall be changed and updated continuously according to our group dynamics.

The starting set of collective guidelines:

- Safety first - both your own and other's well being
- Have fun
- Talk to your neighbour in a respectful and clear manner
- There is no right or wrong question - ask around if in doubt
- Be on the site with your full attention - take care and help each other
- Participate in the morning meetings

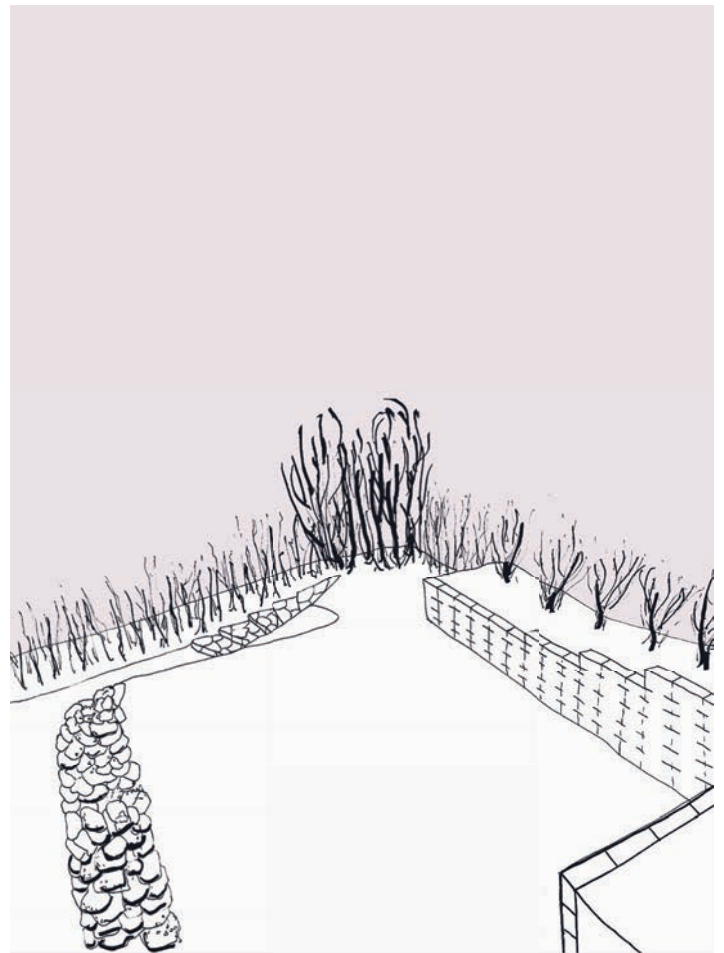


Figure 42. Building site

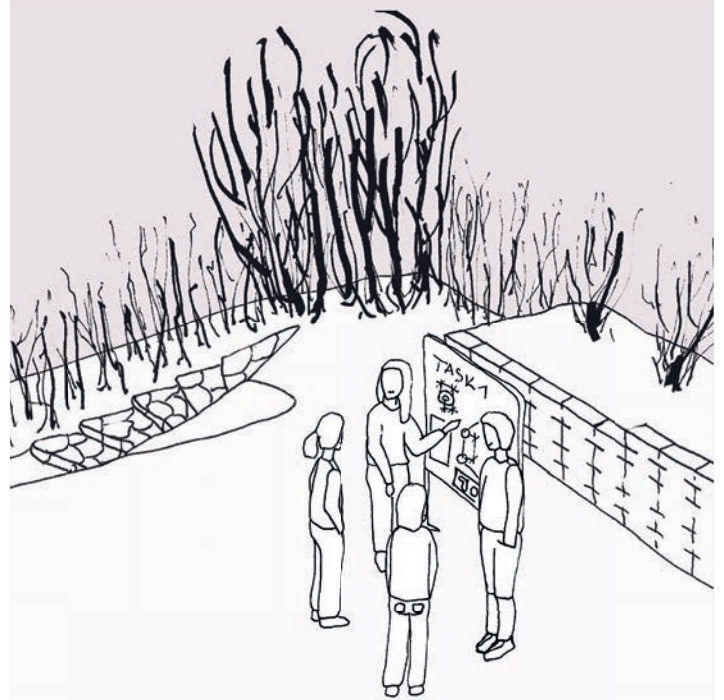


Figure 43. Introduction meeting

First workshop day

The first workshop day starts with a common breakfast and the morning meeting. At the meeting, everyone can sign up for a daily task. The group is deciding collectively which tasks should be included each day, for example, we start the list with preparing breakfast for the next morning, preparing lunch and dinner, and doing the dishes after the meals. Next, the facilitator briefly introduces the working tasks for the day and says how many participants they need for each task. The first task, to prepare the ground for building the foundation requires four participants. At the end of this round, everyone can sign up for a task by raising their hands. Additionally, there is 'a round' of messages that everyone should be informed about, for example, first Friday of a month everyone is invited to People's kitchen dinner at Makväcket.

Before starting the work the facilitator of the foundation workshop explains the first working task and the safety measures on the building site. Participants need safety shoes, gloves, a dust mask, earplugs, and glasses for operating the plate vibrator, light clothes protecting from the sun, to drink plenty of water, each person gets their own measurement tool and a sharpened pencil. It is important at all times to keep attention on the safety of oneself and people on the site!

The first task is to prepare the ground for building the foundation. For this, one team of two is needed - one for operating the plate vibrator to compact the ground and another person for shovelling the sand-gravel mixture where needed. The facilitator and the team together do one trial of the task to learn how to use the machine, learn the basic technique from the facilitator and to understand what should the outcome be like. Furtheron the team is working on their own, experimenting and learning the techniques during the work process.

Lunch and evening hang out

Before lunch, the team that signed up for cooking, leave the workshop one hour before or according to how much time they need to prepare food for everyone. After the lunch, people, who signed up for cleaning up after the meal will stay for a bit longer and join later the rest of the group, who is continuing the workshop.

As preparing the ground is almost finished, the facilitator is inviting another team of two to join the second task of building the foundation.

After the workshop day is finished, everyone helps each other to clean up the construction site: check that electrical tools are turned off, protect the tools from rain, cover building site if needed, organise tools and building site so the next person can find everything easily, etc.

After the dinner, some participants call for a short presentation from the volunteers cooking team, who are professional vegan chefs to talk about vegan cuisine and lifestyle. This topic continues at the bonfire (*see figure 44*), where people reflect on their experiences and listen to other opinions from different perspectives - overall this discussion is enriching for both sides of the conversation.

