



**Dorian**

Carleton University  
Winter 2010



**The design brief: This project is a redesign of an existing product or product category with a focus on incremental innovation. The task is to design a small mobile low voltage light. This research driven project strives to either improve upon the human functionality of a specific product, by making it easier to use or more suitable for an identified task or application or identifying a new need or opportunity. The project will be taken from inception to completion through five phases.**

## Initial Research

This should generate qualitative and quantitative insights that will present a series of “design problems” and opportunities.



### **Creating a visual map**

Helped the team filter ideas and thoughts at the beginning of the design process.

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### **Categorizing ideas**

This helped the team gain a focus on different perspective of the design problem.

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### **Connecting the dots**

Made a visual representation that allowed for solving problems in a tangible way.

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The intention of most interactive lighting designs are mainly to encourage relationships between the lighting product and its user by engaging him or her with behavioural response. With interaction, the design of the light becomes more 'emotionally durable', meaning that it will sustain the user's interest.



### **Oshibe**

An interactive lighting sculpture that plays ambient sounds.

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### **Hono Light**

An LED light with the characteristics of a candle and is blown to put out the "flame".

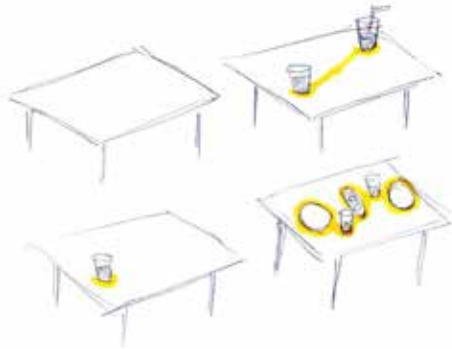
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### **Candela**

Wax candle replacements used to illuminate or as an emergency light source.

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**Connect**

Representing togetherness when sharing a meal.



**Light as warmth/heat**

Outdoor patio heater that glows.



**Flower**

Gradually collects solar power to "grow" a "plant". Solar power is gauged by brightness of the "soil".

PLAY

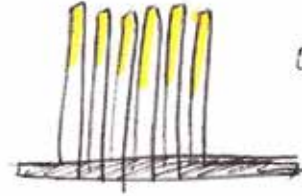
\* Candelight dinner



Build?

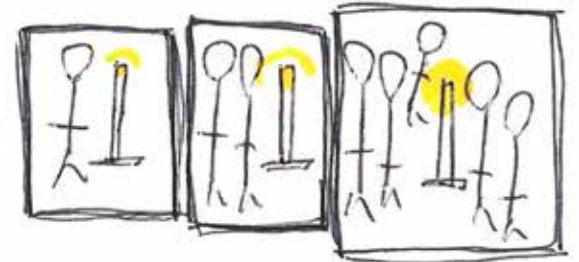
Story.

MUSIC?  
feedback.



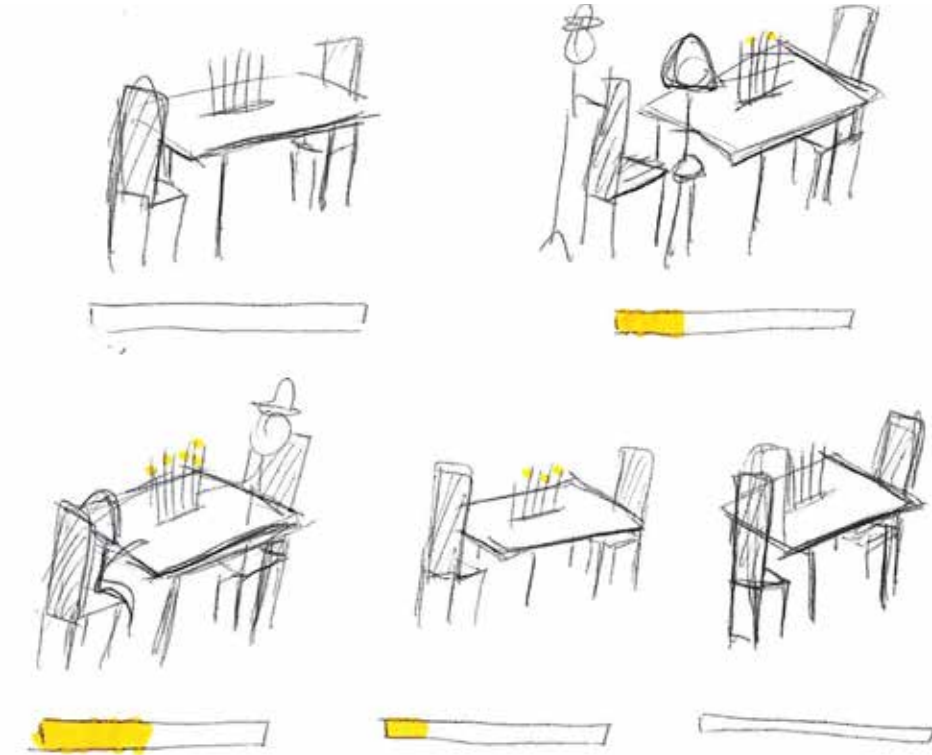
glow when the people are in proximity

the more people around the light the brighter it glows?









