ENCOUNTERS AND RETREAT
IN THE LIVING ENVIRONMENT OF VULNERABLE ELDERLY

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Abstract

The objective of this conference paper is to discuss the problem of loneliness among vulnerable elderly and the question if and how architecture could offer a contribution to a better balance between encounters and retreat of the elderly in daily life. As the activities of vulnerable elderly are often much more dependent on their home and direct environment than those of vital elderly, the research focuses on the scale of the house and the direct neighbourhood. Aim of this paper is to elaborate on the phenomenon of loneliness, explain the research method and elaborate on a pilot study done by a master student of architecture under supervision of the author, concluding with first outcomes.

Background: We are rapidly moving towards an aging society. This trend is global and needs appropriate design solutions on different scales, from furniture up to the scale of the city. The living conditions of elderly, their homes, houses and neighbourhoods need to be reconsidered, especially for vulnerable elderly. In the Netherlands we can see a shift towards staying at home as long as possible. This causes several problems. The elderly lose connection with others and building up new social networks often is difficult. No matter if living in an elderly home or staying at home, the situation in which elderly live often causes loneliness.

The main research question is, how architectural design may help to avoid phenomenon of loneliness among elderly. Can architects contribute with their design to an optimal balance between encounters and retreat in daily life of them?

Methodologically the research is based on a theoretical study about public and private, crowding and isolation, and architectural elements that support encounters. In a second step public spaces were observed. Interviews were done in which design proposals were discussed with the elderly. The places visited were all in one neighbourhood where lots of elderly live, at home or in a and nursing home.

The first results show architectural answers that would help to empower the elderly in their choice between contact or withdrawing. One of the most important conclusions of the first sessions was the wish of the elderly to be absolutely free in choice when, where and how they encounter others, or choose for retreat.

Keywords: elderly at home | loneliness | encounters | architectural design

1. Introduction & Objective

We are rapidly moving to an aging society which will have certain impact on our living environment. Cities observe that the elderly are hidden, forgotten and, especially if vulnerable and less mobile, lonely. This paper investigates on how architectural design could support the moments of encounters in the everyday life of those elderly. At the chair of 'architecture and dwelling' of the Faculty of Architecture we want to discuss and rethink, together with our students, the way the elderly live today and in the future. Our students do interviews with vulnerable elderly in both situations, while living in a retirement house and while staying at home. The outcomes show that loneliness pops up in both situations. There are studies about loneliness in relation to elderly, mostly looking at the activities that 'work'. Study about how architecture could support the encounter in daily life is scarce. The goal is to bring together the pattern of daily life of (vulnerable) elderly with design proposals that enhance moments of encounter as a step in the social life of the elderly. With this paper the applied method and the results of a pilot, focusing solely on the problematic of loneliness, will be shown.

The paper will summarize the background on the example of the Netherlands (paragraph 2). Then the theory and the phenomenon of loneliness as well as privacy and isolation versus encounters and crowding are discussed (paragraph 3). The research question and the method, which is based on literature study, observation, first talks and interviews,

is described (paragraph 4). The results of the fieldwork are shown. This leads to first design advice for architecture that fosters encounters (paragraph 5), and to conclusions (paragraph 6).

2. Background

The last decennia there is a shift recognizable in the elderly care which moves from institutional facilities of dwelling combined with care towards the separation of dwelling and care. In the Netherlands, this was even strengthened by a new law for long-term care, which caused that elderly who did not have a right on this financial support needed to move from retirement homes back to flats, or to stay where they were, in a flat. Care needed to be partly taken over by informal connections and supplemented by professionals.

Elderly, and especially vulnerable elderly, have more chance to feel lonely. Reasons can be individual ones like less self-confidence or social ones like the loss of their partner, a big distance to their children, and a smaller social network in general. Even the imago in society can play a role. In the Netherlands in 2012, 40% of the elderly between 65-74 and 60 % of all elderly above 85 felt lonely [1]. The four big cities Rotterdam, The Hague, Amsterdam and Utrecht did extra health monitoring which showed that migrants feel more lonely than autochthones.

This outcome motivated several Dutch cities to develop programs against loneliness: "Rotterdammers do not leave each other alone"; "Hague Community against loneliness"; "together against loneliness" (Amsterdam). Voluntaries visit the elderly and organize several activities. However, there are not enough helping hands. Cities need to empower the elderly to come out of their refuges and take an active part in the society on their own speed. Rotterdam therefore started the program of "Slow City Rotterdam" and the municipality started introducing a slow layer to walk and relax in certain neighborhoods, next to the high speed layer of the city. The question here is, how to introduce a slow network with places and slow city design to support the moments of encounters for the elderly and others.

