Lifestyle and Lighting

Guided by Prof. S. Sethi & Prof. R. Pooviah
Thomas George
02613808

Intent

understanding the qualities of light both natural and man made

study the aspects of light that are linked to our well being

exploring the possibilities of creating a synergy between the light and various other sensory stimuli

experiencing light through an intimate interaction

creating an ambience that enhances both personal reflection and social togetherness

Study of Light and Lighting

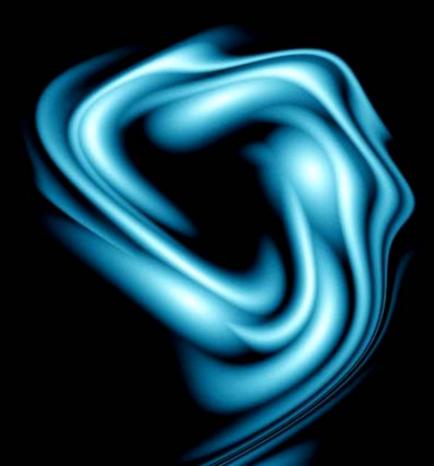
light
natural artificial
direct incandescence
reflected
chemical
atmospheric phenomena

bioluminescence

Effect of light on our well being

air appearance atmosphere aura bearing comportment demeanor effect feel flavor impression look manner mood pose presence property quality semblance

tone



lighting

illumination

hue

ambience









Scale

Space

Interaction

Materials

Lighting and Design













touch



air



sound

Material

paper
acrylic
natural fiber
fabric
ceramic
wood
metal



User Survey











Inferences

Appreciate the need of having a lighting object that has an aesthetic character and creates a relaxing ambience.

Widely exposed to the international arena through mass media and also frequently travel abroad and hence are knowledgeable and discerning about current trends.

Natural elements such as water and plants are being used in combination with the lighting object.

There is a naturally prevalent fear of handling electrical objects, this anxiety prevents people from having overly physical interaction with such objects.

Most of the time the lighting objects bought are used as display pieces as well, when not in use.

