



BlindSight

Robert Carlsen | Andrew Styer



Concept

Explore synesthesia by associating certain body positions with visual hallucinations induced by photic stimulation.

Concept

Wearable sensors adjust the frequency of the flashes and thus provide various patterns.

Inspiration

William Gibson's "Neuromancer"

protagonist uses electrodes/glasses to jack into cyberspace

three-dimensional space visualized as colored geometric shapes

Inspiration

Kinesthetics

interest in sensing body movement as a system rather than as isolated and disjointed movements.

Topics

Proprioception

Perception

Kinesthetics

Association

Self

Iteration

Sound & Light Machine

Visuals in support of audio sequence

Expanding visual frequency range

Using body movement

Providing user direct control

Independent eye frequencies

Research

Jan Purkinje

Recorded patterns perceived looking at Sun

Mitch Altman

Brainwave Glasses

Dominic H. ffytche

“The hodology of hallucinations”

Cortex, September 2008

Experience

LED glasses stimulate vision through eyelids.

Flashes are often perceived as patterns.

Patterns vary based on flashing frequency.

Sensors affixed to sleeves affect frequency.

Alter the experience by moving arms.

Associate position with visual patterns.



Context

Solitary exploration

Visual yet vision-diminished

Closed eyes

Seated

Space for movement

Materials

Glasses with LED elements

Accelerometers worn on arms

Microcontroller / battery

Soft switch for operation

Snug garment

Challenges

Discomfort

Controlling light intensity

Generating meaningful interaction

Photosensitive epilepsy

Bucha effect

Successes

People are often eager to try them

Strong favorable reaction

Most participants report visualization

Generally pleasant sensation

Seem absorbed by experience



Exploration

Other sensors / movement

Utilize gesture

Expressiveness in lights

Frequency shift events

Experiment with audio

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<http://robertcarlsen.net/blog/blindsight>