Re-adapting the Laundry

Inquiring about culture-graded buildings
By Participatory Action Research

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According to the Stockholm City municipality’s publication *The City Museums Cultural and Historical Classifications* [*Stadsmuseets kulturhistoriska klassificering*], culture-graded buildings in Stockholm are classified by The Stockholm City Museum, according to a model of evaluation created by the National Heritage Board, seeking to define what cultural heritage brings to the table (Stockholm City, 2022). As it says in the Swedish National Board of Housing’s Building and planning publication *Corruption Prohibition*, to ensure the preservation of the positive impacts culturally significant buildings provide for their surroundings, the municipalities enforce laws that affect the development process of the built environment (Boverket, 2021).

In Stockholm, many apartment buildings were built during the functionalistic era, more commonly known as the *Funkis* movement. Revolving around the needs of the people, the functionalistic manifest *Accept* as read in *Modern Swedish Design* translated by Kenneth Frampton, proposed a societal necessity of instilling value in functions dependent on the needs of everyday life (Åhrén et al., 2008).

This bachelor’s thesis revolves around a case in which a housing cooperative of a culture-graded Funkis building in Stockholm is looking to re-adapt an inner courtyard. Resulting in an inquiry on how a particular housing cooperative initialize the re-adoptions of their common shared space and also providing a methodological approach applicable to any projects looking to re-adapt culturally graded buildings in participation with its users.

The methodological approach uses Participatory Action Research (PAR) as Marwa Dabaieh, says in her journal article *Participatory Action Research as a Tool in Solving Desert Vernacular Architecture Problems in the Western Desert of Egypt*, as a methodological means to an end solving common issues, in participation with the people experiencing the situation (Dabaieh, 2013).

**Key-words - Participatory Action Research, Culture Grades, Participatory design, design inquiry.**
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# Table of Contents

Abstract. 2  
Acknowledgments. 3  
1. Introduction. 5  
1.1. Background. 5  
1.2. Why what and how?. 6  
1.3. Structure. 7  
1.4. Limitations. 8  
2. Research Area. 8  
2.1. Participatory Action Research. 8  
2.2. Culture Grades. 10  
3. Literature Review. 11  
3.1. Architecture History .11  
3.2. Architecture Theory .12  
3.3. Wayfinding .12  
3.4. Planning By Participation .12  
4. Methodology. 15  
4.1. Methods. 16  
4.1.1. Field Work. 16  
4.1.1.1. Field Observations. 16  
4.1.1.2. Archival Research. 19  
4.1.2. Participatory Research. 20  
4.1.2.1. Survey. 20  
4.1.2.2. Participatory Meeting. 21  
4.1.3. Follow-up Methods. 22  
4.1.3.1. Presenting for Inhabitants. 22  
4.1.3.2. Open-end Interviews. 23  
4.2. Ethical Considerations. 24  
4.3. Analytical Methods. 24  
4.3.1. Culture Grade analysis. 24  
4.3.2. Modelling of a site. 25  
4.3.3. SWOT. 26  
4.3.4. Initial Key Objectives .26  
4.3.5. Cross-analysis to generate design criteria. 27  
4.3.6. 3d-modelling an inquiry. 27  
5. Result & Analysis. 28  
5.1. Field Work. 28  
5.1.1. Field Observations. 28  
5.1.2. Archival Research. 29  
5.1.3. Culture Grade analysis. 30  
5.2. Participatory Research. 30  
5.2.1. Survey. 30  
5.2.2. SWOT. 33  
5.2.3. Initial Key Objectives. 35  
5.2.4. Modelling of a site. 36  
5.2.5. Participatory Meeting. 36  
5.3. Cross-analysis to generate design criteria. 40  
5.3.1. Low usage/Private feeling. 40  
5.3.2. Wayfinding and accessibility. 43  
5.3.3. Activities. 44  
5.3.4. Physical Preconditions. 46  
5.3.5. More space for greenery/furniture. 47  
5.4. 3D-modelling an inquiry. 49  
5.5 Follow-up methods. 54  
5.5.1. Presenting for inhabitants. 54  
5.5.2. Open-end interviews. 55  
6. Discussion. 58  
6.1. Comparing results. 58  
6.2. Evaluation. 61  
7. Conclusion. 62

References
Apendices
1.1 Background

As explained in the article *An Assessment of the Scientific Merits of Action Research* written by Gerald Susman and Roger Evered, action research originated from the social scientist Kurt Lewin in 1946 (Susman & Evered, 1978). His goal was to create a methodology in which research would be conducted to make way for social change. The approach is described by the authors as a cyclical process of identifying knowledge, diagnosing, planning strategies, acting on strategies, and evaluating the actions. The approach is defined by the authors as a science producing and making use of situated knowledge on specific issues (Susman & Evered, 1978).

In Johan Albrecht’s article *Towards a Theory of Participation in Architecture: An Examination of Humanistic Planning Theories*, he elaborates that participatory architectural practices originated from the egalitarianism struggle of the 1960s (Albrecht, 1988). Architects have since, as said by Albrecht, been practising participatory methods to justify means. Adopting the implications of social morality that come with the incorporation of participatory methods into design practices, whether sustainable or not. Albrecht argues that one of the main issues of his contemporary participatory architecture projects lies in the duality of taking a step back from the design process as an architect. Either being minimized to an enabler of any justifications found; or maximizing their role and imposing non-consensual concepts justified by the situated knowledge of the planner (Albrecht, 1988).

*Together WE can re-adapt OUR world!*

Askvall, Ture. (2022) [Figure 1] Origins of Participatory Action Research
1.2 Why, what and how?

In January 2022 I was introduced to the housing cooperatives’ issue of wanting to re-adapt their inner courtyard. With participatory practices being a reoccurring theme throughout my education at Malmö University, I immediately recognized the opportunity of executing my skills on a real-world project. While starting to formulate a methodology and area of research for the project, my supervisor told me that the approach that I was proposing could be classified as Action Research.

Reviewing the newfound area of research, I found that most projects available related to achieving quantifiable results such as energy conservation or heat distribution. This project seeks instead to make use of the participatory nature of action research to generate qualitative results and a methodological approach to my newly encountered problem:

**How can a researcher re-adapt a culture-graded building, in participation with its inhabitants?**
1. Introduction

1.3 Structure

The first part is a product of combining prior knowledge with the empirical gathering and reviewing of information surrounding relevant research areas and literature discovered at different stages of the process. The research area was identified at an early stage of the project when the thesis was beginning to take shape, but newfound research and references were added throughout the process. The same can be said about the literature review, which is heavily shaped by both the researcher’s prior knowledge and new topics arising out of seminars or surveys.

The second part contains the methodology applied throughout the project. The methodological approach changed throughout the process and many of the originally planned methods were either reworked or changed to better fit the purpose. The second part also contains the analytical methods chosen to review the gathered data. The methodological approach is designed to fit this case yet could still apply to any project looking to re-adapt culturally graded buildings with a PAR approach. Consisting also of the results and analysis. Combining the two parts represents the approach of gathering data, analyzing what was gathered, making assumptions, and looping back to gathering further data. Therefore, the results are firstly presented and then analyzed before moving on to the results of the next method.

The third part is the discussion and conclusions, which reflects upon both the output of the methodological approach and analysis. Starting with a discussion that compares the results of fieldwork and participatory methods with the results of a follow-up. Finally concluding the PAR approach with a summary of the methodological approach and its output.
1. Introduction

1.4. Limitations

This bachelor’s thesis has limitations concerning the research and its output. The first limitation is that all the analyses and interpretations of data were made by the same researcher. Which would imply that the outcome of the research is heavily shaped by the prior knowledge of the interpreter. The second limitation is that the process of the project is limited to the front end in which strategies are discussed and explained, but not executed. Meaning that the following up on actions taken could not be done based on data acquired from implementing strategies, instead, it could only be speculated and simulated. The output is also limited in a way considering the aspect of accessibility, which would only be considered in the common shared space and not in the whole building. Because situation is complex and would require an entire project focusing on how to make the whole apartment building more accessible.

2. Research Area

2.1. Participatory Action Research

PAR could be described by Karen Goodnough according to her article Facilitating action research in the context of science education as one of the branches marching under the banner of Action Research (Goodnough, 2003). In the SAGE Encyclopedia of Action Research Action Research is defined as a means of applying both practice and theory, to achieve a common goal within a community (Coghlan et al., 2014). Originating from the social sciences, AR relies on activities generating shared experiences and utilizing situated knowledge, to achieve a holistic perspective of a certain situation, making way for actions to be planned and plans to be acted upon. (Susman & Evered, 1978).

According to an article in the conference proceedings from the 34th Annual ARCOM Conference written by E Grosse titled A Gestalt Perspective on Co-creation: Action Research in Architectural Practice the benefit of a cooperative process is that users who participate in a co-creational project gain a sense of influence over the outcome of the project, which in turn generates a sense of ownership and attachment that engages the participants even after the process has accomplished the said goal. A study mentioned in the article showed that ownership, which can be generated through participation, helps to keep constructs and ideas alive. (Grosse, 2018)

Participatory action research as a tool in solving desert vernacular architecture problems in the Western Desert of Egypt by Dabaieh is a journal article documenting a PAR project relating to conserving the cultural heritage and their
architectural practices (Dabaieh, 2013). The study aimed to save the tradition and results of vernacular mud desert architecture in western Egypt. To raise public awareness and generate a commitment to the goal in the eye of the public, Dabaieh applied the PAR approach to achieve the desired result and in this way create a methodology that could be used by municipalities and organizations committed to the same cause of saving vernacular heritage (Dabaieh, 2013).

Dabaieh starts her essay with a thorough investigation of the site with the intent of defining and exploring the context of the situation. She then applies participatory methods of the same defining and explanatory nature, seminars, discussions, and model experiments. The researcher used the data gathered to execute a full-scale experiment that could be used to triangulate the results of her previous methods and further generate citizen engagement through active participation (Dabaieh, 2013).

Through applying PAR to the methodology of the project, the researcher generated her goal of keeping the tradition alive in the mind of the public as well as providing a plug to fill the gap in knowledge on how to further strengthen the heritage of vernacular architecture, applicable to a broad range of cases (Dabaieh, 2013).
2.2. Culture-Grades

The Museum of Stockholm city oversees the grading of buildings by their cultural and historical significance. These grades are described on The Stockholm City Museum webpage and range from blue to yellow with blue being of the utmost cultural/historical importance and yellow being the lowest on the scale (Stockholm City, 2022). The yellow grade marks a building that has a positive impact on its surroundings and/or is of cultural importance. A green grade marks a building that is of significant cultural importance, and a blue grade marks a building that is of an especially significant cultural importance. The grey grade is explained as all buildings that cannot be categorized in any of the colour grades above (Stockholm City, 2022).

The municipality defines cultural importance through the application of an evaluation method developed by the National Heritage Board. The method revolves around defining values through reviewing documents, drawings and the built environment resulting in an evaluation considering document values and experience values. Document values are described of traditional historical nature and the experience values consider what the experience of the built environment brings to the table (Stockholm City, 2022).

Erica Persson wrote her bachelor’s thesis Guidelines for renovating historic buildings in Stockholm in which she elaborates that the Stockholm Urban Planning department applies two laws in the decision process of denying/granting permits relating to changes in the culturally graded built environment (Persson, 2020). The laws were developed to enforce the preservation of cultural heritage in a judicial sense.

The Corruption law [Förvansknings förbud] is described by the administrative authority as applicable in any case of development that implies changing the characteristics of the culturally graded built environment and its surroundings. The purpose of the law is to conserve cultural heritage and to prevent corruption of culturally graded buildings’ positive impact on their surroundings (Boverket, 2021).

The Caution law [Varsamhets lagen] is applicable on a broader scale that also relates more heavily to non-graded buildings. The Swedish plan and building law 8 Chapter. 17§ states that changes or relocations of buildings must take precautions to ensure that characteristic values are conserved (The Swedish Parliament, 2011). The legislation revolves around generating a sense of caution in the planning process so that planners and builders take precautions to prevent negative impacts caused by a lack of knowledge around the specific situation.
Persson also provides the reader with conclusions about what a party of interest can do to secure that the permits submitted for changes and re-adaptions to culture graded-buildings follow the ideals of the municipality. She concludes that there are no frameworks that can precise what gets granted and denied, instead she elaborates on the criteria the municipalities use to grade buildings. In this way, a party of interest can get a good grip on the specific situation that their case dwells in, and therefore apply precautions to secure a granted project by the Stockholm urban planning department that is set out to preserve cultural heritage and the positive impacts it provides for its surroundings as graded by the museum of Stockholm city. (Persson, 2020).

