

Rage Rhythm

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INTRODUCTION

An aesthetics of interaction should not only consider interactions, but also its appearance (e.g. materiality [6]), role [4] and ability to involve the whole human being [10]. It shifts the focus from easy to use to having an enjoyable experience [4,5], which becomes important since users are more in search of challenging experiences instead of products [4].

Striving for great aesthetics of interaction, an important aspect is affordance. The interaction should be intuitive [7], which can be accomplished by using among others functional, augmented and inherent feedback [12]. Next to this the frogger framework can be used to make sure both action and function are unified regarding time, location, direction, modality, dynamics and expression [12]. Lastly, feedforward [12] is an important aspect so the formgiving expresses the purpose of the product [4].

These aspects are not limited to motion, or visuals but can also be accomplished using sound. Sound exists in time and over space in contrast to visuals which makes it possible to trigger the user in other ways [11].

Experience prototypes are an useful tool to become

an expert of the movements [5], discover the possibilities regarding haptics [2], and understand the rich interaction [5]. It helps with experiencing the product and its context, to evaluate on this and communicate the concept to stakeholders [1].

In this pictorial, there is specific focus on material exploration and adding sounds to create a multi-sensory product. I believe triggering multiple senses improves the experience since the entity of the human body is involved.

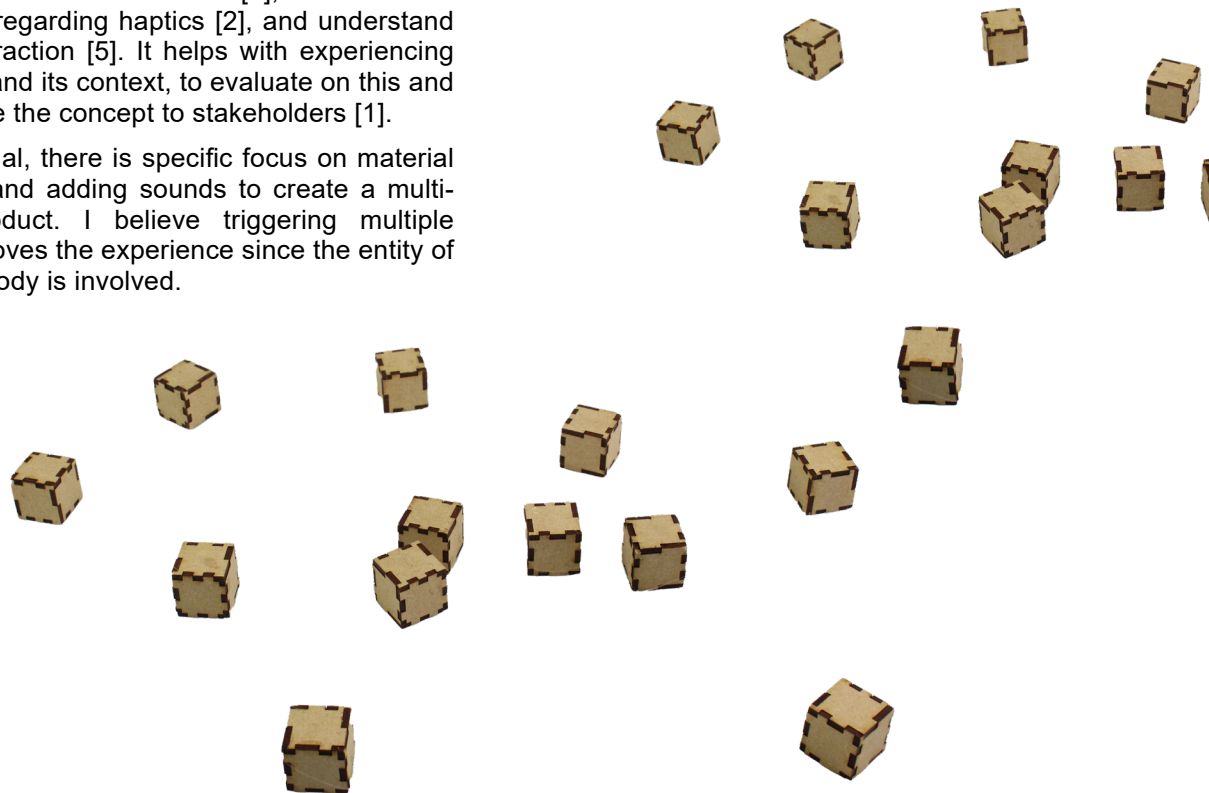


Figure 1. Blocks Rage Rhythm

DESIGN PROCESS

Within the first iteration, two experience prototypes [1] (Figure 2) were created for a waking-up experience after sleeping. The Instrumental Box, with a shaker inside and drums on the outside, allows expressivity in creating music. The Disassembling Cube, which should be solved to turn it off allows for aggressivity in the evening and concentration in the morning.

