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SOCIAL DESIGN AND INNOVATION TOOLS

Thesis

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Abstract

The thesis presents an overview of a theoretical and personal exploration of the rising design practice of social design, understood as design concentrating on the needs and well-being of a society. This involves a general theory and framework in the field of social design, such as the Maslow's hierarchy of needs, principles of social design, and the role of social design since the 20th century.

Moreover, the thesis interprets the meaning of innovation and different innovation tools and contextualizes them into social design leading to the most important user-centered methods such as the participatory design method. Some real world examples of social design are presented to show inspiring design practices and to give reference to the innovation methods and case study.

The purpose of the case study is to implement the knowledge gained into two different outcomes: intangible and tangible. For comparison, the focus of the case study was divided; where the intangible approach has more of a focus on the method and the tangible approach more on the concept outcome. The overall aim of the case study is to enhance social welfare challenges and needs provided by elderly population living in elderly homes in Finland.

The tangible outcome designed with the elderly through user-centered method of qualitative interviews is a game board concept. The intangible outcome designed through a participatory innovation workshop is a creative talent event for the elderly. Both approaches support the view that social design is needed  in connection to the social well-being of the elderly in Finland. With the case study and the background knowledge gained, the main objective is to strengthen the role for the designers to take responsibility in the society and the future.

| Language | Pages 73 |
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Title:
SOSIAALINEN MUOTOILU JA INNOVAATION TYÖKALUT

Abstrakti

Tässä opinnäytetyössä määritetään ja tutkitaan kasvavaa sosiaalista muotoilua, joka ymmärretään muotoiluna keskittyen yhteiskunnan tarpeisiin ja hyvinvointiin. Tähän liittyy yleinen teoria ja puitteet sosiaalisen muotoilun alalla, kuten Maslown tarpeiden hierarkia, sosiaalisen muotoilun periaatteet ja sosiaalisen muotoilun rooli 1920-luvulta lähtien.

Opinnäytetyö tulkitsee innovaatioiden merkitystä, erinlaisia innovaatio työkaluja, ja yhdistää nämä sosiaaliseen muotoiluun, joka johtaa tärkeisiin käyttäjäkeskeisiin menetelmiin kuten 'participatory' eli osallistuvaan muotoilun menetelmään. Esimerkkejä sosiaalisesta muotoilusta todellisessa maailmassa esitetään inspiroivina muotoilun menetelminä ja näillä viitataan myös innovaatio työkaluihin ja tapaustutkimuksiin.

Tapaustutkimus on toteutettu haalittu kahdella erilaisella tavalla; sekä aineellisella että aineettomalla. Lisäksi tapaustutkimus on jaettu kahteen osaan, jossa aineettoman lähtökohtana on keskittyä itse käytettyyn menetelmään ja aineellisen tutkimuksen lopputulokseen. Tutkimuksen tavoitteena on parantaa Suomessa vanhusten kodissa asuvien ikäihmisten sosiaalisen hyvinvoinnin haasteita ja tarpeita.

Aineellinen tulos toteutettu ikääntyvien ihmisten kanssa käyttäjäläheisellä menetelmällä eli kvantitatiivisilla haastatteluilla, josta on tuloksena käyttäjä-läheinen pelilauta. Aineettoman tuloksen suunnittelu tapahtui innovaatio työpajan kautta, jonka tuloksena on luova kykyjen tapahtuma ikäihmisille. Kummatkin menetelmät tukevat näkemystä siitä, että sosiaalinen muotoilu on tarpeellinen yhteys Suomessa ikäihmisten sosiaalisen suorituskyvyn edistämisessä. Tapaustutkimuksen ja taustatiedon tavoitteena oli vahvistaa muotoilijoiden roolia ottamalla enemmän vastuuta yhteiskunnassa ja tulevaisuudessa.

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# CONTENTS

# 1    INTRODUCTION

It's time for a social change. During the numerable decades from the start of industrial design until today, the ways of thinking, as well as the goals of work in design have changed uncountable times by responding to the culture, art movements, needs and new desires of the society. Design has undergone through numerable movements adjusting itself to eras such as Industrialization and Modernism. Since the Industrial Revolution, the dominant design practice has become to serve market purposes and alternatives have received little attention. In a consumer and capitalistic society we live in today, a designer needs to make a living, but with a different focus and methods a designer can obtain a certain socially responsible attitude towards design. (Margolin & Margolin 2002, 24.)

*"*Design is most often understood by the public as an artistic practice that produces dazzling lamps, furniture, and automobiles. This is how it is generally presented by the media and the museums.*"* (Margolin & Margolin 2002, 28.) Design should not be seen only in the light of an aesthetic and artistic practice but seen to the great lengths that it can impact society, for example millions of elderly people who are in need. As Tim Brown expresses in *TED talks* 2009; designers should aim to think big. In his talk, he express how design has got small and functions mostly in the society as a "tool for consumerism." He suggest designers to focus more on social systems for a bigger impact. (Brown 2009.)

This is the time for change, as a trend of peer to peer user activity in society is growing in the effect of rising social media that links to social design. It is time to get over the idea of being a consumer and get into the idea of being a participant. In the olden times, according to Tim Brown about 200 years ago, we used to participate far more into the society than today, e.g. in building houses or harvesting wheat. Currently communication technology is leading us back to the form of participation. An example is of how a service is far more valuable when participation is required than being passive. In simplistic terms the basic formula in the economy since the industrial revolution has been in finding a

resource, putting value on it and getting a cash flow. It is very linear and non-productive. However today, communication is disrupting the linear cash flow as it is spreading as a form of a network and is less measurable by cash. In the new economy one has to measure value through other means too, not just money. Now-a-days we see value in our network, in our relationships, how much we can trust people, and the measure of meaning. (Brown 2010.)

A good example of shifting values is a recent trend of time banking, where money is not the currency of value. The concept is based on a internet platform where one can help others in a society and gain time credit from this. With the time credit, one can then redeem to favors or activities that he/she needs help with in return. One time credit equals an hour of work, and all work is seen to be equal. It is based on an international *Community Exchange Systems* (CES) where the aim is to reinforce local communities and the concept that no one needs to be alone. (Suomen aikapankit 2013.) Also many products that one owns might have a need or use only a few times a year, for example power tools or yard tools. For products that have infrequent use, the logical want is availability rather than ownership. Sharing items like this with other users without affecting their availability would be an easy solution as all associated burdens to ownership like value depreciation and maintenance costs would be removed. The concept of switching from an owning model to a use model and contributing your skills and know-how to the society and getting the same in return, is very close to the ideology of social design as the bottom line in both is the well-being of the society. Through the economy change the fundamental ideas of design are changing. (Chick & Micklethwaite 2011, 121.)

The thesis will be answering questions such as what is this social design then, how does it relate to industrial design, how does user-centered innovation and design thinking integrate to it and what real life case examples of companies, non-profit organizations, charities or exhibitions are already existing. The case study section will take a look at the current rising sector of health and well-being and how social design can contribute to the needs of social performance of the elderly in a pubic space of an elderly home. In order to get more understanding and answers, two very different processes and outcomes of intangible and

tangible will be explored in the case study. The intangible outcome refers to an outcome that is not something concrete for example a service. In the case study the intangible outcome resulted in an elderly autumn talent event that the elderly designed mostly themselves in order to feel more involved in the elderly house and to increase social contacts with other citizens of the elderly house.

The tangible outcome refers to a concrete outcome, which was designed with user-centered interviews and resulted in a game board for the elderly with the same aim of more social interaction and involvement to increase social well-being. The game board is designed for flexible and easy use for the elderly with for example elderly with tremor problems. Through the case study, social design could be implemented as a tool for public sector services could serve as a channel for social sustainability.

# 2    THESIS FRAMEWORK

Research in the field of social design is essential as:

> Most of an iceberg is hidden below the surface of the water, which provides a good metaphor for the research process. Research strives both to expose unknown and unmet needs, and to develop new technologies that can meet those needs, through which we may uncover new market opportunities. (Morris, 2008.)

As Morris expresses, research is a way to explore and expand views on the existing and the undiscovered never knowing what opportunities might be faced. Raising awareness through research can be seen from a process in a thesis to a lifetime challenge. The underlying aim in the thesis is to go under the surface in order to explain and expand the understanding of social design in the field of design for example through sustainability and explore responsibilities that a designer should identify with.

## 2.1    The purpose and challenge

The challenge of the thesis is to delve into the theory of social design and innovation with reliable books, articles, electronic resources, media and lectures. Then implement the information gathered into practice with the case study. The thesis will go through the main aspects of social design and innovation tools and explore how the two are combined. After understanding the fields, different innovation methods and points of view will be tested with the two case study approaches, which concentrate in a segment of one rapidly emergent social field: the social challenges and needs provided by elderly population.

The environmental, economic and social aspect are all linked to each other and overlap with one another determining sustainable development (as seen form Figure 1) but as a whole are too vast to be included in detail in this thesis. Thus I will be focusing mainly on the social aspect of sustainability. The challenge itself is to put boundaries on the topic of social design as there are a lot of

perspectives from where the topic could be looked upon, for example the worlds resources, the society,  the designers, the revenue, or the manufacturers point of view. The thesis is mainly focused on the designers point of view in both the theory and the case study. By comparing theory based knowledge with the case study and the case study outcomes with each other, gives advisable clues on how the social factor in sustainable development works in given situations.
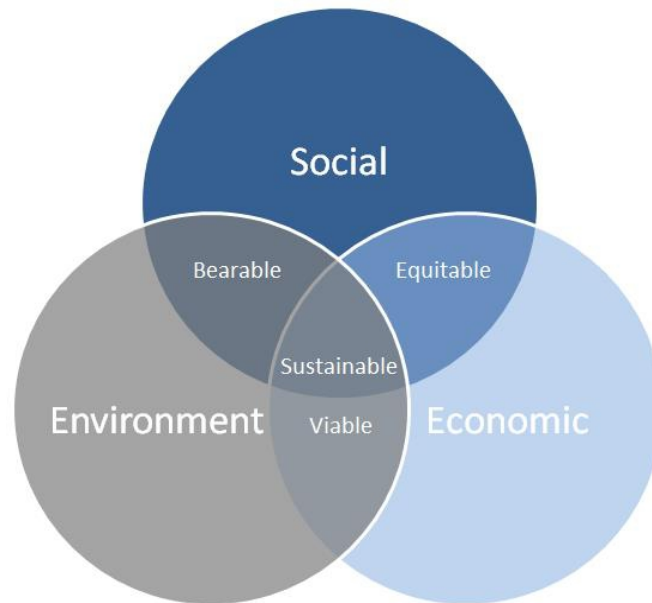


Figure 1. The overlapping circles of sustainable development (United Nations General Assembly 2005).

This thesis focuses on challenging the designers' mind set – how a designer should have an understanding on the purpose of designing, from market oriented design to creative social problem solving design. The mind set of a designer means the framework of the designers thoughts, which affects the perspective on how a designer looks at an issue. Through challenging the designers mind set the thesis hopes to raise awareness of the reader, where it is insignificant whether the reader has a close relation to design.

## 2.2    The relevance of social design in industrial design

The *Industrial Designers Society of America* (2010) states industrial design as:

> The professional service of creating and developing concepts and specifications that optimize the function,value and appearance of products and systems for the mutual benefit of both user and manufacturer. Industrial designers develop these concepts and specifications through collection, analysis and synthesis of data guided by the special requirements of the client or manufacturer. (IDSA 2010.)

As the IDSA expresses, industrial design concerns the optimization of products and systems to an communal benefit for both the user and the manufacturer, as both parties need to gain from the outcome of the design process. Also, the industrial designer develops the concepts of design through data collection that is guided by the special need of the client or manufacturer. The manufacturer in social design is often the public sector or a 3rd sector association, in these cases also the beneficial goals of these actors are an emphasis and they should be able to produce the good in an effective way. (IDSA 2010.)

Industrial design in relation to industry  is performed as an creative activity. Industrial design is taught in art and design schools, but furthermore it is strongly linked with changes in business, environment and industry. However, due to the recent changeover from increasing manufacturing industries to a knowledge economy has altered the traditional position of industrial design education to a new position. Choices of educational direction have affected how well education has been able to adjust to such changes. (Valtonen 2006, 3.)

One changing factor in the knowledge economy is how roles of designer and design researcher are becoming interdependent. The roles are merging to the point where they are blurred. Designers are more and more participating in the creation of the tools and in the expansion of the design language for users. With co-designing and user-centered methods, designers will observe first hand the experiences and the tools for creative expression by the users and other stakeholders. Designers are participating in teams where they are responsible for the analysis and interpretation of the primary data, which is usually user-

generated. (Sanders 2002.) (Design Council 2013.) The knowledge economy is only one factor amongst many factors affecting the need for social design, other examples are the increasing gap between wealth and poverty, rise in unemployment, the use of worlds resources and origin of materials. The thesis will not go in more detail into these factors, but these factors should not be forgotten.

In the late 20th century, social design was made tangible by the Austrian designer Victor Papanek, one of the first designers who raised up the ethical questions of designers responsibility in his book *Design for the Real World – Human Ecology and Social Change* as a call for a new social agenda for designers and to develop design for a social need. He highlighted on how designers should focus on real problems and not create new ones. (Walker 2006, 22.)

> Advertising design, in persuading people to buy things they don't need, with money they don't have, in order to impress others who don't care, is probably the phoniest field in existence today. Industrial design, by concocting the tawdry idiocies hawked by advertisers, comes a close second. (Papanek 1985, ix.)

Papanek wrote his revised edition of the book in 1985 and since then the understanding and expansion of the field in industrial design has evolved and expanded. Nowadays an industrial designer can have expertise in fields from innovation, interface to service design. Despite Papaneks opinion, an industrial designer can become part of a social design process as these two fields can be integrated with one another and ideally can be united for a sustainable future. (Margolin & Margolin 2002, 27-29.)

## 2.3 The process

The process model displayed in Figure 2 shows how this thesis chronologically advanced from a theoretical foundation, to the case study to a discussion. The connection of the two fields of social design and innovation tools is brought forward with the theory of social design and innovation.
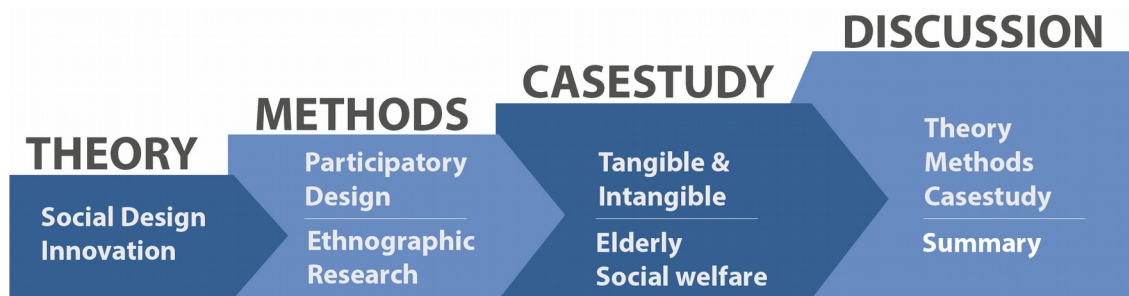


Figure 2. The process time line

The theory building block in the architecture of this thesis functions as the fundamental knowledge base for the progression of the thesis to explore the further steps of innovation methods of participatory design and ethnographic research, then with the knowledge gained conduct the case study from two different approaches, and at last summarize the whole process with looking ahead in the discussion.

The base of knowledge had to be build through various information sources in order to understand the whole scheme of social design, the overlapping of social design and innovation tools, the current society and real examples from the design world. By exploring the most important innovation tools of user-centered methods used in a social design process, the participatory design method was put into use in the intangible approach of the case study. For comparison, the focus of the case study was divided; where the intangible approach has more of a focus on the method and the tangible approach more on the concept outcome.

The case study presented in this thesis has a focus on a specific segment of social design, the social welfare of elderly population. The understanding of

disabilities and performance of the elderly in forms of physical, social and psychological factors are vital for the design process of the concepts or outcomes. The case studies can be further used as a basis for inspiration, ideation, and development for companies and designers interested in the field of social design and elderly welfare. The case studies have potential to be implemented and improved for the future if any company raises interest in the user-centered integration talent event and game board outcome. The case study also supports the view that social design is needed in the elderly social performance in Finland.

The intangible outcome of the talent integration event concept designed through a participatory innovation workshop is designed to give elderly a chance to get involved in the planning process of an event, feel more integrated to the elderly house, show creative strengths, and enhance social well-being in a common area of the elderly home.

