DESIGN FOR WELL-BEING IN CARE HOMES FOR THE ELDERLY

Hugh Miller and Mirja Kälviäinen
Nottingham Trent University, U.K.; North Karelia University of Applied Sciences, Finland
Hugh.miller@ntu.ac.uk; Mirja.Kalviainen@pkamk.fi

ABSTRACT

Current guidelines in the U.K. and Fnland for the design and layout of care homes for the elderly specify factors such as space, safety, privacy and cleanliness, but do not concentrate on promoting well-being. This paper draws on discussions with focus groups of various users in Finland and ideas from positive psychology to propose ways of improving the quality of life of both staff and residents in care homes, considering both physical design and the design of carer's roles and responsibilities.

Keywords: care home, well-being, elderly, design

INTRODUCTION

The aim of this paper is to consider how existing physical guidelines for elderly care home design might be extended to enhance the well-being of residents. Typically these guidelines promote concrete space elements without advising how solutions can create an atmosphere which supports emotional-cultural values and attributes such as cosiness, friendliness and domesticity, or how design of the care home might promote well-being. Care home design needs to bridge the gap for all users, both workers and residents. The effects of care home solutions are further considered with the help of Finnish studies with focus groups discussing users' needs using existing care homes as stimulus images. The results suggest the possibility of a positive care home experience through well thought-out physical and organisational elements supporting an atmosphere and affordances for positive well-being.

EXISTING DESIGN GUIDELINES FOR ELDERLY CARE HOMES

Examples of official care home guidelines are the 24 hour care plan for healthcare assessment in Finland from the National Authority for Medicolegal Affairs (Anon, 2009) and in the Care Homes Regulations from UK by the Department of Health (Anon, 2006). The aim is to ensure a minimum quality level for the residents and their care. The quality assessment is usually done by people from a health care professional background. Environmental care home guidelines promote accessibility, care, personal and social activities, often through defining concrete space elements. The regulations also promote emotional and social-cultural factors such as coziness, friendliness and domestic character without explicitly relating them to the concrete elements.
The Finnish quality guidelines (Anon. 2009) emphasize the necessity of a barrier free environment (passages, steps, ramps, thresholds, doors and lighting), possibilities for joint activities, minimum resident room size, single room recommendation, adequate equipment and furniture, technical and functional safety, storage rooms, hygienic surface requirements, air conditioning, possibilities for cultural and other activities and being outdoors. In general, they describe that the environment should fulfill the demands for a pleasurable, safe, home-resembling living space, making privacy possible and supporting functionality. This is described more concretely as activity equipment and activities, joint happenings, facilities for eating together and supporting relatives' visits and participation. Self-regulation, privacy and participation, even with weak functional abilities, are also emphasized. Earlier Finnish care home managers' facility quality guidance refers, in addition to functional qualities, to pleasurable, comfortable and

activating environments with joint gathering room, resting places on the corridors, enough moving space, plants, preventing draft or light reflections, and home-resembling furnishing, calm patterns and colours, the whole atmosphere being calm and without noise.(Rissanen et al. 2004).

The UK Care Homes for older people National Minimum Standards and Regulations (Anon. 2006) focus on service users' quality of life, residents' personal and health care needs and everyday preferences. The individual resident approach includes privacy, dignity, autonomy, choice and lifestyle preferences in the built environment. Provision for social, cultural, and religious activities, joint dining rooms, private visitor spaces and outdoor facilities are mentioned, together with minimum space requirements. Users' individual and collective needs should be met in a comfortable and homely way, related to domestic lighting, furniture and carpeting. Accessibility, disability equipment, equipment storage, good lightning, safety, good maintenance, hygiene and proper ventilation are required. Service users should have comfort, safety and privacy in their bedrooms with their own possessions around them. If lacking their own furniture, an offer of bedroom setting with a bed, overhead and bedside lighting, comfortable seating for two, drawers and space for hanging clothes, a table to sit at and a bed-side table should be available. In new build the bedroom window should enable users to see out of it when seated or in bed. The home's philosophy of care and its size, design and layout are seen as interwoven. A home with family-like care would need small, divided communal domestic scale units and a 'hotel'-style home could serve with one large semi-public environment.

