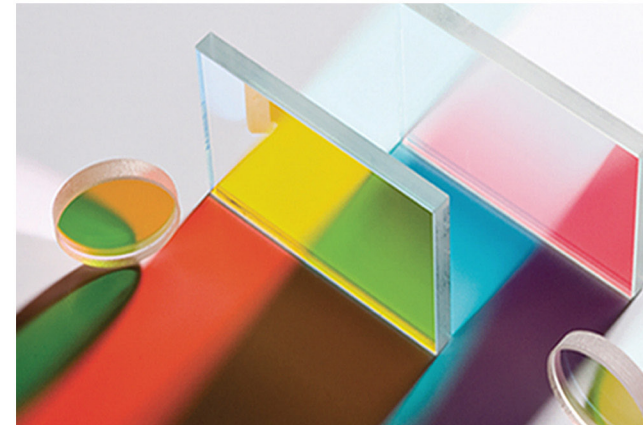
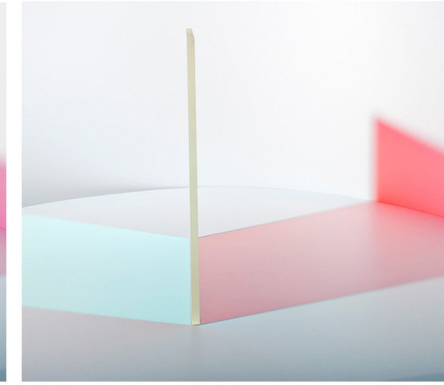
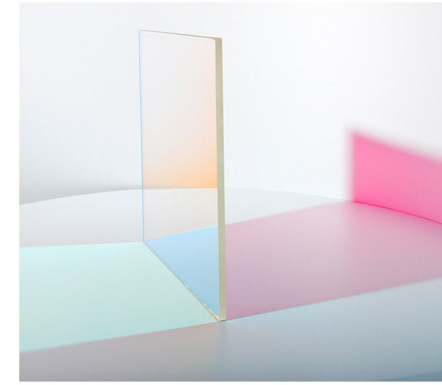
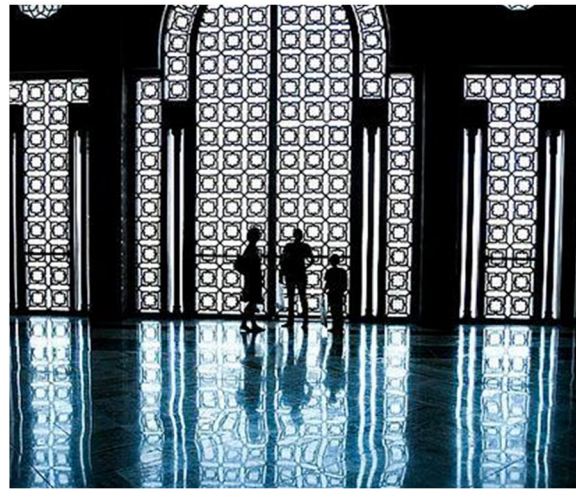
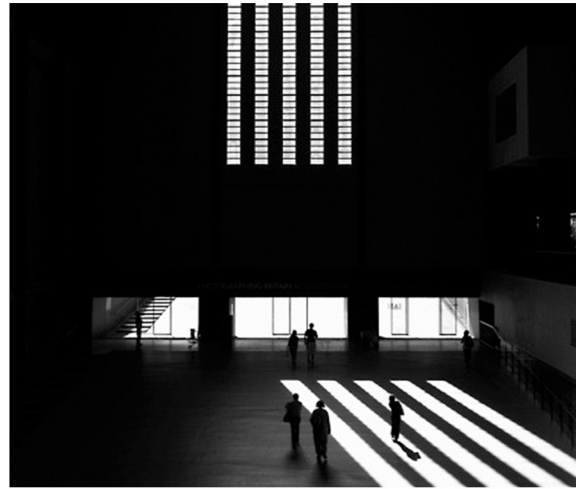


Light Moving Color

The project one was started by special physical phenomenon created by dichroic beamsplitter. Through moving process of brass ring,the light color is moving all the time, creates interesting interaction and amazing experience . It creates new interaction between people and light.





