Natural Individuals: Extro-Categorized Arts after the Internet

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A dissertation
Submitted in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy

University of Washington
2020

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Program Authorized to Offer Degree:

Digital Arts and Experimental Media

University of Washington

Abstract

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The current dissertation points out that Internet platforms promote ‘individual homogeneity’ for easy control. This paper focused on how an individual’s view of social justice and cultural diversity could be acquired against the Internet platform’s surveillance system. Through my recent exhibition Natural Individuals in Seattle, which consists of VR Mobile Application, *Metamorphosis into Self-resemblance* (2020) and Generative Sculptures, *The Space Beyond Recognition* (2020), I reveal that the structure of Internet platforms limits individuals to think an object excessively in the category formed by ‘sharing and similarity’. Artworks of ‘Net art’ that inherited an artistic context from an avant-garde movement, dismantling and exploring the Internet medium, are researched in this dissertation. For theoretical reference, I used ‘resemblance of representation’ by Michel Foucault, ‘multiple being’ by Alain Badiou, ‘out of human-centered cognition’ by Quentin Meillassoux and ‘digital swarm’ by Byung-Chul Han.

In Chapter 1, I criticize that internet platforms have a surveillance system disguising with communication, and it provokes ‘individual homogenization’ in cultural and social aspects. I point out

that ‘similarity,’ a major methodology to form an Internet platform’s structure, leads to standardization of individuality. Individuals are categorized by similarity, form ethnic-network, and become labors producing data that are easy to process in the digital surveillance system for consumption encouragement. The surveillance system includes aggregate and statistical analysis, self-referentiality search results, recommend system reflecting major tastes, and their algorithms create an invisible framework to close the possibility of individuals’ diverse cultural preference and subjective identity.

In Chapter 2, Net art combined with Net.art (net-dot-art) and Post-Internet will be researched to find ways to improve the Internet platform’s surveillance system ethically and aesthetically rather than trying to deviate from the system. Selected artworks in Net art show representative methodologies of avant-garde art movements like uncertainty, randomness, a collection with heterogeneous objects, media-translation, and annihilation. These methodologies are also analyzed in Chapter 2. In addition, the artworks intend to reflect changes in social and cultural awareness after the Internet and to dismantle and criticize the limited structure of the Internet environment.

In Chapter 3, the two artworks in my dissertation exhibition, *Natural Individuals,* are explained.

Metamorphosis into Self-resemblance (2020) is a mobile virtual reality application that plays back videos and sounds according to a viewer’s gaze. In Scene 1, the interactive mechanism works only on the waterfall of the pond, which looks real. To progress to the next scene, viewers have to fix their eyes to the waterfall, reminding viewers’ immobile single eye in front of the illusion made with a linear perspective. The viewer’s gaze moves to the next scene chasing the ladybug and wanders among miscellaneous images associated with a ladybug. In the last scene, the gaze cannot find the original ladybug missing in the previous scene and eventually transforms into the ladybug itself and disappears from the darkness. The narrative of *Metamorphosis into Self-resemblance* indicates that an

object's authentic identity can never be reached in the chain of representations moving from one resemblance to another.

The Space Beyond Recognition (2020) is created from the three-dimensional arrangement of similar images obtained by searching for a specific keyword in an Internet search engine. These generative sculptures reveal the insignificant morphological information of a particular object that was lost on the web. A ladybug that has one side of its body, ammonites that still have its patterns but lost its three-dimensionality, and a conch shell with a free form except for the horns located at specific positions are examples. Their morphological metamorphosis implies that image data on the Internet is biased and limited to human-centered recognition.

Lastly, in Chapter 4, my future direction after *Natural Individuals* includes generating 'autonomous simulation' artworks created with pure mechanical processes, including image training set. Classification of a new machine separated from the human realm is necessary to maintain the machine's neutral decision. In conclusion, I emphasized that through the 'pure mechanical category' in the internet environment, we can find the possibility of social and cultural progress without any limitation and bias that the internet platform could lead.

ACKNOWLEDGMENTS

I wish to express deep gratitude to the University of Washington's DXARTS (Digital Arts and Experimental Media) for their support, and especially to my advisor, Professors James Coupe, for his extensive knowledge, support, and guidance. Also, I would like to thank Professors, Afroditi Pasarra, Juan Pampin, Richard Karpen, Phillip Thurtle, Rebecca Cummins, for their insightful comments.