The tangible game board concept designed with the elderly through user-centered method of qualitative interviews, is aimed to function as a social gathering point, assistive device for motor-performance difficulties such as tremor in hands, and enhance social well-being in a common area of the elderly home. The financing of the game board implementation in the case study approach led this thesis to become from a practice based thesis to a theory based thesis as the co-operation that was started with the development center ISAK, Center for Innovations for Independent Living, did not result in a company funded thesis. However, the co-operation done with the development center gave good preliminary sources, inspiration and support for the case study.

# 3    SOCIAL DESIGN

## 3.1    What is social design?

To begin to articulate social design, one must begin with understanding the term design. Design today can be seen as a concept, a plan, a proposal, or an outcome. Design does not necessarily have to be a physical form. Design outcomes can be categorized from very concrete outcomes to more intangible ones. In intangible cases design outcomes can be messages, opinions, festivities, communication systems, processes, methodologies, markets, public services, laws, systems, contexts, identities, environments and futures. A good example is the growing sector of service design, which is characterized by the creation of services, rather than products. The form of social design in designing sustainable lifestyle solutions usually varies from a product, a system design to a service interface. (Chick & Micklethwaite, 2011, 23.)

Social design can be identified in a wide variety of terms such as social responsible design, socially conscious design, design for development, transformation design, sustainable social design, good design, social innovation and design altruism. Aside from what term is used, the overall aim is to refocus design thinking from a traditional designer client economical relationship towards exploring opportunities on the development of sustainable lifestyle solutions. In other words, designers should enhance the sustainable well being of the society by starting from the people who are in need of help or who need problems to be solved. Some designers view that social design should be mainly focused on the needs of the socially vulnerable population. This includes implementing solutions that create better living for frail or underprivileged populations such as in the third world countries,the homeless, the elderly, the mentally and physically ill. (Margolin & Margolin 2002, 24- 25.) However, in this thesis we will define social design in more general terms of design concentrating on the needs and well being of a society.

An online contest was made by a team of *GOOD magazine* and *Design 21* to see how people define their ideas of social design. Some of them were very well

written and thus the highlights of the ideas have been picked out.

> Social design gives means to a community and interaction, it is design with society in mind.// It promotes community rather than further detachment from the world around us.// It is progressive, proactive, forward thinking, and has the power to make a change.// Social design promotes to have the option to elect social change rather than tradition.// It can be seen as taking classic design ideas and problem solving and applying them to more than aesthetic ideals.// It is design that will shape how we live our lives more directly than a cleverly designed end table. (Design 21 & GOOD Design 2007.)

Herbert Simon (1996), a pioneer in the field of design, gave a definition of design that has since become famous:

> Everyone designs who devises courses of action aimed at changing existing situations into preferred ones. The intellectual activity that produces material artifacts is no different fundamentally from the one that prescribes remedies for a sick patient or the one that devises a new sales plan for a company or a social welfare policy for a state.
> (Simon 1996, 111 – 128.)

In the case of  social design, both the "existing" and the "preferred" situations are social constructs.  Aside the social context, the co-design aspect comes evidently forward in the quote and should be seen as an inevitable part of social design. The social and ethical responsibility that designers are advised to participate in is indifferent from daily intellectual activities. Designers have the responsibility to make right moral design decisions in their work, which result and are accountable in a society.

"Design has become the most powerful tool with which man shapes his tools and environments and, by extension, society and himself." (Papanek 1985, ix.) As Victor Papanek expresses, designers should be aware of the power design has by extension in small and large contexts. Social design is from small changes in things like daily routines to life changing projects bringing about personal and societal transformation. In other terms it is for the greater good, a change for something better, and anything with the good of people in mind. One possible way that one can implement social design, in the same line as

Papanek believed that every designer should give '*kymmennykset*' that means ten percent of our ideas and talents to the needs of mankind. One of Finland's most famous jewelry artists Björn Weckstörm got moved by this ideology in the 1970's and left his international practice for one year to go and design survival shelters in Africa. (Papanek 1985, 68-69.)

Ezio Manzini (2007) said designs fundamental meaning *{raison d´être}* is to help make world a better place. In general terms, design functions on the quality and acceptance of products, systems and services. Design is usually close to consumer's everyday life and thus the designer is in a key position to create welfare and opportunities for a sustainable future and lifestyle. The consumer needs "to learn how to live better while we decrease our ecological footprint and enhance our social network." (Manzini 2007, 78.)

Throughout the 20th century social design has been put forward and discussed, but still today in most parts of the world capitalism is the main employer of artists and designers. A 'first thing first' manifesto by Ken Garland was first published in the 1964 and signed by a group of 22 graphic designers during the high point of the advertising industry (Figure 3). The manifesto was a counter movement to the advertising markets that "contribute nothing or little to our national prosperity." (Garland 1964, 32.)

The manifesto goes hand in hand with the humane ideology of social design in stating how design should serve the real human needs, not detergent bottles and cat food. A similar revised manifesto was republished in 2000 with 33 signatures from influential international graphic designers "reinstating the manifesto in the expectation that no more decades will pass before it is taken care of." (Poynor 1999, 2.)
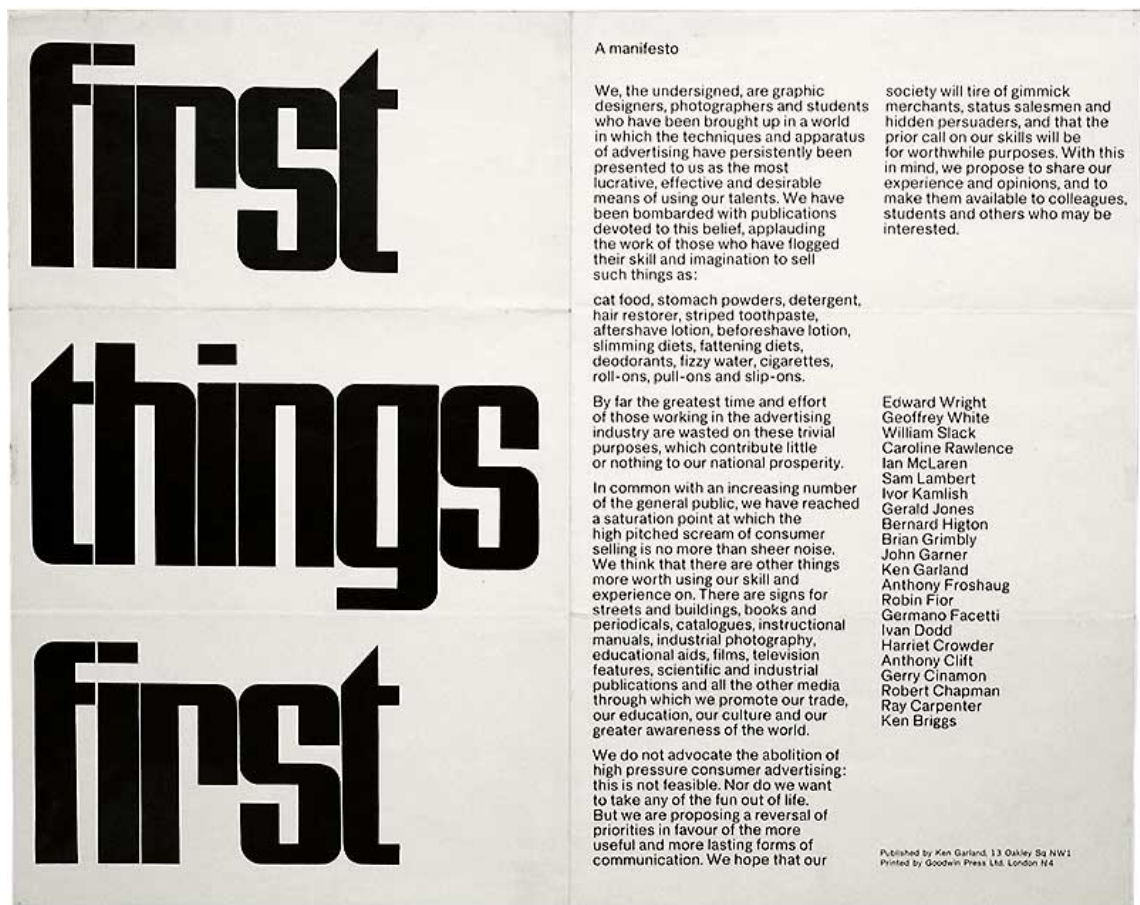
Figure 3. First things first-manifesto (Garland 1964, 32.)

Design is progressively viewed as a key element on the contemporary need for greater ecological and societal sustainability. The question is what is the responsibility of a designer concerning these issues today? Clearly, the ethics and responsibility of a designer should go hand in hand with all the ethical guidelines of any human being which can be found from the United Nations declaration of human rights (United Nations 2013). Special effort should be put in the designers responsibility and understanding of the huge influence design has and can have on people, communities and societies.

## 3.2 Guidelines of Social design

The design philosophy behind design methods and outcomes is a very important aspect of being a designer. It is good to reflect on each stage of a design process; what is the starting point or the aim of the design, the process and what will be the outcome of the design? How does the design outcome influence on the identity, community, environment and existence of consumers? Abraham Maslow's hierarchy of needs (Figure 4) has a link to the fundamental purpose of social design; to design for needs, not wants. The hierarchy of needs is a model, and thus not absolutely accurate as a guide to human action. However, it helps understand the needs of people and what needs are more fundamental than others.

As you can see in Figure 4, physical needs represent the lower-order needs whilst socio-psychological needs represents the higher order needs. The pyramid diagram starts from the bottom and proceeds upwards; where a particular need only arises when a need below has been satisfied. The hierarchy of needs starts from the physiological needs; hunger, thirst, hygiene, and proceeds to the stage of basic safety, where one has to feel safe in their environment. The third stage is love and belonging which includes the feeling of being part of a community and having an active social network around. The fourth stage is self esteem that goes hand in hand with identity; esteem, self-esteem, self-respect and esteem for others. The highest point one can reach, is the self-actualization stage which, according to Maslow, can only be reached when all the other needs of the lower stages are satisfied. This stage is where one can make the fullest use of one's potential and personal development. (Rakowski 2008, 4-6.)

According to Papanek, designers sometimes tend to have a mind set to design for the markets or the few privileged, where design is targeted on wants instead of needs, as Papanek puts it "much recent design has satisfied only evanescent wants and desires, while the genuine needs of man have often been neglected by the designer." (Papanek 1984, 15.) Social design does not focus on misguided wants and desires but on  stages of needs, depending on the case that one is working with. When social design is targeted towards third world countries or

the homeless, the bottom stages are more in focus and when the target is more on first world social problems, the focus is more on the higher stages of needs. For the case study, the thesis will be exploring and implementing social design methods on the elderly of a first world country, so the focus will be on the higher order needs of love, belonging and self-esteem stages that can also be seen as the community and self esteem stage (Figure 4).
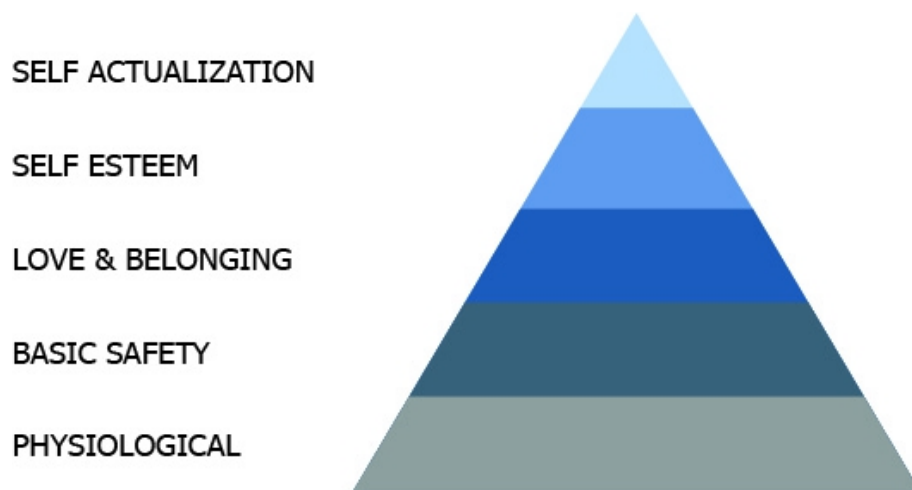


Figure 4: Maslow's hierarchy of needs (Source: Maslow 1943.)

As social design often concentrates on diverse segments of the marginalized population, it can be a challenge to find a common guideline for all the segments of the population. For example the needs and limitations of the poor, the handicapped, and the severely impaired elderly are very different. The approach of universal design, in which design is focused on designing for the whole population with emphasis on the vulnerable population, goes hand in hand with the overall principles of social design. The following table (Table 5) gives the general principles of social design. The principles are to determine optimal performance characteristics and use features that make products and environments usable by the greatest diversity of people. (Story, Mueller & Mace 1998, 35.)

| Title of Principles | Description of principles |
|---|---|
| **Equitable Use** | The design is useful and marketable to people with diverse abilities. |
| **Flexibility in Use** | The design accommodates a wide range of individual preferences and abilities. |
| **Simple and Intuitive Use** | Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. |
| **Perceptible Information** | The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. |
| **Tolerance for Error** | The design minimizes hazards and the adverse consequences of accidental or unintended actions. |
| **Low Physical Effort** | The design can be used efficiently and comfortably and with a minimum of fatigue. |
| **Size and Space for Approach and Use** | Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility. |

Table 5: Principles of Social design (Source: Story et al. 1998, 35-36.)

The principles of social design (as seen in Table 5) should concentrate on the equitable use to provide for all users the same standard of use in terms of identical use or at least equivalent. The idea is to avoid stigmatization of any users and making provisions for privacy, security, and safety equally available with appealing design. The key is flexibility for a wide range of preferences and abilities, providing the choice in methods of use. For example accommodating right- or left-handed access and use, facilitating accuracy and precision and providing adaptability to the user's pace. Simple and intuitive use of help in the facilitation, which can be done by eliminating unnecessary complexity and usually by arranging information consistently with its importance. It is also important to provide effective assistance and feedback during and after task completion, for example by providing adequate space for the use of assistive devices or personal assistance and assistance with a variety of techniques or devices especially for people with sensory limitations. Also it is important to

allow the user to maintain a neutral body position and use reasonable operating forces with low physical effort, which will be considered in the tangible outcome of the case study. As well as providing a clear line of sight to important elements and make reach to all components comfortable for any seated or standing user. (Source: Story et al. 1998, 35-84.)

All the seven principles can be applied to design being a product, an interface or a service. The principles are in general terms and a mere guide to designing responsibly in a social context, but have adequate guideline for the safety and comfort of the vulnerable population at hand. (Story et al. 1998. 35-36.) These guidelines follow the basic usability issues, the feel qualities, attitudes and values: the acceptability issue is not discussed. This has been a bigger question in the discussion of social design after the millennium.

# 4 INNOVATION TOOLS AND METHODS

## 4.1 Defining innovation

Innovation has become a polysemous word in our society and thus it is good to define the basic meaning of the word. The term innovation is widely used in the business and product development sector. In this context, innovation is seen as the reason for creating business value, in the forms of products, services, reduction of costs, and increase of sales. The real challenge with innovation is not only the creation of business value, new ideas and dimensions, but how to make those ideas work technically and commercially. (Morris 2008, 2.)

Innovation is seen to link with economical gain, but it does not mean that it always is. Innovation is also about discovery, making connections, and generating new applicable alternatives to a problem at hand (Walton 2004, 15). As innovation is about asking where there might be an opportunity to add value, it is also about questioning and challenging why and how things are done (Stamm 2004, 15). If one can use their knowledge, experience and ideas gained and combine these insights with people from different fields, the end the result of innovation can be very fruitful. That is the reason why many innovation workshops invite participants from different areas for contribution of different ways of thinking.

