Is there a new way to do this?

How do people use it?

Conceptual

Procedural

1

2

3

Behavioral

Sensory

Is it pleasurable to use?

Before

After

Space Heater Redesign

Brand extension redesign through effective prototyping

Prototypes as Questions

Each prototype built should be the physical manifest of a question or questions. Design prototypes exist to satisfy a need for physical feedback on the unrealized (Poggenpohl, 2018, pg. 177), and belong to these categories of prototype design: Conceptual, the expanding, divergent possibilities of design. Understanding the mechanisms and logic of the product how users interpret and interact with the product. And Sensory, the salient qualities of the design, visual, textural. From these, good prototypes seek to answer the above (image left). There can be overlap in these questions, but all serve to answer specific queries into the nature of the new design (Poggenpohl, 2018, 178) and communicate mind to hand, and back again.

Garmin Brand Extension Prototype Critique

This product blockout prototype stands out as an ineffective prototype. Carved foam can be a great material for form development but when time spent on sanding could be better spent with iterative, multitudes of rougher form mock ups would leave more room for branching ideation that generate broader feedback. Quickly Joined bodies can be used in co-design and user testing, if they can be manipulated with ease and include a comprehensible stand-in for user interaction. In this case they were permanently affixed removing any such benefit, which ended up propagating this interface layout oversight into the final design.

Saving the Space Heater with Thoughtful Prototypes

Redesigning the project using 3 distinct prototypes will make physical the unanswered questions from the original design.

A mass block prototype, massing out the significant components of the space heater, heater core, fan, control board will answer 1. The final version will spin about its stand when buttons are pushed. From these weighted blockouts new forms can be explored and iterated upon to come up with novel yet stable configurations.

Cardboard and pushpin models for interface testing. The final design skirts the line of unsafe switch placement near hot surfaces, while committing to the earlier prototype's flaws. Exploring how users interact with this model can rend hazards obvious and open the design to greater changes, like hand placement and the presence of hot components.

Can it be pleasurable? Changing textures, colours, and even accessory forms can expand the brand language of Garmin, while opening the door for improved aesthetics and sensorial qualities by means of feedback and testing. Use of swatches can convey textural information and be pinned onto other prototypes, which could lead to insight on surfaces and interactions that did not occur with the initial prototype phase. Changes made to texturing and colouring hint at safe hand placement and acceptable interactions in the final version.

Patrick Cusimano

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Carleton University

School of Industrial Design