3.1. Architecture History

Doreen Massey writes in “A Global Sense of Place” that a problematic history can live on, even though physical changes have been made (Massey, 1991). Acknowledging this, the history of the relevant Swedish architecture movements becomes highly relevant in the process of re-adapting culture-graded buildings in Stockholm.

Gunnell Ivanov wrote her dissertation in historical studies about Finer things for everyday life - Design for all?: Gregor Paulsson and the Swedish Arts and Crafts Committee 1915-1925 in which she elaborates on the architectural practice of the Swedish design movement (Ivanov, 2004). Ivanov writes that Gregor Paulsson the founder of the movement wanted to refine the products of everyday life and make attractive design accessible for all. The writer also describes the movement as a product of the industrialization of Europe, in which mass production was taking its effects on the quality of everyday things such as architecture and consumer goods. The movement was a direct opposition to the mass production of low-quality goods and therefore strived to achieve quality and design for all. (Ivanova, 2004).

In the functionalistic manifest Acceptera, the protagonists want to move away from the earlier traditional methods of architecture, focusing instead on the needs of the people (Åhrén et al., 2008). The message was to develop architecture into a scientifically stable field of social science that could withstand any debate or criticism, rooted in functionality. Encouraging architects to put their energy into solving practical problems and the needs of the people, focusing on functionality as the main driving aspect of sustainability (Åhrén et al., 2008).
3.2. Architecture Theory

Jeremy Tills’ book *Architecture Depends*, provides the reader with concepts to use in the discourse of architecture (Till, 2009). *Contingencies* are described as the inevitable forces that impose themselves on the built environment. Factors such as politics, needs of functions, and people to name a few, are all inevitably shaping architecture, whether the architect considered these contingencies or not (Till, 2009).

Tills’ second concept relevant in the discussion about culturally graded buildings is *Thick Time*. This construct is described as the past, present, and future condensed into one overlapping element of time, that reveals itself in architecture (Till, 2009). Historically significant buildings often portray their past in a tangible sense, with ornaments and building techniques reflecting the historical times when the built environment was planned. The present often takes its shape literally in the fact that the architecture is still in use, people using a building denotes the fact the architecture is present. Looking ahead to the future may seem non-tangible, but the fact of the matter is that it may be as simple as acknowledging the time patina that is as inevitable as the future itself or providing flexible uses that can change with time.

Jan Gehl’s book *Life between Buildings: using public space* was written to define what affects the utilization of public spaces and their qualities (Gehl, 1987). Gehl starts his book by defining what types of activities take place in outdoor places and how the quality of the built environment affects them. He suggests that good and optimal quality of built environment promotes usage in both necessary and optional activities, which in turn results in spontaneous social activities. Caused by the mere fact that increased usage of a place results in a greater number of times where spontaneous encounters may happen. He further categorizes different degrees of social interaction ranging from low-intensity to high-intensity, suggesting that the spontaneous encounters of the vibrant city mostly promote the lower intensity interactions such as spontaneous hear-say encounters, that in turn could generate higher intensity interaction through creating friendships and social structures. Through studying different cases Gehl pinpoints the relationship between the quality of the environment and the quality of activities. He suggests that through the planning of the built environment one can to a degree promote how a place should function and what activities should take place, somewhat guaranteeing the quality of activities and interaction through providing qualitative space (Gehl, 1987).
3.3. Wayfinding

Paul Arthur and Romedi Passini wrote a book about *Wayfinding: People, Signs, and Architecture*, in which they are looking to explain the area of research revolving around the process of interpreting your surroundings to locate routes to desired destinations (Arthur & Passini, 1992). The authors dissect the concept into three rationalized stages processing information, decision making, and acting on those decisions. *Cognitive maps* are described as a product of priorly processed information that affects the decision-making process, in other words, it could be described as the subconscious GPS giving you directions based on priorly gathered reference points interpreted in your surroundings. Designing for wayfinding would therefore according to the authors, be to provide multisensory reference points for the creation of cognitive maps and the process of locating access to resources to be supported by the design. These points of reference can either be physical or psychological (Arthur & Passini, 1992).

3.4. Planning and Participation

*Architecture and Participation* is a collection of different experiences by different researchers practising architecture through participatory methods edited by Peter Blundell Jones, Doina Petrescu, and Jeremy Till (Blundell-Jones et al., 2005). The book provides different insights into varying approaches to practising architecture developed through some sort of collaborative approach, and the authors’ reflection on the results of them (Blundell-Jones et al., 2005). The one thing that was found as common amongst the different stories of Architecture and Participation, is that all of them are striving for a more sustainable development grounded in the situated knowledge and needs of the users of the development.

*The SymbioCity Approach a conceptual framework for sustainable urban development* was developed by the Swedish professor Ulf Ranhagen based upon a framework for sustainable development referred to as the triple bottom line of economic, environmental, and social sustainability (Ranhagen & Groth, 2012). The approach regards the city as a fluctuating resource instead of a problem, therefore Ranhagen emphasizes the value of the city as a self-governing collaborative structure that promotes synergy effects and diversity (Ranhagen & Groth, 2012).

Ranhagen’s approach relates to urban development, but much of what is provided in his work could be easily applied at any scale. To better explain the SymbioCity Ranhagen dissects the approach into three loops. Loop one starts with step one which aims to develop a framework for sustainability that defines the
envisioned outcome. The second loop consists of steps three and four which aim to confirm the diagnosis in qualitative and quantitative ways to define how to continue with the project to guarantee an outcome that is transparent and dependent on the project vision. Loop three is the execution phase of the project in which the outcome of the project is analysed to continue with implementing strategies, reviewing the process, and following up on data. Ranhagen mentions that further loops may be developed in order with the complexity of the process (Ranhagen & Groth, 2012).
4. Methodology

The methodological approach is a product of adapting the Symbiocity approach to PAR. The PAR approach combines research with participatory methods to make use of different kinds of knowledge to find appropriate actions to solve issues. The symbio city approach uses participatory methods together with analytical models in order to define a situation to make way for implementations of strategies. Combining the two results in an approach that makes use of knowledge to define a situation that can later be approached in participation with those experiencing it. Following up on the approach by making use of expert contextual knowledge of the situation and also general expert knowledge about similar practices.

The approach starts in an exploratory stage focusing on achieving a framework for sustainability by collecting quantitative and qualitative data through archival research, survey, further observations, and the analysis of the research data collected. The results of the first phase include developing objectives and as Ranhagen would have said, making a diagnosis of the situation (Ranhagen & Groth, 2012).

The second phase revolves around explanatory methods where the data and analysis of the previous stages are explained to the participants in a meeting in which they could openly express their thoughts about the strategies presented and other perceptions. This stage also includes the analysis of the data collected to support the newfound and improved upon strategies with data.

The third phase is affected by the limitations of the project. The result of this third and final stage, like that of making an inquiry to an architecture competition, will not contain the implementation of strategies and follow-up on physical changes and their impacts. Instead, the third stage is of elucidatory nature intended to clarify the project vision, and much like the competition, resulting in a presentation of the inquiry and a thumbs up or down from the board of the cooperative to continue with the process of improving their common shared space according to their perception of what is needed.
4. Methodology

4.1. Methods

The research data gathered by applying the PAR approach will heavily relate to the specific place that the project revolves around, and the conclusions and results would therefore be classified as abductive according to Runa Patel and Bo Davidsson’s book *The Basics of Research Methodology* ([*Forsknings metodikens grunder*](#) (Patel & Davidsson, 2003). The methods of choice were developed to fit the specific stage of the project that the method was conducted in and are therefore of different nature depending on when the method was executed. The methods categorized as fieldwork were those of a non-participatory nature, in which the researcher would be collecting data through methods including observations and archival research. The participatory methods were conducted with the inhabitants of the culture-graded building as respondents to surveys and participators in meetings.

4.1.1 Fieldwork

4.1.1.1 Field Observations

Three, arguably four different observatory approaches were conducted throughout the course of the project. The varying ways of the observations are a result of adapting them for their specific cause.

To achieve an initial definition of the situation, an initial exploratory site observation was made in an unstructured format (Patel & Davidsson, 2003). The observation was intended to be purely exploratory, with no checklist at hand, and last about an hour. Pen and paper were the main tools for collecting data, complementing the notes with measurements taken with a tape ruler and photographs taken with a mobile camera. The method was used to collect qualitative data with an exploratory approach that in turn could generate initial assumptions about the situation.

The further observations were adapted so that the methods were appropriate for their specific purpose of confirming the previously gathered data. Observations are our main way of gathering information in the everyday life (Patel & Davidsson, 2003). This method was not the main way of gathering research data, instead, it was approached as complementary, with the checklist content produced so that the data gathered by the previous methods could be triangulated and further explored. The observations were, as Patel and Davidson would to some extent suggest, of a standardized format in which several observations are made at specific times and with the same checklist (Patel & Davidsson, 2003). Differing from the
4. Methodology

standardized format was the fluctuating approach to participant and non-participant perspectives. The first observation was conducted from a non-participant perspective, to not affect the usage of the courtyard, and further observations were of a participant approach, to complement the data with different perspectives.

Askvall, Ture. (2022)
[Figure 6]
Images from observations
To take inventory of the site, the researcher went to the courtyard with a mobile phone to use as a camera, a pen, and paper to take notes with, and a measuring tape. The intent was to take inventory of the stone paving as well as the furniture and objects placed on site. Photographs were taken of each stone to later be able to trace them so that they could be each represented on a somewhat exact scale. One unique stone was chosen and then precisely measured. Tables, chairs, and pots were also photographed and measured.

The different observatory approaches aimed to achieve an initial exploration of the situation, further elaboration upon data collected and a thorough inventory of the site.
4.1.1.2. Archival Research

Alja Aksamijas’s book *Research Methods for the Architectural Profession* describes archival research as a method of gathering information from data sources so that they can later be put through analysis procedures, for a researcher to reap the benefits of having primary resources on a subject. The drawback is that what is taken from the analysis is dependent on the researcher’s prior knowledge and own conclusions about the research data (Aksamija, 2021).

The method was planned to thoroughly investigate the archives of two websites by searching for the specific address of the housing cooperative on the databases. The first one was the Stockholm City Urban Planning departments archive for cases and documents. The second archive was the map of historical classifications webpage of the Stockholm city museum. The municipal archives were researched through the same procedure, searching for the address, looking through the material, and locating relevant materials such as permits, drawings, and descriptions.

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Askvall, Ture. (2022)

[Figure 8] Archival research
4. Methodology

4.1.2. Participatory Research Methods

4.1.2.1. Survey

The first survey consisted of a standardized format that was structured in the reverse funnel model, a structure that starts with more quantitative questions with alternatives as answers, leading the respondent into more qualitative and open questions (Patel & Davidsson, 2003).

The first survey was tested in a pilot study sent to the board members of the housing cooperative. The survey that was sent out to all of the participants contained eight questions in Swedish and was formulated to revolve around the respondent’s perception and experience of the courtyard, as well as its physical strengths and weaknesses. The respondents had the option to choose which answers to reply to and to answer the last five questions with multiple suggestions.

The second survey was a summary of the next part in the methodological approach. Aiming to clarify what had been presented and discussed during the participatory meeting. The survey lastly had two questions with the first one asking if they agreed with the material and the second giving them an option to reply freely.

Survey Questions

Q1: Is the common shared space easy to locate?
Q2: Do you perceive the inner courtyard as public or private?
Q3: How many times do you use space in an average week?
Q4: What activity brings you to the courtyard?
Q5: What activity would bring you to the common shared space?
Q6: What is the major strength of the inner courtyard?
Q7: What is its major weakness?
Q8: Do you have any other thoughts?

Askvall, Ture. (2022) [Figure 9] Survey questions

Askvall, Ture. (2022) [Figure 10] Survey method
4. Methodology

4.1.2.2. Participatory Meeting

The meeting plan consisted of both a structured and unstructured discussion about the results from the earlier parts of the methodology (Patel & Davidsson, 2003). In preparation for this method, the analysis of previous parts was concluded into easily understandable visual material and text which was presented during the meeting. The unstructured part was planned to contain an open discussion in which each participant would get a chance to express their thoughts and ideas. The method was later clarified through a meeting conclusion sent out in a standardized format, presenting both the results from the prior analysis, as well as the data collected from the event. The summary also allowed for participants of the process who could not partake in the meeting to get a chance to affect and reflect upon the outcome of the meeting.

