FEEL THE ART; CREATING MUSEUM INVOLVEMENT BY TAPPING UNIVERSAL HUMAN CONCERNS

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ABSTRACT
This paper reports an experience-driven design project that was commissioned by the Amsterdam Rijksmuseum. The aim was to cause a shift in the relationship between visitors and the art collection from one that is experienced as ‘distant’ to one that is experienced as ‘committed’. In five steps, an online application was conceptualised, developed, and implemented. The application aims to enable people to express, share, and interpret their feelings towards the Rijksmuseum collection. The first step was to formulate a profile of universal (i.e. context independent) human concerns that are related to the experience of commitment. Based on a context vision of ‘experiencing art at the Rijksmuseum’ (formulated in Step 2), the universal concern profile was transformed into a situated concern profile (Step 3). A design position was formulated, focusing on the expression and interpretation of feelings (Step 4), and a web application was conceptualised and implemented (Step 5). The case is presented as an example of a design project in which conceptions of universal human values are used to effectively design products or services that have a predefined experiential intention.

Keywords: Design Case; Experience driven Design; Value driven Design

1 INTRODUCTION
This paper reports a design case that was commissioned in 2005 by the Amsterdam Rijksmuseum with the general aim to intensify the relationship between visitors and the museum. The Rijksmuseum that was founded in 1800, has historically been, and is today, one of the most influential museums of art and history in The Netherlands. With a collection of over one million artifacts, the museum is world-famous for its collection of Dutch paintings from the 17th century, with masterpieces of artists like Rembrandt van Rijn, Johannes Vermeer, Frans Hals, and Jan Steen. The current museum building (Figure 1) was designed by the architect Pierre Cuypers, and opened its doors in 1885.

Figure 1; The Rijksmuseum, Amsterdam, The Netherlands
A museum, according to the International Council of Museums (www.icom.museum), is a permanent institution in the service of society and of its development, open to the public, which acquires, conserves, researches, communicates, and exhibits the tangible and intangible heritage of humanity and its environment. Although museums do not have commercial objectives, they can be considered institutes that create and deliver services. Services are compositions of tangible and intangible elements bonded into whole systems [11], and the design of a service requires a careful coordinating of all these elements. In the case of museums these elements are the art works, the attendants, the exhibition halls, the waiting lines, the toilets, the other visitors, ticketing procedures, guides and audio tours, books, items like postcards that can be bought, etcetera. Historically, the design of a museum service was mostly the task of those responsible for the two main elements that define this service: architects (the physical environment) and curators (the exhibitions). Recently, the internet has added a new and influential dimension to the museum service. Museums are nowadays making more and more use of the possibilities that internet offers for exhibiting and communicating about art and exhibitions; initially to support activities situated in the museum building, but increasingly as a supplement to these activities. In the case of the Rijksmuseum, 4000 pieces of the collection, of which approximately 1500 main pieces, can also be explored on the museum website (www.rijksmuseum.nl), featuring extensive information by means of text, images, and animations.

1.1 Design challenge

The Rijksmuseum management (hereafter referred to as ‘the Rijks’) initiated the ‘Feel the Rijks’ design project because they had detected an imbalance in the general relationship between the museum (or the art collection) and its visitors. For a long time it was recognized by the Rijks (and managements of other museums alike) that the frequency with which people generally visit museums was very low: most people only visited museums only once every couple of years. For some reason it did not occur to the general public that they could enjoy visiting the same museum several times a year. The basic goal of the design intervention described in this paper was therefore to stimulate people to visit the museum more frequently. The Rijks envisioned that the low frequency was motivated by a detached nature of the relationship between visitors and the exposed art, and that the frequency can be increased by a shift from a detached to an involved relationship.

In the current situation, the general public did not fully feel at ease when visiting the museum. Many people visited the museum because they felt that it was important for their general cultivation and overall cultural awareness. In the light of this motivation, the relationship with the museum was experienced like the relationship of students with their high-school teachers. Although, on the one hand they enjoyed the exhibited art collections, on the other hand, they were often also troubled by the impression that their general art knowledge and knowledge of the exhibited work was not sufficient to appreciate the value of the works and understand the (historical) meaning. This experience coincides with a feeling of falling short, with an unwanted negative effect on the self-confidence. Effectively, many people do feel some relief when, after one or two hours of exploring the museum, they settle in the cafeteria to have a cup of coffee. The Rijks had identified this aloof relationship as problematic, and wanted some design intervention to change this relationship. The design challenge, therefore, was to create some alteration in the service-chain that stimulates this alternative relationship.