After analyzing the initial concepts, we decided to focus on the values of expressivity, materiality, transformability, and aggressivity. To be able to express emotions to an interactive product, freedom of expression and thus freedom in interaction is required [12].



Figure 4. Iteration 2



Figure 2. Iteration 1

Through materiality, we wanted to focus on natural sounds without using speakers (Figure 3).

Previous explorations were combined to create a new experience prototype where sound-producing materials are added inside the disassembling cube (Figure 4).



Figure 3. Material/sound exploration

After deciding to continue focusing on anger, we gained more understanding of the user experience, context, and movements [5]. To find design opportunities, karate exercises, and role-playing were performed.

During the karate tutorial [9], the following insights were found:

- A target is preferable.
- Complex movements demand focus
- Simple movements release anger.
- Big movements release more energy

To think outside the box and explore the richness of actions [3], interaction relabelling was used. This was done with both a hammer and an umbrella. The hammer was interesting because of its weight and the umbrella because of its transformability.



Figure 6. Extreme character [Image by Microsoft Image Creator, 2024]



Figure 5. Karate & Interaction relabelling [Image by Renske Spreeuwenberg]

Lastly, an extreme character [3] was created, called “Mad Musician”. It exposes the negatively seen character trait of being grumpy. The Mad Musician was born grumpy and because of her therapist, she became a percussionist in an orchestra. It helps to release anger and provides structure. To develop the character further, an AI-generated image was created (Figure 6).

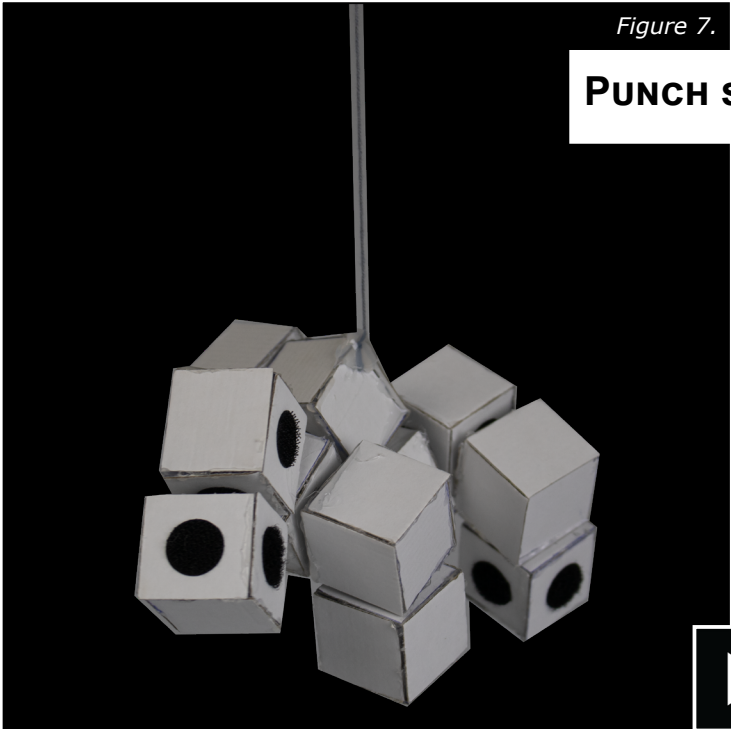


Figure 7.

PUNCH STRUCTURE TO SET ALARM

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After doing more benchmarking and embodiment exercises, we changed solving a puzzle to freedom of expression. This resulted in a hanging cube that can be reassembled in any way you want.