User Profile

25-35 yrs

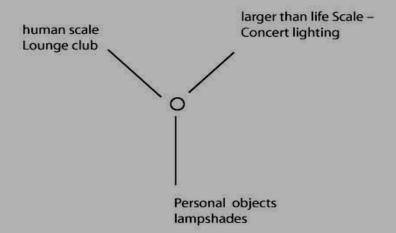
Urban

Middle income to upper income

Double income couples, single, married with young children

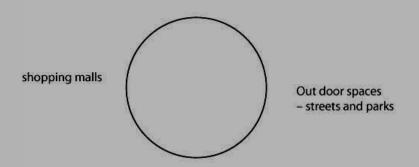
Scale, space and activity analysis

Scale of ambient lights

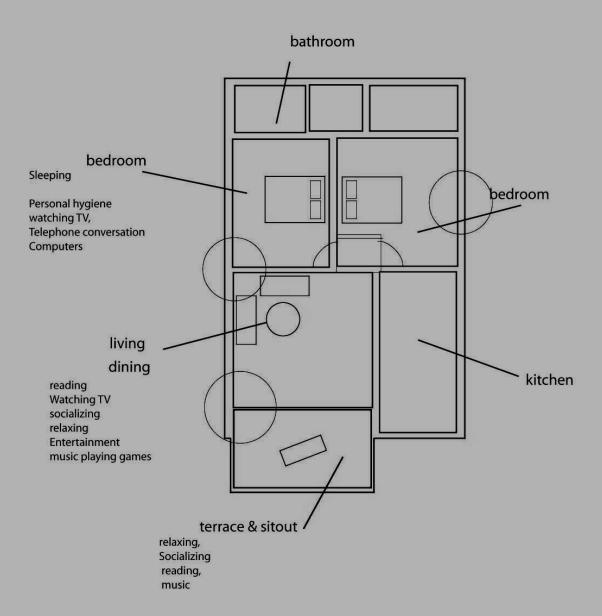


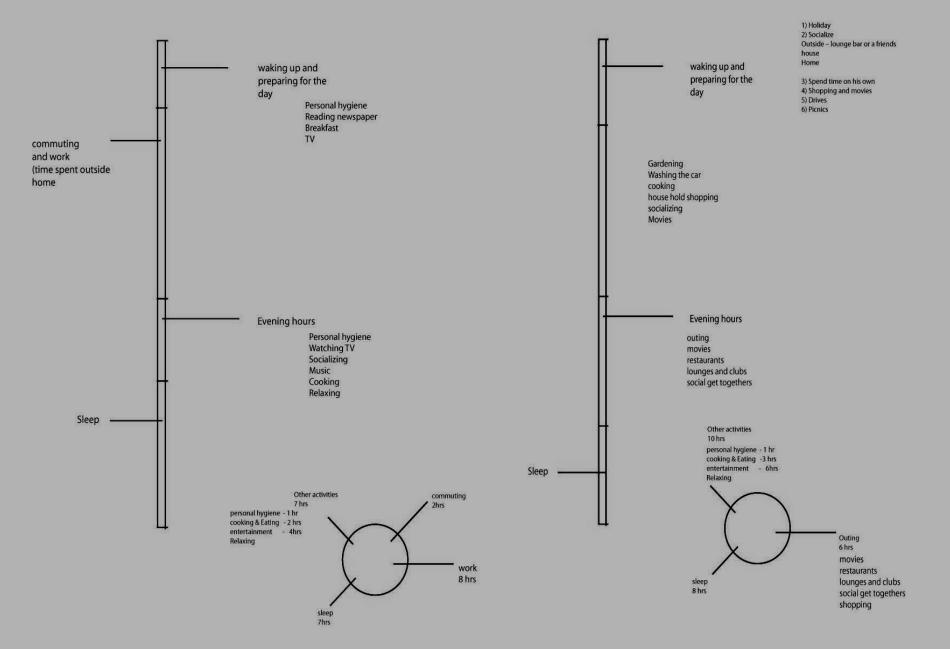
places where he experiences ambient lighting

home environment



restaurants and clubs





Market Survey

ceiling fixtures





















wall fixtures

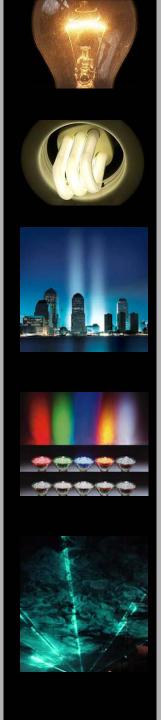
Inferences

The majority of the designs serve only as lighting object, there is scope in broadening the kind of interaction between product and user.

Floor based design prove to be more flexible at adapting to changing environments. They can be moved around within a space.

The form of the lighting fixtures or luminaries tend to dominate over the actual lighting effect/ambience.

The space analysis revealed that there are surfaces and geometries within the space such as corners, skirting, around pillars and curved walls, bay-windows etc that can treated specifically with lighting.



The technology is chosen based on

- 1) The heat generated
- 2) the kind of lighting effect produced (color/intensity/fade)
- 3) Overall dimensions were an important factor as smaller units give more flexibility in design and packaging.
- 4) The initial cost vs. maintenance cost is also an important factor for the selection of light sources. A lamp which is not used very frequently can have incandescent sources, which would make the initial investment less.
- 5) Variability in the kind of bulbs that can be used would be an added benefit.

Design Brief

Develop a lighting object/system primarily for use in the home environment

Specifically catering to the ambient lighting requirements of the user

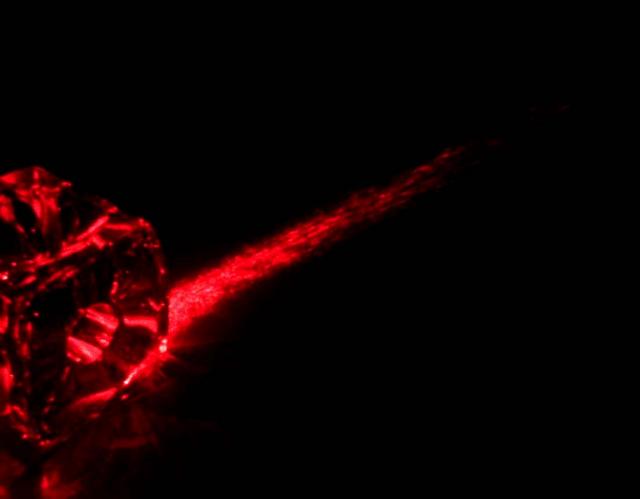
Explore possibilities of incorporating other sensory perceptions such as sound, touch and smell.

The user-object interaction should impart a sense of character to the product along with the lighting effect it produces.

