Emotions from Interaction
Reflection on the ‘DCB200 Aesthetics of Interaction’ course

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REFLECTION ON COURSE MATERIAL
The course offered a good variety in reading material, giving several perspectives and techniques related to the aesthetics of interaction. Starting with the frogger framework [8], the course presented a clear and new way to approach interaction design. The concepts of coupling, feedback, and feedforward [8] made me realize there was much more to interaction design than being user-centered. It made me shift my workflow of function-based design to experience-based design. With the frogger framework as a solid fundament, the papers about experience prototyping [2], interaction relabeling [3] and movement based design [5] showed me ways of bringing this theory into practice. Experience prototyping showed me that when presenting a design, one should carefully choose a correct medium that is able to simulate the full set of functionalities of the concept; an experience(able) prototype. This insight will help me to better convince people of my future work. Hummels et al. [5] gave many statements on the importance of movement based design, but I feel the most important notions, however, are that as designers we should design by moving and research by doing [5], or as said by Djajadiningrat et al. [4]: “Don’t think thinking, just do doing”. Combined with my own experience, I now understand that theory and ideas only go so far. To really comprehend the interaction of your design, you should make, experience, iterate and repeat. Lastly, the interaction relabeling as described by Djajadiningrat et al. [3] taught me interesting techniques to find interactions for your design. The exploration of mechanical artifacts allows for more versatile and alternative interactions for a new design. I find this to be one of the most valuable techniques discussed in the course. Apart from the papers, I was also greatly inspired by the “Designing Fluid Interfaces” presentation [1] by Apple on user interface design; a subject that lies in the center of my field of interest. Their vision on the design of iOS showed me that design does not have to be physical and rich to be aesthetic. A point that is otherwise missing in this course.

DESIGN PROCESS
For the course’s assignment of redesigning an alarm clock, we went through several iterations and critique sessions to get to the final design. The first iteration was based on an interaction relabeling [3] exercise, for which we used a double legged wine opener for the pulling and squeezing motion.

Figure 1: First iteration – pull and squeeze
The time stick is pulled out to set the time indicated by the hole in the center, where after the handles on the bottom are squeezed to activate the alarm. The pulling uses augmented feedforward [8] and the squeezing uses inherent feedforward [8]. Also, there is a coupling in time and direction [8]. For the second iteration the main focus, among several other theories, was on showing the mechanical functionality of the device [4].

Figure 2: Second iteration – mechanical transparency
By making the front plate semi-transparent, the user understands that marbles inside the alarm will fall when the red (hollow) indicator reaches the set time (bottom); a natural effect of gravity. We showed the mechanical
properties of the device to try to make it more intuitive. We liked this property of showing the mechanical properties and kept it our main focus, but the second iteration still relied on cognitive skills too much. For the final prototype, we started looking for core values [6] to relate our design to. We explored relating time to weight and based our design on a combination of an old brass balance and an hourglass. To figure out the details of our design, we used experience prototyping [2] and made a third iteration as seen in figure 3.

Figure 3: Third iteration – brass balance

With the final design, we wanted to address both mind and body [6]. For the body part, we decided to make the scale much larger and wall mounted. We also added a rail on the right side of the board that the hourglass with sand (time) could slide through. To set the time, we used large glass marbles which are located on the left side of the board. With the board being two square meters, the user needs the whole body to interact. The glass marbles also address the mind, since understanding how much weight represents how much time has a learning curve and requires some trial and error. Other than the second iteration, this design is fully mechanical and shows all individual components. This creates a natural understanding of the design’s functionality and results in a high level of affordance [8]. The functionality of the design can be seen in the corresponding video [7].

PERSONAL PERSPECTIVE ON AESTHETICS OF INTERACTION

For me, aesthetics of interaction is a very relative term. It is a summary of all aspects of a design like shape, material, expressiveness, and context, that all contribute to the experience of the design. I believe this summary is the emotion that we have while experiencing the products around us. Because it is an emotion, it is very personal and subjective, and could therefore not be right or wrong. Now one might argue that a design that is aesthetically interactive for most people, could be considered aesthetically interactive overall. I do not believe this to be true. For a product to have overall good aesthetics of interaction, its form should serve as a medium for personalization, allowing the user to define their own interaction and experience. In short, allowing the combination of multiple or adjustable ways of interacting.

REFERENCES