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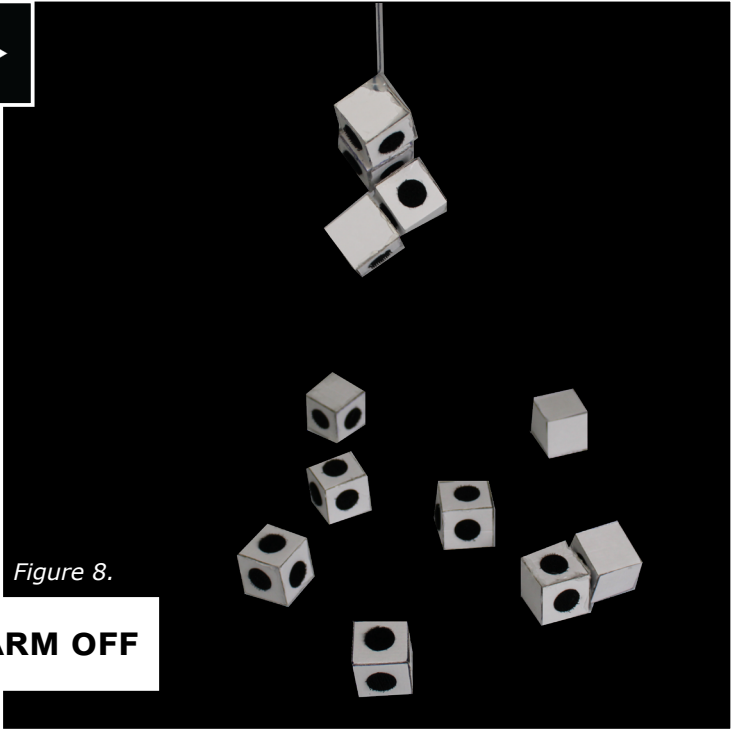


Figure 8.

BUILD STRUCTURE TO TURN ALARM OFF

- After reflection and research, we found that the interaction with physical products can show the users' emotional state [4]. To incorporate this, we decided to use wood because of the wear and tear it shows. It represents the users' anger and lets them reflect on this. Therefore, we also decided to generalize the context to situations when you are angry.
 - Every cube has different materials inside, which allows the creation of different sounds. Focusing on different sounds distracts their focus from their anger. Besides, cubes with louder materials shake more in the beginning and slowly fade away until a peaceful sound is left. This represents the users' anger relief.
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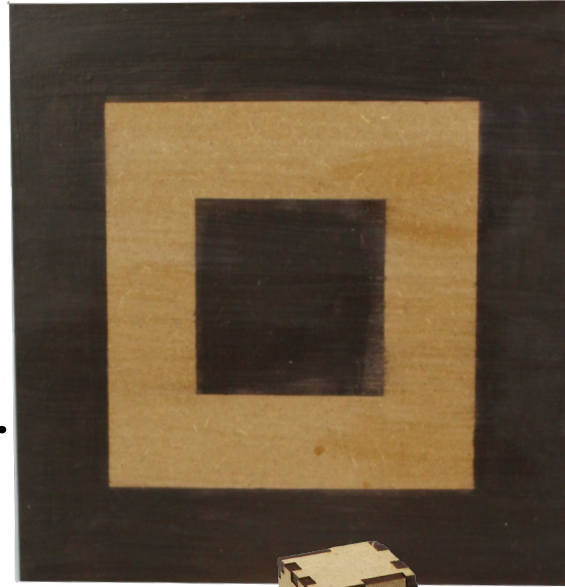
RAGE RHYTHM

TARGET

The target was added to increase the intuitiveness [7] of throwing the blocks. Besides, the karate exercise showed that having a target increases energy and anger relief.

MOSS

Firstly, the moss was added for the aesthetics of the product, since it fits with the natural look of the product. Besides, we found it makes the product multi-sensory. The smell of forest is seen as peaceful and thus adds an extra layer to anger release [8].