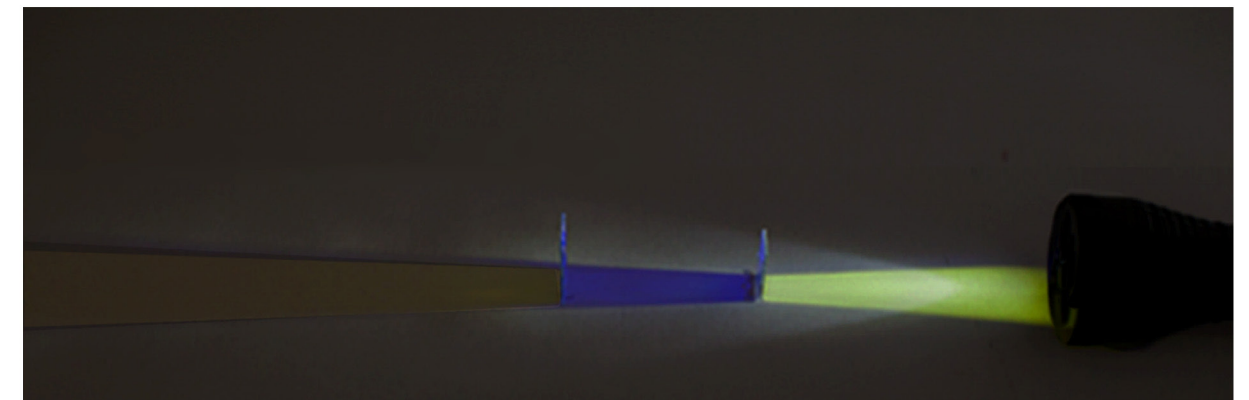
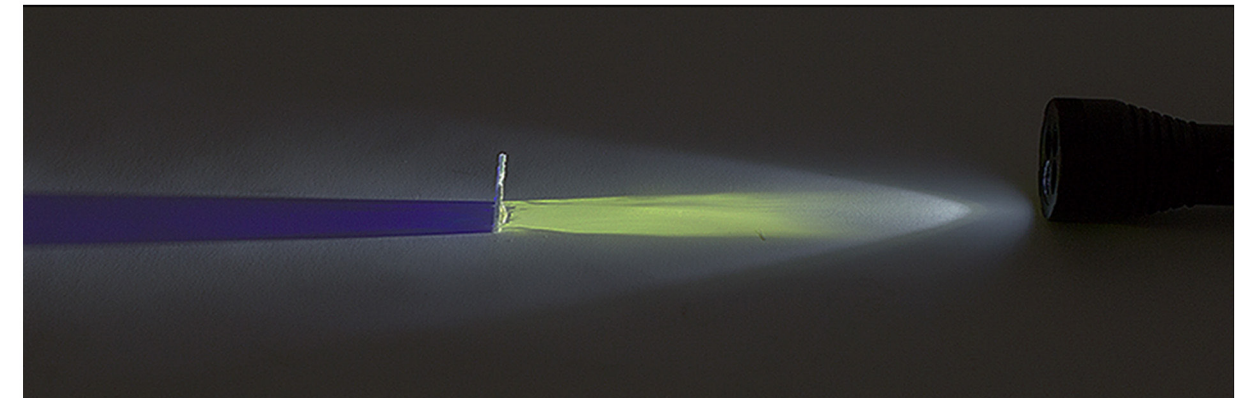
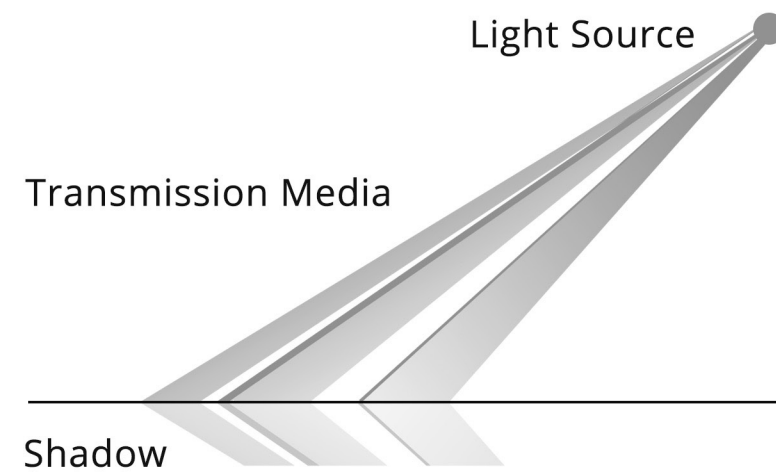
Different Angle
of Dichroic
Beamsplitter
It reflects one color of
light and transmits
another color of light.

