

The background of the entire page is a dense, intricate pattern of thin, overlapping lines in shades of blue, green, and red. These lines form a complex, almost cellular or organic structure, with some lines being thicker than others. The overall effect is a vibrant, textured field of color that changes as the viewer's perspective shifts.

OBSCURING BOUNDARIES

The physical and virtual worlds in contemporary art

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OBSCURING **B**OUNDARIES:

THE PHYSICAL AND VIRTUAL WORLDS IN CONTEMPORARY ART

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Abstract

Computer and digitalism have rapidly become the focus of our contemporary lives, affecting us not just as a cultural movement but as our perceptual contact with the world. Intrigued by this shift in our being, and the ways it affects our post-digital art scene I seek to decipher some of the complex layers, integrations and clashes of these (seemingly) contradictory worlds through Hito Steyerl's artwork *Factory of the Sun* (2015) and Jon Rafman's *9-eyes* (2008-ongoing).

With the explorations of virtual embodiment and perception in relation to art I aim to grasp the ambiguous outlines of existence within these worlds.

Keywords Digital, Art, Contemporary Art, Embodiment, Immersion Technoculture, Cyberspace, Virtual, Hito Steyerl, Jon Rafman

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1. INTRODUCTION

My fascination with technoculture begun when my studies in New Media-Art during a student-exchange at the Emily Carr University of Vancouver, B.C., re-oriented my artistic interests and work towards the digital. As the computer and digitalism have rapidly become the focus of our contemporary lives, affecting us not just as a cultural movement but as our perceptual contact with reality¹, its increasing role in the field of art is unavoidable. Intrigued by this shift I seek to decipher with art some of the complex layers, integrations and clashes of the worlds we are existing within: the physical and the virtual.

The findings of this thesis are founded on the various theoretical literature written of the foretold themes, which will be examined further upon in chapter two, *Theoretical foundation*. This chapter seeks to introduce the relationship between art and technology through philosophical discussion and study how the existence of art has been challenged and advanced by technology through our recent history.

The key aspect of my thesis are however two works of art onto which I will be employing a concept-based reading as my method (described in chapter three, *Methodology*). It is to be noted that the descriptions of these works will unavoidably be my subjective interpretations, for I can only cover limited attributes of them and will, though unwittingly, project my own views upon them, as *the viewer*

¹ Chiu, C. 2005

*is always an active contributor of substance*² on works of art.

These artworks, *Factory of the Sun* (2015) by **Hito Steyerl** and *9eyes* (2008-ongoing) by **Jon Rafman**, have both left personal impressions on me with their engrossing themes and executions. While Steyerl's work studies cyber-reality through immersive embodiment Rafman's work is more about the visual observation, thus discoursing varied ways of experiencing art. Together they serve as the bridge through which I will delve into the theme of physical and virtual in art. Chapter four, *Embodiment in the cyberspace* ponders human embodiment within a cyber-experience through *Factory of the Sun*, and questions whether its audience can experience art in physical and non-physical spaces simultaneously. The themes of connection and virtual traces are also addressed. Chapter five, *The mechanical gaze* focuses on *9eyes* and attempts to understand the differences and similarities an image holds when taken by human or machine, as well as the power and meaning of gaze.

Through these explorations of embodiment and perception in relation to digital art I aim to grasp the ambiguous outlines of existence within these worlds. As the conclusive chapter six *Becoming part of the digital world* attempts to claim that our world has already blended with the virtual realm, understanding the influence of technology becomes even more vital.

² Elovirta, A. 1998.

2. THEORETICAL FOUNDATION

The groundwork of this thesis is rooted in the famous essays by **Walter Benjamin's** *The work of art in the age of mechanical reproduction* (1935) and **Martin Heidegger's** *The question concerning technology* (1954), which though aged classics still have a lot to offer when analyzing the relationship of art and technology of today. Another crucial reference work was the doctoral dissertation of **Chih-Young Chiu's** *Blurred boundaries and return to authenticity: Image politics of arts in cyberspace* (2005), which was thematically very close to this thesis, providing me with pivotal points and lots of reference material.

Another large influence and source of information came from the Technocultures-course held by Professor **Chris Jones** of the Emily Carr University. This course was the first to introduce me to the historical and contemporary landscapes of new media, human-machine interaction and technologically mediated perception.

