

Title: The meaning of rehabilitation of multi-story housing for the residents

Abstract

The rehabilitation of blocks of flats can be planned and executed in very different ways. This article describes two case studies of rehabilitation processes, focusing on what can be learned from the organizational processes and the meaning of the rehabilitation for the residents. Residents, initiators, architects and contractors have all been interviewed. One of the case studies involved two blocks of flats with municipal apartments for substance abusers, where the residents participated in the planning of the housing rehabilitation. The other case study reviewed a housing cooperative where the residents, through an elected board and chairman, took on an initiative to undertake a complete rehabilitation. In both case studies most residents were very pleased with the results, and had a feeling of ownership towards the project and their houses. The rehabilitation process and architectural changes positively affected their social status and personal pride. The common criteria for success seems to not necessarily be the degree of involvement in the decision-making process, but rather the leaders' respect for their needs, the level of information provided and the follow-up. The leaders of both projects were enthusiastic, and were in close contact with the residents while guiding the rehabilitation process.

Keywords: Housing rehabilitation, resident participation, home and identity.

Introduction

This article describes two different case study examples of multi-storey, 60's and 70's housing rehabilitation¹ in small cities within Norway. The two groups of residents were different, the scopes and focuses of the rehabilitation projects were different, and the starting point and initiatives were correspondingly unequal. Still, both case studies highlighted important questions regarding the meaning the rehabilitation of housing may have for the residents. This article aims to explore:

- the meaning of resident participation in housing rehabilitation processes for the residents,
- and the significance of architectural changes for the residents' self-perception and life situation.

Housing is both a basis and a premise for participation in other arenas of life. Work, social integration, health and opportunities to develop and maintain social relationships are affected by an individual's housing situation (Dyb, Solheim & Ytrehus, 2004). Housing quality therefore crucially affects many aspects of a person's life. Housing influences self-perception and quality of life. Therefore, rehabilitation of multi-storey housing is not only about physical changes. Resident participation is another aspect that influences the individual's perception of the housing rehabilitation process. Leung (2005) states that the success of resident participation depends upon impetus, politics, resources, and values.

This article starts with a contextual overview of Norwegian housing, followed by theories on resident participation, and then reflects on the meaning of housing on self-perception and quality of life. The study presented is based on case study methodology, represented by two case studies, Svingen and Barkaleitet, which are shortly described. In both cases, resident participation is identified, with some mutual and some variant experiences. These experiences are discussed in relationship to the meaning of architectural changes have on self-perception and quality of life.

The Norwegian context

According to 2008 statistics, 56% of the Norwegian population live in single-unit dwellings, 23% live in semi-detached houses, row houses or other small houses, and 21 % live in blocks of flats. The housing ownership structure is somewhat different in Norway compared to other countries in Europe. In Norway, nearly 80 % of the households are freeholders (www.ssb.no). In most other European countries it is more common to rent a home.

Housing cooperatives

14% of freeholders own their housing unit through a housing cooperative (most housing cooperatives are blocks of flats in cities) (www.ssb.no). "Borettslag" is the legal entity for housing cooperatives in Norway. The company is owned by those who live in the cooperative, the shareholders. Each share gives the right to live in the cooperative, and thus in a particular apartment (or house). A shareholder is free to sell his part, but the cooperative statute can give internal first preference. The cooperation owns the buildings and the property, while the highest authority in the cooperative is the annual meeting for shareholders that elects the board of directors who are responsible for daily operations. Usually, a large share of the

¹ SINTEF and NTNU Social Research AS in Norway received founding from the Norwegian State Housing bank to carry out a five year research project (2008-2012), ReBo, on sustainable rehabilitation of blocks of flats from the post-war period. The project has three main focus areas: 1) Municipal management and decision-making processes, 2) universal design, and 3) energy. This article is written with the main focus on the first theme.

construction costs of the property is financed through shared debt that is issued to the cooperative, and not to the individual. This shared debt, along with the costs to cover property management and maintenance, is charged to the shareholders as rent. Some cooperatives are members of a housing association, which again are members of the Norwegian Federation of Co-operative Housing Associations. It is often a challenge to obtain the residents agreement to carry out rehabilitation of large housing cooperatives. In order to implement a rehabilitation plan in a housing cooperative, a decision by a 2/3 majority vote of the general meeting is required. In Norway there are many examples of how difficult it is to achieve consensus on maintenance and rehabilitation projects. Even if the investments are well considered from an economical point of view, the fear of increasing rent often stops the process and leads to building degradation in the long run.

Special needs in the housing market

People with special needs in the housing market are a compound group of people; e.g. the young, financially disadvantaged and/or other marginalised groups. The reason for their special needs are often seen as psychosocial, behavioural or financial disadvantages, impairments, health problems or problems speaking the official language (Rundskriv U-10/2002; St.meld. nr.23 2003-2004). Special needs in the housing market may also be connected to characteristics in the housing market and the housing stock. Reduced accessibility, discrimination and lacking services are characteristics that exclude individuals from the housing market. In other words, people with special needs in the housing market are not a homogeneous group. Some people need help to find a house, while others also need particular services to be able to live in the house. Only 4 % of the Norwegian housing stock is publicly owned (Hansen, 2006) and can be categorized as social housing. Public support for vulnerable groups has been given through individually directed instruments rather than provisions for subsidized housing. Public housing has been reserved for the worst off, socially as well as economically.

The Norwegian State Housing Bank

The Norwegian State Housing Bank plays an important role in Norwegian housing policy. The bank has financed some 50 % of all housing built after the Second World War. It has contributed to the existing quality of housing in Norway by developing standards and specifying floor space needed for functional solutions. The criteria for Housing Bank financing was changed in 2005, in order to promote sustainable development, accessibility for all, and architectural quality, as well as to allow easier access to owner occupied housing for disadvantaged groups and young people. The Norwegian State Housing Bank also subsidizes the development of methods and models, in order to achieve quality housing.

Resident participation

Housing development, renewal and rehabilitation processes involve discussions of resident participation. The concept is not well understood, and is generally described as a process taking place at different levels, from the possible ways to receive information, to participation in decision-making processes and/or self-determination. Resident participation has its roots in public-policy and grassroots community-organizing efforts (Leung, 2005). More than forty years ago, Arnstein (1969) described citizen participation as a ladder with eight rungs. During the 1960s, she led The Model Cities Program in the US Department. Central in the program was citizen involvement in local decision-making processes that affected them. The rungs of ladder ranged from non-participation (manipulation and therapy) at the bottom, to partnership and citizen control at the top. In between she placed informing, consultation, placation, partnership, delegated power and citizen control at the top. Arnsteins (1969) personal

commitment was to a redistribution of power from haves to have-nots, by empowering the poor and powerless.