I also wish to thank my colleagues and friends, Inmi Lee, Donald Craig and Hana Lee. In particular, many thanks to Julie Park and Cheonwook Park's encouragement while writing this thesis.

Finally, this thesis would never have been completed without the warm consideration and devotion of my family: special thanks to Jeeeun, Sooyong, Soyeon, Seungryong, Kyun, Minseo, Taehui, Yuju, Seojin.

DEDICATION

To my parents, Jeong Heo and Kumsuk Park

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1.1. The Rise of Individuals, but Swarm

"Just look what a movie-maker we have here. He seems to have been born with a camera."

In Camera Buff (1979) by Krzysztof Kieslowski

It seems as if the individual's status is elevated.

In Krzysztof Kieslowski's *In Camera* Buff (1979), the main character, Philip, is an ordinary factory worker. He begins to make a movie through an 8mm movie camera to record the birth of his soon-to-be-born daughter. He is an *amateur* filmmaker. Philip becomes fascinated by filming and gets appointed as an official cameraman by the regional communist delegate. He submits his film to a movie festival and wins an award. The reason he was able to get these opportunities is that he was the only person who has a video camera that is worth two months of the salary in this region. Philip gradually becomes obsessed with images and desires to be a renowned professional film director. As filmmaking becomes everything in his daily life, Philip's actual reality entangles with filmmaking, and the boundary between the two is blurred. To capture dramatic moments, he purposely sprinkles crumbs, hiding next to the window, to lure birds or imagines how an argument with his wife can be captured in films by making a viewfinder with his fingers during it.

There is nothing strange about Philip's behaviors in today's perspective. His behaviors, such as obsessive fascination with the image created by the desire to be socially recognized, an unclear separation between one's work and personal life, and critical thinking like an intrusion on privacy,

now have become an ordinary daily life. Perhaps, all of us are Philip, producer, actor, judge, audience, and even broadcaster. It is not rare or is not considered lucky for individuals to become famous for their photos, videos, or writings today. We take pictures with mobile cameras and instantly share them online with others. While Philip might face difficulties over limited creative freedom due to censorship when unveiling his film, people these days can determine who and when others view their creative works. They also share their emotions, thoughts, and information, which can be extremely personal, with others connected online. Web-based platforms, such as blogs, Twitter, media sharing communities, as well as various social network media, efficiently provide personalized public spaces to urge individuals or amateurs to play more critical roles in society. There, we believed that an individual exists no longer as a subordinated entity in public, but an individual's identity can be distinctively recognized. Therefore, it seemed like these web-based platforms could be a 'new form of public' space that can fulfill 'democratic communication' for people living in the Digital Age.

Compared to the dominant media in the past, such as a television (TV), digital communication-based media has been using more democratic communication methods since the Internet. TV is a one-way transmission method and forms an authoritative, centralized system, and therefore, it was easily controlled and manipulated by a government or major companies. A historical example is the 'May 18 Gwangju Democratization Movement,'[1] where the coup regime killed many Gwangju students and citizens under the media and local controls. In contrast, through Web 2.0[2], which is based on

[1] In 1979, in the movement to amend the Yushin constitution and to back to a democratic one, Doo-hwan Chun initiated a military revolt and seized the dictatorship military regime in South Korea. Since the beginning of May 1980, protesters against his political forces began to rise across the country. On the morning of May 18th, the "May 18 Gwangju Democratization Movement" occurred as parachute troops repressed students from Chonnam National University, which is located in Gwangju, protesting in front of their school's main entrance by beating and assaulting. Due to brutality, even Gwangju citizens and high school students participated in the protests. As days passed, more and more Gwangju citizens were killed as repression became more brutal, and there were more mass firings; however, people outside of Gwangju did not know about this massacre because television, radio, and newspapers were controlled. It was not until the stealthy German reporter, Jürgen Hinzpeter, spread the news when people worldwide learned about this violence in Gwangju.

[2] Web 2.0/Social media platforms are web-based platforms that predominantly support online social networking, online community-building, and maintenance, collaborative information production and sharing, and user-generated content production, diffusion, and consumption. see Fuchs (2011).

interactive communication, individuals have become more active and prompt participants. The public formed social networks through social media platforms, where they can share information, discuss opinions, promote themselves, and share their interests with others.

