CHALMERS
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Building a house and reaching a dream?

An investigation of the pedagogical dimensions of participatory design in a self-building process

Master's thesis in Learning and Leadership

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SUMMARY

In the Swedish housing market today, where it is difficult to cater one's own housing needs, the organization Egnahemsfabriken are offering a way to secure housing, by building a house by oneself, what is called self-building. The aim of this essay is to understand how to acquire knowledge and abilities, and uphold motivation, to be able to go through the preparation phase of the process of building a house by oneself, with the support from experts through methods of participatory design. This aim requires an understanding of what local preconditions of the study circle that is of importance in this specific case, and what obstacles and challenges that are occurring when preparing for building a house by oneself.

The case investigated is a study circle, of Egnahemsfabriken, of eleven occasions, where two leaders are learning four participants how to build a house. The research design is a case study, and it is done abductively with observations of the occasions, seven interviews of central persons and a literature study. This essay does not take into consideration the personal differences between participants and leaders. There could exist differences between the culture, sex, age, experience and personality between the people involved.

The result is that there exist many structural obstacles which are beyond the influence of individuals. Egnahemsfabriken tries to find ways around these obstacles by organizing self-building, for example, this study circle. The central personal challenges are to continue being empowered and to deal with the consequences of the obscurity occurring. Egnahemsfabriken's solution to this complex problem is by participating in the design, where an expert and the participant is working closely together, and the expert is designing from the participants perspective. The participant is learning how to build a house, by becoming a part of the practice, while the expert and the participant work together. Keywords in the collaboration are responsiveness and trust. To even start to build the participants need the insight that it is possible to build a house by oneself, at the same time as they need to be naive in front of what the challenge means.

Keywords: Participatory design, Self-building, Learning, Egnahemsfabriken, Study circle, Knowledge in practice, Practitioner

FOREWORD

This master thesis includes 30 higher education credits on the Department of Communication and Learning Studies in Science on the Chalmers University of Technology. The supervisor was Björn Andersson at the Department of Social Work at the University of Gothenburg. My educational background is a Bachelor of Science on the Chalmers University of Technology, including 180 higher education credits, with a major in Architecture and Engineering, and a Master of Science on the Chalmers University of Technology, including 120 higher education credits, with a major in Learning and Leadership.

This project could not have been done without Egnahemsfabriken letting me take part in their study circle. A special thanks to the leaders of the study circle, to the participants of the study circle, and to the researcher connected to the study circle. Without you, this master thesis would not have happened.

I would like to express my gratitude to Petter Isaksson and Stina-Maria Sandgren for supporting me in the preparatory work. Without your help the process of this master thesis would have been a struggle.

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Alice Allinger, Gothenburg, March 2019

CONTENT

GLOSSARY

Egnahemsfabriken:	The factory of Egnahem, an initiative in Tjörn started in 2018, which aims to create new ways of solving peoples' housing needs, by helping them build their own houses, without the need to be wealthy.
Egnahemsrörelsen:	The movement of Egnahem was a movement in Sweden at the beginning of the 20th century which aimed to make it possible for common people building their own homes.
Obscurity, obscure[1]:	Not having an overview; Not clear to the understanding and hard to perceive.
Participatory design[2]:	Design methods which differ from conventional design methods by aiming to make the user as much participating as possible.
Researcher R1:	I myself as a researcher.
Researcher R2:	A researcher connected to the study circle, interviewed as one of the leaders.
RQ1, RQ2, RQ3 & RQ4:	The research questions 1, 2, 3 and 4.
Self-builder[3]:	A private person or a group which are building a house as amateurs.
Self-building[4]:	A house built by a self-builder.
The dual goal:	The goal to both finish the construction of a house which is the house of one's dreams.
The Pattern Language:	A design method describing universal ways of living formulated into different patterns. These patterns can be used, to design houses, in a similar way as how grammar is used in a language.
The study circle:	A study circle is an educational form in Sweden were a person or an organization organizes a series of occasions with an aim to learn something specific, the range of subjects are endless, from painting to surviving the apocalypse, and, to building a house. A study circle is normally lead by one or several leaders and is financed by one of the adulting study associations. This essay investigates a study circle held by Egnahemsfabriken in cooperation with The Adult Study Educational Association is investigated.
Volunteer architect:	A volunteer architect is an architect assisting the builders in making their design and making drawings of the design for them.

[1] Oöverskådligt, oöverskådlig (Swedish)
[2] Deltagande design (Swedish)
[3] Självbyggeri (Swedish)
[4] Självbyggare (Swedish)

1 INTRODUCTION

This essay is a case study investigating the pedagogical dimensions of participatory design in a self-building process.

1.1 Background

1.1.1 The Housing Situation in Sweden and Tjörn

Secure housing is an important part of the quality of life. This is hard to realize for many people today. Most people in Sweden are living in municipalities where there is a housing shortage (Hyresgästföreningen, 2018a). Young people, aged 20-27, have difficulty in finding residences. One of four are still living with their parents, and most of them involuntarily. For a long time, the housing situation for young people has not been this alarming (Börjeson & Runfeldt, 2017, p.5). This housing situation also applies to Tjörn municipality (Hyresgästföreningen, 2018b). In recent years the migration to Tjörn municipality has increased, but there are rare possibilities for newcomers and other people moving there to find housing (Egnahemsfabriken, 2018a).

1.1.2 Egnahemsfabriken

As a reaction to the critical housing situation, a dialogue between the society in Tjörn and Tjörn municipality resulted in an idea (Egnahemsfabriken, 2018a) to solve the complex challenge of providing newcomers with both an employment and housing. This would be accomplished by letting them build their own houses and at the same time meet the long term need of housing in Tjörn municipality. The idea was concretized into a project called Egnahemsfabriken, which started in 2018. The project is only situated in Tjörn. A wide gathering of diverse organisations were involved in the start-up: The Association of Building communities, The Swedish Church of Tjörn, The Association of Construction Brigade, The Educational Association of Adult Schooling, The Ekopool, RISE - Research Institute of Sweden, Chalmers University of Technology and The Architecture Company INOBI.

The objectives of Egnahemsfabriken (2018b) is to support people who want to build their own house. The support consists of help in both abstract matters such as planning the building process and making economical calculations, and practical matters for example how to build a wall or how to use different tools. The project is housed in a workroom in Svanevik, Tjörn. There is a large working area with machines and tools, a depository and a coffee room. Svanevik is operated by a site manager who is working fulltime. Three different carpenters are employed, they are employed on 80% of a work week each. Besides this, there are two architects employed on 25% of a work week each, and three administrators employed together on 35 % each work week. The project is not limited to the location, support is also given directly on housing sites.

Egnahemsfabriken (2018b) focuses on three target groups which have a hard time fulfilling their housing need on the conventional housing market: newcomers, young (to the age of 30) and older (senior citizens). In common, the vulnerable are affected by the shortage of tiny, inexpensive housing.

Egnahemsfabriken (2018b) focuses on three target groups: newcomers, young up to the age of 30 and senior citizens. They all have in common of being affected by the shortage of tiny, inexpensive housing which puts them in a hard situation of fulfilling their housing need on the conventional housing market.

1.1.3 Why Tjörn?

To understand why all this is taking place on Tjörn we must look into the character of Tjörn. Tjörn is a large island north of Gothenburg with several communities and one town. It is a 20-minute drive to cross the 20 km large island. There is a village character in Tjörn with people knowing each other. Parts of the community is into a spirit of progress with several dedicated enthusiasts interested in housing issues, all of them well-connected by the social closeness of the civil society's village character.

1.1.4 Egnahemsrörelsen - Building by Oneself in a Historical Context

In the decades around the year 1900, the emigration from Sweden was immense. People emigrated mainly due to economic reasons, but also because of religious and political reasons (Rydén, 2016, p.88). The people emigrating were farm-workers and maids without any own properties, and later also industrial workers. Liberal and conservative politicians actualized a reformation[5] the year of 1904. Their aspiration was to hinder the emigration to make labour remain in Sweden and to offer an alternative to socialism. The reformation was aiming to make it possible for workers to obtain their own housing, land for self-sufficiency and improved living conditions. At first, the focus was on countryside housing, but after a while, urban housing became the main priority. The reformation was made possible through a new kind of loan[6], which was given by the municipalities, and not by the bank. Anyone should have the opportunity to own a home to an affordable price. The criteria to get a loan approved was to be well-behaved, and in some areas sober (ibid, p.89).

To avoid land speculations, when properties were detached from the cities long lease was introduced by law in 1908. Plots could be mortgaged by those who wanted to build their own house, with a limitation a 60-year renting period. The construction was carried out by different firms (Rydén, 2016, p.92). From start, the down payment was 20 per cent (ibid, p.91), which prevented those in most need from affording a loan. A group of workers and craftsmen suggested in the year of 1919 that it should be possible to contribute with labour instead of a down payment. They formed the association *Home through own working, without personal responsibility*[7] (ibid, p.94). They organized self-building in social communities. The members were divided into teams of six households. The teams built the houses together, two per year. The association got a loan from the city to cover building costs. As the houses were finished, the loans were transferred to the house owners. Members were also insured through the association and got assistance if they became sick or came behind in the construction. In 1927 the idea of self-building instead of down payment became an official course of action (ibid, p.95).

This movement is called *Egnahemsrörelsen (One's own home movement*).

[5] Egnahemsreformen (Swedish)
[6] Egnahemslån (Swedish)
[7] Hem genom eget arbete u.p.a (utan personligt ansvar) (Swedish)

1.1.5 The Complexity of Building a House Today

Building a house in Sweden today is a very complex process. The builder must manage a wide range of diverging fields, involving various kinds of knowledge, abilities and resources. The most crucial need is financing (Egnahemsfabriken, 2018c). In comparison to the times of Egnahemsrörelsen, there is today no possibility to get a beneficial loan for building a house. Besides the financing, the builder needs both theoretical and practical knowledge and abilities about laws governing building, applications, budget, construction process, insurance, obligations, design, transportation, construction and building skills. The builder also needs a different kind of resources like a plot, time and a social network. One of the major challenges is to orientate oneself among all these knowledge and abilities: where should one begin? Even professionals may struggle to overview the entire process.

1.1.6 The Study Circle

During the autumn of 2018, to support people who would like to build their own house, Egnahemsfabriken started a study circle for building houses by oneself. The aim of the study circle was to support people, who were in progress of becoming builders of their own homes, in the preparation phase, preparing for the construction phase. The study circle consisted of 11 meetups where the four participants meet up together with the two leaders. There were also several guest lectures, on this guest lectures people from outside the study circle attended. This study circle is what I have been following and observing.

1.1.7 Participatory Design

One of the main ideas behind the study circle is what is called participatory design, which means that the user is taking a more active part in the design process. This can be seen in relation to an ordinary design process where different experts are creating a different part of the process. For example, an architect makes the drawings, an engineer makes calculations and a carpenter builds the house. In this process, the user is far from the process and has only sparse possibilities to affect the process. Instead, the idea of participatory design aims to make the user more participating in their own design. The ideas of participatory design are presented in 2.1 and are one of the main reasons the study circle become what I became.

1.1.8 Knowledge in Practice

To build one’s own house, a lot of different bits of knowledge and abilities are required. In the branch of house building, there are a lot of different professions. They are all practitioners acting in their own practice. The practice of house building is structured of all these different but closely related practices, for example, the practice of architects and the practice of carpenters are both part of the practice of building. Learning to build one’s own house is about getting into practice and learning from the practice. This is investigated in this essay.

1.2 Research Question

The aim of this essay is to understand how to acquire knowledge and abilities, and uphold motivation, to be able to go through the preparation phase of the process of building a house by oneself, with the support from experts through methods of participatory design. This aim requires an understanding of what local preconditions of the study circle that is of importance in this specific case, and what obstacles and challenges that are occurring when preparing for building a house by oneself. By investigating Egnahemsfabriken's study circle I aim to add something to help Egnahemsfabriken improve their study circle and their working.

Main research question
How can a pedagogical effort, based on participatory design, be organized and carried through in order to provide people with knowledge and abilities, and uphold motivation, to prepare themselves for a self-building project?

Research questions

1. How does the study circle organize an educational process that teach practical knowledge?
2. How are the methods of participatory design supporting the participants?
3. What local preconditions have been of importance for the implementation of the study circle?
4. What obstacles and challenges are occurring, and how to meet them?

1.3 Delimitations and Assumptions

This essay does not take into consideration the personal differences between participants and leaders. There could exist differences between the culture, sex, age, experience and personality between the people involved. Methods for solving structural obstacles are not taken into consideration. Learning occurring outside the study circle is not taken into consideration. The volunteer architects are treated as, not central, but peripheral actors in the study circle. The period of the case study is the same as the study circle, and the case study is therefore only investigating the preparation phase, to the upcoming construction phase, of the process of building a house. The methods of participatory design are not evaluated, but the consequences of the methods for the study circle are explored.

It is assumed that all the participants attending the study circle are motivated to build their own house. Knowledge acquired from the interviews is assumed to be created in the interaction between the interviewee and the interviewer.

1.4 The Structure of This Essay

This paper is consisting of seven chapters. The paper is divided into two parts, 1 and 2. Part one is providing background, theories and data. Part two is combining the information from part 1 to answer the research questions and present a model of learning. Part 1 is arranged in such order that every other chapter is more of a theoretical character, which is shown in figure 1.1 with the *Line of theory*. The theoretical chapters are 2, the *Theoretical Framework* and 4, the *Method*. The reason for this reading order is to make the paper easier to read, alternating between theory and descriptions. In part 2, the *Discussion* (chapter 6) is built up by the *Theoretical Framework* (chapter 2) and the *Result* (chapter 5). The *Conclusions* (chapter 7) are a congregate of the *Discussion*.

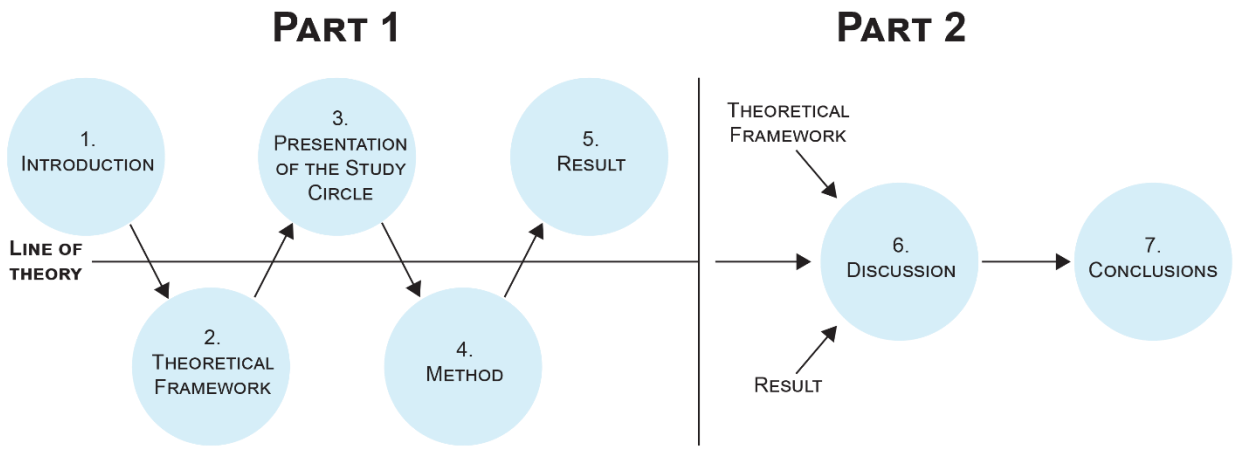

Figure 1.1
A visualisation of the structure of this paper. Divided into two parts, 1 and 2, where part 1 is divided into two by the line of theory.

2 THEORETICAL FRAMEWORK

In this chapter the theoretical framework is presented, it is made up of three different parts, participatory design (2.1), theories about knowledge and learning (2.2) and about the obscurity of the modern world (2.3). Participatory design is the methods Egnahemsfabriken uses for understanding how to help participants on their way of designing and building their own houses. This is needed to understand the second research question: *How are the methods of participatory design supporting the participants?* Theories about knowledge and learning are used to explain what is happening in the case, and this is needed to understand the first research question: *How does the study circle organize an educational process that teach practical knowledge?* The theory about obscurity is used to understand the complexity of the problem of building a house by oneself, which is needed to understand the forth research question: *What obstacles and challenges are occurring, and how to meet them?*

2.1 Participatory Design

The participatory design is a design which aims to involve the users in the design process, the power of design is to be switched from the professionals to those who are going to live in the houses designed (Stenberg, 2018). Egnahemsfabriken uses two main ideas of participatory design: The ideas of participatory design originated from Livingston (2.1.1 & 2.1.2); and The Pattern language (2.1.3) (Stenberg, Ottosson, Berg & Myllykangas, 2018).

2.1.1 The Idea of Participatory Design

The method Egnahemsfabriken uses originate from the Argentinean architect Rudolfo Livingston's book El Metodo (Livingstone, 1995). In the method, the design is done with the assistance of so-called community architects which are *lending out their mind* to the users (Stenberg et al., 2018). Livingston's (Stenberg, 2018) ideas are highlighting the architects' role in the building process as someone with an overbridging understanding and try explaining how to mediate this role and knowledges to the users. Livingston developed this method when he saw architects of Cuba design houses not adapted for the users. The houses had extensive flaws in windproof, ventilation and they were overcrowded with third-rate plans. Livingston thought the architect, in the same way as the doctor, has a responsibility for the personal relationship with the users. They should assist and empower them to develop their housing. Everyone should have the right to a community architect, and the profession must step down from their high pedestal, becoming equal with the users.

2.1.2 Livingston's Participatory Design

The process of Livingston is possible to implement in about three weeks, including five interviews. The main point is that the architect is assisting the users to find the house of their dream, at the same time as they continuously move the process forward. The architect's main role is to assist the user in understanding the process. The development of a relationship and of trustful cooperation is of great importance. The architect assists the users in understanding information about the plot and the culture that surrounds it and assists with documentation and visualization.

