

MOOD BOARDS FOR THEIR OWN FORMATIVE YEARS HELP STUDENTS DESIGN BETTER FOR ELDERLY PEOPLE

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ABSTRACT

The global population is aging, especially in western countries. Until recently, elderly people were targeted as one homogeneous group. While this may have worked in the past, for the present, very critical and often financially independent baby boom generation, it does not. Persons in this older generation have different opinions and different needs; they do not want to be treated as one homogeneous group. To meet their requirements, a design method was developed that takes their formative years (the period when people are between 15 and 25 years old greatly influences which preferences and values they will have during the rest of their lives), the effect of their age (when people age, their skills deteriorate) and the influence of the present into account. Students turned out to have some difficulty understanding the meaning of the formative years. Therefore, additional mood boards were created for more recent years (1985-2005). The first section of this paper introduces the design method. The second part presents the addition and effects of the mood boards for the later years.

Keywords: design method, designing for elderly people, formative years, mood boards

1 INTRODUCTION

The population in western countries is growing older. Not only is the number of elderly people rising, their life expectancy is increasing, and they remain healthy for much longer. In the second half of this century, one third of the population in the western part of the world will be over 50 years old. Many members of this age group will have been quite successful in their careers and will therefore have a relatively large amount of money to spend. This makes them an interesting target group for products and services aimed at their requirements. For many people, the age of 50 is a psychological turning point in their lives [1, 2]. Their children are leaving home or have already left. Their role in the family changes from parent to grandparent. Some of them will be retiring, and as most of them have taken good care of themselves, they will have a great deal of money and time available. They do not plan to leave this money to their children. They are assertive and critical; they want to enjoy the rest of their lives, but they also want to give meaning to their lives (fulfillment). An important part of our method to teach students to design for this target group is the use of mood boards for the target group's formative years (see Figure 2). We observed that the students had difficulties in creating, understanding and using these mood boards.

2 DESIGN FOR THE ELDERLY

Until recently, elderly people were seen as one big homogeneous target group. Present research and (product) developments for the elderly are mainly directed toward overcoming the ailments of old age. The research is based on the premise that old age brings ailments. Although there is some truth to this, these ailments develop many years later for most people. It is not until the age of 75 when 50% of the (Dutch) population have minor health conditions and only about 10 to 15% experience major discomforts (Figure 1) [3].

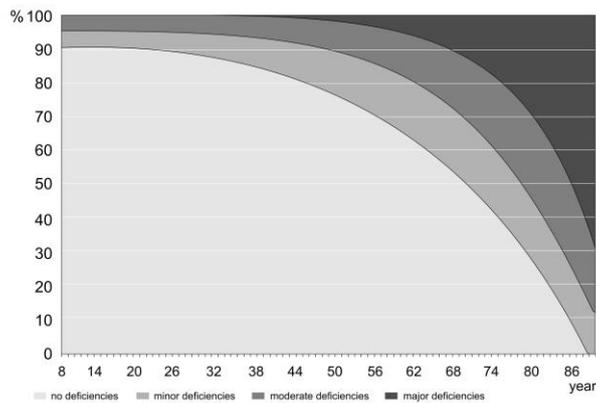


Figure 1. Relationship between age and ailments (Source: VROM, WBO 2002)

3 THREE EFFECTS OF TIME

The factor time influences the way people live, their values and lifestyles, and the way they behave. The following three effects can be distinguished: the cohort effect, the effect of the present, and the age effect.

3.1 The cohort effect

The concept of the cohort effect supposes that most preferences, norms and values of people are formed in their so-called formative period. A cohort is defined as a group of persons of the same age who have had the same kind of experiences in their formative years. Although the age that is the most influential can differ between individuals, it is usually assumed to be the period between 15 and 25 years of age. Between the ages of 15 and 25, most people have many new and first experiences, which are often impressive and worth remembering. These are events like their first relationship, the first time they have sex, beginning a study, their first job, starting to live on their own, etc. These first memories contain many facets that influence the rest of people's lives, their identity, their career, their opinions and values.

3.2 The present

Although generational sociologists often suggest that the formative period determines the lives of people to a great extent, it seems likely that later periods may have some influence as well. Important events taking place after the formative years will also have an impact. Think of for example a war, such as WWII or the Gulf War. Another example of such an influence is the optimism of the 1960s with regard to personal freedom. At the beginning of the 21st century, this optimism gave way to a much more critical opinion, as the result of terrorist attacks such as 9/11 in 2001 and the Madrid train bombings in 2004. People's preferences, opinions and values are mainly established in their formative years, but sometimes change in the years that follow. This influence and the influence of the present can be assessed through market research. Concurrent market research is a common practice among industrial designers; including it when designing for older generations is not very different from what happens in design projects for younger generations.