InformeDesign (US.) runs an interior designers' database with evidence based guidelines for elderly care homes deriving from research articles looking at different areas of interior solutions (InformeDesign, 2009). The result is a collection of guidelines providing general guidance such as home-resembling conditions, small enough households, meaningful objects, home-like feeling, informal furniture and fabrics, and replacing symbols of institutional care. Specific areas of guidance include safety (fire extinguishers, smoke detectors, flashlights, escape routes, falling and hazard prevention, non-skid floors, handle rails and glare prevention), lighting (bright light, sunlight, motion sensor night lights, work lighting), avoidance of distracting sounds, and barrier-free solutions with assistive devices and furniture. The guidelines emphasize mobility and active behaviour opportunities, walking space, environmental signage, places to rest and stimulating, changeable features in social areas (bird watching, aquariums, pets, artwork, bulletin boards, music, family videotapes). Access to the outdoors and nature, with outdoor seating and activities, is also seen as important. Everyday necessities are supported by easy bathroom conditions and small person per bathroom ratios. Rooms with personalization possibilities (furnishings, art, memorabilia) and resident control provide privacy, as well as socialization with shared communal space, joint but intimate eating, and semi-private visiting or activity areas. The guidelines also mention considering differences in residents' cultures and personalities, cognitive abilities, and fatigue. There are also some useful reviews of environmental design for well-being in dementia homes and care homes, mainly based on empirical research. Kälviäinen (in press) and Barnes & al (2002), Brawley (2006) and van Hoof & al (2010) discuss such issues as how environments can match the sensory capacities of older people.

USER-BASED RESEARCH

Environmental psychology suggests how a pleasurable living environment is composed of physical, social and emotional environmental offerings or affordances divided into community feeling, aesthetics, safety, recreation, activities and needs of different resident groups (Kyttä 2003). To capture all these influence areas the designers need to bridge the gap between real environmental and functional elements and manifold emotional and meaning based experience effects. A study searching for these bridging possibilities was conducted in Finland in 2009. This study used images from existing care homes' public spaces and a focus group type of free discussion about the pleasure reactions to this stimulus. Results concerned with general experience feel, atmosphere, affordances and concept analysis of these perceptions are presented here from discussions with users, care home management, care personnel and designers. The visual stimulus driven

discussions were held in small focus group interviews with each stakeholder sector as a separate group but here the results are presented as a joint analysis. There were seven focus group discussions altogether. The focus group sessions were conducted in eastern Finland and in Helsinki by different members of the Academy of Finland research project 'Constructing Well-being in Elderly Care'.

The chosen images presented environments from four different care homes in Eastern Finland. Two of them were privately owned and two were public. The selection of these environments was made through a larger observational information collection of 16 regional care homes and the chosen ones represent diverse qualities found in these homes, and also a private-public dichotomy. The following two images show a target living room solution in one of the private and one of the public care homes. In each of the four selected care homes a picture of the public living room, dining, bathroom and corridor facilities was presented.

Figure 1. Two examples of the living room solutions

People's preferences specified a pleasurable, warm and respectful middle zone: a well thought-out, homey and comfortable setting with domestic furniture, items and plants, warm colours and good lighting. Care homes filled with devices, messy information boards, differing styles of furniture and stimulation material are fussy and associated with disrespect. Assistive devices stimulate experiences of disability stigma, cleaning items communicate about constant cleaning and an unclean environment, and children's materials imply childish residents. On the other hand too bare environments with cold colours and lighting, public space items and settings present a displeasing, boring and even scary atmosphere redolent of healthcare institutions. When domestic quality is demonstrated in a former hospital ward with an odd selection of home furniture the end result may be weird, fake and disturbing rather than pleasurable.

Figure 2. Space with clutter, pleasurable domestic setting, institutional bare corridor

We have also been guided by two user information workshops with older people in North Karelia October 2010 as part of the CoWell project, based at The University of Eastern Finland, Kuopio. We talked to 67 respondents (57 women, 10 men): people having heart problems and their relatives, people having relatives in a care home, and people taking care of relatives at home. They were asked about what it would be important to them still to be able to do, things they would like to take with them if going into a care home, how they could retain their identity, what would remind them in a pleasurable way about their past life, and what activities should be public and private.

What people wanted to keep was a variety of things – memories, customary surroundings, continuing activities and hobbies, ways of keeping in touch with the world. What people wanted to be able to do was a continuity of what they had done before – to live a 'normal life', not an 'institution-controlled' life. They were clear that they wanted to be able to continue to live their life: the word 'own' was used repeatedly: own plants, own activities, own music, own books, own decorations, own clothes (and underwear).

INSIGHTS FROM POSITIVE PSYCHOLOGY

We also feel that insights from the research on wellbeing carried out over the last twenty or thirty

years as part of the 'positive psychology' movement can help in informing design guidelines. This research has used a variety of indicators of adjustment, health, contentment, and effective functioning to evaluate theories of well-being. The literature suggests a distinction between three positive states: absence of deprivation and suffering, immediate pleasure and enjoyment, and deeper, longer-term engagement and satisfaction, which might arise either from social engagement or from involvement with tasks and activities. It is suggested that these work in different ways. Removing suffering will stop us feeling bad, but doesn't in itself help us to feel good. Immediate pleasures are enjoyable, but we quickly habituate to pleasant things and need escalation and constant variety to maintain enjoyment. Engagement and satisfaction, on the other hand, may result from activities which may not be immediately experienced as positive (and may well not be relaxing), but are valued in retrospect, and are seen as being capable of making a positive change in the individual, which in turn may lead to long-term benefits (Seligman, 2003). This last process could be called 'deep satisfaction', and its potential for enabling personal development makes it an important component of the well-being literature.