Askvall, Ture. (2022) [Figure 12]
Participatory meeting method with model
4. Methodology

4.1.3. Follow-up methods

4.1.3.2. Presenting for the inhabitants.

Some of the analytical methods that will later be explained were intended to produce visual material that would explain the inquiry and the different strategies suggested. The material was then sent to the housing cooperatives board members. The format of the presentation was a document which they would receive in their email inbox, sent to them by the designated communicator. This stage of the methodology was designed like this in order for the respondents to have time to thoroughly review the work without the presence of the inquirer affecting their critique. They would then meet together in an annual meeting in which they would discuss the document and reply with a communal answer reflecting the opinions of the inquiry. Sending the paragraph summarising their perception of the inquiry back to the inquirer for further development of the proposal. This method is what was described as similar to sending in a proposal to an architecture competition, in the sense that the product would be judged by a jury consisting of the board members. However, no matter the results of the presentation, the job would not be seen as finished even if the cooperative had nothing to add.
4. Methodology

4.1.3.3. Open-end interviews

To gain the architectural perspective, and make use of situated knowledge three interviews were conducted with teachers at Malmö University of different architectural backgrounds. The discussions were structured in the sense that they were intended to revolve around the topics explaining the design process, while also showing the visual material created. Yet, they were intended to be casual discussions revolving around the different approaches and the architects’ varying prior experiences of them. The architects were contacted via email and interviewed via Zoom while sharing a quickly-put together document summarising the inquiry with text and visual material. The text was there for the conversation to smoothly transition into the next questions and the images to visualise the proposed strategies.

The first interview was with the architect Jonas E Andersson who is an expert in the field of accessible architecture. The second interview was with the architect Marwa Dabaieh who specialises in sustainable solutions and conservation, and the third was with the architect Elise Aldén whose recent work revolves around participatory processes.
4. Methodology

4.2. Ethical Considerations

There are a variety of important ethical considerations that researchers need to keep in mind when exercising PAR caused of its interactive nature. The first dilemma that could become a threat to the success of the project, if not addressed, was that the housing cooperative designated a contact person who would oversee the communications occurring between the methods. This contact person had a personal relationship with the researcher which could lead to impartialness. To overcome this obstacle the discussions between the communicator and the researcher had to be carefully managed so that the process remained uncorrupted by impartialness and unequal opportunities for the participants.

4.3. Analysis Methods

4.3.1. Culture grade analysis

Erica Persson developed a model for planners to find guidance in achieving a project that follows the ideals of the PBL and the municipalities (Persson, 2020). The model asks basic questions relating to information that can be found by conducting archival research. The analytical model aims to generate an answer giving planners direction on how their specific case relates to the caution and corruption laws. By pragmatically reviewing the results, following a flowchart.

Askvall, Ture. (2022)  
[Figure 15] Culture-grade analysis based on Erica Persson's model (2020)
4. Methodology

4.3.2. Modelling of a Site

The results of the observations and archival research were to be analysed by translating the data collected into a 3D model of the site. Using the 3D-visualisation tools Sketchup and V-ray to get both a measurable model and renders representing the common shared space. The analytical method was planned to be conducted by importing drawings to the 3D tool and supporting the details of the architecture by using measurements, sketches and photos of stones to somewhat precisely represent the space.

The results were also used to build a physical model, acknowledging the millennial tendency to lean toward digital material and recognizing it as an opportunity for further analysis of the material by physical modelling. The results were reviewed in a similar fashion the only difference was that instead of creating digital representations of drawings and measurements, it was done by cutting styrofoam boards and bending wire.

The actual purpose of the analytical model is similar to how Simon Unwin explains how architects sketch their way towards sense-making in the article *Analysing Architecture through Drawing* (Unwin, 2007). By concretizing the sketches towards both physical and digital sense.

Askvall, Ture. (2022) [Figure 16] Making sense through 3d-modelling
4. Methodology

4.3.2. SWOT

Swot analysis is a common way of categorizing the strengths, weaknesses, opportunities, and threats of a project. Usually brainstormed in a group, the analytical approach is according to Ranhagen a tool to concretize which precautions, resources, and other important aspects need to be kept in mind when developing a vision for a project. The method of analysis should result in a first attempt at defining a situation (Ranhagen & Groth, 2012).

The results of the methods will undergo a process of being defined as something of positive or negative nature, further exploring if the phenomenon described is categorized as internal or external, which in this case was considered as something possible to change (internal) or if it’s something that is out of the projects reach (external), due to physical limitations or economic factors. The internal positives were classified as strengths and negatives as weaknesses. The external positives are categorized as opportunities and the negatives as threats. The data gathered will be put through the analytical model with an approach adapted to fit the results of the methodology, resulting in the categorization of data and the first diagnosis of the situation.

4.3.4. Initial Key Objectives

To clarify an initial vision, Ranhagen proposes breaking down the project into key objectives that summarize what the results should achieve. Previous steps are all taken into consideration when formulating the key objectives and the three different objectives should reflect or try to solve issues formulated during the process of putting the collected data through prior analytical models. Ranhagen suggests that these objectives should be displayed in a survey-like format in which the respondents have three dots in which they freely can place upon objectives in order of their significance, this leading to a discussion about the results of the gathered information about the objectives and their significance (Ranhagen & Groth, 2012).
4. Methodology

4.3.6. Cross-analysis to generate design criteria

This analytical method is rooted in the prior experiences in design processes that had been a part of the Architecture visualisation and communications education at Malmö University. During the years of the bachelor’s programme, it was not uncommon that a design would be created out of fulfilling criteria that decided in cooperation with teachers, classmates or other students of different educations. All the way back to the first design project of the education, the first lesson revolved around identifying a context, in order for a design process to be initiated. Therefore this analytical model aims to review the data in order to specify contexts and areas of improvement that could be translated into criteria for design. Mixing together theory, data and prior experiences to concretize both the issue and the strategies to deal with it.

4.3.7. 3d-modelling an Inquiry

Again, SketchUp and V-ray were the visualisation tools of choice, also incorporating Adobe Photoshop and Illustrator for post-production and editing. The results of the earlier analytical model designated to make a model of the site as it was currently, could be used as a basis for implementing the decisions made in the cross-analysis, as shown by sketches and diagrams. The desired outcome of this analytical method is to achieve visual material that would represent the concept of the inquiry in an easily understandable way.
5.1. Field work

5.1.1. Field Observations

The initial observation took place on a cold January day from fifteen to sixteen o clock. The notes were written down freely without a checklist and showed: that the path to the courtyard from within the building was perceived as hard to find, the courtyard’s elevated position made it feel separated from the street, and the elm tree provides shade and was perceived as aesthetically pleasing, a notion that the place suffers from a lack of direct sunlight because of its surrounding buildings, it was perceived that the courtyard is closely connected to windows and that the building looks culturally significant. During the observation, no one else entered the courtyard.

The non-participatory observation was conducted from seven to eight o clock on a warm Sunday evening in April. The notes stated that: two people entered the courtyard from a private door and were dominating the utilization of the space through grilling and dining, remaining the sole users of the space during the time of observation. It was perceived that they did not notice me observing them from the street level.

During the further participatory observation conducted during lunchtime on a Wednesday in April, the following notes were written down: There is a close distance to a park, the route to the courtyard is perceived as hard to locate and access, there is a roof terrace accessible by elevator, the common shared space has litter and trash on it, no one used the space during the observation.

The observation conducted to take inventory of the site lasted for two hours from eleven to thirteen o clock on Wednesday the twenty-first. The results of the inventory on-site provided photo albums and sketches of materials and their measurements on-site. Due to complications some of the stones were harder to make out than others, resulting in an almost complete library of the stones.
5. Results & Analysis

5.1.2. Archival research

Through database searches, archival material was gathered such as architectural drawings, previously submitted permits, and a description of the building’s cultural grades. The drawings that were gathered from the databases were the original drawings submitted when the building was first planned. The digital map of the Stockholm city museums’ culture-graded buildings showed that the building is marked with a yellow grade, which is described on the same website as a building that is of significant historical, cultural, environmental, or artistic value.

The assumptions made in the initial two methods could be somewhat supported by each other. Looking at the architectural drawings one can confirm that it is a rather long distance between the main communications of the building and the entrance to the courtyard. The drawings also showed that the courtyard was closely connected to many windows. The building is culturally graded by the municipality as a yellow grade, meaning that the assumption stating that the building was culturally significant could be confirmed.

Further, the measurements, sketches, and drawings were compared to the drawings and permits collected in the archival research. The permits collected helped define the differences in the sketches and drawings that were noted, indicating that there had been changes to their original design. The results of looking through the permits showed that the only permit relating to changes in the courtyard had been submitted after its original building plan, detailing the addition of private doors accessing the common shared space where windows had been previously located.
5.1.3. Culture-grade analysis

The collected data revolving around the building’s cultural grade gathered from the databases of the municipalities could be put through the culture-grade analytical method developed by Erica Persson (Persson 2020). The culture grade analysis provided the answer that the area in question was defined by the municipalities as of cultural or historical importance for their surroundings and that both of the laws relating to the culturally graded built environment are applicable.

5.2 Participatory research

5.2.1 Survey

The main result of the pilot study was achieving the correct Swedish terminology to use in the actual survey so that questions would be easily accessible and prevent misinterpretations. The findings of the survey were both qualitative and quantitative, revolving around the respondent’s perception of the courtyard, its utilization, and their ideas for future change. Nineteen out of forty-nine respondents replied to the survey.

The first three questions were answered with simple statements in which the respondents were allowed to choose from two or three options. The qualitative data showed ten answers indicating that the courtyard was hard to locate and nine answers indicating that it was easy. When asked if the respondents perceived the place as public or private the answers showed that fifteen chose private and four picked public. The quantitative data gathered showed that sixteen respondents used the courtyard zero to one time a week and that two respondents utilized the space five to seven days per week. Indicating that only sixteen percent of the respondents used the space more than zero to one time a week.

The other answers to the study were read while simultaneously transcribing the qualitative findings onto a piece of paper. Initializing the process of reviewing the data with a categorization of findings to achieve quantitative results on which answers were common in the data collected, indicating their importance according to the collective perception of the inhabitants. The common answers were seen as of high importance, yet those who were uncommon were not seen as of no importance, instead, they were simply categorized as uncommon. All the data, despite its frequency of answers, was categorized by reviewing the data and comparing the answers to the questions, noting down similar data to find answers interpreted as having common grounds.
To the question of what activity brings them to the courtyard, these were the common answers collected: ten replies stating that no activity currently is attracting their use of the courtyard, four mentions of optional activities, three replies indicating that the private feel of the courtyard hinders them from utilizing the space, two mentions of enjoying the sun and two replies indicating that two respondents attend the common shared space only for rare necessary activities such as spring cleaning. The uncommon answer to the question indicates that a respondent only visits the courtyard if the other common shared spaces were at their capacity or suffering from harsh conditions.

The next question asked what activity they would want to perform on the courtyard in the future, the common data were: thirteen replies representing a want to perform optional activities, three respondents said no activity would attract their use with one of them mentioning that they would rather go to the nearby park. The uncommon data indicated a need for the necessary activity of storing strollers and bikes.

Further data relating to the courtyard’s major strengths showed the common answers: eleven replies indicating that the common shared space has good physical preconditions, and four replies about the existing greenery and two answers stating that there currently was no major strength or that the respondent couldn’t think of one. The uncommon data collected were: one reply indicating that the major strength of the common shared space was that it was good for those who live in connection with it, one mentioned it can support the other common shared space in terms of size, one mentioned the connection to the neighbours being positive and one reply saying that it could solve the problem of storage for strollers and bikes.

