

# The aesthetic zone of interaction - How are aesthetic design qualities experienced?

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## INTRODUCTION

The aim of the present position paper is to raise issues concerning aesthetic experience in relation to an ongoing work of designing an artefact encouraging video reporting of personal experiences. The work serves as an example of a design experiment where aesthetic qualities are emphasized, but where the resulting interactions have not yet been analyzed in relation to these qualities. Our position is that the aesthetics of an interactive artefact evolves in the interactive zone between people who use it and the artefact itself. The aesthetic qualities are, thus, crystallized in the use of the artefact – whether it ranks high on a usability scale or not. Just as usability qualities, the aesthetic qualities contain contextual factors of its users, such as their pre-comprehension of the artefact, their cultural background and their emotional states. Furthermore, they include the context of the artefact, such as its physical design and the environment of its use. Our standpoint is consistent with Shusterman’s pragmatist approach to aesthetics, as related by Petersen et al. [2]. This approach promotes aesthetics of use rather than aesthetics of appearance. The experience of aesthetics lies in the interaction with the artefact rather than merely in the visual perception of it.

In relation to the workshop “Aesthetics as critical computing” we would like to discuss three major issues of general interest, with the experiment with The Well serving as a concrete example to relate them to. They all relate to the general question of the nature of users’ emotional processes involved in interacting with digital artifacts. The issues are:

- 1 Is it possible to identify particular design features significant for supporting behaviour involving exposure of personal experiences? In the particular experiment reported, we are especially interested in identifying design qualities relating to:
  - the physical environment inspiring users with integrity, serenity and respect in order to make them feel comfortable in personal exposure.
  - a non-intelligent agent eliciting emotions of being cared for and listened to.
- 2 What methods and techniques may be used to address questions involving the relationship between aesthetic design features and behavioral responses? Think-aloud-methods usually work well for capturing people’s reasoning on a cognitive level, but they might be inadequate for capturing emotional responses to aesthetic design.
- 3 How may qualitative data, such as video recordings tell us something about how the aesthetical aspects of the design were experienced?

In order to relate the above questions to a concrete example, the background and procedures of The Well are briefly described in the following sections.

## An illustrating example – The Well

The Well is a recording booth designed to allow volunteer workers to make personal video-recordings of their experiences of their work at the festival. We refer to the Well as an *expression booth*. Briefly, the goal of designing an expression booth was to create a tool and an environment for expressing thoughts and emotions related to the work and the role in the festival organization. This type of artefact would relieve its users of frustrations, facilitate for them to reflect upon their own role, report on things they were dissatisfied with and on things they were pleased with. The user expressions could, thus, include factual reports as well as emotional statements. Major concepts inspiring the design were “cleansing”, “testimony”,

“reflection” and “analysis”. The artefact was designed with the intention of placing its users in an emotional state which would facilitate for opening up and freely express their minds through a video-recording visible and audible to themselves. We assumed that the aesthetic design of the Well was to play an important role in users’ willingness and ease of exposing their views and feelings. This act was referred to as giving “a personal testimony”.



Figure 1: Exterior view of The Well



Figure 2: Interior view of The Well

A stage designer made the physical design of The Well, basing her ideas around the concept of a confessional booth and her associations went to the Maya culture, to which she turned for inspiration. In this context, the stage designer saw the user behavior as similar to a rite. The name The Well was chosen, since a well in the Maya-culture represents a health giving and a social place, where people go not only to collect water but also to meet with and speak with other people. Water is considered sacred in most cultures and is a carrier of symbolism, representing life, flow and cleansing. In the artefact flow would stand for the flow of words and free association and cleansing would characterize the process of expressing one’s opinions of the work with the festival.

The stage designer’s ideas of what the user was to experience had to do with the type of emotional state elicited and the power of attraction the design had on users. The intention was that the design would affect the emotional state of the user through, for instance, the choice of material, colours, shape and decorations. These features would place the user in a state of feeling safe to open up and expose herself. Integrity and seclusion of the user were seen as central. Also the feeling of reverence for The Well was considered important. Moreover, the design would serve a role in attracting users through inviting and encouraging them to use The Well. Of course, the ideas of the stage designer also rested upon artistic and aesthetic considerations, such as concordance in style and metaphor. Thus, she communicated traits of the Maya-culture to the animation designer, in order to avoid a clash of styles between the design of the booth and the design of the screen animation. Important characteristics were, for instance, the use of animals in stories in the Maya-culture and the use of earth colors and turquoise.



Figure 3: The animation shown on the screen while the video is recorded

Figure 3 shows the animation visible to the user while she/he is interacting with The Well. The user watches herself communicating with the monkey on the screen. While the user talks and moves she is filmed by a video camera attached above the screen. The dialogue between users and the animated monkey was not real in the sense that the monkey's response was based on the utterances of users. Rather, the monkey's non-sense humming was pre-programmed and uttered at regular intervals. The monkey was designed to model a non-verbal behaviour of a "caring person" displaying an open posture, head nodding and affirmative humming [1]. However, it was not possible to time the monkey's humming in response to the users' utterances, since the hummings were pre-recorded. There was, thus, a risk that the monkey would interrupt the user. Nevertheless, the purpose of the animation was to provide the user with a caring and concerned character - neutral regarding sex and age - to communicate their personal views and feelings to.