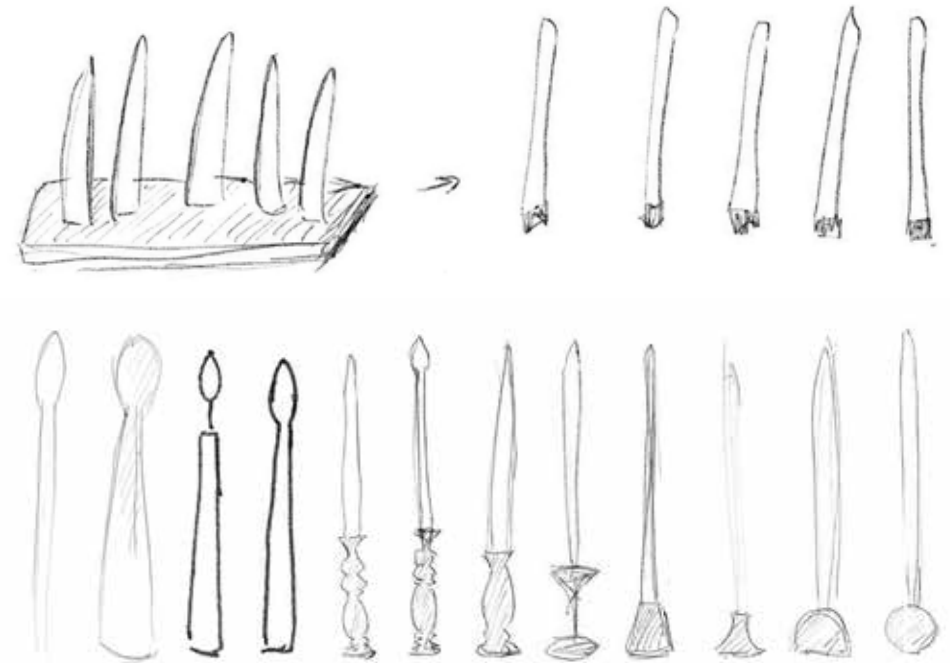
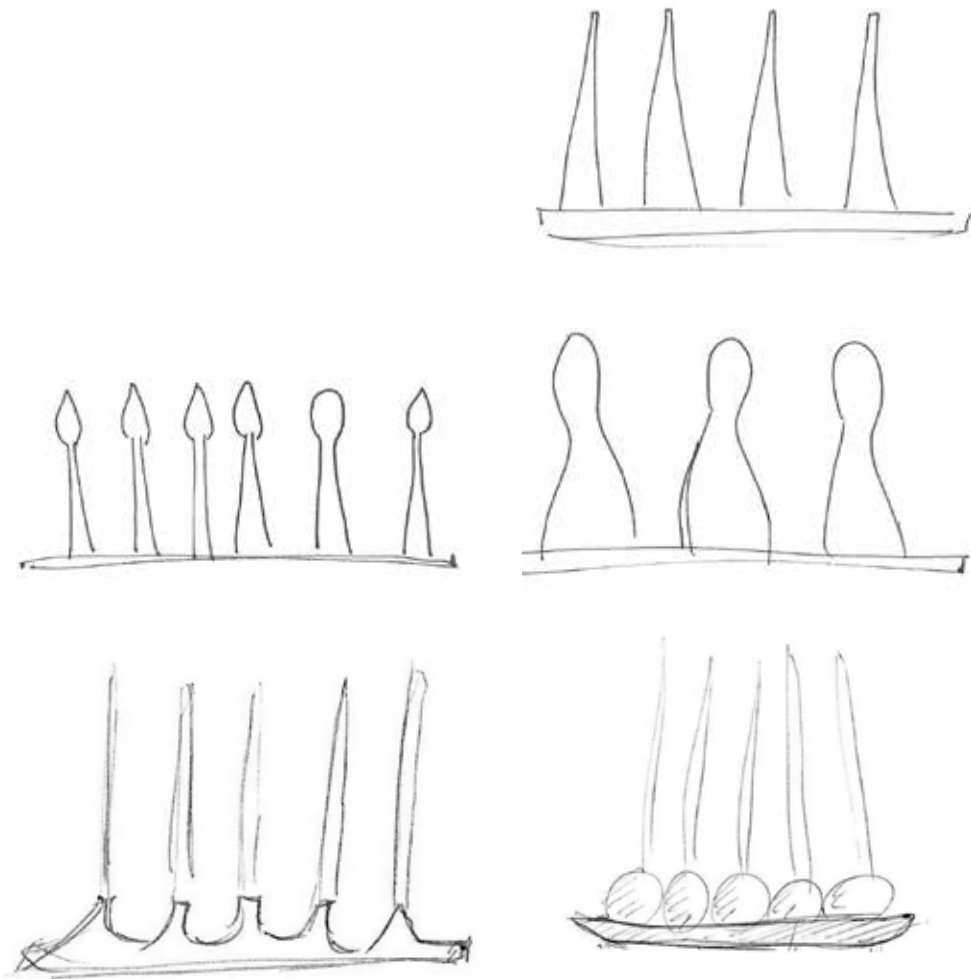
### Lighting quality