The data collected through the question asking about the respondents’ perception of the place’s major weaknesses contained the common data: eleven answers indicating that the place’s private feeling created by the close connection to private doors and windows was perceived as a weakness, five answers indicating that the courtyard is hard to access and three replies indicating that the courtyard was perceived as of low-quality space. The data collected from the seventh question in the survey showed the uncommon answers provided in the same reply: there had been difficulties growing plants earlier, downpipes expose a danger in accessibility, sound propagates between the buildings and that various objects had been thrown out of windows exposing a danger for people on the courtyard.
5. Results & Analysis

Do you have any other thoughts?
MORE GREENERY x5
MORE PUBLIC x4
MORE/BETTER FURNITURE x3
PUBLIC/PRIVATE x2
PRIVATE x2
TREE x2
KEEP STONE PAVING x2
GRILL x2

Askvall, Ture. (2022) [Figure 25] Statistics from final question of the survey

The last question providing the respondents with the last chance to express any other thoughts or ideas showed the common mentions: five replies indicating that there was a desire for more greenery, four mentions of a will to transform the inner courtyard into a common shared space that is perceived as public, three answers pointing to a need for more and better-suited furniture, two mentions of organizing the courtyard into public and private zones, two mentions of reserving the courtyard as private, two mentions of wanting to secure the health of the elm tree situated on the courtyard, two mentions that the stone paving should be reworked and two mentions of a desire for building a common grill. The uncommon answers to the open question showed: a statement that indicated that objects placed on the courtyard were endangered by the risk of snowfall and shovelings, that one person wanted the courtyard to feel homely, one answer that indicated that they would like the place to feel inviting, one mention of wanting a stationary grill that could be placed at the courtyard, one mention of the courtyards poor quality of space and one mention of not being able to think of a reason to go there.

To rule out opposites and to define what contradicting notion is perceived as of higher stake according to the interpretation of qualitative data collected. The data were first analyzed to find any contradictions, and further the opposites and their numerical value in frequency were compared. The only major contradiction found were the three answers to the last question suggesting either that the courtyard should be perceived as public, public/private, or private. The argument applied was that the wish to perceive the place as a more public space could be supported through data collected from other questions, showing that the privateness of the courtyard was perceived as a weakness. While the notions of semi or fully reserving the place as private were only indicated by the frequency of times that they were brought up during the last question.

The method of summarizing the participatory meeting was confirmed by sending the discussion points and meeting agenda back in a survey format to both the participants and those who didn’t partake in the meeting. The results were majorly accepted by the respondents, yet one out of nine respondents felt that the results were not clear enough and that there was a need to know where ideas originated from. Although the data indicated a majority agreed with what had been discussed, this was seen as an important issue that would have to be dealt with. Therefore, the presentation of the design was noted as needing to show exactly where from and what part of the process ideas and strategies were developed.
5.2.2 SWOT

All the data collected through the survey could now be considered with the perspective of a Swot-analysis, transcending the borders of the questions to find support for both common and uncommon data. The format of the questions affected the frequency of certain data, and it was noted that the frequency revolving around specifically asked for information would naturally be more common, especially those answered in quantitative ways. The other data not placed in the SWOT were not seen as of no importance, instead, the uncommon data was as stated earlier, only categorized as such to achieve a sort of scale indicating which data could suffice on its own, and which needed further elaboration.

The topic with the highest numerical value is the data indicating that the courtyard feels private, which can be counted as referenced a whooping thirty times throughout all the data collected in the survey. Being a common shared space, this was interpreted as something negative and something that could be affected, which allowed it to be categorized as a weakness. Remembering also what had been elaborated on in the observations, a further threat was also defined as a close connection to neighbours. It was chosen as a threat because the apartments and their windows could not be moved or removed.

The numerical value indicating the second most common data was replies to the quantitative question relating to the respondent’s frequency of utilization of the inner courtyard, with seventeen out of nineteen replies indicating that many respondents only utilized the common shared space zero to one time a week. Adding in the answers indicating that people rarely used the courtyard to the count, it added up to the numerical value of twenty. This was perceived as negative and as something that this project could affect, therefore the low usage was classified as a weakness in the swot analytical method.

The third most shown answer related to optional activities performed in the common shared space. There was a total of eighteen mentions of performing activities such as enjoying the sun, reading, and eating. This was interpreted as something positive and as a precondition that could not be directly affected by the project, therefore an opportunity.

The fourth most shown data indicated that the courtyard was hard to access as shown by seventeen replies, with ten originating from the initial question relating to the respondent’s perception about the courtyards accessibility added together with the collected results of the other questions. This problem
was divided into the two different negative categories of the SWOT, with the weakness revolving around the affectable issue of locating the entry point, and the threat being how to route to the common shared space is complicated.

The fifth place for most shown data collected through the survey was a tie between the perception that the courtyard’s physical preconditions were of good quality, with twelve replies. The data was interpreted as positive but as something that cannot be physically changed through the course of the project and was therefore classified as an opportunity. Reviewing the data indicating that the courtyard had good physical preconditions, it was found that many of the replies stated that it was the separation from the street which was the inner courtyard’s major strength. The separation from the street was seen as something affectable because of the attempted flowerbed which could be seen as both a way to incorporate more greenery into the courtyard and also an attempt at further distancing the courtyard from the street level and was therefore classified as a strength.

The sixth most common data indicated that the courtyard had no functions attracting the respondents and was mentioned eight times in the data collected. The data was gathered in the questions revolving around current and future activities.

Seventh place was a three-way split between data indicating a want for more greenery, the perception that the common shared space was of poor quality and mentions suggesting a need for furniture better suited for both the desired activities as well as the courtyard itself. All of them landed on the numerical value of six. The desire and space for more greenery were seen as a strength because of the interpretation of the data as a positive thing that this project could affect. The perception of the courtyard being of low-quality space was seen as something this project could affect and as something negative, therefore it was interpreted as a weakness. Considering what the uncommon data from the survey stating that the stone paving should be re-used was elaborated upon in the observations, the stone paving was also categorized as a strength, because it could be reused, and its cultural reflection was positive. The need for new and better-suited furniture could be argued as a weakness due to its negative implication of the currently accessible furniture not being good enough, however, the prior weakness stating that the courtyard was of low-quality space was seen as implying the same problem that the desire for better-suited furniture would as a weakness. Therefore, this was seen as a strength, because the data was reflecting the respondent’s communal perception it could therefore be interpreted to imply engagement, which was seen as positive.
Eight places were tied between the data indicating that the tree was perceived as positive and the data showing that there was a will to transform the common shared space into a place that is by its inhabitants perceived as public. The tree was seen as a strength because of the positive nature of the data collected and the fact that trees are susceptible to change meaning that the tree could be affected by a re-adaption of the inner courtyard. The desire to give the courtyard a more public feel was seen as a positive notion of change, and as affectable, therefore a strength.

Place number nine is the mention of a risk of falling objects and snow appearing two times throughout the collected data. The risk of falling objects and snow was seen as a threat because this of this project not being able to change the physical laws of nature in which gravity will cause snow to fall from the tilted roof, and the occasional dropping of items out of windows. The fact that there were more available spaces close to and within the estate was seen as an opportunity.

5.2.3. Initial Key Objectives

To clarify what the objectives should relate to in textual and conceptual material, all the previous findings were shortly described in ways of approaching them with a problem-solving perspective. This was done to concretize an initial vision generated through applying the prior analytical methods to the data collected in the methodology.

The first objective proposed strategies relating to physical changes in materials and furniture that were described in the swot analysis. The proposed objective stated that furniture could be a way of overcoming the obstacles by imposing a sense of use and indicating a degree of publicness. Remembering that Gehl wrote about the quality of space increasing the conditions needed for activities and spontaneous interaction, the objective also stated that new quality furniture should be investigated to increase the quality of space. Acknowledging the uncommon answers contributing with objective information that stated that items are at risk of destruction due to snowfall and or objects falling out of windows, therefore objective also acknowledged that storage for furniture and items would have to be considered.

The second key objective was defined with the title Tree and Greenery and related to the qualitative data gathered about the perception of the tree and greenery as something positive. The objective said to acknowledge the elm tree on-site as a strength and to further develop space for greenery. The objective also acknowledged seasonal changes relating to increasing the quality of space throughout the year.
The third key objective detailed an approach that would revolve around wayfinding and activities. The data collected showed a fifty percent split when the respondents were asked if the courtyard was easy to locate, showing that there was a poor sense of wayfinding in the courtyard and that the mental maps of the inhabitants needed support to strengthen their perception of wayfinding concerning the courtyard. The survey results showed a desire for optional activities such as sitting, reading, and food-related activities, the objective, therefore, stated that the furniture used should allow for these activities to take place and present good conditions for them to be performed.

The third objective also related to the fact that the courtyard suffered from low usage, shown in the survey, and triangulated through observations, only sixteen percent of the respondents utilized the courtyard more than zero to one time a week, this could be seen as caused by the lacking sense of use. Defining what activities could take place was interpreted as it could in turn generate a higher usage with consensus achieving a stronger sense of use.

5.2.4. Modelling of a site

The different methods gave results showing measurements, original drawings and the differences in how the building looks today compared to the drawings. The data was used to create both digital representation of the space as it currently looked and a physical model that could be used as a tool for discussion during the participatory meeting. What was modelled was the building, the courtyard, the stone paving and a simple site of the surroundings. The analytical methods most important result was a better understanding of the physical environment.

5.2.5. Participatory Meeting

The meeting was held at the common shared space on the twenty-fifth of May from five to seven in the evening. Participating in the meeting were six people with different levels of stake in the project, some were board members of the collective, close neighbours to the courtyard and other apartment owners. The discussion produced notes portraying the participants’ thoughts about the methodological approach as well as different criteria important to incorporate into a design.

The meeting conclusions survey resulted in nine answers out of forty-nine, in which eight respondents agreed with the statements, and one comment mentioned that the transparency of the meeting was unclear and that it would be helpful for participants who could not partake to see exactly where ideas originated from.
There were two discussion notes relating to the problem of the common shared space private feel. The first approach to the issue proposed that the problem originates from the close connection to windows and that the way to deal with the issue would be to break sightlines between windows and active areas in the courtyard. The second approach considered a new topic not priorly mentioned in the analysis, suggesting that lighting could increase a sense of publicness as the only current sources of light came from private sources.

The issue of low usage was found through analyzing the data from the survey and was confirmed in further observations. The topic was not directly discussed during the meeting but what was discussed was many ways of improving the quality of space and accessibility to the courtyard.

The results of the survey indicated a clear wish to perform optional activities on the common shared space. During the discussions, it was explained that the inner courtyard was the only place accessible to the apartment owners where it was allowed to grill, and the participants of the meeting indicated that there was a desire for one of the optional activities to be performed on the terrace to be grilling in a social context. There was also a discussion about creating a secluded place that could allow for optional activities such as reading and relaxing to be supported in the planned environment.

The fourth most common data collected from the survey indicated that the courtyard was both hard to locate and to access, this was also stated in both the first initial site observation and the participatory observation. During the meeting it was discussed as an issue originating from the complex and long route to the courtyard, the problem could supposedly be fixed by allowing this project of re-adapting the common shared space to consider not only the inner courtyard but also the route to it. Both decorations as well as providing the corridor with more lights could be a way to strengthen and support the cognitive maps of the inhabitants. The issue of accessibility also considered the accessibility of those who have private entry points to the courtyard. The current state of the common shared space includes downpipes that run across the courtyard, these were described as a problem of inaccessibility and it was discussed that some sort of wooden structure could be built to act as both a way to hide the downpipes as well as providing improvements in other aspects of accessibility caused by the downpipes close connection to the private doors that have a tall gap down to the ground level of the terrace.

There were no direct notes taken down from the discussions about the inner courtyard’s physical preconditions, instead many of the discussion points that were directly relevant to
other topics revolved around making use of the conditions presented. Probably because the preconditions were stated in the presentation as something that this project could only deal with internally, which would be the physical preconditions existing in the courtyard. Sightlines, lighting, optional activities and considering all seasons all in some way relate to the topic of making use of the courtyard’s external physical preconditions internally, as to allow the inhabitants to reap the benefits of the elevation and geographical orientation of the common shared space.

Data collected from the survey indicated that many of the respondents found no use for the common shared space, either because of its private feeling or because of access to higher quality spaces nearby. During the meeting, it was discussed that the one optional activity that was unique for the common shared space was grilling. Grilling is defined as an optional activity and looking at the ones mentioned in the survey, the optional activities would need all the same conditions as grilling, with the exception being the grill. There was another discussion originating from one of the inhabitants that wished to perform physical activity on the common shared space. The discussion noted that the other participants thought typical workout objects and materials were perceived as negative. Instead, it was discussed that maybe it could be done in a subtle way. The discussion also revolved around many ways to increase the quality of space, accessibility, and quality of activities, which during the clustering and literature review were interpreted as means of achieving more usage.