Below shows a few, typical architectural questions by which the architect can assist the builder. Sometimes one just needs to understand which of the questions to ask (Stenberg, 2018):

How to live in a place like this?

How is the place at different times of the year?

How present is the sun, the shadows and the trees in the place?

Livingston recommends starting the process with a group interview, with the aim to free the imagination. Each user is to answer and be active on every theme by themselves. Four different themes are discussed:

What on one's own home, does one like and dislike?

What problems does one see on one's own home?

Everyone makes a drawing of a house to gather visions.

Everyone is to dream freely of what they want in their house.

The architect is to collect the data by a special pattern, where the architect's personal will and likings are put aside. By this way, the architect can help the user to make their dreams can become clearer.

The processed data are presented as several different proposals for the family with other architects presents, which are to see if the process is proceeding correctly. Every proposal is evaluated separately. After a week the users return to make a decision.

2.1.3 Design Patterns

The Pattern Language is a book by Christopher Alexander, Sara Ishikawa, Murray Silverstein, Max Jacobson, Ingrid Fiksdahl-King and Shlomo Angel (1977) that describes a language for patterns in designing architecture. The Pattern Language as a method can be used by educated designers and users together to design and build housing. The ideas of the book are that there exists a universal architecture, not a true architecture, but that there exist similarities in how people want to live. In The Pattern Language, these similarities are formulated as a language, consisting of design components that are possible for anyone to use.

The book compounds of 253 patterns which together form the language. Every language includes a conviction of what is right and wrong in design.

The language is here exemplified by one pattern used in the study circle, *The Intimacy Gradient* (Alexander et al., 1977, p.610-613). The intimacy gradient states that every building has different zones, in which different people are allowed. Alexander explains this with an example from Peru.

> *"Casual neighborhood friends will probably never enter the house at all. Formal friends, such as the priest, the daughter's boyfriend, and friends from work may be invited in, but tend to be limited to a well-furnished and maintained part of the house, the sala. This room is sheltered from the clutter and more obvious informality of the rest of the house. Relatives and intimate friends may be made to feel at home in the family room (comedor-estar), where the family is likely to spend much of its time. A few relatives and friends, particularly women, will be allowed into the kitchen, other workspaces, and, perhaps, the bedrooms of the house. In this way, the family maintain both privacy and pride"* (Alexander, 1977, p.611).

The intimacy gradient is common everywhere in the world, but in different forms, in both living quarters and in official buildings.

The intimacy gradient is shown in the figure 2.1 and figure 2.2 below.

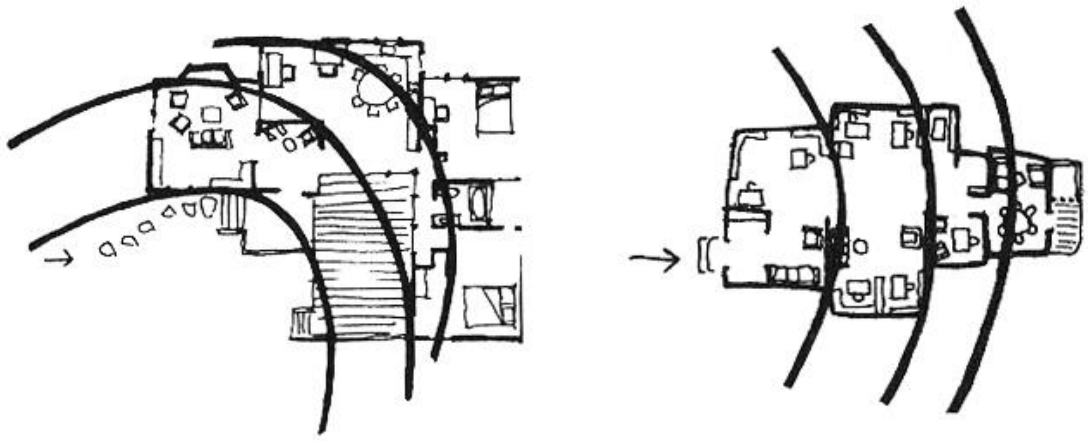

Figure 2.1 & Figure 2.2
A visualisation of the intimacy gradient in a building. The different arches describe how far into the building different people are allowed. To the left, in a house (Figure 2.1) and to the right, in an office (Figure 2.2) (Alexander et al., 1977, p.610).

2.2 Learning in Practice

Learning how to build a house, means learning the practice of building a house. This includes theories, practical labour, and things that normally are unsaid. The chapter is trying to nuance the picture of what one learns when one learns something in practice.

2.2.1 Knowledge in Practice

Knowledge in practice is what we do all the time, every day. Everyone knows what it is, but as Fredrik Svaneaus (2009, p.14) states, it is not as easily formulated and tested theory, and it is harder to measure than the profit of a company. Svaneaus (2009, p.12) shows us a picture:

> *"... practical knowledge is found in all zones where human life and act. The first we do, when waking up and getting up in the morning, is practicing of practical knowledge. Our body has embodied a knowing that we use in different activities without thinking. Getting up from the bed, getting dressed, the breakfast, biking to work..."*. Svaneaus (2009, p.13)

Svaneaus describes knowledge in practice as an achieved personal knowing expressed like an intuition. This is not only found in the individual, but also in the collective were the acting is. Roger Säljö (2014, p.149) gives a concrete example of what intuition is, when shopping in a supermarket, the knowledge about extra prices and the value of goods, will be compared by the mind with an approximate outcome, which is enough for making the necessary decisions when shopping.

The knowing practitioner is a concept introduced by Donald Schön (Molander, 1996, p.138). It is about having a repertoire of examples, pictures, interpretations, acting, patterns and models. Together this builds a bank of knowledge or, as Schön says, knowing.

This knowing is not always easy to see and to understand, it's not apparent. Michael Polanyi (1966, p.27) stated that "We can know more than we can tell". This knowledge is called *tacit knowledge*. Molander (1996, p.35) explains that we can recognize and do things without being able to explain our emotions to them, or what we actually do. Säljö (2014, p.130) describes it as a fingertip feeling about how other people understand a situation and what is allowed and not allowed doing there. Polanyi gives the example:

> *"We know a person's face, and can recognize it among thousands, indeed among a million other faces. Yet we usually cannot tell how we recognize a face we know"* (Polanyi, 1966, p.27)

Understanding how this works, one can imagine using a cane for the first time, one will feel its pressure in the hand. After a while, we can use the cane for orientating, examining the way. The cane is transformed into an extension of our body, the tool becomes a part of us. This is done through a shift in attention. From start, the attention was directed toward the cane, and therefore we felt the sensations of its presence, but when the cane became an extension of ourselves the attention was directed towards what the cane was sensing (Polanyi, 1966, p.36). This tool and extension of the human body don't have to be physical, it could also be a moral teaching or scientific understanding. With a scientific understanding, one can shift the attention from examining the theories to an examination of something else, for example, a physical problem - applying the theories we know (ibid, p.41). This leads to great clarity in complex

subjects (ibid p.43). In some sense, every field is a practice, even science is a craft. A student is entering the practice of science, learning how to be a good practitioner in science (Molander, 1996, p.202). There are related words like *intuition* (Bohlin, 2009, p.72) and *know-how knowledge* (ibid, p.77), which describe similar dimensions as tacit knowledge. The border between them is subtle. What is important is understanding the power of unspoken knowledge.

2.2.2 Knowing One's Way About

A similar word for describing what we cannot tell is, as mentioned, intuition. Bohlin shows how intuition has become an aggregate for many different phenomena. Bohlin explains how Aristoteles had a much clearer definition of what intuition is: 1. something we know; 2. is based on logical truth; 3. is direct, the knowledge is not built upon evidence and argument.

It takes time and years of training to achieve tacit knowledge, as well as other understanding of practice. One must learn the connections between rules and actions (Molander, 1996, p.199). We develop an ability to act with intellectual and physical tools, which makes us more competitive in our practice (Säljö, 2014, p.52). Gilberg Ryle calls this acting intelligently (Molander, 1996, p.140). From a say of Wittgenstein, G.E.M. Anscombe and D. Paul express it in English like *a kind of knowing one's way about* (Molander, 1996, p.112). An important part of knowing one's way about is to master the whole. Every action is a part of a greater context including activities, practice, social institutions etc. One must master every part, the cultural and material whole, and knowing about the limits of the whole and the limits of oneself (Molander, 1996, p.112). Clarifying this Molander (1996, p.115) reproduce Thomas Tempte's example of the boat builder Gösta:

> *"For an experienced boat builder, it takes 14 days to 3 weeks finishing the strake. It is a long and demanding process requiring high concentration, and a very physical outlet. When one has the experience of Gösta, the routine is a help. Gösta has all of the boat in his head, in the same way as an architect, with the difference that Gösta creates it with his own hands"* (Molander, 1996, p.16)

One cannot isolate a single operation and ignore its part of the whole. The knowing is to be able to shift attention between the part and the whole, always keeping them both in mind. Molander (1996, p.181) explains, this knowledge of the whole is a very grounded knowledge, down to earth, a *common sense*[8].

To understand something and to achieve this common sense, as stated in the hermeneutic circle, one needs a pre-understanding. There are many different pre-understandings, for example, to understand the whole, one must understand the parts, but at the same time, one must understand the whole to understand the parts. Molander (1996, p.69) describes how knowledge does not have a beginning or an end. It is only meaningful to speak about knowledge in a long period of time (Molander, 1996, p.128).

[8] "Bondförnuft" (Swedish)

2.2.3 Dialogue, Reflection and Learning-by-doing

To achieve knowledge in practice, there are three important parts: *dialogue*, *reflection* and *learning-by-doing*. Like how tacit knowledge uses different tools for understanding complexity, these three tools are used for acquiring and developing knowledge in practice.

The dialogue is an art, the dynamics are more important than singular words (Molander, 1996, p.85). A central thought of Platon's theories of knowledge is the ability to ask and to answer (ibid, p.89). This idea of the dialogue is central from Socrates to Habermas (ibid, p.99). The core of the dialogue is reciprocity, there must be an equality between the right to ask and the right to answer, not to ask and not answer, and between the listener and the speaker. Habermas expresses this as that in a dialogue there are only participants (ibid, p.103). A dialogue does not have to be between persons, it can also be between a person and an object. Schön describes how architectural design is a practical conversation between an architect and a material, or a situation. He tells that in some sense, every kind of practitioner is a kind of designer, using a dialogical approach (ibid, p.145).

Having a dialogue with oneself is what we call reflection; one can do this, without putting it into spoken words (Molander, 1996, p.141). This ability is, by Säljö (2014, p.135), called a structural resource. The ability to be aware of how one should think is sometimes called metacognition, describing knowing about situations and what is needed there. It assists us and plans our thoughts and actions. Molander (1996, p.116) says that it is like creating a picture of something inside one's mind. This takes time but having insight into one's knowledge will increase knowledge. This is what is called a process of reflection. Schön (Egidius, 2009, p.127) introduced the concept of the *reflective practitioner*. It is an art, being able to reflect on what one is doing. Schön means knowledge needs to be alive and personal. Therefore, every professional need a personal style of solving problems, choosing strategies and applying personally chosen theorems of connections. Egidius (2009, p.130) describes that when reflective practitioners meet a new situation, they seek something they recognize, a pattern, a similarity, something which makes the situation understandable. They will compare this new situation with already known ones. Kurt Lewin's (Egidius, 2009, p.119) theories are highlighting the importance of concrete experience. Concrete experience is followed by observations, and later generalizations and at last, creating a concept of what is been experienced. Examples of this are to call a conversation for communication and a telephone line for electronic highways. This process is taking place almost immediately, and it is what we call reflection. Molander (1996, p.139) explains that there is a hermeneutic connection between the reflection in acting and the knowledge in acting.

One needs to be active to learn something, it is not possible to learn only by reading and listening, one must try understanding and create different connections (Reisberg, 2016, p.219). This process is described by the legacy of John Dewey, *learning-by-doing* (Hartman, Hartman, Lundgren, 2004, p.16). Dewey describes:

> *"Without practice, the theory becomes incomprehensible, and without theory, one doesn't understand the practice"* (Egidius, 2009, p.67)

Egidius (2009, p.68) explains one must understand one's own role, understand what tools and objects to use. Through social collective activities, knowledge will be acquired. Schön (Molander, 1996, p.153) calls on more practical learning in all educations of professions, one needs training in directing one's attention on what is matter.

2.2.4 The Art of Practice

Learning how to become a practitioner, Molander (1996, p.70) explains, require oneself to relate to the traditions of the practice in question. This could be called a horizon of interpretation, which means that within the tradition there is a pre-understanding which determines how one will understand things. The doing of practice needs attention in the action, where the tradition is hidden between, as explained in 2.2.2, the extension of the body through tacit knowledge. This tacit knowledge of tradition and the focus of attention result in routines. By following routines, the practitioner feels secure in its practice. This feeling of security is a foundation upon which the knowledge of a profession is based. This leads to what Schön & Coleridge (Molander, 1996, p.154) claims is of great importance to learn something, the learners' ability to freely refrain themselves from distrust, which means that one must trust the master. Learning has a similar configuration to a contract. To acquire knowledge, Polanyi (1996, p.89) states, there is a need for great trust and great faith. In the traditionalistic way of thinking, one requires belief before knowing. In a modern scientifically rationalism, the belief is solely on data. Already Augustinus knew the importance of faith:

> *"If you do not have faith, you will not understand"* (Polanyi, 1966, p.89).

To know something in practice one needs to feel confident in oneself regarding what one can do. Critics erode the confidence, which might be a problem for people in traditions with low social status, relating to a critic with high status (Molander, 1996, p.102).

Knowledge is not neutral or free from values, it is closely connected with cultural values and ethical assumptions (Säljö, 2014, p.96). One part of the practice, the acting and the attention, is of an ethical character (Molander, 1996, p.79). The knowledge is an art of reasonable actions which is striving for the good, or at least, the better. Learning a practice is also about learning what is good and bad (ibid, 1996, p.78), for example, how to design a good house.

One can learn a practice by training, but not by theory. Application and knowing are not possible to separate (Molander, 1996, p.136), and the theories are to be used for orientation (ibid, 1996, p.150). The knowledge of practice is part of a community of practitioners. The practitioners have common strivings, languages and values. To learn practical knowledge, one must become a part of a collective system of knowledge (ibid, 1996, p.136). This striving to orientate, to get an overview, to know what is good and what is to value, is done in the form of a dialogue. Being a practitioner is the same as shaping and creating something. It is a matter of art. This way of thinking is opposed to modern science (ibid, 1996, p.186). Science is replacing practical activities by more and more applied theory. Every part of the modern world is becoming science (ibid, 1996, p.67). This leads to, according to Säljö (2014, p.42), that one cannot prepare for a specific profession, most of them require a high degree of general knowledge, and at the same time it is hard to possess all expert knowledge needed in one family (ibid, 2014, p.38). This complex society leads to increased abstraction in education and a higher demand for knowledge for future generations (ibid, 2014, p.42).

The cornerstones in knowledge in practice are to understand that there always exist a pre-understanding and that a lot of knowledge is of a tacit character. Being attentive and understanding the whole of things, are helping the practitioners to know their way about. The knowledge is acquired through dialogue, reflection and in learning-by-doing. To be able to understand, one needs faith, both in the master and in the knowledge and the knowing. Using

knowledge is a kind of valuation of what is good and bad, and it is like a form of art, it is a shaping of actions.

2.2.5 Language in Practice

Language is a necessity for practice. Säljö (2014, p.91) explains, that in a practice, language is of the same importance as the practical if self. Talking has a crucial role when we act physically with our hands and with practical tools. For example, when a smith is fabricating a tool, or a carpenter is building something, they are reading drawings, speaking with customers and discussing with colleges. Säljö (2014, p.92) continues, the language is creating meaning, maintaining notions and developing conceptions. There is a close relationship between the word and the hand, which is of great importance in both professional and everyday practice. Different objects and situations are perceived differently in different social contexts and practices, like when an architect finds meaning in a situation, which for an amateur says nothing (Säljö, 2014, p.95). This is known as *the architectural glasses*. People handle their environment through linguistic categories, which express values, emotions and attitudes (Säljö, 2014, p.107).

2.2.6 Communication in Practice

We are learning how to act in social practice. Our cognition is fitted for getting socialized through a long childhood with linguistic and cultural experiences. This socialization makes us complex and competent (Säljö, 2014, p.104).

Communication is a process of sharing individual experiences, through which they become collective experiences. Learning and thinking are happening within and between people (Säljö, 2014, p.105). The thinking, which is within a person, is a form of communication, which is between people. The ways a person have learnt to communicate can later be used both in thinking and in communication. People are closely connected to their environment, their history, their imagination and their social practices (ibid, p.106). Säljö (2014, p.108) explains thinking is a collective process - we think in groups, which is something happening between people. What is keeping a conversation together is that people give and take using the same common rules. What happens, Säljö (2014, p.114) continues, is that people are both listening and speaking. By doing this people are getting access to other interpretations and can thereby adjust their perspectives in relation to the group. Potential suggestions for solutions will come forward, and anyone can continue to build on them. Individuals are not passive spectators but contribute continuously with their own actions (ibid, p.127). There is a continuity between individuals through communication, a common understanding is created. This is an important part of the creation of knowledge and leads to why it is possible to borrow one another's insights and understandings (ibid, p.114). Through this, Säljö (2014, p.121) explains, a mediation of knowledge and abilities can occur - people are exposed to reasoning and acting in social practices, they learn how to understand this, get to know it and, at last, they can carry it out by themselves.