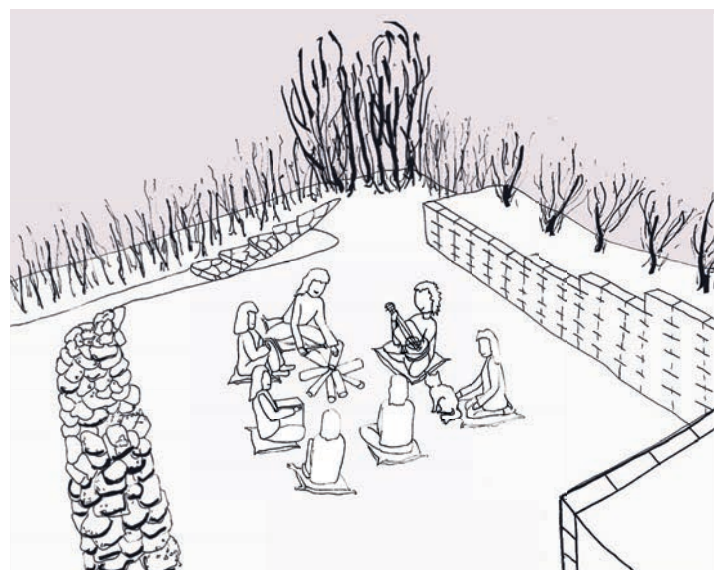


Figure 44. Building site hang out

Second task

Another team of two is starting to work in parallel on the second task (see *figure 45*). First, the facilitator is explaining the task by demonstrating how to do it. They need to check if the ground is levelled by laying the car tires on the compacted ground and crossing a floor beam between them. In the case of unevenness, the team removes the tires to indicate to the other team the spot that needs more infill and compacting. Once all the tires are levelled, the team will lay geo-textile following the perimeter of the foundation, the textile needs to be placed under the tires.

After finalising levelling and laying geo-textile, the foundation can be built. Prior to this task, all the tires have to be placed on the ground in the correct place according to the drawing (see *Appendix - Foundation workshop - Task 1*). Next, one team can fill the tires with gravel, while the other team hammers three metal rods per tire into the ground touching the outer surface of the tire, to keep it in place (see *figure 46*).

After securing the tires filled with gravel, the tires need to be covered with marine plywood boards cut in about the same dimension as the tire to protect the wooden construction from the rising moisture from the ground. For this, one team is covering the tires with tar membrane, while the other team cuts marine plywood boards and screws them tightly on top of each tire after the membrane has been attached.

The next step (see *figure 47*) of building the foundation is to apply tar oil on the floor beams, let them dry and then place them on top of the tires by attaching to the plywood board, according to the drawing (see *Appendix - Foundation workshop - Task 2*).



Figure 45. Preparing the ground for building the foundation

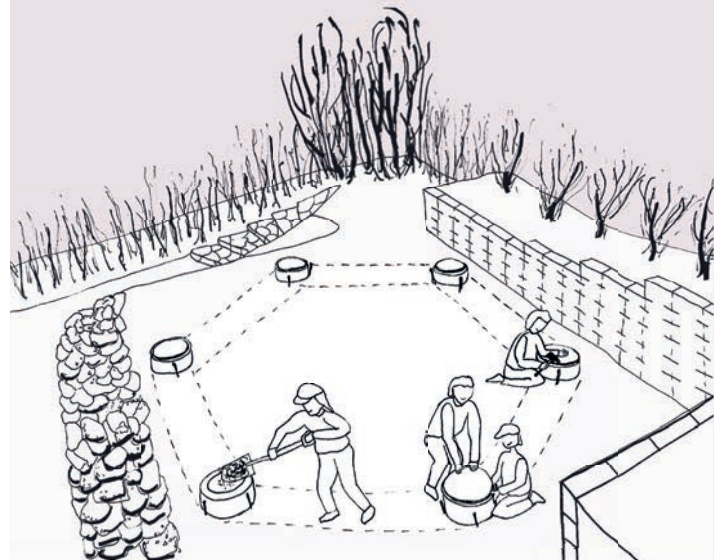


Figure 46. Building the foundation

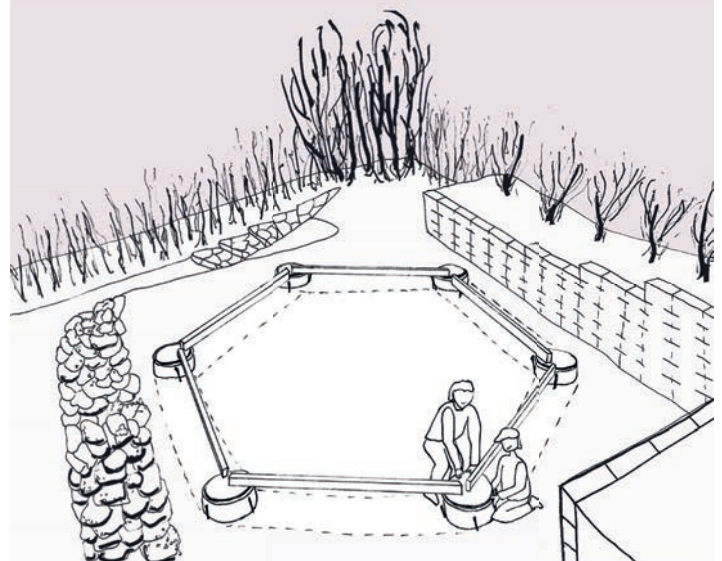


Figure 47. Building the floor structure

Summary

The Action Plan introduces the components and the process of transformational learning by building the guest house with the community. This chapter has two purposes: to plan the building course and to illustrate how the process could unfold.

From the side of planning the course, the design of the guest house, as well as the building process timeline, may change depending on the participants' skills and interests. Thus, at the beginning of the course, I propose the design and timeline to the group of participants to have a discussion on it and to develop it further in collaboration.

To illustrate the building and transformational learning processes, I adapted the learning stages to the local community and interpreted the learning process supported by the learning tools. I expect these tools to be helpful to guide the transformational learning in the building course when there are difficulties in group dynamics, like conflicts, challenges with collaboration, etc.

At the end is a narrative illustrating the action plan in practice, describing 'the societal transformation' process taking place in the collective building course. It includes social interactions, where people learn about each other's life situations, build trust through understanding, and establish the support network for further collaborations and for creating new initiatives. Participants share specialised knowledge, practical skills and learn to collaborate and act in a changing group dynamics. Additionally, the people participating are establishing trust in each other, and creating a common space with a shared effort that could become a symbol of the identity of the community.

REFLECTIONS ON DISCUSSION II

The discussions about the Action Plan were more difficult to hold than previous discussions, both at Makvärket and at Compass. I think the reason is that the theoretical material was put in a new, practical context, thus it was more difficult to relate to. Thus, the discussion shifted towards the practical side of project management, instead of envisioning how it could support reaching the aim of the Action Plan: through building with the community to evoke transformational learning in the group towards establishing community resilience. As this method of reaching community resilience is not an existing concept yet, additionally to creating a theory, the Action Plan needs to be put in practice to test and further develop the method.

The final conclusion from the academic perspective was that the proposed method in the Action Plan, involving co-creation and participation, is a realistic concept of changing the societal norms in the group and taking a step towards building community resilience.

DISCUSSION II - on the Action Plan

This is a discussion on the Action Plan taking place at two occasions with two different groups, contributing with different kinds of knowledge and worldviews - academic and practical.

Makväcket
19th of April

- Through working together and sharing knowledge collective visions and values are embodied through experiences.

HOW TO PRACTICALLY RUN A COLLECTIVE (BUILDING) PROJECT?

VISIONARY ASPECT

COMPASS
8th of May

- Visions are communicated through written manifesto or articles of associations.

- Organising responsibilities are on a group, who is preparing and taking decisions before the construction starts, once the building process is ongoing decisions are taken in each team individually on the site and through collective consulting if needed.

ORGANISATIONAL ASPECT

- Responsibilities are shared between the organisation groups. The supreme authority is the collective members group, who work in parallel with the board.

