博士(人間情報学)論文概要

CRITICAL DEVICE ART SYSTEMS
Series of different system settings for interacting and investigating of the active Self

(クリティカル・デバイスアート・システム
－　自己との相互作用と分析を行う作品群)

グローバル教育院　エンパワーメント情報学プログラム

Maša Jazbec

2018 年　03 月

ABSTRACT

The thesis is a modest attempt to contribute to collaborative research practices among art, science and technology. The thesis is generated through the concept of Device Art approaches with added critical thought. Device Art has an enlightening side to it, to make people interested in the nature of technology. Japanese Device Art artists are quite often overcriticized for their positive attitude toward technology, which is also one of the reasons for coining a new term –Critical Device Art.
The idMirror installation is one of the first projects in the series of Critical Device Art. We have to admit that being critical is important in art and it does not mean being negative. Artists visualize what technology means and does to us as individuals and to society as a whole. Being engaged in contemporary visual practice brings along also the need for social responsibility, which, at the same time, is also the subject of Critical Device Art. Being critical is also the key point of the idMirror device. Critical Device Art research is characterized by creating a series of device systems for rediscovering human perception of the Self.
At first we designed the idMirror art installation in which we confronted participants with the image of their own facial reflection in an electronic mirror. We got interested in their reaction upon seeing their own face in the mirror.
After that we became interested in designing an experiment in which we would confront the participants with a reflection of a different face in the mirror in place where they should see their own reflection. Face identification proves the awareness that the face reflected in the mirror is owned by oneself, and represents a fundamental component of self-awareness. We designed the experiment and we examined whether and to what extent an unfamiliar face seen in the mirror can be perceived as one's own face.
Another motivation for my PhD research is also to investigate the relation between the mind and the body, which has always been an issue to humans. There is an evident lack of access to our bodily self-knowledge; we take the ownership of our bodies for granted. Nowadays, with advanced technology and new knowledge in neuroscience, we know that the ownership of our bodies is very malleable. To support the claim we conducted several scientific experiments in laboratories as well as in public spaces, such as art exhibitions, in the period between 2015-17. The idMirror experiment carried out in the form of artistic installation, discussed in the thesis, challenged the participants about what they traditionally thought and perceived as their own facial appearance in the mirror as well as the sense of body ownership when they saw it from "outside" of themselves. In our daily life it is impossible to perceive the appearance of our faces and bodies directly; we can only do it to some extent by using our senses. We need external media such as mirrors or cameras to see the actual image of ourselves from the outside.
When the participants taking part in the experiment were confronted with their own facial and body image – in front of themselves – they felt it as an utterly unfamiliar experience. In the presented thesis, we investigated this phenomenon from different

points of view; through systems incorporating a head mounted display (HMD), an electronic mirror and embodied android robots such as HI-2 and Telenoid. It has shown that with appropriate system of multisensory stimulation and manipulation, an illusion of owning limbs that differ from their own can be induced in people. The dissertation summarizes a study of creation of different systems on body ownership illusion in the frame of Critical Device Art systems.

Index