Experiment Phenomenon

One Dichroic Beamsplitter & Two
Dichroic Beamsplitters Phenomenon

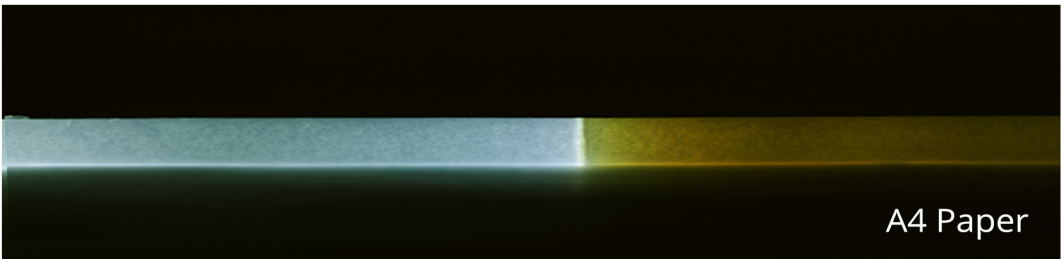
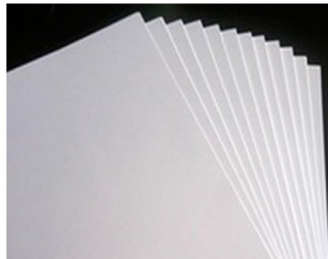
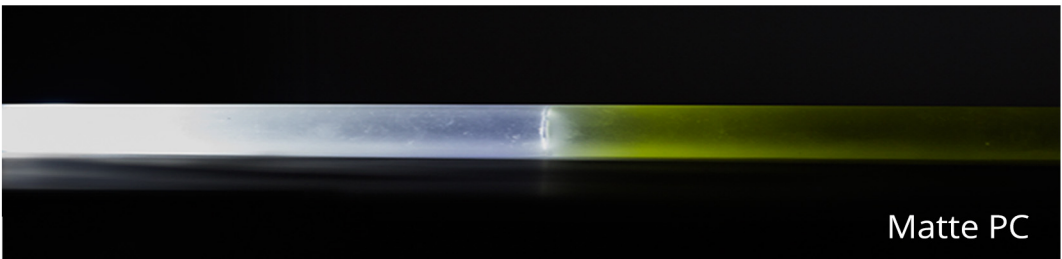
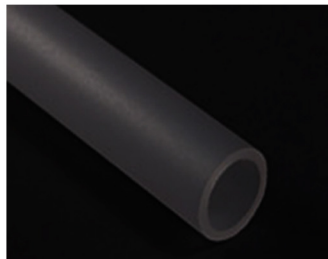
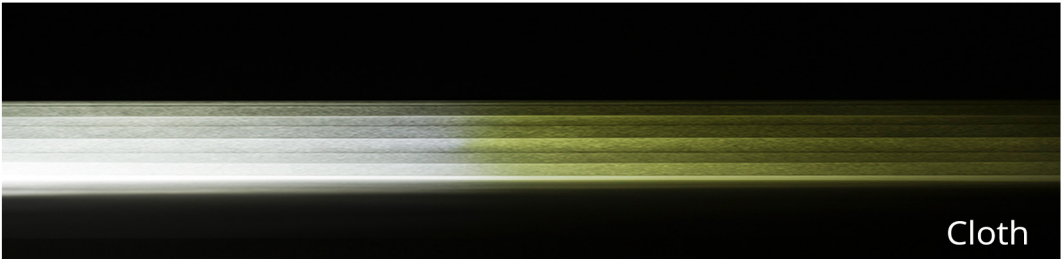
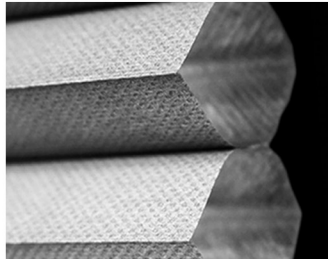
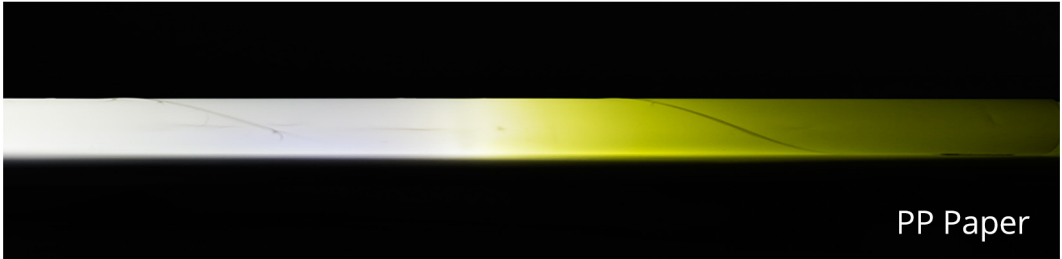
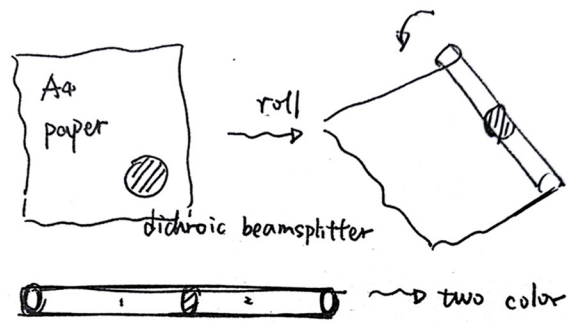
Inspiration