- Applying for project based funding from large funds and organisations.

FINANCIAL ASPECT

- Sustainable financial structure to run the project in long-term, for instance, by the community of people, who will gain in value from the improvements of the collective spaces.

Chapter 7. Final discussion and conclusion

This thesis takes on a critical perspective on the architect's role in contributing to a societal change towards a just and sustainable future. For this, an architect has to become actively involved in the society, where the architectural intervention is taking place. Throughout the thesis, I have built up the method an architect striving for societal transformation could use in the practice of building community resilience. I have created the Action Plan that can be adapted to other communities, with the involvement of an architect-facilitator. I developed the educational booklet for others in the architect's profession to introduce how to take the leading role in working towards societal change in the community through stimulating the transformational learning process.

I believe an architect is in the position of building community resilience through both, creating environmentally regenerative solutions, and stimulating societal change towards a holistic worldview. Regenerative culture is location and community-specific, thus, it needs to be created in close collaboration with the community. Architects are in the intersection of society and environment, they could bring the local, professional and holistic knowledge cultures into collaboration, and should contribute with expertise from sustainable development. Unfortunately, in the architect's profession, the social side of the work is often overlooked as the focus is on environmental sustainability.

Additionally, the responsibilities of an architect are being governmentally re-evaluated to reflect on environmental sustainability, for instance, the revised building regulations in Europe are raising the standards for energy-efficiency in buildings. I claim, architects can, and should, take a responsibility to build

community resilience through a holistic approach, involving both environmental considerations, like energy-efficiency, indoor climate, etc., and enhancing the supportive community through involving and educating citizens. This statement is in align with the clause from IPCC (2018) report suggesting education, information and community approach for a wide-scale behaviour change towards adapting to and limiting global warming. I think the building regulations should set a higher standard on actively involving citizens in the building process. In my opinion, the current 'participatory approaches' are not effective in reaching, for instance, topics of individuals' lifestyle and unsustainable consumption habits, and in creating collaborations to find customised solutions together in the process.

I think formal education for the cause of adapting to and limiting global warming is not radical enough. For a wide scale behaviour change, transformational learning through active involvement in building the collective spaces, at the same time learning to acknowledge, and unlearn, the cultural paradigm could be more efficient, as it is contributing to long-term structural changes.

I believe architects have the means to make a difference, for instance, when taking a role of an educator by challenging the inhabitant's worldview and habits, and learning together to create resilient solutions specific to the local community. With this thesis, I am proposing a narrative of an architect's work from within the community to help the local people to establish collaboration and trust in a supportive surrounding society, and creating together the customised solutions for specific needs of the community.

I propose a design perspective that is situated in a rural context. Nevertheless, I see a potential in the method to be adapted to the urban context, as the main focus of the project is to evoke the societal transformation in the community by working together creating collective spaces. This method could be implemented in urban transformation projects, where the community will be established and empowered by being involved in the building process, and throughout the process acknowledging and unlearning unsustainable habits, like over-consumption, involuntary contribution to social polarisation and poverty in the society. Unlearning is about disassembling culturally and individually established boundaries in the worldview.

Architects are working from a position of power, every day we are to choose to support the status quo or to dissolve the domination by sharing the authority over decisions that are impacting citizens. Here, I don't mean 'participatory approach' as this is not resolving the power hierarchies. I mean architect 'becoming a citizen' - embedding the concerns of the community and acting upon it from the professional knowledge and skills.

In conclusion, in the architect's profession is raising interest in involving citizens and creating locally adapted sustainability solutions. At the same time, growing environmental and economic constraints are counter-effective in making customised solutions reachable to the majority of the society. Thus, further research is needed to create methods for architects to share their knowledge and expertise and to facilitate establishing resilient communities, including disenfranchised groups of the society.

Chapter 8. References

- Agency by Design. (2015). *Maker-centered learning and the development of self: Preliminary findings of the agency by design project*. Harvard: Project Zero, Harvard Graduate School of Education.
- Bandura, A., Ross, D., & Ross, S. A. (1963). *Vicarious reinforcement and imitative learning*. The Journal of Abnormal and Social Psychology, 67(6), 601.
- Banks, S. (2016). *A healthy culture of conflict from the favelas of Brazil*. Retrived from: <https://transitionnetwork.org/news-and-blog/a-healthy-culture-of-conflict-from-the-favelas-of-brazil/>
- Blanton, B. (2018). *The Core Principles of Radical Honesty*. Retrived from: <https://www.radicalhonesty.com/core-principles-radical-honesty>
- Brook, B. (2016). *Can animals and plants adapt to global warming?* Retrieved from: <http://www.skepticalscience.com/Can-animals-and-plants-adapt-to-global-warming.htm>
- Brown, J. S., And Others, Xerox Corp., P. A. C. P. A. R. C., & BBN Labs, I. . C. M. (1988). *Situated Cognition and the Culture of Learning*. Technical Report.
- Brown, V. A. (2008). *A Collective Social Learning Pattern*. In 13th European Conference on Pattern Languages of Programs EuroPLoP 2008, Bavaria, Germany, pp. 1-14.
- Bruner, J. S. (1960). *The Process of education*. Cambridge, Mass.: Harvard University Press.
- COMPASS. (2018). *Collective Movements and Pathways to Sustainable Societies*. Retrieved from: www.compass.ku.dk
- Comstock, T. (2018). *Cognitive Construction: A Timeline of Constructivist Thinking*. Retrieved from: <https://www.cognitiveconstruction.com/cognitive-building-blocks/constructivist-timeline/>
- Cook, J., Nuccitelli, D., Green, S.A., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., Skuce, A. (2013). *Quantifying the consensus on anthropogenic global warming in the scientific literature*. Environmental Research Letters, 8, 1-8. doi: 10.1088/1748-9326/8/2/024024
- Dewey, J. (1916). *Democracy and Education: An introduction to the philosophy of education*. New York: The Macmillan Company.
- Dirkx, J. (1998). *Transformative learning theory in the practice of adult education: An overview*. PAACE Journal of Lifelong Learning, 7, 1–14.
- Dobson, A. (2000). *Green Political Thought* (Vol. 3rd ed). London: Routledge.
- Driver, R., Asoko, H., Leach, J., Mortimer, E., & Scott, P. (1994). *Constructing scientific knowledge in the classroom*. Educational Researcher, 23(7), 5–12.
- du Plessis, C. (2012). *Towards a regenerative paradigm for the built environment*. Building Research & Information, 40(1), 7-22. doi: 10.1080/09613218.2012.628548
- Earth Day Network. (2018). *Fact Sheet: Global Species Decline*. Retrieved from: <https://www.earthday.org/2018/05/18/fact-sheet-global-species-decline/>
- Falkheden, L. (n.d.) *Designed links: Supporting Everyday Actions for Sustainable Development*. Unpublished manuscript, Architecture and Civil Engineering, Chalmers, Gothenburg, Sweden.
- Festinger, L. (1957). *A Theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Flair, I. (2019). *Zone of proximal development (ZPD)*. Salem Press Encyclopedia. Retrieved from <http://proxy.lib.chalmers.se/login?url=http://search.ebscohost.com.proxy.lib.chalmers.se/login.aspx?direct=true&db=ers&AN=89677659&lang=sv&site=eds-live&scope=site>