3. Theories

This paragraph elaborates on the relevant theories of the phenomenon of loneliness. The main distinctions within the concept of loneliness are clarified. Then it elaborates on theories relevant for the concepts of the encounter and the retreat, public and private and crowding and isolation. Finally, it shows some architectural discourse related to encounters and relevant for this study.

The phenomenon of loneliness

Loneliness is a complex phenomenon. It is a subjective feeling which makes it difficult to define: "the subjective experience of an unpleasant and unacceptable missing of relationships" [2]. Relationships can be quantitative or qualitative. In case the amount of contacts does not meet the desired expectations we speak of *social loneliness*. In case the contacts do not give enough emotional support, we speak of *emotional loneliness*. Only if this feeling is a long-term feeling, this will have a negative impact on someone's life [3]. Statistics show that elderly, low educated people and not western allochthones participate less in the society and therefore have more chance to feel lonely. Next to them the single elderly has a bigger chance to feel lonely. To answer the question of how architecture may contribute to an optimal balance between encounters and retreat, the *social loneliness* is the most applicable for solutions found in architectural design. As the daily life of vulnerable elderly is close to the direct living environment, this means that encounters should meet the everyday routine of the elderly. Here architecture can play an interesting and supportive role.

Encounters and retreat

A person needs a healthy balance between contact and retreat. His property is, if it is in balance, organized in such a way that this is possible. *Retreat* in this context means a *chosen withdrawal*. The *encounter* means to meet somebody *face-to-face*, expected or unexpectedly, it is a social connection with another person, visually, verbally and physically. In general – the visual contact is less satisfying as people want to communicate visually *and* verbally. Encounters with others can be seen as a first life need and can be organized (the expected encounters) but can also happen spontaneously (the unexpected encounters). These informal and unexpected encounters can stimulate the feeling of being member of a group or neighborhood and that can have a positive influence on the health of people [4]. The sporadic can be seen as the weave that creates a base and the nodes are the repeated encounter [5]. "Not being in each other's house does not mean that people like to be completely anonymous sliding alongside each other. There is a need for meeting.[..] the American city architect William Whyte already showed in 1980 what a simple kiosk with folding chairs - no street furniture cast in concrete! - could mean."[6] As the sociologist Talja Blokland argues the unexpected encounter, sporadic or repeated, are the fabric of the neighborhood. It is this informal encounter that happens on the way to the elevator, the postbox, the bus stop or the little park that planners and architects have to take into account when designing (residential) buildings and neighborhoods. With this in mind architecture may offer support to get out of the loneliness trap.

Public and private

The ideal dwelling should be a retreat *and* offer possibilities to contact and connect. "People need a private world with privacy. Therefore, distance is also necessary [...] in privacy it should be about the balance between showing yourself and hiding yourself. The architect mediates between city and intimacy. He does not make either, maybe the space in between" [7]. The social environment can influence how a person feels, as Sloterdijk argues. The gradation of closeness serves here to be adjustable. Moments of need for rest and contact are personal and unpredictable [8]. Private in general means that one has control over something. It can be a physical control like a space that is private, but also information about a person who must remain strictly private. The Latin word *private* means "withdrawn from public life, secluded" [9] , but also special, private, own. The Latin word *public* means "it is of the people" [10]. The public belongs or is accessible to the people. The philosopher Hannah Arendt distinguished between the *Vita Activa* and the *Vita Contemplativa*. For the public an active life in the public community is important. Retiring into the contemplative can lead to a turning away from the world [11]. As a human being, we would not see our uniqueness if we were not among the people, that is why public is so important. Only in the debate with others is this possible for us. As Arendt points out: "Where the plurality is contained, there is no public domain; loss of public domain is dangerous for plurality - then people are deprived of their freedom to develop their own unique biography in front of others and to integrate with them in the organized world" [12]. When our students went to fieldwork in elderly homes or nursing homes, they heard one very important complaint of almost all elderly they spoke to: "Only old people live here." When the plurality of life is absent and elderly only see or speak elderly, they cannot mirror their thoughts and actions to different groups of the society anymore. They are no active part of the society.

The balance between encounters and retreat is built up by visible mechanisms and invisible codes of behaviour. Together they regulate the privacy of people. We can see that non-verbal laws have affected our built environment. Distance in proximity ensures private life [13].