2.2.7 Transfer of Knowledge

One of the main issues with acquiring knowledge in practice is that it takes time. When solving complex problems, like building a house, Säljö (2014, p.81) explains, one uses experts. Hiring different expert with an intuitive and complex knowing and knowledge of the practice. In our modern society, Säljö (2014, p.142) explains, we take for granted the possibility of

transferring knowledge and practice from one environment to another, but this is severely complex. Dewey put it like this:

> *"A constantly repeating exercise can lead to great skills in one field. Regardless if it is about accounting, logarithm or hydrocarbon experiment, the skills will be limited to its field. If not the exercises on the actual field are formed so that the skills can be expanded to other fields, it is possible being an authority in one specific field and on the same time have an unusually bad judgment on other, unrelated fields"* (Phillips & Soltis, 2014, p.118)

In our tradition (Säljö, 2014, p.141) there is an image of knowledge as something neutral, which leads to education with the purpose of giving general knowledge which later is supposed to be applied in the real world. But this knowledge is situated in the education, passing an exam makes the learner learn how to pass an exam, and knowledge learnt are difficult to transfer to other fields. Instead, as explained above about the communication in practice, one possibility is to lend the knowledge of others and use this as our own, getting help from an expert, explaining how to do (Säljö, 2014, p.34).

2.2.8 Understanding the Expert

A considerable difference between experts and novices is how they solve problems. When novices solve a problem, they take to many dimensions in consideration, in contrast to experts who know how to sift out the important dimensions, which are needed for solving the problem (Reisberg, 2016, p.486). According to Célestin Freinet (Egidius, 2009, p.45), in a learning situation, one of the teachers' functions is to help the students to systemize knowledge that they collect. Students get to learn how to establish libraries from their work. School books, homework and lessons are replaced by learning where the students, from a critical point of view, discover their surrounding world and adopt new skills with guidance from a tutor or a teacher. Reisberg (s.486, 2016) points out that one of the expert's abilities, which distinguishes them from novices, is how to put-up milestones, and how to define (Reisberg, s.488, 2016) one's problems, understanding their complexity and dynamic.

Hubert and Stuart Dreyfus (Molander, 1996, p.127) are speaking of experts as an *acting practitioner*, who act directly in situations without thinking and reasoning. This way of seeing experts makes it hard to explain how experts learn. Instead, Schön (ibid, p.131) introduced, what was mentioned above, the reflective practitioner, who think while acting. Molander (s.152, 1996) wants to develop an understanding of the expert as an *attentive and learning practitioner*.

One part of the expert's profession is knowledge about theory and about the field. However, one ability of great importance is the expert's handling of problematic situations. Experts have the capacity of setting a problem. Originating from a mess but getting clarity through a dialogue with the situation (Molander, 1996, p.134). The knowing practitioner (2.2.1) creates meaning and context where there was none from the beginning. This happens in the meeting with the situation. The expert does not have knowledge about every case, and in some cases, the knowledge does not fit at all, still, the expert creates a solution. The knowing practitioner can reflect, experiment and improvise (ibid, p.136).

2.3 The New Obscurity

One observation in the study circle was that a character of understanding a problem is that they are of an obscure character.

Jürgen Habermas introduced the term *the new obscurity* in a speech in 1984. Society is getting more and more complex, with more and more advanced technical, legal and bureaucratical systems it is more likely there will occur dysfunctional side effects (Habermas, 1985).

> *" Every day we are experiencing, forces of production transformed into forces of destruction, and capacity of planning transformed into capacity of interference"* (Habermas, 1985)

The horizon of a future of possibilities is shrinking, and both intellectuals and politicians stand without an answer of what to do. This absence of an answer is what characterizes the obscurity of the modern world (Habermas, 1985). Molander (1996, p.75-76 & 185) explains, that in the idea of the enlightenment, modernity and modern science, there is a great belief in common sense. Everyone is to expel their prejudices and free themselves from beliefs in authorities and see the world with their own eyes. Hypotheses and facts are tested by observations, and knowledge is created and formulated into a collective overview. We understand more, we see consequences we could not understand before, we get a greater overview, but it is not sure that the total overview of today is greater than the total overview of yesterday. Instead, paradoxically, getting an overview open ups for even more new obscurity than there were before (Molander, 1996, p.185), and thereby the present gets more and more obscure.

One consequence of this growing obscurity is that today, it is not as easy to prepare oneself for a specific profession or employment. A lot of professions today requires a high degree of general knowledge. This complexity in the society leads to an increased abstraction in education and higher demands on the next generation (Säljö, 2014, p.42), and in these complex societies, it becomes harder and harder to possess all different expert knowledge needed for living as a single family (ibid, p.38).

The amount of choices is increasing in our life. It is a quality of life having the possibilities to make choices, but at the same time too many choices make us less happy (Reisberg, 2016, p.463). The overload of possibilities of today is one reason for the occurrence of obscurity, especially for people getting into a new field, like, for the first time, building a house of their own by them self.

3 PRESENTATION OF THE STUDY CIRCLE

In this chapter, the background and arrangement of the study circle is presented. This is giving a background to the result (chapter 5), explaining the context. The presentation is based on course materials and on observations. This chapter is needed to answer the third research question: *What local preconditions have been of importance for the implementation of the study circle?*

3.1 The Location of The Study Circle

The study circle was held at Egnahemsfabriken at Tjörn. The site of Egnahemsfabriken consists of an outdoor working site for building houses, a barn for working in a shelter and for storing building parts, a small building for having meetings and presentations indoors, and a few greenhouses.

The study circle was held in the meeting building. The size of the building is about 35 square meters, with walls painted in pleasant colours and a window from which one can see the site. The building is heated with an electric radiator and when it is cold it needs additional heat from the people in the room. The room is furnished with a table and several chairs. There are a projector, a whiteboard and a printer. There is a small kitchen with a microwave, a coffee brewer and a dishwashing area. Water is brought in water containers from the outside. The walls of the room are covered with a lot of pictures of the working progress of Egnahemsfabriken. The overall feeling of the room is that it is cozy.

3.2 The Arrangement of the Study Circle

The study circle varied in arrangement, time and day, but most of the occasions were on Mondays between 18:00-21:00. The study circle was usually made up of two parts. In the first part there were one or two guest lectures and in the second part, the group discussed an architectural issue. In-between part one and two, there was always a 15 minutes break with a coffee break.

3.3 The Material of The Study Circle

The course guide *Design & build your own house – together*[9] (Stenberg et al., 2018) is a document of 14 pages which shortly describes the ideas of participatory design and of The Pattern Language (2.1.3). The course guide also shows the structure of the study circle, when and where things were to happen.

Apart from the course guide, there is one more study material, The Pattern Language by Alexander et al. (1977). A few patterns from the book are used in the study circle.

[9] Original title: *Rita & bygg ditt eget hus – tillsammans* (Swedish)

3.4 The Guest Lectures of the Study Circle

During the guest lectures, there were also other people attending apart from the study circle's participants. On some occasions, there were about 15 extra people attending, on other occasions, there were fewer extra people. The guest lectures were between one and two hours long.

Almost all the guest lecturers had some experience of trying to build a house by themselves or in a family constellation. All these lecturers explained how their process had evolved. Some had built a house but had not finished, and some had primarily been dreaming and had not started yet. A common theme in all these lecturers was that they seemed to think to that build a house is or would be very fun. Another thing was that all of them had come across a lot of problems which at first seemed as a non-problem or as simple, and a small problem, but after a while, the problems appeared to be large in either time load, workload or cost load.

3.5 The Group Discussions of the Study Circle

The second part of the study circle was set-up as seminars where the study circle leaders made sure everyone was talking. Everyone got to speak almost the same amount of time. On every occasion, the study circle discussed a theme chosen by the study circle leaders. The themes were mostly about theoretical architectural thoughts in the planning stage of the building process.

3.6 The Group Constellations of the Study Circle

Each group consisted of four participants aged 29 to 64. The group was led by two study circle leaders who were practicing architects. They were experienced architects with experience of teaching, but with none pedagogical education. There were also three volunteer architects who were part of the study circle on some occasions. These volunteer architects were like semi-participants, they were both participating and learning, as well as they were offering their architect competence to the participants. There were also two observers, one of them was a researcher (R2) who had been part of designing the study circle's structure, and the second observer was me (R1), making this case study.

Table 3.1. Describing the number of people in the study circle.

Roles in the study circle	**Number of people**
Leaders	2
Participants	4
Researchers	2
Volunteer architects	3
All together	10

3.7 The Volunteer Architects of the Study Circle

In the study circle, the participants got to cooperate with volunteer architects. The volunteer architects helped the participants to make drawings of their houses. This was done outside the time of the study circle. The volunteer architect and the participant had face-to-face meetings and communicated through the internet and by phone. During this process, the volunteer architects transferred their knowledge as an architect to the participants. There were three volunteer architects, newly educated in the last 1-2 years ago, and the two leaders in the study circle, who were volunteering.

3.8 The Occasions of the Study Circle

Below is a detailed description of the 11 study circle occasions and one study tour.

Table 3.2. A description of the different occasions of the study circle.

Occasion 1:	*Introduction*
Location:	Egnahemsfabriken
Guest lecturer	None
Theme	Introduction to the study circle and the arrangement of the study circle. The participants were given a chance to express their expectations of the study circle and describe their house dreams.
Based on theory:	Livingston (2.1.2) about the participants housing dreams.

Occasion 2:	*House Building Dreams*
Location:	Egnahemsfabriken
Guest lecturer 1	From sketch to self-building: A short introduction to theoretical architectural values in buildings: space, light, the line of sights etc.
Guest lecturer 2	A self-builder's personal story and how to find cheap reusable material on the internet, and how to build with them.
Theme	The participants continued to describe their house building dreams while the study circle leaders asked questions to make them think about different aspects of their dreams.
Based on theory:	Livingston (2.1.2) about the participants housing dreams.

Occasion 3:	*Building Permits*
Location:	Egnahemsfabriken
Guest lecturer	How to finance building a small-scale house. What are the possibilities? How should one think?
Theme	All the participant asks questions to a public official about building permits.

Occasion 4:	*Home-Visit and Communicating with Pictures*
Location:	One of the study circle leader's homes at Tjörn
Guest lecturer 1	Are we going to continue to build all our life? A personal story of a house building process.
Guest lecturer 2	Accessibility in small scale housing. What are the rules?
Theme	On this occasion, the meeting was held at one of the study circle leaders' home. The participants got to ask the self-builders questions about the house. As an exercise, the participants and the study circle leaders had brought pictures of houses they like. Together the participants used the pictures to explain what kind of things they like about different houses. They used the picture to create a collective reference point when speaking about building details.
Based on theory:	

Study tour:	*Study Tour*
Location:	Orust
Theme	In addition to the meetings, the study circle went on a full day study tour visiting an eco-village on Orust were people have built and are building their own houses.
Based on theory:	

Occasion 5:	*Meeting with a Volunteer Architect*
Location:	Egnahemsfabriken
Guest lecturer 1	None
Theme	All the participants had a meeting on their own with their volunteer architect. During these meetings, they started to make drawings of the participants' houses. One of the participants and the volunteer architect met up on the site and marked the house's corners with wooden sticks. This gave them a sense of how well the location was suited for the house.
Based on theory:	Livingston's (2.1.1) idea about a community architect sharing their expertise and experience to the participant.

Occasion 6:	*Theoretical Approach to Design, Part 1*
Location:	Egnahemsfabriken
Guest lecturer	None
Theme	The participants read articles in a book about a theoretical way of constructing architecture by different patterns. They got to answer the following questions: *What do I like, and what do I dislike, in a home?* *What is private, and what is public?* *How important is the kitchen in your life?*
Based on theory:	Livingston's (2.1.2) disposition of interviewing the participants for freeing their imagination. And combined with design patterns (2.1.3).

Occasion 7:	*Theoretical Approach to Design, Part 2*
Location:	Egnahemsfabriken
Guest lecturer	Transition in thought and action – how to build in an ecological way. The lecturer talked about how to build a house without any money at all.
Theme	Like occasion 6 but with different questions. The participants got to answer the following questions: *Which is your Zen view, great spots, on your site?* *How do you want your outdoor rooms?*
Based on theory:	Livingston's (2.1.2) disposition of interviewing the participants for freeing their imagination. And combined with design patterns (2.1.3).

Occasion 8:	*Economical Calculation*
Location:	Egnahemsfabriken
Guest lecturer 1	What colours to use and how to paint one's house? What ecological paints are there on the market?
Guest lecturer 2	A lecture about the developer's legal responsibility and about how to make an economical calculation over a building project.
Theme	A discussion about an economic calculation for building small houses.
Based on theory:	

Occasion 9:	*Presentation of Proposals*
Location:	Egnahemsfabriken
Guest lecturer	None
Theme	Every participant and their volunteer architect presented a few different designs of the house. The whole group discussed the pros and cons of the different designs.
Based on theory:	Livingston's (2.1.2) idea of presenting and evaluating proposals

Occasion 10:	*Visiting Sites*
Location:	At one of the study circle leader's homes at Tjörn
Guest lecturer	None
Theme	On this occasion, the participants and the study circle leaders meet up during daytime and drove around Tjörn visiting three sites of the participants. At the end of the meeting, the study circle had a coffee break at one of the participants home at Tjörn.
Based on theory:	

Occasion 11:	*Ending: Summary and Evaluation*
Location:	Egnahemsfabriken
Guest lecturer	None
Theme	On the last occasion, the participants summarized their current stage in their house-building process. What is the next step in the process? At the end of the study circle, there was an evaluation with the researcher (R2) asking questions. The researcher (R2) led the feedback in the group.
Based on theory:	

4 METHOD

In this chapter the method of this case study is described. Firstly, the research design is presented and motivated in 4.1. In 4.2 and 4.3 the parts and dilemmas of the observations and the interviews are presented. In 4.4 the different phases of analysis are presented. In 4.5-4.7 generalizability, validity, reliability and ethics are presented. In 4.8 important factors, which could have affected the result, are discussed in a method discussion.

4.1 Research Design

This work is a case study (figure 4.1), which is a study aiming to illustrate the general by looking at something specific (Denscombe, 2016, p.91). This specific case was chosen because of, firstly, the opportunity to get access to the study circle was given, and, secondly, because Egnahemsfabriken is a central actor in the movement of self-builders in Sweden today, and the study circle is their utmost implementation of their ideas. This case is ideal understanding how to implement theories of participatory design. Other possible research methods apart from the case study could have been, action research, or a more quantitative perspective, were different courses of self-builders could have been compared. The reason why the case study was chosen as a research method before action research is that action research presumes an intention to change something in the activity, as an aim of the research (ibid, p.180). The process of action research is also time consuming, and in short projects, there is often needed a lot of extra work to achieve the participatory benefits of the method (ibid, p.188). The reason why the case study was chosen before a quantitative perspective is because a case study is well suited for studying a continually social activity where there are different perceptions of what is happening and where it is important to observe the atmosphere in the social context. The case study as research design is going deep, it focuses on relations and processes and it generates a holistic view (ibid, p.91). For example, making a survey research risks of missing details and a deeper understanding (ibid, p.59)

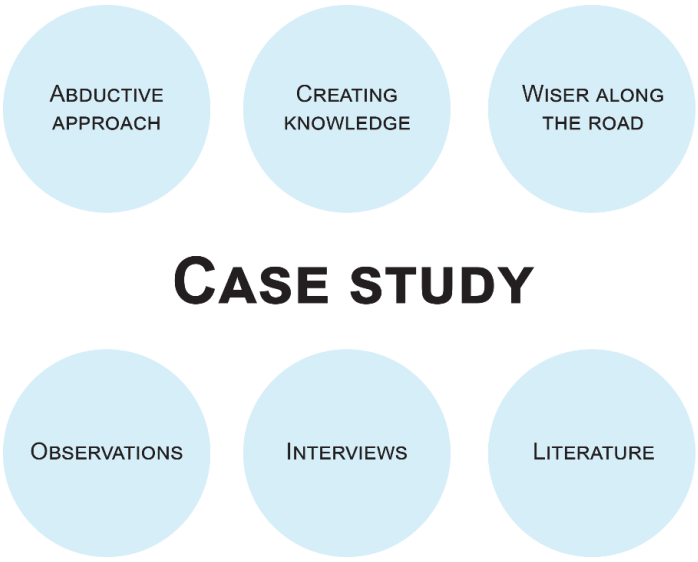

Figure 4.1
A visualization of the different parts of the case study and of important assumptions. The assumptions are: abductive approach, creating knowledge and becoming wiser along the road. The parts are: observations, interviews and literature.

In a case study, different methods of data collections are advantageously used (Denscombe, 2016, p.92-93). In the case study, a method of triangulation was used, where observations, interviews and reading of theories and documents (2.1 & 3.3) together built a more holistic view of the case (figure 4.1). The observations gave insights into the problem and on the learning, and an observer's perspective on the social and on actions. In the interviews, these insights could be confirmed or falsified, and the social, and actions in the case, were put in a context with broader background information. The theories and documentation added understanding of the intentions behind different actions in the study circle (ibid, p.223-225). The reason of arranging the case study in this way compare to other arrangement, for example, two series of interviews, one in the beginning and one in the end, or using focus groups, is firstly, that I did not understand how the study circle was to be executed. Observation as a method made it possible for me to understand how the study circle was executed. Secondly, the study circle begun only a week after I got access to Egnahemsfabriken, and therefore there was no time to do a first interview study. The reason why not focus groups were chosen is that the character of the study is alike the character of a focus group, so in some sense I was observing a focus group when I was observing the study circle. In groups there always arise norms of what to say and what to not say. Therefore, by complementing the observations by interviews, the aim was to make it possible for the interviewees to express their inner personal thoughts and opinions.

A case study is of a qualitative character which means that the most important tool for measurement is the researcher (R1) by itself. As a researcher (R1) I have a background, a pre-understanding, values, identity and convictions, these are tools for understanding the studied case (Denscombe, 2016, p.344). My pre-understanding, as a student of architecture and engineering, about the field of house building and of architecture affected where I started the case study, what I looked after in the observations and what I asked in the interviews. With this background, the observations started without any set theory.