In his report from a qualitative study of six community renewal initiatives in Australia, Wood (2002) describes the rationale for participation from the perspectives of the residents and professionals, as well as the benefits of participation. The two reasons for participation he found were the managerial and the citizenship perspective. He divided the managerial perspective in two – ‘the bottom-up’ and ‘the top-down.’ The bottom-up perspective argues that locale people are the best to identify their problems, and therefore are also the best to know what issues should be prioritized. People arguing for the top-down approach will prioritize their expert knowledge and support resident participation as long as their solutions are not interfered with. In a way the bottom-up perspective is supported by the citizenship perspective, which claims that residents should be involved because they have the right to be. The houses or the community is theirs; they live there and will continue living there after the renewal. The citizenship perspective of residential participation is, as Wood (2002) points out, connected to empowerment, because of its focus on encouraging people to take control of the decisions that directly affect their own lives. This empowering process is complex, and Somerville (1998) discusses how empowerment can be encouraged through knowledge, statute, resources, agreement and specific power transfer. He emphasises that the residents right to make their own decisions through resources, control and ownership, represents a possibility to achieve empowerment. Empowerment is not a result of achieving control, resources and ownership, but these factors are important for the individual to have the freedom to make choices, and gain empowerment.

Involvement of the resident in the planning and rehabilitation of housing is meant to acknowledge the resident’s life world and experiences, and to give the resident a feeling of control over his or her physical environment. Participation is seen as central in promoting social cohesion and sustainability (Leung 2005). The process of participation can strengthen the feeling of responsibility and ownership towards the environment. Physical environments we find beautiful and comfortable, are environments that give us positive associations. Research has shown that the experience of housing environments is influenced by knowledge and feelings related to the building and/or rehabilitation phase. To involve the residents, treating them with respect and taking their opinions seriously, is important on two levels: The solutions that are chosen will be more closely aligned with the needs of the resident, who will be heard and given authority in relationship to his or her personal environment. This further strengthens the resident’s positive experience of the dwelling. A rehabilitation process with residential participation is also a good opportunity to influence the social environment, and create sense of community and inclusion among the residents (Hauge & Støa, 2009; Hauge, 2009).

Challenges of residential participation

Although the residents’ understanding of the dwellings use and the social environment is of great value, resident participation can also be a challenge owing to the fact that they often have less understanding than architects and planners about frames and limitations, both in relationship to economy and possible accomplishments. It is often not possible to satisfy all the residents, due to differing opinions and needs. The residents have chosen their dwelling in consideration of certain economical criteria, family and work situations, and it is expected that their needs will change over time. Thus the needs they find important at one point in life, are not necessarily of the same importance during other phases or new situations. However, the opposite may also be a problem: Residents may have trouble imagining new and different

architectural solutions. It is important for the planner to consider more flexible and radical solutions than the users often do (Vischer, 1985). In the programming phase, illustrations of physical solutions must be made in a way that neither limits the ideas, nor is perceived as a final solution, because without purpose, drawings can be seen as final.

Wood (2002) describes a number of barriers to participation in renewal. He found that the way professionals neglected listening to the residents and their desires, was the main cause of communication barriers in renewal projects. Benum et al. (2007) points to the fact that there will always be challenges tied to technical language and residential participation. Project leaders, engineers and architects often use many unfamiliar words and terms that are in general difficult for residents to understand. This can alienate residents involved in the process and they may feel too insecure to ask questions. Professional actors may use this to get their preferred solutions through, even though these solutions are not necessarily the residents' preferences. It is therefore important to explain rehabilitation plans in a plain language, focusing on mutual respect, and to be open and honest about the plans. Among other barriers Wood found, were the communal experiences of residents whom he described as disadvantaged. Life experiences like social stigma, unfair treatment, poverty and crime were elements within this residential group, which could make participation more challenging.

It is a well known phenomenon that experts and the laity often have differing preferences, referred to as "the gap". Architects, planners and other people with education within design are often more critical and have developed another taste than people in general (Cold, Kolstad & Larssæter, 1998). Many architects and planners prefer modern buildings, while people in general often prefer a more traditional, familiar style. This may be due to how the level of knowledge creates different cognitive structures. Experts seek environments that challenge them, the untypical, while laity people more often seek environments that are familiar and typical. Awareness of the preference gap between experts and laity people is a good basis for dialog.

Successful resident participation

Wood (2002) found that projects that were rooted in empowerment and citizenship had a higher engagement of resident participation. Central elements to improve participation were; starting with the local people, ensure a wider range of representation, realizing the resource implication, and monitoring if and how residents had influenced the decision process. Impetus, politics, values and resource are described by Leung (2005) as factors influencing a successful process. "Impetus" is about the residents' reasons for wanting rehabilitation, and their commitment to the project. "Politics" include types of leadership and the political environment that affects the rehabilitation. "Value" is about the project leaders' appreciation of resident participation, and the residents' real opportunity to influence the project. "Resource" includes both financial and other types of support. These four factors have internal and external conditions that influence the results. In addition, the process is dependent on bridging resources helping the external and internal factors to cooperate. Bridging resources is distinguished by trust, community organizing, strategic partnerships, organizational capacity, community planning and education. Resident participation can be implemented in different ways. Central in literature on the subject is the importance of actively listening to local people. Resident participation means that active listening has to be a part of the renewal plans, and this requires resources and time.