Figure 01. Altman, social distance [14]

Van Dorst argues that: "The occupant's need to interact with his living environment depends on how he feels or what he is doing at the time. A dwelling with interfaces that move from private to public scenarios enables him to regulate this interaction." As the occupant's needs may vary, the environment must be versatile enough to meet his different requirements [15]. Some fundamental laws for man and his environment are summarized [16]:

1. Man constantly wants to be able to intervene in his environment;
2. Man aspires his own territory;
3. Man needs contact with the natural environment;

Crowding and isolation

In daily life people are constantly trying to achieve the right level of privacy which always is striving for an optimum of balance between the *personal space* and *territory*, between *crowding* which means that the achieved privacy is less than desired, and *isolation*, meaning that the achieved privacy is more than desired [17]. Irwin Altman and E.T. Hall [18] introduced the *personal space* and the *territoriality* [19].

Personal space is defined by Hall as an *invisible space* around a person that can be felt by others. This *invisible space* is important for the personal privacy. In difference to this invisible bubble *territoriality* is the *visible space* of a person or a group, protected by elements like hedges or walls against others. Hall states that privacy can be arranged by *visible* and *invisible space*. The need for some kind of privacy works unconsciously but organizes spaces anyway. For the elderly the private territory is often limited to a small apartment, especially if less mobile. Once having opened the door of the apartment, the elderly is dependent on the spaces and attributes that are offered as privacy gradients for a smooth transition from private to public, leaving choice to the elderly at every stage and as well offering spaces for encounters.
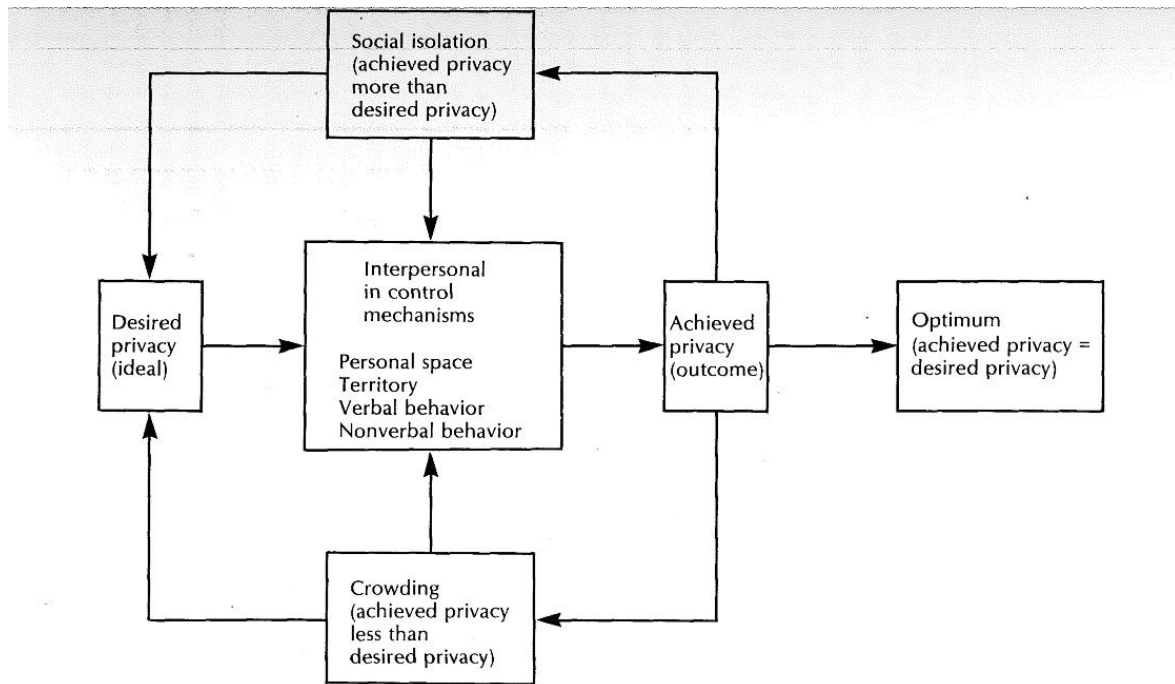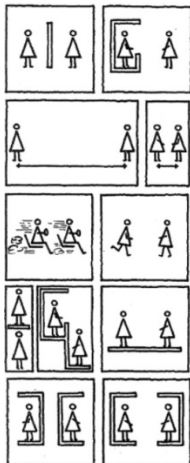
Figure 02. Relationships among privacy, personal space, territory, and crowding [20]