Exploration

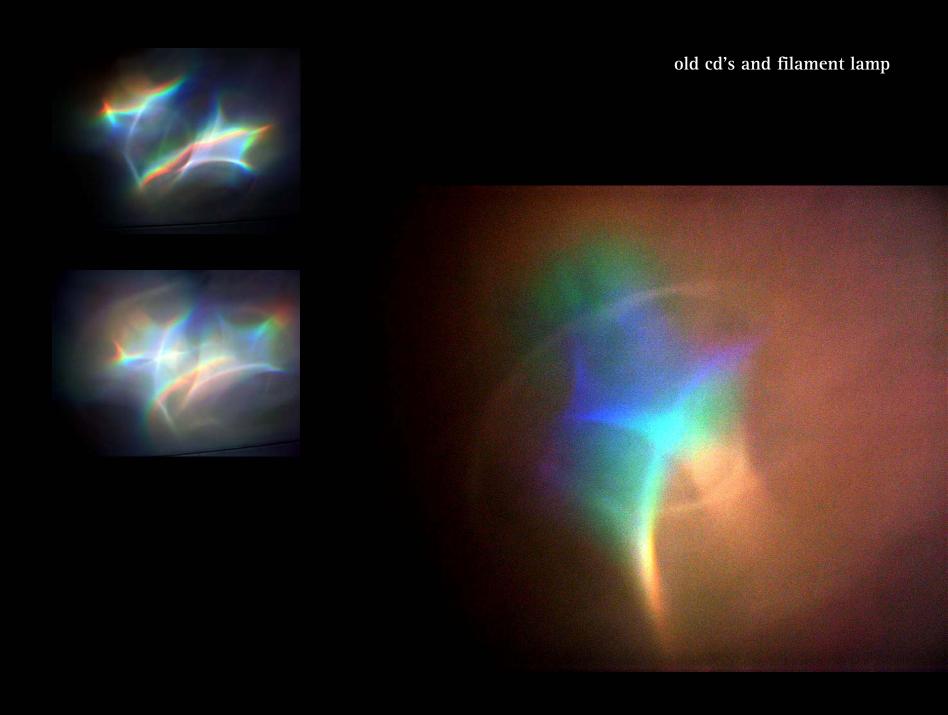
glass and laser

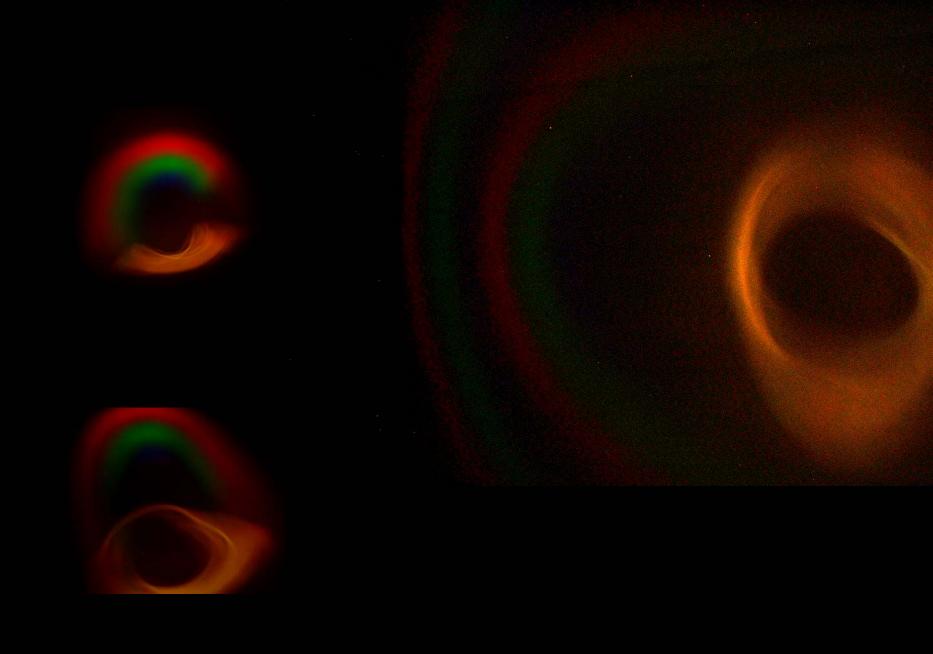






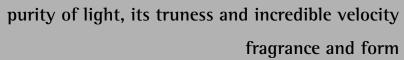


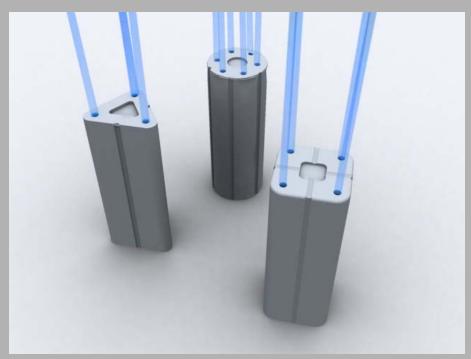




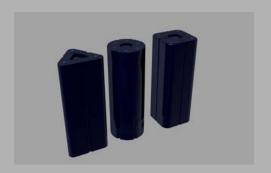


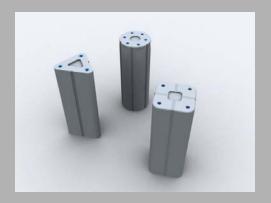




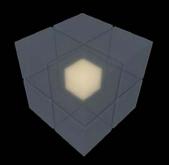


Object becomes an extension of the quality of light that it emits



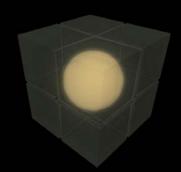


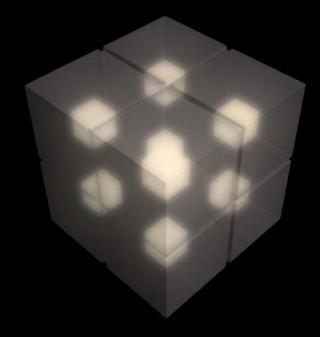




What would it feel like to hold light in the palm of your hand?

