# FROM TROUBLESHOOTING TO TRUE EMOTIONAL IMPACT:

# THE ADDED VALUE OF ADDRESSING LATENT CONCERNS IN DESIGN FOR EMOTION

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### **ABSTRACT**

The authors of this paper believe that insight into latent concerns of users is essential to design for emotion. The added value of mapping latent concerns in the 'basic model to Product emotions' (Desmet 2002), is illustrated by means of a case study. The case describes a project that focused on reducing the nuisance of homeless Hindu men in the Transvaal area of The Hague, The Netherlands. For this user group, the individual concerns are thoroughly mapped and translated into designs that create a high emotional impact. It illustrates that latent concerns are extremely useful in social projects. Since solving social problems often requires change of people's behaviour, addressing relevant concerns is crucial. Concluding, the added value of addressing latent concerns is threefold. It enables designers to 1) design for the right concerns 2) come up with meaningful designs and 3) get motivated and inspired as a design team.

Keywords: latent concerns, generative techniques, social design, emotional impact of design

#### INTRODUCTION

The basic model to product emotions describes how emotions are elicited from human-product interactions (Desmet 2002). It introduces three universal key variables in the process of emotion elicitation, which are concern, stimuli and appraisal (Desmet, 2002). The model stresses that emotions are elicited when individuals are encountered with products that are appraised as having beneficial or harmful

consequences for the individual's concerns (Desmet & Hekkert, 2007) (see figure 1).

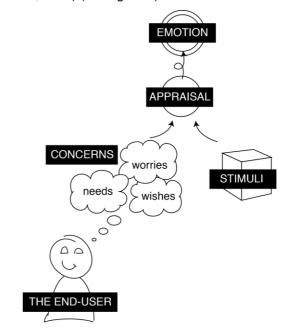


Figure 1. Basic model to Product emotions. Adapted from Desmet (2002).

The authors of this paper envision that concerns play a pivotal role in designing for emotion. Designs based on latent concerns of users, effectuate an emotional impact that cannot be equaled. In this paper, this vision is demonstrated by a design case that explores designing for a social problem. We conclude the paper with a reflection on the added value of a deep understanding of latent concerns.

#### THE ROLE OF CONCERNS

Before describing the case in detail, three aspects of design for emotion are highlighted: the role of concerns in designing for emotion, the role of concerns in designing for social problems, and techniques to reveal concerns on a latent level. Subsequently, the authors' vision on designing for emotion is stated.



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#### The role of concerns in designing for emotion

Concerns are considered as a container concept that includes individuals' major goals, motives, well-being and other sensitivities (Frijda, 1986; Lazarus, 1991). Some concerns are universal, such as the concern for safety and the concern for love. Other concerns are specific to a certain context or culture, for example the concern of being home before dark or securing a good seat for your friend in the cinema (Desmet & Hekkert, 2007). By designing products or services that anticipate on the concerns in an appropriate way, designers can influence the emotions that users experience.

#### The role of concerns in social problems

Social problems concern issues within society, such as crime, homelessness, drug addiction, alcoholism and high unemployment rates. A general aspect of complex social problems is that people's collective concerns, which often focus on the long term, conflict with individual concerns, which are often directed on the short term (Tromp & Hekkert, 2010). Because people are more easily driven by individual and short-term gains, people can behave in a manner that is undesired from a social perspective. An example of such a clash, related to the case presented in this paper, is the individual concern of homelessness to find a place to sleep harming the collective concern to create safe streetscapes in the city.

## Revealing concerns on a latent level

Several qualitative research methods are applied to document people's experience for use in design. Figure 2 shows how different levels of knowledge are assessed by different research methods, from explicit knowledge to latent needs (Sanders, 2001). Techniques such as interviews, observations and questionnaires provide information about what people say, which is mainly explicit knowledge. Observation studies give insight into the physical context of people, and how people do things. Finally, we can dig into the tacit or even latent knowledge of people by means of generative techniques (Sanders and Dadavate, 1999; Sleeswijk Visser et al., 2005). Generative techniques aim to reveal people's latent knowledge: feelings, and dreams for the future on an emotional level (Sanders, 2001). Therefore these techniques can pre-eminently

be used to reveal latent concerns, in projects that involve designing for emotion.

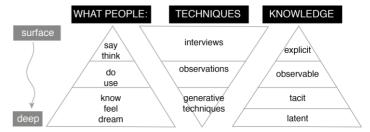


Figure 2. Different levels of knowledge on experience are accessed by different techniques (adapted from Sleeswijk Visser, 2005).

#### **VISION ON DESIGNING FOR EMOTION**

Due to the lack of insight in latent concerns of users, many social problems are tackled by solving collective or individual concerns on a functional level. Often, this results in fighting the symptoms instead of solving the cause of the problem. Furthermore, it often leads to short term solutions. An example of this is fining homeless people who are causing nuisance on the streets or providing them with a bed for one night. In order to develop more substantive solutions, we have generated the following vision.

