

Aesthetics of Interaction: Reflection

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INTRODUCTION

In this elective I became further acquainted with fundamental Interaction Design (IxD) theories via lectures, literature review and application in design. The final deliverable was *Abanico* [3]: an alarm clock redesigned using IxD principles to include Aesthetics of Interaction.

STUDY MATERIAL

Being a final bachelor student, I have gained knowledge in IxD as it is one of the focal points of Industrial Design Eindhoven. Nevertheless, I found the reading material valuable as it provided me with theoretical frameworks to enhance my intuition in interaction design processes. Prior to this course I had my own methods of designing interactions, but the theory by experts helped me improve my academic abilities and streamlined my design process.

The *Frogger Framework* [7] on analysing feedforward and feedback allowed me to break down interactions, transitions between system states, in a very systematic way. The theory on coupled actions and functions along the six aspects have helped me design logical interactions, while also providing a powerful tool for analysis and iteration.

Interaction Relabelling [2] is a method of exploring interactions by not just focusing on ease of use. We used this to re-map the functionalities of an alarm clock to various everyday items, including a mechanical stapler. All traditional alarm clock functions were compiled, then translated in other items using role-play.

Throughout the sessions I realised that the best results were achieved when social norms of ‘acting normal’ were disregarded, and emotion was not suppressed in the role-playing sessions. By doing this, we synthesised design principles for our final design: the delightful experience of smooth dynamics of embodied interactions.

This is in line with the views of Hummels et al. [4] who advocate for increased use of users’ motor skills to create meaningful interactions. Additionally, their fifth principle of *researching by doing* helped guide us throughout our design process. Some of the most valuable insights were gained during the ‘acting-out’ sessions.

Another interesting tool harmonious with the principle of research by doing is *Experience Prototyping* [1]. This design methodology allows early-stage exploration of concepts by simulating experiences. This technique has been implemented used throughout all stages of our design process, and proved to be a valuable asset.

After low-fidelity prototypes of alarm clocks were developed, they were tested among participants using experience prototyping. They were instructed in varied levels of depth: some were given clear instructions on how to operate the devices, others were simply told the models represented clocks and were asked to carry out tasks such as setting an alarm for a certain time.

This led to interesting insights: while the test groups experienced the dynamics of the shape-changing interface as more pleasing, most preferred the prototype that matched best with their *mental models* [5, 6] of traditional clocks. These insights were used to design an alarm clock that was not only compatible with current mental models, but also incorporated joy and playfulness in its interaction.

Aesthetics of Interaction

From my standpoint, Aesthetics of Interaction is something that can provide designs with a unique identity. It is hard to quantify and therefore create, yet very apparent when done well. To my mind, Aesthetics of Interaction occurs when an interaction satisfies a number of criteria.

Firstly: its actions and functions are coupled well along the six aspects of the Frogger Framework. It is important to notice that these are not restricted to one-to-one couplings, which brings me to my second point: the interaction needs to tap into fascination. This can be done by among others using elements of surprise, playfulness, expressivity and dynamic forms to create delight in the interactions.

Implementing Aesthetics of Interaction

With *Abanico* we aimed to provide our users with a platform for playfulness and expressivity. The ritual of setting the alarm clock at night was enhanced by allowing users to ‘compose’ their own alarm tune using a very tangible and embodied interaction: challenging their motor skills. The modular nature of the clock’s arms creates geometric, stairwell-like forms when the alarm progresses. This does not only provide an interesting, dynamic aesthetic to look at, it also provides the users with the feedforward they need to know how much time they have left to sleep.

SYNTHESIS AND FUTURE APPLICATION

This course has allowed me to strengthen my academic understanding of interaction design theory and processes. The various techniques I have learnt have been assets in the design process, and are things I will permanently keep in my toolbox as designer. The lecturers’ visions on creating aesthetic interactions by looking beyond usability is very refreshing: I will seek to implement this in future projects.

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