What is the relationship between
light source & transmission media ?



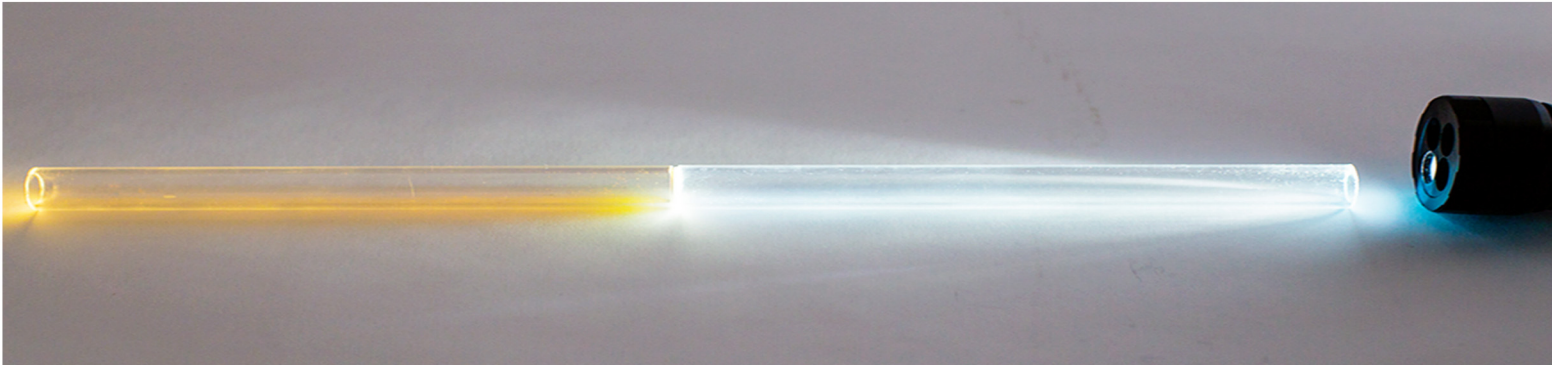
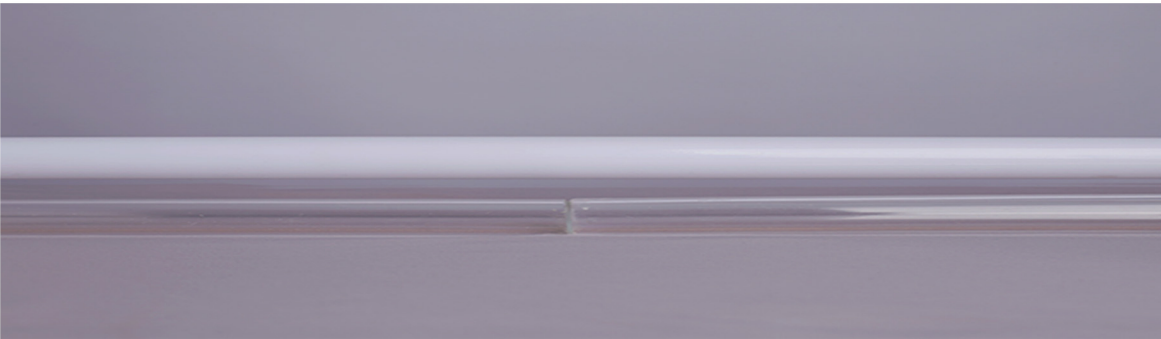