3.3 The age effect

Reaching a certain age has its effects on what are sometimes called the 'big five' [4]. The big five are extroversion, kindness, conscientiousness, neuroticism and openness to new experiences. Research has shown that older people become less extroverted, less neurotic and less open to new experiences, but are kinder and more conscientious [5]. Four groups can be distinguished.

New Seniors, 50 – 59 years

The New Seniors do not see themselves as elderly and don't want to be addressed as such. Most of them are still working; their careers are running smoothly while their expenses decrease. Their children start living on their own, or have already left home, their mortgages are nearly paid off and many of the products they own are good enough and don't need replacing. They prefer faraway exclusive holiday destinations. They are interested in the economy, technology, and new media.

Young Seniors, 60 – 69 years

The Young Seniors have both time and money. Their children have left the nest. Young Seniors want good quality and service. They are assertive and critical; they want to enjoy the rest of their life, but they also want to give it meaning (fulfilment). They are aware of their own mortality as often one or both of their parents have passed away, so they worry about their health and work on improving it.

Seniors, 70 – 79 years

The Seniors are – to a great extent – comparable to the Young Seniors. However, they develop more and more problems with their health. Their need for medication slowly increases, whereas their mobility slowly decreases. In this period, 30% of them develop major health conditions and about 80% have at least some health problems, although not necessarily severe. They have accepted being elderly and don't mind too much being treated accordingly.

Elderly, 80+ years

The close circle of this group is shrinking. Their friends and relatives pass away, while their mobility diminishes. Their need for medication grows. They start taking stock of their life. As women live longer, the number of women in this group is greater than the number of men.

4 COMBINATION OF THE THREE EFFECTS: THE DESIGN TOOL

The cohort effect, the effect of the present and the age effect form the three parts of the design tool. An important element of the tool is the time line. As Figure 3 shows, the cohort effect and the present are described with the aid of the PESTLE Analysis, which reveals the factors in the external environment that influence a company and its products [6]. For the purpose of our research, we added styling – hereafter, we will call it PESTLE-S – because the existing PESTLE analysis does not take design or styling into account. In our research, however, this is a very important aspect.

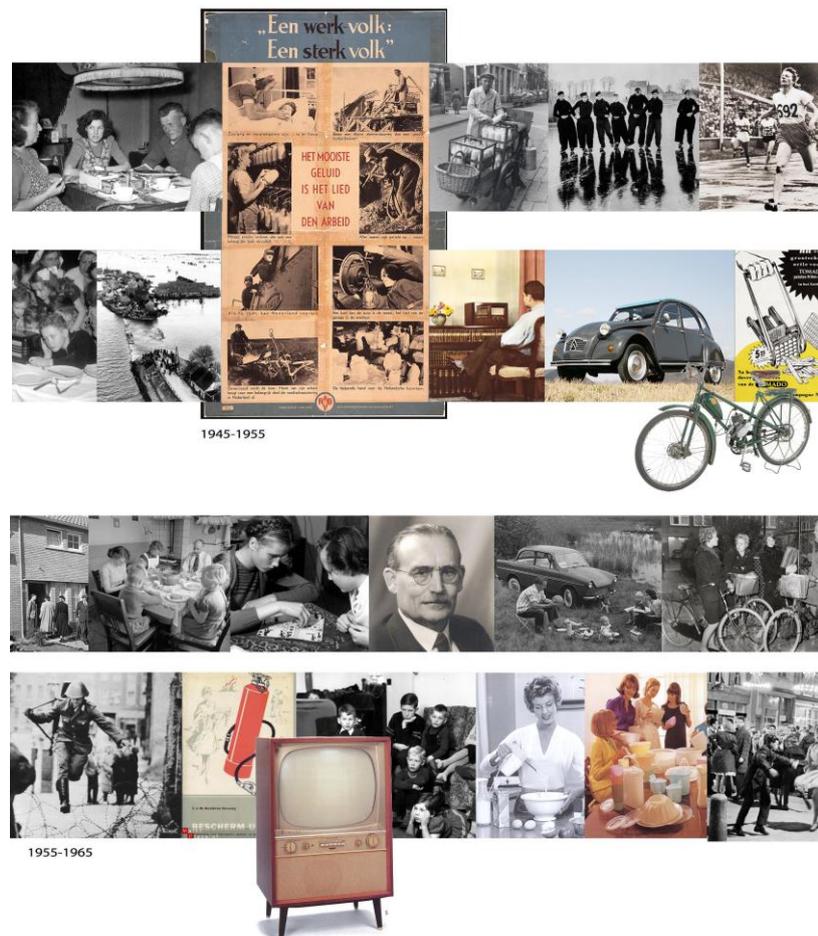




Figure 2. Mood boards give impressions of formative periods. The formative periods 1945-1955, 1955-1965 and 1965-1975 are shown here.