2 DESIGN APPROACH

This design project is an example of an experience-driven design case. The aim was to generate a shift in how the visitor experiences his or her relationship with the art collection. There was no predefined means (e.g. design an exhibition space; design an entrance; design a website application, etcetera), but only an intended experiential effect. The method that was used to conceptualise ideas that should stimulate this intended shift, was formulated by combining insights drawn from two design approaches. The first is the vision-centred design approach (ViP) introduced by Hekkert, Lloyd and van Dijk [8], and the second is the ‘design for emotion’ approach introduced by Desmet [2]. The vision approach has three main starting points. First, design is about looking for possibilities, and possible futures, instead of solving present-day problems. Second, design is a means for accomplishing appropriate actions, interactions, and relationships. Third, the appropriateness of an interaction is determined by the context for which it is designed. This context can be the world of
today, tomorrow, or may lie years ahead. This makes this approach context-driven, and particularly suitable for the current design goal. The design for emotion approach is based on the proposition that all emotional experiences hide an underlying concern. We are angry because someone’s action conflicts with our concern of respect, and we are afraid because something conflicts with our concern of safety. In order to design something that elicits a particular intended emotional experience, one can first formulate a concern profile that represents those concerns that are, in the situation in which the product is used, involved in the appraisals that elicits the intended emotion.

Our approach was to formulate a vision of what kinds of concerns are involved in the ‘commitment experience’ in the particular context of the relationship with art, and to use this ‘concern profile’ as the basis for the design process. The process consisted of the five main steps that are shown in Figure 2. The first step was to formulate a vision on the general (universal) concerns that are related to the experience of commitment. The second step was to generate a vision of the context in which this relationship will take place. In the third step, this context vision was used to detail the concern profile to the particular relationship between visitors and the art collection of the Rijksmuseum. In the fourth step, this specified concern profile was used to formulate a design position, which was used to conceptualise a design in the fifth step.

![Figure 2: Concern-based design approach](image)

2.1 Universal concerns underlying the experience of commitment (Step 1)

Emotions arise from encounters with events that are appraised as having beneficial or harmful consequences for the individual’s concerns, that is, his or her major goals, motives, well-being, or other sensitivities [6]. Concerns are the dispositions that we bring into the emotion process, and stimuli will only elicit emotions if they are somehow relevant (conflict or help to achieve) one’s concerns [9]. The number and variety of human concerns is endless. Types of concerns reported in the research literature are, for example, drives, needs, instincts, motives, goals and values (for a discussion, see [10]). Goals, for example, are the things one wants to get done and the things one wants to see happen, and standards are our beliefs, social norms or conventions of how we think things should be. Whereas goals refer to the state of affairs we want to obtain, standards are the states of affairs we believe ought to be. For example, many of us believe that we should respect our parents, or wear clean clothes at work. An appropriate means for understanding emotional responses, is to understand the concerns that underlie these emotions. For that reason, the first step in this design project was to understand what concerns are involved in the process that underlies the experience of commitment in the domain of art reception.
On a basic level, our concerns are universal, shared by all humans, like the concern for safety and the concern for love. Most of the time these concerns are latent (sleeping), as long as the circumstances pose no threat or possibility to their fulfilment. The concern of physical well-being, for example, will stay asleep until something threatens the physical well-being, like an upcoming headache, or a news item warning for the risk of eating unhealthy food. Sleeping concerns are latent in the sense that they only turn to the foreground when the factual circumstances differ from satisfaction conditions. Although concerns are situational in the sense that they are influenced by the context or situation in which they are activated, these situational concerns are always derived from higher-order universal concerns. Several authors have proposed taxonomies of universal concerns. Chulé, Read, and Walsh [1] developed a taxonomy of 135 universal concerns by combining sets of concerns published in the psychological literature. Examples of concerns included in this set are: seeking fairness, being respected by others, having friends, helping others, knowing myself, and etcetera.