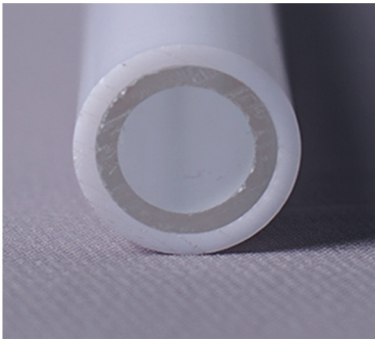
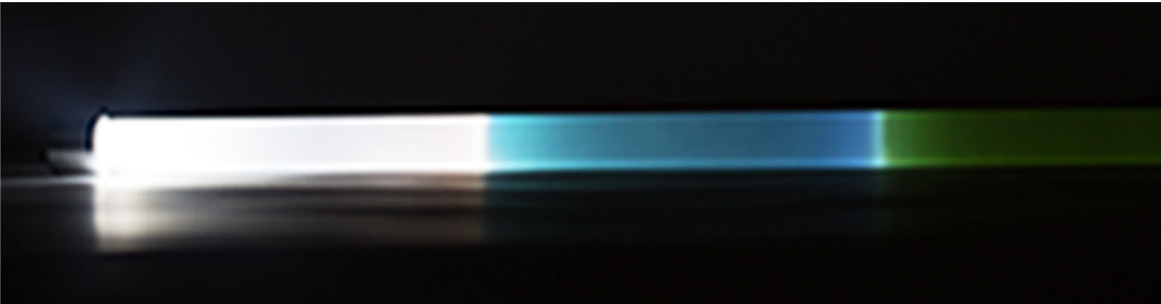
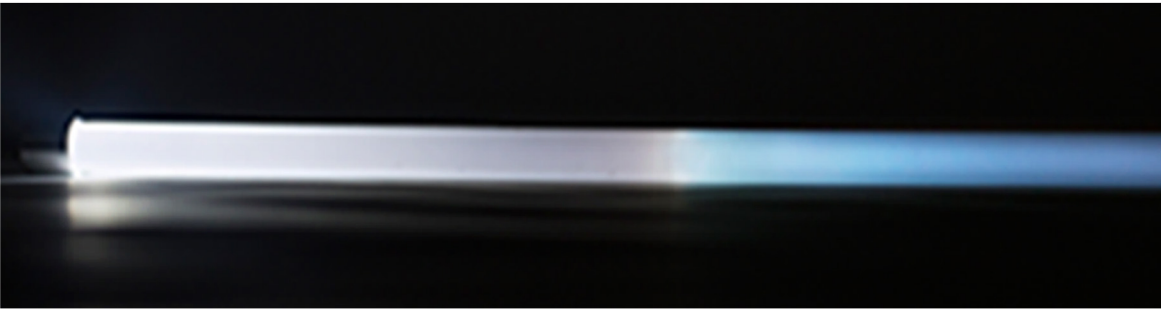
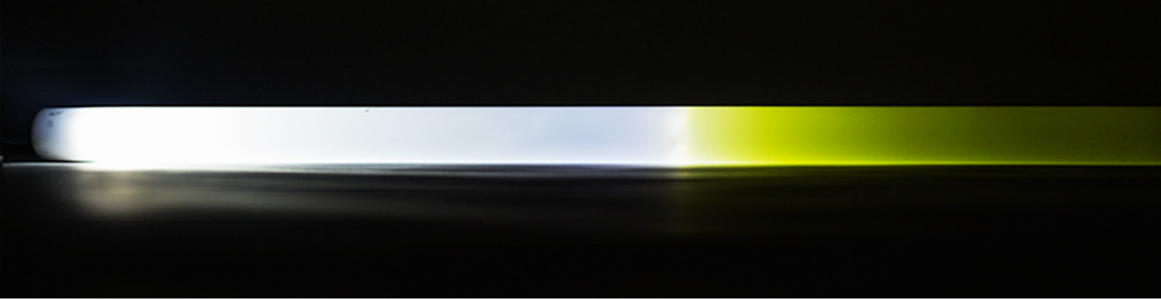
Idea Development