Device glows brighter when there are more people or actions in proximity



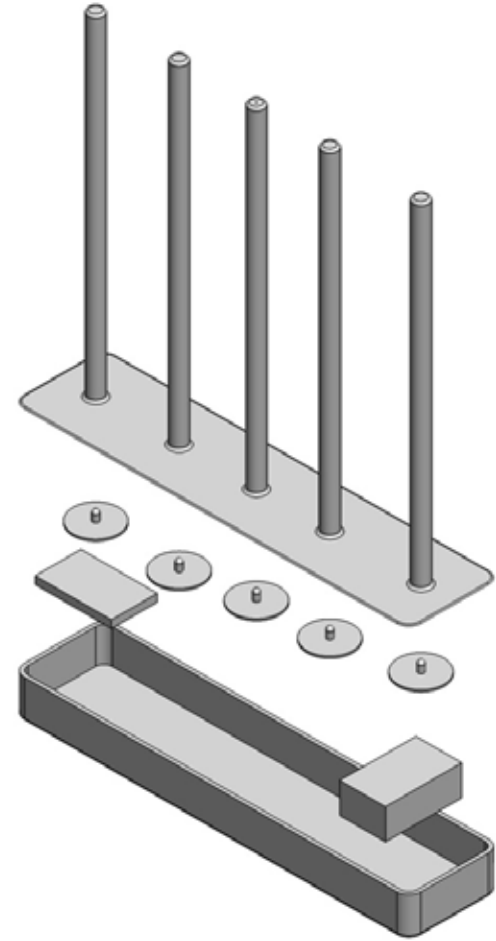
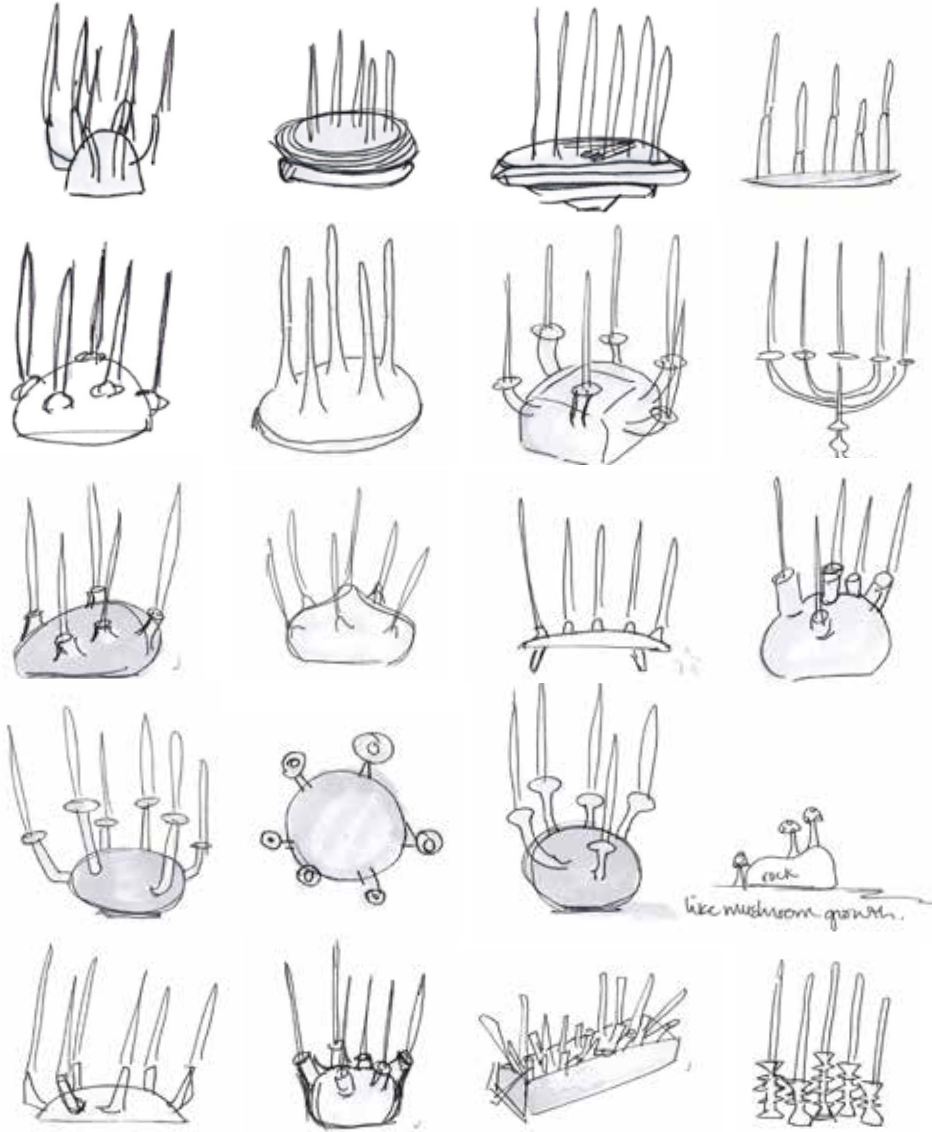
# making prototypes for testing