The discussion notes also show references to the common topics from the survey: a desire for more greenery, the notion that the common shared space is of poor quality, and the need for better-suited furniture. Discussing greenery, the notes provided insights on why the prior attempts had been unsuccessful, indicating that plants would need more physical space than what had been tried before. The discussion notes also indicate a need to recognize the seasonal changes and their effects on plants. The plot of soil around the tree was currently the major source of greenery beside the tree itself. It was discussed that it should remain, to not harm the tree, but that a re-adoption of the inner courtyard should consider complementing it in the design. Improving the quality of prerequisites required for greenery to thrive, would be a direct way to increase the quality of space in one of its aspects. The discussion revolved around many other ways of improving the quality of space either through lighting, increasing accessibility, breaking sightlines, or considering seasonal changes. During the discussion about furniture, the first point of discussion revolved around storage and the fact that they needed to secure during the winter half-year. It was interpreted as optimal
if the furniture could be safely stored on the common shared courtyard, protected from the climate. The wooden structure that was discussed to hide the downpipes were both perceived to be a way to provide compact storage and maybe further seating.

Discussing both how to strengthen the tree and ways to make the common shared space feel more public, there were direct ways of approaching the problems suggested. Firstly, the tree’s health was discussed, and it was stated that it remained unclear if the tree was healthy or not. It was said that it could be assumed that it is in good condition as it is still growing and producing leaves during the summer, although it could not be specified with certainty unless an expert is involved. The discussion, therefore, proposed involving a dendrological expert in the process at some stage.

The risk of falling snow from shovelings was discussed during meetings and it was concluded that to secure furniture and other object placed on the common shared space the re-adoption needs to determine a storage plan. Following the discussion yet another topic arose, which revolves around the upkeep of the common shared space. Currently, there is no designated caretaker of the inner courtyard, and the topic arose out of the discussion around who would oversee storing away the furniture when the climate changes. The discussion led to further elaboration on the topic, and it was noted that a re-adoption needs to come with an upkeep plan.

Another new topic collected from the results of the participatory meeting was the execution of the project. It was stated that the re-adoption should consider being executed in different stages making it so that the courtyard would not get stuck in a transitory state in which it cannot be used because of long-lasting construction.
5.3. Cross-analysis to develop Design Criteria

To achieve a diagnosis that would make grounds for the design criteria, all the data and theory collected is compared to each other, elaborating on how the data relates to each other, further identifying how to deal with what is discussed according to the collected data.

5.3.1. Low usage/Private feeling

The non-participant observations confirmed the data gathered from the survey indicating that the courtyard suffered from low usage. During the several occasions of observations, it showed that at most, two people were partaking in optional activities on the common shared space, and more times than not there were no users during the observations. In turn, this was interpreted to also confirm the data indicating that many of the respondents found no use for the place. The data shows that the people who dominate the utilization of the courtyard were mainly those who inhabit the apartments that have private doors accessing the space. Supporting the uncommon answer from the survey proposes that those who live in close connection to the courtyard are those who can benefit most from the shared space. In some sense, the recognition that those who dominate the space are the ones who gain from it the most could somewhat explain the data from the survey showing that the commonly shared courtyard is seen as private. Perceiving a place as private certainly affects the way you relate to it and the private feeling indicated in the data of the survey was seen as one of the causes of the low usage. The cause of the low usage could also be somewhat explained by the data implying that the inner courtyard was hard to access, as shown in the data collected from the survey and observations.

Askvall, Ture. (2022) [Figure 26] Site plan and cellar path
5. Results & Analysis

The observation showed that the users of the space, during the observations, always entered and exited the courtyard through private doors which could possibly provide an explanation of how the private feeling that was shown in the data, had manifested itself in exclusive comfortable access, complicated public access, and poor conditions for attracting use, which has resulted in low usage of the common shared space. Comparing the results of the methods and the analysis conducted, the data could firstly triangulate the suggestion that the courtyard suffers from low usage indicated by the survey results, and secondly elaborate on its causality by further comparing the data and the literature.

Askvall, Ture. (2022) [Figure 27] Digitalised sketch from observation entering the inner courtyard

Askvall, Ture. (2022) [Figure 28] Digitalised sketch from observation with one user of the space
The results of the survey indicated that there was a will to instil a more public feeling in the common shared space, the data could also be supported by the common mention of the private feeling as a weakness. The will to transform the place into a more publicly perceived space was therefore interpreted to originate from the negative perception of the inner courtyard as private, shown in the quantitative and qualitative results.

The first area of strategies proposed to deal with the diagnosed low usage and private feeling in more than one way. The design aimed to lower the private feeling of the common shared space to increase its usage, which was suggested during the participatory meeting. The discussion notes from the meeting proposed breaking sight lines from windows to the active zones of the courtyard. What first had to be done was a decision on where activities would take place on the courtyard. The active zones were previously gathered towards the middle of the inner courtyard, where the stone paving was centred. The inquiry proposes moving the zones towards the southern periphery of the common shared space, away from the neighbouring windows. The sightlines from the windows would then be semi-broken, by placing plant boxes on the outside area beneath the windows, separating the users from the windows while still allowing sunlight to reach the inside of the apartments.

Figure 28 Digitalized sketch of plan drawing with sightlines and plants

Askvall, Ture. (2022)
5.3.2. Wayfinding and Accessibility

Data collected from participatory observations could also verify the data gathered through the survey indicating a poor sense of wayfinding. Looking at the data collected through the survey revolving around the public entry point to the courtyard, it indicates that it is both hard to locate and hard to access. Wayfinding was perceived as of poor quality during both the initial site observation and during the participatory observations in which the notes indicated that the route was both complicated and visually hard to interpret. The data from the survey indicating that the public entrance to the courtyard was hard to access was confirmed by comparing the results of the observations.

How to improve the sense of wayfinding was directly discussed during the participatory meeting and the strategy chosen originated from the unstructured discussion. The notes said that the path to the common shared space should be complemented with lighting or decorations. Which would provide the users with reference points to strengthen their cognitive maps of locating the inner courtyard by the cellar path (Arthur & Passini, 1992). Light loops could therefore be placed in the cellar path to increase accessibility and wayfinding. A certain issue of accessibility was also discussed during the meeting, the notes stating that the downpipes and tall gaps from the private doors to the ground of the courtyard posed a danger in accessibility for the users exiting and entering from private doors. The strategy was discussed during the meeting and proposed building a wooden structure that would hide the down drains and serve as a stair for the private entrances.

Askvall, Ture. (2022) [Figure 29] Digitalized sketch of strategy to increase wayfinding
5.3.3. Activities

The optional activities noted as currently viable on the common shared space would be described by Gehl as of higher intensity, requiring social bonds and structures to support interaction (Gehl, 1987). Comparing the activities noted during observations and those collected by the survey, showed that the currently performed activities and the common answers to the questions relating to activities had similar results. Indicating that the activities desired for future use were the same as those that were currently performed. This means that the activities that the inhabitants wished to take part in in the courtyard were viable for its surroundings. Analyzing the data collected revolving around activities allowed for a somewhat triangulated interpretation that the desired optional activities were suitable for the inner courtyard and were already being performed by those who utilized the common shared space.

The participant observations were conducted so that the observer could try and assimilate the perspective of an inhabitant and could elaborate on the data indicating that six respondents found no use for the common shared space. Observing as a participant showed that the respondents had access to other common shared spaces from within the building and close connection to several public spaces outside of the property. Although there were two mentions of the inner courtyard serving as further space for inhabitants to utilize when the others were at their capacity, during the observations it was hard to imagine the various public spaces all being at their capacity, however it was noted that the other common shared space, within the building, was smaller than the courtyard. The access to a variety of other public and semi-public spaces for respondents to utilize could possibly provide an answer of why the respondents found no use for the courtyard, which was also indicated by a reply to the survey stating that the respondent would rather go to the nearby park for optional activities.
The first strategy is to provide more flexible furniture that would allow for spontaneous constellations supporting different activities. The second way to increase the quality of conditions for certain activities was to complement the stone paving of the new zone dedicated to activities so that chairs, grills, and tables could be comfortably used. Increasing the quality of activity by improving the conditions for them, could lead to more spontaneous interactions by increased usage (Gehl, 1987).

5. Results & Analysis

Askvall, Ture. (2022) [Figure 31] Digitalized sketch with suggested spaces for greenery
5.3.4. Physical Preconditions

The common data interpreted in the survey indicated that the courtyard had good physical preconditions such as the separation from the street level, a comfortable climate and interesting relation to surrounding buildings. The inner courtyard and its surroundings were noted to be unique and to reflect a sense of cultural heritage during the initial site observation, it was also noted that the level changes sheltered the courtyard from the street level, putting the user on an elevated stage above the noise from the pedestrian and the vehicular road beneath. Comparing the results of the methods that related to the inner courtyards’ physical preconditions the data showed that the courtyard.

Strategies applied relating to the criteria revolved around making sure that no harmful effects such as blocking of sunlight or corruption of the cultural values would be achieved. The first decision made was to make use of existing materials such as the stone paving, which was also somewhat suggested in some of the data collected from the survey. Re-using materials was seen to represent thick time in a sense of portraying the inner courtyards’ past by preserving and highlighting its original materials (Till, 2009). The second decision was that any new structures or furniture would be temporary, meaning that they could be moved and removed without harming their surroundings. Portraying a sense of present and future in that structures built can be easily identified as additions to the original plan.

[Figure 32] Showing care for what is currently there
5.3.5. More space for Greenery/Furniture

Observing also led to further elaboration on the data that indicated that there was a desire for more greenery, the current state of the courtyard was of poor quality and mentions indicating a need for better-suited furniture. The notes from both the non-participant and participant observations showed similar results as that of the survey. There was the uncommon data from the survey that indicated an attempt at creating flowerbeds along the south-western periphery of the courtyard facing the street, which could also indicate an attempt at further separating the courtyard from the street level and neighbouring windows, that was mentioned in both the survey and observations as unsuccessful. The flower beds were during the observations only seen as plots of soil, with the only major element of greenery being the tree and the plot of grass that was found around its trunk. The attempt at creating a flowerbed indicates a desire for more greenery to complement the existing tree, which was also shown in the results of the survey.

The data collected through the survey showed the common replies that the shared space was perceived to need better-suited furniture. Looking at the notes from the participant observations it was noted that there was furniture easy to access on the courtyard, but that the furniture felt like it belonged to the surrounding apartments, probably caused by the private feel of the common shared space. The data from the survey also indicated a common perception of the inner courtyard as of low-quality space, mentioning that it was seen as grey and private. One uncommon answer also indicated that there would be litter from time to time. Looking at further notes from the participant observations it was noted that the inner courtyard was unclean, both in terms of waste and dirt, noting that there was earth spilling out from between the stone paving and the flowerbeds and that there were many cigarette butts and other objects to be found scattered across the courtyard.

Observations with different perspectives led to results that could be compared to the common results of the survey and discussion notes from the participatory meeting relating to the tree. The tree was mentioned five times as something positive throughout the results of the survey. During the site observations, it was noted that the tree was the major element of greenery existing in the courtyard and that it was visually pleasing as well as contributing to protection against the climate. During the participatory meeting, strategies for securing the trees’ health were discussed. The positive perception of the tree was seen as a product of it being the sole source of greenery on the inner courtyard.
There were two mentions of a risk of falling objects and snow found in the data collected from the survey, during the observations the only note relating to the topic was that it could be imagined, because of the tilted roof and close connection to tall rising walls with windows, it could be imagined that objects and snow falling would pose a danger to objects and people on the inner courtyard.

During the participatory, meeting greenery was the most frequent point of discussion. The different discussion points were incorporated into the proposed strategies with actions aimed to improve the quality of space. Space for greenery was previously added to decrease the direct connection to windows for users of the common shared space. The further space for greenery was divided into zones of evergreen and seasonal so that all seasons would be acknowledged. The last strategy proposed relating to the tree is to invite an expert on dendrological health to make a check-up on the tree to see if vaccinations for elm disease could be needed.

The addition of more space for furniture relates to two proposed strategies. The first one was a product of strengthening the preconditions of activities, by providing more furniture that could be arranged in flexible constellations. The second decision was to give space for storing the furniture safely away from the dangers of falling items and snow during the winter seasons. Storage was incorporated into the design in a proposed way that would create storage space in a compact way in the wooden stair/plant box structure. Guaranteeing that any investment in furniture would result in long-lasting quality preconditions for activities, by securing them from the harsh weather of the winter in Stockholm.

