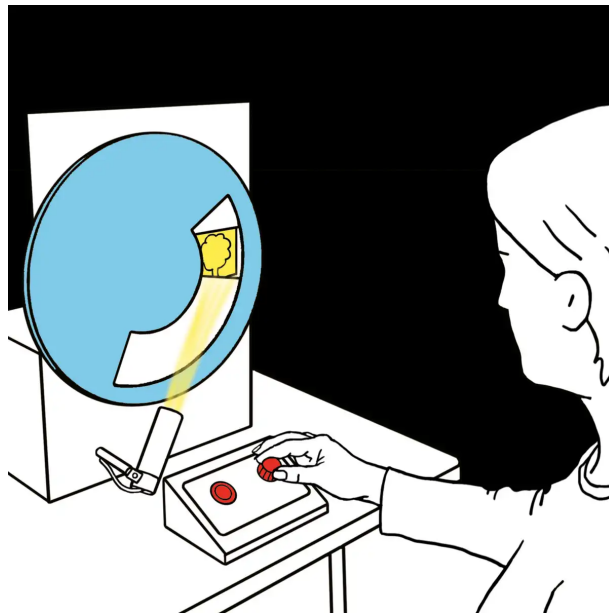


Colour Reversal

Can you change the colour of the tree without clouring it?



Turn the switch just a little, so that the disc is slightly turning backwards, and observe the tree.

What happens to the colours, when you increase the speed?

What happens when you stop the disc or turn off the light?

When the disc spins backwards, i.e. counter-clockwise, first you see a green tree and then a white surface.

The white area is perceived by the three visual cells for green, red and blue together. If a coloured area is perceived, like the tree, the visual cells adapt, reduce the eye's sensitivity for this colour and report the colour impression with less intensity than before.

At a faster speed, your eye perceives the white surface as being on top of the tree. In this moment the green colour signal is transmitted to the brain with less intensity, because the eyes have just seen the green tree. The green part of the white surface is therefore no longer fully perceived, resulting in a reddish tree. The same effect works for the background.

When the disc spins clockwise, or when the light is turned off, we see the normal colours of the objects. The light intensity is not enough to highly stimulate the visual cells and to cause the effect.