- Food Sharing Copenhagen. (2019). *Our Story*. Retrieved from: <http://foodsharingcph.org/story/>
- Fridays for Future. (2019). *Press release Fridaysforfuture*. Retrieved from: <https://fridaysforfuture.org/>
- Fuller, B., Applewhite, A.J. (1975). *Synergetics: Explorations in the Geometry of Thinking*. Retrieved from: <https://fullerfuture.files.wordpress.com/2013/01/buckminsterfuller-synergetics.pdf>
- Gould, M. (2017). *Learning Process*. Salem Press Encyclopedia. Retrieved from <http://proxy.lib.chalmers.se/login?url=http://search.ebscohost.com.proxy.lib.chalmers.se/login.aspx?direct=true&db=ers&AN=89164302&lang=sv&site=eds-live&scope=site>
- Gredler, M. E. (1997). *Learning and instruction: Theory into practice* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Grippin, P., & Peters, S. (1984). *Learning theory and learning outcomes*. Lanham, MD: University Press of America.
- Haack, S. & Marteinsson, A. (Eds.) (2015). *This is X*. Aarhus: USE books.
- Intergovernmental Panel on Climate Change. (2018). *Global Warming of 1.5 °C*. Retrieved from: <https://report.ipcc.ch/sr15/>
- Jarvis, P. (2006). *Towards a comprehensive theory of human learning*. London: Routledge.
- Jordan, T. (2014). *Deliberative Methods for Complex Issues: A typology of functions that may need scaffolding*. Group Facilitation: A Research and Applications Journal, 13(13), 50-71.
- Kegan, R. (2000). *What "form" transforms? A constructive-developmental perspective on transformational learning*. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 35–70). San Francisco: Jossey-Bass.
- Koffka, (1935). *Principles of Gestalt Psychology*, p. 176
- Kolb, D. (2015). *Experiential learning : experience as the source of learning and development*. Upper Saddle River, NJ: Pearson.
- Lave, J. (1991). *Situated Learning in Communities of Practice*. In Lave, J., & Wenger, E. (Eds.), *Situated learning: legitimate peripheral participation* (pp. 63-82). Cambridge: Cambridge Univ. Press.
- Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. Beaverton, US: Guilford Press.
- Lerch, D. (Eds.) (2017). *The community resilience reader: Essential resources for an era of upheaval*. London: Island Press.
- Makvärket Collective. (2013). *Values of Makvärket*. Unpublished manuscript.
- Makvärket Collective. (2016). *Makvärket Informative Zine*. Unpublished manuscript.
- Maslow, A. H. (1943). *A Theory of Human Motivation*. Psychological Review, 50, 370-96.
- Material Centralen. (2019). *Materiale Centralen Manifesto*. Retrieved from: <https://materialecentralen.wordpress.com/about/>
- Merriam, S. B., Caffarella, R. S., Baumgartner, L. (2007). *Learning in adulthood: a comprehensive guide*. San Francisco, US: Jossey-Bass.
- Mezirow, J. (1978). *Perspective Transformation*. Adult Education Quarterly, 28(2), 100-110. doi: 10.1177/074171367802800202

- Mezirow, J. (1992). *Transformation theory: Critique and confusion*. *Adult Education Quarterly*, 42(2), 250–252.
- Mezirow, J. (2000). *Learning to think like an adult: Core concepts of transformation theory*. In J. Mezirow & Associates, *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3–33). San Francisco: Jossey-Bass.
- Mol, A. P. J., & Spaargaren, G. (2000). *Ecological Modernisation Theory in Debate: A Review*. *Environmental Politics*, 9(1), 17.
- Municipalities in Transition. (2018). *The MiT Communities of Practice*. Retrieved from: <http://municipalitiesintransition.org/the-mit-communities-of-practice/>
- O’Sullivan, E. (1999). *Transformative learning: Educational vision for the 21st century*. New York: Zed Books.
- Piaget, J. (1932). *The moral judgment of the child*. London: Routledge & Kegan Paul.
- O’Sullivan, E., Morrell, A., & O’Connor, M. (Eds.). (2002). *Expanding the boundaries of transformative learning: Essays on theory and praxis*. New York: Palgrave Press.
- Prouix, J. (2006). *Constructivism: A re-equilibration and clarification of concepts, and some potential implications for teaching and pedagogy*. *Radical Pedagogy*, 7, 5. Retrieved from: <http://search.ebscohost.com.proxy.lib.chalmers.se/login.aspx?direct=true&db=ehh&AN=21174718&site=ehost-live>
- Realdania. (2019). Our Mission And Goals. Retrieved from: <https://www.realdania.org/whoweare/ourmissionandgoals>
- Rijken, T. (2018). *Flexagone*. Retrieved from: <http://habitatvegetal.com/fr/flexagone/>
- Rogers, C. R. (1946). *Significant aspects of client-centered therapy*. *American Psychologist*, 1, 415-422.
- Rogers, C. R. (1969). *Freedom to Learn: A View of what Education Might Become*. Columbus, Ohio: Merrill.
- Schifter, D. (1996). *A constructivist perspective on teaching and learning mathematics*. In *constructivism: Theory, perspectives and practiced*. C. T. Fos-not, 73–91. New York: Teachers’ College Press.
- Seeds for Change. (2013). *A Consensus Handbook: Co-operative decision-making for activists, co-ops and communities*. Lancaster: Seeds for Change Lancaster Cooperative Ltd.
- Skinner, B. F. (1938). *The Behavior of organisms: An experimental analysis*. New York: Appleton-Century.
- Steffe, L. P., & Gale, J. (Eds.). (1995). *Constructivism in education*. Hillsdale, NJ: Erlbaum.
- Taylor, E. W., & Cranton, P. (2012). *The Handbook of Transformative Learning: Theory, Research, and Practice* (Vol. 1st ed). San Francisco: Jossey-Bass.
- The Transition Network Team. (2016). *The Essential Guide to Doing Transition: Your guide to starting Transition in your street, community, town or organisation*. Devon, UK: Transition Network.
- The Transition Network Team. (2016). *What is Transition?* Retrieved from: <https://transitionnetwork.org/about-the-movement/what-is-transition/>
- Tisdell, E. J. (2003). *Exploring spirituality and culture in adult and higher education*. San Francisco: Jossey-Bass.
- Vygotsky, L. S. (1934). *Myshlenie i rech’: Psikhologicheskie issledovaniya [Learning and Speech]*. Moscow, Leningrad: Gosudarstvennoe Sotsial’no Ekonomicheskoe Izdatel’stvo.
- Wahl, D.C. (2016). *Designing regenerative cultures*. Axminster, England: Triarchy Press, cop.
- Weinell, I. (2019). *Dewey Applies Pragmatism to Education*. Salem Press Encyclopedia. Retrieved from <http://proxy.lib.chalmers.se/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=89314351&lang=sv&site=eds-live&scope=site>