2.1. The essence of technology

As Martin Heidegger declares in his famous essay *The question concerning technology* the essence of technology is not technological, but something much deeper and truer. Reflecting upon technology is not about pondering it in itself, just as reflecting upon art isn't just about looking at a picture but hides the possibility of one's awareness within its nature. *When we look into the ambiguous essence of technology, we behold the constellation, the stellar course of the mystery.*³

Despite their very different roots both technology and art seem to give similar auras, something concealed that we might glimpse at but never define. Therefore, the most befitting way of exploring either of them might be through another. Together they serve as the reminder of wonder, the speck of enlightenment we rely on to reflect upon ourselves and the world(s) surrounding us.

³ Heidegger, M. 1977.

2.2. A brief history of technoculture

The brief but turbulent history of technoculture is mainly formed by its competing ideologies between art and science, as dividing forces. With origins shaped by science and military industry, the computer grew diverged from the established traditions of fine art, and so as the first form of computer art emerged in 1965 it had already gained complex cultural meanings.⁴

Much like the reaction to photography, artists feared that by ceding the privilege of making art the machine would undermine the integrity and meaning of art and its history. Despite the indisputable aesthetic similarities to the abstract art pieces of the era many criticized computer art for being alienating and clinical because of its origins.⁵

It was not until the late 1970s that technology started separating from its “man versus machine” paradigm, finding continuity with the ancient Pythagorean, Platonic and Byzantine traditions and mathematical mysticism, thus marking computer artists the pioneers of a new mystic space - the digital world.⁶ Although technology was still rather scarce and required expertise to handle, artists begun to feel more at ease utilizing it in their works, no longer viewing it as an invasion of science in the territory of art. It was as if their common roots through the antique

⁴ Taylor, G.D. 2014.

⁵ Ibid.

⁶ Ibid.

Greek term “tekhne”, which covered both⁷, had begun to resurface. This was much due to the advancements in programming, which re-shaped our relationship with the computer, converting it to one of interaction from the self-generating nature of the previous decade⁸.

Whereas the Modern was mechanical, the Postmodern is decidedly electronic or digital⁹. As technology grew more accessible to most in the 1990s its position in art shifted from a subject to an object¹⁰, establishing computer art in the natural continuum of art history, and giving space to its offspring of virtual immersion, cyberspace and interactivity. As the role of the digital grew more significant, the virtual imagery transformed the interaction among the spectator, the artwork, and perceived world.

⁷ Heidegger, M. 1977.

⁸ Taylor, G.D. 2014

⁹ Chu, C. 2005.

¹⁰ Weil B. 2002.

3. METHODOLOGY

Although I began consciously gathering the literary foundation for my thesis this spring I had already been familiarized with many of them during my New Media Art-studies at the Emily Carr University. As I collected the theoretical sources I already knew to be suitable from the EBSCO-database and Aalto University's Finna-archive I naturally came to find more intriguing texts to delve onto. One discovery often generated many more, and soon it became more of an issue of reducing the found materials into the essential.

The eventual choices of my reference-repertoire are based in the thematical needs of each chapter: the artworks studied, and the research questions contemplated. I will be employing a concept-based reading of art as my method, where I apply theoretical views to perceive the works of Hito Steyerl and Jon Rafman through. I believe this method to be the most natural and effective way to provide me with the entry-points and substantive insights for discussing the relationship between physical and virtual.

4. EMBODIMENT IN THE CYBERSPACE:

STEYERL, HITO. (2015). *FACTORY OF THE SUN*

“If much of early modern science gained its new vision of the world through optical technologies, the process of embodiment itself is both much older and more pervasive. To embody one’s praxis through technologies is ultimately an existential relation with the world. It is something humans have always - since they left the naked perceptions of the Garden - done.”

Don Ihde, Technology and the lifeworld (1990)

In Hito Steyerl’s film installation *Factory of the Sun* the museum is transformed into the framework of an immersive digital world. With its cyan colored and gridded arena the work bears a strong resemblance to the cyberspace of the 1982 sci-fi film *Tron* where a young Jeff Bridges - having been sucked from the “real world” into the interior of an arcade game - battles for his freedom against a machine intelligence. As an ethereal robotic voice speaks over

whirling 3-D rendered text that reads: “This is not a game - this is reality“ the artwork’s audience are brought into the unknown in-between space on the screen and the place from which the screen is viewed and interacted with.

For Steyerl reality seems to be deployed through the cathartic nature of our current digital landscape - images and avatars, advertising, news reports, anime characters, documentaries, video game footage and YouTube dance videos, all jumbled together. The set pays the allegorical motion capture studio of the dystopian storyline¹¹, where the captive workers are forced to make artificial sunlight (a nod to a quote from **Donna Haraway’s** Cyborg Manifesto (1984) “*Our best machines are made of sunshine...*”) with their movement. As the viewers are invited to lie leisurely in sundeck chairs, basking in the artificial light of the screen, the reality of the audience becomes inferior to its staged and produced counterpart. This passive state and simmering unease makes one wonder whether we as viewers have ultimately become the metanarrative factory laborers¹² of the titular game, performing under the guidelines set out for us.