Overall, this literature suggests that as well as improving things for people by removing unpleasantnesses and difficulties, designers might aim to enhance well-being in three general ways: enabling effective and involving action, with a feeling of predictability and control of what is happening; encouraging satisfying social interaction; and promoting mindfulness, physical involvement and enjoyment. Removing discomfort and irritation has to be worthwhile, of course, and this area is well covered in writings on cognitive ergonomics and universal design. It will be mentioned below where it might be combined with the other three goals.

Below we suggest some specific ways in which those general goals might be applied to improve the quality of existence in care homes for the elderly. Positive psychology can be criticised for being too optimistic and too focused on personal growth. The long and medium term outlook for care home residents is not optimistic, and the personal and psychological changes they may experience are usually associated with decline, rather than growth. However, a positive psychology focus on making the most of whatever abilities and possibilities are available, while avoiding unnecessary limitation from disabilities, seems justifiable. It is also important to consider these principles with regard to the well-being of workers in care homes as well as that of residents, since research has shown that major determinants of residents' well-being are the attitudes, job satisfaction and lack of staff turnover of home workers (Zimmerman & al, 2005a,b). Where there are conflicts between the needs of workers and residents, the needs of the residents should come first, but if increasing the well-being of staff can have important effects on increasing the well-being of residents, then making some compromises in favour of staff well-being might be appropriate. 'Workers' and 'staff' here can be taken rather generally. It is the job of front-line workers in roles such as care assistant to work most closely and continuously with residents, but there are often other workers in a home (cleaners, cooks, secretarial staff) who are part of the whole social life of the home and may contribute much to its overall atmosphere. Also, a theme of this paper will be that care homes should be regarded as overall systems, and the design, management and well-being of all aspects of the system are relevant to residents' well-being.

A SENSE OF CONTROL AND RESPONSIBILITY

In our previous review of design for well-being (Miller & Kälviäinen, 2006) we pointed out research which showed that well-being could be supported by enabling action, and allowing a sense of prediction and control of what's going on (Seligman, 1975; Rodin and Langer 1977; Langer 1983; Csikszentmihalyi, 1990). While the opportunities for this may be limited in care homes, the importance of allowing people a sense of control and responsibility in their lives in care homes has been recognised for a long time, at least since the Rodin and Langer (1977) study "Long-term effects of a control-relevant intervention with the institutionalized aged", which showed the positive health effects of giving residents some choice and responsibility for aspects of their daily lives. This has been backed up by much subsequent research (Schulz, 1976; Secker, Hill, Villeneau, & Parkman, 2003). However, increased control and responsibility might be associated with increased risk, and obviously

maintaining safety is a main objective in care home management. However, it does seem that an increased concern with safety is associated with reduced quality of life in much research (Bland, 2005; Parker & al, 2004). The design issue here is in providing opportunities for autonomous action within an inherently safe environment. A common example is giving free, but basically safe, access to secure outdoor spaces (Chalfont & Rodiek, 2005).

Control and responsibility are issues for workers as well as residents. The Green House movement in the USA approaches promotes the use of small, home-style units for up to 10 elder residents with care workers (Rabig, Thomas, Kane, Cutler, McAlilly, 2006). The focus is on individualized, person-centered planning empowering the staff for maximizing each resident's quality of life, personal autonomy and daily functioning. Instead of good *care* the whole concept, the following design and service intended to support the residents' good *life* and lifestyle. Comparison results (Kane et al, 2007) show higher resident quality of life measures in these solutions than in a conventional nursing home when considering physical comfort, functional competence, privacy, dignity, meaningful activity, relationship, autonomy, food enjoyment, spiritual well-being, security, and individuality. One of the features of the Green House system is the role of Shabaz, a worker who has prime responsibility for most of what happens in their unit, being involved in nursing, social and practical aspects of the house management. Such a role might be much more fulfilling and absorbing than that of a basic care assistant. Rabig & al (2006) in their report from an early implementation of the Green Hose concept in Tupelo, Mississippi, note that "Most Shahbazim embrace the empowerment of their roles and visibly demonstrate increased skills, self-esteem, problem solving, and self-possession" (p538).