Can light be trapped or brought to stand still?







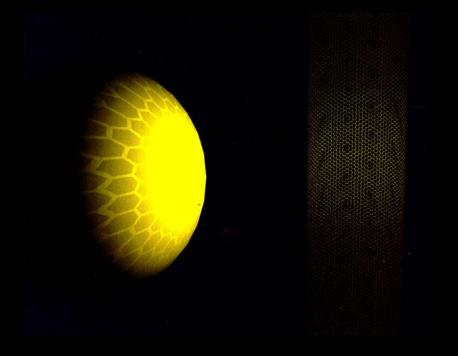






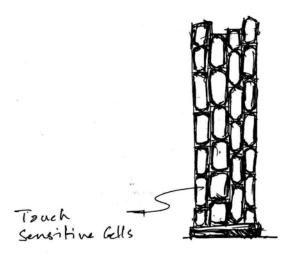
Taking inspiration from the bioluminescent creatures of the ocean depths, this concept tries to explore the possibilities of using light in multiple layers.

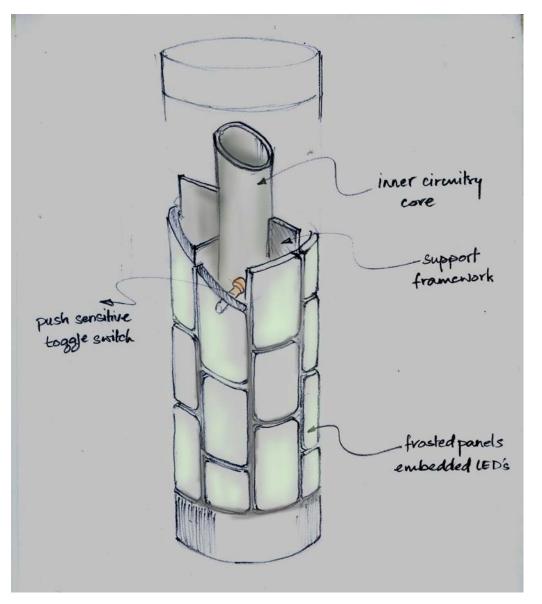




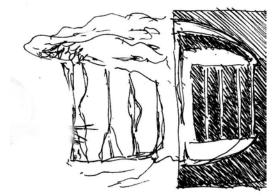


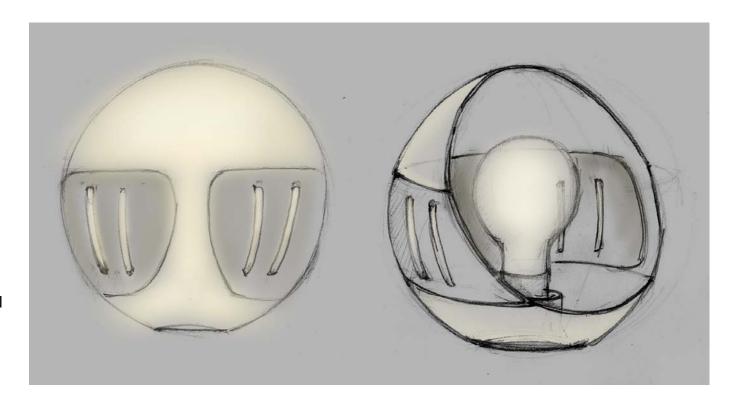
each cell can be lit up individually so the user can brighten or dim the lamp by pushing the requisite cells











