

## SNEAK PEAK - AN INSTALLATION USING SURVEILLANCE IMAGING

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**ABSTRACT:** Sneak Peak, see Fig. 1, is an art installation recreating common situation where we observe people without them being aware of it by looking at the layering of glass in our everyday life.

It is derived from reflections through windows and semi reflective glasses in the S-Bahn as shown in Fig. 2. In the S-Bahn we come across reflections which gives different view of the visible reality in augmentation provided by glass. We look and study people without them being aware of it. The juxtaposition of many events happening simultaneously at different areas are brought together at one place changing the whole context of a scenario.

This installation presents the multiplicity of one view in an array of reflections through an arrangement of numerous Plexiglas and a projected real-time camera feedback of the viewing area so that the viewers can compare the difference of the direct and the projected image, see Fig. 3.



*Fig. 1: Playful interactions captured by real-time video projected onto a layering of Plexiglas*

### 1. INTRODUCTION

The idea of Sneak Peek came from observing people when they think nobody is watching. It is an extract from the reflections we observe in

the S-Bahn where reflections from peculiar angles overlap and we are unaware if what we are observing is the actual person or the reflection and have to look more closely. Sneak Peak also discusses how we observe people doing strange actions thinking that nobody is looking and even pass time looking at people who we find are attractive without them knowing. We are often caught in the act of staring at people we find interesting and we



**Fig. 2:** *Inspiration: deceptive reflections in the S- Bahn*

have to act as if we were thinking about something else or by acting like we weren't looking. We also notice due to gaze detection, the result of evolution, if someone is looking at us. But in the case of this installation, the viewer does not know where the actual location of a person is while he is observing him and gives idea of how reality can be perceived.

The incorporation of layering of images is widely used in the realms of art and photography. The usage of Real-time Camera Feedback has been colossal at the later stage of last century especially in Surveillance and Security.

Previous work has been done on the topic and that the most influential works for the Sneak Peak project include [1] Babel babble, by Laura Hudson, a glass sculpture having imagery of the Parliament of New Zealand in Wellington and relating it to Breughel Towers of Babel using dry point on glass sheets resembles in the technique of depiction. The artists suggest the resemblance of political process in the institutions.

[2] *Evocative Illustrations Show What Women Do When No One's Watching* is a series of illustrations by Sally Nixon. It discusses that women live in a world in which their appearance is constantly evaluated. These illustrations show women alone without being physically judged and are not being watched.

[3] *Juxtaposition*, an installation by Volker Kuchelmeister that juxtaposes the Tasmanian wilderness and the extreme urban development of Hong Kong. This exhibition explores the boundaries between real and virtual space and the relationship between observer and



**Fig. 3:** *Sneak Peak installation at a glance*

observed. It explores and explodes boundaries of cinematic image.

[4] *Landscapes*, sandblasted glass paintings by Jeff Zimmer that involve layering of glass to give a sense of space in the painting. The paintings depict the phenomenon of existence and non-existence and the transient nature of all earthly life. The paintings resemble in the technique of layering.

[5] *Rashomon*, film by Akira Kurosawa made in 1950s which involves a happening, rape and murder, which is viewed in different way by the bandit, the victim and the murdered man. This film is a brilliant exploration of truth and human weakness.

The innovation in Sneak Peek installation is this visual ambiguity that it creates in the sight of vision by projection of the same image as you see directly but through augmentation provided from transparent angular Plexiglas. This Project is unique because the viewer is able to see the material i.e. Plexiglas and is

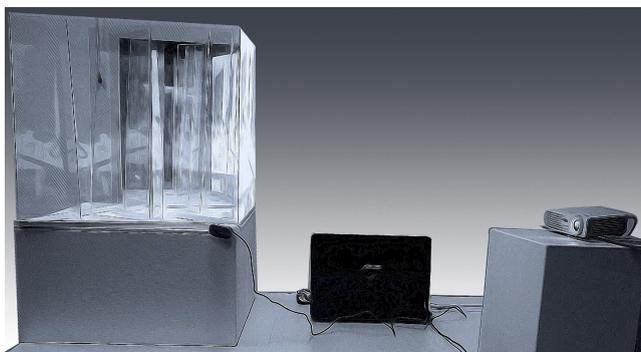
unable to comprehend the reality of the real view from the projected view.