People generally find involvement in a task satisfying if that task places reasonable demands on their skills, but is not so difficult as to be beyond their capabilities. Seligman's (1975) work on learned helplessness points out that both failure and success which arrive arbitrarily are damaging to people's sense of competence in dealing with future challenges. Elderly people in care homes are likely to have many of their abilities restricted, but they still do have abilities, and it is possible to match the demands put on them with those abilities, with some sensitivity. Zeisel (2011) points out how awareness of the specific cognitive weaknesses and strengths of a person with dementia can be used to avoid ways of interacting with them which leave them helpless, and choose ways which will allow them to respond effectively. Secker & al (2003), in a valuable article, suggest that we could see dependence and independence as separate dimensions. Residents in a care home are necessarily highly dependent physically and perhaps cognitively, but can still have the capacity to make immediate choices of what to do, and maintain a sense of having a meaningful social role, and therefore maintain some sense of independence. The point made by Zeisel (2011) about sensitively supporting cognitive abilities applies to other areas of skill, and knowledge of each individual's abilities and how they might be reflected in the demands of the environment and activities, from washing vegetables to playing the piano, can help in supporting meaningful activity for each person. People will also want to continue with their own interests and skills, even if at a more basic level. Those who have been keen knitters in their earlier life will still like to knit; one of our respondents, who had enjoyed working on his car when he was younger, still enjoyed looking through illustrated books on car maintenance. In this context designing for satisfying involvement is mainly a matter of task design, both for workers and residents. Management might take responsibility for specifying workers' roles in such a way that they have challenging but clear goals for the ways in which they support residents (whose responses will provide feedback), but also ensure that workers have sufficient training, skills and support to be able to perform those roles effectively. One of the important, challenging, roles for workers could be to support residents in involvement in activities which for them are also challenging at an appropriate level of skill, however mundane those activities might seem, as suggested above. Verbeek, van Rossum, Zwakhalen, Kempen and Hamers (2008) in a literature review of small, homelike care environments for people with dementia, point out that a common feature is involving residents in household activities, but comment that "Daily life is organised around meaningful activities, such as cooking, with a lot of personal contact. This requires the staff to have specific skills, such as high levels of social and communicative skills." p259

Since the most beneficial form of skilled behaviour here is in the human, interactive aspects of activities, systems design which allows workers to focus on that, rather than mechanical problems, will be an advantage. People should be free to use their skills in gathering information from residents, rather than being challenged by record keeping systems; to concentrate on keeping someone calm and comfortable, rather than concentrating on the difficult-to-use hoist system. Training guides, such as Grealy, McMullen, and Grealy (2005), can give guidance on ways of approaching and interacting with people with dementia to reduce conflict and make interactions more social and less threatening.

SUPPORTING SOCIAL INTERACTION

Another major theme in well-being research is the importance of satisfying social interaction. Design for social interaction is partly a matter of designing convivial social spaces. Hall (1966) proposed the concepts of sociopetal and sociofugal spaces; sociofugal spaces drive people apart, while sociopetal spaces bring them together. The analogy is with centrifugal and centripetal forces in physics. Examples of sociofugal settings are airport lounges or dentists' waiting rooms, while sociopetal settings are restaurant booths or even a conference table. The example of restaurant booths also suggests that spaces can serve both functions at the same time: holding a small group of people together, while separating them from those around them. One stereotype of an unsatisfactory public space in a care home is a room arranged like a doctor's waiting room, with chairs around the walls, and a television, which might be a sociopetal focus in other circumstances, playing unattended in a corner. This is sociofugal space – one which makes people socially separate. It is desirable to design spaces which encourage interaction between people, at whatever level is manageable for them, or spaces that allow flexible shifting between privacy and intimacy and broader social contact. However, whatever the physical structure of a building, considerable changes can be made to its sociability by rearranging chairs and tables. In our interviews, respondents were able to identify home-like furniture arrangements which they thought would make more pleasurable semi-public spaces in comparison with the 'waiting room' layout.

Management of spaces to support appropriate social interaction is one aspect of Alexander's pattern language (Alexander, Ishikawa and Silverstein, 1977) for architectural design. In care home design, that suggests that spaces might be organised to encourage social interaction, but it is also important to manage social interaction. Part of the Green House idea is to put groups of people, both residents and staff, together in appropriate numbers and in appropriate spaces to encourage and support the range of social interactions of everyday life.