### Formal development

Formal qualities of Dorian was initially influenced by candlelight dinners.





### Prototyping and Testing

Rough prototypes were made and tested for size, weight, and proportion. Light quality and circuitry was also tested.



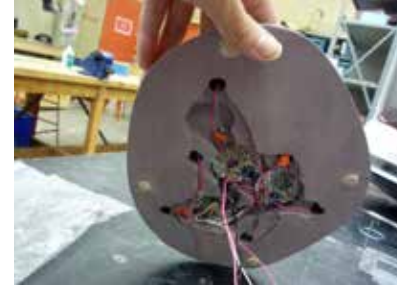




### Items from the CNC

CNC-ed renshape parts were cut and sanded.

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### Internal Components

Pre-programmed chips and connecting wires are glued in but still accessible.

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### Fitting

Parts were laid out and sanded and filled to fit for a smooth surface.

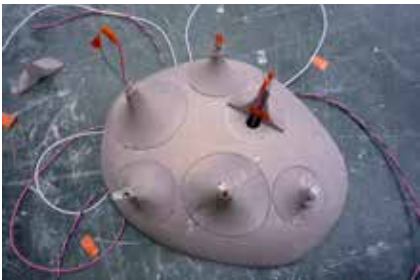
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### Chrome

A thick glossy layer of chrome paint was used for the finish.

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### L.E.D.s

Lights are sautered and strung through the model.

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### Finished model

Has a 5hr energy saving timer, four lighting modes and accessible internal components.

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WATCH VIDEO





Setting the table for dinner



Dorian is added as a centerpiece



The meal is finished



The light slowly fades



To turn on Dorian, push the button on the base.



Dinner begins and the light begins to flicker.

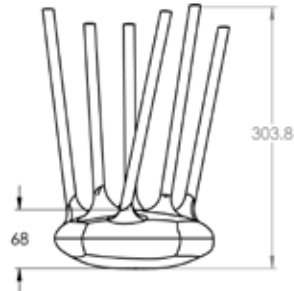
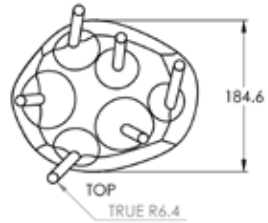


The light will turn off by itself over time.



Dorian can also be used as a decorative piece.





**Dorian is an emotive lighting concept. Featuring six electronic candles, the design playfully simulates the same experience as traditional dinner candles. In an attempt to encourage casual socializing the design senses the amplitude of speech and reacts with lighting equal in intensity. This interaction visually displays the semantics of conversation and in this way supports it. Made mostly of polished aluminum the design acts as a decorative piece when not in use.**