The issue of who would store away the furniture was discussed during the participatory meeting. The discussion also raised the topic of considering who will water the plants. As mentioned earlier, the common shared space had no designated caretaker which would mean that irrigation, access to tools, and an upkeep plan would have to be proposed. Instead of creating autonomous irrigation, it was seen as an opportunity for long-lasting engagement to make use of the human factor in irrigation. Yet, it had to be done in an accessible way. The wooden structure allowed for easy implementation of drip irrigation controlled by a device that would be placed together with a sign providing the reader with information relating to watering and when the plants were watered recently. The wooden structure also created space in which tools such as brooms, garden scissors and shovels could be stored all year round. The upkeep plan is related to the zoning of greenery and close access to tools. The aim is to provide the necessary equipment for easy upkeep so that every user of the space
feel that they have the tools they need to solve any issues such as litter or drying plants quickly and smoothly. Hoping that the process has generated enough active engagement to continue after the end of the project. The seasonal greenery zones were also seen as an opportunity for generating care with engagement by seasonal changes.

5.4. 3d-modelling an Inquiry

The analytical method was used in order to translate the results of the cross-analysis to achieve visual material that would portray the concept developed. The aim was also to somewhat concretize the general shapes and sizes of the structures developed. However because of the fact that this analytical model is not the last part of the project it was seen as unnecessary to specify exact measurements of the strategies. Because the work would continue on after the development of this initial concept.

The process started with the 3d-modelling of the wooden structures that were proposed. The results of reviewing the sketches and translating them into Sketchup is shown in the following images. In total there were four wooden structures serving different purposes. Two of them provide space for storage and cultivation and the other two are dealing with issues of accessibility and could also be used for further storage.

Askvall, Ture. (2022) [Figure 33] Line isonometry showing the different structures and their purpose.
Adding the wooden structures to the already built model showed how the wooden structures would deal with the proposed strategies of breaking sightlines, and also led to an initial attempt at re-organising the stones in accordance with the decision to push the zone of activity towards the southern periphery of the common shared space. The plan drawing below shows only the reversible yet less temporary structures serving as stairs and plant boxes, and not the temporary furniture, further pots for plants or grill.

The process continued with implementing the temporary aspects described above, in order to experiment with different scenarios of different activities taking place. The experimentation is shown on the next page through visualisations that would help the participants and also the researcher, get a better connection to how it could look in real life.

Askvall, Ture. (2022)
[Figure 33] Plan drawing showing section lines added structures, sightlines, moving of stones and zoning.
5. Results & Analysis

Askvall, Ture. (2022) [Figure 34] Visualisation of mid-day coffebreak during beginning of summer.

Askvall, Ture. (2022) [Figure 35] Visualisation of smaller groups of activities during mid summer.

Askvall, Ture. (2022) [Figure 36] Visualisation of evening dinner party late summer.
After having experimented with different furniture constellations it was decided that 3d-sections would be visualised to show specific strategies. The first strategy in need of more explanation was how the plant boxes would function for cultivation and storage. Therefore section B: B was produced, aiming to explain how the boxes are connected. The boxes are connected to make waterproof storage space and still allow for water to travel and plant boxes to have air circulation.

Askvall, Ture. (2022) 
[Figure 37] 3d-section B: B showing how plantboxes are connected to allow for water proof storage.
The second 3d-section was visualised in order to explain the strategy related to wayfinding. Showing how the cellar path connects to the common shared space and also how fairy lights could provide the users accessing the space from the public entrance with reference points that would strengthen their perception of wayfinding.

Askvall, Ture. (2022) [Figure 37] 3d-section A: A showing connection to cellar path with added lights.
5.4. Follow-up Methods

5.4.1 Presenting for the Inhabitants

The analysed results of the previous step in the follow-up part of the methodology were sent to the participants of the process. What was sent back as an answer to the inquiry was a summary of the inhabitant’s thoughts on the developed design. The summary is shown below as it was sent by the communicator to the researcher, the only difference is that it is translated freely from Swedish to English and emojis are removed:

The process to initialize the project was well thought out. The process started with a discussion between the board members to make initial decisions on what the work should entail. Ture then conducted observations to get an initial definition of the situation, thereafter he continued with formulating the problem by sending out a survey to the inhabitants. The results were summarized and presented during a meeting in which the participants could express their thoughts and other ideas. The meeting was seen as positive and creative among the participants. Ture then used the collected data to develop an inquiry into the problem.

Here are some comments received about the inquiry:

- The result is really nice and professionally presented.
- Good that Ture thought about including storage for furniture.
- I liked that he incorporated the cellar path in the work.
- Cheap and effective solutions!
- Looks great.
- Wow!! looks great!
- Some of us are sceptical about how the yard is to be perceived as less "private"
- Some of us are unsure about how the inquiry would attract more utilization.

The board members choose to present the inquiry without changes and make decisions during an annual meeting

The annual meeting resulted in that the board, with help from Ture, decided to continue improving upon the inquiry, and after that make a cost proposal.

Looking at the results of this follow-up method it is clear that the desired effect was achieved. Which was that the inquiry would not be a final product originating from the inquirer, instead, the results describe a work in progress in further need of improvements according to the perceptions of the inhabitants.
5.4.2. Open-end Interviews with Architects

The interviews lasted between thirty to fifty minutes and gave different directions that should be considered when further developing the project. The different topics were discussed casually and the answers reflect the differences in architectural and personal backgrounds. The interviews were summarized instead of directly quoted in order for them to be combined by the topics of discussion. The full summaries can be found in the appendices and the paragraphs below aim to explain the conversations by summarising and comparing the different answers.

The first topic of discussion was dealing with the issue of low usage/private feelings. Andersson gave an answer that related more to how the legislation relates to strategies for solving the problem. Stating that the areas that are in close vicinity to private doors and windows need to be visually marked in some way that indicates the difference between the private spaces and the public. The respondent mentioned this was because of the legislation stating that people should not be disturbed when on their private property. This means that the inhabitants on the ground floor would have to be safeguarded in some way that guides users away from the private spaces. Dabaieh stated that the approach to organising space should consider public space, semi-public, semi-private and private space. She has dealt with the problem previously by varying methods of organising the space in participation with the ones who would have to experience the division of public space. Ensuring that disturbance is diminished by ensuring a consensus of utilisation. Similar to how Dabaieh emphasized participatory methods, Aldén added the importance of mapping out the context in order for the architect to get an initial definition of the situation so that the participatory methods are efficiently executed by making use of the architectural expertise of defining by mapping out a context. Aldén said that she thinks about the process, inspired by other architects, creating a system for the people to decide how they make use of it. She gave an example of how she designed a structure for a chair that the participants would then infuse their own personalities into by adding their own touch to the structure. In a sense ensuring that the process enforces a feeling of possession in the minds of the participants.

The discussions transitioned into the topic of wayfinding, in which the architects again provided different insights into the issue and the strategies proposed. Andersson started the discussion by saying that the results of good wayfinding could only strive to achieve the results of universal accessibility. Mentioning that the question of accessibility would also be the main point of discussion and evaluation for the municipalities
in their possible evaluation of the project. He stated that low-speed elevators could ensure that any user, despite their physical variations, would be able to utilise the space to the same extent. Here it was discussed that one of the limitations of the project was that the bachelor’s thesis would not have the time to consider the accessibility of the complex building that was built before the standardisation of accessibility had been established. Dabaieh provides insights into how she previously had used reversible methods of wayfinding to listed heritage. Explaining also that a multi-sensory approach was important for wayfinding to be accessible to all users. Dabaieh provided an example of how she used a projector and speaker to provide temporary, flexible and reversible reference points for the users of buildings with cultural or historical significance. Aldén again emphasized the importance of participatory methods, by giving an example of how she in one project provided the participators with the opportunity to create their own signage to release into the public sphere.

Andersson again stated that the municipalities would consider how the activities stated in the third question in the interview guide could be disturbing to inhabitants of the apartments and how they would evaluate the aspect of accessibility. The conversation started off by discussing how sound can multiply on hard surfaces and ended with a discussion about how another grill should be considered, acknowledging that the grill shown in the visualisation would not be optimal for diminishing smoke and odour. Dabaieh however emphasised the keyword of flexibility. By explaining how she always tried to support multi-use by imagining different scenarios and their dependency on furniture and space. Aldén mentioned that her experience is that the participants know what they want, but that it is hard to express thoughts and opinions with words. Arguing that the process of collaborative building can evoke conversations showing perceptions that would otherwise have gone unnoticed. Making use of situated knowledge also by providing the participants with a way of concretizing innovative ideas by taking a step back from the role of an architect. Concluding the discussion by saying that sometimes you need to reformulate questions to undirectly touch on the subject, arguing that sometimes it is easier to express what you want by looking at it from another perspective.

Discussing how to work with physical preconditions the conversations again took different approaches to the topic. Andersson again took on the perspective of the municipalities mentioning the legislations regarding drainage, accessibility to the physical preconditions and how reversible changes relate to the detailed plans of different classifications. Emphasising that all properties need to be able to deal with their own day water, provide universal access to resources and how the
visualisations show tendencies which would be considered as done with care because of their reversible nature. Dabaieh mentioned that she has worked with different projects seeking to make use of good physical preconditions on site. Provides an explanation of how some of her projects in Egypt aimed to maximize the use of the potentials found in a site’s physical preconditions. Aldén said that every time she gets started on an objective evaluation of what is there. Saying that the architects have to approach projects by acknowledging what is there and approaching the issues and opportunities with an open mind.

Talking about the desire for more furniture and greenery, Andersson mentioned that these additions need to be distributed in an accessible way, emphasising taking on the perspective of different people and their different needs. For example, the conversation stated that a wheelchair would need space for turning. Discussing the visualisations with Andersson he noted that there would be a need for a door on the storage so that furniture and tools could be safely stored without the risk of the storage areas getting filled with dirt or possibly rats. During the discussion, Andersson also mentioned that the previously mentioned private areas that would need to be indicated by a design could also be used for compact storage and how giving the private areas more space would provide more storage in a sense. Which brought up the issue of how the furniture would be accessed by intruding on private space and it would have to be noted that objects that are frequently used and stored away would have to be in spaces where the users retrieving said items would not become a point of frequent disturbance. Dabaieh talked again about flexibility, in which she emphasised that during her work with small apartments the design made use of foldable elements to provide compact storage allowing for multi-use. The keywords from the conversation with Dabaieh around the topic of furniture and greenery could be summarised as multi-use, flexibility and easy access to the tools of changing functions. The conversation with Aldén provided insights into how she has dealt with multi-use and temporary functions by efficiently organising structures that can change with time. Like a puzzle, she said, where all the pieces fit together. Her example was again of a self-built project in which she has to cram in different functionalities in a small space, and doing it by mapping out what is needed and looking at what is there with a perspective acknowledging different purposes.
6. Discussion

6.1 Comparing the Results

The results of fieldwork and participatory methods are compared with the results of the follow-up methods, to initialise the process of improving the work. The results of the first two methodological steps were an inquiry that was later reviewed by the participants and also architects.

The results of presenting the inquiry to the inhabitants showed that there was an appreciation for the work conducted, but that there was a need for further improvement. This was also shown in the interviews with architects who provided guidance by both explaining similar strategies to the ones shown in the pictures, but also by looking at the inquiry from a legislation perspective.

The first area of improvement is related to how the inquiry tries to enforce a public feeling in the common shared space. Andersson noted that the inquiry needs to acknowledge that some spaces should be private, and it was discussed that spaces in close connection to private apartments should be considered and marked as private. Dabaieh and Aldén proposed making use of further participatory methods in order to organise the private/semi/public spaces. The results of the presentation for the inhabitants also stated that it was unclear how the inquiry seeks to achieve a more public perception. Showing a clear area of improvement that could make use of further participatory events in order to generate a consensus of private and public space, that would make the project align better with the ideals of the municipalities, as interpreted by reviewing the follow-up results.

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Private spaces should be marked as private
Organise public/semi/private spaces in a participatory event.

Askvall, Ture. (2022)
[Figure 38] How to improve upon how the structure organises private/public spaces
The inquiry aimed to provide reference points that could provide guidance in locating the common shared space, by placing lights leading towards the common shared space. The results of the presentation for inhabitants showed that some of the participants appreciated the proposed strategy. However, the interviews showed that there is room for improving the strategies and also continuing the work by acknowledging the aspect of accessibility as to strengthen wayfinding. Dabaieh gave inspiration by explaining different methods she had used in order to achieve similar and more holistic multisensory wayfinding. Andersson stated that more work had to be done considering the accessibility on and to the common shared space. Reviewing the results it is clear that the process generated appreciated results, but that there are still many stones that have been unturned.

6. Discussion

Askvall, Ture. (2022)
[Figure 39] How to improve upon the issue of accessibility and wayfinding
The approach to supporting certain activities in the common shared space was developed by analysing the results of fieldwork and participatory methods. In the results of presenting the inquiry for the inhabitants, it was shown that some participants did not see how the re- adoption would attract their use. Indicating a need for further improvement to achieve increased utilization of the common shared space. The interviews also proposed areas of improvement consisting of accessibility and privacy as mentioned by Andersson and further participatory methods as explained by Aldén and Dabaieh.