Design thinking, a term that one must link to innovation, was initially brought forward in the design community by the CEO of IDEO, Tim Brown. Design thinking concentrates on capacities that we all have but usually we over see because of more conventional problem solving practices. It is about ability to be intuitive to see patterns, to come up with ideas that have emotional a functional aspects, and to express oneself in other ways than  only with words and symbols. It is a system of overlapping spaces rather than a systematic trail of steps. In figure 6, one can see the innovation and design thinking process used in workshops that usually follow these spaces as a guideline. There are three spaces: inspiration, ideation and implementation that do not always follow systematically but can circle back to any stage if a team refines their ideas and

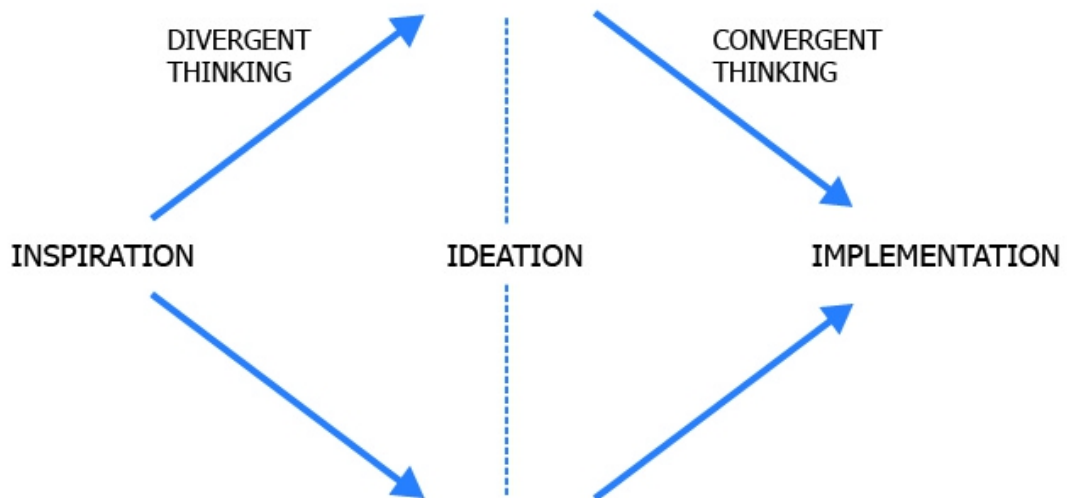explores new directions. (Brown & Wyatt 2010, 32.)

Figure 6. Innovation and design thinking process (Brown & Wyatt 2010, 32.)

The classic starting point of the inspiration space is the brief that gives a structure from where to begin, reference points where progress can be measured and objectives to be realized, example price point and market segment. The understanding that the overview and aim of the innovation project is grasped by all the participants. The space should not be confused with a set of instructions or attempt to answer questions before hand. A well constructed brief allows unpredictability, pleasant surprises, and a creative area for breakthrough ideas. The risks are if the brief is too abstract where the team might end up wandering, or if the brief is being too precise and narrow constraints will make the team ideas mediocre. Once the brief has been constructed the discovery of people's needs starts. One must be careful with true needs and wants of people. Although it is usually discussed and told by people through various methods, actual behavior can provide valuable clues of needs which is mostly done by ethnographic research. In chapter 4.3.2 ethnographic research will be discussed in more detail. (Brown & Wyatt 2010, 33.)

The second space is the ideation phase, which takes place after spending time at the field and doing observations and research. In this phase, the process of

synthesis takes place in which the group extracts the input from the research into meaning and insights that lead to solutions or opportunities of change. (Brown & Wyatt 2010, 34.)

During the first two spaces of inspiration and ideation, divergent thinking takes place, where a spread of all possible ideas are brought forward with tools like brainstorming and word associations. It is important in divergent thinking to have a group of different people involved in the process and to give as much input as possible. Ideas usually range from absurd to the obvious. This leads the group to a process of grouping and sorting the ideas through conceptualization. Good ideas usually rise and bad ideas drop off with the convergent thinking process, which takes place after divergent thinking phase. Convergent thinking brings the practical aspects to the table and filters the ideas with different quality criteria, for example the applicability and financing of the idea. (Brown & Wyatt 2010, 34.)

The third space is the implementation. This is where the ideation is turned into an action plan. The core process of implementation is about prototyping, and making ideas into actual tangible and intangible outcomes. The actual outcomes are then tested, repeated and refined. Design thinking in this space seeks to eliminate unforeseen challenges and unintended consequences in order to have a reliable and long-term success. Facilitation throughout the innovation process is essential as it helps to build up the goals, content and social environment for the innovation work. (Kälviäinen & Räty 2011, 5-7.) A good example of where design thinking has been applied is a toolkit launched by IDEO with the funding of Bill and Melinda Gates to codify design thinking with the initial plan that non-governmental organizations could use the toolkit on a grass-root level to interact with local farmers in the developing world. This will be discussed in more detail in Chapter 4.4. (Brown & Wyatt 2010, 35.)

According to Kälviäinen and Räty, the approaches of many scientists, researchers, and engineers as well as businessmen are typically systematic and focused on certain view of innovation. Designers and users on the other hand, commonly use divergent thinking in spreading of ideas and visualizations

that benefit all sides. (Kälviäinen & Räty 2011, 3-5.) Visual work with what designers combine into innovation workshops can be used as tools for the unconscious act of creativity, social discussion, mutual understanding and communication between the participants in the innovation process, which can help and "support in sharing values, feelings, experiences, ideas, mental images and maps". (Kälviäinen & Räty 2011, 5-7.)

## 4.2   Social design as an innovative process

Social design is not just about problem solving, it can also be about problem finding. As mentioned before, a design outcome after an innovative process may not always be a physical and tangible product. It may be a service or a new way of doing things or just a better integration of a product to serve the needs of consumers. As innovation can alternatively be determined outside of commercial gain or financial terms, one can use innovation as a tool for the benefit of social gain. There is an increasing recognition that design should not only be for the few acting on behalf of a society, but a role for all to be used as a tool to shape and reshape our world. Design can be a powerful tool to transform our society and the way people live in now and the future.  A shift is taking place from passive consumption to a more active participation where people are being involved in creation of their own outcomes. New roles for designers are continually coming to existence as a designer becomes less a generator of ideas and more a facilitator of the generated ideas. (Chick & Micklethwaite 2011, 32-33.)

An overview of the overlapping and relation between innovation and social design is essential to grasp with a diagram (Figure 7). There is new value creation where companies do not only focus on the monetary values but also on sustainability and social aspects. The division between commercial approach and human-centered approach are sometimes merging resulting in using design thinking and user-centered methods and can be seen in the real world cases (see Chapter 4.4).
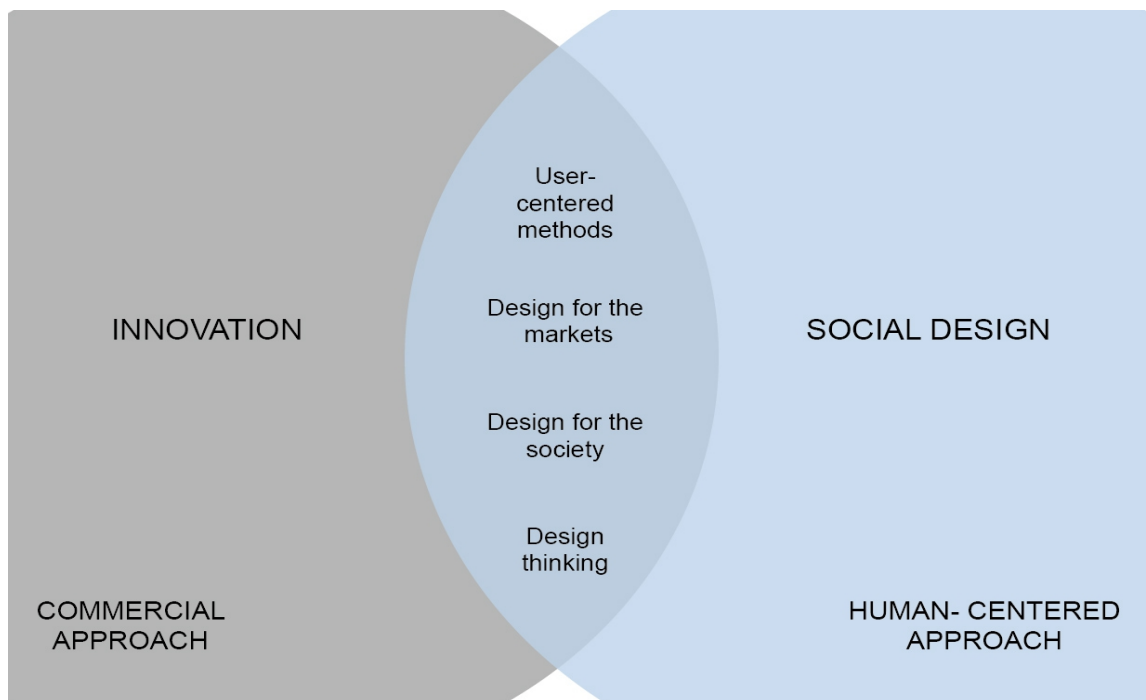
Figure 7. Overview of the overlapping factors in social design and innovation

The approach of social design is no longer all about designing *for* the people but designing *with* the people  An emphasis on the professionalism can under value the contribution of non-professionals. This a key in social design as the best participants can be found from the surrounding where the design is targeted. People who are experts of their own needs, capabilities and restrictions are able to give ideal primary source information. The primary sources of information are used for identifying problems, ideation, creation and development of the final designs. (Chick & Mickelthwaite 2011, 33.) The process of participatory design is a key tool for extensively involving users and making users part of the design process and getting realistic and applicable results, this will be discussed further in Chapter 5.

"People need not only to obtain things, they need above all the freedom to make things among which they can live, to give shape to them according to their own tastes, and to put them to use in caring for and about others." (Fuad-Luke 2009, 37.) The quote focuses on the importance of freedom of choice in design and how these choices will shape up to target the welfare of others. The

participation to a design process where impact on the environment and society is visible, attracts people to participate. For many people, having the possibility to take part and have a sense of control of the societal and environmental impact gives a sense of security and ambition. In these terms, the participation of the public into socially responsible projects will be substantial and successful. (Fuad-Luke 2009, 37.)

Co-design is rising not only amongst everyday people and designers, but also amongst designers and other field of experts such as architectures, engineers, environmentalists, and economists. An individual designer cannot have the knowledge in all areas of a social design project and so there must be collaboration in interdisciplinary teams. Interdisciplinary social intervention is a key ingredient in social design. (Sanders & Simons 2009, 5.) In these terms, designers will find colleagues in profession areas related to fields such as health, education, social work, aging, and crime prevention. (Papanek 1971, 5.)

## 4.3    Suitable Social design models

The social design model can have various forms depending and modifying on the specific segment of the target group and the parties involved in the process. However, most of the processes can be applied to every target group with only a few adjustments, the main being participatory and ethnographic design processes.

### 4.3.1 Participatory design process

In participatory design, also known as co-operative design, participants are invited to co-operate with designers, researchers, and/or developers in an innovation process. The belief is that all people have something to offer to the design process by articulating well and being creative when appropriate tools are given for expression. Participatory design goes hand-in-hand with co-design and human-centered design. (Chick & Micklethwaite 2011, 48-49.)
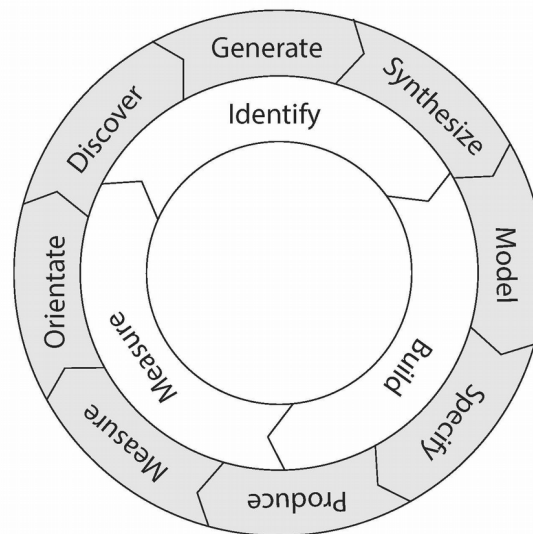
Figure 8. Participatory design process (Chick & Micklethwaite 2011, 48-49.)

Figure 8 displays the participatory co-creation process, made by a leading service and innovation company called *Engines* in London, which is built around the three core stages of Identify, Build and Measure. The participatory design process attempts to actively involve all stakeholders (e.g. employees, partners, customers, citizens, and end users) in the design process for usable and relevant results. (Chick & Micklethwaite 2011, 48-49.)

The *Identification* phase is to identify the problem by getting to know the organization that co-operation is started with. The discovering and investigating of how everything is currently working is crucial from a user centered point of view and from the ones who are providing the service. Workshops allow the project team to begin sharing and generating views about the context of the project and synthesizing ideas. The *Build* phase is the second step, where visual and conceptual drafts are made as a response to the challenge that has been identified. Workshops in this phase allow clients and their customers to design their own rough services and plans. Prototyping is a helpful tool to reduce the risk at this phase by following through to test the generated ideas. The *Measuring* phase is about evaluating and refining the propositions of the phase before. The clients and/or the customers agree on the most needed

proposition. To measure the efficiency, effectiveness, desirability, usefulness and usability, it is crucial to get feedback for improvements. This is the final phase and therefore connects back to the beginning of identifying the problem. (Chick & Micklethwaite 2011, 49.)

Not only does the designer, developer and/or researcher benefit from the process, but usually the participants are eager as well to contribute their expertise, time, and opinions to the innovation process. *Make tools* is a company founded by Liz Sanders that:

> Explores new spaces in the emerging design landscapes. *Make tools* takes part in co-designing, generative design thinking, human-centered design, participatory design tools, methods and mindsets. In consulting services, *Make tools* facilitates hands-on learning experiences for interdisciplinary teams in project work, teams that are facing challenges for the future, or advice on the theory and practice of co-creating and human-centered design. In education *Make tools* can organize presentations, seminars, workshops or hands-on learning experiences. (Sanders 2010.)

*Make tools* can also be described as a "design language" that is not aimed at designers, but mainly at users. The tools of use are built upon an aesthetics of experience rather than on aesthetics of form. According to *Make tools* "all people are creative and can participate in co-designing if they are provided with relevant tools and the settings for their use." (Sanders 2010.) The idea of collective thinking and acting is embraced by *Make tools*. The idea is to put creativity and communication in the hands of people who will be served through design. The *Make tools* provides a good tool kit for innovation practices in a participatory design process. (Sanders 2010.)

### 4.3.2 Design ethnographic research

In an article by Victor and Sylvia Margolin displayed in *Design Issues: Massachusetts Institute of Technology* (2002) an applicable design model is based on a model of generalist ethnographic practice used by social workers. The model includes six problem solving steps; engagement, assessment, planning, implementation, evaluation and termination.

The first engagement phase is to get a sense of the presenting problem. This is usually done by simply listening to the client system. With the information gained, the assessment phase is to have a holistic look at the clients system interactions with varying environmental domains. The aim of the assessment phase is to dig deeper to the root of the problem and not only concentrate on the face values. The outcome is usually a list of different needs that need to be addressed. The third phase, planning, is a collaboration with the client system to prioritize the most pressing needs. Then the method of brainstorming is used to suggest different solutions. Various ideas are discussed and collaborative decisions are made on what will work the best. Then, a list of goals and objectives are done and decisions are made of who will do what and by when. In the second last phases, the implementation takes place with the evaluation for further improvements. The last step of termination is for fixing any mistakes seen in the evaluation phase and to finalize the outcome. (Margolin & Margolin 2002, 26-27.)

As an example, ethnographic research was used in a *Life 2.0* project as one of the processes, where the focus was in offering services for elderly based on mutual help, e-participation and peer help, in providing a user-friendly tool that will show different ways of generating social interaction between elderly, and addressing a common gap between a service design idea and execution, user's perceptions and expectations. The project used user driven research, development and piloting across Europe. (Morelli & Kälviäinen 2013, 38-49.) The ethnographic research was said to provide in-depth and multi-layered insight in the investigated area of: "elderly users' everyday interactions and challenges, motivation to help each other, age-related changes in functional abilities, and experiences with information and communication technologies." (Morelli & Kälviäinen 2013, 42.)

The elderly people were viewed as a resource, not a problem and seen to have the best possible knowledge about their own everyday life, problems, solutions, expectations and hopes. The ethnographic research resulted in showing that the older participants felt the need for activities where socialization is essential and

that the design team or contact personnel should act as a life-coach to help users overcome natural barriers in early phases of the service usage. The need for essential socialization will also serve as the basis of the case study in this thesis. (Morelli & Kälviäinen 2013, 41- 48.)

## 4.4 Real world cases

The *Young Foundation* views social design as "innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations that have primary social purposes." (Young foundation 2013.) According to the *Young Foundation* designers have the tools to translate this ideal into practical, realistic and people oriented solutions. If design is to drive social design in this direction, one would think the clients are increasingly likely going to be government agencies, non-governmental organizations (NGO's) and community organizations. (Young foundation 2013.)

