Engaging Yet Understandable Experiences

My Individual Pictorial on the Aesthetics of Interaction

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INTRODUCTION

Good designs are intuitive [4]. That is how the first reading started, but how are intuitive designs made? It all has to do with the concept of affordances, if well executed the user knows how the product works, without any extra information like pictures or manuals [4]. The Frogger framework can be used to evaluate the coupling between action and function, if these are coupled it will result in an intuitive interaction [5]. If not the case, it could be solved by correctly using feedback and feedforward. The feedforward will make it clear with what controls can be interacted and what will be altered by them, while the feedback will communicate that something happened or is set into action. Designing with this in mind will make products more intuitive and so more aesthetically pleasant in use. However, ease of use should not be the focus, the joy of the interacting experience should be central [3]. This can be done through enabling a freedom of interaction, allowing for multiple interaction types for reaching the functionalities [5]. Or can be accomplished by thinking beyond the product and of the whole experience [3]. So, design for a complete setting, incorporating all the senses.

Therefor, a creative approach is necessary. By focusing on making and experiencing from the start innovation can spark [3, 1]. Experience prototypes can quickly convey or test the vision, interaction and usability of a product while being fast to set up [1]. Lastly, extreme characters can help spark creativity because of the extremes in their needs, emotions or routines [2].

DESIGN PROCESS

As starting point I analysed and redesigned an existing alarm clock (figure 1) using the Frogger framework [5]. Initially it showed that there is feedforward and feedback, but the button combinations need for regular functions, like setting a wake-up time, were odd and unintuitive. Therefore, I redesigned this feature. Added are two rotational sliders (figure 2) that allow for altering the bedtime and wake-up time, the orange part then resembles the available sleep time. This interaction allows for simultaneous actions enriching the action possibilities [5].

The group project started with evaluating our personal wake-up experience. This did not give us a desired starting point, so we explored using extreme characters [2], this led to all designing for one specific sensorial wakeup. After experiencing these lo-fi prototypes, we merged these separate sensorial wakeups into a nautical weather-based wake-up experience, where waves, wind and storm woke the user [1].

figure 1: original alarm clock

figure 2: redesigned alarm clock

When starting to make this concept into a product or prototype we had to iterate [1, 3]. This resulted into a couple of prototypes on a weather-based wake-up alarms (figure 3), with one immediate favourite as start point, a first iteration (figure 4). In this concept adding more balls and thus growing the cloud above the alarm clock, would increase the sensorial wake-up experience, and giving the user a choice on how they wake up [3].

figure 3: prototypes of the first making session

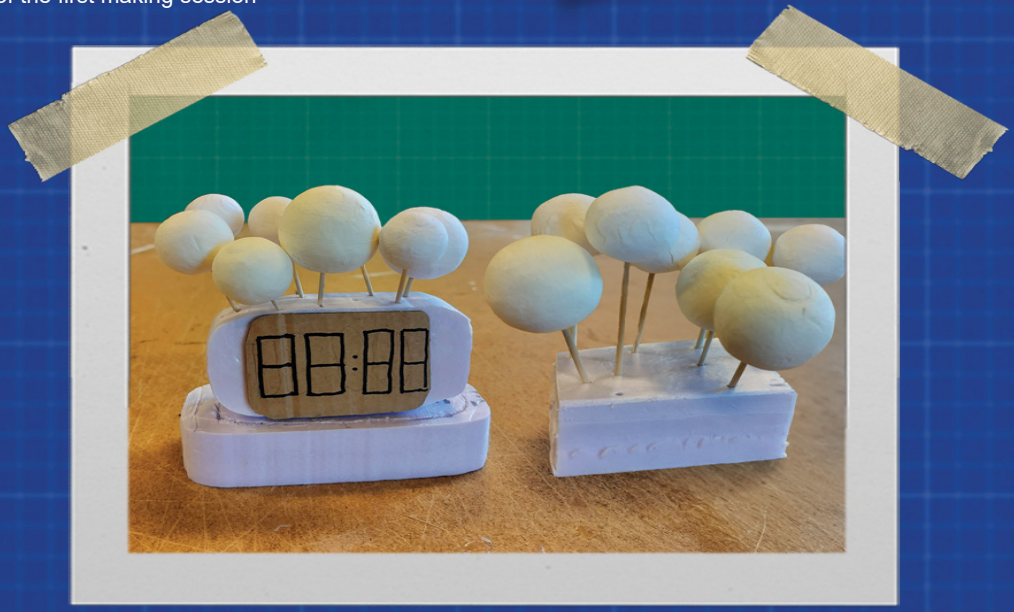
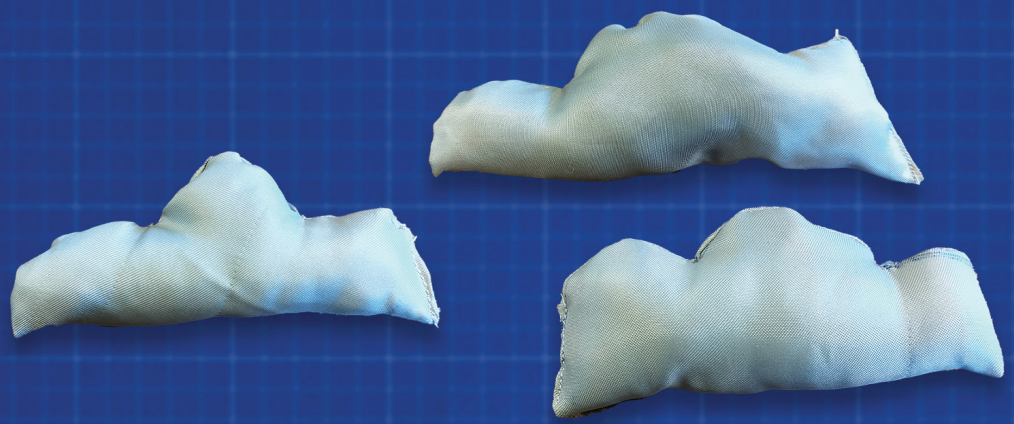


