

# MONOCHROME ROOM

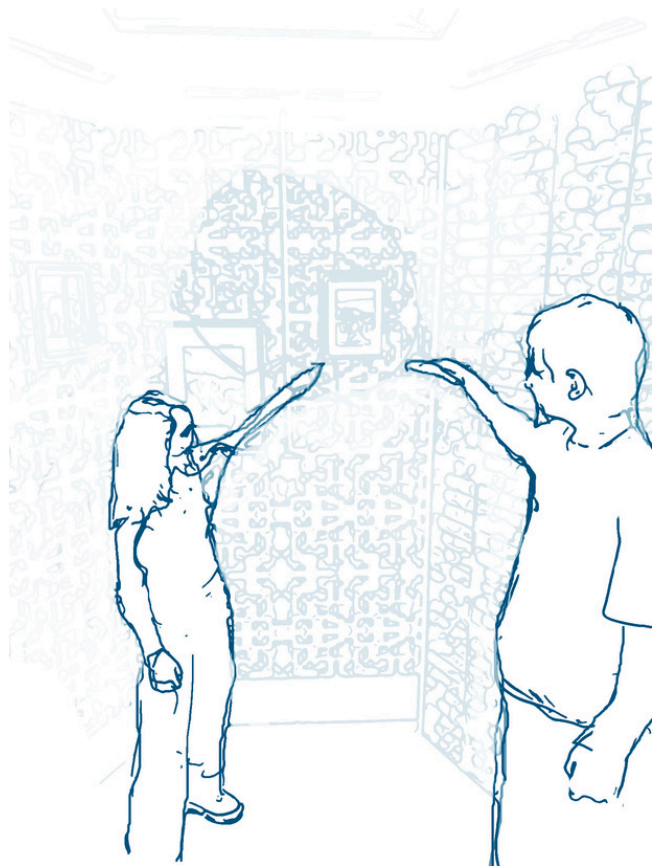


Where have all the colors gone?

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## What to do

- Go into the room and look around.
- Try to identify the colors of the objects in the room.
- Press the switch opposite the entrance...



## IF YOU WANT TO KNOW MORE

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### What Do You Notice?

All the colors in the room look faded or similar. Many objects suddenly look alike. When you turn on the lamp, their true colors reappear.

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### The Science Behind It

The light in this room comes from a sodium-vapor lamp. It emits almost just one color of light at a very specific wavelength. This is called monochromatic light (“mono” means one, and “chroma” means color). Normal light contains many different wavelengths. Their combination makes colors visible: objects reflect certain parts of the light, and we perceive these as color. Here, that variety is missing. There is only one color of light, which is reflected similarly by all surfaces. As a result, your eyes cannot distinguish between them, and almost everything looks the same color or gray. Only when “white” light returns—that is, light containing many wavelengths—do the true colors become visible again. The room shows that colors arise from the interaction between light and objects.