Architectural discourse related to encounters

The Danish architect Jan Gehl has done lots of research about the informal moments of encounter. In his study on 'life between buildings', he shows elements that function as *territory border* and others that invite to come closer. A short distance can invite interaction, as can elements like benches which are placed in a communal zone. The important fact lays in their visibility, and the consciousness as a designer to use them in the right way. The scheme shows some elements that hinder or support the encounters. The aspects he works out with this scheme are: separation, distances, speeds, spatial organization and orientation (back-to-back or vis-à-vis). However, Gehl did not specify the needs for special groups, like the elderly, which is the missing link that still needs to be elaborated.

Figure 03. Elements that hinder or support encounters [21]

The architects Aldo van Eyck and Herman Hertzberger always gave a positive notion on elements and spaces that offer the possibility to be appropriated by the users. The phenomenon of the *in-between* became an important theme in their architecture. Hertzberger suggested introducing elements that invite the resident to act. His slogan was: Making space - leaving space. A nice example is done in the project for vulnerable elderly 'De Drie Hoven', where the architect introduced low separation walls on which people can sit (fig.04).

The entrance doors to the private apartment consisting of two parts give an idea about the attitude of the designing architect (fig.05). The way residential buildings are designed today resonances our desire of privacy, comfort and individuality but less the support of meeting each other. For elderly this is a shortcoming.
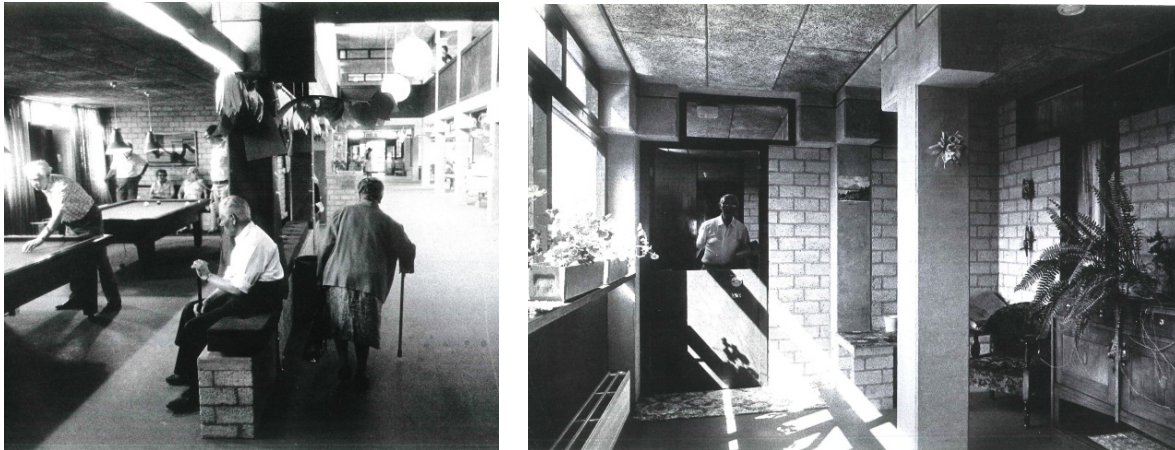
Figure 04 and 05. "De Drie Hoven", architect Herman Hertzberger [22].

4. Research question and method

To answer the main questions - Can architectural design help to avoid loneliness among elderly? What kind of architectural solutions could be supportive to meet each other? The research had to be framed. We realized that including people with dementia would influence the outcomes, as this target group would probably have a different desire and within this group the range of cognitive and emotional challenges can differ a lot. As we wanted to start with a pilot, the choice was made to exclude them. The elderly that would be interviewed did not have any cognitive but mobility challenges.

The research method is a combination of several steps and techniques, from literature study about loneliness and about architecture that would support moments of encounters in daily life, towards observational study of the elderly in public and in their daily environment, combined with interviews and a questionnaire, combined in 7 steps:

1. Literature study to understand loneliness (paragraph 3);
2. Literature study to understand spatial conditions designing for elderly, spatial organization and supportive architectural elements (paragraph 3);
3. Observation of social spaces in public;
4. Design proposals for spaces within the daily living environment based on step 2 and drawn on postcards;
5. Interviews with the elderly using these cards;
6. Interviews about the daily routine and social contact, both to understand the social places and attributes that are important for the elderly.
7. A questionnaire was spread in the neighbourhood of the design site, to get to know what kind of infrastructure the elderly use and what they miss in their neighbourhood. 6 persons reacted among young people with children.