figure 4: starting point of the final design

figure 5: sun with clouds



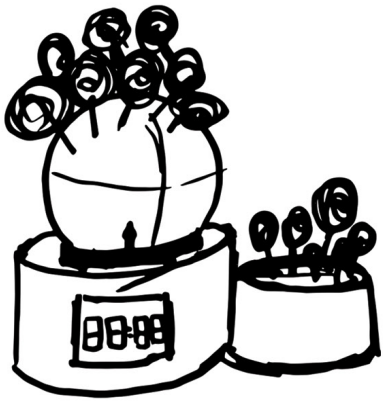


figure 6: setting the alarm

Scaling up from the first iteration, making it into a higher fidelity model and making a complete experience, we wanted to match the theme of the wake-up experience with setting the alarm [3]. For this we chose the common theme of weather and its different conditions. That resulted into a sun on which clouds magnetically attach (figure 5). The more clouds surrounding the sun, the worse the weather will be, so the more extreme the wake-up weather experience will be. The wake-up time can be set by turning the sun around on its base (figure 6). With the last feedback from peers, we made our final design, Stormy Sleeper.

DESIGN PROCESS

The Stormy Sleeper (figure 10, 11) is a multi-sensorial wake-up experience where the user can choose their desired way of waking up [3]. From very lightly, when there is no rush, to very intense, when a fast wake-up is required.

The Stormy Sleeper is a big cloud that is hanging from the ceiling as centre piece, by adding weather plushies (figure 8), the wake-up weather conditions can be selected. The available plushies and thus the conditions are wind, rain and lightning. Their amount attached to the cloud will set the intensity of that weather condition. The cloud has a metal frame (figure 7), and the plushies contain magnets, giving the user complete freedom of interaction while placing them and giving satisfying feedback [3, 5].

Setting the wake-up time is done by a hand-held dial (figure 9). By turning the dial to the desired wake-up time and then placing it back on its stand. The dial incorporates feedforward through tangible ridges and numbers and haptic feedback when turning the dial, as well as visual feedback, flickering lights, in the cloud [5].

Waking up will be with the selected weather condition(s). Wind will be recreated by a fan, rain by a spray bottle and humidifier and lightning by LEDs, all of these conditions will be amplified with the corresponding sounds.

CONCLUSION

As a designer I strive to design for rich tangible user interaction to assist others while being an eye catcher. To be able to design these products, it is important to understand the aesthetics of interaction. For me it essentially emphasises on thinking about the complete picture, so designing for a full experience. That experience should strive to be unique through different means, ranging from being multi sensorial to freedom of interaction or very expressive. But still must be balanced with an intuitive use. This helped me to understand this balance between striving for uniqueness and intuitiveness. According to aesthetics of interaction all of this should result in engaging, understandable and unique experienceable interactions.

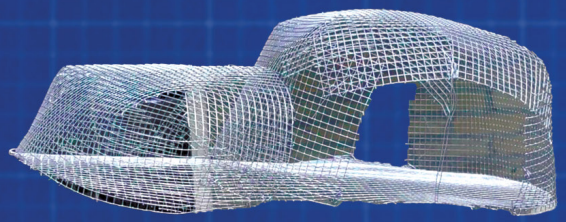


figure 7: metal cloud frame

figure 8: weather plushies

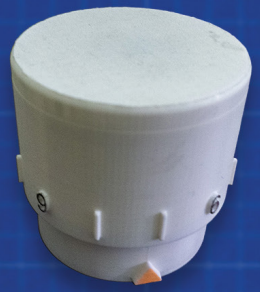
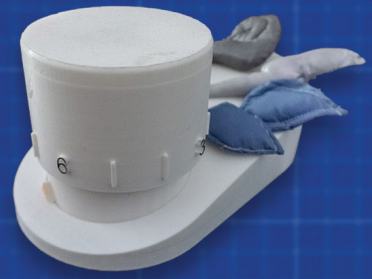


figure 9: hand-held dial

figure 10: Stormy Sleeper in action

figure 11: Stormy Sleeper



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