		<i>Cohort Effect</i>				<i>Present</i>	
Political		John F. Kennedy				Obama	
Economical		Growth				Financial crisis	
Social		Youth culture				Ageing	
Technological		Moon landing				Social media	
Legal		Democratization				Privacy	
Environmental						Sustainability	
+							
Styling							
Age Effect							
1950	1960	1970	1980	1990	2000	2010	2020

Figure 3. Schematic representation of the three effects for a person turning 65 in 2015 (born in 1950, formative period 1965-1975)

The cohort effect is visualised with the aid of a database, which contains images with short descriptions of important events that took place in the period between 1945 and 1975. By taking the date of birth as a starting point (in Figure 3, this is 1950), events from the formative years can be selected. A mood board combines these events and images and provides an impression of the formative years (see Figure 2). The other two effects – that of the present and that of age – are part of the usual design methods of most industrial design engineers. Some of the age effects can be found in the preceding sections; the effect of the present should be subject of dedicated market research.

5 EVALUATION

We carried out a small test to evaluate the design tool and formulated a fictitious design assignment for a radio. The design project was executed for three age groups, and for two different life styles within each of these three groups, bringing the total number of targeted groups to six. The present was researched by studying the latest trends in design, techniques, the usage of contemporary radios and related products. Using the tool, Mulhof [2] designed six radios. To test the designs, we set up a small qualitative experiment. In an open interview, ten subjects were asked to choose the mood board that they considered the most striking and recognisable one, without knowing the purpose behind the creation of the mood boards; all six mood boards were shown to them. Next, they were asked to imagine purchasing a new radio and to indicate which design they would prefer. They were not instructed to look at the styling, but the given specifications of all designs were the same. Nine participants chose the mood board that fitted their own formative years. Half of the subjects actually selected the radio set that was created for them. This is an encouraging result. We think that many designers will be quite happy if 50% of their target group actually selects their design. (For a detailed description of this research, see [7].)

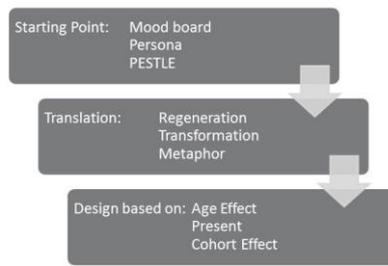


Figure 4. Diagram of the design tool for translating style characteristics into new designs (after Nijkamp and Garde, 2010 [8])

6 TEACHING THE METHOD TO DESIGN STUDENTS

We observed that it is very difficult for design students without experience in the design practice to translate style characteristics into new designs. We developed a practical design tool to support them in this process [8]. This tool is based on an input-translation-output model. The starting point (input) is a target group or a mood board for a certain period. The goal of the process (output) is the design of a product that matches a specific style or time period (Figure 4). We tested the effect of the design tool in the course ‘Methods of Design’ at the University of Twente [8]. A problem we encountered when using this method in our course ‘Design Tool for the Elderly’ was that the students had difficulties figuring out how to use the mood boards (generated from the database) in their design process. Colleague Chris Vermaas suggested creating mood boards for more recent periods as well: 1975-85, 1985-95, 1995-2005 (Figure 5). They are not derived from the database, but are examples of mood boards. This worked well; when confronted with a mood board representing their own formative years, the students immediately recognized and understood its meaning. During our lectures, we now start with the oldest example and end with the most recent. It is amazing to notice how an ‘Aha Erlebnis’ buzzes through the room when the final mood board appears on the screen. A possible explanation may be that people attribute meaning to events [9]. Such meanings are often responsible for – sometimes strong – emotions. In the mood board of their own formative years (1995-2005), the students recognize a number of events that they can attribute meaning to. All the other mood boards are merely history to them.





Figure 5. Mood boards for the formative periods 1975-85, 1985-95 and 1995-2005
(Courtesy: Office of CC, an Amsterdam-based design office)

7 CONCLUSIONS AND RECOMMENDATIONS

This paper introduces a design method that can be helpful in designing and styling products that better fit the requirements of functionality and attribution of meaning for elderly people. The method offers the designer inspiration and knowledge about three effects that influence the choices made by the target groups, namely the formative years, the present – state-of-the-art – period and the age effect. A problem that arose was how to explain the formative period (which determines the cohort effect) to the students. With the aid of mood boards for their own formative years, we were able to help them understand the concept. So far, mainly Master's students working on their final assignments have used this tool to design for elderly people. This year, we will also use the tool in a course for Master's students in earlier stages of their study. We intend to present the first results for this course at the conference in September.

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