The reality is bended further as the work’s narrative fact and fiction intertwine by telling the actual biography of Yulia (Steyerl’s real-life assistant). As she reminiscences her parents violence-tinted migration from Soviet Union, her brother, once a YouTube sensation making viral dance-videos is now one of those forced to passively gyrate in the motion-capture studio of Deutsche Bank.

¹¹ Linnert, N. 2017.

¹² Ibid.

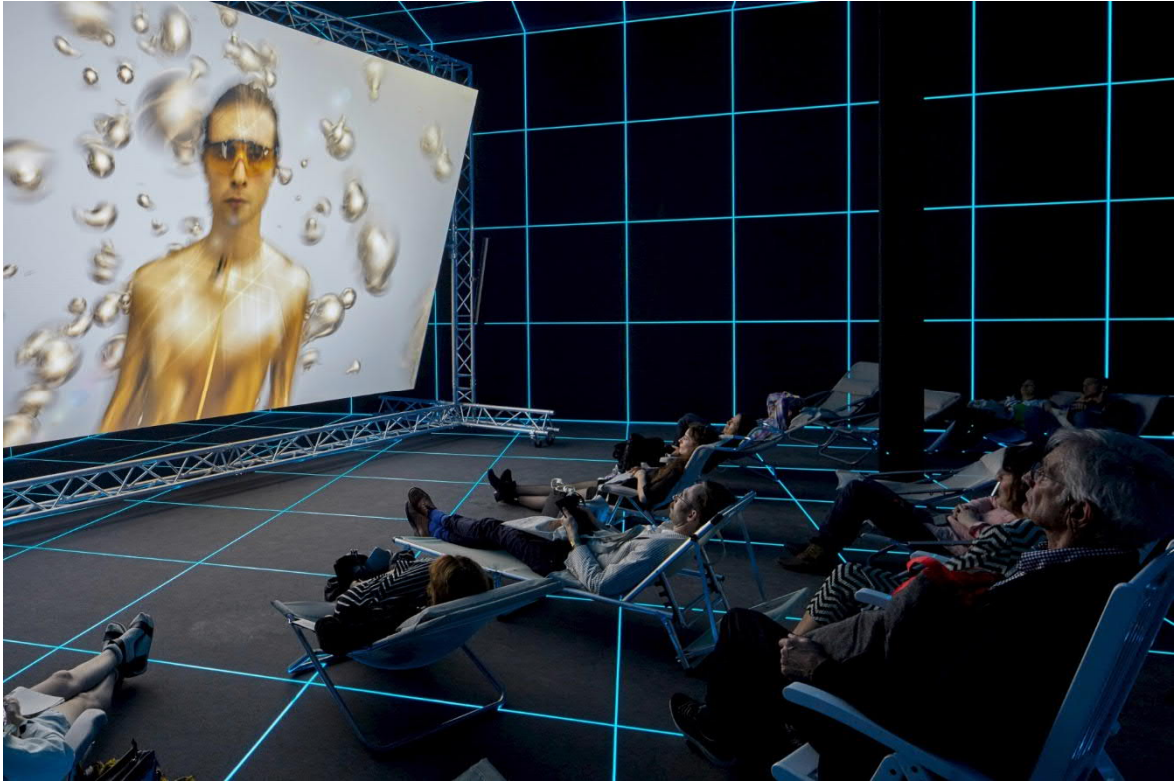


Image 1. Steyerl, Hito: Factory of the Sun (2015).

The dancer's global fans have modeled his movements into various anime-characters that become the ghostly avatars of students killed in near-future protests. These echoes of virtual embodiments, respawns that do not extend to the physical speak for the unique terms of the dematerialized reality. *When I enter virtual reality, what body will I leave behind?*¹³ And what presence do I leave behind as I exit the virtual?

¹³ Karen Franck as quoted by Chiu, C. 2005.

The work's ending is hacked, and the unseen player of the game interrupted by a typewritten "Bot manifesto", calling for resistance. Dance, the art-form that has always celebrated the moving, physical body, becomes a metaphor of collective resistance when surveillance has become a mundane part of an increasingly virtual world. Factory of the Sun is not a moral lesson, but an observation of the contemporary situation. As the factory workers start fighting against the system by dancing instead of just performing the physical movements (hence adding a human emotion to the neoliberal system they're living within) we're reminded that the digital world isn't just a way of surveillance, but a platform of freedom and self-expression.