From the beginning the processes and phenomena taking place in the study circle were unspecified. When studying an unknown process like this one, observations are well suited. With observations, one can study process and structure hard to foresee. One can study the difference between what people do and what they say they do, and what they take for granted (Esaiasson, 2017, p.315). Therefore, it was decided to use observations. Parallelly with the observations, a search of relevant theories was carried out. Theories explaining different phenomena in the observations changed the directions of the observations. This way of collecting data that is called Abduction (figure 4.1) (Kvale & Brinkmann, 2014, p.239).

Using only observations leads to a problem of validity (more about validity in 4.5). There is a large risk that observations will not explain everything that happens (Esaiasson, 2017, p.318). Observations are not reliable to say anything about people's intentions and about their emotions (ibid, p.315). Moderate this problem of validity and by answering questions raised in the abductive search, the observations were complemented by interviews to handle the limitations described above. When making interviews it is important to have a good understanding of the situation before starting on the actual interviews. This can be done through studying previous research such as, for example, in a study where observations were shown to become an important foundation for the interviewer (Esaiasson, 2017, p.266). By complementing with interviews, I could benefit of what Kvale & Brinkmann (2014, p.155) describe as becoming *wiser along the road*, which means that the researcher (R1) will gradually learn more and more about the subject (figure 4.1). There is a dilemma about if the researcher (R1) should take new insights into account during the study or if one should keep to the initial plan. Tak-

ing new insights into account may add extra time to the research (Kvale & Brinkmann, 2014, p.155). In this case study, a lot of these new insights were possible to be considered in creating the interview guide.

To understand the case, most of the 11 occasions were observed and the inner group of people participating in the study circle was interviewed. This includes the four participants, the two leaders and the researcher (R2). The interviews were of both informative and responsive character, where some information obtained were able to use as fact about how things were and some information obtained were opinions used to understand what was preferable (Esaiasson, 2017, p.272-273). It is a sliding scale from informative to responsive, were the four participants mainly were interviewed in a responsive way, and the researcher (R2) mainly was interviewed in an informant way, and the leaders were somewhere in between.

The subject was approached without any set theories in mind. By the abductive way of finding first, and understanding afterwards, and then finding new material, lead to a search in literature, and through interviews and discussions, to understand possible entrances into the subject.

One interview with a retired university lecturer provided me with a wide overview of the possible entrances understanding the study circle through a pedagogical perspective. This lead forward to the book *Pedagogics for the 21th century*[10] (Egidius, 2009). Correspondence with the researcher (R2) connected to the study circle (and also one of the leaders in the result) gave me different views on what aspects of the participatory design that are of interest, like the importance of *empowerment* and *participatory design*. This preparatory reading and discussion led to an initial understanding on which the study circle could be understood sufficiently to be investigated.

After looking around through different fields and theories, philosophy, psychology, pedagogics, neuropsychology, theories of management, I found an entrance to an understanding the study circle, through Bengt Molander's *Knowledge in action*[11] (1996) and Roger Säljö's *Learning in practice: A socio-cultural perspective*[12] (2014). Together they stand for theories which on several levels are hard to measure, like tacit knowledge and social constructivist dimensions. Even if the theories by Molander and Säljö do not explain specific functions, and seldom explain why something is like it is, or if they are actually able to validate the theories, they are still the best options as they create a coherent explanation, and a coherent explanation is required for understanding of complex situations like learning in a practice.

When, observation data, interview data and theories, were collected the analysis was performed. The analysis was done through a summing-up of the material and then a categorizing of the material (Esaiasson, 2017, p.280). To make the case study easier to understand chapter three, *Presentation of the Study Circle* was added. This chapter is based on documents and observations. Chapter three was separated from the result because it is data of a different character. In chapter three, the data is a display of what it looked like and what happened, and in the result, it was presented opinions, thoughts and conversational matters. The result (5) and the theoretical framework (2) were discussed in chapter 6, and the conclusions were expressed in chapter 7.

[10] Original title: *Pedagogik för 2000-talet* (Swedish)
[11] Original title: *Kunskap i handling* (Swedish)
[12] Original title: *Lärande i praktiken: Ett sociokulturellt perspektiv* (Swedish)

Kvale & Brinkmann (2014, p.71) describe that the interviewer either can collect knowledge or create knowledge (figure 4.1). Knowledge is something temporarily, beliefs of today may be false tomorrow. Knowledge is a product of our time (Denscombe, 2016, p.227). In this study, the interviews were formed to create knowledge in the conversation, in a conversation my interview questions were answered by the interviewee, but the interviewee's answers affected on how, and in which order the I asked subsequent questions. Together in the interview, they created knowledge. Some questions were of a more collecting character when they were needed to achieve answers to specific questions (Kvale & Brinkmann, 2014, 71).

4.2 Observation

The primary aim of the observation was to get an understanding of the case and the group studied. There were three primary dilemmas of the observations (figure 4.2). The first was to which extent that I as a researcher (R1) was influencing the case and group studied. The second dilemma was what I was able to observe and the third was about how to document what I observed.

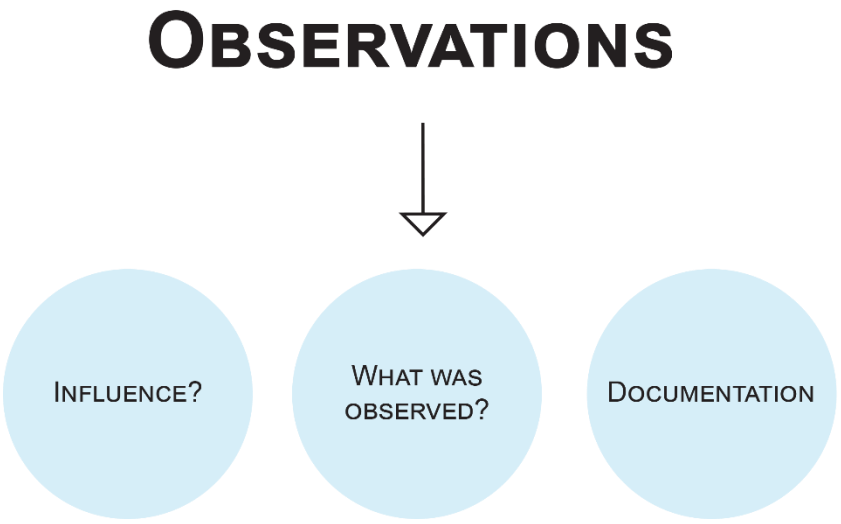

Figure 4.2
A visualization of the different dilemmas of the observations.

Esaiasson (2017, p.316) explains that there is a sliding scale between being a complete observer and a complete participant. In this case study, I was a participating observer. As a participating observer, I was participating in conversations and become a part of the social group. The conversations were occurring both in the breaks of the study circle and while travelling home from the location. The location for the study circle was isolated in the countryside, so it was natural that I was travelling together with some of the participants. In conversations both during the study circle and in other conversations, I made a strong effort to hold back even when I could have added to the conversation and still, I tried to be socially smooth. In these cases, there was a risk that I influenced the study circle and the participants without being aware of it. The impact of my presence as a researcher (R1) in the study circle is hard to estimate but being social also contribute to what information that were possible to gathering. Esaiasson (2017, p.327) expresses the importance of empathy and commitment as necessary for getting good information. It is a balance between empathy and integrity. The observation is dependent on a social contract.

In the beginning, I used observations to look broadly for different aspects of learning in the study circle and of characteristics of the problem of building a house by oneself. Esaiasson (2017, p.321) compare the process to *trawling*, it is normally something done in the beginning of the observations, later the observations become more specified in what is searched for. After a while the focus shifts from all aspects being investigated to solely observe the structure of the different stages and how well they were performed.

The question about how to document was present on all the observations. Since most of the observations were of an overview character, a documentation template was not used, and instead observations were taken as notes. This was complemented using a Dictaphone at the end of every occasion. The documentation made by hand were giving small details seen in an attentive presence at the study circle. The documentation made with the Dictaphone was more of a summarizing character where an overall understanding of the occasion was documented. The negative aspect of documenting in this way is that it at times may seem to be random. One assumption is that the researcher's (R1) ability to be attentive and see patterns in doing the observations is trusted.

Besides the observations, literature studies of theories were carried out. These theories assisted the observations by providing new perspectives of understanding. Getting exposed to new theoretical concepts influenced new connections to be observed in the study circle. As a researcher (R1) I was continually reflecting on my own work, learning more and more about the study circle, in the abductive way of working.

4.3 Interview

The observations worked as a pre-study to the interviews. The aim of the interview formulated was based on the observations made. Four aims were formulated (figure 4.3). The first was to understand the problem of building a house by oneself. From a discover in the observation, I introduced the concept of obscurity as something central in the understanding, which later was investigated. The second aim was to understand what was needed to learn to build one's own house. The third aim was to find out the background to the study circle, which ideas and circumstances, which made this study circle come true. lead forward to this study circle. The

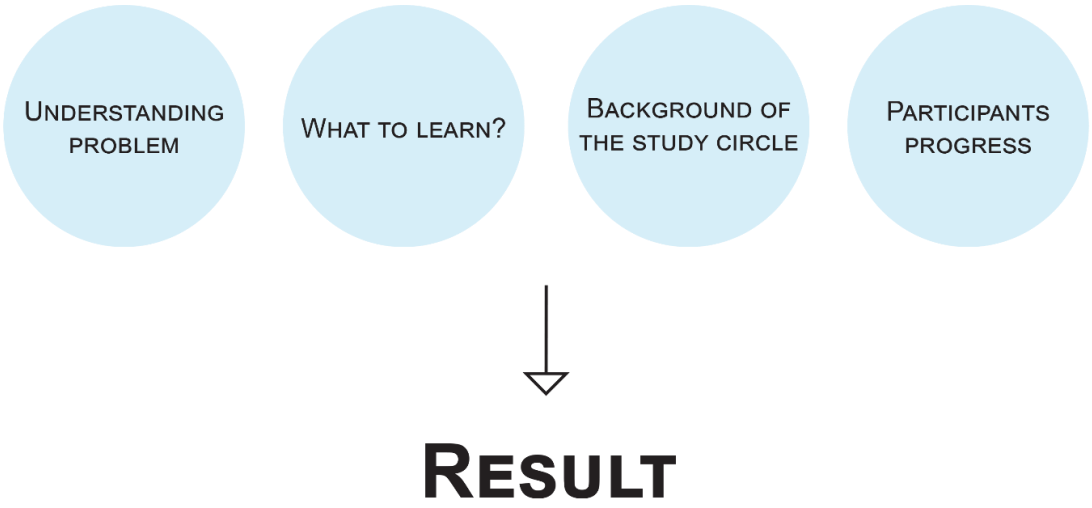

Figure 4.3
A visualization of the which questions the interview guide tried to answer.

fourth aim was to find out how each of the participants progressed with the study circle. Two interview guides (Appendix) was formed to answer these aims. A test interview was carried out to decrease the inaccuracy between written and spoken language in the interview guide (Esaiasson, 2017, p.277).

Quite early it was decided to conduct six interviews with the inner part of the study circle. This is because of, what Esaiasson (2017, p.268) calls, centrality, which means that the most important persons are in the middle of the case. After interviewing the central interviewees, one will get a sense of which other people to include in the interviews (Esaiasson, 2017, p.267). In this case study, several different persons were considered to be interviewed. After a few of the interviews was carried out, it became clear that one additional interview, with a researcher (R2) connected to Egnahemsfabriken, was required. Besides the choice of centrality when choosing interviewees, it was also of importance to restrict the size of the interview study.

The interview guides were created according to advices by Esaiasson (2017, p.273) and Kvale & Brinkmann (2014, 172). Questions were advised to be structured into themes where the main questions were asked first and complemented by other questions on the same theme (Kvale & Brinkmann, 2014, p.147). The interview guides consisted of several themes (Appendix) corresponding to the aims above. Advice from Esaiasson (2017, p.274), also followed, was to keep the interview guides easy to understand with the most important questions to be descriptive and openly formulated followed by monitoring questions. This way of interviewing is called semi-structured interview (Denscombe, 2016, p.266). The interview guides did not contain any warm-up questions, as Esaiasson (2017, p.274) suggested, instead of small talk was carried out before the interviews. At the beginning of the interview, it was made clear that this was part of a case study and it was discussed with the interviewee about how to deal with the confidentiality (Esaiasson, 2017, p.267). The length of the interview was set to 60 minutes. The place for the interviews was decided together with the interviewees. The places used were Egnahemsfabriken's meeting building in Tjörn, a café in Tjörn, a café in Gothenburg, a meeting room in Chalmers, and one interview was conducted over the telephone. The difference in settings had some impact on the results reliability (Esaiasson, 2017, p.276-278). The recording from the cafés was less audible than the meeting rooms, and the interview by telephone was lost due to a technical error, fortunately, notes were taken, after the interview a summarize was made, and the interviewee complemented the interview by answering the questions to the interview guide by email. There was also a small difference in the intimateness between the face to face interviews and the telephone interview, wherein the face to face interviews additional impressions, like body movements, were added.

Because of the foregoing observations, I was known by the interviewees. I was in a role similar to the leaders, someone observing and standing above the group, but at the same time, I was free from the responsibility of the leaders' role. This led to a possibility to reach deeper through the interviews. As Esaiasson (2017, p.267) explains, an interview can approach the therapeutic conversation, where the function is to get out inner thoughts. When this happened, I listened, but did not encourage a deepening of the conversation. At the same time, this familiarity generated important knowledge.

The frequency of the interviewees' quotes occurring in the result. It is a good representation between the leaders, and a fairly good representation between the participants, only P1 has markedly fewer quotes than the others. 66 quotes were selected out of hundreds.

Table 4.1. The frequency of quotes of each interviewee.

Interviewee	**Quantity**
L1	12
L2	10
L3	11
P1	5
P2	8
P3	8
P4	12

4.4 Analysis

The data from the interviewees were transcribed, and, in line with Esaiasson (2017, p.280), the data was first summarized by a categorization where data from different interviewees were brought together. Patterns and variance were looked for. The analysis was carried out in three steps, where in each step, categorizes where created relating to the research question (figure 4.4).

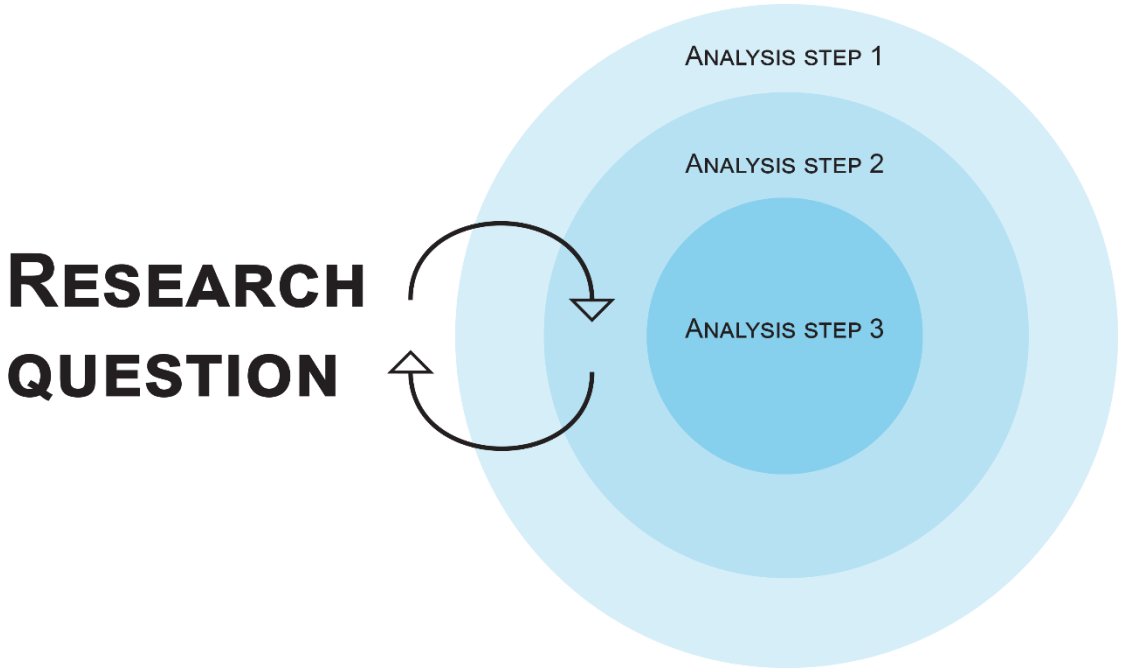

Figure 4.4
A visualization of the different steps of the analysis, going from a lot of data to fewer and fewer data.

Analysis step 1
The design of the interview guides led to that some of the result did not exactly fit the research questions. To make the result fit the research questions better, it was categorized into 26 categories.

Table 4.2. The first 26 categorizes identified in the analysis.

The character of obscurity
Feelings of obscurity
The possibilities of obscurity
The obstacles of obscurity
The tools of obscurity
Presumptions for having control
The volunteer architects
Participatory design
What is needed to build one's own house?
How to learn to build a house by oneself?
What is an architect?
How can the pedagogue support the participant?
Challenges with self-building
Egnahemsrörelsen
Who has the right to their own residence?
What is self-building?
Ideas of the study circle
The prerequisites of the study circle
The result of the study circle
Egnahemsfabriken
The group
Guest lectures
The character of large problems (of house building)
The leaders of the study circle
Time of the building process
Empowerment

Analysis step 2
With the aim of creating a more general understanding of the case, the categorization continued in another step (Esaiasson, 2017, p.281). In this step it was decided that the result would be presented in a way where the process of the study circle was put in the center, firstly, the background of the study circle was presented, then how to learn to build, then how it was implemented and last what feelings it resulted in. This way of presenting the study circle seemed logical because it is an ongoing process, it would be impossible redoing the same case study because the process is going on. In this step 4 categorizes and 15 sub-categorize were found.

Table 4.3. The 4 categorizes and the 15 sub-categorizes identified in analysis step 2.