List of figures

- Cover page. Author's own work (2019). *Community building the guest house - 'space to learn on'* [Drawing].
- Figure 1. Author's own work (2019). *Community building the guest house - 'space to learn on'* [Drawing]. p. 6.
- Figure 2. Rey, D. (2016). *Photo of Eeva-Maarja* [Electronic image]. p. 8.
- Figure 3. D-Maps.com (2019). Map of Denmark [Map]. p. 9. Retrieved from: https://d-maps.com/carte.php?num_car=18631&lang=en
- Figure 4. Author's own work (2019). *Diagram of the Action Plan* [Diagram]. p. 12.
- Figure 5. Author's own work (2019). *Diagram of the thesis process* [Diagram]. p. 14.
- Figure 6. Author's own work (2019). *Makvärket 'living room'* [Drawing]. p. 16.
- Figure 7. Author's own work (2019). *Diagram of Makvärket collective structure* [Diagram]. p. 17.
- Figure 8. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 18.
- Figure 9. Culture and Environmental Collective Makvärket (2019). *Photo of Makvärket* [Electronic image]. p. 19.
- Figure 10. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 20.
- Figure 11. Culture and Environmental Collective Makvärket (2019). *Photo of Makvärket* [Electronic image]. p. 21.
- Figure 12. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 22.
- Figure 13. Culture and Environmental Collective Makvärket (2019). *Photo of Makvärket* [Electronic image]. p. 23.
- Figure 14. Author's own work (2019). *Makvärket 'free shop'* [Drawing]. p. 25.
- Figure 15. Author's own work (2019). *Makvärket 'hobby space'* [Drawing]. p. 25.
- Figure 16. Author's own work (2019). *Diagram of learning theories* [Diagram]. p. 26.
- Figure 17. Author's own work (2019). *Diagram of transformational learning theories* [Diagram]. p. 28.
- Figure 18. Author's own work (2019). *Diagram of transformational learning stages according to Jarvis* [Diagram]. p. 31. Illustration drawings retrieved from: <https://www.vecteezy.com/vector-art/89778-free-seed-vector-series>
- Figure 19. Author's own work (2019). *Makvärket 'cinema'* [Drawing]. p. 34.
- Figure 20. Author's own work (2019). *Diagram of learning spaces* [Diagram]. p. 35.
- Figure 21. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 36.
- Figure 22. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 37.
- Figure 23. Culture and Environmental Collective Makvärket (2019). *Photo of Makvärket* [Electronic image]. p. 38.
- Figure 24. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 39.
- Figure 25. Culture and Environmental Collective Makvärket (2019). *Photos of Makvärket* [Electronic images]. p. 40.

- Figure 26. Culture and Environmental Collective Makværket (2019). *Photos of Makværket* [Electronic images]. p. 41.
- Figure 27. Author's own work (2019). *Diagram of transformational learning stages in Makværket* [Diagram]. p. 43. Illustration drawings retrieved from: <https://www.vecteezy.com/vector-art/89778-free-seed-vector-series>
- Figure 28. Author's own work (2019). *Diagram of transformational learning tools* [Diagram]. p. 44.
- Figure 29. D-Maps.com (2019). *Map of Denmark* [Map]. p. 9. Retrieved from: https://d-maps.com/carte.php?num_car=18631&lang=en
- Figure 30. Google Maps (2019). *Map of Toftegaard Fritidshaver* [Map]. p. 51.
- Figure 31. Author's own work (2019). *Diagram of the Toftegaard allotment gardens* [Diagram]. Base map retrieved from: Jernløse Kommune (2003). *Lokalplan nr. 4.6 for kolonihaver i Sønder Jernløse* [pdf].
- Figure 32. Author's own work (2019). *Diagram of the learning spaces at Toftegaard allotment gardens* [Diagram]. Base map retrieved from: Jernløse Kommune (2003). *Lokalplan nr. 4.6 for kolonihaver i Sønder Jernløse* [pdf].
- Figure 33. Author's own work (2019). *Allotment gardens 'permaculture garden'* [Drawing]. p. 55.
- Figure 34. Author's own work (2019). *Allotment gardens 'view over the gardens'* [Drawing]. p. 55.
- Figure 35. Author's own work (2019). *Situation plan* [Drawing]. Base map retrieved from: Google Maps (2019). *Map of Toftegaard Fritidshaver* [Map].
- Figure 36. Author's own work (2019). *Section A* [Drawing]. p. 57.
- Figure 37. Author's own work (2019). *Site plan* [Drawing]. p. 57.
- Figure 38. Author's own work (2019). *Diagram of transformational learning stages in Toftegaard allotment gardens* [Diagram]. p. 59. Illustration drawings retrieved from: <https://www.vecteezy.com/vector-art/89778-free-seed-vector-series>
- Figure 39. Author's own work (2019). *Diagram of the building course* [Diagram]. p. 60.
- Figure 40. Author's own work (2019). *Diagram of relations between transformational learning tools* [Diagram]. p. 61.
- Figure 41. Author's own work (2019). Workshop page from the building course material [Drawing]. p. 62.
- Figure 42. Author's own work (2019). *Building site* [Drawing]. p. 63.
- Figure 43. Author's own work (2019). *Introduction meeting* [Drawing]. p. 63.
- Figure 44. Author's own work (2019). *Building site hang out* [Drawing]. p. 64.
- Figure 45. Author's own work (2019). *Preparing the ground for building the foundation* [Drawing]. p. 65.
- Figure 46. Author's own work (2019). *Building the foundation* [Drawing]. p. 65.
- Figure 47. Author's own work (2019). *Building the floor structure* [Drawing]. p. 65.
- Appendix cover page. Author's own work (2019). *Makværket 'space to learn in'* [Electronic image].

Appendix



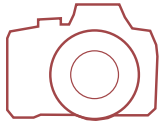



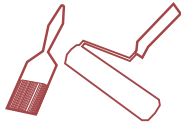
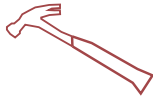

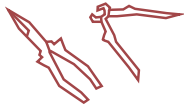
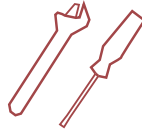



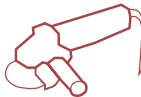
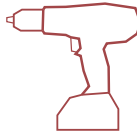
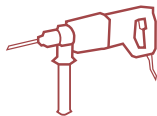
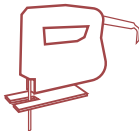
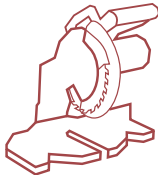


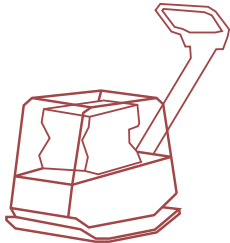
OPEN CALL FOR PARTICIPANTS

Let's build a resilient community at Sdr Jernløse fritidshaver!