The meaning of housing for self-perception and life quality

Buildings are physical structures laden with meanings and associations. The building, both in itself and through location, liberates associations and memories. *“The house derives meaning from its setting as well as its own characteristics. Feelings about the house will be influenced by the perceived physical and social environment outside the front door”* (Clapham, 2005: 155). Housing and environments liberate the associations we make, in an attempt to understand the people and situations of everyday life. Residents are often judged on the basis of visual clues that are interpreted as signs of identity by others (Gullestad, 2002). People often associate beautiful environments with important people, and furthermore read environments as statements about the significance or value of people, institutions and organizations (Gifford, 2002; Sadalla & Sheets, 1993). People draw obvious conclusions about the wealth and social class of residents according to where they live (Lindstrom, 1997, Gifford, 2002). Neighbourhoods may increasingly differentiate among people, and may be important in establishing the lifestyle and identity of those who inhabit them. Based on qualitative interviews, Gram-Hanssen & Beck-Danielsen (2004) have shown how people associated specific residential neighbourhoods with different symbolic values. These values reflected social structures, and influenced the residents’ choice of home. Hauge & Kolstad (2007) interviewed 18 residents in high-priced and low-priced neighbourhoods, and found that the residents experienced their dwelling and neighbourhood as a provider of information about their personality, tastes, interests, phase of life, social status, and relationships. Younger to middle-aged residents were more aware of the communicative aspect of their environments than older residents. Not only locations, but also building exteriors are found to release specific associations. Building materials are shown to provide associations to people about the personality and characteristics of the residents (Sadalla & Sheets, 1993). Photos of houses in different architectural styles are associated with different levels of friendliness among the residents (Nasar, 1989). In addition, identical buildings assigned different labels will elicit different opinions; an apartment said to be public housing provokes less favourable reactions than the same apartment said to be a private condominium (Nasar & Julian, 1985). Interior styles are also associated with different social attributes, and the respondents’ judgements are surprisingly similar (Wilson & Mackenzie, 2000). Surroundings and personal belongings say something about people, even within restricted choices of objects or surroundings. This means that people are able to control processes of communication of identity to varying degrees. It is impossible to stop others from interpreting information through physical clues, the associations created by buildings do not only tell us who other people are, but also who we are. *“The spatial world in which we live tells us who we are. We find our self within it, we respond to it and it reacts to us. By manipulating it we affirm our identity”* (Robinson, 2006: 23).

Robinson (2006) writes about architecture as a “cultural medium” and how buildings can activate different mental schemas used to understand the world. Associations drawn from the built environment may be seen as “schema” in social psychology; mental structures representing different aspects of the world, such as situations, people, or groups of people (Lee, 2003; Myers, 2002). These schemas have to be learnt within a culture. People use schemas to organize knowledge about different aspects of life, providing frameworks for future understanding. This approach represents both a necessary human simplification of the information processing, and also creates the potential risk for misunderstandings and prejudices. Lee (2003: 33) states that *“the built environment is more or less isomorphic with the social system that is developed within it. Also because no human environment of any consequence can be perceived as a physical object in isolation from its social implications and behavioural activity patterns.”*

The influence housing has on people's quality of life can be divided into different categories. Housing mainly influences people's quality of life in two ways: 1) through the residents' associations with location, external and internal, and 2) through localization and physical solutions that facilitate behaviour and social interaction. These relations are not dependent on the physical environment alone, but are also influenced by social contexts (Hauge, 2009). An example of how housing influences people's identity through the way it facilitates behaviour, is shown in how specific architectural solutions can contribute to people's experiences of mastering everyday life, and how it gives people the opportunity to regulate social contact. Hauge & Støa (2009) described how the location and size of apartments for former drug abusers contributed to increased contact between the residents and their children (children living with their mothers), because the apartment was a safe place to bring children to. The influence of visual clues and how architecture influences behaviour are, however also closely related. A safer location and more space may only contribute to more contact between residents and their visiting children if the apartment is a nice place to stay. It is also important to emphasize that the physical environment is only one of many factors that influence people's identity and quality of life. The meaning and impact of the physical environment will vary depending on the social context and the strength of other contributing factors and elements, such as health, social environment, family relations and job opportunities.

Neighbourhood reputation is another important factor influencing the individual's self-perception and quality of life. A rehabilitation process will influence a whole area, not only the residents living in the rehabilitated buildings. In this process, one should discuss how to make a neighbourhood attractive for other people living there or in the city in general (Permentier, Bolt & van Ham 2011). If people have chosen their neighbourhood, they are more satisfied with the dwellings and area than if they have been placed there. Permentier, Bolt & van Ham (2011) also found that when judging neighbourhood attributes, subjective assessments are more important than perceived reputation. Objective characteristics such as ethnicity and neighbourhood income will, at the same time, contribute more perceived reputation than neighbourhood satisfaction. In a study of Utrecht in Netherlands, Permentier, Ham & Bolt (2008) found that the reputation of a neighbourhood gives a better score among the residents and the owners of the property than among other people within the city. Reputation is connected to socio-economic and socio-cultural characteristic of the neighbourhood. Physical and functional characteristic seem to mean less. Also in this study, residents assessed the reputation of their own neighbourhood higher than other city residents living outside of the area. When considering the reputation of a neighbourhood, history is also of great importance. Both subjective and objective predictors have to be taken into account, especially social factors. Neighbourhood reputations can be hard to change, but Permentier, Ham & Bolt (2008) place emphasise on creating a vision of the desired neighbourhood image, in which public relation should have a central part of the strategy.

Some dwellings have a stigma connected to them. Neighbourhood stigma is hard to change. It will stay through generations, even when the buildings have been rehabilitated (Hastings & Dean 2003). Hastings & Dean (2003) studied a neighbourhood in Northeast England. They found that the current reputation was mainly connected to the social class of the original residents who lived there. Shaping a new image by changing reputation or reducing a stigma, is a substantial challenge. Hastings (2004) shows how several actors must contribute to the promotion of the area and residents in a new and positive light. This is not something the residents can do by themselves. Hastings (2009) also shows how an insufficient service provision function has a 'neighbourhood effect', which contributes to the problems of being

poor and living in a poor area. Provided services could compensate for this, creating a positive 'neighbourhood effect.' She refers to workers discussing how they would work harder and more effectively in neighbourhoods where problems were under control and where the residents expressed a concern about their environment. Residents will tidy up if they experience that others value what they do.

The quality of maintenance service is also important for a resident's quality of life. When looking into what maintenance services residents in social housing prioritized, van Mossel & Jansen (2010) found that the heating and water system, and the maintenance of hinges and locks on windows and external doors were considered the most important, and should receive priority. Exterior paintwork, bathrooms, and maintenance of ventilation systems were also important. Johnston (1995) examined the most important determinants for satisfaction with services among bank customers, the results can be transferred to other service industries, f. ex. housing organizations. He found that responsiveness is a crucial determinant. Responsiveness is a frequent source of satisfaction and a source of dissatisfaction when it is lacking. Other satisfying determinants were attentiveness, responsiveness, care and friendliness. On the other hand, the "dissatisfiers" were described as absence of integrity, reliability, responsiveness, availability and functionality. **In housing rehabilitation processes, dissatisfiers are aspects that have to be answered to satisfy the residents. In a situation of low performance, the dissatisfiers will lead to a negative assessment of the housing situation. This means that both the way residents are met, listened to and involved in discussions about the renewal, and the functionality of the building, will have an influence on the assessment of the renovation process and the results. "Satisfiers" are aspects that will lead to a higher assessment. Lack of involvement will, according to Johnston (1995) lead to residents that are less satisfied.**

Method

Case study methodology

This article is based on qualitative case studies, and relies on multiple sources of evidence (Yin, 2003): Interviews with employees, board members, chairmen, residents and architects. In addition, site inspections and studies of correspondence between different actors in the rehabilitation processes were conducted. However, for the results discussed in this paper, the interviews are the main source of evidence. The results from the case studies can be generalized through analytical generalization, meaning that the findings from one study can be used as a guide to what might occur in other situations (Kvale, 1996). Far from being typical, a case might be selected on the grounds that it provides a contrast from the norm. In this way, knowledge that is not found anywhere else might be revealed, and factors of influence might be more easily seen than in an average case (Denscombe, 2003). Both case studies presented are rehabilitation processes with a special focus on the residents' needs. Thus the case studies must be classified as extreme cases in different ways (see information about the case studies in the next section). A typical, or average, case is often not the richest in information; extreme cases reveal more knowledge (Flyvbjerg, 2004).