The Projected area is concealed to not give the illusion away which is not the case of most of the installations and the final outcome comes off fake. This project is a new way of exploring boundaries of vision and perception and does so in a seamless way.

## 2. METHOD

This installation aimed at changing the perception of one point of view being the ultimate truth and bringing into consideration how one event can be viewed in numerous ways. It uses Real-time Camera Feedback, Projection, Processing and an array of various sized Plexiglas arranged in a matrix.

The process involves live video from the exact viewing angle as that of the Setup. The real-time camera feedback is then directed to a System which uses Processing to compute the video in a frame that constantly moves to and fro and this video is then projected on a translucent film in the concealed part of the Setup. The setup involves a 60 cubic centimetre space with an arrangement of Plexiglas mounted on a pedestal (see Fig. 4). The Projected Video is reflected at many angles with the angular Plexiglas and thus project a multiplicity of views where you become uncertain of the reality of one particular view.



**Fig. 4:** Setup (Projector, System, Web-Cam & array of Plexiglas)

## 3. PROCESSING

Sneak Peak uses the Processing Texture Quad FX sketch (Fig.5) (<https://processing.org/examples/texturequad.html>) to resize the image and to make it move to and fro within the frame of the Quadrant and to Map in on the translucent film.

```
TextureQuad_FK | Processing 2.2.1
File Edit Sketch Tools Help
TextureQuad_FK
import processing.video.*;
PImage img;
Capture video;
PImage tempimage = createImage(960, 960, RGB); // 1080, 1080
int counter = 0;
int direction = 1;

void setup() {
  size(1920, 1080, P3D); // 1105, 1080
  noStroke();
  frameRate(30);
  String[] cameras = Capture.list();
  for (int i = 0; i < cameras.length; i++) {
    println(i + ": " + cameras[i]);
  };
  video = new Capture(this, cameras[75]);
  video.start();
}

void draw() {
  if (video.available()) {
    video.read();
  }
  background(0);
  tempimage=video.get(counter, 0, 960, 960); // 280, 0, 720, 720
  beginShape();
  texture(tempimage);
  vertex(410, 0, 0, 0, 0);
  vertex(1510, 11, 0, tempimage.width, 0);
  vertex(1490, 1072, 0, tempimage.width, tempimage.height);
}
```

**Fig. 5:** Processing Texture Quad Sketch

## 4. CONCLUSION

The outcomes of this installation were a playful interaction of people with the Setup which allowed for interesting movements being captured in the resultant multiplicity of views. An ambiguity was created when people walked in front of the Setup which successfully confused the viewer of the position of the people coming into his field of vision and from where they came. Hence, Sneak Peak realized the initial idea of viewing people in a way that they didn't know that they were being watched as the view was indirect and brought forth through a series of different mediums.

One of the issues related to the project was the visibility of the Setup which gave way to the final result and people knew how the Setup was working. Moreover, the viewing point was not clearly defined I had to guide people from where to see. The light conditions were not ideal because of the other projects in the same space.

## 5. FUTURE WORK

I would like to invest more time to work on the technicalities in a more seamless way, at the same time incorporating semi-reflective glass in the setup to explore new possibilities of ambiguity. The installation would have been more meaningful if the Setup was not visible. It can be further implemented in a way to

create a huge installation with video feedback from more than one camera and more projections to making the view more ambiguous so that the idea is embodied in a better way. The idea can be presented in a form of labyrinth where you can question the unreliability of vision. It can be used in the study to reflect on how our thinking makes us prone to seeing certain things in a certain way and a certain augmentation may make us susceptible of new ways of thinking about the world. Moreover, this new ambiguity can be helpful in studying behaviours of people alone and in the presence of others. In addition to this multiplicity of views can also be used in car views instead of just the side view and the rear view.

### **Video Link**

<https://vimeo.com/165014596>

## **6. REFERENCES**

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