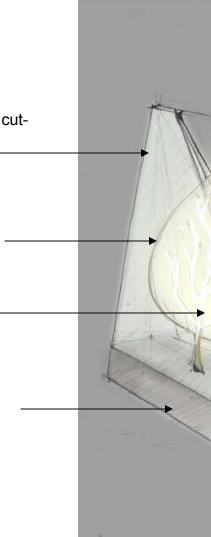
abstraction of the banyan tree in the form of a spherical lamp

textured metal slab with banyan leaf cutout in the middle

polycarbonate leaf cut-out inserted into slab in two halves

veins of the leaf are highlighted by fibre optic strands

light source for fibre optic strands

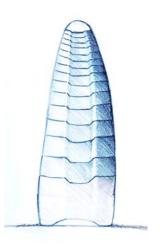


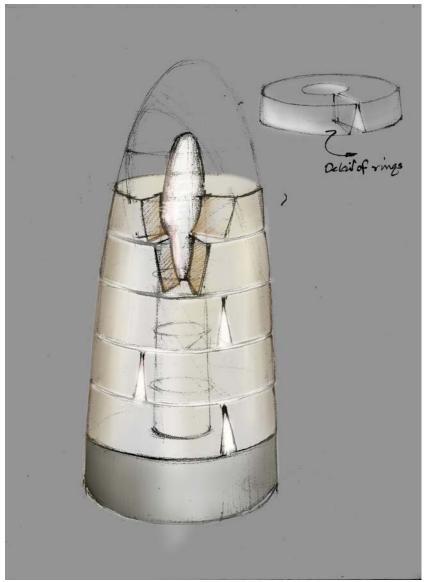




the streaks of light can be played with by rotating the discs, the slits create sharp rays of light simulating the thorns of the plant

