Cyborgism: Artistic Hybridizations of Human Perception

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Looking back at debates within cultural theory and philosophy, the intersection of technology and human perception has been discussed for quite some time. But what happens when technology becomes embedded within the body itself thereby changing the very framework and starting point for perceiving the world? Cyborgism is described as a specific art movement in which artists produce their artworks through new senses created by the union between cybernetics and their organism. These fundamentally new perceptions within cyborgism on the one hand result in a new type of cyborg artworks but may also result in a new way of re-perceiving existing artworks and the world in general. This new field of cyborg perceptions within the production and experience of art poses a new perspective and new questions regarding the intersection of technology and human perception, as both concepts change their fixed meanings by ways of the artistic hybridizations of human perception within cyborgism as an artistic movement.

1. TECHNOLOGY AND PERCEPTION

Looking back at debates within cultural theory and philosophy, the intersection of technology and human perception has been discussed for quite some time, one example being Walter Benjamin, who stated that what he terms the 'collective perception' is quite capable of change, and is in fact changed or even conditioned by technological developments happening at specific historical times (Benjamin 1936, p.439). Much research has dealt with different types of historically and technologically conditioned sight perceptions and visualities, and many researchers argue that as human beings, we were and still are perceptually changed by the invention of the cinema, the microscope, photography and today maybe even more so by the re-discovery of virtual reality technologies (Jay 1988, Friedberg 1993, Sontag 1997).

According to Mark B.N. Hansen (2004, p. xviii), visuality is first and foremost bodily constituted and therefore in no way something abstract. Following Henri Bergson's philosophy, Hansen insists that the body functions as an active framework for the image even in our contemporary digital regime. In this way, neither information or images exist without the human body's form giving and frameworking potential. The affectivity and resulting pre-discursiveness of the body functions as an active starting point for meaning production, which gives technology a radical potential following the argument that technology is capable of affecting our senses on a pre-cognitive level long before perception and language (Hansen 2004, p.252). But what happens when technology becomes embedded within the body itself thereby changing the very framework and starting point for perceiving the world? On a philosophical level this question has been sought answered ever since the first conceptions of the cyborg figure. Donna Haraway discussed how the machine in relation to the human is neither something to be worshipped or dominated as the machine is always already us, already our processes and an aspect of our embodiment (Haraway 1985, p. 314). However, when moving away from ontological considerations, the question still lacks a detailed answer when it comes to the cyborg's very tangible possibilities for extensions of the senses through extensions of the body and how this might affect contemporary visual expressions, artworks, and art practices.
2. CYBORGISM AS ARTISTIC MOVEMENT

In her article 'I, Cyborg' new media artist and researcher Ellen Pearlman provides an analysis of an event held at Hyphen Hub at the Red Door in New York City, August 27, 2014. This event consisted of a performance and a demonstration featuring cyborg artists Neil Harbisson and Moon Ribas. In the context of this analysis, Pearlman argues that "cyborgism changes art and perception of art" (Pearlman 2015, p. 89). Pearlman describes cyborgism as a specific art movement in which artists produce their artworks through new senses created by the union between cybernetics and their organism.

Harbisson is a Catalanian artist, musician and co-founder of the Cyborg Foundation along with fellow Catalanian choreographer and dancer Moon Ribas. The Foundation, according to its website, has as its mission to "help people become cyborgs, promote cyborg art and defend cyborg rights" (Cyborg Foundation 2018). The foundation first and foremost focuses on extending the senses and not the bionic body and the key imperative is to alter and hybridize the means of perception.

Harbisson was born with a rare form of colourblindness, where cone cells in the eyes are unable to register colour. This meant the he saw the world only in black, white, and grey. In 2004 together with cybernetics expert Adam Montadon, he put together the first prototype for the Eyeborg. It was a small camera that sensed the frequency of colour, but connected to a burdensome five-kilo computer that transposed six basic colour frequencies into six separate tones, that he could hear through a headset and then memorize. Gradually, more colours were added and slowly, the size of the headphones was changed and the size of the computer was reduced. In 2010, with the help of developer Matias Lizana, he exchanged the computer for a chip, and began using occipital bone conduction to relay sound instead of wearing headphones. In 2013, the Eyeborg antenna was osseointegrated inside his skull to include a pressure pad and three holes: one for the antenna, one for his cheek to relieve the pressure, and one for the charging jack. The chip was updated to include Bluetooth connection, and the sonic frequencies of infrared and ultraviolet were added (Pearlman 2015). Harbisson is consistently explicit about that what the Eyeborg has allowed him is a totally new sense and a new range of perceptions that he terms 'sonochromatism' – it is not to be considered synaesthesia, because there is never a varied relationship between colour and sound.

Moon Ribas studied at Dartington College as did Harbisson, and she majored in experimental dance and choreography. Since 2013, Ribas has had a small motor implanted in her left elbow, connected to the Internet that vibrates whenever seismic activity occurs anywhere on Earth. She feels the earthquakes with their power reflected in the intensity of the implant's vibrations. With this ability she created the performance piece Waiting for Earthquakes. In an interview Ribas stated: "Becoming a cyborg is an art itself. We treat our brain like it's a sculpture" (Raymer 2016, online).

At the event held at Hyphen Hub at the Red Door in New York City, August 27, 2014, Ribas performed the performance piece Waiting for Earthquakes. If an earthquake happens in the southern part of the world, she moves towards the south. If the quake is small, the movements are small. If the quake is big, her movements grow large. At the same event, Harbisson performed the world's first skull-transmitted painting Skyped from audience members in Times Square as they painted simple colored stripes onto a canvas. With the Eyeborg antenna, he received the colour frequencies into the chip implanted in his brain. He correctly identified and painted the same colour onto the canvas that was being painted live in Times Square. He performed this in front of the Hyphen Hub audience without ever turning around to view the actual painting.

“If you have new senses it opens up a whole new range of art,” Harbisson says. “We think we’ll start seeing more cyborg artists that will change the way we perceive reality through their perception, their new senses” (Raymer 2016, online).

The picture that cyborg artists paint of the future is highly optimistic, as they believe, that new sensory experiences will push the evolution of cyborgism and that technologically-expanded senses have the potential to positively change the way we experience the world by way of artistic practice and perceptual explorations. These fundamentally new perceptions within cyborgism on the one hand result in a new type of cyborg artworks but may also result in a new way of re-perceiving existing artworks and the world in general. This new field of cyborg perceptions within the production and experience of art poses a new perspective and new questions regarding the intersection of technology and human perception. It does so as both concepts change their fixed meanings by ways of the artistic hybridizations of human perception within cyborgism as an artistic movement. Returning to Hansen, he argues that our bodily affectivity is always already, that is, essentially, contaminated by technicity (Hansen 2004, pp. 266-267). We wouldn’t yet term our general human perceptions 'cyborg', but cyborgism as an artistic movement indicates a more general divergence of what we might term 'human' perception. And still, we are only at the very beginning.

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