

Cubist's Visual Reality/CVR Device Hands-on Demo and Experiment

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Abstract. This is the presentation of the Cubist's Visual Reality/CVR Device experiment and demo, which aims to impel the participants to change their perspective and become more conscious of how we see and navigate in space.

Keywords: perception, spatial cognition, viewing device, drawing, navigation

1 Presentation of the CVR Device Hands-on Demo.

The visual arts have always been a creative viewpoint through which we see and understand the world around us. As an architect and artist I have always been interested in comprehending what lies beyond of what we can see; what are all these forces that form our experience of space. Of course, this is a part of the architectural method; to understand how space works and how can this knowledge be used for a designed *telos*. For that to happen we need to be conscious about how and when we perceive our immediate environment.

It takes time to design something as big as a city or even as small as a house and sometimes it takes even more time to cognitively understand how we navigate in space and our built environment in extent. Although, in our days we have so many digital tools to help us in this task, we still rely on the abilities of our brain and bodies. At the end of the day, our existence begins and ends with them and anything beyond them would be an assisting tool. Therefore, while we explore the Virtual/Augmented/Cross realities as we should, we owe to be able to be conscious of our Physical reality.

When we place ourselves into an unfamiliar space or when the sense of depth that we so accustomed to is eliminated, it is inevitable that we (our brains) will aim to make sense of what we see. In this way, acting under unusual conditions impels immediate reconsideration of the given parameters. This has been one of the tools that the artists of Cubism [1] used in order to reinstate the sense of time in an artwork. In a 'typical' Cubist painting the perspective would be fragmented in such a way that the viewer would be able to many sides of a given still-life or portrait. This perspective would have nothing to do with the perspective of the Renaissance which resembles the way that we see space; as close as it could be by using one viewpoint while we use two – our eyes.

In my current work I am researching how vision functions, initially through fragmented viewing, in an attempt to replicate what the world would look like through the Cubist perspective, which was very much influenced by the virtuality of the fourth dimension as time [2]. For that reason, I created the Cubist's Visual Reality device (CVR device) which has a wearable version [Fig.1] and as well as a camera attachable version.

Fig.1 (left) Martina Keleri (2018) CVR Device, wearable, version 5.

Fig.2 (right) Martina Keleri (2018) CVR Device, wearable, experiment at Tate Exchange 2018

2 Structure and expected outcomes.

The proposed hands-on demonstration aims to engage the audience in an experiment of spatial perception which will be achieved with two ways. The first will be to invite them to draw what they see while looking through the wearable CVR Device [Fig.1 & 2]. The goal will not be to demonstrate a skill in drawing but it will be to offer the viewer a tool of understanding spatial perception. The second way will be to wear the device and try to navigate into space, testing this way the adaptability of our brains when our visual field changes.

The objectives of the Demo are to review the experimental method of the CVR Device by documenting the it via video recording and data collection through a questionnaire, as well as review how much time each participant needs to adapt to the new *visual reality* and to what level they would get dizzy. The final objective will be to record the drawing process and discuss with the participant their experience of the drawing and help them understand the process they followed (e.g. what they drew first, where their eyes focused first etc). The goals and expected outcomes of this experiment are to encourage the audience to use this analogue medium and enhance perception as well as making them conscious of the way we see and navigate in space. Additionally, I am wishing to collect data that in a later stage will be applied in VR environment design, as vision is the sense that is primarily involved.

The CVR Device demo will last 120' and the audience will have the chance to try the 9 different versions of the wearable device either by drawing or by navigating in space. Their experience will be discussed and the key elements will be recorded via video and questionnaires. The targeted audience is Architects/urban designers/interior designers, VR/AR/CR designers, artists, performers, neuroscientists and everyone who would like to experiment with the devices or is willing to question their visual perspective.

References:

1. Dalrymple-Henderson, L. (2013) *The Fourth Dimension and Non-Euclidean Geometry in Modern Art*. MIT Press