5. THE MECHANICAL GAZE:

RAFMAN, JON. (2008-ONGOING). *9EYES*

"I'm an eye. A mechanical eye. I, the machine, show you a world the way only I can see it[...]Freed from the boundaries of time and space, I co-ordinate any and all points of the universe, wherever I want them to be. My way leads towards the creation of a fresh perception of the world. Thus I explain in a new way the world unknown to you. "

Dziga Vertov, Kino-Eye Manifesto (1923)

Is an eye an eye? Or is an eye the ability to see? If it's the latter, we have grown many eyes during the recent decades. But with all that vision, are the machines just a vehicle for our perceptions, or are they not just seeing, but perceiving as well?

Rafman's ever evolving online piece *9-eyes* shows us the world as captured by Google Maps Street View's mechanical

eye. In this blog-like piece of picture stream the viewers get to peek into a set of unprepared instances, some which are funny, some beautiful, and some that feel like borderline privacy infringements.

The way we react to images taken by a machine differs greatly from one taken by human. Those being pictured by it, human or animal do not seem to perceive themselves as an object. They're seen but not being gazed at, as the eye of the camera is freed from desire and intention. Somehow the pictures of *9-eyes* seem a truer representation of the world than what we've encountered in those pictured by human. But still they stay as representations, not reality, tied in their time and space, and though less obviously, in the artist curating the piece.



Image 2. Rafman, Jon: *9eyes* (2008-ongoing).



Image 3. Rafman, Jon: *9eyes* (2008-ongoing).



Image 4. Rafman, Jon: *9eyes* (2008-ongoing).

We once thought that because machines don't have emotions the data they collect could be perceived objective, just as photographs during the 1960s were seen as rational evidence. However, there is never such thing as an innocent eye, as *lifeless objects quickly become mirrors*¹⁴, gazing back at us. When the work's meaning isn't interpreted through the intention given by an artist, the role of audience becomes heightened.

While we as humans pick out the forms and colors of the picture to apply our own interpretations onto, the machines are no longer simple devices either, used for the extension of human vision. Instead they take in information for their own operation and automatically process what they capture, forming those visuals into facts. In our society where images flood into our lives more and more, *the "truth" of what we see is no longer given by our eyes but by our instruments and their scientific interpretation or military appropriation.*¹⁵

Just as in *Factory of the Sun* where Deutsche Bank becomes the symbol of corporate control, *9-eyes* reminds us of the already existing forms of surveillance through another massive corporation. Seeing isn't just perceiving but bears the means for knowledge and authority within it, becoming a metaphor of control¹⁶. As such this work of art piques the unnerving question whether it's possible for us to be surveilled anywhere we go, and whether we're aware of it.

¹⁴ Norman Bryson as quoted by Elovirta, A. 1998.

¹⁵ Johnston, J. 1999.

¹⁶ Elovirta, A. 1998.

These images no longer exist in our physical reality either, but in a virtual database where *they can be altered, manipulated, weighted, warped, or repositioned to create not only a simulation of originality, but also an artificial or parallel "virtual" reality*¹⁷, a negotiation between representation of reality and the reality of representation. Is it possible we're already physically part of the digital reality, when we live in a world that is essentially made of billions of digital pictures?

¹⁷ Chiu, C. 2005.

6. BECOMING PART OF THE VIRTUAL WORLD

We live in a time where our notion of reality is diverging. Traditionally the authenticity of an artwork has been connected to its *unique presence in time and space*¹⁸. Cyberspace, however, exists beyond this understanding, challenging our previous concept. When more and more artworks become digitalized the art world faces the new situation of becoming part of both the virtual reality and physical world. This dual existence transforms the spectator's experience as well into a unified world of physicality and virtuality¹⁹.

Though technology has become a sort of an extension of us, altering our understanding of being, humans still live in the concept of space and time as our bodies are essential in the way of understanding and experiencing the world²⁰. We are fascinated by virtual reality because it gives the feeling of reality without its restraints, but this makes the virtual reality into more of a simulation²¹, a world of fantasy without foundation.

As the cyber-experience would be hollow without any physical substance the separation of the two worlds should therefore be abandoned. Though the experience of immaterial existence sounds alluring in theory our bodies play the essential role in forming the connection between the two realities. Only through our bodily senses and by blurring the boundaries

¹⁸ Benjamin, W. 2008

¹⁹ Chiu, C. 2005

²⁰ Xiabo, L. 2014

²¹ Chiu, C. 2005

between the spheres of the virtual and physical can we fully experience these worlds.

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