Categorizes	**Sub-categorizes**
Background	The housing situation today
	Egnahemsfabriken - aims and visions
	Preconditions
	Ideas
	The architect's role
How to build?	Structural obstacles
	Personal challenges
	Personal circumstances
	How to learn?
	The pedagogue's role
Implementation	Expectations
	Arrangement
	Results
Stress and empowerment	Stress and tension
	Empowerment

Analysis step 3

In the third and final step, a categorization was created (Table 4.4). This interview data was complemented by observation data. The observation data are as a narrative with a beginning on the first occasion and an end on the last occasion. The observation data and the interview data were combined into a process-like structure like in step two. The different research questions are connected to the categorizes. Answer to research question one (RQ1): *How does the study circle organize an educational process that teach practical knowledge?* is found in category 2, 3, 4 and 5. Answers to research question two (RQ2): *How are the methods of participatory design supporting the participants?* is found in category 2, 3 and 4. Answers to research question three (RQ3): *What local preconditions have been of importance for the implementation of the study circle?* is found in category 1 and 4. Answers to research question four (RQ4): *What obstacles and challenges are occurring, and how to meet them?* Is found in category 1,2 and 3.

Table 4.4. The 5 categorizes identified in analysis step 3, and how they relate to the different research questions.

	Categorizes	**Research questions**
1	The Background of the Study Circle	RQ3 & RQ4
2	The Different Roles of the Study Circle	RQ1, RQ2 & RQ4
3	Learning how to Build a House	RQ1, RQ2 & RQ4
4	The Implementation of the Study Circle	RQ1, RQ2 & RQ3
5	Empowerment of the Participants	RQ1

Names and confidentiality
There was a dilemma about how the data were to be presented. Different alternative was considered: using the real name of the interviewees; using fake name on the interviewees; call all the interviewees the same; group the interviewees into different groups; call the interviewees by letters. To achieve an as high degree of confidentiality as possible the use of real names rejected. The essay is not taking in consider differences in sex, ethnicity and age, and therefore using fake names were rejected because of prejudices connected to different names. Esaiasson (2017, p.267) explains the difficulties to make a consistent analysis if all interviewees are given the same name, which will lower the understanding of the result. The interviewees were grouped into two groups: participants and leaders because both groups had a different entry to the study circle. The group of participants were most providing respondent data and the group of leaders were providing both respondent and informant data. The researcher (R2), connected to the study circle, was added to the group of the leaders because the researcher (R2) sometimes filled a role as a leader and had also were a part of Egnahemsfabriken. The different interviewees were thereby called P1, P2, P3 and P4 of the group of participants, and L1, L2 and L3 of the group of leaders. The number the interviewees were given is randomized to rise the confidentiality.

4.5 Generalizability and Validity

A case study is studying a small case with the intentions to understand something more general (Denscombe, 2016, p.91). By focusing on the depth of the case a complex understanding can be achieved (Denscombe, 2016, p.92). To make the case study comparable with other cases alike an important focus has been on making a detail description of the study (Denscombe, 2016, p.101-102), for example, chapter 3 was added both for the understanding of the case and for the possibility to compare the case.

The specific case is part of a large tradition of learning how to build houses, more specified, part of a tradition where amateurs, in an organized way, learn how to build their own house. The role model for the case is Egnahemsrörelsen (1.1.4), but even today there are resembling cases where people are learnt how to build their own house. The legacy of Egnahemsrörelsen is the ambitions to assist builders in all the building process, and the study circle is just a part of a larger case, Egnahemsfabriken (1.1.2). Another ambition of the case is to use participatory design and put the individuals' needs and focus in the center. Around the world, there are similar cases where participatory design is used. These similarities make the result possible to generalize into saying something about the general process, but also about the uniqueness of doing this in Sweden today.

At the same time the case is not explaining all the parts of organized self-building in Sweden today, instead, it is adding to the theoretical understanding of the concept (Denscombe, 2016, p.100). The researcher (R2) is connected to Egnahemsfabriken has the aim to evaluate if this way of organizing self-building is possible to implement on a large scale in Sweden, therefore this case study is a part of this greater aim to generalize this concept of self-building.

Egnahemsfabriken and the leaders of the study circle is a hub of the movement of self-building in Sweden today. There is a lot of knowledge about self-building in the case, and therefore it is ideal for studying the challenges of the self-builders building process and how organized teaching in self-builder can be done. Therefore, it is valid to say that the research questions are answered by the result, the study measures what it intends to measure. The validity is approved.

4.6 Reliability

The nature of a case study is that it is not possible to re-do with the same result.

The interviewer effect (Esaiasson, 2017, p.276) is a main factor for the reliability of the study. It is a high likelihood that different interviewers would result in different answers to the questions. This is particularly true for this study were I as a researcher (R1) became a part of the social group. This affects reliability negatively.

The same interview guide was used in six interviews, in both the group of participants and the group of leaders. The answer to the same specific question was of the same character, even if they were not the same. This shows that the reliability on re-doing the interviews are on an acceptable level, which adds positively to the reliability.

4.7 Ethics

In this case study four different uncertainties have been considered: *informed consent*, *confidentiality*, *consequences* and *the role of the researcher* (Kvale & Brinkmann, 2014, p.113). In this Chapter these uncertainties are treated.

In or before the interviews the interviewees were asked if they were consenting to:

1. Applying a certain level of confidentiality. If anything would be unclear or seem to harm the interviewee in any way, it would be removed
2. Participating in a research
3. Accepting to record the interviews
4. How the information of the recordings would be used after the interviews.

This consenting was documented in mail correspondence and in the recording of the interviews.

The question of confidentiality has been of great importance. In chapter 4.4 the dilemma on how to acquire high confidentiality and at the same time not introduce any bias into the analyses. The compromise chosen was to divide the interviewees into two groups, participants and leaders, and in a random order give each of them a number: P1, P2, P3 and P4, and L1, L2 and L3. By doing this it is still possible to follow responses from the respective interviewees and at the same time remove all attributes from the individuals except for their respective roles in the group. The role is of importance to understand from what position the interviewees are responding to the questions. More about this in 4.4.

The consequence of to which extent is it possible for me as a researcher (R1) to participate in the study circle without changing the outcome too much has been considered. The solution chosen was that I would participate socially but restrain from sharing opinions in the conversations as far as possible. How to handle sensitive data collected in the interviews was considered. All sensitive data would be reviewed with the research questions in mind with the aim to unfold the complexity of the problem about how to learn to build a house by oneself. Nothing that could create a conflict in the group would be used.

I have been aware of that I in my role as a researcher (R1) may have had an impact on the results due to that I have been involved in the social group and not been able to keep to an observer's distance. In the interviews, I introduced new concepts and understandings and asked reflective questions, which also likely lead to an effect on the research outcome. As a researcher (R1), I carry a piece of baggage of pre-understandings and pre-knowledge, in which I perceive the world. Shortly summarized I carry the glasses of the engineer, the architect, the teacher, and with a social-constructivist view. These understandings impact the way how I perceive the study circle.

4.8 Method Discussion

In this case study, there are six different dimensions or decisions that may have impacted the result. The result may have been different if any of these, described below, would have been changed.

Firstly, the abductive way of performing the research means starting with as few prejudices as possible and later finding out what is of interest. If the research had been made in a deductive way, the theories would already have been decided on and one would mainly look for confirmations. The result would probably turn out more coherent, but at the same time, unforeseen dimensions like the obscurity could be missed. Having a greater pre-understanding of the theories of knowledge in practice is the second dimension that could form the case study differently. A stronger theoretical ground would open new possibilities when making the interview guide, this could lead to a greater understanding of the practice. It is about a balance between knowing too much and thereby missing the unforeseen.

Secondly, by, in the beginning, having a deeper understanding of theories of knowledge in practice, may have formed the essay differently. The stronger theoretical basis may have opened broader options when authoring the interview guide, which may have led to a greater understanding of the practice. However, there should also be balanced to knowing too much and thereby missing the unforeseen.

Thirdly, if taking another viewpoint on how to participate as an observer the result would probably have come out differently. By being a more reserved and less participating observer, a greater distance would have been created, which may have led to some information not becoming accessible. There is a balance between, the bias introduced by going into a social group, in relation to, the expectation of less bias occurring when being an observer with a greater distance.

Fourthly, if the documentation of the observations and interviews were carried out more systematic and with fewer flaws the result may have turned out differently. In the interviews, by being more consequent and summarizing the interviews directly after the interviews, the feeling of the atmosphere and the overall understanding might have been different. In one of the interviews, a technical error, during a telephone interview, made all the result disappear, the result was therefore obtained through an extensive summarize directly after the interview and complemented by the interviewee answering the interview guide questions by writing. This might have affected the possibility to use the result in a meaningful way. If the documentation of the observations had been carried more systematic the result might have been easier to compose and other aspects might have been observed.

For the fifth, learning the theories of methodology could have been initiated at an earlier point in time in relation to starting the project. In this essay, the basic methodology for conducting each part of the research was understood. The essay could have benefited from an earlier review of the theory of methodology which may have led to a more coherent construction of the study and more precise results.

Lastly, the understanding of how effective the study circle and the social context was for the learning of practice would have increased by adding a control group in comparing builders taking part in the study circle with builders not taking part. That would also have opened the question if there are other methods to learn how to build one's own house.

5 RESULT

The result is based on observations of eight of the elven occasions and seven interviews. The results of the observations and the interviews are interweaved, hard to distinguish from each other. The participants of the interviewees are divided into two groups: L leaders and P participants. In the group of leaders, there are two study circle leaders and a researcher (R2). In the group of participants, there are four participants. The interviewees are in the ages from 29–64. One of the interviewees in P is a newcomer. In P there are three men and one woman. In L there is one man and two women. This essay does not examine differences between age, sex and ethnicities, all the interviewees are confidentialized with just a letter: L1, L2, L3, P1, P2, P3 and P4.

The result is connected to the different research questions. In the text below the following abbreviations are used for the different research questions. In the result, the different paragraphs are connected to the different research questions by the abbreviation of the research question fenced by parenthesis. The connection to the questions is both on a concrete level, were answers to the questions are precise, but also on a more diffuse level. For example, in 5.4, one of the participants describe that they wanted to focus more on working alone on the task, than having guest lectures. This implies that the participant wants to be active in their learning, which is something connecting to research question one.

Research question one is called *RQ1: How does the study circle organize an educational process that teach practical knowledge?* The result connected to RQ1 explains how the actual learning of practical knowledge can be done, and how it is implemented in the study circle. Research question two is called *RQ2: How are the methods of participatory design supporting the participants?* The result connected to RQ2 explains the how the methods of participatory design was implemented in the study circle. Research question three is called *RQ3: What local preconditions have been of importance for the implementation of the study circle?* The result connected to RQ3 explains the different preconditions which are important for understanding the case study. Research question four is called *RQ4: What obstacles and challenges are occurring, and how to meet them?* The result connected to RQ4 explains the different kinds of obstacles challenges and occurring in the process of building a house by oneself.

5.1 The Background to the Study Circle

Building a house in Sweden today is something reserved for a few, people with money and with confidence in their competence. The common attitude in Sweden is that one cannot build a house by oneself. Egnahemsfabriken aims to empower people and make them understand that they can build their own house (RQ4).

> *"It is hard to get people without education and experience of building houses to think that they can build their own house. It is a huge barrier for people in Sweden. In the slums of South Africa poor people build their own houses, simple houses, but still, they know that they can build their own houses. Some of the newcomers in Sweden also knows that they can build their own house, maybe they helped their parents to build their house. One objective of the study circle is to empower people, to enlighten them that they are competent to build their own*

house. When someone designs their own house, they create strong bonds, and it becomes easier taking the next step and start to build it. The study circle is aiming to empower the builders" (L2)

Even people with money, who has the possibilities to build their own houses, are struggling to build the house of their dreams. The most houses being built today are ready-to-build houses, which does not fulfil one's dreams (RQ4).

" When building a house today, everything is already decided. Generally, people buy ready-to-build houses. They are not particularly environmentally friendly, not particularly beautiful and do not fulfil one's dream, but they cost a lot" (L3)

Egnahemsfabriken wants to introduce alternative ways for people getting secure housing. Today most housing is distributed on a market where many people, for example; young, old and newcoming, cannot afford a house. Or via a queueing system, that makes people grow old before having a chance to get a house. Instead, Egnahemsfabriken wants to make it possible for people to solve their housing situation by their own labour, but also by favourable synergies in the local society (RQ3).

" This project is about making it possible for groups who are frustrated about their housing situation and want to do something about it through labour" (L1)

" I hope that in the future when reaching a certain age, growing up, moving away from the parents' home, when starting to search for housing, there would be more ways to choose than today. There should be an established way to go, where one builds one's own house together with friends" (L1)

"They try to create synergies. Older people with money but no physical possibilities of building a house gets to meet newcomers with no job and no money, but with time" (P4)

There is no coincidence that Egnahemsfabriken started in Tjörn. Egnahemsfabriken has support from several organizations (1.1.2). There are several dedicated enthusiasts connected to Egnahemsfabriken. On Tjörn there is a closeness which gives the sense of the whole Island being like a small village. In the grocery store, people will always meet someone they know. This encourages close connections between different parts of the society of Tjörn. People engaged in different association are often engaged in more than one, which is an advantage for networking. This makes it possible for a project like Egnahemsfabriken to quickly get wide support from the community. The most important place which laid the groundwork for Egnahemsfabriken is a meeting place called Food and talk, where people just meet, eat and talk (RQ3).

> *"For about three years the meeting place Food and talk have been an important place for cultivating trust. At Food and talk, newcomers get the possibility to find ways to join the society of Tjörn. Other networks and organizations are The Swedish Church of Tjörn, The Study Association of Adult Education, The Building Brigade, The Center of Integration in Tjörn Municipality and The Friends of Agape. Some of the enthusiastic people are involved in more than one of the networks and therefore the connections are even closer"* (L2)

There is a go-ahead spirit in Egnahemsfabriken, people flock around the project, the interest is high and the expectations as well. At the guest lectures, a lot of people join, even though it is quite a complicated commute without a car (RQ3).

> *"I started in the study circle because Egnahemsfabriken seemed exciting"* (P4)

5.2 The Different Roles of the Study Circle

In the study circle, there are people in five different roles: the leaders, the participants, the volunteer architects, the researchers and the outsiders. The leaders have two functions to fill. First of all, they are architects, with expertise about building houses and about the practice, and secondly, they are pedagogues educating the participants in how to build houses. The participants' main role is to learn and advance in their house building process. The volunteer architects have a role mixed between the leader and the participants' roles; they are like semi-leaders. To the participants, they are architects giving advises and assisting in the building process, but, to the leaders, they are learners, learning how to become responsive architects. There are two researchers, one is me (R1) participating and observing the study circle, and the second is a researcher (R2) taking part in creating and evaluating the study circle. The leaders, the participants and I, attended most of the occasions of the study circle. The volunteer architects attended the second half of the study circle, the researcher (R2) connected to the study circle attended the beginning and the end of the study circle, and the outsiders were different people attending at the guest lectures.

The Leaders

An architect is a practitioner with an expertise in issues relating to how to build the house of someone's dreams. It is a practice containing a lot of intuitive knowing and knowledge where the architect just knows what is right and wrong in a specific situation. The architect is also a communicator, who can put thoughts into sketches and drawings, and by this explaining what it is actually going to be like (RQ2).

> *"The architect's practice consists of guiding the builder to their dream house, by using his/her competence in designing. The architect knows what measurements are needed to get a building like a builder wants, for example, if the builder wants a spacious bathroom the architect knows how big a bathroom needs to be to get the feeling of spaciousness. When someone non-professional has put their design on paper or in a model the measurement might turn out to be incorrect. If they were to decide everything by themselves, they would be surprised when they enter their completed house. The architect also has the knowledge of visualizing, in which they can assist the builder in explaining what they want. The architect has knowledge about the cost ratio between ways of construction and choice of materials in relation to which feelings they give. The*

> *architect has knowledge about the building process, how much time different steps take, and knowledge about which experts to consult in different parts of the process"* (L2)

The ambition of the architect's role in Egnahemsfabriken is to be responsive. The architect must set their own ideas and ambitions aside and do their utmost to help the builder reaching their own dream. The genial architect is commonly known as someone very good at creating neat houses out of great visions, but often with no anchoring in the builder's dreams (RQ2).

> *"One has to ask the user what is beautiful, and at the same time, one must ask in a way that gives power to the user. One should not ask in a way where oneself appear crucial to make it happen with the perception that everything will fall. One should all the time try to assist the user so that they feel that they are in charge of taking care. This is something that not all architects have the know how to do. It is a special art of being a co-creating responsive architect and at the same time not give all the power to the builder. The architect should also ensure the process progresses forward"* (L2)

In Egnahemsfabriken, the leader also has the pedagogical role to be supportive of the participants, a mentor who follows the participant through the building process (RQ2).

> *" One needs someone who has knowledge about cost, to hold one's hand through the process, for example a carpenter"* (L3)

> *"The architect has an important role to fill in the study circle. The architect's prime role is to be a mentor to the builder through the complete process, following the builder from the beginning to the end. The role includes to make sure that the builder becomes satisfied with the result and that the house meets the expectations of the builder Without close mentoring there is a risk that something goes wrong, either the builder cannot foresee what the result is going to be like or the builder is meeting different entrepreneur experts stating beliefs and opinions like they are truth, and thereby leading the builder away from the builder's dream and instead build something in the entrepreneur's favour"* (L2)

The leader must stand beside the participant to assist with their expertise, to help the participant to orientate in the process and to choose what is of importance (RQ1).

> *" Pedagogical thinking: Stand aside and look out, and then help with taking steps, not jumping too far, jumping here and there, back and forth"* (P3)

> *" I need a clear path, expert knowledge to orientate myself. I cannot cast a slab; I cannot lay a road. I need to be in contact with people in the field: thoughts and questions"* (P2)

> *" Others can help me select, being here now, creating a type of structure, processes, starting from scratch"* (P3)

The profession of architects is not only seen as something good, but also as something that may stand in the way of the participant. The position is such that the architect will never be able to really understand and express the participant's thoughts and dreams. Instead of letting the architect be in charge of the designing, the participant has to learn to use the tools that are needed and will thereby come closer to the dreams (RQ2).