*IDEO*, a global innovation and design company, has the capacities to take on social innovation tasks to help sectors such as the third world countries. A free toolkit of human centered design is aimed at finding solutions in the developing countries funded by *International Development Enterprise (IDE)* as part of the *Bill & Melinda Gates Foundation*, is provided without a cost in the internet pages of IDEO (available at: [http://www.ideo.com/work/human-centered-design-toolkit/](http://www.ideo.com/work/human-centered-design-toolkit/)). The toolkit was designed for the ability to use a design thinking process in impoverished communities in Africa, Asia, and Latin America, esspecially for guiding non governmental organizations and social enterprises. The tool kit explains the human-centered design process with simple steps and supports the improvement of listening skills, workshops, and implementing ideas. Companies such as Acumen Fund, AyurVAID, Heifer International, Micro Drip, and Vision Spring  have been using this kit with successful outcomes that have enhanced a great number of people, for example with CleanWell natural antibacterial products, and the Blood Donor System for the Red Cross. (IDEO 2009.)

Aside from the toolkit, *IDEO* has an employed Social Innovation group leader Jocelyn Wyatt, who works to build design thinking and innovative input that meets the local customer needs. Jocelyn is one good example of many designers that are working in different companies or in the public sector in the field of social design:

> Jocelyn's work focuses on identifying non-profit and social enterprises with whom to partner and designing innovative solutions related to water and sanitation, agriculture, energy, health, financial services, and early childhood education. Jocelyn specializes in building social enterprises and advising businesses in the developing world, where she uses the market to effect social change. (IDEO 2013.)

Another design company is the *UK Design Council* that is well known for taking part in social innovation and design. *Designs of the Time* (Dott) is an initiative developed by the *UK Design Council* and its partners that was first carried out in 2007 as a year long program of community projects, events and exhibitions in specific regions in the UK. The projects explored what life is could be like in a sustainable region and how design could help the outcome to get there in terms of the impact of design on economy, people, and the environment. The method of participatory design was used by blending social innovation, design thinking with insights and knowledge of local people to address social and environmental problems. (UK Design Council 2013.)

The process included five stages of diagnose, co-discovery, co-design, co-delivery and legacy, in which the end-user is the focal point from the start. In most cases the client contributes goals and available resources and the designer brings creative expertise; with this combined, the insight of the end-user leads to the creation of sustainable answers that become embedded in the community. An example of the Dott 07 was a project called Alzheimer 100, where the improving of daily life of people with dementia took place. The project kept on going and evolving through Dementia organizations after the Dott project ended. A second year long Dott project initiative took place in 2010. (UK Design Council 2013.)

According to the Conventions on Rights of People with Disabilities by United Nations in 2007, eighty percent of people with disabilities live in developing countries. Only a minority of those in need of a wheelchair have access to one, let alone to an appropriate one. In 2008, there was an estimated 20 million people globally who need a wheel chair but cannot afford to own one. These people are most disadvantaged in a society and live in a vicious cycle of poverty and disability. (United Nations 2007.)

In response, a design led charity called *Motivation* has established a non-profit programme called *World made Wheelchair Service*, which supplies and distributes appropriate wheelchairs and other products of mobility across the developing world with a network of service partners. The aim of the charity is to improve the quality of life of people with limited mobility in low income countries, including Eastern Europe. The range of wheelchairs are designed and supplied in the UK, but manufactured and made locally with available materials and construction technology, best to fit the needs of the user. (Chick & Micklethwaite 2011, 156-157.)

The co-founder of *Motivation* is an industrial designer, David Constantine, who is a wheelchair user himself since 21 years of age due to a spinal injury. Constantine is very aware of challenges faced by being in a wheelchair; a wheelchair gives mobility and allows better and more active participation in a community. "We have moved on from being technically focused, to look at the whole quality of life for people with mobility disabilities. It's about far more than just supplying a piece of equipment." (Chick & Micklethwaite 2011, 156-157.)

*Design for the Other 90%* is a touring exhibition that showcases designs that address essential needs of the 90% of the world's 6.5 billion people, who have little or no access to products or services. The exhibition is created by architects, designers and design teams around the world with the aim of providing for the basic human needs such as shelter, health and transport. Aesthetics are second placed when qualifications for good design is considered; function, user-centered approach and affordability are central. The exhibition

designs often contain simple technology with the aim of aiding human survival from a personal water purifier to shelters for homeless. A good example of the designs is the *Life Straw* that functions as a personal and mobile water purifier. Water borne diseases cause more than 2 million deaths annually and thus the *Life Straw* is an essential tool for turning water bases into safe drinking water. (Smith 2011.) (Chick & Micklethwaite 2011, 154-155.)

# 5    CASE STUDY

## 5.1    Elderly and design

Elderly people and design is a growing and significant matter in design practices today. Specialized attention to elderly design in the field of education can be found for example from the neighboring country of Sweden at *Lund University* (Department of Design Sciences, Lund Institute of Technology, Lund University, 2012). The aim of one program of theirs is the focus on the elderly people and their different experiences and perspectives as technology users and improve it for the benefit of aging citizens and society. Another program for the elderly design department can be found not far away, from *MittUniversitetet* in Strömsund in Sweden, which offers an International Masters program in Design for all including elderly design (Mid Sweden University 2012).

Many countries in Europe have increasing growth of the elderly population, who are viewed as a resource. This growing number of elderly and people with disabilities constitute an interesting potential market for many companies as well as design research. (Morelli & Kälviäinen 2012.) In the case study of this thesis, the focus group will be on the elderly population in Finland. There are more than a million over 65-year-old people in Finland. In the world about 7% of the whole population is over 65 years of age, so about 483 million people around the world. The definition of being 'old' has been shifted due to an increase life expectancy from the age of 65, it is seen now to start from the age of 72. (Voi Hyvin 2013.)

More detail can be found by looking at an age pyramid of Finland that was conducted in the end of 2011. In the pyramid below (Figure 9), the largest population density can be found from around the age group of 48-65 years and in the near future the pyramid will shift upwards and the high population age group will be of elderly. In this case, looking towards the future, it is wise to start to realize the future demand.
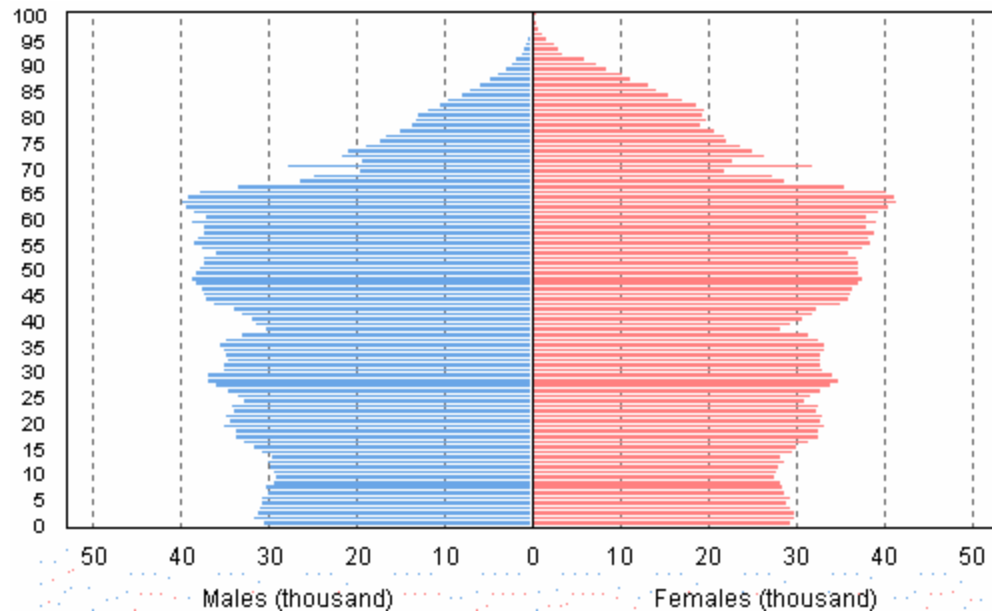
Figure 9: Finland's population structure (Source: Statistics Finland 2013.)

## 5.2 Disabilities and performance

When a designer takes on a task of designing for the elderly, one must realize all the aspects that need to be taken into consideration. The elderly have many cautious factors that cannot be ignored. One of the most difficult and almost inevitable factors for aging is performance deterioration and accumulation of diseases. In average most people are healthy up to the age of 40-50, but only a few 80 year olds are able to survive without any pathological discovery from a medical examination and normally many diseases are found at the same time. (Heikkinen, Kauppanen & Laukkanen 2003, 28.) However, one must remember many retired people can also be in good shape and capable of independent living and own a lot of or reasonable amount of assets (such as money or housing) There is a challenge in changing demographics towards more elderly but it is not specifically or only the elderly issue. (Morelli & Kälviäinen 2012.)

Focusing on the design of elderly a designer must look at three different elderly performance branches and see the factors that affect it. Firstly, physical performance of elderly needs to be looked at, which includes sense functionality, motor skill, balance and physical strength. Factors that affect physical performance can be seen in different diseases, muscle strength

weakening, joint movement decrease and problems with balance. The second branch is social performance of elderly, which includes social interactions in different situations. Factors affecting interaction are social skills and function, social relationships, social network, role in the family, societal belonging, and contact with the environment. The third branch is psyche/psychological performance, which includes problem solving skills. The performance can be effected by the capability to perform mentally challenging problems, self perception, mood, way of dealing with life changes, attitude towards life, self appreciation, capability to perform daily routines, reliance and religious belief. (Kan & Pohjola 2012, 37-40.) All three branches are crucial for daily performance and will be looked at in more detail in the following.

Reflecting on some problems that elderly might have, can help to get a grasp and understanding of some of the restrictions and caution factors in designing for the elderly. Looking at physical performance in more depth through common diseases in elderly, includes body functions like achieving, maintaining and changing posture, maintaining equilibrium, physical exertion and breathing. Parkinson's disease is a degenerative disorder in the nervous system. The main symptoms are muscle rigidity, slow movements, tremor, and difficulty with walking. The tremor is one of the biggest disadvantages in Parkinson's Disease, which starts usually from the fingers and wrist in one hand and spreads to the shoulders. In the end, the tremor can even reach the feet, where there is usually less tremor compared to the hands. (Kan & Pohjola 2012, 37-40.)

Deterioration of physical performance can result from cognitive disabilities, vision and hearing impairments. An example of this is the Alzheimer's disease. In Finland there are over 60,000 Alzheimer patients and approximately 70% of all memory diseases are Alzheimer disease. The development of Alzheimer disease occurs when there is a damage on the cerebral development. Usually a risk component of Alzheimer's is old age. The first brain changes that take place usually alter the learning process of new things and happenings. When the disease spreads, aside from memory and learning difficulties, other deficiencies occur. In the first stage concentration, initiative and orderliness decreases. The

happenings in the near past are hard to recall and the patient can easily loose orientation. As it is hard to leave from home, many patients tend to isolate themselves. Vocabulary can also start to decrease and the symptoms that follow on are very individual. Usually in the middle severity stage the patient has no sense of orientation even in familiar places, the ability to use of daily things decreases, and perceiving of familiar artifacts and people decreases. In the last difficult stage, the performance of the patient weakens dramatically. Help is needed first in dressing up, then in washing, using the bathroom and at last in eating. (Kan & Pohjola 2012, 39-42.)

From another point of view, one has to remember that not all elderly are in such bad physical conditions. However, when elderly with a good health are considered, economic safety and stability can not guarantee a healthy life without social well-being. Social aging, usually a change in a persons position in society, links to social performance; the ability to interact with another party. Social performance cannot be monitored by itself, but has to be combined with the already mentioned physical and psychological performance. The ability to complete daily tasks, caring for own matters, cognitive skills and resources, have an effect essentially to social life and to how an elderly person is able to survive daily life in a self fulfilling way. (Pohjolainen, Sarvimäki, & Syrén 2007, 58.)

As mentioned, psyche/psychological performance includes problem solving skills. When social situations that have problems to be solved seem too confusing or unclear one can easily go into a state exile. Loneliness is a very big problem amongst the Finnish elderly. According to a research conducted, half of 75 year old elders suffer from loneliness. In older age groups living alone it is more common that the contacts to similar aged peers is infrequent and loneliness is more frequent. According to elderly, loneliness is caused by the partners death, weakening of health, lack of friends or family and the disappearance of sense in life. (Kan & Pohjola 2012, 42-43.) Issue of health, social well-being and loneliness will be the main focus of this case study.

## 5.3    The tangible approach

The starting point of this case study was the background knowledge of the rising state of the aging population and problematic factors of the elderly life in all areas of physical, social and psychological  performance. The design for needs was seen clearly in the elderly target group and could be approached in more practical and easier ways to practice user-centered design methods compared to for example, designing for the third world.

The first approach of this case study was to concentrate to enhance the well-being of elderly in all levels of performance, highlighting a social agenda. The social agenda rose to a higher level of importance in result of initial qualitative interviews done with the elderly. The design outcome of the project was a tangible concept of a user-friendly game board for the elderly. The main aim of the game board is to gather the elderly to a social meeting point, which would work as an easy step to approach a social situation when the focus would seem to be on the game. Also, the psychological performance in cognitive memory by problem solving skills and physical performance by arm,wrist, hand and finger movements while playing the game would be in use and enhanced during the game playtime.

The idea for the outcome came to life through a course in Karelia University of Applied Sciences, that was done in co-operation with ISAK (Itsenäisen Suoriutumisen Innovaatiokeskus trans. Independent Performance Innovation center) where the goal of the project was to enhance the well-being of the elderly population through design. The design ideation started off during the course project that included making qualitative interviews within the project to find a need and through the interviews of two elderly men an initial game interface idea was brought forward with a presentation for ISAK.

After a year, the project idea was taken to be reused and an independent co-operation started with ISAK. During the course, the coordinator of ISAK was already impressed with the idea and thus after presenting the design idea again with additional design improvements, the project came to life again.

Unfortunately there was no need for the product from partner funding companies of ISAK as they had a different design focus set for the year.

The need of the game board was seen to be in an insufficient social environment and networking of Finnish elderly, the third stage of Maslow's hierarchy of needs (see Figure 4). At this point, after the reimbursement of the idea by sketches and presentations, more qualitative interviews were made to map the true need, functional and the practical aspects and look of the game-board. After the improvement, the final plan of the outcome was done and made into a 3D model. All of the plans were downloaded on a website, that functions as a sharing platform called *Behance* with a *Creative Common* license. Through this platform other designers can give feedback, develop and use the idea. When the concept will reach the highest point of the planning stage and other enthusiastic designers or interdisciplinary individuals join the team, the implementation space can start where prototypes will be tested and developed with co-designing to result in a final master piece. Unfortunately the implementation space could not be pursued during the thesis time frame due to resource and mobility reasons. However, the process of designing with the user-centered method of qualitative interviews gave understanding of how the view of user-centered design process works when individuals give their view through words and how one must interpret and analyze those words into the design of the artifact.

### 5.3.1 User-centered qualitative interviews

The plan for primary data-gathering was done in the form of qualitative research due to efficient collection of thoughts and opinions from different individuals. The aim was to have different kinds of  qualitative data that would be rich to interpret and give various different angles to work with in the design of the game board. The data collection was done tête-à-tête  with the means of qualitative open-end interviews (Appendix 1). The interviews were recorded and analyzed with comparisons and similarities amongst the elderly interviewed. This method was seen as the most appropriate data collection method for the tangible outcome planning due to the most humane and individualistic approach.

The elderly interviewed varied in different amounts of disabilities from mild to severe disabilities, and of years they had stayed in the facilitated home; from half an year to four years. In average they had stayed in the home for one and a half years and the main symptoms seemed to be in mobility and hearing difficulties. The interviews were done in a elderly service home called *Kuuselan palvelukoti* located in Härmälä, Tampere, Finland. In the service home, the elderly have their own rooms, a cafeteria, and a common area with a television set, tables and chairs. The five elderly people who were interviewed consisted of three women and two men. For the sake of the anonymity agreement (Appendix 2), names of the interviewed will not be given and been changed when referred to. The age range of the interviewed were between 70 and 81 years of age and the average was 74 years of age. The qualitative interviews where done in the common area of the service home by sitting individually at a table with a question sheet in front.

The social aspect was quite poor for most even though services are provided in the house weekly. In terms of games, game board games are not played in the house currently, but four out of five interviewed said that they would join to play with the game board presented. One remark by 'Martti' who was interviewed was that if there is a energetic and excited instructor to inspire the game playing, many of the elderly would easily come and play. According to three of the interviewed there used to be card playing in the house but it gradually stopped as the people in the card playing group passed away. Other activities in the service home are handcrafts, fitness exercises, concerts and a hairdresser service. To sum up, all the five people interviewed stated they would like more activities in the elderly home as they have a lack of activities. When there are no scheduled activities, most of the interaction to others in the house takes place while watching the television.