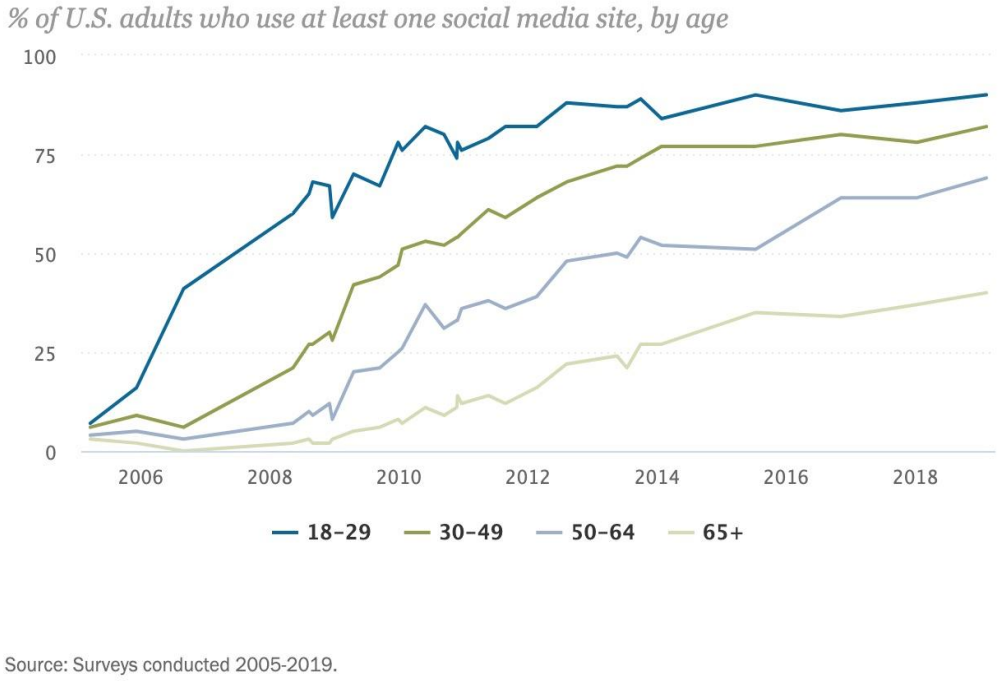

Figure. 1. Rate of U.S adults who use at least one social media site, by age.

Source: Pew Research Center, https://www.pewresearch.org/internet/fact-sheet/social-media/.

Certainly, individual status became elevated and equal in terms of getting a chance to communicate. Anyone who can connect to the Internet can join social media platforms in which people can have their profiles and environment. There, more people produce, share, and consume any amount of information for a longer period of time. Individuals took full advantage of the democratic opportunity. Of those, social networking is a classic example of platforms that got settled in people's daily lives. In 2005, only 5% of adults in the United States used one or more social networking platforms, but in 2019, 72% of adults and greater than 90% of adults aged between 18 and 29 were using these platforms (see Fig.1). For instance, Facebook, which has the widest age range and the largest number

of users, was found that more than 70% of users log in to the platform at least once a day and more than 50% multiple times a day.[3] However, as tens and thousands of people became "self-publishing consumers"[4] by generating and consuming huge amounts of data freely on social media platforms every day, ironically, an individual's private domain is threatened to be in a public one. Communication here was mainly by exposing each other's private domain.

> *Therein lies its violence. Unrestricted freedom and communication switch into total control and surveillance. Social media are also coming to resemble, more and more, digital panoptica that discipline and exploit the social. …The inhabitants of the digital panopticon […] engage in lively communication and bare themselves or their own free will. In this way, they actively collaborate in the digital panopticon.*[5]

We have become very active watchers of each other. We form networks with each other under the name of a 'friend' or 'follower' and get notifications of others' minor daily life updates. The weight of language in digital communication is so minimal. One informs others that they have received other's daily life updates through a single line of comment, emoticons, or checking 'likes.' Checking and actively monitoring shared information by others are considered as "a way of maintaining friendships."[6] In the world of social media, 'participatory surveillance,' that individuals fill their time by lurking and involving in other people's daily lives, is considered as a universal communication.

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[3] Pew Research Center. "Social Media Fact Sheet." 12 June 2019, https://www.pewresearch.org/internet/fact-sheet/social-media/. Accessed 5 April 2020.

[4] Cagliero, Luca; Fiori, Alessandro. "Knowledge discovery from online communities." *Social Networking and Community Behavior Modeling: Qualitative and Quantitative Measures*, IGI Global, 2011, pp. 123-145.