The kind of social interaction which is appropriate varies from setting to setting and situation to situation. Throughout life, we learn to respond to cues for appropriate socialisation very effectively. Zeisel (2011) points out these social skills are part of the implicit learning people may retain for a long time in dementia, and so providing strong signals as to what is happening here, both in the design of the room and the fittings, and in the demeanour of the workers, may be useful in channelling appropriate behaviour. Settings should allow for a variety of social interactions, and people should be allowed some sense of control of settings and interactions. Provision of a variety of private, semi-private, and quietly social as well as stimulating public spaces, and allowing residents flexible access to these different settings, should support both the sense of control of social interactions and the amount and quality of those interactions (Barnes & al, 2002). The preferences of workers, residents and visitors may differ here. Duffy, Bailey, Beck and Barker (1996) found that although both "administrators and designers favored designs that promote social interaction, nursing home residents consistently selected designs that enhance privacy" (p246). Chapman and Carder (2003) found that the most popular places for relatives' visits were public and semi-public spaces, although families were also concerned to personalise their relatives' living spaces and to keep track of personal possessions. Lum and Kane (2008) point out that meeting the needs of visitors and family is important in maintaining the psychosocial well-being of residents. Perhaps given that there will be a variety of preferences, and a variety of kinds of social interaction, in a care home, designing for variety and flexibility of social settings should be the aim. Yang and Start (2010) support this idea, on the basis of a qualitative study, and point out

that making public spaces reservable can transform them into private spaces without the need for physical rearrangement.

However, designing for social interaction isn't just a matter of physical design. Designing the roles of workers so that part of their job is to talk to people, and giving them the time and lack of other pressures to do this, would have a bigger effect on the level of satisfying social interaction in a home than would be achieved by rearranging the chairs. Not surprisingly, participants in our workshops expressed a wish for a setting in which the staff would be ready to talk to them. Similarly, the daily regime can be designed to encourage social activity. Charras and Eynard (2011), introducing the French Eval'zheimer system, stress the importance of communal dining, with staff and residents seated together and serving each other. Charras and Frémontier (2011) report weight gains in residents eating like this compared with others who did not have communal meals, along with increased autonomy in residents and improved staff perception of work conditions.

MINDFULNESS

Ellen Langer's research (1990), suggests that there are psychological benefits from increasing awareness and focussing on the immediate moment, or 'mindfulness', an idea familiar from many religions and philosophies. Novelty and unpredictability are likely to jog us back into mindfulness, but subtle variations and unexpectednesses may help to remind us to pay attention and be present, even with familiar objects. This may be one reason for the often noted benefits of contact with natural environments, which are full of unexpectedness and subtle variations.

Emmons and McCullough (2003) found that people who reminded themselves daily of their 'blessings', things in their lives that they felt gratitude for, reported higher levels of happiness than others who reflected on hassles or on neutral topics. This focussed mindfulness can be encouraged by objects in someone's life, as with things which reinforce a sense of rootedness or links with valued others, as discussed above. These principles may seem paradoxical in dementia, where focussing on the present moment (or at least being aware of it) may be all that people can do, and where there is no memory of recent positive or negative events, but allowing or encouraging people to concentrate on those 'blessings' they can recall, or are currently experiencing would be worthwhile. This is an area where it is useful for staff to have good information about residents' history and values.

The importance of the past, personal, family, or social, either as a way of providing reassurance and rootedness, or as a way of judging progress and development, is a recurrent theme in accounts of what people at all ages value and find uplifting. The resident intake process could include tools for getting to know the residents' identities and their personal requirements and everyday routines, but also their environmental taste. The process could provide a set of pictures from the residents' own homes and surroundings, real life situations, family constellation and roots, everyday life habits, tasks and timetables, occupational and cultural background, hobbies, roles, important things for identity and values, meaningful issues in life and environment, lifestyle inclinations (e.g. for security or adventure), social networks, and interaction habits. (Kälviäinen 2002) Elderly residents have a long life history and the staff should be interested to support the elderly in continuing their preferred life style as much as possible even when in the care home.

We have said elsewhere that this *"suggests that systems should allow people to preserve durable traces of what has gone before, and make them easily available in the sometimes distant future"* (Miller & Kälviäinen, 2006). The care home context is that 'distant future' and encouraging residents to keep and use mementoes of their own past and a wider social past is usual. In coming years, the range of 'durable traces of what has gone before' will change. It is more difficult to preserve digital texts and emails than letters, but it might be easier in the future to make photos and videos available and accessible (through digital photo frames, for instance).

In the first author's research on how people valued craft objects (interviews carried out March - October 2002 with 30 Finnish respondents, 20 female and 10 male), there were strong themes of connection to family, history and loved ones, and also objects were valued as the production of people that the owners respected and admired (Kälviäinen, 2006). A striking feature of this research was how ready people were to ascribe personal identity and social links to some of

the objects they owned. This happened both through linkage to the designer or maker but also through the memories and meanings connected to the product. Clothes, chairs, rugs, and ornaments can serve this function: such things were often mentioned by the elders that we talked to. General understandings for the creation of a positive care home atmosphere should be integrated with the personal life history and home concepts of the real residents.