Qualitative interviews

In case study 1 (Svingen), the project leader, the technical manager of the property management unit, three social workers and three residents were interviewed. The housing project was subject to a site inspection, in connection with the interviews of the residents. In case study 2 (Barkaleitet), the contractor and the chairman were interviewed together. The

two project architects were interviewed together as well. Five residents were also interviewed. During the site inspection, conversations with board members, residents and construction workers gave additional information about the case study. The interviews were semi-structured, and were conducted with two researchers present; one architect, and one social/health scientist. In both case studies, the project leader arranged the interviews with the other informants, while the interviews with the residents were done in their homes. The interviews focused on evaluation of the rehabilitation process, information provided during the process, and the results of the rehabilitation. Attention was paid to conducting the interviews in a common vernacular that was intended to reflect sensitivity towards the informant's language and speech comfort. Notes taken during the interviews, were later processed, analysed and discussed.

Case studies

Case study 1: Svingen

Svingen is situated in a Norwegian city. It was built in 1959, and rehabilitated in 2009. It was initially a block of one-room studios for rent. Each floor had 4 bedsitters with one bathroom for partitioning and two larger, 2-room flats with bathrooms. The residents of Svingen are substance abusers.

Before the rehabilitation, no one wanted to live in Svingen. The blocks of flats were full of graffiti and litter, glass panes were missing and refuse sacks were put in front of the windows. The corridors smelt of urine and methylated spirit, and the sanitary conditions were appalling. The building had no locked doors, and was open to anybody who wanted access. **These aspects are examples of dissatisfiers (van Mosel & Jansen, 2010). The building was not safe for the people living there. They experienced that belongings disappeared, and they had no private space, not even in the common bathrooms where they were unable to lock the door.** Social workers described the house as an unsatisfactory solution for their clients. People working in the home care services were afraid of going into the block without accompaniment, so that the residents did not receive the help that they needed. The block was a symbol of poverty, and was described as having the lowest property value in the municipality. Hastings & Dean (2003) found that the stigma of a building can be hard to change when the knowledge of it has been a part of the city for years. Even if there was a strong will to include the residents in the process of rehabilitation, the residents were negative in the beginning, and lacked confidence in the service providers. The people living in Svingen had no experiences in resident participation.

Figure 1

Svingen after rehabilitation (Photo: SINTEF Byggforsk).

The block of flats is owned by the municipality, and the residents rent their apartment. The building was well known, and is a part of the city's history. Nobody questioned the requirement for drastic action, and discussions about demolition were even brought up, but by actively using the social housing plan of 2006-2009, a rehabilitation project was planned. The rehabilitation project was anchored both in the administration and the local political level.

Rehabilitation project

The apartments, the common areas and the facades have gone through a complete rehabilitation. The numbers of flats were reduced from thirty to twenty one, walls were

demolished in order to establish bathrooms in each unit. Prior to the rehabilitation the block had one entrance. This was extended to two entrances, A and B. A calling system was installed at the entrances. Staircases were enlarged, providing additional space for the common room on each floor, which also provided windows on three sides of the room. Elevator and wheelchair access was implemented in block A, prioritised for residents with movement restrictions. The elevator and the sill free doors made it easier to access and transition through spaces inside the block with a wheeled walker or a wheelchair. Thus, the residents could stay on, even in cases of more wide-ranging impairments. Level outdoor terrain, food store, hairdresser and buss stop near by, also made outdoor activities easily accessible.

By and large, the residents and the project group were satisfied with the results of the rehabilitation, some results they are very satisfied with. Still there were some conditions with which they were dissatisfied. For example, the interior kitchen design should have been better planned. It was described as merely *“incidental solutions with simple design, little space to work and put things aside and only one sink”*. Simple materials and small bathrooms in the one-room flats are other examples.

Process and resident participation

This rehabilitation project was partly funded by the State Housing Bank as a skills upgrading project, focusing on user participation. The project was supported with half of the expenses of the municipality's project leader. The project group consisted of representatives from different parts of the municipal administration and service providers. The project leader was a representative from the Inclusion unit (consisting of people working with claimants and refugees). Other representatives included were a social worker in the housing allocation unit from the mental health services, a technical manager of the property management unit, and a milieu therapist from the environmental service unit. These representatives had little or no experience from earlier interrelated teamwork.

This rehabilitation project was called a “client participation project”. Respect, trust and building of relations were central values, and the involvement of the residents was described as important. The residents were initially not part of the planning group, but were involved when the decision of rehabilitation was made.

The main responsibility of the two resident representatives was to provide the information flow between the project group and the residents. In order to ensure the residents had access to the rehabilitation process and to the decisions made, the resident representatives received the building team meeting reports. The resident representatives met weekly with the residents and a social worker to discuss mutual problem areas as well as information about the rehabilitation process.

Eleven residents were living in the block when the rehabilitation started. They could choose to stay or move to another block in the neighbourhood during rehabilitation. All but one of them wanted to stay, and were relocated to other flats in the building during the process.

Case study 2: Barkaleitet

Barkaleitet is situated in the outskirts of Bergen, Norway. It was built in 1978, and rehabilitated in 2010. It is a housing cooperative with 180 apartments in 5 terraced blocks. The blocks have 3, 4, and 5 room apartments. The residents at Barkaleitet used to primarily be

families with young children, who moved in when the blocks were new. Today, many older people live there. Some have sold their detached houses or row houses to lead easier lives as pensioners. There are a few younger residents in the housing cooperative and many of them are single parents. The housing cooperative has a stable resident group, with an insignificant turnover.