Name:
E-mail:
Phone:

EVALUATE THE FOLLOWING TOOLS BASED ON HOW WELL YOU KNOW IT:

(EX - HAVE SOME EXPERIENCE / PRO - PROFESSIONAL SKILL / Y - WANT TO LEARN / N - DON'T WANT TO DO IT)

				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PLEASE SPECIFY IF AND WHAT TYPE OF CONSTRUCTION RELATED EXPERIENCE YOU HAVE, AS AN AMATEUR OR PROFESSIONAL:

<input type="text"/>
<input type="text"/>

Contact: Sdr Jernløsevej 63, 4420 Regstrup
+45 91763891 (Eeva)
eeva.maarja@gmail.com

MARK THE DATES THAT ARE CONVENIENT FOR YOU AND INDICATE TIME OF THE DAY YOU WOULD LIKE TO JOIN:
(M - MORNING / A - AFTERNOON / F - FULL TIME)

		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
JUNE	w25	17 <input type="checkbox"/>	18 <input type="checkbox"/>	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 *	22 <input type="checkbox"/>	23 <input type="checkbox"/>
	w26	24 <input type="checkbox"/>	25 <input type="checkbox"/>	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>	29 <input type="checkbox"/>	30 <input type="checkbox"/>
JULY	w27	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
	w28	8 <input type="checkbox"/>	9 <input type="checkbox"/>	10 <input type="checkbox"/>	11 <input type="checkbox"/>	12 <input type="checkbox"/>	13 <input type="checkbox"/>	14 <input type="checkbox"/>
AUGUST	w29	15 <input type="checkbox"/>	16 <input type="checkbox"/>	17 <input type="checkbox"/>	18 <input type="checkbox"/>	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>
	w30	22 <input type="checkbox"/>	23 <input type="checkbox"/>	24 <input type="checkbox"/>	25 <input type="checkbox"/>	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>
	w31	29 <input type="checkbox"/>	30 <input type="checkbox"/>	31 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
	w32	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	8 <input type="checkbox"/>	9 <input type="checkbox"/>	10 <input type="checkbox"/>	11 <input type="checkbox"/>
	w33	12 <input type="checkbox"/>	13 <input type="checkbox"/>	14 <input type="checkbox"/>	15 <input type="checkbox"/>	16 <input type="checkbox"/>	17 <input type="checkbox"/>	18 <input type="checkbox"/>
w34	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>	22 <input type="checkbox"/>	23 <input type="checkbox"/>	24 <input type="checkbox"/>	25 <input type="checkbox"/>	
w35	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>	29 <input type="checkbox"/>	30 <input type="checkbox"/>	31 <input type="checkbox"/>	1 <input type="checkbox"/>	

*On 21st of JUNE ONLY THE EVENING IS SCHEDULED FOR A MEETING, TO GET TOGETHER FOR A DINNER AND A HANG OUT, TO GET TO KNOW EACH OTHER AND TO LEARN ABOUT THE PROJECT.



Inviting the participants

To build the guest house I will organise a social building course, involving the neighbourhood community, the allotment gardens neighbours, friends from Makvarket and people from the activists network of Makvarket, etc. - everyone is welcome to join.

The course is announced from person to person, which has been ongoing since spring 2018, thus, the sign up form is just a method for me to organise with the people, who have contacted me. Such analogue method as person to person information sharing is suitable for announcing this course, because

the participants are coming together motivated by their own interest, and as someone referred it to them. Thus, it relies on people knowing each others interests and personal motivation, which are traits of self-motivated learner.

The sign up form (see figure 38) indicates different manual tools, that could be used throughout the building course - participants can evaluate their interest in using or learning to use the tools by filling in the form. Additionally, any relation to construction activities is inquired and the course schedule is included, requesting the duration of commitment per day (full time or morning/afternoon).

OPEN CALL FOR PARTICIPANTS

Sign up form

COME JOIN THE COMMUNITY BUILDING WORKSHOPS!

Name:

E-mail:

Phone:

EVALUATE THE FOLLOWING TOOLS BASED ON HOW WELL YOU KNOW IT:
(EX - HAVE SOME EXPERIENCE / PRO - PROFESSIONAL SKILL / Y - WANT TO LEARN / N - DON'T WANT TO DO IT)


				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

PLEASE SPECIFY IF AND WHAT TYPE OF CONSTRUCTION RELATED EXPERIENCE YOU HAVE, AS AN AMATEUR OR PROFESSIONAL:

MARK THE DATES THAT ARE CONVENIENT FOR YOU AND INDICATE TIME OF THE DAY YOU WOULD LIKE TO JOIN:
(M - MORNING / A - AFTERNOON / F - FULL TIME)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
JUNE							
w25	17 <input type="checkbox"/>	18 <input type="checkbox"/>	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>	22 <input type="checkbox"/>	23 <input type="checkbox"/>
w26	24 <input type="checkbox"/>	25 <input type="checkbox"/>	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>	29 <input type="checkbox"/>	30 <input type="checkbox"/>
JULY							
w27	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
w28	8 <input type="checkbox"/>	9 <input type="checkbox"/>	10 <input type="checkbox"/>	11 <input type="checkbox"/>	12 <input type="checkbox"/>	13 <input type="checkbox"/>	14 <input type="checkbox"/>
w29	15 <input type="checkbox"/>	16 <input type="checkbox"/>	17 <input type="checkbox"/>	18 <input type="checkbox"/>	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>
w30	22 <input type="checkbox"/>	23 <input type="checkbox"/>	24 <input type="checkbox"/>	25 <input type="checkbox"/>	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>
w31	29 <input type="checkbox"/>	30 <input type="checkbox"/>	31 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
AUGUST							
w32	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	8 <input type="checkbox"/>	9 <input type="checkbox"/>	10 <input type="checkbox"/>	11 <input type="checkbox"/>
w33	12 <input type="checkbox"/>	13 <input type="checkbox"/>	14 <input type="checkbox"/>	15 <input type="checkbox"/>	16 <input type="checkbox"/>	17 <input type="checkbox"/>	18 <input type="checkbox"/>
w34	19 <input type="checkbox"/>	20 <input type="checkbox"/>	21 <input type="checkbox"/>	22 <input type="checkbox"/>	23 <input type="checkbox"/>	24 <input type="checkbox"/>	25 <input type="checkbox"/>
w35	26 <input type="checkbox"/>	27 <input type="checkbox"/>	28 <input type="checkbox"/>	29 <input type="checkbox"/>	30 <input type="checkbox"/>	31 <input type="checkbox"/>	1 <input type="checkbox"/>

*On 21st of JUNE ONLY THE EVENING IS SCHEDULED FOR A MEETING, TO GET TOGETHER FOR A DINNER AND A HANG OUT, TO GET TO KNOW EACH OTHER AND TO LEARN ABOUT THE PROJECT.



Daily schedule



8.00 BREAKFAST

BREAKFAST IS PREPARED BY TEAM OF TWO PEOPLE, WHO SIGNED UP FOR IT AT THE MORNING MEETING A DAY BEFORE



8.30 MORNING MEETING

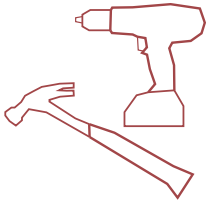
MORNING MEETING AT THE BREAKFAST TABLE IS FOR:

SIGNING UP FOR A DAILY TASK (LIKE COOKING, DISH WASHING, BEING THE CONTACT PERSON, ETC., TASKS CAN BE ADDED AND REMOVED COLLECTIVELY AS NEEDED)

BRIEFING ON THE PROGRESS OF THE WORKING TASKS FROM THE DAY BEFORE AND CALL OUT FOR PARTICIPANTS FOR THE TASKS AHEAD IN THE DAY

SIGNING UP FOR A WORKING TASK FOR THE DAY

ANY MESSAGES OR UPDATES PEOPLE WOULD LIKE TO SHARE WITH THE GROUP



9.00 WORKSHOP BEGINS

THE WORKSHOP FACILITATOR EXPLAINS THE FIRST TASK AND SAFETY MEASURES ON BUILDING SITE, THEN TOGETHER WE DO ONE TRIAL OF THE TASK, FURTHERON PARTICIPANTS WORK IN TEAMS OF TWO