The result of the interviews was alarming as all of the interviewed commented about the excessive amount of time with little activities and social interaction. The television is the only gathering point and relatives come to see in the best cases once a week to the worst none at all. The interviews gave insight to the

passive behavior of the elderly during their free time and it could be seen that most of them would like to be more active. Through the research done, one could see that there was a need for more social activation and a game board interface could be a good prototype for stimulating more social and active behavior.

The basic function and aesthetics of the game board (Figure 10) presented were questioned during the interview. The function against hand tremor was said to be good with application of the grid rim between the squares and the magnetic function of the game board and game pieces. Big and bold game pieces were said to be the best that one can easily grab with their hands. However, the concept of a whole table fixed for the game board was over ruled as the elderly wished to have a choice were they can play the games rather than a set spot. The aesthetics were commented with words simple looking, local materials and approachable.

## 5.3.2 Ideation and sketching

The ideation space took place in the light of the interviews done. The different ideation parts and sketching can be seen from Figure 10 to Figure 12. The multiple ideas were weighed after the interviews and a final ideas were brought forward. The sketches represent different thinking phases of the ideation space. First is a game board box model (Figure 10) that was thought of for the storage of the buttons, but due to it's rigid and less practical function a more simple and stable solution was developed. The base of the game board model (Figure 11) came from the factors of simplicity, stability and approachability. The board is designed for an elderly home where transportation of the broad would not be the biggest concern and thus the board is made of one board piece. Aside from designing and thinking about the base, the game pieces for chess and checkers were also thought of. The main starting features for the pieces were bog, smooth, easy to grab and ergonomic. There was research done on different pieces and sketches to ideate appropriate solutions for them. The final pieces were scanned and drawn 2D in Adobe Illustrator for further rendering (Figure 12).
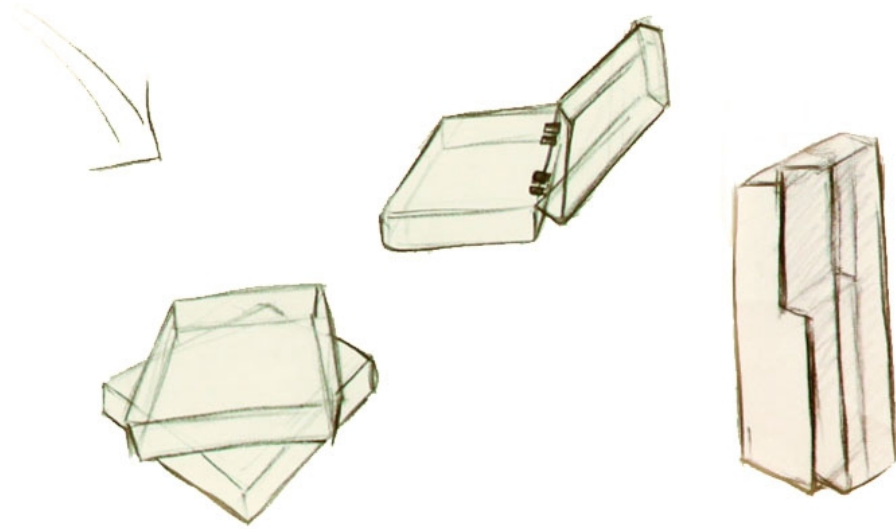
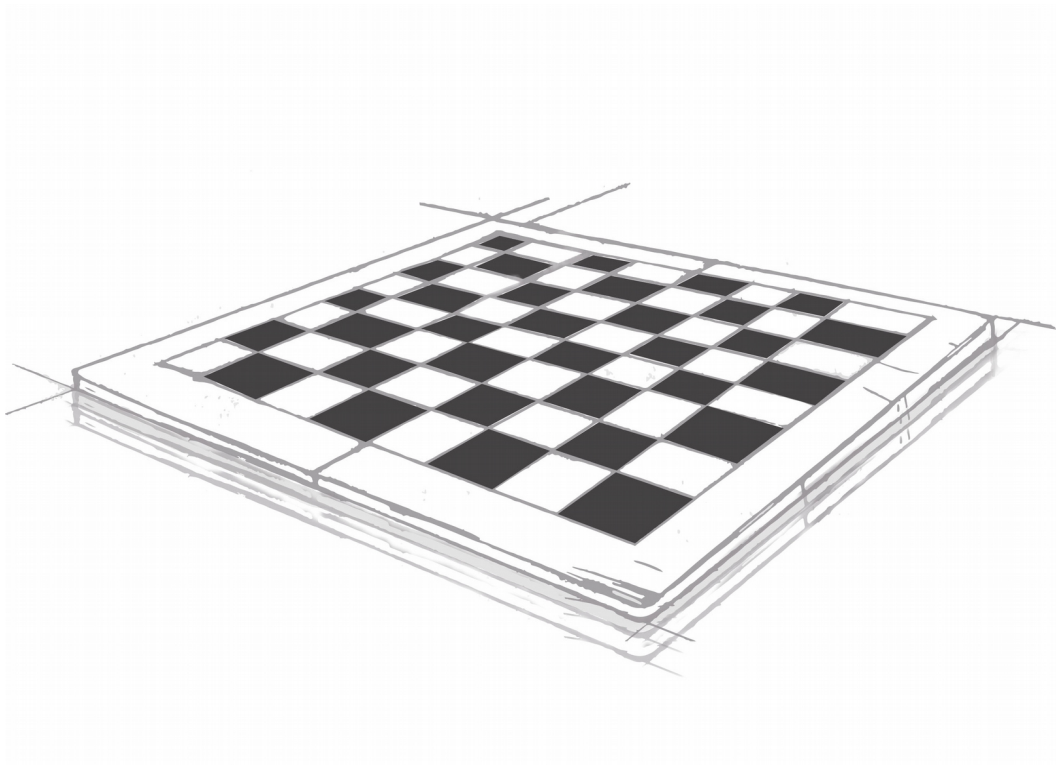Figure 10. Opening techniques for the game board box model
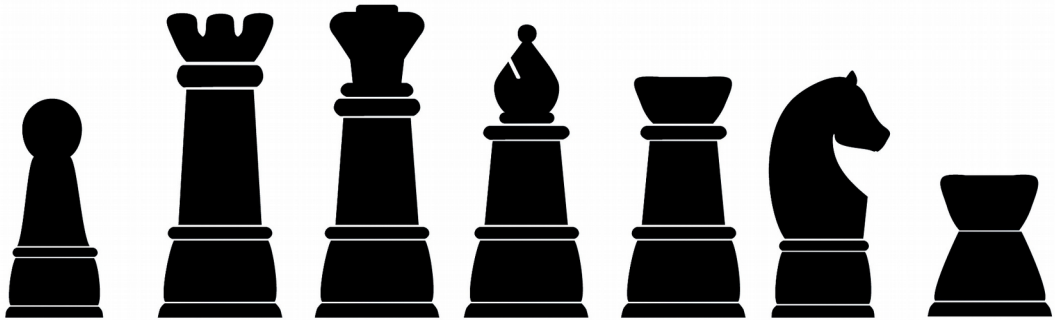


Figure 11.  Game board model

Figure 12.  Game board pieces (Chess and checkers)

Due to the interviews different exterior arm/hand rests around the game board were also designed (Figure 13 to Figure 14). However, a decision was made to keep the board simple for the time being and focus on the function and performance of the game board itself. If seen to be evident, arm rests can be tested in the prototyping phase to enhance the game board experience of the elderly.
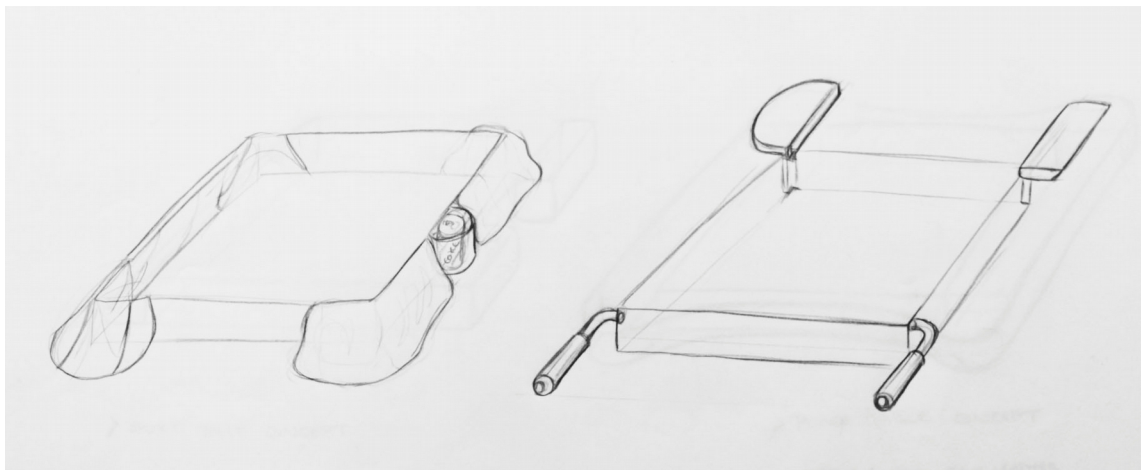


Figure 13.  Game board arm rests first proposal

The sketch labels read: "SPORT REST CONCEPT" and "POKER TABLE CONCEPT", "MATERIALS: VINYL, FAUX LEATHER & HIGHGRADE FOAM", "/BETTER GRAIN FELT: EG. SPEED CLOTH".
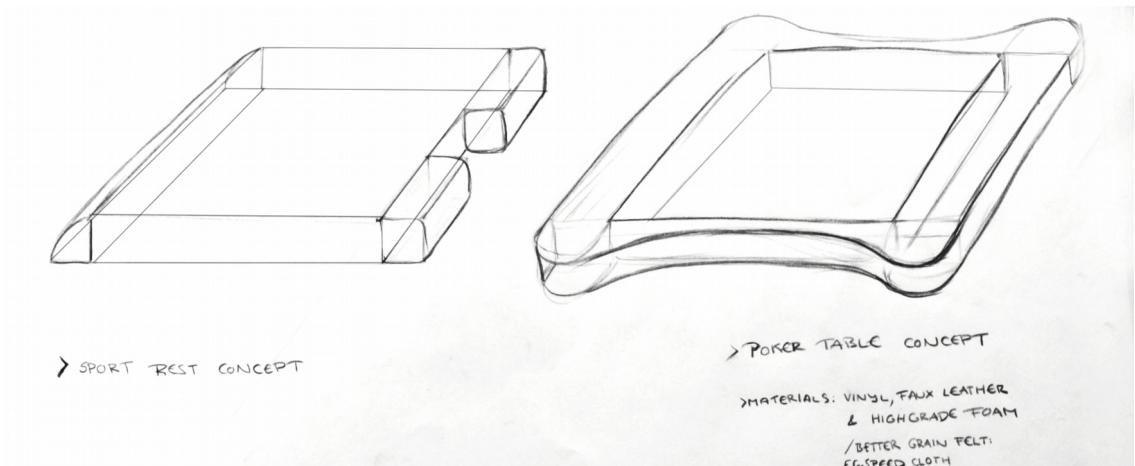
Figure 14.  Game board arm rests second proposal

### 5.3.3 Materials and measurements

As Papanek expresses in his views, a material should be used only for its rightful purpose by honest and optimal ways, never making the material seem what it is not. (Papanek 1984, 5.)

The game board interface is made out of different elements of wood, metal and rubber. There is also a magnetic field that needs to be considered so that the game board pieces find their place to the right squares with less likeliness to loose balance and fall. There will also be 3 x 3 mm narrow birch wood slices to form a grid on the parameters of the game board squares to guide the game button to the right square (Figure 15). This is designed especially for elderly who have a difficulty in precise hand movements and hand tremor from diseases such as the Parkinson's disease. The game board base with the size of 500 x 500 mm base with sixty eight 50 x50 mm squares made out of white birch plywood, a local material in Finland and the right material for the served purpose.
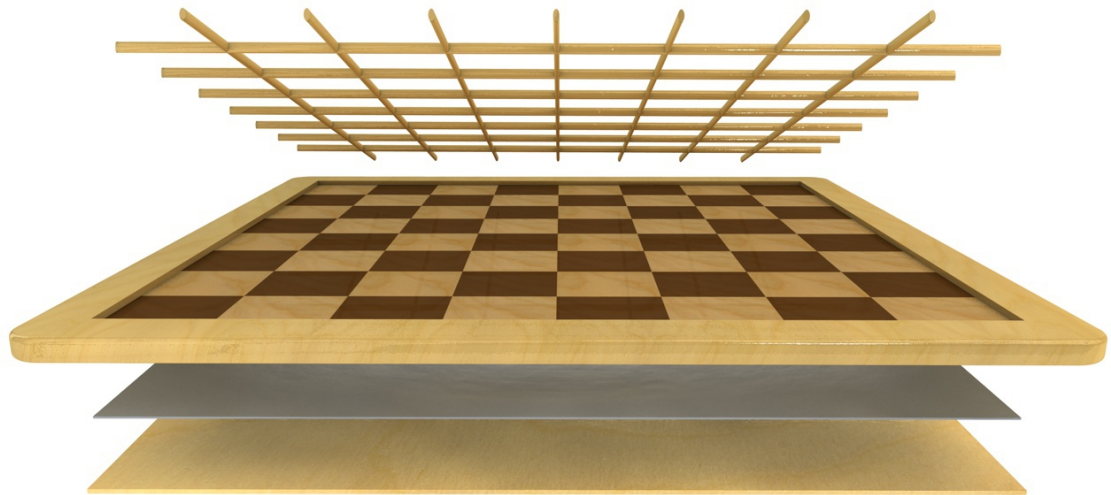
Figure 15. Material layers of the game board.

The most popular white birch found in Finland, called Betula pubescens, is seen to be the national tree of Finland. A birch grows best in fertile grounds with underground water supplies. The birch is close grained and has a consistent high quality standard; it is durable with hardness, damage , water and heavy resistance.  Although it is a hard wood, it is easy to work with. The choice between other woods such as oak or maple is due to price and the light-colored visual appearance of the birch wood that will be left polished and unpainted to represent the white squares of the board. The game board will have dents on the parameters of the black and white squares where one can then attach the wooden birch grid. The service life of birch plywood is in general long, and there are many available methods for disposal. It should be noted that these disposal methods are on Finland's disposal standards and can vary in different countries. Recycling is always the preferred way that the plywood could be utilized in some other way. Another equivalent to recycling is to burn the plywood. At a combustion of at least +700 degrees the plywood even with commonly used paints does not produce hazardous combustion residues. The plywood can also be composted by having the board chipped and composted, but this takes a lot of time. (UPM 2007, 61-64.)

A helpful source comes from establishing a magnetic field to the game board so that it is easier for the elderly with tremor to place game pieces with magnets on the game squares and for the pieces to remain in a balance on the board surface. A steel sheet of 60x60 cm will be tucked between the birch veneer sheets of the board and a thin magnet sheet will be glued on the bottom of each game piece for the magnetic field to work (Figure 16). The electrical steel sheet not only have magnetic qualifications but also is durable and does not rust so easily as metals like iron. Flat oriented steel sheets provide strength, stiffness, excellent corrosion resistance and aging ability. (AK Steel Corporation 2007, 4-14.)



Figure 16. Game board chess piece with a magnet

The game board pieces of checkers and chess will be made out of birch wood as well with an extra help of external transparent rubber surface on certain parts of the chess pieces for better grab of the button. This is especially helpful for elderly with the Parkinson's disease to have a better grab and feel of the button itself. The rubber coating used in the pieces will be natural rubber due to it's good friction characteristics, affordability and susceptible to degradation by a wide range of bacteria. (Columbiaerd 2013.)