Before the rehabilitation project, Barkaleitet was in critical need of renovation. **According to van Mosel & Jansen (2010), the building defects and poor maintenance can be referred to as dissatisfiers. In addition, another dissatisfier for the residents was the lack of elevators.** Many of the residents were retired individuals, and some of them required the use of an elevator and universal design within the common areas **to be able to stay on.**

Figure 2

Barkaleitet housing cooperation before rehabilitation (Photo: SINTEF Building and Infrastructure).

Figure 3

Barkaleitet housing cooperation after rehabilitation (Photo: SINTEF Building and Infrastructure).

Rehabilitation project

The five blocks of flats have gone through a complete rehabilitation of facades, entrances and balconies. However, any renovation inside the apartments was the residents' responsibility. The most noticeable improvement consisted of 15 elevators, and 35 new apartments with life span standard on a new top floor of the blocks. The elevators and the new staircases were built as an extension at each entrance. It was important to remove the asbestos in the outer walls, and additional insulation was necessary to improve energy efficiency. New façade materials such as brick and sheet covering changed the original appearance of the buildings. The windows and balcony doors were replaced with larger glass areas, and the balconies were upgraded and extended through the removal of large flower boxes. A new balanced ventilation system was installed, new water pipes, collective hot water tanks, rubbish chute, and a calling system with cameras were also added. The calling system is adjusted to people with hearing disabilities. The new entrance doors have access control, and can be opened with remote controls from each apartment. New parking lots and upgraded outdoor areas with universal design are also parts of the rehabilitation plans.

Process and resident participation

The rehabilitation process started with an examination of the buildings and of the insurance history, which displayed a great deal of defects. The board of the housing cooperative made a list of all necessary improvements. Four of the residents used staircase elevators. A majority of the residents wanted to be staying in the housing cooperative for the rest of their lives. To make this possible, the housing cooperative was in need of elevators. To finance the elevators, the possibility of building an additional floor with new apartments for sale was examined.

The board invited five architects to an architectural competition, and found a proposal they liked. The one that seemed easiest to get through the municipal building application system was selected.

The project was partly financed through a housing loan from the Norwegian State Housing bank. The bank also yielded a grant for the installation of the elevators. In order to get a loan from the Norwegian State Housing bank, a focus on universal design and energy efficiency was demanded. This motivated a greater focus on accessibility and energy efficient solutions. The additional built floor with new apartments on top of every block financed the installation of the elevators in all of the 15 entrances.

The ambitious initiative for rehabilitation came from the board and the leader of the housing cooperative. The leader was however familiar with the residents' needs and wishes, being one a resident himself. He was familiar with their willingness to pay or lack of such, and emphasized the costs of no rehabilitation over time and of how profitable a more energy efficient building would be. The board spent several months on informal meetings with the residents to account for the need of the rehabilitation. When the issue was raised at the shareholders' meeting for the first time, more than a 2/3 majority was positively inclined. The residents had received a written proposal for rehabilitation prior to the meeting, where two alternative rehabilitations were described; with or without an additional floor. Even if the decision process was effective, the rehabilitation process has all together been going on for many years. The planning alone took two years, and the building process was delayed for four years due to a neighbour complaint.

The housing cooperative is a member of a larger housing association in Bergen, in western Norway. Most housing cooperatives use their housing association for help and counselling during rehabilitation processes. Barkaleitet refused counselling from their housing association, because they felt the housing association had attempted to lower the ambitions of the rehabilitation.

Results and discussion

Resident participation and leadership

Communication and trust

Both case studies are good examples of leadership based on trust. According to Leung (2005), trust is the bridging factor for success in resident participation. Leung also describes the significance of strong, politically savvy leadership, and the will to fight obstacles and sustain resident commitment during the process. The cases reflect the importance of informal contact between individuals in charge of the rehabilitation process and the residents, in achieving positive results. In Barkaleitet, the chairman knew the residents. He addressed their worries seriously, spoke to them and spent time together with them. Rehabilitation of blocks without moving the residents during the process is a challenge. All the informants complained about noise, and difficult entrance conditions and outdoor environments during the rehabilitation, but were determined to cope with the inconveniences in order to achieve the goal. The residents had many smaller concerns both before and during the rehabilitation process. The chairman emphasized the importance of taking these worries seriously and finding good solutions for the residents' everyday problems along the way. The residents in Barkaleitet were satisfied with the way they were involved in the planning and accomplishment of the rehabilitation.

The residents in Svingen lived in a stigmatised building and were stigmatised themselves as substance abusers. Even if they were the best to describe their needs, they turned the project leader away when he came to ask for their involvement in the rehabilitation process. This initiative represents an attempt to accomplish a bottom-up perspective (Wood 2002), which also could be seen as a part of an empowering process, encouraging the residents to express their needs and by small steps take control of their own life (Sommerville 1998). What these situations tell, is that residents that have little experience of satisfiers and to a small degree have participated in anything, need to trust the person in charge to consider the proposal, even to participate at the bottom part of the rungs, with information and consultation (Arnstein 1969). Therefore, it was a challenge for the project leader to make the residents understand the meaning of participating in the rehabilitation process. After a while he was invited back, and one of the residents was happy to take on the responsibility. From that day, the project team could start to build trust and prove that their intentions were good.

The project leader in Svingen played an active role in the rehabilitation process, from the beginning until the residents had moved back and were settled. Research shows that the relationship between residents and service providers is of special importance to how the residents experience their housing situation (Ytrehus, Sandlie & Hansen, 2008). The way the service providers act, and to what degree the residents experience satisfiers, such as responsiveness, can be seen as one of the most important aspects of the rehabilitation process in Svingen. Contact with service providers is of particular importance in maintaining a quality of life for individuals that are struggling to live by themselves. The project leader also visited Svingen in the evening, after work. He spoke to the residents, helped them in practical matters, and they discussed the rehabilitation process in a serious way. He invited them out for dinner twice, together with the project group. In several ways the project leader had extensive and informal contact with the people living in Svingen, by visiting and by phone. In this context, this can be regarded as successful ways to build trust and to make the residents part of the rehabilitation process, and may have been important factors to the success of the project. This also influences the way the residents are seen in the neighbourhood and the city. The project leader and the residents in Svingen visited a restaurant together, and this may have contributed to a more positive self-image in this stigmatised group (Hastings, 2004).