The Well was situated inside a building hosting the canteen for the volunteers and was strategically placed to attract the attention and curiosity of the functionaries. It was possible to use The Well, whenever the canteen was open, that is from early in the morning until late in the evening. A member of the project team, who also served as a volunteer festival worker, sent information to all the 200 key functionaries about The Well, the purpose of it, and its location.

#### **The video clips**

A total of 70 volunteer workers used The Well. Out of these, about 45 users belonged to the initial target group of key functionaries. However, in the subsequent analysis video clips from all users are included. In total, 128 video clips were produced. In 37 of these, there were two or three users. 25 users made more than one recording – between 2 and 9. Nine users made 2 recordings, five users made 3 recordings and one user made 9 recordings.

A total of 128 volunteer workers' video clips were watched, transcribed and analyzed according to procedures for Grounded Theory [3]. Three major categories of interactions emerged: Tests of the actual prototype (38 clips), playful interactions (14 clips), and testimonies of the work of a volunteer (76 clips). The first category includes both single and multiple tests from the same persons. Characteristic of these interactions is behavior directed towards figuring out the monkey's response. The category of playful interactions includes video clips with volunteers using The Well for making faces or performing songs. These video clips mostly show more than one user interacting with The Well. The final category – testimonies - includes video clips where users are focusing on the task mentioned to them in the instructions to The Well – to express thoughts and feelings concerning their experiences as a volunteer worker in the festival.

The testimonies are stories told by individual key functionaries. All but one testimony is given by single individuals and they indicate that the task given in the instruction is taken seriously. All testimonies focus on the role of the festival worker. In the cases where testimonies are given by one user in more than one video clip, these relate a sense of continuity and a more complete picture of the role. The single clip testimonies are more of the nature of short suggestions and pieces of advice or just an expression of well-being. A further analysis of the testimonial video clips was made in relation to which type of information they provided. Three major types were identified:

1. Information dealing with the *preservation of knowledge* in the festival organization.
2. Information relating fragments of the physical and psychological *context*.

3. Information concerning *problems*. Since this is the largest type of testimonial expressions, we have divided it into the further categories of problems of communication, problems of a social-relational nature, practical problems and problems having to do with following rules.

The third major type of testimonies, conveying some kind of problems experienced by the volunteer workers could be further divided into *problems of communication, social problems, practical problems* and *problems of following rules of festival work*. In general, the testimonies conveying problems contained a higher degree of emotional expressions than the other types of testimonies. For instance, there were video clips showing festival workers expressing their frustration and irritation over certain experiences. These include the experience of being unjustly treated and the experience of not being taken seriously. Video clips also displayed a lot positive emotions indicated by smiling faces and cheerful attitudes concerning the work in the festival. It is interesting to note, however, that while frustrations and irritations are mostly expressed by single users of The Well, statements expressed by two or more users mostly contain positive emotions.

## DISCUSSION

The video clips provide us with material for constructing an image of the organization of work of the festival where The Well was placed. Testimonies of volunteer workers who used The Well provide us with fragments contributing to the whole. In general, the information provided by The Well reflects the individual volunteer worker's role in the organizational processes of the festival: It is a problem-solving role and a role requiring the handling of social relations, a heavy workload, and unanticipated incidents. The video-clips may also be viewed in the perspective of aesthetic interaction with The Well. In addition to reflecting the volunteer worker's role they reflect the experience of interacting with The Well. This is consistent with our position that the aesthetics of an interactive artefact evolves in the relationship with its users. As there were clear ambitions in the design of The Well to elicit certain types of experiences – both in relation to the physical design of the booth and in relation to the animation – obvious questions to pose to the video material are:

1. How did the physical design of The Well affect the expressions recorded by the volunteers? Did they attract the target group? Did they make the user feel safe to open up and to expose her emotions?
2. How did the animation and the behaviour of the monkey affect them? Did they feel cared for and listened to?

The present video clips are not sufficient to answer the above questions. However, they may provide us with hints on where to look for indications of behaviour approaching the questions. Information concerning personal experiences is probably indirect rather than direct, since it might be difficult for a user to verbalise aesthetic experiences. The fact that testimonies obtained from users contained a considerable amount of personal thoughts and views indicates that these users felt at ease exposing themselves. Still, we lack information regarding whether this was due to the design of The Well. In a subsequent experiment we will test instruments for retrieving information on the nature of the aesthetic zone of interaction. We plan to test methods from the area of psychology to gather information about people's aesthetic experiences of the design. Thus, we end this position paper with questions rather than with answers. Hopefully, though, the discussion of these questions may contribute to clarifying issues involved in the evolving research area of aesthetic experience in the design of interactive artifacts.

## REFERENCES

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