

My personal rollercoaster journey of discovering the combination of rich interactions and aesthetics

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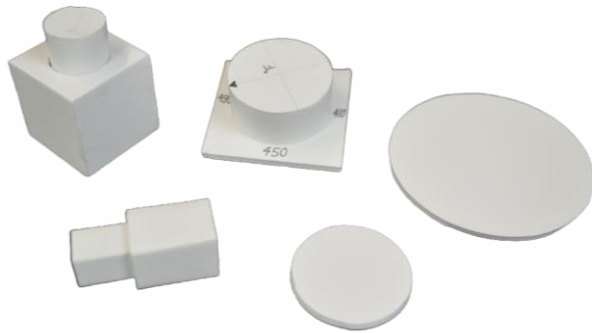


Figure 1: Experience prototype of the Philips alarm clock

INTRODUCTION

Growing up with everything around us developing so quickly makes it hard to observe and evaluate what is 'good design'. However, when being able to zoom out of this developing world, it will be visible how important design choices are. Affordances in design [6], dynamic forms [8], couplings between action and a product's function through the use of feedback and feedforward [2] shape the main factors to design a good aesthetic interaction. The course Aesthetics of Interaction pulled me into a rollercoaster journey with peaks and valleys, learning about what exactly makes interactions aesthetic, and how I could take this with me as a designer. This paper shows my journey, starting from simply trying to understand the meaning of aesthetics of interaction and ending in creating my own view on the aesthetics of interaction.

DESIGN PROCESS

For the first assignment, assignment 2, a Frogger framework [9] was used to analyse an already existing device. Based on this analysis it was seen how feedforward and feedback were connected and what points for improvement could be. These improvement points were then translated into an experience prototype [2].

I analyzed Philips' alarm clock [7] due to its interesting limited feedforward mechanism, consisting only of a touchscreen and push button, resulting in a limited interaction with only sound and a screen as feedback. The interaction focused on setting the alarm and providing physical feedback on the amount of sleep already obtained, rather than remaining sleep time. To achieve this goal, a rotatable knob was used as feedforward to indicate the amount of sleep with adjustable size feedback, resulting in renewed interaction (Figure 1). Interaction relabelling and extreme characters [3] were then used to gain more insights on thinking out of the box. A steering wheel from a car was used for interaction relabelling (Figure 2). This revealed how 'simple' and intuitive it is to use new forms of feedforward and feedback for everyday tasks.



Figure 2: Steering wheel from a car relabelled as an alarm clock

Even more knowledge was gathered from creating multiple extreme characters. After creating multiple, one final extreme character was chosen. For the first iteration, making use of hidden affordances was the main idea (Figure 3).

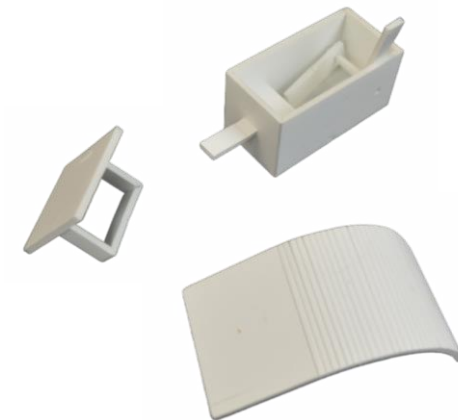


Figure 3: Experience prototypes based on the extreme character, focused on hidden affordances

However, these prototypes did not create enough interesting insights, so a new iteration led to a combination of multiple interesting characteristics: customizability of the product [5], wearability, waking up by events and making use of hidden affordances (Figure 4).

The beanie system, with its unique combination of the four characteristics to wake up the homeless male, was a valuable learning experience in thinking creatively. However, it was necessary to move away from such an extreme concept.

Still having the homeless male in mind, new iterations were done. Wearability, customization and waking up by events were the main themes for the first two iterations for the final design.

A wearable arm band was created to aid homeless survival (Figure 5). Through giving feedforward it matches nearby companies/organizations to the homeless person's needs, providing feedback through sound and vibrations to alert them when necessary resources become available. Besides that, another prototype was created for a woman that needs to plan her day and get notified for activities. However, these concepts were more focused on the story around the concept than on the aesthetic interactions. That is why a whole new idea was developed, keeping in mind the importance of aesthetic interactions. This time no target user was taken, but the focus was put on how the aesthetics of the product could influence the interactions. The term 'waking up' was taken more freely, so instead of waking up from sleeping, it was now about waking up multiple times throughout the day, reminding the user of what he/she is doing, based on the second iteration for the woman. A main theme of the concept was 'balance', so it was explored how balance could be expressed in interactions and aesthetics, e.g. pulling, rotating or squeezing. Squeezing was chosen as the main interaction since this was most interesting regarding dynamic form [8]. Then it was looked at how aesthetics could make squeezing an intuitive movement. It was also explored how aesthetics could (de)motivate a person to do something, by e.g. having different shapes, structures or materials. Lastly the options for feedback were considered. The product should stimulate the user to take action, so it was researched how feedback could influence the user's choice. This resulted in a final prototype where force, changing shape, light and vibrations are the main ways of getting feedback from the product (Figure 6) [1].



Figure 4: Final prototype for extreme character [4]



Figure 5: Iteration towards the final design: wearable arm band



Figure 6: Final design shown in two different colors

DISCUSSION

This course has been a rollercoaster journey. Through the different projects and readings, especially the final project, it has become clear how my approach as a designer and design process have been influenced. I used to like or dislike a design based on my experience, but through the different theories I have now learned how to be more critical towards the details, feedforward, feedback, experience, interactions, aesthetics and especially towards linking all of these together. Now I am able to see more critical parts throughout a project, which can be seen in the final product, where the first idea was thrown away and started over focused on aesthetic interactions.

CONCLUSION

I now perceive the aesthetics of interaction as the act of recognizing and analysing the essentials of design, wherein every detail contributes to the user experience. The designer's analyses and expertise form the interaction, but it is needed to stay critical if the aesthetic experience really results in the desired interaction, and thus the desired functionality.

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