In a brainstorm session that involved both designers, the authors, and employees of the Rijksmuseum, concerns related to an 'commitment experience' were explored by analysing both examples of relationships that are experienced as committed, and relationships that are experienced as indifferent. The approach was to first formulate personal examples, and then to discuss what particular (situational) concerns were involved in these examples. Once we had a clear picture of the situational concern, we attempted to infer what universal concern underlies it. Taxonomies like the one developed by Chulé et al. [1] were used as a source of inspiration for formulating the universal concerns. The result of the brainstorm session was a basic set of four universal concerns that were envisioned to be involved in the experience of commitment. Someone can experience a relationship with something or someone as committed when the following four concerns are supported in this relationship:

- The concern of being able to contribute (helping others or contributing to a general cause)
- The concern of being recognized by others (being admired, recognized, or accepted by others)
- The concern of personal growth (experiencing the ability to grow as a person)
- The concern of being affectionate (being empathic or affectionate towards others)

2.2 Rijksmuseum context vision (Step 2)

The way in which the universal concerns are activated depends on the context in which they are activated. For that reason, the second step was to formulate a vision of the context in which the relationship will be experienced. Similar to the first step, a brainstorm session was organized with designers, the authors, and employees of the Rijksmuseum. In this brainstorm, factors were formulated that describe a wide variety of aspects forming the context. The most interesting, inspiring and relevant factors were selected and used as a basis for a context formulation:

- The world is a stage, has an image dominated culture, requires us to make a lot of choices, has a hybrid cultural identity, and provides us with many sources of knowledge.
- The Rijksmuseum has international status, represents high quality and authority, is professional, conservative, intimidating, proud, Dutch, pedantic, reliable, and leading.
- People like to show their knowledge to others, are insecure about their knowledge on classic art and their taste in art, want to be entertained, are spoiled, look for authenticity, want diversity in their activities, need rest (on demand), want to define themselves, are competitive, don't know a lot about history, and want to belong.

These factors were combined to a comprehensive context framework that represents the coherence in the context-factors (Figure 3).
I versus we: We want to define and design our identity (to be unique), and at the same time connect to a group (to belong).

Make choices: We are forced to choose; the number of options to choose between increases, and we have more and more freedom to make autonomic choices.

Taste insecurity: We are insecure about our knowledge about and taste for (classic) art.

Authority reputation: Authority is no longer determined by reputation. There are many sources of knowledge, and many ways in which these sources can be considered to be valuable.

This context framework is not intended to be objective or factual, but the design team’s point of departure that should give direction to the design activities, and enable the team to evaluate the appropriateness of design ideas.

**2.3 Concerns underlying the experience of commitment in the context of visiting the Rijksmuseum (Step 3)**

The context framework enabled us to formulate how the universal ‘commitment concerns’ are activated in the context of experiencing art at the Rijksmuseum. This resulted in the following eight Rijksmuseum visitor commitment concerns:

- **The concerns of being able to contribute**
  I want to be able to share my art experience with others
  I want to be authentic and genuine

- **The concerns of being recognized by others**
  I want to be autonomous and unique
  I don't want my response to art look stupid or ignorant

- **The concerns of personal growth**
  I want to be able to interpret my personal feelings towards a work of art
  I want a reliable and personal guide to help me understand art

- **The concerns of being affectionate**
  I want my understanding of a work of art to affect my feelings towards that work
  I want to be able to relate to the feelings of others
2.4 Design position (Step 4)
On the basis of the previous three steps, the following design position was formulated: “we will design a personal guide that enables people to guide others: the guide will help people to: (a) understand what I feel, (b) feel what I understand, and (c) exhibit (or share) what I feel and understand” (Figure 4).

![Figure 4; design position](image)

The basic idea that underlies the design position is that art can serve as a reflection of oneself and help us to define ourselves, and that this reflection can be shared with others. Although often only experts are confident to express knowledge-based attitudes, everyone can have feelings, or an artistic experience. Not everyone can explain or understand art, and yet everyone can experience it. Whereas in the ‘old’ relationship with art, the visitor was allowed to observe the artworks, represented as important cultural icons, in the ‘new’ relationship, the artworks can also be a reflection of oneself, and one can share that with others: art can help you to define yourself in the face of the others.