By combining the basic model to product emotions (Desmet, 2002) with the different levels of knowledge that can be revealed (Sleeswijk Visser, 2005) we can divide the container concept of concerns into explicit concerns that are easily expressed though shallow, versus concerns on a latent level, related to what people know, feel and dream. We believe that deep insight in people's concerns on this deeper level is key in order to effectuate a true emotional impact with design. Especially in social design, a deep understanding of the latent concerns in the specific social context is needed, in order to change people's behaviour substantially. The following case study will show the added value of this vision, when applied in social design projects.

#### THE CASE

The case that will be described hereafter represents a project of the user-centered design agency Muzus conducted together with students from the Man and Humanity program of the Design Academy Eindhoven for the Municipality of The Hague with the aim to contribute to social change. The issue of getting homeless people participating positively in society has been proven difficult to tackle with traditional and

obvious solutions, such as regulations or short stay caring facilities.

#### **CURRENT SITUATION**

Transvaal is a district in the city of The Hague located in the Netherlands. This particular area is considered one of the problem areas of the city, caused by a group of long-term unemployed Hindustani men that maunder about on the streets. Most of them are homeless and amongst them are alcoholics and drug addicts. Most of these men are not able to utilize regular facilities for the homeless, because they cannot meet the strict conditions - such as being sober - to partake in this. On top of this, there is a large taboo placed on problems relating to money, such as debts, by the Hindustani culture. This leads to ignorance of the problem and keeping up appearances. The municipality of The Hague started receiving complaints of nuisance caused by this group from the residents living in the area and fining them resulted only in a temporary result. For this reason, Impegno, a foundation which provides assistance to people who are unable to participate in society anymore, initiated a project. They started coaching and organizing simple activities for this group, such as having dinner together. However, the streetscape of the wandering men did not change. Therefore, the municipality of The Hague was still looking for solutions to solve the nuisance caused by them.

## **REVEALING THE CONCERNS**

To overcome the clash between collective and individual concerns, insight into these concerns is necessary. Users' concerns can be very hard to predict. In this case, the municipality of The Hague formulated the collective concerns. Their aim was to decrease the nuisance on the streets, caused by this group of homeless men. Although the individual concerns of the homeless men were never researched before, the municipality assumed that the lack of money, food and shelter were the most striking unmet needs for these men. Initial solutions, such as restraining orders, were based on these preliminary assumptions, and therefore not considered tentative. Before the designers could start to develop concepts that bridge both the collective as the individual concerns, the true individual concerns of the homeless men needed to be mapped thoroughly.

#### **CONTEXT EXPLORATION**

The designers immersed themselves in the context of the homeless men. The homeless men took the designers on a tour through their neighborhood. Furthermore the designers and the men cooked a Hindu meal together. During these activities, the designers supplied the homeless men with booklets with exercises. These exercises were used as conversations starters to discuss the men's personal fears, wishes, needs and dreams (see figure 3). Additionally, two of the coaches of Impegno were





Figure 3. Context exploration with a tour (I) and a meal.

interviewed as experts. During the activities the homeless men shared their personal stories that contained rich and useful information for the designers (Stappers and Sanders, 2003). Insight into the daily life of the men was gained and a relationship of trust was built. As a wrap-up of the day, the homeless men, the designers and the coaches of Impegno ate the self-cooked dinner together. The output of the context exploration was a detailed map of the individual concerns of the homeless men. Contradicting the initial assumptions, these concerns addressed the desired latent level and were based on research activities. Unlike the municipality assumed, the main concerns of the homeless Hindus were not only the lack of money, shelter and food. The two most meaningful concerns are presented below.

## Personal hygiene is crucial to provide self-esteem

Because the homeless men cannot shave, refresh their underwear or control their oral hygiene, they cannot meet their standards for personal hygiene. Their feeling of being unclean results in a lack of selfesteem. For example, one of the Impegno coaches adopted a homeless lifestyle for one week and started losing his self-esteem after two days. The coach regained this after taking a shower. Due to a lack of self-esteem, the men cared less about other people and had a hard time controlling their addiction to

alcohol and drugs. All in all, the loss of self-esteem increased the nuisance and decreased the men's drive to participate in society again.

## Gap between the homeless and the general public

It appears that a major gap exists between the homeless community and the general public, because they live in separate worlds that hardly come into contact with each other. There is a lack of respect caused by mutual ignorance and the feeling of total disjunction between the two groups.

#### **DEFINING THE MEANS**

Overcoming the top-of-mind solutions, such as donating money or, on the contrary, fining them for causing a nuisance, two new concepts were developed. In contradiction to the preliminary solutions, these concepts bridge the collective concerns and the individual concerns, as were previously described.