Finally, an architectural design was made for a site in Amsterdam West.

The pilot: preparation - execution - results

The pilot was done by the graduation student Sophie Dikmans [23]. In total seven elderly between 76 and 95 were interviewed, five of them living in a retirement house in Amsterdam, two in the same neighbourhood. Next to these 7 interviews, Sophie visited a day-care for elderly nearby which offered different activities. We are aware that this is a small amount of interviews, but nevertheless wanted to give the method a try.

The postcards seemed to be a success because this opened a discussion. Her interviews of the daily routine focused on: *The daily round*; *the social contacts*; *the activities and services.* In the following the prepared material of the steps are shown and the results will be summarized directly underneath.

5. Results

Results from theoretical studies (step 1+2):

- Focus on informal encounters. The daily routine of the elderly should offer chances for it.
- The encounter should not be the main function of a place.
- People need a private world. Therefore, distance is necessary.
- People must be able to intervene in the closeness and openness of their dwelling.
- A balance between privacy and contact is important, avoid crowding.
- Even less intensive contacts are important for a feeling of 'Home'.
- Visual stimulation is very important as a stimulus to go outside or to a collective room.

- Diversity of people, not only the elderly.
- Leave space to appropriate by the users.
- Extend the *Home* to the outside as this may result in more use of these spaces and in unexpected encounters.

Results from the observation of social spaces in public (step 3):

Figure 06. Step 3 of the research method - discovering social spaces (Photographs: S. Dikmans).

- Public chess board was appreciated among the elderly
- Coffee at the supermarket often results in unexpected encounters
- Benches to rest
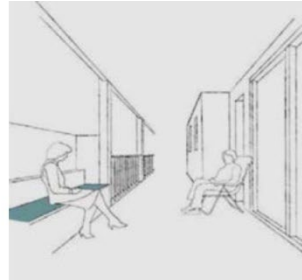- Space and place to play together is necessary and needs to be visible

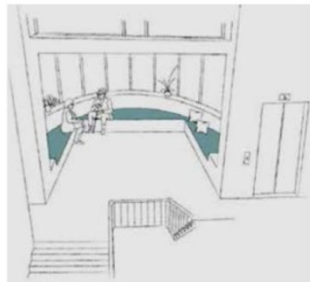## *Results from the postcards (step 4 – 5):*

1.Semi-private nis at access

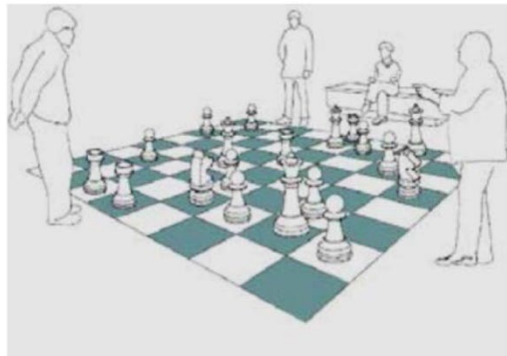2.Broad corridor

3.Bench on the access gallery
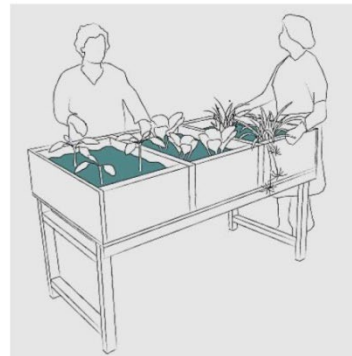

4. Bench at staircase landing

5.Bench integrated in façade

6. Door with upper and lower parts

7. Chess board

8. Garden box

Figure 7. Step 4 – Sophie's postcards (selection)

In the talks with the elderly about design suggestions, the results are partly expectable, partly unexpected. Card 1 was not appreciated as "it would get a mess" and card 4 was valued as too impersonal. The double door was seen with mixed feelings (looks like a stable door), but finally valued positively. Most valued were the integrated benches (3 and 5) as they are for everybody, with the addition to have a nice view to nature or action. Broad corridors are important for all respondents. They loved the chess and the idea of a garden box. The elderly wish to be absolutely free in choice when, where and how they meet others.

