

Invisible Architecture

Initial concept:

My idea of project is focused on the presence of **Mirror**, element that reflect what is opposite them (people, light, objects, etc).

The project consists of an application used to look beyond the material, which will show information about the location of the mirror in the city and which furniture or place it belongs to, projecting the contents of a database into images and written images on its surface.

The reflection I'm going to make is about what these architectural or design elements hide and what it is possible to see through them, a virtual double of our reality.

Inspirations:

- **MIRRORRRRIM**: A giant Tetris block has landed in Powell Gardens, a large botanical garden an hour drive outside of Kansas City, Missouri. MIRRORRRRIM, designed and built by Kansas City-based firm 360 Architecture, is a modular stacking of bright, lime green, cedar cubes, forming a T-shape on the ground with a vertical tower rising above the crossing point.



<https://archpaper.com/2012/06/360-architecture-design-an-invisible-fort-in-kansas-city/>

- **The Juniper House** by [Murman Arkitekter](#): This house is an experiment. You approach it via a cul-de-sac that ends in a sheep fence towards the open moor. There is a grove of high junipers and a couple of white plastered houses visible. Embedded in a glade 5 meters to the right lies Juniper House. The house is barely visible, like a mirror of its own surroundings.



<https://www.archdaily.com/624169/juniper-house-murman-arkitekter>

- **Giant's Causeway Visitors' Centre by Heneghan Peng Architects:** The Giant's Causeway in Northern Ireland consists of 40,000 interlocking basalt columns, created from an ancient volcanic eruption. This visitor center creates an additional sculptural element along the landscape. "It is both visible and invisible; invisible from the cliffside yet recognizable from the land side".



<https://www.dezeen.com/2012/10/18/giants-causeway-visitors-centre-by-heneghan-peng-architects/>

- **Magic Mirror of Oniqlo powered by Holition:** Trying on clothing in front of the Magic Mirror prompted a touchscreen that allowed the customer to select other colours in the range which could be tried on. The Mirrors were also fully connected to social media, allowing instantaneous sharing direct from the Store.



<https://holition.com/portfolio/uniqlo>

Topics and Concepts:

Non-Verbal Communication, Behavior, Gestalt, Color Psychology, Speculative Design, Internet of Things, Synesthesia.

Perception, Umwelt, Warm and Cool Colors, Visceral/Behavioural/Reflective, User Experience, User Centered Interface, Usability, Cognetics, Frames (point of observation)

Chemical Responses from your brain creating a Pattern of Emotions. Mirror may associate bright colors with a high sound, whereas loud sounds are represented by opaque and cold colors. The loud sounds arouse smallness and angularity, while the weak ones evoke vastness and roundness; Rapid musical rhythms evoke sharp and irregular images. Bass sounds with black and high tones with white (Marks, 1975; Willmann, 1944).

Prototipe:

Interactive screen on which the image is shown, taken from an environment camera, like a **mirror**; through the use of a **kinect / motion detector**, it is possible to trace the body of the user in the foreground, in order to consider his **body movement** as a representation of his own **emotional state**. Once the user approaches, the system captures his body profile, removing environment around him and making background colored. With each movement of the user, the kinect send an input to the display that changes the background **color** through a variation of tonality, interpreting each position of the body (arms, shoulders and head) as **non-verbal language**. When the background color is changed, it is possible to add a sound / **music** that, combined with the color, indicates a particular user's mood.

Research Questions:

- My research is about using **Mirror** to show inner emotions and feelings of a person, instead of showing the external body and the environment around. So important and astounding elements are the **color** I chose to use to express each mood/emotion (synesthesia), basing on Color theory and Gestalt, correlation between **language of the body** and hidden **emotions** you can just feel (non-verbal language) and relations between design and architecture object and human being in our society (Internet of Things).
- I can visually share my research using images, text and maybe some graph to explain concepts like the association between color, movements and emotions.
- I can expose an extra analysis of my idea of speculative design, introduce concept of cognitive psychology that I didn't insert in my poster and explain my idea of prototype to physically reproduce this concept.

Planning:

My **target audience** are university students and professors interested in art, digital design and technologies fields. My poster has to present a picture of my prototype/project as main content, in the centre; the other pictures are images presenting two important topics of my research, **color psychology** (a palette of colors with links between a color and an emotion) and **non-verbal language** (a sequence of figures whose pose indicates a particular mood or character).

- 1) **SYNESTHESIA**
- 2) **NON-VERBAL LANGUAGE**
- 3) **SPECULATIVE DESIGN**
- 4) **COLOR PSYCHOLOGY**
- 5) **INTERNET OF THINGS**
- 6) **GESTALT**
- 7) **BEHAVIOR PSYCHOLOGY**