Providing opportunities for people to focus on immediately involving positive experiences is beneficial. This might be one reason for the frequently-reported positive effects of having pet animals in care homes and the value of gardens (refs needed). The value of mindfulness is also some justification for involving residents in activities which might seem 'pointless' and even demeaning to onlookers: allowing people to focus on a momentarily pleasant experience, however trivial, can be worthwhile in itself.

AFFORDANCES FOR SATISFYING LIVING

If it is recognized that various principles from positive psychology can usefully be applied in care homes, the problem remains of how to implement them through design intervention. Conventions inviting or preventing certain kinds of behaviour or experiences lead to perceived affordances in our minds (Norman 1999) and the designer can exploit these affordances to support positive behaviour. Our respondents saw the environments as having positive or negative affordances connected to physical, social and mental activities. It was important to see the environment as a space which offered possibilities for moving with different mobility problems and when using assistive devices. The environmental settings were also seen to provide possibilities for social meetings and interaction. Stimulus affordances were also considered, such as pictures to help one to remember nice things, enjoyable nature views or the environment offering empty places to put nice things in. The possibilities for peaceful meditation were observed when there was a suitable solitary setting. Another important affordance was the opportunity to sit and watch others or life outside the home.

Table 1: Design features which might provide affordance for positive behaviour

Positive characteristics	**Affordance**	**Categories, concepts**
Clear spaces around furniture Big doors	Affordances for assitive devices with moving space	Barrier free
Handrails and other supports	Moving support from the environment	Accessible
Sturdy chairs with armrests	Affordances to sit down and get up	Independent
Assistive devices in the toilet Plastic table cloth Spinklers on the ceiling	Affordances for running everyday life practices in safe conditions	Functional, practical
Groups of seating with and without tables	Social interaction affordances	Social, community
Places for memory objects	Thoughts of past experiences	Memory place
Plants, flowers; table space to put flowers on; Pictures of nature	Affordances of nature	
View out of window, a good seating place with an outdoor view Seating spaces just inside (with a view) and just outside outside doors.	Affordances of following and observing life	Observation place
A place to sit in peace and quiet	Affordances of peaceful meditation	Meditation place

Negative characteristics	**Affordance/ or lack of it**	**Categories, Concepts**
Empty corridors, public lights, institutional space layout, plain and cold materials	The affordance for efficient professional action, no affordances for human contact A space for echoes and annoying noises Not for multisensory experience	An institutional kitchen A healthcare centre A hospital Institutional care
Hospital and cleaning items floating around Plastic gloves Shampoos not meant for people	Clinical care and cleaning going on all the time You do not want to touch people with bare hands	An entrance lobby for washing children or dogs
Bars in front of food service area A bare big clock on the wall	Forbidden and restricted Timetable following	A jail A school
Badly scattered decorative items on the walls, no colours on the doors, empty corridors	Difficult to orientate	Disorientation, fussy institution
Prominent exits A door with a light	Affordances for escaping	
Chairs around the TV, no small social settings	No alternative socialising and refreshment possibilties	A boring institution without thoughtful activities

There is also a need to be critical. How specific can the guidelines become as the instructions given at the detailed level may not apply to real life conditions? The problem in practice is that care home environments form a very diverse set of application targets. They can be new building projects, renovation sites, or already existing care homes with improvement intention. They can be a part of building complex, blocks of flats or separate houses with their own gardens. They can be situated in the city or in the countryside. At a detailed level model examples showing how to apply the guidelines and elements in different environments could be given and the guidelines itself could be at a generic, inspirational, and co-design process support level as is successfully done in the Danish model project.

With the question of affordances we are actually discussing the major feeling issue of how the environment is inviting people, residents and staff members to behave. Does it invite home behaviour or institutional hospital behaviour? The education and socialisation of the nursing staff is following hospital healthcare rules, not home rules. The ideology we should cherish as important for the creation of a care home encompasses the highest level of abstract values and the execution of the smallest of details. Is it the resident quality of everyday home life, the staff wellbeing and efficiency, healthcare and safety, or making a good impression for worried family members, which is important? The concrete visual and other sensual expressions of the ideology and the concept following the ideology guide our behaviour in the environment. Also important is how the ideology influences the assessment process: with what ideology is the assessment executed? Results with the same environment can be extremely different when evaluated from the viewpoint of resident quality of life compared to the efficient care perspective. This

difference was evident even with the focus groups of care staff and managers who saw some environments as being practical for work and then also saw that they would be unpleasant for the elderly user. The existing care home pictures received a lot of institutional and negative experience responses although they are places approved in the quality surveillance processes. So have the domestic and comfort requirements been taken seriously in the assessment process or are they overruled by the safety and health requirements?