A core factor in the design statement is ‘feelings;’ the subjective experience visitors have in response to works of art in the Rijksmuseum collection. The design intends to enable visitors to express and understand their feelings. As a starting point we used a framework that distinguishes three components of product experience (Figure 5). Following Hekkert [7], Desmet and Hekkert [4] distinguished between aesthetic experiences, experiences of meaning, and emotional experiences.

![Figure 5. Framework of product experience](image)

At the aesthetic level, we consider a product’s capacity to delight one or more of our sensory modalities. A product can be beautiful to look at, make a pleasant sound, feel good to touch, or even smell nice. At the level of meaning, cognition comes into play. Through cognitive processes like interpretation, memory retrieval, and associations we are able to recognize metaphors, assign personality or other expressive characteristics, and assess the personal or symbolic significance of
products. At the emotional level, we refer to those affective phenomena typically considered in emotion psychology and in everyday language about emotions, love and disgust, fear and desire, pride and despair, to name a few.

2.5 Design concept (Step 5)
The aim was to create a staged implementation of both new web-based and museum-based interactions. In this paper, the first stage, an online application is reported. The application, designed by Fabrique Communications and Design (Delft, The Netherlands), can be found on [www.rijksmuseum.nl/voel-het-rijks](http://www.rijksmuseum.nl/voel-het-rijks) (the interface is currently available only in Dutch). This application is a website visited at home (or at any location with access to the internet); usage can be, but is not necessarily, stimulated by a (planned) museum visit because in the current states it operates independently from activities inside the museum. Below, a brief explanation of the basic functionalities of the application is provided. The core of the design is an online dynamic and interactive two dimensional representation of feelings elicited by art works. Every visitor can express his or her feelings towards works of art with five scales (Figure 6).

![Figure 6. Reporting feelings towards work of art.](image)

On the left side of the screen a work of art is depicted. Below the picture there is some information about the work of art, the number of people who have responded to it, and some opinions of visitors. On the right side, nine seven-point scales are depicted that represent a cross section of experiences that are often elicited by art. Emotional experience is represented by attraction versus aversion, fascination versus boredom, and admiration versus contempt. Aesthetic experience is represented by beautiful versus ugly. Semantic experience is represented by elegant versus ungainly, generous versus sterile, modern versus old-fashioned, fitting versus irrelevant, and complex versus simple. Once the scales are filled in, the visitor can add some text to explain his or her feelings and click on next. Then a two-dimensional representation of the feelings elicited by this work of art is shown (Figure 7).
Each manikin represents a visitor that has shared his or her feelings towards the work of art. The manikin with the double outline represents you. You can see how your response compares to the responses of others. When you place the cursor over one of the manikins, the added comments will appear. On the left side of the screens there are some buttons to select another work of art, go back, or to make an e-card (a virtual postcard that is send by email) with your feelings. When you click on a particular manikin you will see an overview of all works of art that were rated by this particular person (Figure 8).

Figure 8 shows the works of art that one particular person responded to, and a representation of the emotional impact of these works of art on that person (Xandra). One can click on a work of art to see how other people feel about the work of art. Or, alternatively, one can express his or her own feelings to the work of art, by clicking on the particular work. The buttons on the left side of the screen are: 'start over', 'go to other selections of works', 'give your opinion', 'go to your own selection'.
Besides the possibility to see the responses to particular works of art, or the responses of particular people (including yourself), the application also offers some other viewing possibilities. Figure 9 shows additional options for visitors to explore the emotional impact of works of art.

Figure 9: alternative representations

Figure 9 shows a navigation screen on which you can select particular 'top-twenty' selections. For example, one can select to see the most beautiful art, the most irritating, the most fascinating, and etcetera. Figure 10 shows an example of the most beautiful works of art.