The project leader at Svingen had good connections with politicians in the city, and the will to fight obstacles and bureaucracy. The project leader at Barkaleitet was also a man who fostered the residents' sustained interest and commitment to the rehabilitation project, and he never gave up fighting obstacles. As mentioned in the introduction, many housing cooperatives are challenged to acquire enough votes for rehabilitation, leading to a degradation of the buildings. All the residents at Barkaleitet knew the chairman, and he was described as one of them. The way he listened to and communicated with the residents, seems to have positively affected the chances of gaining the residents' support for the rehabilitation. The board therefore managed to get majority for rehabilitation in the shareholders' meeting.

By communicating and building trust in informal ways, the project leaders in both Svingen and Barkaleitet managed to involve residents in a way the residents described as positive. The starting points were different, so was the process of involvement, but they both had a belief in the importance of communication with the residents.

Values in resident participation

Resident participation is meant to involve the residents in the decisions that are shaping their everyday life. This was done in different ways, and informally in both projects.

In Svingen the residents did not have a great influence on decisions made, but the project leader believed it was important that their requests were attended to and included in the project. The representatives of the residents were given written reports from meetings, and discussed the rehabilitation process and the requests of the residents with the project leader. One of the social workers in the project group also acted as a representative of the residents, as she knew many of the residents from her work. One could say that the residents in Svingen participated in both a formal and informal way through the group representatives, but still at the lower levels of Arnstein (1969) participation rungs. They were also involved in the process by living in the middle of the ongoing rehabilitation. The residents met daily, talked to the construction workers, and were as such informed of what was happening on a running basis. They followed the building process day by day, and coped well with the noise and turbulent environment. There were no complaints, and they talked about the construction workers with respect and trust. Some of the residents talked in a more positive way about the construction workers than of the representatives from the municipality. One reason for this could be that they were more involved in the practical work than in decision making. Connection could also be made to language (Benum et al., 2007). The residents and the construction workers are likely to have a more common language than the residents and the representatives from the municipality. Language, education, and also the reputation of the building and the residents, can create a distance that influences the way people talk and understand each other. The relationship between the residents and the construction workers were also influenced by the fact that they met daily, and could talk about and see the practical work that was being done. In this way the residents were involved in how the workers contributed to shaping their everyday life in a new way. If this process was a positive experienced for the construction workers, this may have also positively influenced the image-building of Svingen.

The collaboration between residents and service providers in Svingen changed during the rehabilitation process. The improvement of this collaboration seems to actually be a result of the building process and of the residents' involvement. After the rehabilitation the residents expressed an increased willingness to receive support in personal care and to discuss mental health problems. The health care providers also feel that they are more welcome. This new openness towards service providers could be connected to the practical and financial support they received when moving into their renewed flats. During this process, the residents received help to furnish their flats, and in so shaping their environments on the basis of their individual desire. The service providers stood by the residents; they were not left alone, and probably represented satisfiers they could trust. The residents were thus proud of the rehabilitation process and results. This pride seems to have resulted in an increase of self-confidence, especially in situations that earlier were found difficult and demanding, such as receiving help. Another unexpected result of the rehabilitation project in Svingen was the extended interdisciplinary co-operation and new easiness in the contact between the municipal service providers and technical office representatives. As values, but also politics, for example how the project group was organised (Leung 2005), are factors that influence a successful participation process. In this case, the way the project group was organized also lead to changes in political decisions. The representatives of the project group learnt more about each others' tasks and areas of responsibility. It therefore became more natural to engage and to be in contact, they also discussed problems in a way that they would not have done previous to the rehabilitation process at Svingen.

The changed relationship between residents and service providers, and increased self-confidence among residents in Svingen, can be seen as examples of “empowerment through residence”, as described by Somerville (1998). The process involved and included the residents in project meetings and decision processes, even if they were substance abusers. The empowerment of the residents might be especially visible here, because the residents had never experienced being included in that way before.

At Barkaleitet housing cooperative, the residents did not have any formal participation in the rehabilitation project other than through the board. But the board and chairman were elected in a democratic way. However, the chairman saw the value of informal contact with the residents. He was open and listened to questions and suggestions from the residents, which is considered central in expressing values and attitudes to residents (Leung, 2005). He knew many of the residents well, and the residents expressed great confidence in him. The chairman had technical competence and ran an electro firm. This enabled him to control the quality of the rehabilitation work during the process, which is one of the reasons why they chose parted contracts. The chairman’s control of the work was noticed and very much appreciated by the residents. It increased their trust in his leadership of the rehabilitation project. The chairman’s involvement in, and need of, control over the rehabilitation was however, considered a bit annoying by the building contractors and architects, but they seemed to find ways to cope with the active chairman. Not only the chairman, but other members of the board of the housing cooperative also had technical and economic competence. This was valuable in the process. Their competence may also have been a barrier to seek assistance with the details in the contracts with the entrepreneurs and building companies, since the contracts later on turned out to be insufficient. Many of the construction workers at Barkaleitet were eastern Europeans. In opposite to Svingen, the residents at Barkaleitet found communication with the construction workers difficult. This may have made the role of the chairman even more significant as a connecting link between residents and construction workers, and an interpreter of needs and worries on both sides. The residents were involved through information, consultation and also by placation (Arnstein 1969), which seems to have been important through the process, after decisions about rehabilitation had been made.

When the first block of flats at Barkaleitet was finished, the chairman invited the residents in the other blocks to take a look at the results. This was a way to reassure the residents, and in response they were even more enthusiastic about the rehabilitation of their own blocks. This may also have influenced the way the residents coped with living in the blocks *during* the rehabilitation.

Most of the residents interviewed at Barkaleitet were pensioners or received disability benefits and they had time to engage themselves in the rehabilitation project. However, they were also present each day and had to deal daily with onsite construction. The housing cooperative of Barkaleitet has always had representative for every entrance. Through the rehabilitation process the residents that were representatives were actively used. They received first-hand knowledge about the renovation process, and were responsible for sharing information regarding plans and progress with the other residents in the apartments. To make the job more attractive the “entrance representatives” were also paid. In addition, they were responsible for bringing feedback and questions from the residents to the housing cooperative board. Information about the ongoing process was also provided through the internet, letters, and formal as well as informal meetings. The chairman’s aim was to bring information about plans and progress as often as possible, and as easy/ low-levelled as possible – to each resident. Information that the residents can understand, is a way of expressing the importance

of their participation. At the same time, it can work as a way of stimulating the residents to discuss the project, and help to inform their neighbours asking about progress. It is also a way to increase their knowledge of the rehabilitation process, which can be seen as a bridging resource (Leung, 2005).