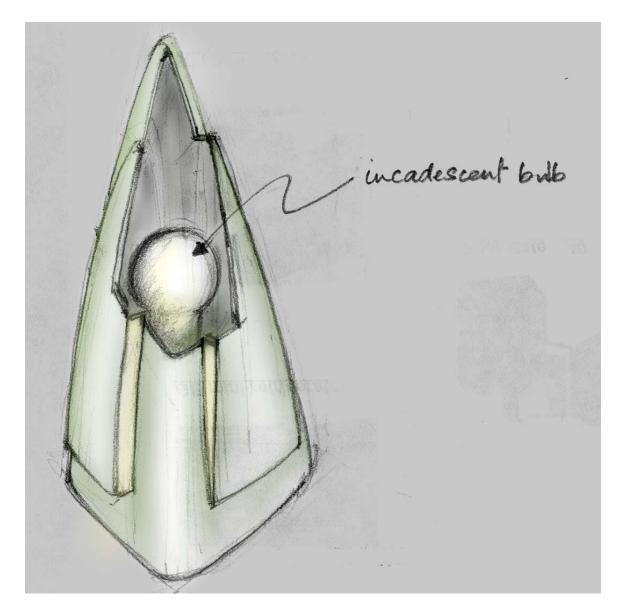


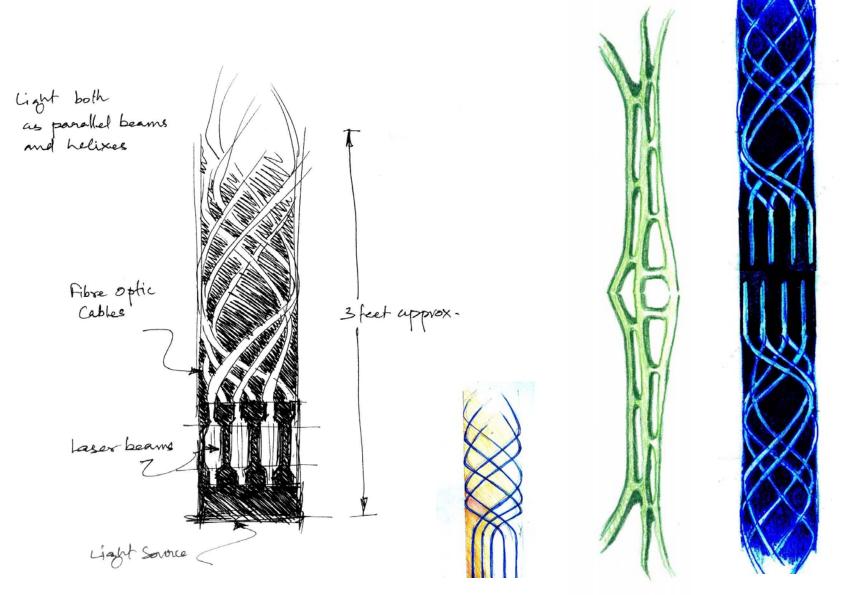


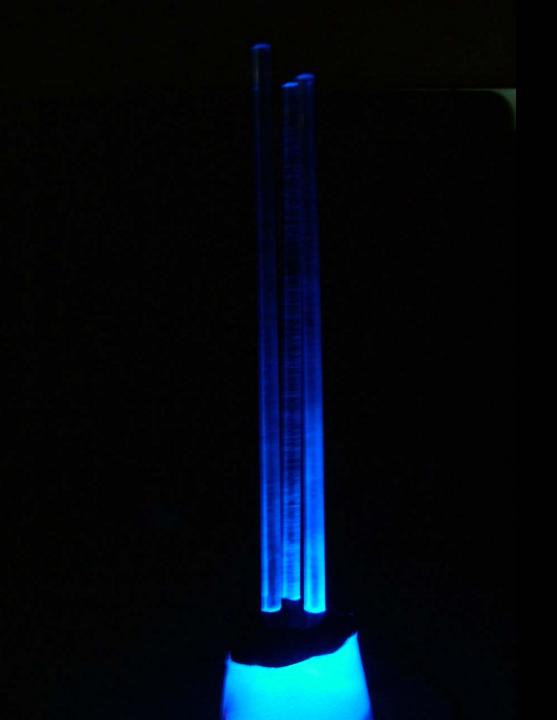




thin rims of light visible along the contours of the flaps





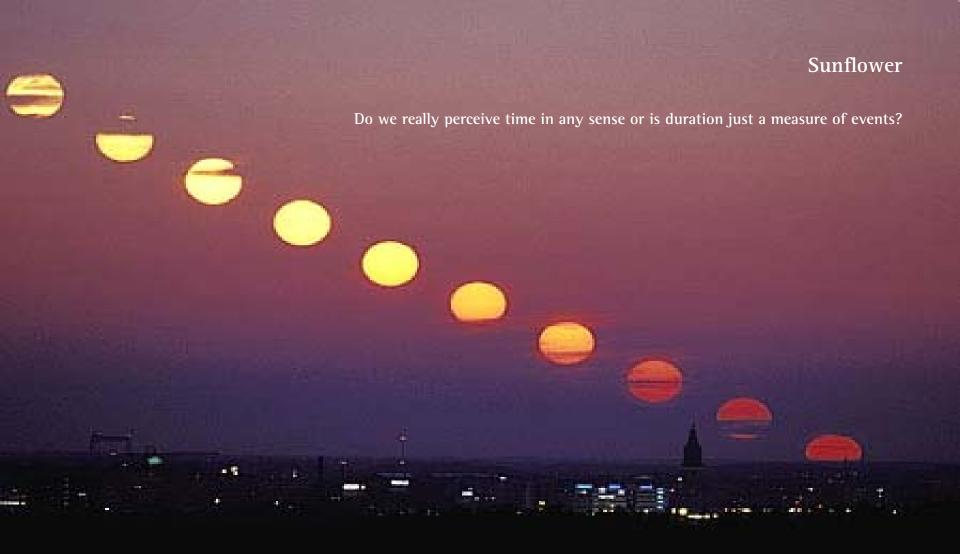


This concept was initiated with attempts in exploring ways in which to interact with the lighting product during the actual 'switching on' 'switching off' point.