DESIGNING SYSTEMS, RATHER THAN OBJECTS

A conclusion we reached in a previous paper (Miller & Kälviäinen 2006) was that the notion of a designer making something complete in itself and 'producing well-being' is mistaken. It is more useful to think of concepts that combine designed objects, services, and ways of working together, which together might be more effective in supporting the possibility of well-being. As Klaus Krippendorf (2006) says:

Design has to shift gears from shaping the appearance of mechanical products [….] to conceptualising artefacts, material or social, that have a chance of meaning something to their users, that aid larger communities, and that support a society that is in the process of reconstructing itself.

Krippendorf (2006), n.p.

So designers and psychologists might work with healthcare or social services to develop objects and systems that allow people the possibility of being active, developing themselves, experiencing flow - and getting long term satisfaction. Care home environments and staff members should provide tools and opportunities for residents to do things with choice, their own imagination and control, as far as possible. Although design tradition in many cases encourages designers to produce some single complete 'thing', the heuristics of well-being point out that the feeling of well-being is born from individual possibilities, activities, social connections and feelings of growth, and the designer can only make scaffolds for these purposes, not some complete product or architectural design producing well-being. The care home needs to be considered as a complete system. Since much of the opportunity for residents in care homes to 'do well-being' depends on the support and involvement of others working in the home, concern with workers' well-being, and understanding of what can be done to support well-being, is central to promoting the well-being of all.

REFERENCES

Alexander, C., Ishikawa, S., and Silverstein, M. (1977) *A Pattern Language: Towns, Buildings, Construction.* New York: Oxford University Press.

Anon (2006) *UK Care Homes for Older People. National Minimum Standards and Care Home Regulations 2001 3rd edn Care Standards Act 2000*. The Department of Health, London, The Stationary Office.

Anon (2009) *Ympärivuorokautisen hoidon ja hoivan terveydenhuoltoa koskeva valvontasuunnitelma*. National Authority for Medicolegal Affairs, Helsinki.

Barnes, S. and the Design in Caring Environments Study Group (2002) The Design of Caring Environments and the Quality of Life of Older People. *Ageing & Society*, Vol, 22, 775-789

Bland, R. E. (2005) *Senior Citizens, Good Practice and Quality of Life in Residential Care Homes*. PhD Thesis, University of Stirling

Brawley, E. (2006) *Design Innovations for Aging and Alzheimer's: Creating caring environments.* Hoboken, NJ: Wiley

Chalfont, G., and Rodiek, S. (2005) Building Edge: an Ecological Approach to research and Design of Environments for People with Dementia *Alzheimer's Care Quarterly*, Vol. 6, Issue 4, 341-348

Chapman N.J., and Carder P. C. (2003) Privacy Needs When Visiting a Person With Alzheimer's Disease: Family and Staff Expectations. *Journal of Applied Gerontology* Vol. 22, Issue 4, 506-522

Charras, K., and Eynard, C. (2011) Intervention sur L'environnement Physique et Social des Residents en Institution Paper presented at *EPHAD2011 Recerche & Practique Clinique Conference*, Toulouse, 2011 Available at: http://www.orsmip.org/enquetes/rehpa/modules/partie/congres2011/telec/06_INTERVENTION_SUR_ENVIRONNEMENT_PHYSIQUE_ET_SOCIAL_DES_RESIDENTS_EN_INSTITUTION_RESUME_K_CHARRAS_C_EYNARD_2011.pdf., accessed 8 February 2012

Charras,K and Frémontier, M. (2010) Sharing Meals with Institutionalized People with Dementia: A Natural Experiment. *Journal of Gerontological Social Work,* Vol. 53, Issue 5, 436-448

Csikszentihalyi, M. (1990) *Flow: the Psychology of Optimal Experience*. New York: Harper and Row.

Duffy, M., Bailey, S., Beck, B., and Barker, D. G. (1986) Preferences in Nursing Home Design: A Comparison of Residents, Administrators, and Designers *Environment and Behavior*, Vol. 18, 246-257

Emmons, R., McCullough, M. (2003) Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life *Journal of Personality and Social Psychology*, Vol. 84: 377-389

Grealy, J., McMullen, H., and Grealy, J. (2005) *Dementia Care: A Practical Photographic Guide*. Oxford: Blackwell

Hall, E (1966) *The Hidden Dimension*. Garden City, N.Y.: Doubleday

InformeDesign (2009) Life-cycle stage a*rticles* http://www.informedesign.org/Rs.aspx?s=issues&tId=868 [Accessed 8 February 2012].

Kälviäinen, M. (2002) Product design for consumer taste. In *Pleasure with Products: Beyond Usability* (Green, W.& Jordan, P. eds.), London: Taylor & Francis.