Making use of the good physical preconditions of the common shared space was also shown to need more improvement. This was not mentioned in the results of presenting the inquiry for the inhabitants, but in the interviews with the architects. Who proposed several areas of improvement targeting different areas. Andersson again related his comments towards the legislations and municipalities. Explaining that the inquiry would have to work on the aspect of drainage, detailing how the common shared space would have to be able to deal with rainwater. Dabaieh also provided inspiration for how the work could be improved, by somehow maximizing the utilization of the good physical preconditions. Aldén gave inspiration in how the work could continue, suggesting a process of further defining the context by clearly mapping out the different positive aspects of the environment.

Askvall, Ture. (2022) [Figure 40] How to improve upon attracting usage, marking privacy and accessibility
6. Discussion

The summary of what the inhabitants thought about the inquiry showed that the structures suggested were appreciated yet still in need of improvement. One of the structure's main goals was achieving a more public perception of the common shared space, which was seen as unclear. However, it was stated that the storage solution was appreciated and that most inhabitants visually agreed with how it would look. Andersson proposed that the structures and furniture would need to be looked at from the perspective of accessibility, considering how people with variations in physical functionality would be able to use the space. Dabaieh proposed areas of improvement relating to how the structures and furniture could change for different purposes. Aldén proposed an area of improvement considering the efficiency of the design and how it should consider temporary functions.

6.2 Evaluation

The methodological approach developed, as expected, did not suffice to create a finished architectural product. However, the goal was always to initialize the process of re-adapting the laundry and not to finish it. Although it might have been better for my architectural career to have executed an architectural project from start to end in this research, it was always recognized that the participatory approach could only benefit from taking on a cyclical approach that has no clear end destination. Of course, the goal was to generate an inquiry that could be seen as a product of this first cycle, but nonetheless, all of the results of the follow-up methods indicate a need for the cycle to continue. The results show that the cyclical methodological approach could suffice in order to initiate a process, based on participatory methods, with the intent of developing and explaining strategies to re-adapt culture-graded buildings.
In order to ensure that the project would respect its surroundings and follow the ideals of the municipalities, reversible changes make it possible for a trial and error process. The culture-graded built environment needs to be respected, yet this does not mean that it can’t be improved upon. Planners and architects have to be willing to elucidate concepts and visualise ideas in order for total clarification and consensus to be achieved. During the process of testing and implementing sketches and 3D-models, it was shown that this was an efficient way to both clarify and test different ideas digitally without harming the built environment. Therefore the research shows that emphasis should be put on the most reversible measure of them all, which I would say is digitally testing strategies.

The 3D-modelling visualised an inquiry that could later be presented to the participants of the process, not as a final product, but as a starting point for them to continue improving upon the strategies even after the approach had conducted its last participatory research method. The design presented in the figures is not seen as the end stage of the project, instead, it is an initial attempt at dealing with the situation that had so far been defined. Further defining the situation could lead to new criteria developed, generating further development of the inquiry. It was up to the housing cooperative to decide to what extent they would like the researcher to be involved, providing them with the opportunity to move away from the personal interpretations of the researcher and focus instead on their perceptions of themselves. Providing them with an inquiry to further improve upon and align with their perceptions. However, the participants stated that they wanted to further explore the problem together with the researcher in order to improve upon the inquiry. Showing that the cyclical approach of handing over a project most likely will need more than one loop to be successful in achieving long-lasting concepts.

The goal of the methodological approach was to achieve a path of success for other projects looking to re-adapt culture-graded buildings to follow. The path to success was not always crystal clear and the iterative nature of applying a PAR approach was combined with the even more iterative nature of a design process. The combination led to a fuzzy process that mainly revolves around the front end of making diagnoses, supporting the definition, and developing plans of action to deal with the issues located. Therefore, the methodological approach might seem somewhat inconclusive, because of the results and their non-final state. However, it was recognized from early on that the methodological approach would not consider the implementation of strategies and the following up on decisions made. Removing the focus of the final product and instead highlighting the process of generating a framework for inquiry.
7. Conclusion

based on data reflecting the participant’s collective perception. What once the steps of the methodological approach had all been conducted, was that such an iterative project, based on qualitative data depending on its users, surely could continue looping back in all eternity. The Inquiry would surely only become more relevant for the inhabitants by conducting further participatory methods that would make the diagnosis more holistic. Touching upon the major conclusion drawn from conducting the methodological approach and reflecting on the process. The PAR approach generates a process that would surely only benefit from conducting further participatory

To conclude, other projects looking to re-adapt culture-graded buildings must be aware that the process initiated by the PAR approach could result in an endless loop of self-improvement if the researcher manages to inspire and activate its main participants. The optimal outcome of applying this PAR approach would therefore not be a final product, instead, it is an endless process of potential for further improvement on the inquiry.

Askvall, Ture. (2022) [Figure 41] How to cyclically approach an inquiry about the culture-graded buildings.
7. References


7. References


7. Appendices

Initial Observation

16/01 - 22. 13:00 - 14:00

The first site visit took place on the sixteenth of January from 13:00 - 14:00. The weather was gloomy, cold, and windy. For this initial site visit, I have no checklist to observe, instead, I want to get an impression of what accepting this work will entail.

Notes

Poor sense of wayfinding, I would not have been able to locate the route to the terrace without my guide.

The level change of the terrace creates a sense of privacy from the street. Yet the street is fully visible and when standing on the terrace it feels like the optimal stakeout point to observe the street below.

The elm tree provides shade and shelter in a natural and aesthetical way, it also contributes to the sense of privacy from the street. Although the first visit took place on a typical January day when plants are not thriving, I got a sense of what the place could look like in the summer when the tree is blooming and plants are growing.

I imagine that the place gets only a few hours of the sun even in the summer, both because of its orientation and surrounding buildings blocking the path of the rays.

I got a strong sense of cultural significance. The noticeably old stone paving and the typical black metal fencing point to an older time in the architectural history of the city.
7. Appendices

Observations

Checklist

How many people stop by?

Where did they enter the terrace from?

What activities take place? (Do they just walk by, stop for a period of time, take a seat or partake in any of the activities shown in the survey result.)

Is there a diversity of users (age, gender, and ethnicity) or is one particular group dominating the place?

Will the people be noticeably bothered by someone observing them from the street?

Review swot and results of the survey and note findings relating to the different data.

PARTICIPATORY,
Friday 15/4, not too sunny not too windy mid-day 13:00 - 14:00

0
N/A
N/A
N/A
N/A

There is a close distance to a park. there is a roof terrace accessible by elevator. the route to the courtyard is perceived as complicated to locate and access. Litter was found, probably came from windows. The attempts at creating flowerbeds were located.

NON-PARTICIPATORY,
Sunday 17/4, Sunny evening 19:00 - 20:00

2
Private door
Grilling and dinner
One group dominating
No
Hey!

This questionnaire consists of 8 questions and should not take up more than 5 minutes of your valuable time. Your answers are completely anonymous and will be collected as research data.

My name is Ture Askvall and I study Architecture, communication and visualization at Malmö University. I have come in contact with your board at [redacted] and have the task of coming up with a proposal for a possible re-adaptation of your western farm, in combination with my bachelor thesis.

This is a survey with the aim of involving the [redacted] on Bastugatan 25 in the process of re-adapting the [redacted]. The answers you submit to this survey will form the basis for the re-adaptation proposal and the intention is that you are a large part of the process that is started with this survey, to then end with a concrete proposal on how to re-adapt your [redacted] according to your needs.

1. Har du lätt att orientera dig till gården?
   - [ ] Ja
   - [ ] Nej

   Q1: Is the common shared space easy to locate?

2. Uppfattar du gården som...
   - [ ] Publik
   - [ ] Privat

   Q2: Do you perceive the inner courtyard as public or private?
7. Appendices

3. Hur många gånger besöker du gården på en genomsnittlig vecka?

   - 0 - 1
   - 2 - 3
   - 5 - 7

4. Vilken aktivitet får dig att gå till gården?

5. Vilken aktivitet önskar du att du kunde utöva på gården?

6. Vilken är den huvudsakliga styrkan med gården?

7. Vilket är det huvudsakliga problemet med gården?

8. Har du några övriga tankar om platsen som du vill uppmärksamma?

Tack för ditt engagemang!

Q3: How many times do you use to space in an average week?

Q4: What activity brings you to the courtyard?

Q5: What activity would bring you to the common shared space?

Q6: What is the major strength of the inner courtyard?

Q7: What is its major weakness?

Q8: Do you have any other thoughts?
Swedish

Mötes agenda och sammanfattning
Sammanfattning av mötes diskussion
I och med godkännandet av denna sammanställning så godtar deltagarna att resultatet av denna process som började med en enkät, används till forskning som bedrivs av malmö universitet och publiceras på Diva-Portal.

Min uppfattning var att det som presenterades mottogs postivt och den enda punkten jag tog bort från mitt resultat av den tidigare analysen var att platsen får få soltimmar, detta var min uppfattning utifrån observationer och ändrades då diskussionen visade att det visst är mycket direkt sol på gården. Många punkter som utgör kriterier för vad designen bör åstadkomma och vilka specifika problem som deltagarna vill ha lösta diskuterades under mötet.

Denna lista är inte i någonslags rangordning utan istället i den kronologiska ordningen som dem skrevs ner i:

Stuprör utgör en fara i tillgänglighet och bör omarbetas så att dem inte stör ens upplevelse och vistelse på gården.

Odlingar och planteringar behöver någon form av självskötande bevattning då det inte finns någon specifik omhändertagare av gården och dess växter och föremål.

Grönska uppfattas som positivt och måste styrkas genom att ge planteringar och odlingar förutsättningarna för att faktiskt frodas (exempelvis ge odlingsplatser tillräckligt med utrymme för att grönska ska kunna rota sig).

Alla årstider bör tas i åtanke och gården ska uppfattas som tillgänglig och attraktiv året runt. Detta innebär även att vidta åtgärder för att kunna skydda föremål och material på gården från snöras under vinterhalvåret.

Det finns en stark villja att grilla på gården, detta är även den platsen som är möjlig att grilla på för deltagarna och bör därför utnyttjas.

Trädets välmående är oklart, en besiktning skulle kunna garantera att trädet behåller sin hälsa och kan fortsätta bidra positivt till den byggda miljön och dess invånare.

Det fanns en specifik ide om att “liva upp” trappan genom att arbeta in grönska i dess utformning.

Siktlinjer från lägenheterna i nära ankytning till terrassen måste tas i åtanke, både på botten plan men såväl alla andra plan ska ha en attraktiv utsikt där man inte blir störd av aktivitet eller känner en för nära ankytning till användarna.

Belysning är en viktig aspekt av den byggda miljön som kan bidra positivt till dess omgivning, den varma karaktären området besitter bör speglas i belysning och här är det också viktigt att tänka på hur lamporna lyser in till lägenheterna.

Lampetter på väggen av korridoren till gården var en ide för att göra vägen till platsen mer tillgänglig och attraktiv.

7. Appendices

Participatory Meeting
Det finns en villja att träna på gården, jag uppfattade det som negativt med typiska gym material och föremål och skulle istället kunna göras på ett mer subtilt sätt.

Vem ska ta hand om gården? Designen bör komma med en tänk underhållningsplan där städmateriel och odlingsverktyg finns lättillgängliga, men även en plan för vem som ska utföra underhållsarbetet.

Vägen till gården går inte i och med detta projekt att planera om, istället skulle man kunna utsmycka den på ett harmoniskt sätt som gör det trevligt att inte vistas i korridoren men att passera.

“Plätten” runt trädet bör kompletteras så att det inte bara är en jord plätt som sticker upp utan istället kanske har en mer planerad utformning där jord inte kan spillas ut genom att bygga upp som en blomlåda eller nått liknande runt den.

Det fanns en specifik ide om att bygga upp en “naturlig koja” med hjälp av spalje staket som skulle kunna skapa en lommig och avskild plats på gården där man känner sig trygg och lugn.

Det fanns en specifik ide om att bygga trätrall som fungerar både som trappa för de lägenheterna i anknytning till gården, förvaring och för att gömma stuprör.

Det är viktigt att designen planeras så att den kan utföras i olika stadier och på ett sätt som gör att den inte hamnar i ett stillestånd och helst att processens olika skeden kan starta relativt snart (helst i sommar).