### 5.3.4 Final product plan

The final idea was made starting with the rendering of the game board and then the pieces. The idea with having two games combined together of chess and checkers would increase diversity of the board and it would serve in the need for players to interact together in order to be able to play. For the elderly to approach the game board the design team or contact personnel would act as a life-coach to help users overcome natural barriers in early phases. The final 3D renderings were brought forward that were made of the game board with chess pieces (Figure 17) and game board with checker pieces (Figure 18). As the emerge of internet based social networking has provided a platform for open source designing, I decided to share my idea online for the sake of spreading the idea forward and future enhancement.
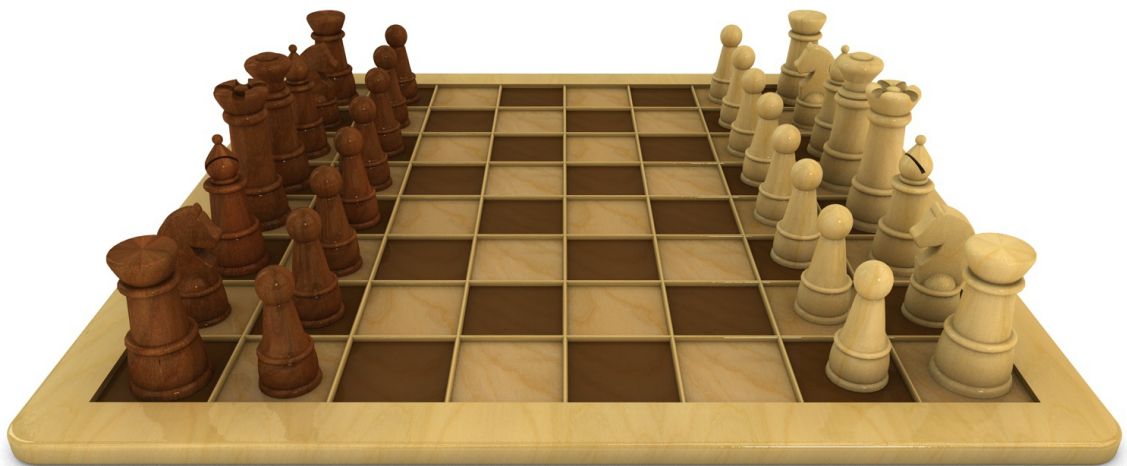


Figure 17. Game board with chess pieces
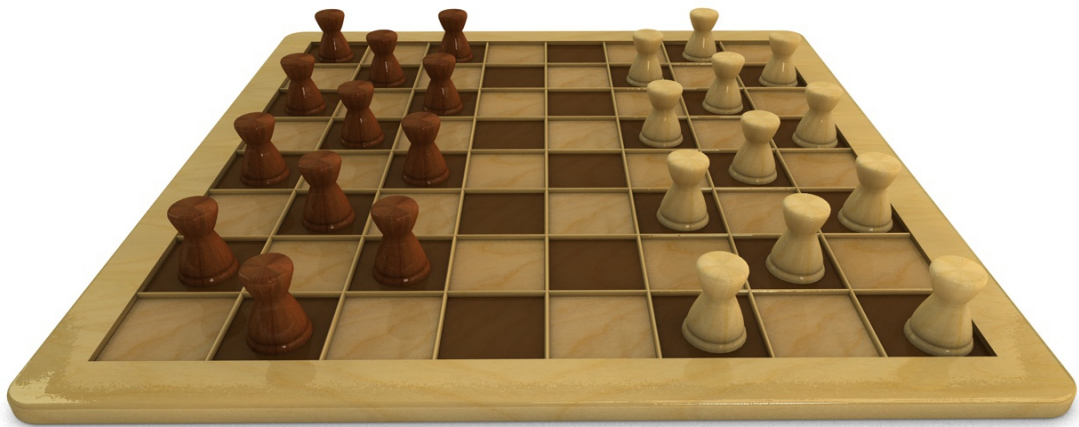
Figure 18. Game board with checker pieces

*Creative commons* is a non-profit corporation, dedicated to making it easier to share content by authors of content, such as designers, and build from on the works of others with the rules of copyright. The internet site provides free licenses to mark creative work with the freedom the creator wants to give to the content, so others can share, contribute, remix, or use the work commercially or non-commercially. For example a No Derivative Work license lets others, distribute, copy, display, and perform only exact copies of your work. The license used for the the game board is a Non-Commercial License that lets others copy, distribute, display and perform the work but for non-commercial purposes only. The Non-Commercial License is not to abandon commercial use completely, but if one wants to publish or use the concept commercially, a query has to be sent by contacting for the permission of commercial use. (Creative Commons 2013.)

*Creative commons* was used in the copyright, display and development of the game board outcome as the game board is still in the creative design thinking process. The sharing platform of *Behance* with the *Creative Common* license was used so that the idea of the game-board concept can be spread around the world with a suitable license. It would be unfortunate if the concept of the game

board for the elderly would only extend to the use of the thesis. Thus the *Behance* platform works as a sharing and development phase. Artist, designers and everyone who is interested on the topic can give feedback and pursue the idea forward. (Behance 2013.)

## 5.4 The intangible approach

The second approach of this case study was to focus on a more intangible result. The approach was to focus on the method of how to get a good grasp on the problem areas and needs of elderly in everyday life. A day long innovation workshop with the trial of the participatory method was held, where the similar focus on the target group of social well-being, needs, social networking and stimulation of the elderly was aimed at as in the first approach. The workshop ended up being successful as intangible solution of a creative talent event was brought forward by the elderly. The participatory design methods proved to be a success as the elderly were enthusiastic to take certain roles in order for the event to be carried out. Also, the perspective of the activity workers were considered in this approach as two of them participated in the workshop and gave good feedback about the how they will continue to use user-center design methods more in their activity planning. The event was truly a success in terms of the participatory design method and in raising awareness.

### 5.4.1 Innovation workshop

In order for the workshop to be executed, the planning took place with contacting elderly homes and asking if it would be possible to make a workshop for the elderly. Two elderly homes declined the workshop as they had too severely disabled elderly to take part in such a workshop and another one declined due to the shortage of participants (minimum of four). However, after some searching an elderly home was found where the workshop could take place. For the briefing, a form for a research permit had to be completed for the elderly home (Appendix 3), a consent of the contracting (Appendix 4), an written letter that would promote the elderly to join the workshop (Appendix 5) and a days plan for the workshop in terms of a timetable (Appendix 6).

The planned workshop for the elderly took place in Tammenlehväkeskus (Figure 19) in Tampere on Thursday 22.8.2013, from 9 am till 4 pm. The workshop was organized and executed with the help of two activity workers in the institution. The activity workers promoted the workshop to the elderly and in the workshop consisted of eight participants. The elderly were between the age of 82 to 93, with the average age of 86 years, and consisted of three men and five women.

The elderly were clear minded and their health varied within the group. Two of the elderly were using a stick as an aid for walking, one had an installed heart pump, two had a hearing device and others three were in good basic shape. With the deficiencies different problem areas were found out during the exercises such as the process of getting on to an outside swing due to the unstable behavior in the movement of the swing, the dangerous of going to the forest with a heart pump due to the electricity lines, and having problems with the hearing device when there is a lot of sound around and you wish to concentrate on a certain sound stimulus. These specific problem areas for different restrictions should be acknowledged but as the workshop focused on the social agenda, these topics will not be dealt with in the scope of this thesis.

Figure 19. Workshop location

The workshop started with a brief introduction to this thesis, what it is about and what the goal is for the workshop with a presentation. Materials for the workshop were the electronic presentation on a television screen, a paperboard, A3 papers, a ready made A3 diagram, pens, scissors, and magazines. The elderly introduced themselves and the consent of the contracting was discussed and signed. Then the first task of the workshop started where the elderly were asked to define what does welfare mean (Figure 20). This was written on a paperboard and it was told that if other ideas come in mind during the workshop, they can be added to the list. According to the participants, welfare is defined by health, relationships such as love and the welfare of the family, the attitude one has in life such as humor and playfulness, economical security, exercising and the satisfaction in living standards.
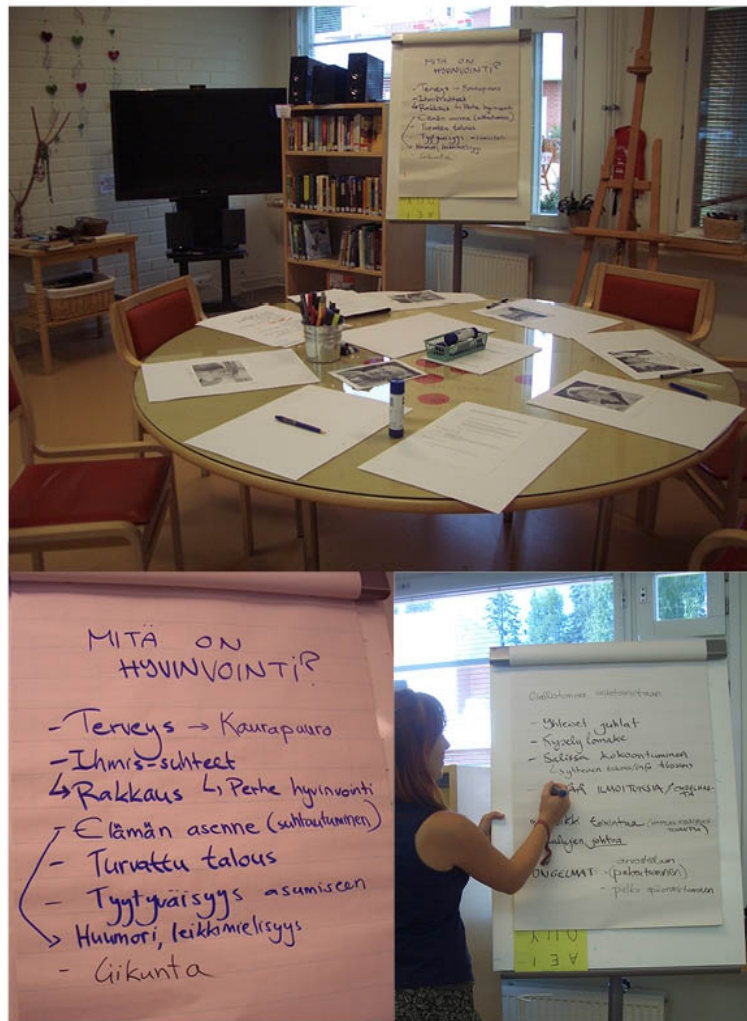
Figure 20. Workshop location and beginning

The next task was the day rhythm of the elderly. A presentation was prepared with motivational images and permitted pictures taken around Tammenlehvänkeskus to have a mind shift to the feeling of a certain time of day (Figure 21). The task idea was to go through the routines of the elderly and allowing them to give their thoughts for improvement of the time of the day and complaints about any difficulty points and needs, for example the morning was said to bring routines such as the day inventory; checking what day it is and what tasks have to be done, take daily medication pills and for two persons to put the hearing device in the ear. There was a need for having better and easier clarification of some of the tasks mentioned. (Figure 22).

According to the elderly, at least once a week there is a need to go to the city to take care of shopping, going to the bank and other errands that need to be taken care of. During discussion and the exercise, pictures around Tammenlehvänkeskus were shown. The participation to different events and activities in the elderly home were discussed and in specific it was mentioned that there are too few of participant amounts in services provided by the house. The activities were said to be too organized and that the elderly wished to have more contribution on the events themselves to feel more part of the elderly house. Some events that could be organized partly by the staff and partly themselves could be reading poems, singing, baking, or making plays. The idea of the event outcome started to get ideation grounds. It was mentioned that it would be a good idea to use the elderly creative resources and use it in uniting the household.

However, the elderly were also expressing how their energy and activity has gone down. The feeling of sloth came forward and it was mentioned that there should also be support for events to enhance in some cases elderly to get be more active. The exercise was successful as the elderly could reflect their day and different ideas came out of it. The risk of bias by the participants wanting to give a good impression was a concern in the workshop, but in the end many problems points were expressed and could be opened up and worked with in later stages of the workshop.
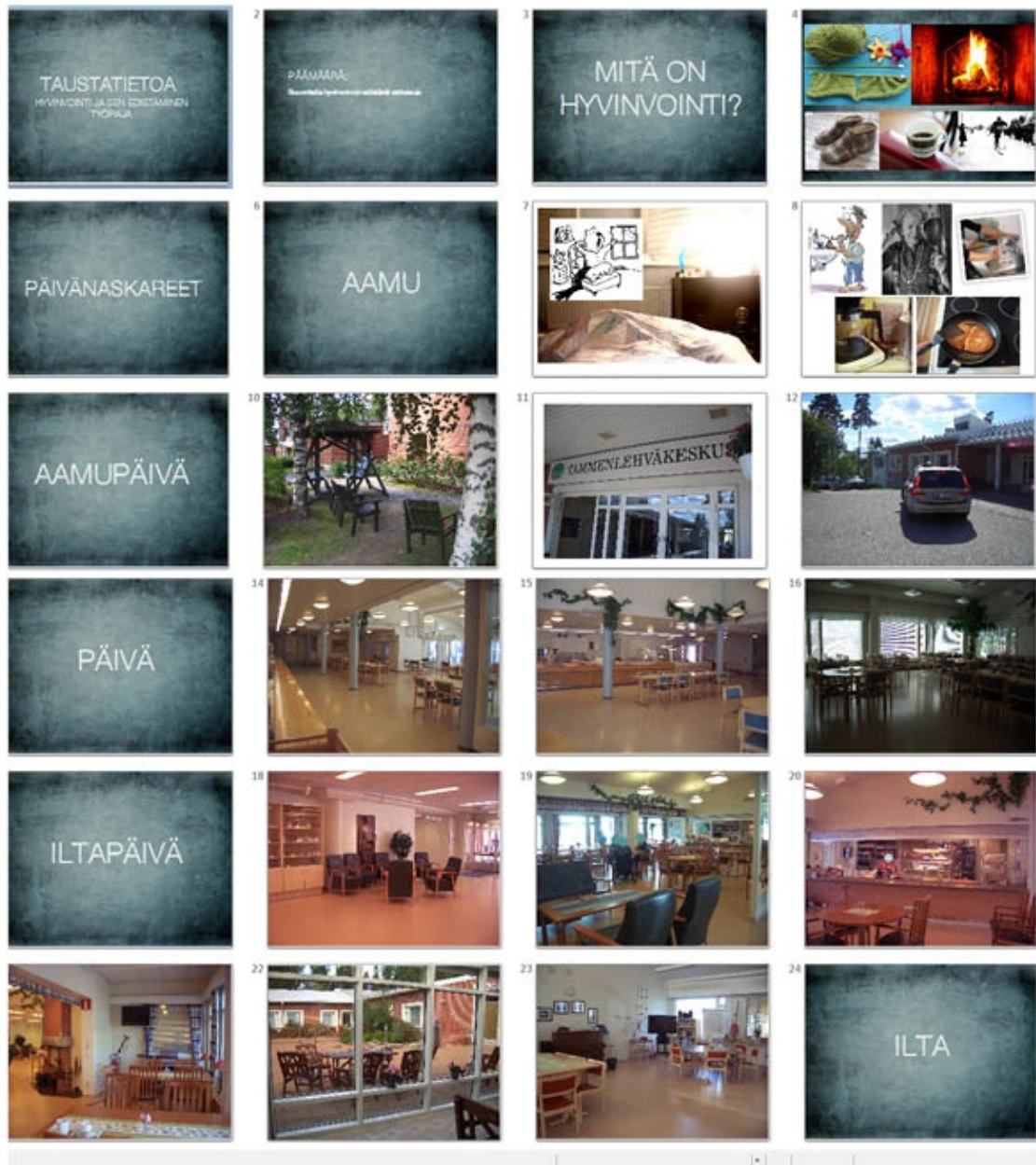
Figure 21. Day rhythm exercise

Figure 22. Day rhythm exercise (2)