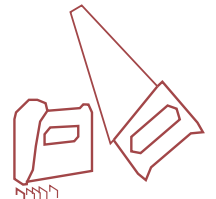


13.00 LUNCH

LUNCH IS PREPARED BY TEAM OF TWO PEOPLE, WHO SIGNED UP FOR IT AT THE MORNING MEETING

14.00 CONTINUE WORKSHOP

POSSIBILITY TO SWITCH A TASK OR COORDINATE IF MORE HELP IS NEEDED ON ANOTHER TASK



17.30 WRAP UP

CLEANING UP THE SITE FOR THE NIGHT



18.00 DINNER AND HANG OUT*

DINNER IS PREPARED BY TEAM OF TWO PEOPLE, WHO SIGNED UP FOR IT AT THE MORNING MEETING

AT THE DINNER IS A POSSIBILITY TO ANNOUNCE ANY MESSAGES OR UPDATES PEOPLE WOULD LIKE TO SHARE WITH THE GROUP

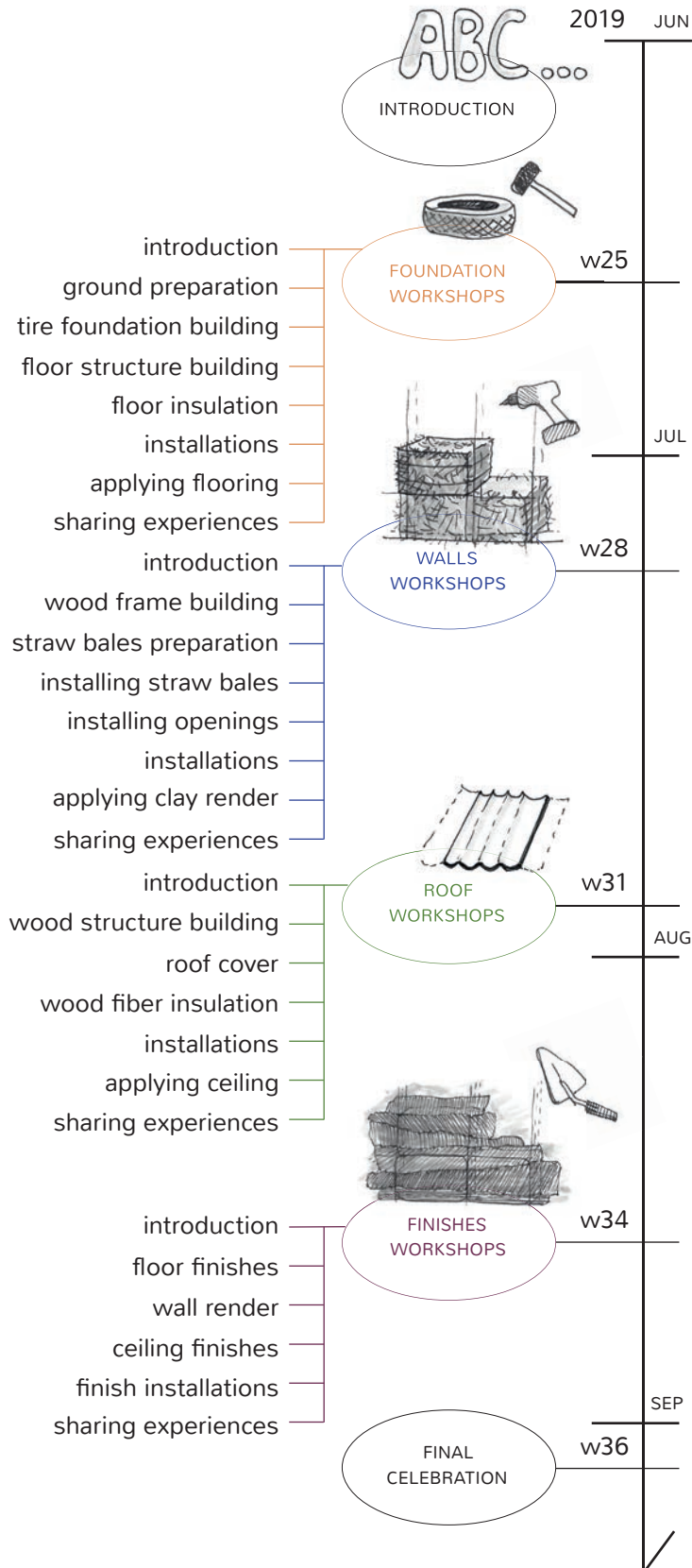
THE REST OF THE EVENING IS FOR MINGLING AND COMMON ACTIVITIES AS PEOPLE FEEL LIKE IT, FOR INSTANCE TO GO SWIMMING, VISIT MAKVÄRKET, MAKE BONFIRE, CULTURAL EXCHANGE, DUMPSTERDIVING ETC.

*IF NEEDED I WILL INVITE SKILLED FRIENDS WHO CANNOT JOIN THE DAILY WORKSHOPS TO THE DINNER AND AFTERWARDS HAVE AN OPEN DISCUSSION AT THE SITE FOR THEIR ADVISE AND EXPERTISE

DRAFT PROPOSAL
will be adapted according
to the participants

Building course timeline

Building process



Tools for transformational learning

Set up the learning spaces
Increase diversity in group to improve inclusion
Share experiences
Initiate a cultural exchange
Establish dialogue-oriented approach to grow trust between people
Initiate activities to do together
Initiate a flashlight round
Create space for diversity of creative expressions
Share specialised knowledge
Envision the future
Introduce non-hierarchical organisation to grow equality
Learn to communicate ideas
Build rapport
Learn active listening
Learn critical thinking
Become action oriented
Identify the common aims
Take decision through consensus
Communicate disagreements through Restorative Circle process
Identify personal predispositions
Identify power structures and privileges
Avoid rushing and appreciate the process
Learn to collaborate
Respect the people and the place
Set sober expectations
Create awareness of roles
Practice long-term thinking
Cultivate the character
Shape the culture
Learn authenticity
Become aware of ecological carrying capacity of the life supporting environment
Build community resilience
Become resilient

DRAFT PROPOSAL
will be adapted according
to the participants

Foundation workshop

TASK 1. PREPARING THE GROUND

SUB-TASKS OF THE WORKSHOP

Preparing the ground

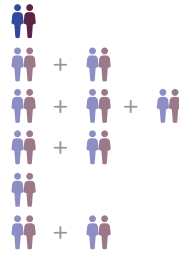
Building the foundation

Building the floor structure

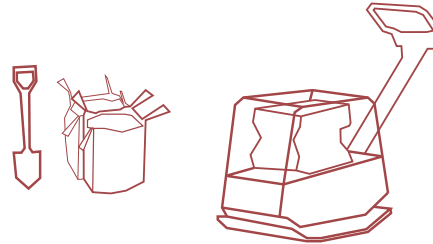
Insulating the floor

Installations (cables, pipes)