Agenda
17:00 Introduktion & agenda
17:05 Metoder & Analys
17:10 Resultat
17:15 Diskussion kring genomgång
17:30 Fri Diskussion modell experimentering
ENGLISH
Meeting agenda and summary
Summary of meeting discussion
With the approval of this compilation, the participants agree that the results of this process, which began with a survey, are used for research conducted by Malmö University and published on Diva-Portal.

My opinion was that what was presented was received positively and the only point I removed from my result of the previous analysis was that the place should get hours of sun, this was my opinion based on observations and changed as the discussion showed that there is direct sun to the yard. Many points that constitute criteria for what the design should achieve and what specific problems the participants want to be solved were discussed during the meeting.

This list is not in any order of rank but instead in the chronological order in which they were written down:

Downpipes pose a danger in accessibility and should be reworked so that they do not interfere with one’s experience and stay on the commonshared space.

Cultivations and plantations need some form of self-care irrigation as there is no specific caretaker of the inner courtyard and its plants and objects.

Greenery is perceived as positive and must be strengthened by giving plantings and crops the conditions to actually thrive (for example, give cultivation sites enough space for greenery to take root).

All seasons should be taken into account and the common shared space should be perceived as accessible and attractive all year round. This also means taking measures to be able to protect objects and materials in the yard from being laced up during the winter.

There is a strong desire to grill on the courtyard, this is also the place that is possible to grill for the participants and should therefore be used.

The well-being of the tree is unclear, an inspection could guarantee that the tree maintains its health and can continue to make a positive contribution to the built environment and its inhabitants.

There was a specific idea to "liven up" the stairs by incorporating greenery into its design.

Sight lines from the apartments in close proximity to the courtyard must be taken into account, both on the ground floor and all other levels must have an attractive view where you are not disturbed by activity or feel a too close connection to the users.

Lighting is an important aspect of the built environment that can contribute positively to its surroundings, the warm character the area possesses should be reflected in lighting and here it is also important to think about how the lights shine into the apartments.

Lamps on the wall of the corridor to the courtyard were an idea to make the road to the place more accessible and attractive.
There is a desire to train on the courtyard I perceived it as negative with typical gym materials and objects and could instead be done in a more subtle way.

Who will take care of the common shared space? The design should come with an imaginary entertainment plan where cleaning materials and cultivation tools are easily accessible, but also a plan for who will carry out the maintenance work.

With this project, the road to the courtyard cannot be re-planned, instead, you could decorate it in a harmonious way that makes it nice not to stay in the corridor but to pass.

The "plate" around the tree should be supplemented so that it is not only a soil plate that protrudes but instead may have a more planned design where soil cannot be spilled by building up like a flower box or something similar around it.

There was a specific idea to build a "natural hut" with the help of trellis fences that could create a leafy and secluded place in the yard where you feel safe and quiet.

There was a specific idea to build wooden trolleys that serve both as stairs for the apartments in connection with the yard, storage and to hide downpipes.

It is important that the design is planned so that it can be carried out in different stages and in a way that prevents it from ending up in a state of stillness and preferably that the various stages of the process can start relatively soon (preferably this summer).

Agenda
17:00 Introduction & agenda
17:05 Methods & Analysis
17:10 Result
17:15 Discussion to review
17:30 Free Discussion model experimentation
7. Appendices

The interviews conducted are of an informal yet structured discussion in which the conversations revolve around explaining the results and analysis and reviewing visual materials followed by free annotations and comments from the experts.

In order to come up with this design, the results and analysis of various methods have been reviewed to translate the qualitative and quantitative results into criteria that would generate a design element to inquire on a yellow graded building in Stockholm.

Q: Low Usage/Private Feeling

All of the observations indicated low usage of the common shared space, this was also shown in the results of a survey. The survey also indicated that the inner courtyard was perceived as a private space, which was in the analysis shown as one of the main contributors to the low usage.

Here you can see that the design intends to strengthen the public perception and experience of the place by breaking sight lines from windows and providing communal spaces for cultivation. While also providing better preconditions for activities.

**Jonas Andersson:** The private doors of the surrounding apartments are expected, looking at it from a PBL perspective, to have some sort of mark indicating that the area in close vicinity is private. We should safeguard, the people living here should not be disturbed, the upper floors have their privacy but the design should consider the privacy of the bottom floor. This can be done through material use, colour, etc, etc. Something that visually marks the difference in the two spaces.

**Marwa Dabaieh:** I have worked on several projects which deal with organizing public/semi/private spaces, working with different levels of privacy. First, I used sketching in a participatory setting so that the participants could make sort of a wishlist that later could be interpreted into a public/semi/private organization of the space which was sketched. Further, I have also made use of other materials such as clay, lego, leftover wood and plastics to discuss the organization in participation with the users of space. To summarize, making use of an approach to simulate different scenarios to create a consensus of the organization through participatory discussions.

**Elise Aldén:** Two examples of how I have worked with organising public and private space is: Working with mapping the everyday of both the built and the temporary at site. I have learned a lot about people by first getting a clear definition of the situation and then moving on to talking with the people experiencing it, and the second example is a project in which I designed a structure for a chair that the participants would get to build and finalize with their own unique touch so that they felt possession over the chair. Like Walter Segal, I tried to design a system but then it’s up to other people how to use it. Combining architectural expertise with participation and engagement.
7. Appendices

Q: Wayfinding
Again The observations and surveys indicated that there was a poor sense of wayfinding. In the archival research, plan drawings proved that the path to the courtyard is long and complex.

As previously stated the building is culturally graded which in turn meant that improving the sense of wayfinding had to be done with temporary measures and not in vast physical changes to the built environment. The proposed strategy is very simple, applying fairy lights/light loops to the pipes in the cellar path.

Jonas Andersson: Accessibility has a larger impact than wayfinding. It would be expected from the municipality that the whole building should be accessible by wheelchair or with any sort of functional variation. I would suggest that low-speed elevators would increase accessibility which in turn strengthens the wayfinding through increased usage. However, this building might be what is classified as “reasonable accommodation” for now, yet sometime in the future, it will need a plan to make the building more accessible.

Marwa Dabaieh: I have worked with wayfinding not only in culturally graded buildings but also in listed buildings which are of a higher conservatory value. Where you cant make interventions in an invasive matter, meaning that the strategies have to be reversible. Suggesting that the reversible strategies can be removed without any damage or impact on the built environment. An example of this is how we used light and sound in order to provide multi-sensory reference points for people to relate their position to. Specially adapted for people with special needs. One time, I used a projector and a speaker to provide flexible signage and wayfinding in a fully reversible and sensible way that has zero impact on the cultural identity or historical values.

Elise Aldén: I haven’t worked with reversible or temporary wayfinding myself, but I have worked with participatory wayfinding. I would like to make use of participatory methods to achieve better wayfinding.
Q: Activities
The activities that were suggested as desired in the survey were also noted as viable in the ob-
servations. The activities stated were, eating, reading, enjoying the sun, and grilling.

The design intends to strengthen these activities by providing them with the preconditions for
optimal usage. Providing flexible furniture that can be arranged in different constellations and
also as previously stated breaking sightlines and improving wayfinding.

**Jonas Andersson:** The suggested activities might be disturbing since they generate sound
which would multiply between the facades, also grilling might be a problem since the smoke and
odour might disturb neighbours. Maybe also the hard materials such as stone and concrete will
create an echo that softer materials could dampen, also screens and parasols would help with
diminishing the sound. I think that the type of grill matters and that this grill shown in the photo
should be changed to one which is closeable and not based on coal and flame. Recognizing
and acknowledging the disturbance factor of the PBL.

**Marwa Dabaieh:** In my designs, I have always tried to emphasize the importance of flexible
use. Providing the users with different alternatives so that the function can change in a quick
and easy manner. The “Do it yourself” approach is important in order for flexibility to work. If
the people utilizing the space don’t know how to change its function, the purpose of the flexible
function will not be sustained when the architect has left the process. Keeping the process alive
and dynamic by allowing for improvement.

**Elise Aldén:** Me and my husband are working on a self-built project right now, where we have
certain activities that are important for us. One of these activities is building in a collaborative
and informal setting. Which I have found to be really beneficial both for me as an architect gai-
nning new and innovative ideas from other people, but also in a social way because of how
the collaborative building evokes conversations that would have otherwise been lost. This is
something that I would like to research more about because I think that this is a way for archi-
tects to take a step back to a consultant role in which the participants are able to express their
thoughts about activities in a physical sense.
Q: Physical preconditions
The data showed that the courtyard’s physical preconditions were perceived as something positive. With its elevation separates the user from the street below and its geographical orientation provides a calm climate.

The design intended to make use of the qualities of the common shared spaces by ensuring that the strategies are made with care in order to not corrupt the positive effects it provides for its surroundings. All Strategies were therefore decided to be temporary and defensive measures are made in order to not harm what is already there which I will talk more about in the next topic.

Jonas Andersson: There are new legislations relating to drainage, each building should manage its own drainage according to the PBL. Therefore the whole inner courtyard should be somewhat tilted (1:50) towards the day water drainage in the corner. I don’t think what you are suggesting has to be permitted by the municipalities, because of the fact that it mostly relates to furniture arrangement and that there are no changes to the facade. However if this project was sent to the municipalities, the discussions would probably revolve around the common shared space’s accessibility. However, if there is anything in the detailed plan that suggests that there is a need for a permit it would be needed. A permit is a trial towards the detailed plan. The support wall also would probably be a point brought up by the municipalities which would need to be seen if it is intact or damaged in some way.

Marwa Dabaieh: Apart from the previously mentioned reversible interventions, previously I have worked in a couple of projects, especially in Egypt, where there were either great views or listed buildings in which the physical preconditions were stated as important to conserve the potentials around and in the site. Creating a design that is intended to maximize the use of these potentials.

Elise Aldén: Every time I do a project I always emphasize working with and acknowledging the preconditions of a project. This is challenging because you have to put away your own perceptions and leave behind the elitist thoughts of me knowing what is beautiful and not. I think we need to look at it like “This exists so, lets work with that” instead of embedding and enforcing personal judgement into projects. Observing all the positive things instead of focusing on the negatives I think is an important perspective that allows for making use of preconditions.
Q: More space for greenery/furniture
It was discovered in the results from the surveys and the participatory meetings that the main desired additions that the design should provide were space for furniture and greenery. Both in terms of storage for furniture and tools and further space for cultivation.

The design, therefore, intends to give space for furniture both in terms of clustering the stones to allow for smooth utilization and also for easy and safe storage. The space for storing furniture is also made in a way so that the building’s facade doesn’t risk being harmed or affected. The plant beds are made so that the smooth airflow is achieved by connecting the plant boxes and also guiding water drippings away from the concrete slab of the building.

Jonas Andersson: The furniture and plant boxes need to be distributed in an accessible way, meaning that physical objects have to allow for a wheelchair to move smoothly and securely, providing space for turning. The activities need to be accessible for all. Remember to think like a wheelchair user, there cant be dead ends that make it difficult to move. The storage space needs a doorway or something that closes the space, to protect the furniture from leaves, rainwater, or maybe even rats. The storage area is in the visualizations closely connected to the private door, which would be a problem of a disturbance if the furniture is moved a lot, meaning that people might disturb the neighbors by moving furniture frequently. Also behind the plant boxes, the space between the facade and the box either has to be protected or stated as having to be cleaned from now and then. The wooden wall could also be higher to protect the facade from damage from plants or water. The plants on top could also be taller which would act as the screen suggested earlier. The private stairs could maybe be where the private zone is indicated, by making them larger and also using them as storage space. Which would create a natural border of private/public/in/out. Use private/semi/public.

Marwa Dabaieh: I have worked a lot with compact living, especially in apartment buildings. One particular case was in a student housing where I used foldable screens to provide a flexible barrier for the users to move freely. Also, foldable furniture and foldable storage could allow for multifunctional use and also compact storage. The keyword of how I have worked with this previously is multi-use, allowing for different functions and easy access to tools to change temporary functions.

Elise Aldén: Again if I think about my self built project, I am working with a small space that needs more efficiency. Almost like a puzzle in which every piece fits together in some way. You have to challenge the idea of storage and functionality, imagining multiple uses for the same space. The house we are building now is small and we have all of these different elements that we want to incorporate into a design. Therefore we have to fit storage into something else. We have to make use of walls, staircases, benches, spaces and wardrobes for multiple uses so that the design can function efficiently for different purposes. Looking also at potential options to achieve flexible solutions that can change and evolve over time.