The next task was about person profiles (Figure 23- 24). Different images of elderly faces where given and the participants could choose from a selection their favorite image and then glue it on a A3 paper. Then the participants had to give this person a profile; name, age, family, hobbies, character and needs. After the elderly had to think of problems that this profiled elderly could have that could be problems that their friends might have or they heard from other people. This tasks idea was to distinguish the bias of having to look good and become depersonalized or anonymous from the process so that even awkward problems could arise that wouldn't come up otherwise. However, the amount of problems that were expressed was to a minimum and all the problems were mostly physical restraints. Afterwards, the profiles were presented and possible results to the problems were discussed.
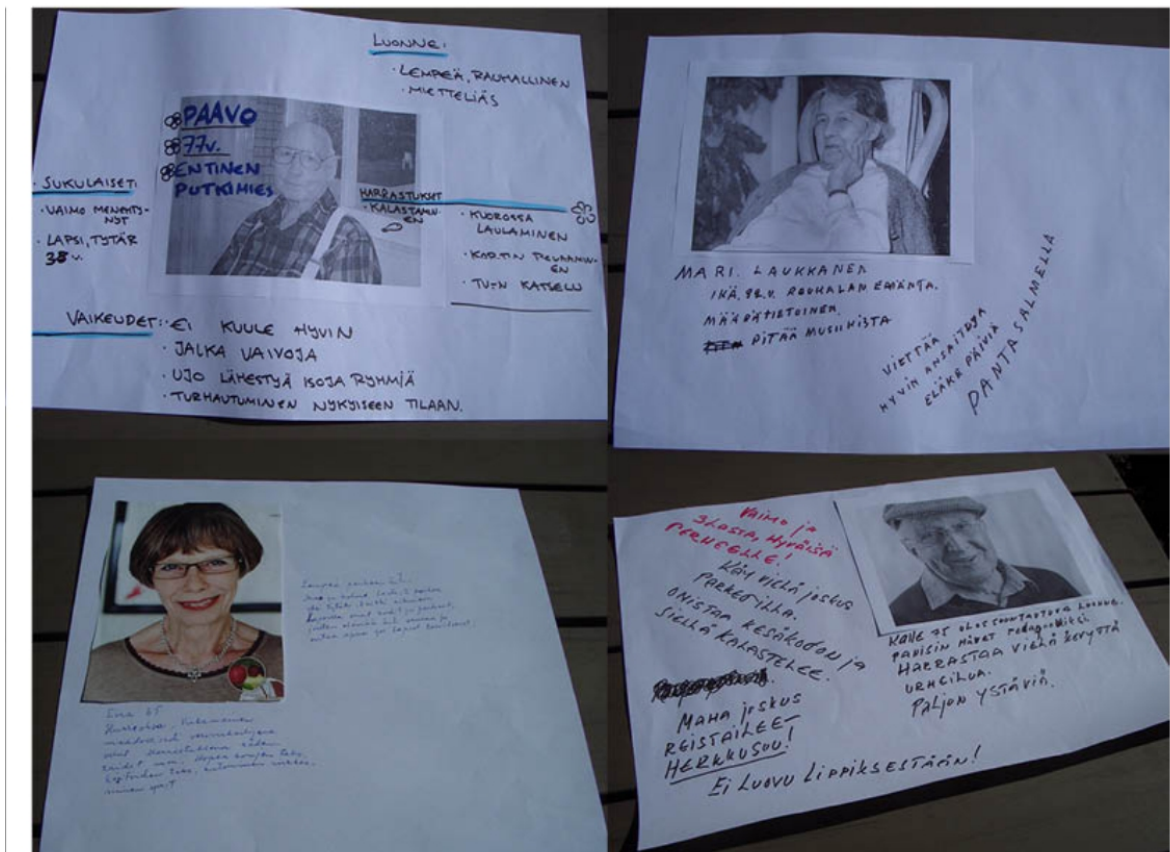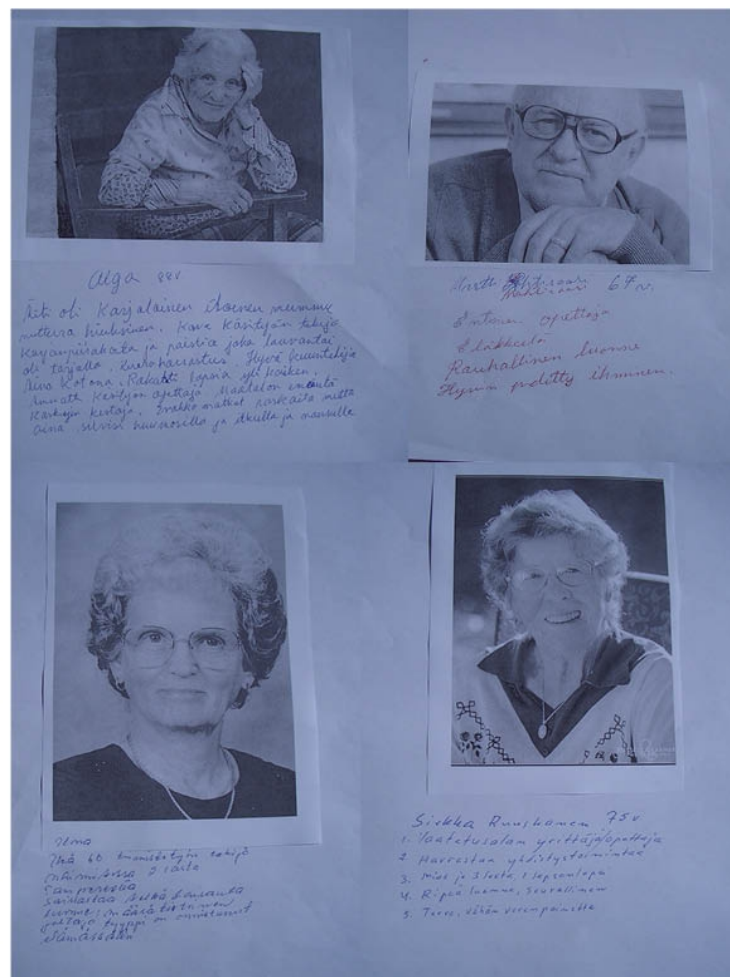


Figure 23. Profile exercise

Figure 24. Profile exercise (2)

The next task of filling out a diagram exercise (Figure 25) raised a lot of problems as the diagram seemed to be too complex to understand for the elderly even though it was explained simple and as clear as possible. However, there were noted many things and discussions arose from what had been written down. Some of the elderly had a hard time writing down things themselves and to the right place due to confusion of the task. From this it was learned that when working with elderly participants, the best way to gather information is to have the things expressed in discussions and noted down, not by asking elderly to fill out complex forms or diagrams. The idea of the diagram was to put all the tasks and problem tasks found from the second task of daily routines and place them in the context of self, self and others and community for an easier grouping purposes.
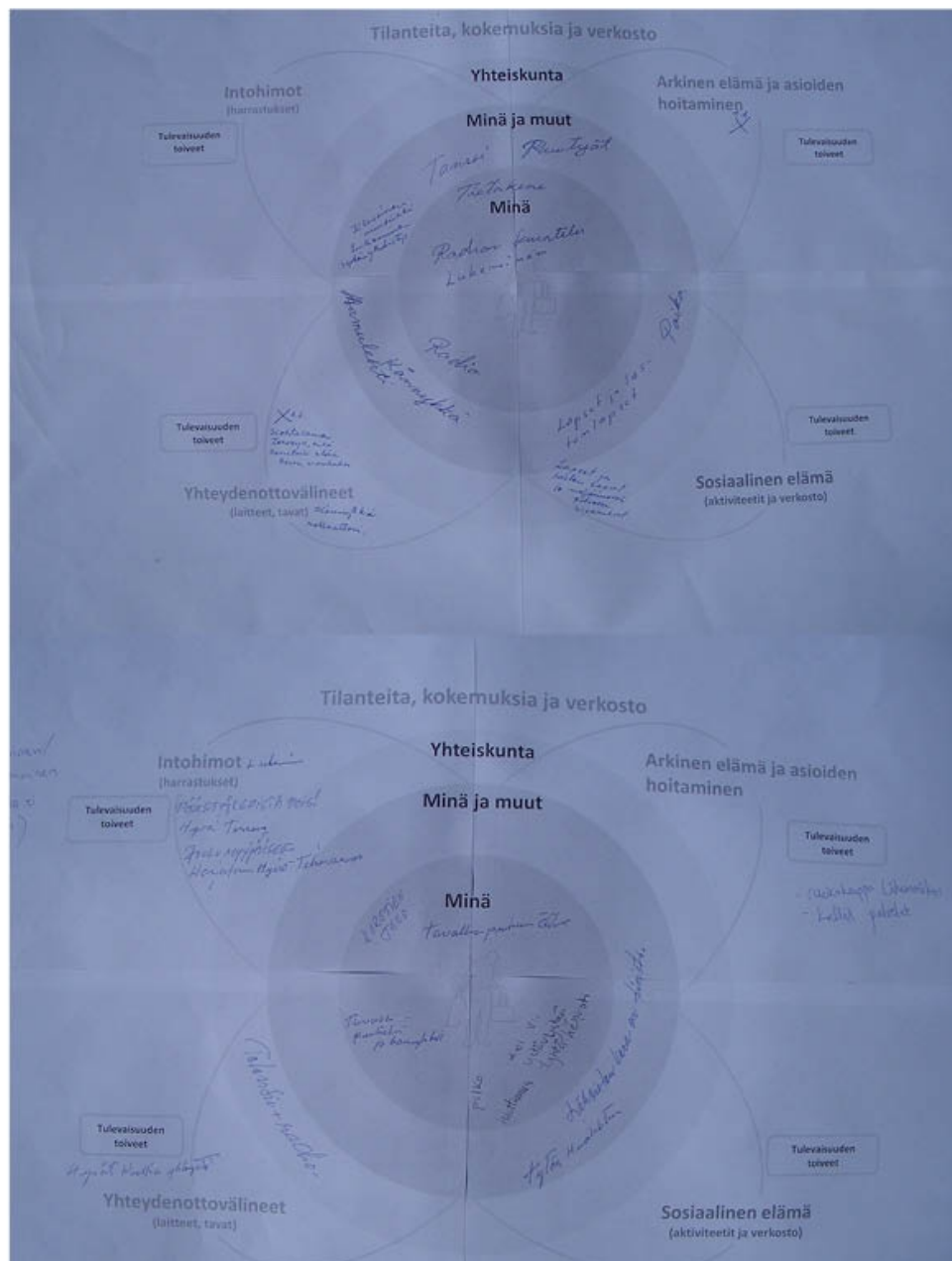
Figure 25. Diagram exercise

As the diagram exercise did not succeed as expected, the ideation categorization phase of the process was one of the most demanding part as the grouping of the ideas for the results had to be done mainly with the workshop facilitator and the two activity workers. The results that the elderly started to work on from the problems aroused were picked mostly from the second exercise of the daily routines (Figure 26). The problems were laid out in teams and the results were presented and discussed. The most practical and favored

result was then taken in front of the whole group and discussions started how this could be executed in real life.
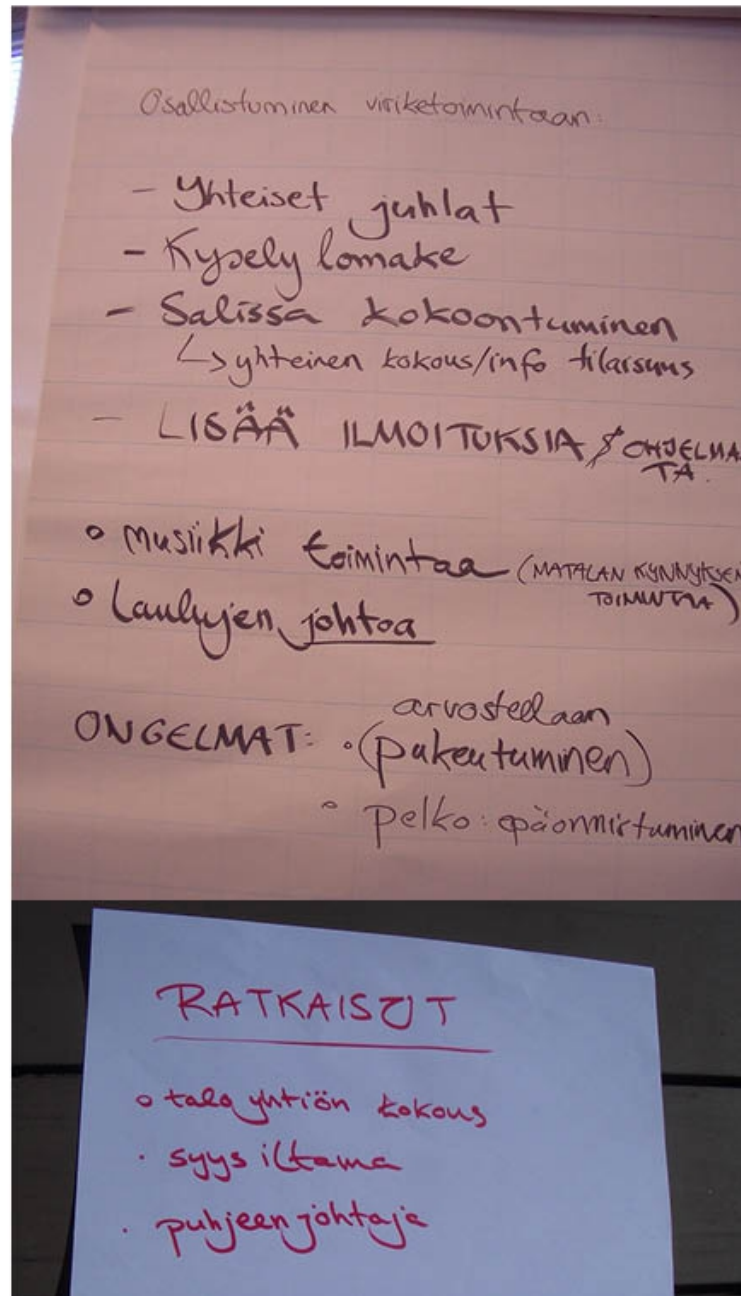


Figure 26. Results

The most voted result was an autumn event that the elderly could organize mostly by themselves with some help of the staff (Figure 27). The idea was that their will be an event where elderly can share their creativity and talent by making their own performance lines or contribute in any other means for

example by baking something for everyone or reading a poem. Participants wanted to take responsibilities for the event for example one elderly man wanted to be the speaker and presenter of the event and another wanted to gather a quire together so that everyone who was interested in singing could participate and there would be some practices before the performance in autumn. The group was split and more ideation was made. A date was set when the elderly will gather with the two activity service workers, plan it in more detail and execute the event in the light of an activity contributed by the elderly house and the participants themselves. The result of the workshop was a success in terms of a user-centered participatory design approach.
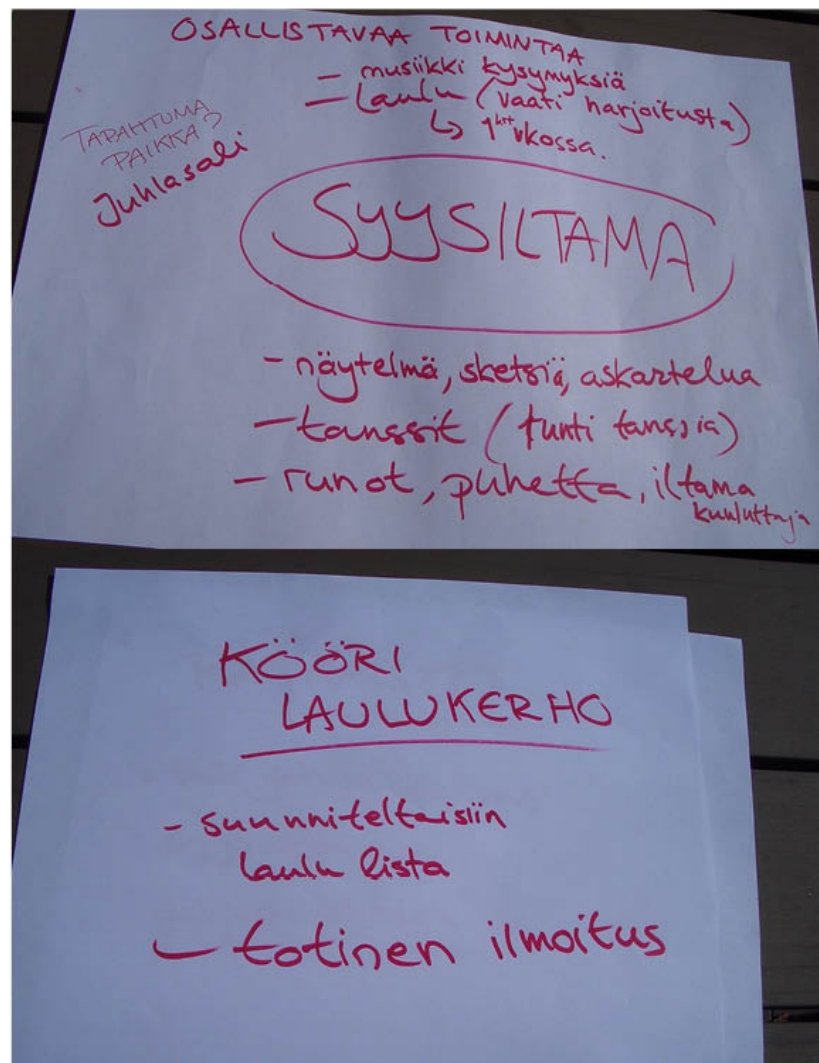


Figure 27. Final result

The last exercise was intended to get the elderly to reflect and to help continue their ideation process even after the workshop. The last exercise (Figure 28 - 29) was to make a collage by cutting magazine pictures, drawing or writing on a A3-paper about how they see the needs and well being now after the workshop and how would they pursue well being themselves from now on aside from the event. The exercise showed a lot of interest and ended up different results such as getting together with friends, having a positive attitude towards the future, taking care of family relationships, keeping good memories close, relaxing, exercising, eating healthy, and trusting future well being.



Figure 28. Welfare collage

Figure 29. Welfare collage (2)

## 5.4.2 The Intangible result

It was very challenging and interesting to be able to organize and facilitate an entire workshop for the elderly. The workshop gave room to new perspectives for everyone who participated. The workshop was a good information source in terms of ideation, grouping information, finding solutions and starting the implementation phase. A lot of experience was gained on what facilitating a

workshop requires and what has to be taken into consideration when such workshops are to be organized with the elderly. In the beginning one must remember the requirements and limitations that a certain target group might have, for example mobility and physical limitations. Also time management is important so that each task has the right amount of time for completion remembering that the elderly need their time. Also the way of explaining a task has to be clear and simple.