DISCUSSION

An interesting aspect of the 'feel the Rijks’ application is that the interaction does not involve a particular predefined path. The user can browse through the collection and base his or her navigation on intuition and feeling. The feelings of people play a central role; one can investigate his or her own feelings, or the feelings of others. Whether or not the application did generate the intended more committed relationship between the visitor and the museum has not been assessed, but the application itself did prove to stimulate a lively online community of people expressing and sharing their feelings towards artworks. In the implementation stage of the project, it was found that the interface needed to
be simplified. The use of nine different scales to express feelings, related to three types of experiences, was felt to be too complicated by the Rijksmuseum management. For that reason, the number of scales was reduced in the final version to five, representing aesthetic and emotional experiences. Also the interaction style of the website can still be improved. Although the site does enable people to express their feelings towards art, the way in which this is done was found to be rather technical (e.g. by using scales and sliders). The design can be optimised by facilitating an interaction style that is more congruent with the experiential function of the website. This illustrates that vision based design projects require careful implementation steps, making sure that the actual usage and user experience fit with the envisioned or intended effects. Moreover, an evaluation procedure, involving stakeholders like museum employees, management, and museum visitors, would have been in place to test the appropriateness of the design.

The launch of this online application for the Rijksmuseum is in line with the proposition that the introduction of virtual environments can make services more attractive to users and productive to the organizations that deliver them. This is comparable to services offered by companies and institutions like universities, banks, and airports, in which technology introduction has drastically transformed the service systems. At the same time, because of the increasing involvement of technology, the design of these services is becoming more complex. In these cases, it is no longer enough to carefully design the isolated elements, assuming this will not alter how value is created for customers in the end. Instead, all elements, including the physical, and virtual, should be considered a system, in which all elements should contribute to the experience of the customer. In this design case, the focus was on the visitors and their relationship with the museum and artworks. In order for the resulting ‘feel the Rijks’ community application to have a full-size impact on the visitors’ experience, there should also be some manifestation in the actual museum building of the data that is generated by the online community. An example would be the organisation of dedicated ‘feel the Rijks’ exhibitions, such as a monthly ‘top 20 of fascinating and boring works’ exhibition. In order for this to actually take place, not only the visitors but also the employees of the Rijksmuseum, the experts and curators, should be enrolled. This illustrates that in the complexity of service design, the effect of altering one element can only be understood by assessing it in relation to all other elements that are influence or are influenced by this element.

All our emotional experiences involve personal concerns or values: we are only emotional about the things we value. Previous design cases have indicated that understanding user concerns is a useful start for experience-driven design projects (see, for example, [3]; [5]). A complicating factor for acquiring this understanding is that the number of possible concerns is basically unlimited, and concerns differ between people, situations, and moments. For that reason, it seems sensible to investigate for each design case what particular concerns play a role, considering who will use the product, and in what situation the product will be used. Various methods are available for gaining rich insights in situated (context dependent) user concerns. Examples are generative techniques, interviews, and questionnaire studies (see [12] for an overview). An interesting aspect of the current project is that it illustrated that in experience-driven design projects it is also possible to start with looking at user values on a more abstract level. At a general level, the unlimited set of situational concerns can be related to a limited set of universal human values. In this project, we first attempted to understand the values on a universal level, involved in the experience that we intended to design for. Then, we formulated a context vision to enable ourselves to transform these universal values to situational concerns. We found this approach to offer both structure and inspiration. Current developments in user-centred design approaches, appear to based on the presupposition that in order to engage in user-centred design activities, one should always involve the end user at an early stage in the design project. Also in this project it could have been fruitful to involve museum visitors (and other stakeholders like museum employees) in the design process. This would have, for example, resulted in a different or more elaborate concern profile, an adjusted design framework or design position, and additional design ideas. Although other design cases have shown that this approach can contribute to the appropriateness of the end result, our results indicate that user-centred design does not necessarily require involving end users in the process. Because involving users in an early design stage requires a substantial investment of time and resources, this should not be done by default, but only in those projects where it justifies the investments. Luckily, when it comes to understanding users, designers do not have to
‘start from scratch.’ A lot of knowledge and insights about human concerns and values are readily available in the social and behavioural science literature, and although universal rather than situational, these insights can be useful for all design initiatives because behind every situational concern, a universal concern can be found.

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