> *"In the future there is no need for architects, it is a profession which is more obstructive than doing good. Ordinary people are generally better at designing. The difference is that the architects have the power over the tools, especially the computer programs, but in the future, there will be programs which for example can add wall thickness and give direct feedback from an algorithm if a door is placed in a way so that it cannot be opened. When the tools are becoming easy to use, the amateurs will be secure in using them in the same way as they have done in media production and journalism"* (L1)

The Participants

The role of the participants is to learn how to build a house both in theory and in practice. The different participants had different prerequisites before starting the process. To retain confidentiality, the participants are in this paragraph named A, B, C and D in a random order, not corresponding to P1, P2, P3 and P4. The participants position in the building process is constantly changing, this description is from time when the interviews were carried out and the study circle were going toward its end. A and B already had a plot ready and just needed a plan and a building permit to start building. C was going to build on a family member's plot and D did not have a plot. A had more experience of house building than the others and had already built a house once before. A, C and D were going to build houses smaller than 35 square meters and B were going to build a house of 80 plus 80 square meters. C's plot was a in a conservation area, and other building rules applies there. The observations showed that the process of A proceeded fast and safe, with a date set for the construction to begin which was just a few weeks after the study circle's end. B, D and D did not have the same pace and got stuck with different obstacles and challenges. B had too much to take into consideration and got stuck in the process of contacting different experts about how to do different parts of the house. C got stuck in the process of getting permit. D got stuck because of several reasons where the lack of plot and the confusion about how to lay a new road became major issues (RQ4).

Table 5.1 A table describing the different circumstances of the participants' process, if they are stuck on something and what the difficulties are.

	A	B	C	D
Plot	Yes	Yes	Families plot	No
Built a house before	Yes	No	No	No
Small house	Yes	No	Yes	Yes
Conservation area	No	No	Yes	No
Obscurity	No	Yes	Yes	Yes
Stuck on	Not stuck	Consulting experts	Building permit	Plot and road

The Volunteer Architects

The volunteer architects came into the study circle after a few occasions. The volunteer architects were newly graduated architects, since one or two years ago, who was to be educated in the methods of participatory design. Their role was to be somewhere between the participant and the leader, like a semi-leader. They assisted the participant in their building process, in the role of architects, and made drawings for the participants. At the same time, they were learning how to become responsive architects, with the leaders as their teachers and mentors. There were two different opinions about the volunteer architects, either that they should be more involved in the process and more educated in participatory design or, that there was a risk that the participant relied too much on someone else to drive their process forward (RQ2).

> *" Unbelievable rewarding using volunteer architects. Still they need more education and more time separately with the builder and with the study circle leader"* (L3)

> *" It is easy becoming dependent on the volunteer architect to move forward, even with quite small changes"* (L1)

The cooperation between the participants and the volunteer architects went well but was sometimes creating a bit of frustration when the participant got too dependent on the volunteer architect (RQ2).

> *" The volunteer architects have to be available. It is hard to have social contact with someone that is not present"* (P1)

The general opinion was that the volunteer architects were a good feature. The main reason for this was that all the participants got a set of drawings made by the volunteer architect. The price of the study circle is much lower than hiring a professional architect making the drawings, and therefore motivates the use of volunteer architects (RQ2).

The Researchers and the Outsiders

I, as a researcher (R1) was participating in the study circle as a member of the group but at the same time an observer. In my presence, I was taking a lot of notes and listened carefully. The researcher (R2), connected to the study circle, attended the study circle in the beginning and in the end. At the end of the circle, the researcher (R2) performed the evaluation. In this sense, the researcher (R2) was, on this occasion, partly a leader as well. The presence of the researchers (R2) is something enriching because the participants get acquainted to the researchers (R2) they are working with and see them as an extension of the social group (RQ3).

The outsiders were different people attending the presentations of the guest lectures. Sometimes as many as 15 extra people were attending a lecture, sometimes only five. This presence of outsiders seems to have affected the group in two ways. Firstly, they became an extended network with a lot of people interested in the same issues and secondly, the inner group of the study circle was strengthened partially because of the feeling of *us and them* (RQ3).

5.3 Learning how to Build a House

Learning to build a house means that one must understand what obstacles and challenges that lay ahead, and one must go through a learning process achieving knowledge needed for the task.

Structural Obstacles

Building a house by oneself today brings some structural obstacles which are hard to tackle on a personal level. The obstacles are first and foremost getting a bank loan and obtaining a plot, but one also need to learn about and understand laws, taxes and insurances. The laws today are written in such a way as to fit a professional building process and make it difficult for an amateur to build their own house. When it comes to taxes, there is uncertainty about how to classify the labour, which is creating value without any payment. The laws about working environment plans and basic insurance are opposing the possibilities of getting assistance from friends. Building a house by oneself today means building without being insured. These are structural obstacles which Egnahemsfabriken aims to solve (RQ4).

> *" If you build by yourself, you're the developer, otherwise, an entrepreneur is the developer. It is illegal helping out, it is an insurance issue"* (L3)

> *" Obstacles are structural and can be removed"* (L1)

Historically, in the Egnahemsrörelsen these obstacles were solved with a lot of innovative solutions (1.1.4) (RQ4).

> *" Loans, plot, laws, taxes and insurance. These obstacles were solved in Egnahemsrörelsen"* (L1)

Within Egnahemsfabriken they are visionary and today they see possible solutions to these obstacles. One example is how to solve the obstacle of environment plans (RQ4):

> *"A solution to some of the obstacles is by a professionally organized self-building with introduced educations for every element, longer educations for some elements and special safety agents for this kind of process"* (L1)

Personal Challenges

There are also a lot of personal challenges when building a house by oneself. Everyone has their own challenges depending on previous experiences, knowledge, abilities, network and other resources (RQ4).

> *" How to buy a plot? What applications to do? Where do I get a loan? There is plenty of everything"* (P3)

> *" It is hard to become a builder with limited experience and not being so handy"* (P4)

The problems the participants are trying to solve are large and demanding, and the participants need different kinds of knowledge, both practical and theoretical, and as one interviewee put it (RQ4):

> *" The problem has two sides, one logical engineering side, and one softer architectural side"* (P4)

> *" The design process for small houses is quite large and quite demanding. It is better to start with a small house and then build another one. It is possible to live quite small"* (L3)

Egnahemsfabriken tries to create an infrastructure in assisting people with their personal challenges. At Egnahemsfabriken there is a workshop with tools needed for building houses, an area to build houses at the site, carpenter helping with the construction and there is a lot of help to get with the planning of the building process. The study circle is one tool Egnahemsfabriken uses in helping people build their own house (RQ4).

> *"At Egnahemsfabriken there is a structure to assist the builders in their process"* (P3)

> *"Egnahemsfabriken tries to solve all problems of the building process, even the matter of time, by hired work assisting"* (P4)

> *"The aim with the study circle is that the builders get a complete design of their house, a drawing, but not a building permit document. They should feel that they are competent to build their own house and that they are empowered, and to have their financing ready. The idea with the study circle is to gather people facing the similar challenges of the building process and at the same time letting them prepare together"* (L2)

On a more personal level, every interviewee points out the need to have support from other people and to not be standing alone (RQ4).

> *" To have people behind oneself, support and commitment"* (P1)

To even get into the process requires brave, or naive, people. Building a house is a complicated process, and the first step is to dare to start (RQ4).

> *" One has to be able to get into things which are impossible. I would never have built a house if I was not naive for what it meant"* (L1)

The Obscurity of the Process

One of the largest personal challenges is the obscurity. When being in the process of building a house, it is likely that the process will become obscure. Each guest lecturer presenting their own experience of building houses gave concrete examples of how the obscurity of the process was a large part of their own development. It is hard to foresee every aspect of a project, and in a house building process, there are very many different aspects which are unknown. Some of these aspects might become huge problems, for example, one guest lecturer explains how an intention to save the old roof tiles became a project which took in demand months of work. All the guest lectures were consistency showing that the building process was very hard to foresee (RQ4).

> *" Obscurity is to not understand what lies ahead and what it will cost"* (P1)

> *" It is important to get control of what needs to be done, and in which order. It is quite easy to start in the wrong end and work too much on wrong things"* (P4)

> *" I do not know when I am going to finish, the end is indescribably far away, but not infinite"* (P2)

The uncertainty of the obscure process made the interviewees feeling paralyzed, stressed, frustrated and disempowered. However, the obscurity of the process also opens for new possibilities. When being in an obscure state different options are still open and therefore the obscure state is a state of creativity (RQ4).

> *" The possibility to act intuitively on a feeling"* (P2)

It is of importance that the obscurity does not take over. There are two ways of dealing with the obscurity, either one tries to take control over everything, or one tries to accept the obscurity. It is hard to balance between the two positions (RQ4).

> *" Using acceptance to handle the impossible to get an overview"* (L1)

> *"Handling the obscurity is a balance between acceptance and learned helplessness, to feel a belief in the future is not coming spontaneously, one has to work for it, against the obscurity"* (P2)

The experience of have been in the obscurity of a similar problem makes it easier to withstand the difficulties the obscurity brings (RQ4).

> *" It is a security that it went well before, which makes it possible for me to get into things without considering"* (L1)

One of the participants explains that a calming factor is to not be dependent or responsible for the house. In a sharp situation makes everything more serious, and the obscurity is thereby becoming greater, and harder to handle (RQ4).

> *" It is reassuring that I am not economically dependent or responsible. I am building an extra house and someone else is paying"* (P4)

The Ideas of Learning

In the study circle, there are three different learning approaches, learning-by-doing, the dialogue and the reflection. Together they build up the participants knowledge and knowledge of the practice of building. Learning-by-doing is one of the main thoughts of the study circle. It means that the participants are truly understanding something when it is carried out (RQ1).

> *"Learning-by-doing is one of the main ideas behind the study circle. When one creates something, one also understands it. Doing and understanding can be in different forms, for example: learning-by-building and learning-by-designing"* (L2)

A study circle is a place for dialogue. The reason for using a study circle as a way of pedagogically organizing the learning is to make the dialogue central. When learning in a dialogue, everyone's experience and knowledge can be considered, and the support within the group can become great (RQ1).

> *" The form of the study circle is good for learning together, reflecting together, both practical and theoretical"* (L1)

> *"One asks someone, and it becomes something cohesive. If several people are thinking that something is hard, one can find a community, if one is in a group where everyone except oneself has full control, it is harder not having an overview"* (L3)

> *" The need to discuss with others in similar situations"* (P2)

Another reason for using the dialogue as a pedagogical tool is that the design process has the characteristics of a dialogical process. Designing by oneself or together with others, the design process is going back and forth between different positions, just like in dialogue (RQ1).

> *" The drawing process is like a dialogue, one share ideas, present to the group who helps making the choices. One support each other, and together a collective intelligence arises"* (L3)

The way the dialogue is used not only between people, but also within the mind of one person is what we call reflection. Reflection is an important part of the study circle. Both the leaders and the participants need to reflect upon what is happening in the study circle, both on design matters and on the process of learning in a group (RQ1).

> *" Introspection and self-reflection. I must be able to sleep on the nights"* (P2)

The Views on Participatory Design in the Study Circle

One main thought with the study circle was to use participatory design (2.1) as a method of moving the participant forward in their building process. The participatory design is a tool that keeps the process moving forward at a steady state. In the study circle, the participatory design used was built up by the methods of Livingstone (2.1.2) and The Pattern Language (2.1.3) (RQ2).

There are two different opinions on how to relate to the participation of the architects. The first view is that by having an architect closely collaborating with the participants, who also makes drawings and sketches for the participant, sharing their thoughts and insights with the participant, the participants are going to finish the project faster (RQ2).

> *" Livingston's ideas about 'lending the mind' fits me well, to have very close contact with the people how are going to live in the house. Lending my knowledge, and drawing from their dreams and thoughts"* (L3)

The other view is that when the architects are in charge of the tools of designing it is very easy to become dependent on the architect. The participant becomes, dependent on the architect to do their work in time, and dependent on the architect to understand the participants' inner thoughts, which is never going to happen. This view does not mean that the architect should be absent, only that the responsibility of creating is shifted from the architect to the participant (RQ2).

> *" The study circle is designed by architects for the architects to act as facilitators, so that the architects can use their unique competence to find and document solutions. This makes the architects absolutely necessary. How would it be if the participants got the tools for themselves?"* (L1)

The first view also points out that since the participants lack tools and knowledge, such as making drawings and formulating their ideas on paper, it is more likely that the participant are going to reach their dreams through the work of a professional (RQ2).

> *" We have discussed if the participants should get the tools of drawing, but it is not necessary to draw by oneself, it is more important that it becomes as one wants it"* (L3)

When looking historically at the processes of self-building, it is possible to see how different approaches resulted in different levels of reaching a participant's own dream. In more structured building processes for amateurs it is difficult to let the participant have the power to design their own house. Instead the focus is on finishing the house's and this happened both in Cuba and in Egnahemsrörelsen (RQ2).

> *"The idea of designing one's own house is right in time. In Cuba, they had building brigades where one built a house which someone else had designed, and when one finished, one got another house than the house one built. An unpersonal way of self-building. In Egnahemsrörelsen one did not design by oneself, but one built one's own house and were therefore a bit closer in creating the house by oneself. The houses were designed by educated people who know how to best plan and build. It was tough work building the houses, and one was*

> *not in charge, one was just a builder taking orders from a foreman. The degree of participation in the design was very low. The ground structure was alike, but with different finishes. Egnahemsfabriken has a basic design of a house called Home One[13]. If there was not for the participatory design, all the houses built through Egnahemsfabriken would likely be variations of Home One. But thanks to the co-creating design method the houses turned out unique from each other, only one house is alike Home One"* (L2)

In the examples from Cuba and Egnahemsrörelsen, there was no participation by participants. This led to finished houses, which might have been the primary goal. In the study circle, the finished design in every design is differing from each other, which shows that the participants' dream is more taken into account, but only the future can tell if they are going to finish their houses (RQ2).

5.4 The Implementation of the Study Circle

To understand how the study circle arrangements effected the participants it is important to understand the expectations of the participants and what happened during implementation.

The Expectations on the Study Circle

Before study circle started there were high expectations on the study circle. During the first occasions, the energy in the room was high, almost like something one could touch with bare hands. No-one really understood what they were going to learn, only that they would know how to design and build a house at the end of the study circle. It was like learning the mystery of house building, like entering a magical world and becoming a wizard, a wizard of housing (RQ3).

There was a large interest from people outside from the study circle to attend the guest lectures with people travelling a long way to attend. The guest lecturers travelled from different parts of Sweden. The overall feeling was that something important was going to happen (RQ3).

The expectations on the study circle were many and meeting them all were difficult. After a few occasions, it became clear that no magic was going to happen, and everyone started to look for knowledge that they understood that they would need to know, but felt they need to feel competent and knowing what to do next. In summary, everyone ended-up in an unpleasant state of obscurity. All the participants requested more firm knowledge, like for example how to construct a roof? Or, what groundwork is needed (RQ3).

> *" I had expected more in practice"* (P4)

[13] The original name: *HemEtt* (Swedish)

The Arrangement of the Study Circle

The arrangement of the study circle consisted primarily of three different parts, the guest lectures, a dialogue about the lectures, and a dialogue between the participants and the volunteer architects.

The most common part were the guest lectures. These often took two out of three hours of every occasion. The guest lecturers introduced some knowledge for the participants, but most of the time they were mainly inspiring. One theme of all the lecturers was that they were all self-builders, trying to build their own house. None of the lecturers had finished their house yet, some had come far, but others were just in the early phase of their constructions. They all had histories about how small issues had grown to out of proportions. This showed how obscure the building process can be. The participants got affected by the lectures in different ways, either they got a bit scared or they grow a substantial respect for the challenge (RQ1).

> *" I feel that one should try things even if that is not the purpose, for example experiment with different materials. I have felt 'god what a pain', but on the other side it is good I am just building a small house"* (P3)

> *" In total, the lectures have given me a healthy respect for the challenge"* (P4)

Another issue with the guest lectures was the timing of the content in relation to what activities the participants were exploring at the time in the study circle. For example, while the participants were dealing with permits for building and how to do the groundwork, the lecture presented how to colour one's house. Instead of inspiring how to eventually colour one's house, this led to frustration because more urgent matters could have been treated with at the moment (RQ1).

> *" Things have to come in the right order. The lecture about colour came far too early"* (P1)

> *" The lectures were very good and not so good. Inspiring, but hard to connect to the study circle"* (L3)

The occasions of the study circle were focusing more on the guest lectures than on the actual task, the guest lectures almost took over the study circle (RQ1).

> *" I prefer the occasions where we are alone and are focusing on the assignment"* (P2)

The guest lectures became a large part of the study circle. This happened because Egnahemsfabriken is dependent on the support from the local society. By having guest lectures, they aimed to inspire the participants, increase their knowledge. At the same time people outside the study circle were invited to take part in the study circle thereby cultivating the interest for the Egnahemsfabriken in the local society (RQ3).

> *"When forming the study circle, they had to relate to the society on Tjörn: keeping up the local interest, which is what Egnahemsfabriken is built on. This is the reason why guest lectures had such a large place in the study circle – to invite people from the outside"* (L2)

At every occasion there was discussion after the guest lectures. The guest lectures were a suitable entry into a dialogue. The dialogues were often about matters of good and bad, for example (RQ2):

> *How important is the kitchen for the participants?*
>
> *How is the kitchen going to be used?*
>
> *What is a good design of a kitchen?*

Question of this kind are of architectural character and common questions for architects to deal with (RQ1).

> *" This study circle has been about a building process softer architectural part"* (P4)

Architectural knowledge is not always firm and easy to grasp, it is hard to know if one is learning anything at all. Because of the obscurity of the task, the participants tried to obtain control. In this case more concrete knowledge is something adding to the feeling of control. Therefore, the content of the study circle was criticized (RQ1).