Through the workshop it was evident that elderly have a need for different activities or events in the elderly home for social contact due to the lack of visitors and general social input. Comparing the  definition of what well-being means for the elderly with Maslow's hierarchy, similarities can be seen in health and satisfaction in living standards that reaches the first step of physiological needs in the pyramid, economical security the second step of basic security, relationships such as love and the welfare of the family goes on the third step of love and belonging, and the attitude you have in life such as humor and playfulness goes to the fourth step of the self esteem. The well-being was well defined by the elderly and when asked which part of well-being would the elderly like to enhance the most, the answer was between two opinions of health and relationships. These seem to be the high priority points.

In later stages of the workshop, the participants expressed their frustration of feeling useless in their current state and wanted more creative input and belonging to the elderly home. The workshop ended with an event being planned by elderly for the autumn with the concept of elderly having the possibility to contribute to the house event with talents or any form of creativity. This event will be the first stepping stone towards more active behavior and involvement in the elderly house and a good way to support the self esteem of the elderly by contributing to the event with any form of interest or talent they want to share. It is also way to get all the elderly together and get an idea for the elderly what kind of people are living in the same elderly home and hopefully find similar interests amongst new acquaintances. It is hoped that the success of this event would inspire and show other less active elderly the motivation to contribute to future events for more social well-being.

# 6    DISCUSSION

Going through the background research for the elderly by looking at the population statistics presented and the educational branches existing in the focus of elderly, one has to realize that the focus of the case study is an evident matter to tackle and not just a naive attempt to make the world a better place. The research done on the performance of elderly is a mere crust of what knowledge a gerontologist has about the matter, but enough for a designer to get a grasp on what factors of physical, psychological and social performance need to be considered in the design process and outcome.

The purpose of the two case study processes in the thesis was to get a social designers perspective with the aim to design for the welfare of the elderly with a social agenda that would locate to the most accessible and common gathering place of a common space in the elderly house. In making two different processes in the case study, an overview can be seen about what kind of a process and outcome a social designer may be included in. Some might argue that it would have been better to focus on a single case study outcome instead to get a deeper understanding in one specific concept, but the aim was to focus on getting an overall view of the innovation process of social design in the social and participation agenda of the elderly.

As mentioned before, a social design outcome has the flexibility to be a tangible or an intangible outcome. When working in the field, a designer has to be able to see what kind of an outcome serves the needs of the community the best, whether it is an artifact, event or a service. In my experience, a social designer should have a certain grasp on the fields of innovation, tangible and intangible design in order to have a wide scope and good understanding for the different processes.

Looking at the different elderly homes visited during the case study and weighing the social agenda, the elderly expressed in both cases how the amount of provided services depend on the elderly home, on the rates of participation and are not enough for the elderly to be socially satisfied. The

similar socialization need could be seen in the *Life 2.0* project. Thus it is important to enhance the participation opportunities that satisfy elderly needs. The result of the case study helped elderly to become active participants by creating an own event that encourages personal involvement, and for an alternative a concept of a game board was made for elderly that do not participate in the activities or services provided, but would rather enjoy being in the common areas in their own time for interaction and pleasure. Similarly, as in the *Life 2.0* project and the remark by 'Martti' during the qualitative interview, it is considered important that the design team or contact personnel should act as a life-coach to help users overcome natural barriers in early phases of the event execution and usage of the game board.

The tangible outcome of achieving positive social experience, carried on to the concept of a game board for the elderly. The background information on disabilities is mostly an information cluster that is needed for the case study process parts such as the the background of the game board interface as each button is designed for elderly who might have performance disabilities like Parkinson's or early Alzheimer's diseases. It is an aid for helping people with physical difficulties play with ease without making the board appeal like a clinical aid in the design in an obvious manner and it helps cognitive performances with the ongoing problem solving game. The two alternative games one can choose to play: either the easier checkers version or the harder chess version. The game board developed through the interviews with feedback given about the approach to the game board and what it should carry within.

In the intangible approach the focus was more on the methodology of the workshop of co-designing and using the participatory method. The design process is more interesting as one has to deal with different people outside of their field at the same time and get a lot of insight on a some what unfamiliar sector. It was interesting to see how social design brings purpose and identity as one is dealing with real needs of the target group. It would have been ideal to get an gerontologist to the innovation workshop to contribute, but unfortunately there was not enough resources to do so. The workshop definitely functioned better with creativity, expressing and comparing ideas and thoughts of the

elderly whereas the individual qualitative interviews. The qualitative interviews helped shape the game board to a satisfaction but in the future ethnographic research should be done when the game board is implemented into the elderly home environment. The user-centered methods used from the very beginning through qualitative open-end interviews and the innovation workshop should be seen as a step forward from the old linear steps of design and testing. Not only does it save time, but the methods can focus on the real needs of the target group.

The game board concept that has been displayed to the design sharing community Behance on the internet with a Creative Common license. This will hopefully result in finding sources for continuation of the project and result in the near future in bringing a benefit as well as well-being to the elderly. The implementation space of prototyping and testing of the game board will be the next phase and will hopefully be done in cooperation with a non-profit organization in the future. The workshop and the followed up event that were executed in the Tammenlehväkeskus gave elderly a new view point on what a workshop practice can be and how they can be an asset to their own well-being through the events in the elderly home and the community around. The activity workers with whose help the workshop was done with said to have also influenced positively from the workshop and will continue to use the co-design method in their activity and event work to pursue more activities and events with involving the elderly in the ideation and implementation process.

Thinking about social design in a larger context, as mentioned in Chapter 2.1, the environmental and economic aspect of designers responsibility in sustainable matters are linked to the matter of the social view but too vast to be included in detail in this thesis. The economic aspect of implementing the case study were not given a lot of emphasis in the thesis as the outcomes are still on a concept level. Implementing the intangible solution to a service outside of the elderly home and the tangible solution with the financing and material costs will be done in the implementation and prototyping phase. However, through the background research, workshop and interviews done, a clear market demand can be seen in the outcomes. The environmental aspect could also be weighed

with the materials of the game board as the materials of the game board were thought all the way until the end of the product cycle. Even though the economic and environmental aspects were not discussed in a lot of detail and focused mainly on the social aspect of sustainability, the two other aspects are not meant to be ignored but rather seen as part of the whole system.

In the future, new forms of design will emerge where refreshed and new educational methodologies are needed for designers. However, this does not mean that traditional design for the markets ideology will disappear. Our society is moving rapidly in a spread of networks and it is crucial for designers to understand clearly their view of the society in light of social, economic, and environmental background, which should be integrated to the basis of all design teaching. According to Papanek "design can and must become a way in which young people can participate in changing society". (Papanek 1985, 5.) Participation for change with true responsibility should be part of every designers agenda.

Social change has been evident since the 20th century through expression and contribution of designers such as Victor Papanek and the *First things first manifesto*, but could not be accepted as open-armed by the society and so that a new revised manifesto was written in the 21st century. The shift in the society from passive to more participatory direction in design has made social design evident today. As seen from Chapter 4.4 with real world cases, there are already some companies, charities, exhibitions and non-profit organizations examples of many that have seen the importance of social change in design and are pursuing their way to make an impact on societies in the world all around. It is a set example by well-known design companies such as *IDEO* and *Design Council* to consider social design matters. The design matters are pursued in terms of the year long social projects such as the *Dott projects*, a free toolkit being done for the advancement of innovation methods in third world countries for everyone from a non-profit organization to a design student. The true aesthetic lies in how the importance of sustainable social design can be seen in the staff of *IDEO*, by having an fixed project leader in the field of social design. This shows the relation to a wider professional and societal context by how the

topic is crucial and current in our society today. The exhibition of the *Design for the other 90%* and the charity organization of *Motivation* also contribute to the hot topic of the current rise in social design and show how social design can have a true impact on the third world through first world practices. Also, it is good to notice that social design mostly has a sustainable direct impact, but can also impact indirectly through trying to achieve awareness and inspiration through other means such as exhibitions.

One has to be clear that the purpose of this thesis is not imply to become a radical design activist by turning against the markets. It is simply trying to raise awareness of an alternative approach to the traditional design view and encourage designers to think more responsibly.  Through the company cases, the case study process and Papaneks' '*kymmennykset*' idea, gives some overall idea of how a designer can implement and pursue with the social design practice. However, this is a mere crust of the possibilities and should not be seen to only extend until this thesis.

The overall experience of writing a thesis has been very beneficial in terms of new insights, knowledge and my professional view on design. The experience of working with the thesis was challenging, but overall very rewarding. I hope that the thesis has not only moved and shaped me as a designer, but also readers and designers interested in the topic. To conclude, why should a designer be satisfied in designing a beautiful shell for a printer for the profit of a company when one could tackle problems such as how can design help the well-being of a society? Like the elderly, designers deserve to step out of their unsatisfactory comfort zone and start acting on their true potential. The practice of social design involves a series of methods and decisions that result in a series of consequences on a greater scale, understanding that each step in the design process is a choice that impacts our communities, our world, our lives and the future.

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# APPENDICE

## Appendix 1 The interview base

PELITASO KYSELY

- Mitkä ovat Teidän nimenne ja ikänne?

- Mistä olette saapuneet tänne?

- Onko *Paikka X* mukava paikka asua?

1.  Tuntuuko aika joskus käyvän pitkäveteiseksi? Mihin päiväsaikaan?

2.  Minkälaista toimintaa talosta löytyy? Onko toiminta mieluista?

3.  Pelaatteko talossa paljon *lautapelejä*?

4.  Jos lautapelaamista tarjottaisiin täällä (enemmän), menisitkö mukaan?

5.  Olisiko lautapeliä vaikea lähestyä jos toisessa päässä on tuntematon pelaaja?

6.  Minkä olisi idyllinen lautapelitaso?

7.  Mitä lisäisit lautapelitason mukavuuden parantamiseksi?

8.  Peliteollisuus tekee harmillisen pieniä pelinappuloita hyvään pelaamiseen, oletko samaa mieltä? Miten nappuloita voisi parantaa?

9.  Mitkä muut tekijät voisivat lisätä peli mukavuutta? (Pelipaikka mihin olisi mukava tulla.)

# Appendix 2 The consent of the contracting for the interview

Karelia Ammattikorkeakoulu

Sirkkalantie 12 A

80100 Joensuu

**SUOSTUMUS** opinnäytetyö haastatteluun

Suostun osallistumaan haastatteluun muotoiluopiskelija Emmi Haapajoen opinnäytetyöhön. Työ aihe käsittelee ikäihmisten näkökulmasta ikäosaamista ja hyvinvoininnin edistämistä muotoilun keinoin. Työpaja tapahtuu haastattelu muodossa, jossa keskustellaan annetuista aiheista ja kirjataan vastaukset ylös. Tutkija käsittelee haastatteluaineiston nimettömänä ja ehdottoman luottamuksellisesti. Tutkimukseen osallistuminen on täysin vapaaehtoista ja sen voi keskeyttää niin halutessaan.

**Osallistun haastatteluun ja annan luvan käyttää haastattelusta saatua aineistoa tutkimuksessa.**

Kiitos osallistumisestanne.

_____

Paikka ja aika

_____

Osallistujan allekirjoitus

# Appendix 3 The research permission form

**Karelia**
AMMATTIKORKEAKOULU

TUTKIMUSLUPAHAKEMUS

Haen lupaa suorittaa opinnäytetyöhön liittyvä tutkimus

**Opinnäytetyön aihe:**   Socially responsible design (Sosiaalisesti vastuullinen muotoilu)

**Tutkimuksen toteutuspaikka/-yksikkö:**

Tammenlehväkeskus Oy
Kenttäkatu 17, 33500 Tampere

Yhteyshenkilö: Aija Nikkilä

**Tutkimuksen:**

a) kohde/kohdejoukko:          Tammenlehväkeskuksen seniori asiakkaat

b) aineiston keruumenetelmä: Työpaja päivä

c) aineiston keruun ajankohta:  Torstai 22.8.2013

**Opinnäytetyön ohjaajat:**

Mirja Kälviäinen (mirja.kalviainen@karelia.fi)
*Muotoilun yliopettaja. D'ART Muotoilun palvelukeskus. Muotoilun koulutusohjelma.*
&
Päivi Pennala (paivi.pennala@karelia.fi)
*Lehtori. Muotoilun koulutusohjelma.*

Päiväys: 13/08/2013

**Luvan hakija:**

Emmi Haapajoki
puh. 0407485124

LIITTEET:          - englanninkielinen tutkimussuunnitelma (thesis plan)

# Appendix 4 The consent of the contracting for the workshop

Karelia Ammattikorkeakoulu

Sirkkalantie 12 A

80100 Joensuu

**SUOSTUMUS** opinnäytetyö työpajaan

Suostun osallistumaan työpajaan muotoiluopiskelija Emmi Haapajoen opinnäytetyöhön. Työ aihe käsittelee ikäihmisten näkökulmasta ikäosaamista ja hyvinvoininnin edistämistä muotoilun keinoin. Työpaja tapahtuu kolmessa neljän ihmisen ryhmässä, jossa keskustellaan annetuista aiheista ja kirjataan vastaukset ylös. Lopuksi esitellään ja keskustellaan tuloksista. Ryhmä työpajan kokonaiskesto on noin neljä tuntia. Tutkija käsittelee haastatteluaineiston nimettömänä ja ehdottoman luottamuksellisesti. Tutkimukseen osallistuminen on täysin vapaaehtoista ja sen voi keskeyttää niin halutessaan.

**Osallistun ryhmähaastatteluun ja annan luvan käyttää haastattelusta saatua aineistoa tutkimuksessa.**

Kiitos osallistumisestanne.

_____

Paikka ja aika

_____

Osallistujan allekirjoitus

# Appendix 5 Workshop invitation letter

**Työpaja: Ikääntyvien ihmisten hyvinvointi ja sen edistäminen**

**Torstai 22.8.2013, klo 9 alkaen**
**Viinikka sali**

Heippa hei,

Olen Emmi Haapajoki, opiskelija Karelia Ammattikorkeakoulusta ja etsin vapaaehtoisia ottamaan osaa työpajaan, jossa mietitään yhdessä tapoja miten päivittäistä hyvinvointia voitaisiin edistää muotoilun keinoin. Kyseessä on opinnäytetyöni tutkimus. Tarkoitus on tutkia kokemuksia ja näkemyksiä vanhusten päivittäisestä kanssakäymisestä ja erityisesti päivättäisiä haasteita ja niihin liittyviä ratkaisuja hyvinvoinnin parantamiseksi. Työpaja kestää vajaa päivän jokaisen jaksamisen mukaan. Työpajassa esille tulleet asiat raportoidaan tutkimusjulkaisuissa ilman yksityiskohtia, jolloin tutkittavia tai yksittäisiä henkilöitä ei voi tunnistaa.

Tule mukaan antamaan ideoita ja ajatuksiasi tulevaisuuden ja ihmisten hyvinvoinnin edistämiseksi.

Ystävällisin terveisin,
Emmi Haapajoki

# Appendix 6 Timetable for the workshop

**Työpaja aikataulu**

**Ikääntyvien ihmisten hyvinvointi ja sen edistämien**

klo 9.00 -    Keskustelu kaikille: Mitä on hyvinvointi?

Siirrytään teemaan päivän askareet – käydään läpi päivän tapahtumat ja eri kontaktipisteet (fyysiset ja sosiaaliset) aamusta iltaan

Kuvat päivästä: aamu, aamupäivä, päivä, iltapäivä, yö.
Missä päivänaskareissa tulee vastoinkäymisiä? Vaikeuksia fyysisesti?
Psyykkisesti? Sosiaalisesti? Ongelma kohtien löytäminen ja jakaminen.

**Ruokatauko** klo 11.05 alkaen

klo 12.30 –    Ideointi, ratkaisut ja esittely.
Profiilin tekoa. 'Pirkko mummon' ongelma tekijät ja ratkaisut hyvinvoinnin edistämiseksi. *Kuvalehtien avulla visualisointi, sakset, liimaa ja A3 paperia.*

Tilanteita, kokemuksia ja verkosto tehtävä. Keskustelu.

**Kahvittelu** klo 13.30 alkaen

klo 13.45 – 14.45   Mitä hyvinvointi on sinulle & miten aiot edistää hyvinvointia tulevaisuudessa? Uusia näkökulmia työpajasta.

Kuvalehtien avulla visuaalisointi – sakset, liimaa ja paperia.

Kiitos.