Both case studies show that involving people in the ongoing activities of rehabilitation is a way to develop a feeling of ownership towards the project. Both projects presented had leaders that were deeply engaged in the rehabilitation projects. However more importantly, they listened to the residents, talked to them, were available and social. According to Leung (2005) one of the success criteria for resident participation is that those in power value resident participation, and are truly listening to the residents. Both case studies are examples of residents that were heard and felt an ownership towards the project. Still, there are decisions that the residents were unable to influence. At Barkaleitet, some of the informants even said that if every resident should have an opinion on details in the rehabilitation project, it would be impossible to handle. They trusted that their chairman and board would make good decisions. The satisfaction with the leadership, and the trust that the residents in both case studies had in the project leader seems to have meant more than being a part of every decision. The positive process can also be explained by the fact that the residents were happy with the decisions made. Both case studies are examples of rehabilitation projects that the residents were pleased with. There are smaller aspects they were not happy with, but in general they were satisfied with the changes. The study did not reveal whether *the leadership* and *information flow* described in this section positively influenced the architectural quality of the rehabilitation. This is difficult to tell because people are seldom negative about newly rehabilitated surroundings, due to the symbol effect of being appreciated (Nasar, 1998; Hauge & Støa 2009). New surfaces, new architectural solutions, and new exteriors are especially overwhelming for social clients with substance abuse, who are used to low quality housing conditions. It also demonstrates that housing environments and rehabilitation processes have to be evaluated again after some time in use, once the residents are accustomed to the surroundings. Nasar (1998) reported several studies indicating that people in general seem to like maintenance and civilities. Further, people like surroundings that are maintained, clean, and new. People report disliking environments that are dirty and lack proper upkeep. These preferences may be due to the symbolic content in a lack of maintenance as cues to social disorder.

The meaning of architectural changes for self-perception and life quality

Architectural changes lead to a different relationship between residents and their home
Robinson (2006) claims that, our spatial world tells us who we are, that we respond to it and it reacts to us. This means that a renewed physical environment may lead to a change in behaviour and a change in the way the individual perceive herself or himself. This can explain what happened in Svingen. Before, nobody wanted to live there. The social workers emphasised the shift in the residents' preoccupation of taking care of the flats and the common rooms, and that the residents demonstrated an attitude of pride and ownership. After having a party on the weekend, the place was tidy Monday morning, which had never happened before. The improved quality of the surroundings inspired the residents to take care of the building and the interior. One of the informants was especially proud of the common room, wanted to decorate it more and to keep it clean and nice. The common room had inspired her and other residents to meet in new surroundings, and to continue making the place their own. They were engaged in a new way with the surroundings both outside and

inside the block. To improve the view to the sea from the common room, they wanted some large trees removed, and they were engaged in keeping the park outside the block free of rubbish. Similar findings were also central in the study by Hauge and Støa (2009): Attractive environments made former substance abusers take better care of their surroundings. When asking the residents of the differences of living in Svingen today compared to earlier, the answers were “from hell to heaven”, “like night and day”, or “you can’t compare.” These reactions may also have been positively coloured by the way the residents felt they were treated during the rehabilitation process. The empowering process and the examples of image-building had made them more aware of what the environment meant to them. They saw themselves more like other residents in the neighbourhood.

The residents at Svingen also spent more time at home subsequent to the rehabilitation. The social workers claimed that the residents gave an impression of being more secure at home now than earlier, which could be one of the reasons why they spent more time there. The residents themselves made a point of the importance of the locked doors. The front door received an interphone, and was always locked, which meant the individual contacted could decide who to let in making it easier not to have undesirable guests entering the building. They all talked about the benefits and importance of this system. At the same time they wanted to install a monitoring camera like the one at Barkaleitet. These findings are supported by van Mossel & Jansen (2010). In their study of maintenance services among more than 6000 tenants, locks of external doors, together with heating, water and locks of windows were especially important for the residents. Residents in both Barkaleitet and Svingen wanted to feel safe and to prevent the wrong individuals from entering. Locked doors and a monitoring camera also give a feedback to the residents themselves and to the environment that the people living there want to take care of themselves and their belongings and decide for themselves with whom they should spend time. In these decisions the residents in Svingen acted like other neighbours. At Barkaleitet, the residents also felt safer after the installation of the new calling system with cameras. This is one of the changes that has been most appreciated. One of the informants said that he earlier used to check if the entrance door of his block every evening to see that it was locked. He now feels safer in his own apartment.

As already mentioned, the residents at Svingen were more willing to receive support and personal care as a result of the participation process and there was a new trust between employees and residents in the social housing units. The residents expressed a higher degree of satisfying determinants (Johnston, 1995), in contact with the service providers, as care, responsiveness, reliability and friendliness, making them feel more like partners. Another reason for the increased willingness to receive support may also be connected to how visual clues and architecture influences behaviour and self-respect (Hauge & Støa, 2009). After the rehabilitation, the residents had their own, new bathrooms, thus it was easier to welcome the community care in these surroundings. They did not have to use a small and dirty bathroom with a door that was impossible to close. The new bathroom gave an expression of the individual as a resident in an ordinary block of flats. In this way the actual changes in the physical environment lead to increased self-respect among the residents and may also be seen as a type of “empowerment through residence” (Somerville, 1998). It exemplifies the strong symbolic content in housing environments: How the physical environment is read as signals of identity, and how improvements may lead to changes in self-perception and quality of life.

Physical environments affect social interaction

As Hauge and Støa (2009) described in their study of how quality social housing environments affect the residents, some of the residents in Svingen also experienced positive

changes in their contact with family members after the rehabilitation. This related to the new pride that the residents took in their dwellings, and the new safety they felt living there. One woman invited grandchildren to visit, this had not happened earlier. These environmental changes had made her home a safer place to bring children. At the same time she did not let them stay for the night, in case they would meet drunken residents. She was reassured that her assessment of her home and environment were in accordance with other peoples' perceptions. Peoples' positive experiences while visiting can be central in reducing and changing stigma (Hastings, 2004).

In both Barkaleitet and Svingen the installation of elevators has led to easier access for old and/or disabled residents. However, the residents in Barkaleitet also commented on the lack of informal meeting points, since the staircase is rarely in use any longer. Choosing the lift reduces the possibilities for having a small talk with a neighbour. The residents do not see each other as much as before. An old lady mentioned the example of how she often came across neighbours offering to help her with the shopping bags when she slowly climbed the stairs. The lack of informal meeting points after the installation of the elevators is noticed by all the informants. Some of them emphasize the need for attractive outdoor areas, benches and tables, which may function as informal meeting points to contribute to keep up the good social milieu in the housing cooperative.