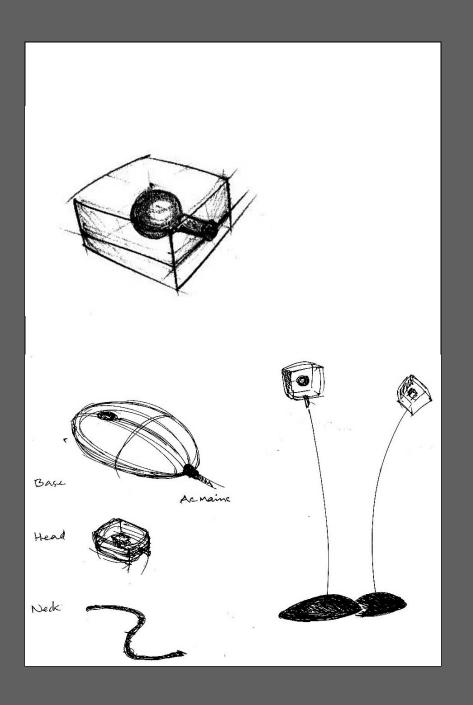


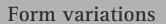


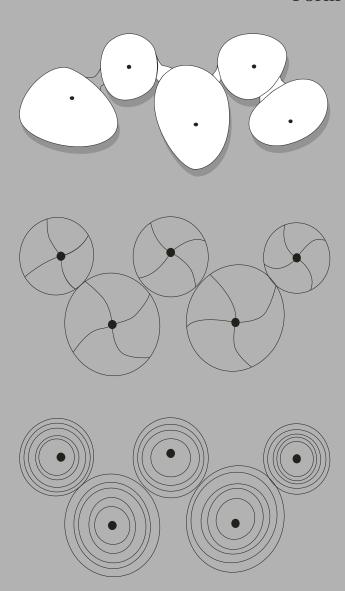


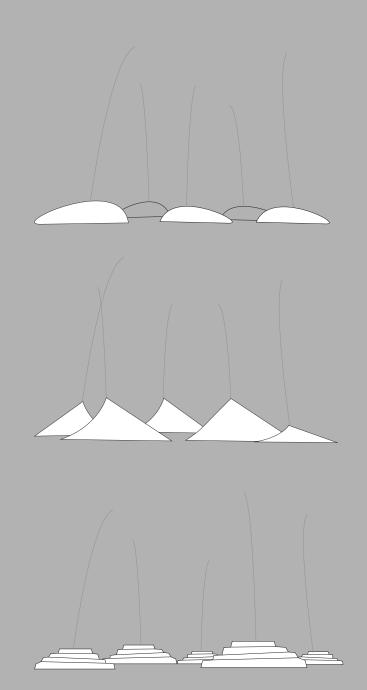
sense of duration felt with movement of natural light property of phototropism – growth of the organism towards or away from light.