#### Vending hygienic needs

Vending machines are usually used for providing (fast-) food in public areas, accessible 24/7. This concept utilizes the vending machines to provide basic hygienic needs, such as clean underwear, toothbrushes and toothpaste in an easy accessible way (see figure 4). The vending machines are located in a public space, so citizens can adapt the concept by putting small change in the machine that opens windows for the homeless men to take items for free. This way, the concept creates mutual respect between the two separate groups. Beneficial of this solution is the controlled use of donated money (instead of buying alcoholics), the anonymous nature of the vending machine and the easy access. But most importantly, it stimulates the homeless to improve their personal hygiene and thereby their selfesteem, as well as reducing the gap between them and the general public.







Figure 4. Concepts Vending hygienic needs (I) and capturing the postbox.

## The homeless postbox

Two types of communication can be distinguished, self-expression and communication with the outside world. The second category can be divided into personal communication (friends and family) and official communication (companies, organizations or authority).

The homeless pointed out that this part of their life is chaotic, which leads to a lower self-esteem and disinterest in taking care of oneself including personal hygiene. Providing the homeless with a personal postbox (see figure 4) offers them a stable place with an address where they can keep personal belongings, and the ability to communicate with the outside world. Also, stationary such as pens and stamps, are stored in their box. This stimulates the homeless to organize their administration and, subsequently, organize their life better. As a result, they are likely to reintegrate into society sooner and easier. The location of the postboxes provides a touch point between the homeless community and the general public, since it becomes a place for brief moments of interaction.

## **REFLECTION ON THE CASE**

The representatives of the municipality of The Hague usually think in terms of controlling nuisance and separating the homeless from the general public, approaching them as a problem instead of people with a different way of living. Immersing themselves with the homeless provided them with a way to think like them – a new perspective on the social issue. Providing these men with subtle ways to participate in society again beneficially reduces the nuisance. The students noticed that at the start of the project, the homeless men were labeled as a problem group. After diving into the daily life of the homeless people, their views shifted from a label towards individuals with personal needs and wishes. This inspired their designs, improving the lives of the persons they spoke to. For the students it was a new way of designing "I never had so much contact with real people". Diving into and designing from the context gave them the ability to come with better ideas addressing the latent needs of the homeless people. The homeless men were happily surprised that the designers were able to understand them so well in a relatively short period of time. They appreciated the opportunity to tell their stories within this project and the personal attention.

The notion that the concepts are based on positive aspects, such as the motivation to take part in society again, touched them. For once, they were not addressed on an aspect that they feel ashamed about, which was highly valued by all of them.

#### **CASE CONCLUSION**

Governments have limited means when dealing with social problems. At best they can change legislation or provide subsidies, however not every type of behaviour allows for legislation (Tromp & Hekkert, 2010). Solving societal problems involves changing people's behaviour substantially, which impedes solving these problems. This case demonstrates that insight into latent concerns of users is very valuable when designing for social matters, because 1) solutions become meaningful to users when addressing these concerns, 2) designers anticipate on the core of the problem, and 3) applying limited means correctly can change people's behaviour substantially.

The case shows that insight into the latent concerns of the homeless creates the opportunity to design solutions that address aspects which are meaningful for them, such as self-esteem, hygiene, self-expression and communication. Therefore the solutions are highly valued by them and can change their behaviour substantially.

Anticipating on latent concerns enables designers to anticipate on the core of the problem, instead of only fighting the symptoms of it. Thereby problems can be solved in a substantial way, which goes beyond troubleshooting. In the case of the homeless men, they can be stimulated to change their undesirable behaviour by enabling them to gain self-esteem. The concept of 'vending hygienic needs' for example solves the problem of nuisance in a way that might seem indirect, but in fact is very effective, because it addresses a relevant concern.

Finally, the case shows that social problems can be solved substantially, even with limited means. The case illustrates that the accessible research techniques that were applied in the case, reveal many latent concerns that are meaningful to the homeless community as well as inspiring for designers. The generated concepts show that groundbreaking solutions can earn strength from simplicity.

## CONCLUSION

A deep understanding of the latent concerns of individuals increases the emotional impact of design because it adds value to the following aspects. First, understanding concerns thoroughly helps designers to address the right concerns with their designs. Designers know which concerns are most meaningful for the users and how different concerns are related to each other. Secondly, the process of revealing the concerns creates empathy for the users, which motivates and inspires designers: 'Labels' become real people; assumptions are replaced by real insights. This stimulates the ambition and motivation of designers. Furthermore it is possible to translate concerns into a design in the right way. During concept development, a concern map can direct designers in their creative and decision-making processes, by prioritizing their concepts according to the concerns of users. This guides them from troubleshooting to designing meaningful solutions that create actual emotional impact.

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