**A MULTI-SENSORY
ANGER MANAGEMENT TOOL
COMBINING CONTROLLED
DESTRUCTION, CALMING
SOUNDS, AND REFLECTION.**



CUBES

The cubes stick through magnets and fall apart when throwing the structure. Vibrations of the cube allow the materials inside to make sound. All blocks contain different materials.



LIGHTS

After putting the structure back on the tray, the tray lights shortly up. This provides feedback to the user and puts their creation in the light. This shows that they can overcome their anger and provides a moment for reflection.

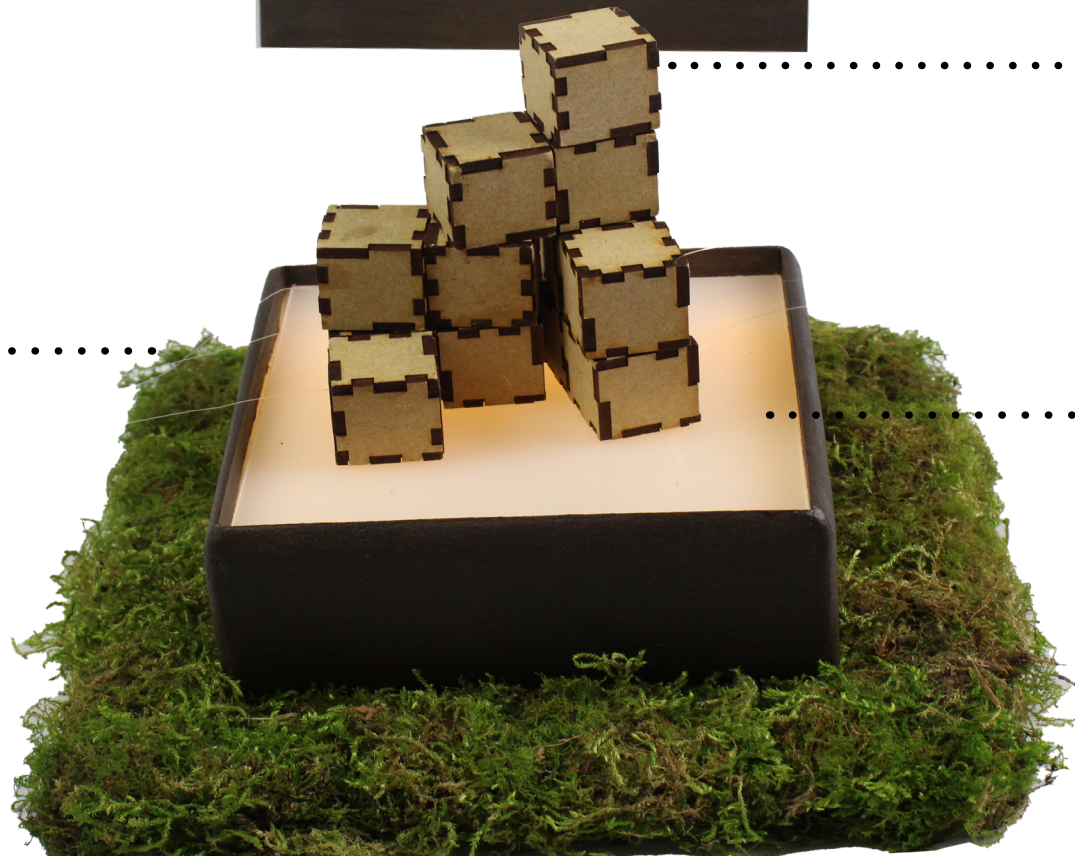


Figure 9. Rage Rhythm

THE INTERACTION

Final video:

<https://www.youtube.com/watch?v=sKpIloWtJyQ>

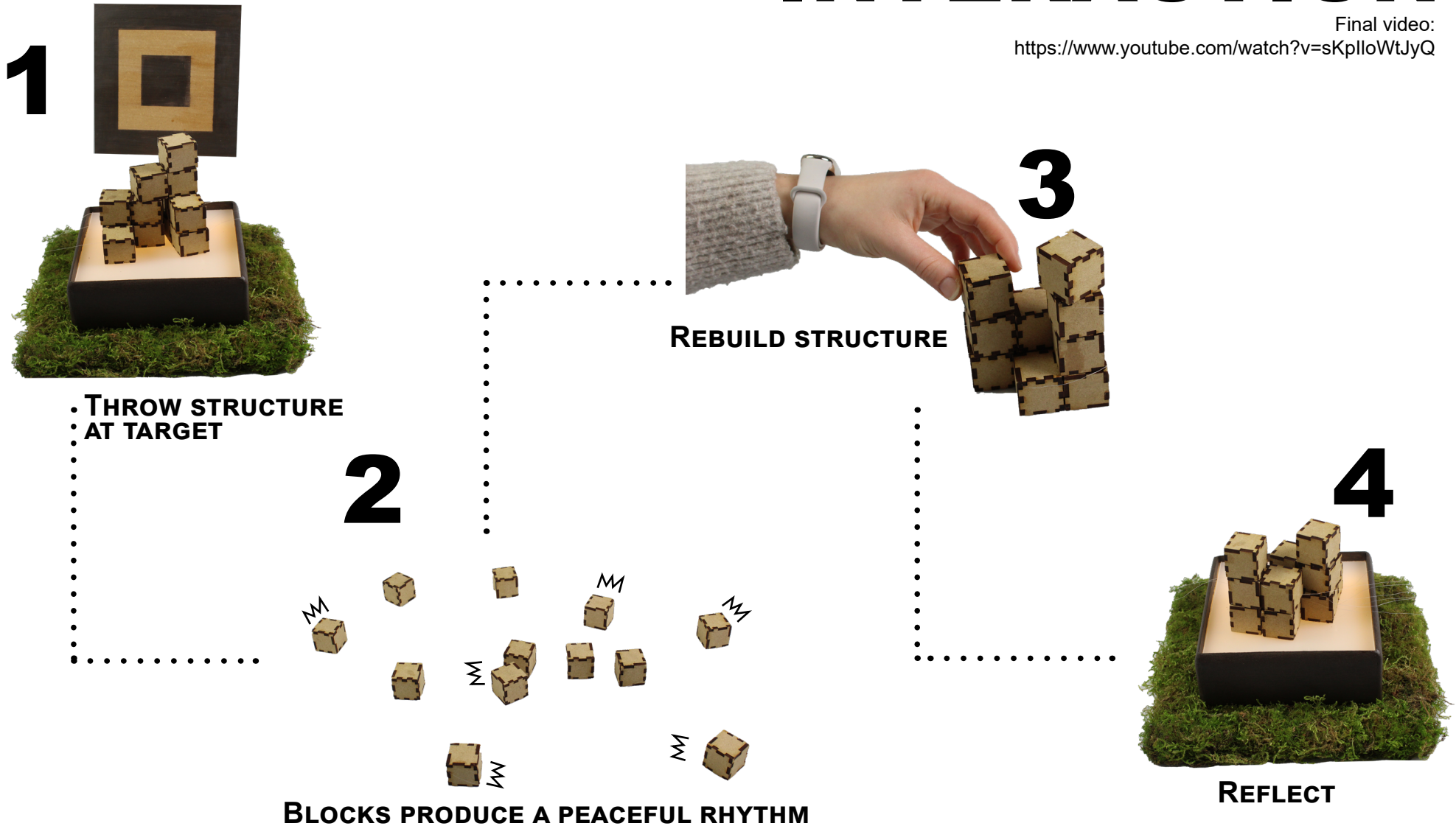


Figure 10. Rage Rhythm interaction

CONCLUSION

In my view, the aesthetics of interaction involve all aspects that can either make or break an experience. I believe following principles for aesthetics of interaction is not always beneficial, since every experience is different. Designers can use embodiment exercises and hands-on ideation to discover intrinsic values to incorporate into the design. These values should be used to create the aesthetics of interaction tailored to suit the product.

As a user-centered designer, I think it is important to not only involve stakeholders but to also empathize with their perspectives through among others role-playing to understand the context. I believe a great aesthetics of interaction can be created by combining our empathy with creativity.

REFERENCES

All images are own work except stated otherwise.

All videos are recorded by Laura Nascimento.

AI has been used for creating Figure 6 via Microsoft Image Creator with the sentence: "A woman who is a percussionist in an orchestra, she is always grumpy".

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