> *" I cannot see any meaning of learning theory and history. We build houses today, not for thousands of years ago"* (P1)
>
> *" The content needs to change"* (P3)

Beside the guest lectures and the dialogues, the study circle consisted of the collaboration between the participants and the volunteer architects. These collaborations were mostly happening in the interspace, during the breaks, or between the occasions (RQ3).

5.5 Empowerment of the Participants

One could assume that all participants in the study circle were motivated at the start. One of the main objectives of the study circle was to maintain this motivation or even increase the momentum. This is not easily done with such an obscure process. One great source for empowerment is the unity of the group (RQ1).

> *"The group has been very good. A secure group, very allowing, they supported each other. No one tried to take leadership, which is something positive"* (L3)
>
> *"There is great power in the group, the participants have empowered each other. I knew this was going to happen, but I never understood that the group belonging would be as great as it became"* (L2)

One empowering function of the study circle was that it was recurring every week (RQ1).

> *"The study circle has made me keep going, every Monday has been a reminder of the construction, a push forward in the process. It has led to that I am signing a building contract right now"* (P3)

The study circle also gave the participants a larger insight into what is needed to build a house. These insights were both empowering and disempowering (RQ1).

> *"The study circle has made it clearer what I need to come forward with. It has given me reflection. Earlier I was naive about the project, now I get more respect. I have realized that some parts I am not going to do by myself, being realistic. An insight into the problem about it is no simple challenge"* (P4)

> *" I am frustrated about not coming further, the charted path just gets longer and longer, more elements keep appearing. I have been naive, but when the project grows a lot, the trouble and the time has grown, and I have lost the momentum"* (P2)

The study circle also functioned as a support; this support made it possible for some participants to relax in their feeling of obscurity (RQ1).

> *" The study circle brought a lot of positive things, like a lot of support, sounding board, being listened to, treated personally. Quite good individually, small course, four participants with two leaders, very valuable"* (P4)

> *" Now are we getting started, a lot of decisions, I am taking them gradually, I am not so worried that new things will appear"* (P3)

6 DISCUSSION

How to acquire knowledge and abilities, and uphold motivation, to be able to go through the preparation phase of a self-building process, supported by participatory design?

The discussion explores how a pedagogical effort, based on participatory design, can be organized and carried through in order to provide people with knowledge and abilities, and uphold motivation, to prepare themselves for a self-building project. This is the main research question of the essay. Chapter 6.1-6.5 are connected to the forth research question: *What obstacles and challenges are occurring, and how to meet them?* Chapter 6.6 is connected to the first research question: *How does the study circle organize an educational process that teach practical knowledge?* Chapter 6.7 & 6.8 are connected to the second research question: *How are the methods of participatory design supporting the participants?* Chapter 6.9 is connected to the third research question: *What local preconditions have been of importance for the implementation of the study circle?*

6.1 The Dual Goal

The title of this master thesis, *building a house, and reaching a dream*, implies that it is not enough to just build a house as the builder also wants it to be the house of their dreams. In 5.1 one of the leaders expresses the difficulties of this.

It is possible to lose track of one's dreams while building a house and end up with something different from the dreams. At the same time, great dreams can become obstacles preventing one from finishing the house. In neither of these cases, will the builder reach the goal of building a house, nor build the house of their dreams. The text below explores the pedagogical needs and dilemmas of reaching these two goals and from now on this will be referred to *the dual goal*.

6.2 The Character of the Problem

There are several obstacles that have to be overcome in order to reach the dual goal. Some of them are of a structural character and difficult to deal with on a personal level. Structural difficulties of importance such as finance, plot, laws, building responsibilities, insurance, tax on free labour and attitude are explained in 5.1 and 5.3. If you do not have money and a plot you cannot build. Today there are no easy ways to overcome this. In the era of Egnahemsrörelsen (1.4 & 5.1) they solved these obstacles by establishing new kinds of loans and possibilities for long time rental of plots. When it comes to bureaucracy, there could be difficulties since this involves the Swedish legal framework, which on a whole is complicated. It is also adapted to attend to professional builders instead of amateurs building houses by themselves. If someone is building their own house and wants help from friends and family, they should have in mind that labour creating value without being paid and taxed, is not appropriate according to The Swedish Tax Agency. They will need to have building insurance; the demand is that they are educated within the field and there are regulations concerning laws of the working environment. Attitudes (5.1) about building houses by oneself in Sweden today is that it is not possible, people do not know they can build a house by themselves, the challenge is too great. In some other countries, people know they can build houses by themselves, people living in slums know it, some of the newcomers know it. These different kinds of structural difficulties can be changed through political action, but some of them can be tackled by people getting

together and jointly try to solve them, like in Egnahemsfabriken. To overcome the biased attitudes against building one's own house, the activities of Egnahemsfabriken's can stand as a model to empower people. However, this essay will hereinafter explore personal difficulties, the difficulties individuals or small groups will meet going through the process.

The greatest challenge on a personal level (5.3) is to orientate oneself in the building process. A building process is very complex, especially for someone without experience of such a process. In 5.3, one of the participants express the need for practical experience, and one of the leaders explains that the process of building small houses is complex. One has to know, what kind of knowledge one must acquire, which experts to consult, the different steps of the building process, when to build and in which order to build, which is explained in (5.2). The big problem with learning all this is that there are many different beliefs about how to do things. There are countless information and a lot of decisions to make, and every decision lead to new conditions and new beliefs. The complexity of orientating in this is best described as obscurity.

Obscurity (2.3) is when one is far away from having an overview of what to do and how to do it, as the interviewees express in 5.3. I saw the obscurity in the guest lectures, in the arrangement of the study circle and in the actions of the participants. This obscurity was confirmed in the interviews (5.3). It is a state of mind connected to personal limitations like confusion, frustration, stress, disappointment, powerlessness, feeling paralysis, panic and fear (5.3). Habermas term *the new obscurity* (2.3) introduced a way of understanding that it is harder to get an overview today, then it was yesterday. This is a symptom of the modern times. In all of society everything is getting specialized, and with the increasing specialization, new obscuirity are born. Molander (2.3) suggests that this obscure world will break down anyone trying to get clarity and, instead, we must accept the obscurity. The interviewees confirm this challenge, it is a subtle balance between accepting the obscurity and trying to get clarity. One of the participants (5.3) expresses this as it is hard to know where to start. The need for clarity is immediate.

6.3 The House Dream of Today and Responsibilities

In today's modern world, every aspect of life is individualistic; everyone is to fulfil their unique personal dream. To reach one´s dream house of today, regardless if it is an old renovated 19th-century cottage or something newly built, is reaching the dual goal with emphasize on the importance of the personal unique dream.

Today, only wealthy people can afford to build a house, and in many cases, not even wealthy people will reach their dream house since a lot of houses built today are of pre-fabricated. These houses are expensive, but are not dream houses, as one of the leaders explains in 5.1.

Reaching both the house dream of today and dual goal also includes strict personal responsibilities. One cannot count on help from the society or from friends. Dreams are tightly connected with responsibilities. The combination of the large freedom of choice with strict personal responsibilities can easily lead to a feeling of obscurity. As Habermas suggested in 2.3, the obscurity of the modern world is getting bigger and bigger.

In the era of Egnahemsrörelsen, the thoughts were different. As part of a collective, one only had small possibilities to affect how one's house would turn out. Someone else, an expert, decided how it should look. At the same time, this was effective and there was a collective

responsibility since no one built the house by themselves. When the builder arrived at the worksite, there were other builders and a foreman there. There was an infrastructure which helped people with the different problems that could occur, for instance if someone became sick (5.3).

The aim of Egnahemsfabriken is to create solutions and facilitate for people dealing with the house dream and reaching the dual goal. One of the leaders calls their process 2.0 because one both make the drawings and builds by oneself (5.1). One interviewee explains how there is a structure to assist the builders (5.1) and another interviewee tells how Egnahemsfabriken tries to find synergies in the local society, thereby meeting the difficulties of the personal responsibilities (5.1). One of the leaders says that if it were not for the focus on each of the builder's personal dreams, all the projects would probably turn out the same, as in the era of Egnahemsrörelsen (5.3).

6.4 The Preconditions of the Builders

Deciding to build one's own house is like begging for obscurity, one creates oneself a big problem. In 5.3 the participants tell how this makes them hindered in different ways. It is almost impossible to be prepared, the interviewees tell (5.5) that it is easy to be naive to the challenge, which also is a presumption from the beginning as one of the leaders says (5.3). If one understands how much it is to do that one has no understanding of then it is hard not to be scared. The naivety is one of the reasons for why people do this, and at the same time the attitudes of building houses, as explained in 5.1, makes it impossible for most people to even consider building their own house. So, at the same time as one must be insightful and understand that one can build a house by oneself, one also needs to be naive. These are the premises to start to build a house by oneself in this obscure modern world. One of the participants expressed that the participant would not turn to Egnahemsfabriken if the participant knew how to build a house (5.1). This supports the premise of being both insightful and naive at the same time.

The main power of the study circle is that it is a group. The interviewees (5.5) thought this would have a great effect but could not foresee how strong the power of the fellowship would become. Cognitively we are constructed to be socialized into groups, which leads into social practice. We share knowledge and experiences with each other to a point where they become a collective possession (2.4). Thus, the structure of the study circle will become the ideal learning place with its different people, in different roles and knowledge and experience from different areas. In the study circle the participants had different experiences, for example one of the participants had already built a house (5.3). This experience created different synergies in the group: the participant was ahead of the other participants into the process, the participant could share knowledge and experience with the group, the participant could function as a role model, which showed its actual possible building one's own house. The differences in between participants, and between participants and leaders, created a strong drive. In 5.3 the interviewees express how powerful the group had become.

6.5 Reaching the Dual Goal

To reach the dual goal requires the participant to deal with their obscurity. The foremost to do is to have a feeling of control (5.3). Getting control can be done in two different ways: getting clarity and accepting the obscurity (5.3). By getting clarity one must achieve knowledge in different forms, this can be very time consuming, especially when one does not know what knowledge to achieve. By accepting the obscurity, one will calm down, but at the same time, one needs a momentum forward. The solution to this is to work on both fronts at the same time. The Achilles heel of getting forward is the feeling of absence of control, this can kill any momentum. To get closer to the dual goal one must in parallel obtain knowledge and put trust in the experts, supporting the process (2.2.7 & 2.2.8). In doing this one has to understand knowledge is achieved, and to use the power of the experts. This must be an ongoing relationship through the whole process.

6.6 Achieving Practical Knowledge

As seen in chapter 2, achieving practical knowledge consists of several dimensions. In this discussion, eight dimensions will be covered: the social context, the dialogical process, practice versus theory, learning-by-doing, ongoing knowledge, valuation, faith and, how it is important both understanding the parts and whole of something, like when building a house, understanding both the details and the overall planning.

Being part of the social practice is of importance since humans cognitively are learning through a socializing process (2.2.6) and because learning the language of practice has a great impact on what we can understand and which thoughts that can be formed (2.2.5). In 5.3, the interviewees express how learning occurs in communities, facing a problem together unites the group, and in 5.2 and 5.3, how important the community has been in providing a sense of security. When being in a social practice one will learn from different examples, pictures, interpretations and acting (2.2.1 & 5.3). A bank of apparent knowledge complemented by tacit knowledge (2.2.1) is slowly built up. It is a subtle process which often only can be observed after a while, for example the intuitive knowledge of which colour fits best together.

Processing examples, pictures, interpretations and acting into knowledge is done through a dialogical process. This process is both occurring between people and within people, which is called dialogue and reflection (2.2.3). In 5.3 the process of making a drawing is compared to a dialogue between the participant and the architect. The core of the dialogue is the ability of the sides to reciprocate, which is seen in 2.2.3 and 5.3. The dialogical way combined with the language of practice is needed to form the thoughts needed, and thereby, reflect. In 5.3 one of the interviewees is pointing out the importance of self-observation and self-reflection. This will turn the participant into what Schön (2.2.3) calls a reflective practitioner.

In practice, it is not possible to separate practical knowledge and theoretical knowledge. The learner must become a part of a collective system of knowledge (2.2.4). The collective system of knowledge of practice is existing in the social context and in the language, which is another reason why they are of such importance. In 5.3 an interview describes how a dialogical process between people merges into collective intelligence. Being part of a social practice is to become socialized into the traditions of the practice, and thereby becoming a part of the collective system of knowledge of the practice.

In order to achieve the needed practical and theoretical knowledge, one has to be active and attentive (2.2.4) when coming across examples, pictures, interpretations and acting. This is express in 5.3 with the words associated with Dewey, as that applied knowledge is achieved through learning-by-doing. Parallel, with the active and attentive achieving of knowledge, the learner begins their dialogical processes, developing their knowledge (2.2.8). This is what Molander calls an attentive and learning practitioner.

To start achieving knowledge one must understand the importance of pre-understanding and that one can only speak about knowledge over time (2.2.4). In 5.5 one participant describe that the reason why it is going so well is partly that the participant had built a house before, and therefore there was a large pre-understanding. The other participants did not have the same pre-understanding which is also one of the reasons why they had not come as far in their projects (5.2). In 5.4 the interviewees explain that they have not got the knowledge they need in the study circle. Understanding this from the perspective of time, they have built apparent and tacit knowledge, which they cannot see now, only in the future will they be able to look back and understand what they learnt.

Becoming a practitioner means acquiring a knowledge about the small parts and the greater whole, and the relation between them. It is a parallel process, where it is impossible to distinguish one from another. In 5.3, one of the participants expresses the difficulty of doing this, and one of the leaders express the need for understanding that one has to know about them both. The boat builder Gösta (2.2.2) is a typical example of an expert knowing about parts and wholes.

Being in a social practice one will acquire a skill of evaluating what is good and bad, or at least, what is less good and what is better (2.2.4). Practicing something is the art of deciding what to do based on knowledge from the practice, constantly weighting pros against cons. For example, an architect knows how to make a bathroom feel spacious (5.2), which is a complex process of weighting different parameters against each other. The Pattern Language, used in the study circle, also includes a conviction of what is right and wrong in different design situations (2.1.3).

A presumption to even begin achieving knowledge is to have faith. One needs to believe in what one is trying to learn, and one needs to have faith in the teacher (2.2.4). To have faith is closely connected to self-confidence and what keep us going. In 5.3 one of the leaders express that the most important thing to have is the will to do.

Putting all this together and learning the ways of practice, is an art, it is a way of knowing one’s way around (2.2.2)

6.7 Experts, Trust and Responsiveness

The society today is extremely complex, which makes it necessary to rely on experts (2.3). By being naive, as stated in 6.4, one is going to be startled when facing all the unforeseen challenges. In 5.2 the interviewees express their frustration about not coming closer to the end, instead the path forward feels longer and longer. The interviewees feel dependent on others, for example, the government agencies (5.4).

So, where in this obscure and huge process should one start to reach the dual goal? The solution is trust. One must rely on experts or at least on the experts' knowledge (2.8), which is shown in 5.2. The pedagogue's role is to help the participant to orientate, sort and value. In this way the expert can guide a naive participant through the process, helping them through the obscurity (5.2).

To have a healthy learning process, the expert must be responsive in relation to the assignment, the expert should not appear crucial for something to happen (5.2 & 5.3). Livingston (2.1.2) and the interviewees (5.3) points out this as a primary presumption to reach the dual goal. Without responsiveness, the finished house will probably become the expert's realization and not the participant's own dream.

Different experts got different apparent knowledge and different tacit knowledge. There is a benefit in surrounding oneself with different experts. Having an expert by one's side is also of great importance when meeting other experts, for instance if the participant needs to consult someone regarding a specific detail of the house, like the foundation. Because different experts have different beliefs, one needs someone with knowledge in the area to determine what is relevant and what is not. Here one needs an expert that one is trusting. In 5.2 it is pointed out that different experts can be in charge of the process, the important part is that the expert is good at overall understanding. In a house building process, it could be an architect, an engineer, a carpenter or someone else with an overall understanding of the building process (5.2).

6.8 The Need of Participation

Trusting an expert means giving up some of one's own control, interviewees tell in 5.3.

Egnahemsfabriken is using an idea from Livingston (2.1.1 & 5.3) about participatory design. This means that in contrast to the ordinary building process, where the experts are in charge and the user only gets to decide a little, the participant is far more involved in the process. The advantage to build with experts, instead of the participant doing it all by themselves, is due to the process being so complex, and as stated in the interviewees, it is likely that the house will not be finished. For example, it is easy to lose one's budget (5.2). On the other hand, leaving most of the decisions to an expert might lower the possibility of reaching the house of one's dream. The dual goal is clearly complex.

When cooperating with an expert, the participant lowers their participation (5.2), and thereby loses control of the result. Even if the expert wants to, it is impossible to look into the mind of the participant and things are always going to be lost in the communication. Because the expert has more influence and knowledge than the participant, it is also hard for the participant to stand up for them self in front of the expert. If the expert is convinced of a belief, which may not be the only belief existing, it is difficult for the participant to come up with something different. The participant might move further and further away from their dream house, and in the end the house standing there is not reaching the dual goal. One of the leaders explains that the participants can get dependent on the architect (5.3).

This is not the only way to understand what participation does with the participant's process. As the interviewees tell in 5.2, people inexperienced with designing might end up doing mistakes which are impossible to correct, like building a kitchen that is too small. Learning to design is a complex knowledge and it is impossible to quickly explain how to think. People are educated for many years and practice even longer to become skilled designers. So, maybe

it is when there is no expert involved that the participant does not reach the dual goal, either the dream takes overhand and the house is never finished, or the house is finished, but the result is not as in the dream. In a close dialogue between the expert and participants, a design close to the dreams can come true (2.1.1). This is the way of Livingston and what is tried in the study circle.

This degree of participation is of importance. If the expert is responsive the collaboration could lead to results reaching the dual goal, but the expert must be present and available, as one interviewee points out in 5.2. Since the participant put trust in the expert and therefore let go of their checking needs, it is going to hit even harder if the expert cannot be there. The participant will lose a lot of empowerment (5.5).