Kälviäinen, M. (2006). Design guidelines for meaningful craft experience. *Human Perspectives on Sustainable Future. Research Reports of the Faculty of Education 99*. Joensuu: Joensuu University.

Kane, R.A., Kling, KC, Bershadsky, B, Kane, RL, Giles, K., Degenholtz, HB, Liu, J. and Cutler, LJ. (2003) Quality of life measures for nursing home residents. *Journal of Gerontology: Medical Sciences*, Vol. 58A, Issue. 3, 240-248.

Krippendorf, K (2006) *The Semantic Turn; A New Foundation for Design*. New York: Taylor & Francis

Kyttä M. (2003) *Children in outdoor contexts: Affordances and independent mobility in the assessment of environmental child friendliness*. Espoo, Helsinki University of Technology, Centre for Urban and Regional Studies.

Langer, E. (1983) *The Psychology of Control*. London: Sage.

Langer, E. (1990) *Mindfulness*. Reading, MA: Addison Wesley

Lum, T. Y. and Kane, R. A. (2008) Effects of Green House® Nursing Homes on Residents' Families. *Health Care Financing Review*, Vol. 30, Issue 2, 35-51

Miller, H., and Kälviäinen, M. (2006) Design for Well-being. Paper presented at the *Design & Emotion 2006 Conference* Chalmers University, Gothenburg, Sweden September 2006.

Norman, D. (1999) Affordances, Conventions and Design. *Interactions,* Vol. 6, Issue 3, 38-43.

Parker, C., Barnes, S., Mckee, K., Morgan, K., Torrington, J. and Tregenza, P. (2004) Quality of life and building design in residential and nursing homes for older people. *Ageing & Society,* Vol. 24, 941–962.

Rabig, J., Thomas, W., Kane, R. A., Cutler, L. J., McAlilly, S. (2006) Radical Redesign of Nursing Homes: Applying the Green House Concept in Tupelo, Mississippi. *The Gerontologist* Vol. 46, Issue. 4, 533–539

Rissanen S., Hiltunen M., Penttinen R., Repo R., Roivanen S-L., and Roivanen T. (2004) *Yksityisten hoivakotien laadun kriteeristö yrittäjien yhteistyönä.* In *Hoivayrittäjyys* (Rissanen S. & Sinkkonen S. eds.), PS-kustannus, Jyväskylä, pp. 185-189.

Rodin, J. and Langer, E. J.(1977) Long-term effects of a control-relevant intervention with the institutionalized aged. *Journal of Personality and Social Psychology*, Vol. 35, Issue 12, 897-902.

Schulz, R. (1976) Effects of Control and Predictability on the Physical and Psychological well-Being of the Institutionalised Aged *Journal of Personality & Social Psychology*, Vol. 33, Issue 5, 563-573

Secker, J., Hill, R., Villeneau, L., and Parkman, S. (2003) Promoting Independence: but Promoting What and How? *Aging & Society*, Vol. 23, 375-391

Seligman, M. (1975) *Helplessness*. San Francisco: Freeman

Seligman, M. (2003) *Authentic Happiness*. London: Nicholas Brealey Publishing.

van Hoof, J., Kort, H.S.M., Duijnstee, M.S.H., Rutten, P.G.S., and Hensen, J.L.M (2010) The Indoor Environment and the Integrated Design of Homes for Older People With Dementia. *Building and Environment*, Vol. 45, 1244-1261

Verbeek, H., van Rossum, E., Zwakhalen, S., Kempen, G., and Hamers, J. (2008) Small, Homelike Care Environments for Older People with Dementia: A Literature Review *International Psychogeriatrics*, Vol. 21, Issue 2, 252-264

Kälviäinen, M. (in press) Reflections on the Care Home Design Guidelines in Rissanen,S., Hujala,A., Vihma, S.(eds) *New Approaches for Well-Being,*

Design and Management in Elderly Care. Helsinki: Aalto University
Yang, H-Y., Start, S. (2010) The role of Environmental Features in Social Engagements Among Residents Living in Assisted Living Facilities. *Journal of Housing for the Elderly*, Vol. 24, Issue 1, 28-43
Zeisel, J. A. (2011) *I'm Still Here: A New Philosophy of Alzheimer's Care*. London: Piatkus
Zimmerman, S., Sloane, P., Williams, C., Reed, P., Preisser, J., Eckert, K., Boustani, M., and Dobbs, D. (2005a) Dementia Care and the Quality of Life in Assisted Living and Nursing homes. *The Gerontologist,* Vol. 45, 1331-146
Zimmerman, S., Williams, C., Reed, P., Boustani, M., Preisser, J., Heck, E., and Sloane, P. (2005b) Attitudes, Stress, and Satisfaction of Staff Who Care for Residents with Dementia. *The Gerontologist* Vol. 45, 96-105