Use a paper to cover the dichroic beamsplitter, so people can find the color divides into two through the paper, but they do not know how this happen since they cannot see the dichroic beamsplitter



Use light and dichroic beamsplitters to test different materials After experiments ,smooth PC tube is found to be the most suitable materials to transmit light and convenient for mass production.

Different Material Test

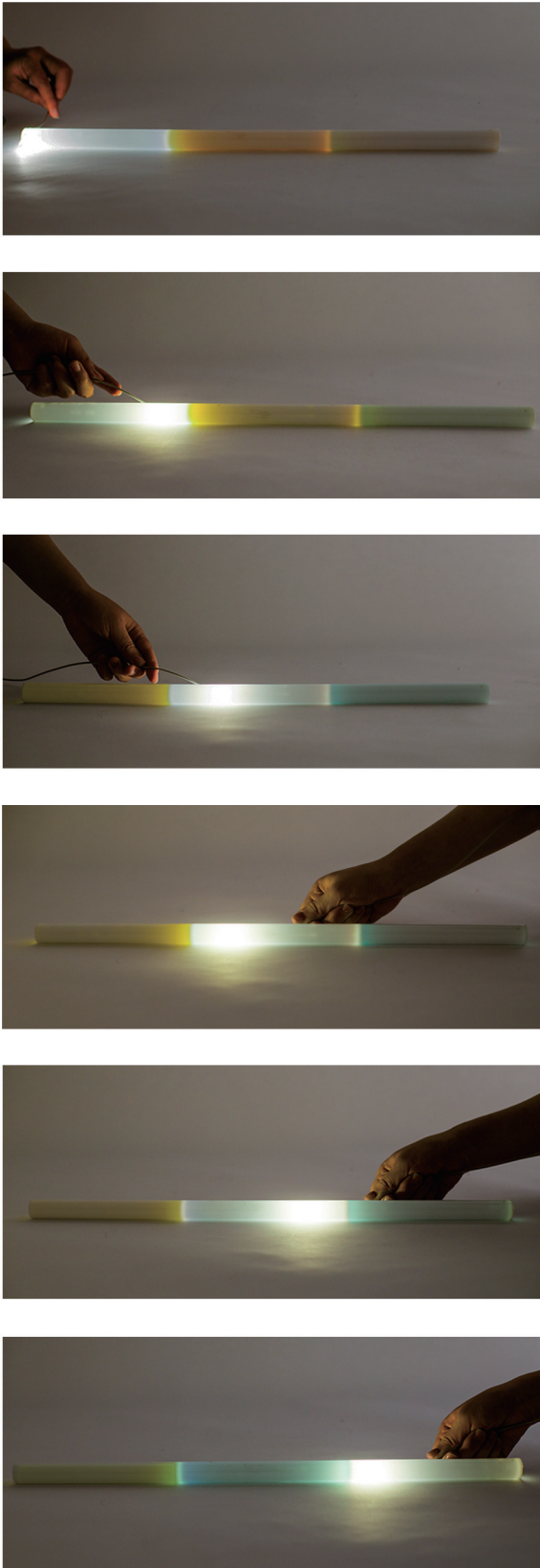


The tube is double structure. The inner tubes are two transparent tubes to fix a dichroic beamsplitter in the middle position. The outer tube is white smooth PC to make internal structure is invisible for people.