[5] Han, Byung-Chul. *The Transparency Society*. trans. Erick Butler, Stanford, CA: Stanford University Press, 2015, p. Viii.

[6] Albrechtslund, Anders. "Online social networking as participatory surveillance." *First Monday*, vol.13, no. 3, 3 March 2008, https://firstmonday.org/ojs/index.php/fm/article/download/2142/1949/. Accessed 6 April 2020.

Figure. 2. Amalia Ulman, *Excellences & Perfections*, 2014.

Through her performance on Instagram and Facebook, Amalia Ulman points out the culture in which an individual is consumed as an image through social media. She produced images by changing herself, such as an image of her bandaged breasts after the breast augmentation surgery, a selfie exposing her waistline in the bathroom, a photo showing off her luxury shopping, and a picture of taking pole dance lessons as if they were true. Her persona "had amassed 88,906 followers"[7] until the project ended on September 19, 2014, and received all kinds of support or profanity. According to the artist Michael Conner, even Ulman's friends were confused because her "images are excessive, but also believable—because they're so familiar."[8] Unlike offline, there are truth or revered typical aesthetics shared in the form of social media. It has become common to sell one's own lifestyle in line with other's eyes and track other people's lifestyles.

[7] Kinsey, Cadence. "ARCHETYPE AND AUTHENTICITY: REFLECTIONS ON AMALIA ULMAN'S EXCELLENCES & PERFECTIONS." *Female Agency and Documentary Strategies: Subjectivities, Identity and Activism*. edited by Boel Ulfsdotter and Anna Backman Rogers, Edinburgh University Press, Edinburgh, 2018, pp. 23–37. *JSTOR*, www.jstor.org/stable/10.3366/j.ctt1tqx9f7.8/. Accessed 22 May 2020.

[8] Connor, Michael. "First Look: Amalia Ulman Excellences & Perfections." *Rhizome*, New Museum, 20 October 2014, https://rhizome.org/editorial/2014/oct/20/first-look-amalia-ulmanexcellences-perfections/. Accessed 22 May 2020.

The communication and collaboration in digital space degenerate to the surveillance, and through reproduction and dispersion in the space, the surveillance can be applied faster, and the target range for it can be broadened. The proliferation of reproduction creates an endless chain of loops that repeatedly copy and spread people's daily lives and information through a closely connected network. A vast and rapid movement is formed that has the meaning of reproduction and dissemination, overwhelming the content, context, and authenticity of the originals. Within social media platforms, the movement is observed as a group that many people immediately move towards the same direction. The group is just movement itself, meaning trace and homogenization, and in that group, an individual's unique identity or unity of the crowd does not exist. It is a temporary and changeable group in digital space that repeatedly gather and disperse in a short time without clear cause and purposes. Such movements do not lead cultural context, but rather exist as a short-term phenomenon. Han calls people with these movements as a 'digital swarm.'

> *The digital swarm does not constitute a mass because no soul – no spirit – dwells within it. The soul gathers and unites. In contrast, the digital swarm comprises isolated individuals. The mass is structured along different lines: its features cannot be traced back to individuals. But now, individuals are melting into a new unit; its members no longer have a profile of their own. …Unlike the crowd, the swarm demonstrates no internal coherence. It does not speak with a voice.*[9]

Specifically, each individual who forms the digital swarm means a passive viewer, homogenized with others. Their replication and dissemination continue beyond the screen to the real world. The boundary between images and actual mutual reflection no longer exists. In the domino effect of the "collapse of metaphor,"[10] in which replication mimics replication itself, the identical images continue

[9] Han, Byung-Chul. *In the swarm: Digital Prospects*. trans. Erik Butler, Cambridge, MA: MIT Press, 2017, p. 10.

[10] Baudrillard, Jean. *America*. trans. Chris Turner, London, UK: Verso, 1989, p. 27.

to disperse without any limitation, and a digital swarm forms toward the mimesis. One can understand the unusual phenomenon of toilet paper shortages due to COVID-19 in countries such as the United States, Japan, Germany, and the United Kingdom in this context. CNN analyzed and presented five reasons why the toilet paper shortage phenomenon occurred on March 9th. They pointed out that one of the reasons is fake news spread through news reports and social media, as well as the repeated images of empty shelves.[11] Whether it is true or not, a picture of empty shelves is communicated as multiple empty shelves from one to others through social media platforms, and copying and spreading of these objects stir up the swarm.