Finishing the flooring



REQUIRED TOOLS

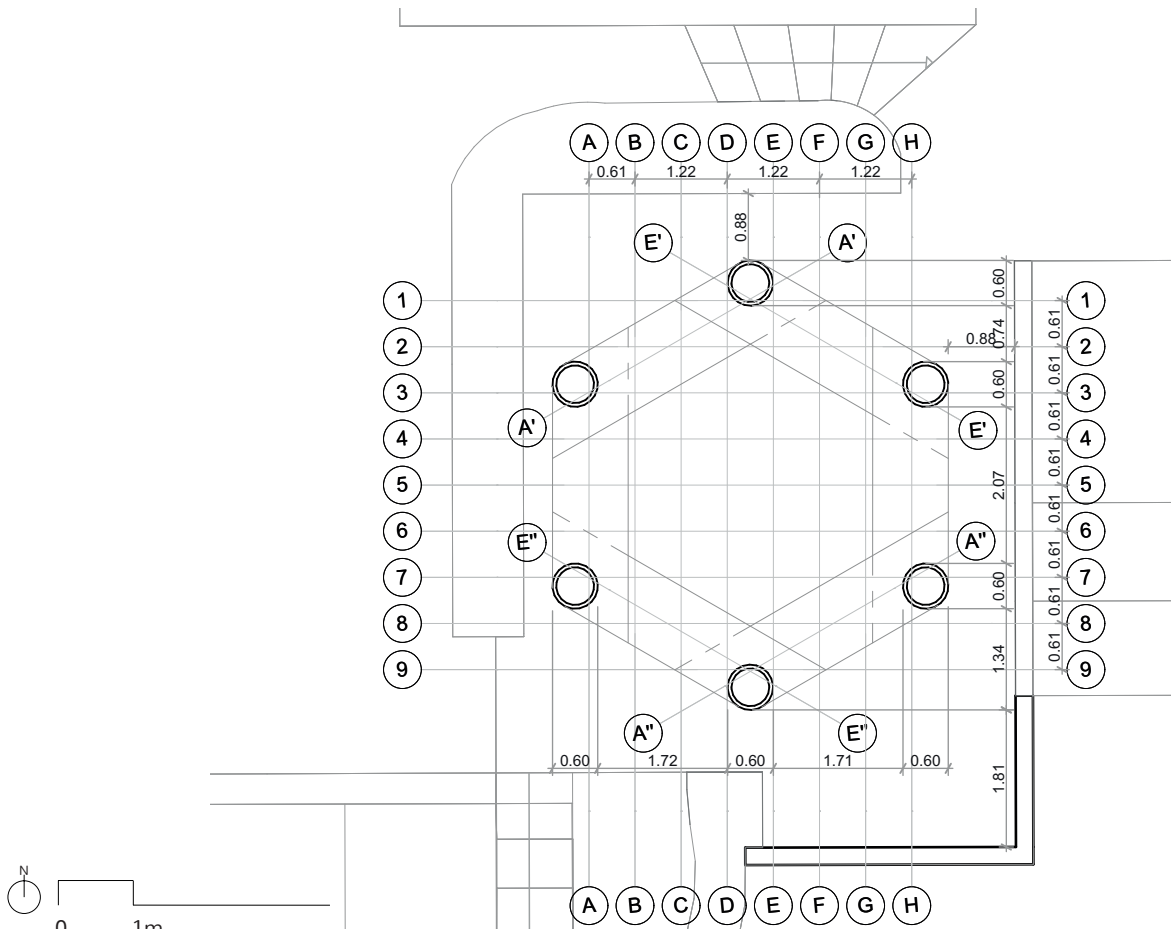


REQUIRED BUILDING MATERIALS

- sand-gravel mixture
- gravel

SKILLS TO BE LEARNED

- using hand-tools
- taking measurements
- compacting ground using plate vibrator



Floor plan: Car tires placement

Foundation workshop

TASK 2. BUILDING THE FOUNDATION

DRAFT PROPOSAL
will be adapted according
to the participants

SUB-TASKS OF THE WORKSHOP

Preparing the ground

Building the foundation

Building the floor structure

Insulating the floor

Installations (cables, pipes)

Finishing the flooring

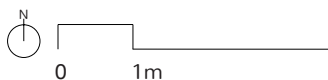
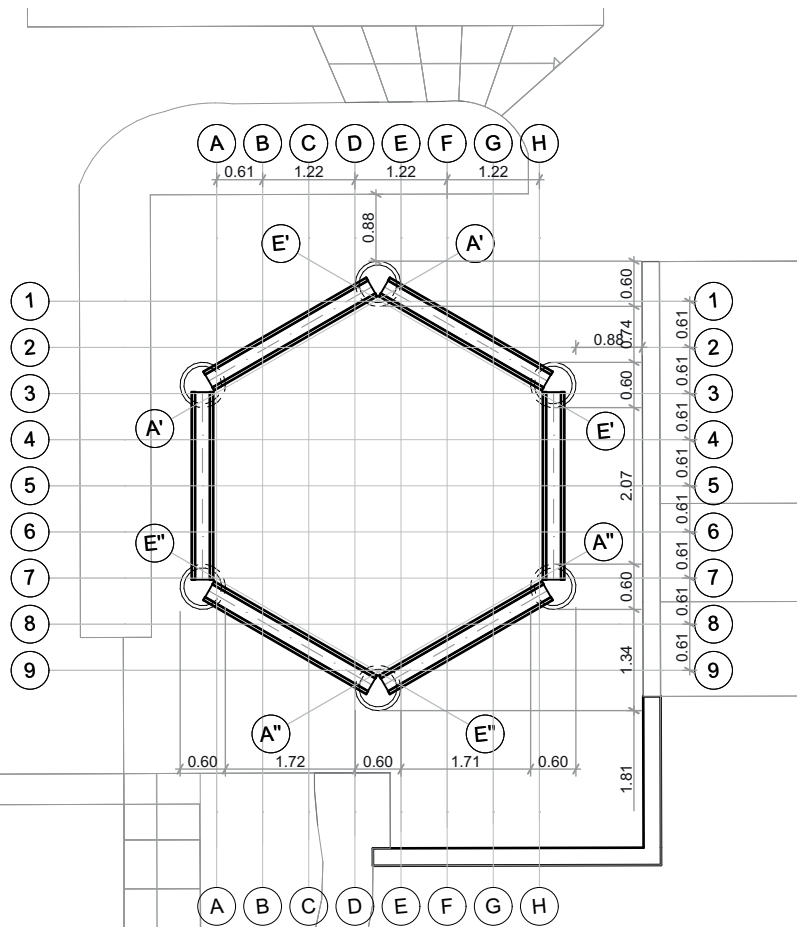
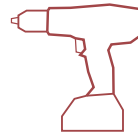
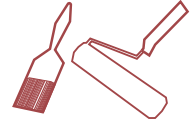
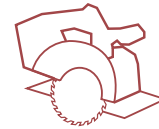
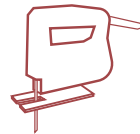
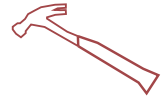
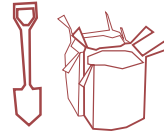
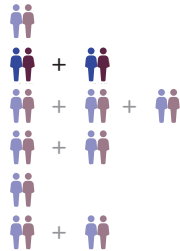
REQUIRED BUILDING MATERIALS

- recycled car tires
- geo-textile
- metal rods
- tar membrane and tar oil
- marine plywood board

SKILLS TO BE LEARNED

- using hand-tools
- taking measurements
- levelling the foundation
- applying tar oil on floor beams

REQUIRED TOOLS



Floor plan. Foundation plan