Doube Tube Structure

Light Color Moving

The light source moves from left of the tube to the right. Through this moving process, the light is changing all the time.

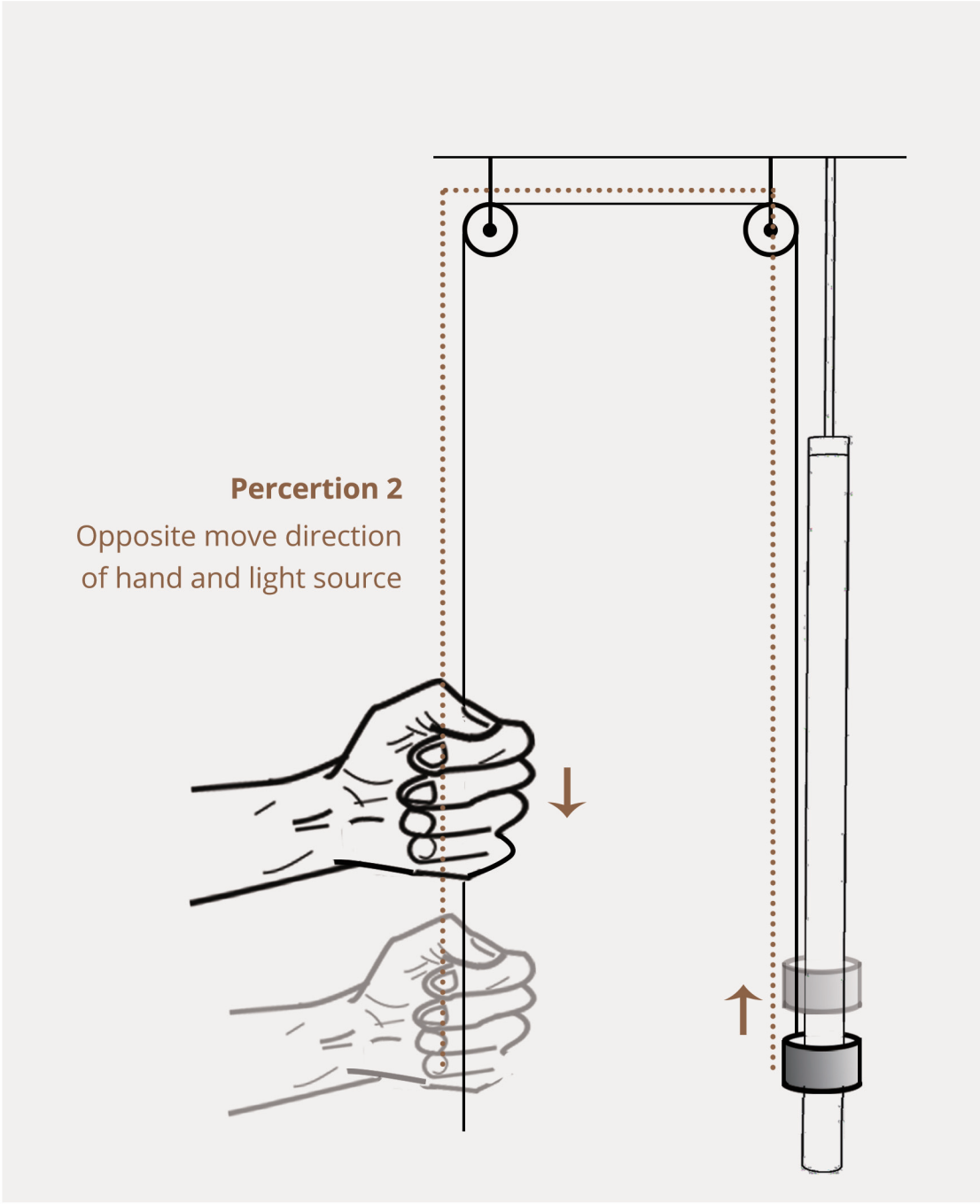
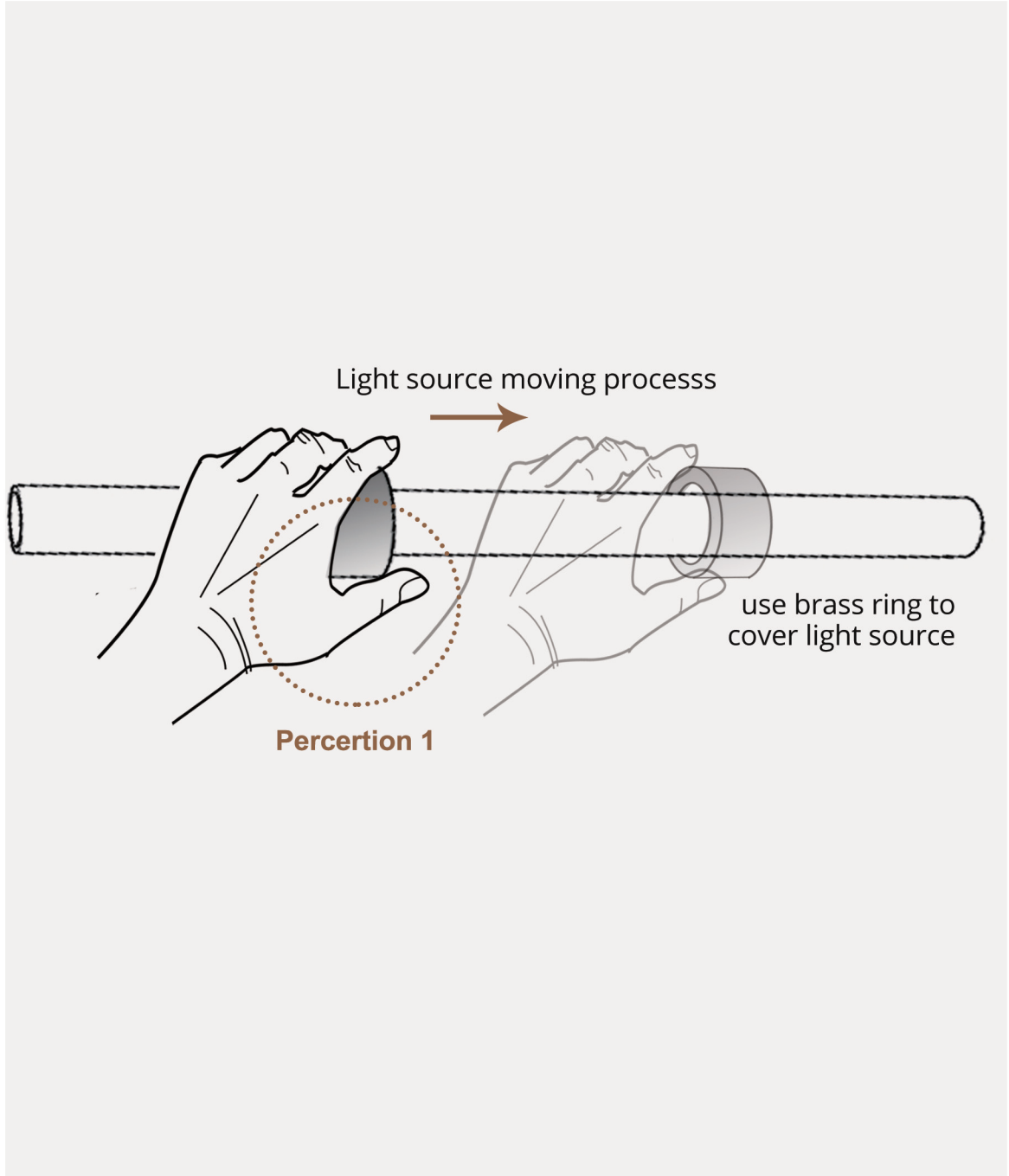


How to make this experience more interesting?

Short percertiion process of brain
Use hand to move light source directly



Longer perception process of brain
Use string and pulley to pull up the light





Cut the brass to a needed length, and machine the desired cylinder with a lathe.



Use drill press to drill the hole at the required position. Thread and weld circuit.



Making Process





Interaction between light source and user

Cover the light source in
the brass ring,and when
using string to pull up
the string,the color of
the light is changing all
the time.

Put a brass ring (light
source) on tube to light
up it and when moving
the brass ring,The light
illuminates dichroic
beamsplitter from
different angle to see
light moving.Interaction
between light and people.

Light Moving Process and Color Changing