Results of interviews (step 6):

1. The daily round:	2. The social contacts:	3.The activities and services:
Can you tell me what you do every day? Where do you go? What is the purpose of your daily round? What do you come across? Are there places where you stop? How far can you walk until you need to rest? At what places do you have a rest? Are there enough rest places? Benches? Street furniture? How often do you come outside your home?	How often do you speak with people? Do you have contact with your neighbors? Is there an opportunity in your residential complex to meet people? Where do you speak to people? At home or outside the door? What do you think is a pleasant place to meet people? How does it look like. Do you have spontaneous chat with someone? Are you missing places to talk to other people?	What kind of activities do you like to do? Do you find it important to have contact with other people during such an activity? Do you enjoy watching or listening to other people's activities? (playing kids) Are there facilities in your residential complex? Do you use it? Which facilities in the neighborhood do you use? Can you name three facilities that are important to you? Are you missing facilities in the area?

Table 01. Step 6 – interview questions about daily routine and contact

The importance of daily movement is well understood and all the seven have a daily walk. One needs a bench to pause, five of the seven have a maximal distance of 500 meters. The daily round is the social round as well. But 500 meters is not far. The daily contacts are mostly with the people living in the same house, all elderly. Six of them miss more choice of shops nearby (500 m). They miss views to activities, liveliness, other ages and diversity among residents. The surveyed all found a residential complex with only elderly no 'normal situation'. All of them would like to participate in society by doing easy voluntary work in the house they live.

Results of the questionnaire (Step 7):

The questionnaire showed that people make use of the supermarket, the library and the playground (younger person with kids). When it comes to the question what they miss, a centre for 55+ was mentioned, where you can go when feeling lonely. A place to sport was a wish of elderly as well as allotment gardens.

6. Conclusion

The combination of the different steps has led to interesting results. Six of the seven interviews showed that they miss views to activities, liveliness, other ages and diversity among residents. 'This is not a normal situation', was a common answer to the question about their daily life and their encounters. Changing this would mean not to design for the elderly, but for a mixed living. Especially the care needing elderly, who hardly go out, would be more integrated. The program should contain a mix of functions. Residents would be aware to help the more vulnerable. Professional care needs to be more flexible. Sophie's design focused on a mix. As there is an elementary school situated next to her site, she decided to bring an extra gym hall into the building, in the central area of her design, like a patio. Windows from every level offer a view to it (figure 10). The hall can be used by the elderly as well.

The wish of the elderly to be absolutely free in choice when, where and how they meet others, has consequences for the design. The architect may offer spaces for unexpected contact, but the resident must have a choice. Architectural elements like windows towards the access spaces to see somebody passing by, need a shutter. Collective living rooms need to be visible from the hall so that you can see who is sitting there and make your choice. In Sophie's design there a lot of openings to the corridors, however they can be closed by the residents, or the opening do not offer any chance to see the rooms inside (figure 8 and 9).

The elderly want to stay a respected person in our society and participate. This is a societal question. It shows the need to empower the elderly instead of making them passive members of an elderly home where everything is prepared, even the meals. Architecture could foster empowerment by visual stimulation, seeing others doing kitchen work may trigger them to join. Seeing an elderly in a workshop doing some reparation of bikes could make them step in and help. If the elderly wants to participate with voluntary work, space is needed where a slow working rhythm is fine and does not hinder others who like the rush. On a societal level we have to change our attitude. Not everything needs to be done in a rush.

Sophie's design provides places for small groups to cook and eat together. Each floor has a big roof terrace where herbs and little vegetables can grow in garden boxes. There is lot to do for the elderly within their own house. A Cafe and a shop offer interaction. We discussed the possibility to get a mix of target groups by offering different apartment sizes. To provide flexibility she designed one-person apartments that can be combined to get bigger apartments fitting for a couple or a little family.

The research definitively helped her to get more insight in how architectural design could help to avoid phenomenon of loneliness among elderly in daily life. Spaces for unexpected encounters within the daily round, which is short, are very important, as well as views towards the collective spaces, and possibilities for action space in the house. But

there lies another challenge, namely, not to exclude the elderly in the way it is often happening today, but to develop towards an inclusive living environment.

Some impressions of the architectural design, made by Sophie Dikmans

Figure 8 and 9. The access gallery to the apartments with views from inside-outside to the gallery (little kitchen windows to the gallery), elements to sit, a double door, table gardens and a window at the end of the gallery.

Figure 10. A view to action – a new gym hall for the primary school.

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