On the other hand, the renovation *process* at Barkaleitet has, according to the informants, led to more contact between the residents. They have gotten to know their neighbours, and have a common project to talk about. The same has happened at Svingen; the residents and the employees are closer to each other than before. The residents in Svingen have also experienced changes in meeting points. Greta, one of three women living there, emphasised the meaning of the common area in each floor. These rooms had a round table with chairs, big windows and a view to the sea and a far off island. Here, the residents met informally for a coffee or a chat.

The image of the built environment – self-perception

The architects for Barkaleitet described the rehabilitation project as unusual due to the very large interventions and the high ambitions. The residents are very satisfied with the rehabilitation. They are proud of the new, physical layout, and the attention their housing cooperative received from neighbours, housing associations, media, and researchers. The activities which can be seen as image-building have changed how the residents are seen and assessed in the neighbourhood. The residents' social status has been upgraded through the new physical layout of the buildings. The chairman and some of the residents refer to the neighbouring housing cooperatives as “envious” of them.

The block of flats in Svingen was “lifted” in the eyes of everyone; the residents, the project leader, the social and health professionals, and the city administration. Previous to the rehabilitation, this was a place where nobody wanted to live. Now, there are waiting lists for getting a flat. People walking by see the changes. The project leader has been asked the question “who is living there now”? The building no longer looks like a house where substance abusers, would be living. Earlier, one of the informants had received comments like “how can you live in that house”? This does not happen any longer. Now, the block looks like any other. There are curtains in the windows, it looks nice and is more peaceful than earlier. These are examples of how changes in a building that are laden with meaning leads to questions that can help people create new meanings. The visible clues that were interpreted as signs of the former residents are removed, and people walking by have to ask for new clues.

The mental schemas (Robinson, 2006) people used earlier, are not useful any longer. A new question is if this experience also will lead to new interpretations of the people living in Svingen, or if people walking by learn something about themselves and who *they* are? What would the new mental schemas look like? A building's stigma may stay through generations (Hastings & Dean, 2003). However, what happened in Svingen illustrates how several factors contributed to shape a new image of the building and the people living there. It is difficult to improve neighbourhood reputation (Permentier, van Ham & Bolt, 2008), but the reputation of Svingen has changed. To continue these image changes, the maintenance of the buildings, and how the residents act in the neighbourhood will be important. The residents would need support from the service providers in continuing this empowering process.

Conclusions

Main conclusions

The article has presented the rehabilitation processes of two blocks of flats in Norway. The residents expressed satisfaction with the results and with the new meanings associated with the blocks. While, the projects and the resident groups are very different, the results show that the most significant aspects of resident participation are trust and communication, and not necessarily resident involvement in every single decision. The case studies exemplified how trust between residents and the person in charge influences the rehabilitation process. Trust can be seen as one of the most important bridging resources in resident participation (Leung 2005). The most significant factors seem to be the leader's ability to listen to the residents, to know them, to provide a good flow of information, and to care about the residents' worries. The leaders in the case studies for this article managed to take the residents' perspective and they responded to it in a way that made the residents trust them. In Svingen, resident participation was declared a part of the political aims of the rehabilitation project, while the process of resident participation at Barkaleitet can be seen as a result of the leader's personal engagement. **Looking at Arnsteins' (1969) ladder with eight steps, the way the residents were involved in the rehabilitation process must be placed at the lower level. The steps called informing, consultation and placation can be used to name the way resident involvement was accomplished. This means that minor steps according to Arnstein's ladder also can be of great importance, as long as communication is built on trust and a will to respond to questions and messages from the residents.**

The architectural changes at Svingen lead to the residents taking better care of the housing environment, and changed the social interaction and reputation of the building. It resulted in more frequent contact between residents and visiting families. This may be rooted both in pride of the improved surroundings, and safety due to locked doors, upgraded exteriors, and the changed image of the place.

Further, the results show that architectural changes have a meaning that affects the residents' life. In both case studies, the residents reported that the upgrading had lead to a higher status and more confidence. However, the contrasting before and after is naturally greatest in the case of social housing for substance abusers. Even the employees expressed a sense of increased status when working with the residents in the upgraded blocks of flats. The residents of Svingen emphasized that it is a better place to live, and that their quality of life had improved. The residents acted and presented themselves in new ways. They expressed a pride in the place they were living, they welcomed service providers, they were engaged in

how the block of flats appeared, they felt more secure, and some said they had reduced their drinking. **In both cases, maintenance, safety improvements, accessibility improvement, and the way the process have been carried through, have removed dissatisfiers (Mosel & Jansen, 2010). On the other hand, enhancing the architectural quality has enlarged the satisfiers in a crucial way.**

The resident participation process in Svingen can be seen as an empowering process for the residents living there (Somerville 1998). They have had the opportunity to, and were encouraged to make their own decisions which influenced their flat and/or their surroundings. Maybe for the first time in their life they were given a voice and were encouraged to use it. The changing buildings provided new opportunities to take control of their environment. The experience of control may have had an influence on how they in a new way demonstrate a positive attitude to home services. The empowerment of the residents was not just a result of the participation process, but also a result of the new status that the rehabilitated environment gave them. The block of flats signalizes normality, which was an image change, and could be a positive start in the process of inclusion.

Further research

The case studies were small, and in total based on ca. 16 interviews. More data is needed to draw general conclusions. However, the case studies give inspiring examples on the meaning of resident participation in the rehabilitation process, and the significance of architectural changes in the residents' self-perception and life situation. Analytic generalisation relies on the comparison of differences and similarities between relevant case studies. Case study methodology says something about what "may be" (Kvale, 1996), and depends on verification through explicit arguments. Previous research does also, as shown, strengthen the findings in this study. The context; culture, society, and organizational aspects, are especially important when comparing different research studies within this area.

Further research is required to understand these matters better. Both building projects described in this article had leaders who were exceptionally dedicated. This position is demanding, and one cannot expect all project leaders to have such tenacity. However, the main objectives should be the same; housing quality, the same united focus, and the same resident satisfaction as described here. To identify criteria for how to manage good rehabilitation processes with less dedicated project leaders would be useful. Further research could develop guidelines for project accomplishment, and methods of mapping users needs, something that was done very informally in both of the described case studies.

Svingen is still a block of flats for individuals that have problems finding a residence in ordinary blocks. One of the residents tried to buy a new apartment some years ago, but he was denied the flat due to his former address. Would this be the case if any of the other residents wanted to move to a place where the neighbourhood was not primarily made up of substance abusers? Will the changes in how the block appears affect peoples' willingness to accept and include these people? Another important question is whether the physical changes actually lead to behavioural changes in the substance abusers. Further research will require longitudinal, interdisciplinary studies.

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