Stating that a participative process is of importance, creates two different ways of looking on how to relate to the process. The first way is to see the expert as assistance, leaving the participant to do all the elements by themselves, but assisting with knowledge and criticism (5.2 & 5.3). The second way of seeing the participation is to see the expert as someone who will do some of the work, but in close collaboration with the participant, for example an architect making a drawing for a participant. There are different opinions about this. The first is that the study circle is developed to fit the architects, and the second is that an architect is a tool for reaching the dual goal (5.2). The importance in this is for the participant to trust the expert, and for the expert to be responsive.

6.9 The Study Circle in Practice

Egnahemsfabriken has many different ambitions (1.2), the core is the ambition to give alternative ways to find a living on today's housing market. This is achieved through the aim to create an infrastructure as a way of organizing self-builders. The study circle is one part of this project. The goal with the study circle is for the participants, to reach the dual goal, and for Egnahemsfabriken to assist the participants in reaching the dual goal (5.1).

According to the discussion one must first have a goal, which in this case is the dual goal, and also understand the character of the problem. The problem is of an obscure, complex character, which means that we cannot get control, it is up to the individual to take all the responsibility. To reach the dual goal one must understand that we are social beings (2.2.6) and that we must use this possibility to manage the obscurity. We do this through help from friends and experts. It is of great importance to trust the expert and for the expert it is important to be responsive and be available through all the process. The participant will have different ways to acquire the knowledge needed: language, attention, dialogue, reflection and learning by doing (2.2.3-2.2.5). The expert will support the participant in this project and help the participant by leading its knowledge to the participant (2.2.7, 2.2.8 & 5.2). In this way, the participant can take part in evasive knowledge like tacit knowledge.

The outcome of the study circle is that one of the participants is close to starting to build, two are on their way, and one is far away from starting (5.2). There are different reasons why the situation is like this, for instance not all have financing and a plot available. Apart from these differences, the participants handle the obscurity differently. Three of the participants, in different degrees, got overwhelmed by the obscurity and became stressed and disempowered. They tried to solve this in different ways, by acquiring as much knowledge as possible and by accepting the obscurity. It is important to trust the experts not to get too disempowered. In times of strong stress because of obscurity, the importance of trust increases. The participant

who is close to reach the dual goal had great trust in the leaders (5.2 & 5.5). The experts on their part must be completely responsive and present. In the study circle, there has been a difference in the responsiveness and about how present the experts were able to be (5.2). The different degree of trust in the experts and the different degree of responsiveness of the experts and presence of the experts made the participants differently empowered (5.5).

The experts have been there to help the participants orientate, sort and value. Most of the study circle consisted of guest lectures (3.8) and not so much of learning-by-doing (5.2). This focus was criticized by the participants as the lectures did not meet their needs, and the timing of the topics was not coordinated to their needs in the moment. At the same time knowledge is only meaningful to speak of over a period of time (2.2.2) which means that if asking the participants in the future, the might admit that the knowledge acquired in the study circle have been useful. Besides the guest lectures, some parts of the study circle have been learning-by-doing, like when the participant marked their house on the plot with sticks (3.8).

The language of the designing has been introduced through The Pattern Language (2.1.3) providing the participants to in some ways to think like an architect. To be confident and in control the participants also need language from other parts of the building process like construction. It does not have to be a deep understanding, but at least at an overall level. When the participants speak of learning more in practice (5.4) it is about learning the language of construction. Not learning the language of the practice might cause an obscure feeling.

Throughout the study circle, there has been a plan over what is to come next. It has still been hard for the participants to grasp the whole process (5.4). Even if the content was presented in advance, it was hard understanding what was going to be learnt. This discrepancy between expectations and content is one of the main reasons why the participants expressed that they wanted more practical construction work and less theory (5.3 & 5.4). This dilemma is occurring when a content is composed by experts who have a clear insight into a subject and knows what needs to learn, but at the same time the participants are not satisfied with the content. It could be so, that either the content is relevant, but the experts have been unclear about why and what to learn, or the content is deficient. In either way, it is important to reflect over if the aim of the experts is to focus on the participants to be in control, managing their obscurity, or if the focus should be on the participants achieving needed abilities and knowledge to face the challenge.

In order for the experts to be able to relate to the importance of acquiring the dual goal it is of importance that the participants trust the expert and that the expert is responsive and present. This sounds easy, but in practice it is hard. Trust is something built over time and can easily be crushed. Egnahemsfabriken tries to grow trust in the local society by inviting people from the outside to the guest lectures. The downside of this was that sometimes the focus on growing trust became the priority at the expense of the aim of the study circle to help the participants in their process. It is a balance between them both. It is a hard mission for the volunteer architects participating in the study circle, they are doing it on a voluntary basis, so they need to have other jobs besides. It is a long commute to the location of the study circle, and they are not yet educated in Livingston’s method of responsiveness.

7 CONCLUSIONS

7.1 Research Questions

The title of this essay expresses the main challenge of modern house building. For all times, people have built their own houses, but in modern Sweden today it has almost become impossible due to extensive structural obstacles and personal challenges, and because the strict individualistic norm where everyone is chasing the unique. People in Sweden today do not know they can build a house by themselves, it is not even on the map, and if trying, one is going to be overwhelmed by the power of obscurity. The modern chase of fulfilling a personal dream at the same time as building a house is called the dual goal.

Egnahemsfabriken aims to create established ways of reaching the dual goal. They are doing this by creating an infrastructure around the house building process, where the participant will get the assistance needed. By doing this they are dealing with the conserveness of the individuality, which has led to the lesser collective, and greater personal, responsibility. The infrastructure aims to find synergies between people and by becoming more collective. By sharing responsibilities, the process of building a house becomes more accessible for more people. One of Egnahemsfabriken's attempt, creating an infrastructure, is the study circle, investigated in this essay.

Building one's own house means becoming a builder. Today there are many professions connected to the building process. How this is done is explored through the research questions of this essay.

Main research question
How can a pedagogical effort, based on participatory design, be organized and carried through in order to provide people with knowledge and abilities, and uphold motivation, to prepare themselves for a self-building project? The aim of the main research question is for the study circle to make the participants reaching the dual goal. To get there, which is shown in a model in figure 7.1, it is firstly of importance to understand the responsibilities, preconditions and challenges of the task.

The responsibilities are connected to the forth research question (RQ4): *What obstacles and challenges are occurring, and how to meet them?* In the individualistic times of today, reaching the dual goal gives the participant great freedom in their designing, but at the same time they are alone in the responsibility of their building process. This can be hard and might lead to an obscure feeling. When building a house, it is good to find solutions were the responsibility is shared.

The preconditions are connected to the first research question (RQ1): *How does the study circle organize an educational process that teach practical knowledge?* There are two personal preconditions, firstly the participant has to be naive to even start build their own house, and secondly, the participant has to be insightful, understanding that they actual can build a house by themselves.

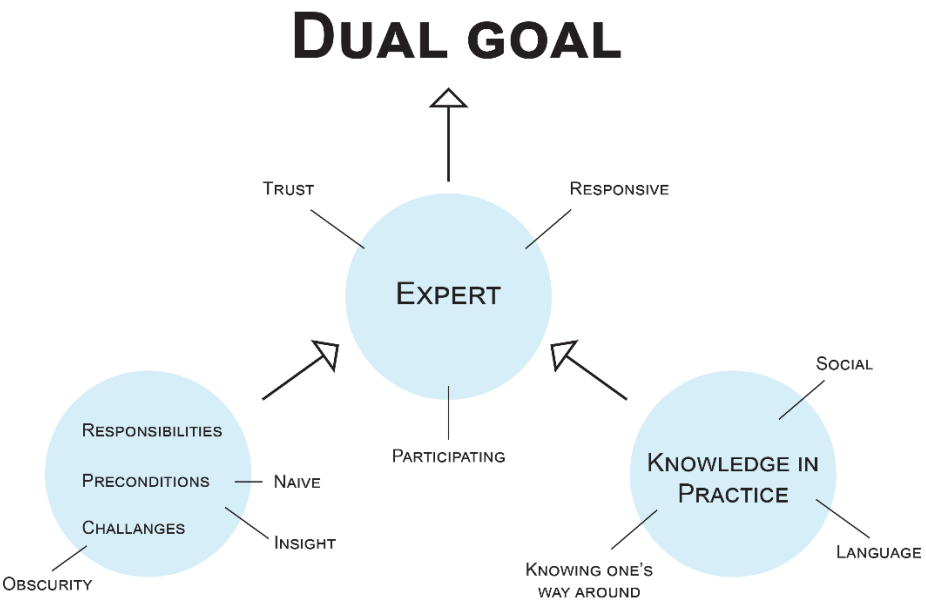

Figure 7.1
A visualization of the model of reaching the dual goal. One has to know about responsibilities, preconditions and challenges, and as well learn the knowledge in practice. This is a process taking long time, to make a shortcut the builder can cooperate with experts.

The challenges are connected to RQ4. There are both structural obstacles, which must be solved collectively, for example by projects like Egnahemsfabriken, and personal challenges. The personal challenges are about orientating in the process, handle the obscurity occurring and relate to different beliefs of how to build. Taken the responsibilities, preconditions and challenges into account, one also has to start the learning of practical knowledge.

The knowledge in practice is connected to RQ1. Learning practical knowledge is advantageously done in a social context, where one is being socialized into the practice. The language of the practice is of importance, it lays a ground for reflection and dialogue about the matter. When mastering a practice, one will learn to *know one's way around*, which means have a lot of intuitive knowledge, knowing about what is good and bad. Achieving knowledge in practice takes a long time, and therefore only relying on this would make the dual goal far away. Instead, reaching the dual goal faster can be done with the support of experts.

The expert is connected to the second research question (RQ2): *How are the methods of participatory design supporting the participants?* By a close collaboration between the participant and the expert the dual goal can be reach faster and easier. There is a need of balance between full participating and none participating by an expert. With none participating by an expert, there is a great risk of lost momentum and of confusion in the process, with a risk of getting stuck in the wrong beliefs of how to build. With full participating by an expert, there is a risk of losing control of the result. The both sides are disempowering. To counteract, both the participant and the expert need the will to cooperate, to trust each other and to be responsive.

The context of this process, the study circle, is connected to RQ3: *What local preconditions have been of importance for the implementation of the study circle?* To make this collaborative process possible it is of importance that the local society trusts, and are interested in, the project.

7.2 Future Research

This essay provides a contribution to the understanding of how to build a house by oneself. The focus has been on the first phase of the building process. It would be desirable for future studies to study the process until the end, to investigate the resembling process. Questions desirable to answer are:

This essay studied the first part of the building process, there would be desirable to study the process till the end. Questions desirable to answer are:

Is this method (the study circle) effective for building houses?

Is participatory design a good method for the study circle?

Are there other methods which could be used in a participatory design process?

The most important is to continue research in this area.

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APPENDIX

ANNEX 1. INTERVIEW GUIDE 1

Att gå igenom med intervjuperson:

Anonymitet: Hur ställer sig intervjupersonen till anonymitet?

Kan tack nej: Intervjupersonen kan alltid höra av sig i efterhand och be intervjuaren stryka delar av eller hela intervjun.

Spela in?: Är det ok för intervjupersonen att bli inspelad? Det kommer bara att användas av intervjuaren för att kunna transkribera intervjun.

Syfte: Syftet med intervjun är att ta reda på hur en pedagog/cirkelledare kan vägleda cirkel-deltagare genom ett oöverskådligt projekt som självbyggeri?

Intervjuns upplägg: Intervjun tar ca 60 min och består av fyra teman: oöverskådlighet, självbyggeri, studiecirkeln och det egna huset.

Intervjuare:

Intervjuperson:

Datum:

Plats:

1. Tema: Oöverskådlighet

Under studiecirkeln så har jag gjort en spaning: Många självbyggare verkar ha svårt att överblicka sin egen process. Det verkar vara svårt att få en bild av alla stegen som måste tas för att gå från dröm till färdigt hus. Jag har därför börjat att fundera kring begreppet oöverskådlighet och vad det gör med en situation. Jag tror att vi till vardags kämpar med olika situationer där vi inte kan få någon bra överblick.

- Jag skulle vilja att du tänker efter och försöker komma på en situation där du känner att du har tappat överblicken, där situationen har blivit oöverskådlig. Beskriv situationen och hur du känner kring den.
- Vad betyder det för dig att en situation är oöverskådlig?
    - Kan du beskriva situationen.
    - Vad för oöverskådligheten med sig?
    - Vad är positivt?
    - Vad är negativt?
    - När blir en situation för oöverskådlig och du tappar kontrollen?
- Hur kan du hantera en oöverskådlig situation?
    - Bör du lära dig vara i den oöverskådliga situationen eller bör du försöka göra situationen överskådlig?
    - Vad är viktigt för att inte köra fast i en oöverskådlig situation?
    - Vad finns det för verktyg?
- Hur kan en pedagog/cirkelledare/vän göra för att stötta dig i oöverskådlig situation?

2. Tema: Självbyggeri

- Vad finns det för utmaningar och hinder för någon som vill bygga sitt eget hus? Både inom människan, i själva bygget och i samhället.
    - Hur skiljer det sig mellan nu och förr (egnahemsrörelsen)?
    - Vad har du för erfarenhet av självbyggeri?
    - Känner du andra som har byggt/renoverat?
- Vad tror du är viktiga resurser för att genomföra ett självbyggeri från dröm till färdigt hus? Med resurser så menar jag t.ex. erfarenheter, praktisk kunskap, socialt kontaktnät, tid, pengar, etc.)
    - Vad skulle krävas för att du skulle rekommendera någon att ge sig in i ett självbyggeri?
    - Vilka tips skulle du ge till någon som skall vägleda någon genom ett självbyggeri?
- Vad är självbyggeri?
    - Vad omfattas av självbyggeri?
    - Var går gränsen mellan självbyggeri och konventionellt byggeri? Är det en eller en flytande gräns?

3. Tema: Studiecirkeln

- Vad är de pedagogiska tankarna bakom studiecirkelns upplägg?
    - Kan du beskriva dina grundtankar?
    - Hur ser förberedelserna inför studiecirkeln ut?
- Har studiecirkeln blivit som du föreställde dig?
    - Vad har blivit annorlunda?
    - Vill du beskriva hur kommunikationen mellan cirkeldeltagare och cirkelledare har fungerat.
    - Vill du beskriva hur kommunikationen mellan cirkeldeltagare har fungerat.
    - Vill du beskriva gruppen.
    - Vilka innefattas av gruppen?
    - Hur tycker du det känns när det kommer in utomstående och lyssnar på föreläsningarna?
- Vad i studiecirkeln gav dig tilltro till att du själv kan genomföra självbyggeriet?
    - I vilka tillfällen under studiecirkeln tappade du tilltro till dig själv?

4. Tema: Egna huset

- Beskriv ditt projekt, eller flera. Vad kännetecknar dem? Hur stora? Känns de överkomliga?
- Hur ser din nuvarande tidsplan ut?
    - Hur har tidsplanen förändrats under kursens gång?
    - Vad tror du kommer att ta mest tid?
    - När vi har lyssnat på olika självbyggare så verkar det som att flera fastnar på någon liten detalj som blir extremt arbetskrävande. Hur tänker du att en kan hålla balansen mellan arbete, tid och pengar så att inte någon sticker iväg? Så att en inte fastnar på små detaljer?
- Vad ser du som de stora problemen med din husbyggnadsdröm?
- Känns projektet som det är på riktigt?
    - Vad gör att det känns så?

ANNEX 2. INTERVIEW GUIDE 2

Att gå igenom med intervjuperson:

Anonymitet: Hur ställer sig intervjupersonen till anonymitet?

Kan tack nej: Intervjupersonen kan alltid höra av sig i efterhand och be intervjuaren stryka delar av eller hela intervjun.

Spela in?: Är det ok för intervjupersonen att bli inspelad? Det kommer bara att användas av intervjuaren för att kunna transkribera intervjun.

Syfte: Syftet med intervjun är att ta reda på hur en pedagog/cirkelledare kan vägleda cirkeldeltagare genom ett oöverskådligt projekt som självbyggeri?

Intervjuns upplägg: Intervjun tar ca 60 min och består av fyra teman: oöverskådlighet, självbyggeri, studiecirkeln och det egna huset.

Intervjuare:

Intervjuperson:

Datum:

Plats:

1. Tema: Vilka var förutsättningarna för Egnahemsfabriken?

- Varför uppstod Egnahemsfabriken just på Tjörn?
- Vad är speciellt med Tjörn?
- Vad ledde fram till Egnahemsfabriken?
- När kom du in i processen?
- Vad är din roll i Egnahemsfabriken?

2. Tema: Bakomliggande idéer

- Vilka idéer är de centrala bakom studiecirkeln?
    - Hur återfinns dessa idéer i studiecirkeln?
- Berätta om idéer från Livingston som ni använder till studiecirkeln.
    - Varför?
- Hur fungerar idéen att "låna ut sin hjärna" till studiedeltagarna?
- Berätta om idéer från Alexander som ni använder till studiecirkeln.
    - Varför?
- I texten *Metoder för deltagande design och kollobarativt byggande* så berättas om att Alexander har en designmetod där en arbetar från *helhet till del* istället för växlande mellan *helhet och del* som är mer vanligt idag. Är detta något ni använder er av i upp-byggandet av cirkeln?
- Berätta om idéer från Ranger & Westerberg som ni använder till studiecirkeln.

3. Tema: Studiecirkelns upplägg

- Varför har studiecirkeln fått den utformning den har fått?
- Vad syftar studiecirkeln till att göra för studiecirkeldeltagarna?
- Vad består arkitekternas kunskap i?
- I vilka moment "lånar arkitekten ut sin hjärna" till deltagarna?
- På vilket sätt skall deltagarna bli "empowered" av studiecirkeln?
- I vilka moment?

4. Tema: Deltagande

- Vilka element av deltagande återfinns i kursen?