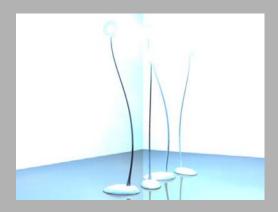


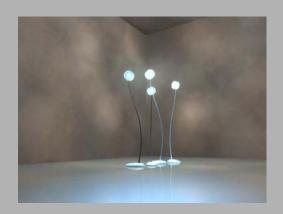




Form explorations





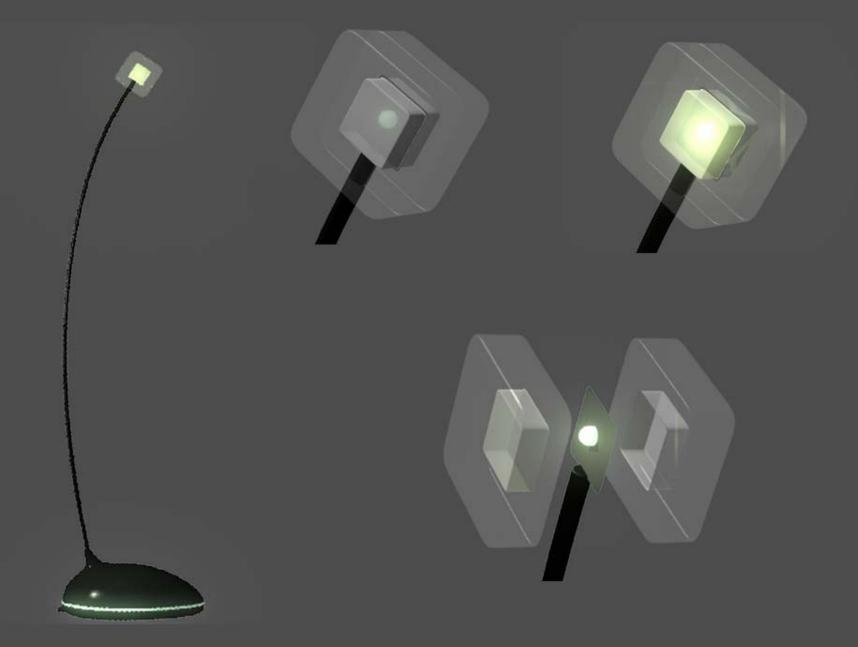








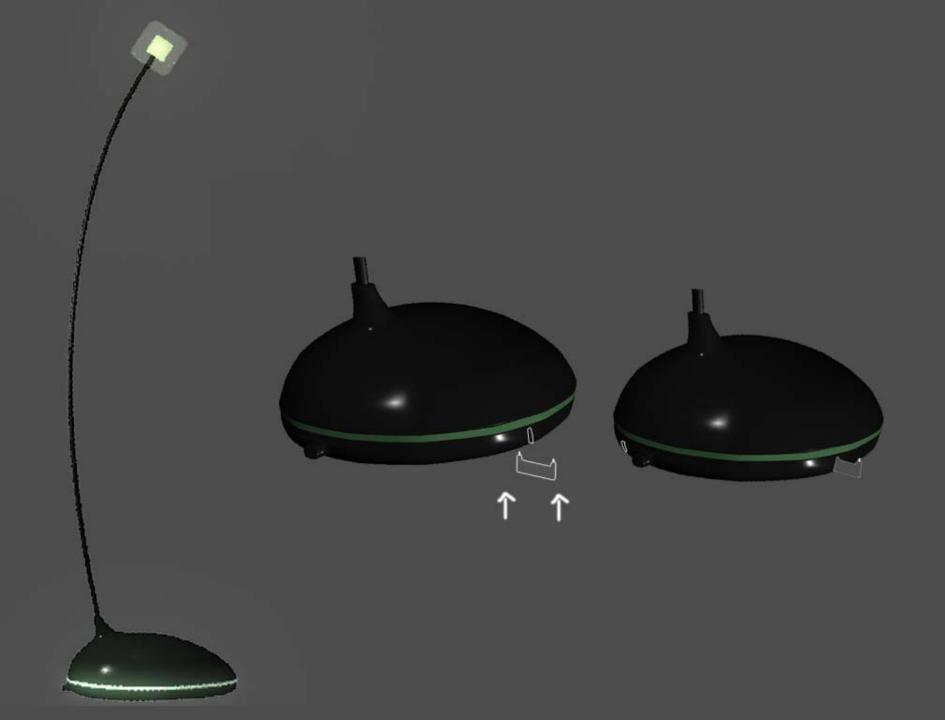








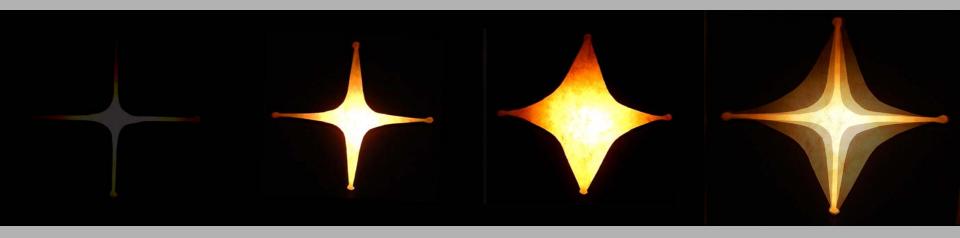


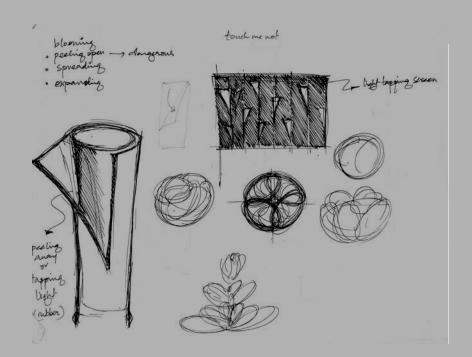


Scenario sitting in a easy chair Listening to music



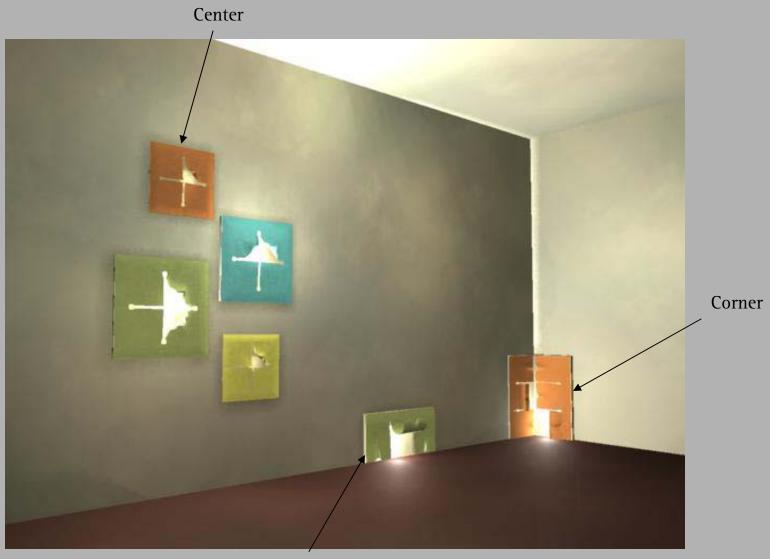






Allow the user to engage in an almost playful manner and control the amount of light to create the perfect ambience for himself.

Modules



Bottom

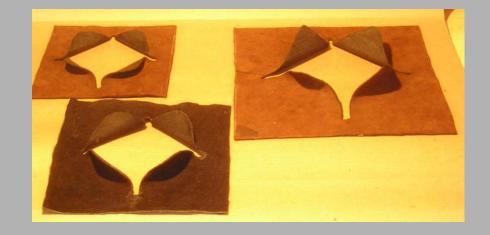
Operation

Animation flap opening

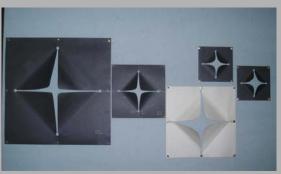
Mock-up and scale







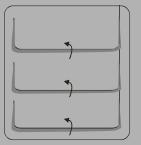


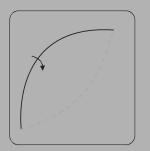


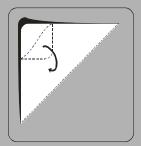


Colour and pattern





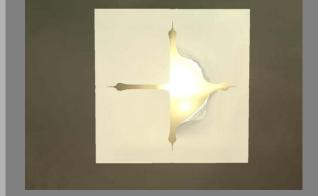




Material

opacity

texture



Opaque



Translucent



