Figure. 3. Michelangelo Antonioni, *Blowup*, Film, 1966.

In the last scene of the movie, *BlowUp* (1966), the protagonist, Thomas, is unsure how to prove that he witnessed missing dead bodies in the park alone. Without an image, the metaphor of memory, that

[11] Andrew, Scottie. "The psychology behind why toilet paper, of all things, is the latest coronavirus panic buy." *CNN.com*, Cable News Network, 9 March 2020, https://www.cnn.com/2020/03/09/health/toilet-paper-shortages-novel-coronavirus-trnd/index.html/. Accessed 18 March 2020.

is a representation of the present, one witness cannot be proved. Thomas sees young men, who painted their faces in the same color, are showing a mime playing a tennis game on a tennis court without a ball. Staring at the situation in wonder outside of the court, he faces a moment when a nonexistent tennis ball falls in front of him. Thomas picks the nonexistent ball up and throws it back into the court, following the nonvisible situation of the young men. As he turns around and leaves, he hears the tennis racket hitting the ball and then disappears from the screen. Eventually, here, the truth is the fact that many agree.

Closed and centralized signaling systems, which radio or TV media had been distributed and multiplexed through the appearance of multi-view social media platforms, but here is why we have no choice but to question the diversity of content. Because communication on social media platforms provides mostly positive mechanisms such as sharing or liking, it is easy to stimulate 'digital swarm.' Han describes this sympathy movement as "an excess of positivity"[12] and the "Phenomenology of '*Like*.'"[13] In addition, Guy et al. (2010) explain that such platforms typically rely on two flavors, "familiarity and similarity evidence,"[14] to connect relationships among people. Then, there is a relatively limited chance of getting exposed to different or diverse contents. He distinguishes familiarity and similarity as follows. "Familiarity evidence provides clues to when users may know one another, such as an explicit connection on an SNS, tight collaboration on a wiki page, or public message exchange. Examples of similarity evidence include using the same tags, bookmarking the same web pages, or connecting with the same people."[15] Similar behaviors and activities of people, the 'similarity'-based evidence is utilized to network with strangers rather than 'familiarity.' Actually,

[12] Han, Byung-Chul. *In the swarm: Digital Prospects*. trans. Erik Butler, Cambridge, MA: MIT Press, 2017, p. 53.

[13] Ibid., p. 54.

[14] Guy, Ido, et al. "Same Places, Same Things, Same People?: Mining User Similarity on Social Media." *Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work*, 2010, pp. 41–50.

[15] Ibid.

"recommender systems already make use of similarity."[16] Moreover, people establish a community with people who have similar interests and share information and opinions within it. Communication, where only similar and positive things are exchanged, is closed and terroristic in that expression of difference is suppressed.

Another reason the growth rate of content diversity is lower than that of personal activities through social platforms is the absence of a system that cannot evaluate 'diversity.' As content types are more diverse and complex, it is harder to make a mining task. Countless contents are pouring out every day as individuals function as personal media today, creating and broadcasting content by themselves in real-time. However, as mediators of broadcast or promotions, their contents are divided into categories standardized by the platforms they use, and the aggregated numbers of clicks or views, meaning positive response, becomes the principal measure of evaluation. Therefore, individual producers end up creating overlapping or similar content because they all focus on popular themes among viewers.

In [The Consumer Society] (1998), Baudrillard warns that reproduction and homogenization between mass media can conceive the totalitarian aspect.

> *[TV], then, is the truth of the mass media: it is their function to neutralize to lived, unique, eventual character of the world and substitute for it a multiple universe of media which, as such, are homogeneous one with another, signifying each other reciprocally and referring back and forth to each other. In the extreme case, they each become the content of the others – and that is the totalitarian 'message' of a consumer society.*[17]

[16] Goldberg, D, et al. "Using Collaborative Filtering to Weave an Information Tapestry." *Communications of the ACM*, vol. 35, no. 12, 1992, pp. 61–70.

[17] Baudrillard, Jean. *The Consumer Society: Myths and Structure*. Revised Edition, London, UK: Sage Publications, 2017, p. 142.

Figure. 4. Natalie Bookchin, *Mass Ornament*, 2009.

The videos of Mass Ornament (2009) by Bookchin were edited by rhythmically crossing individuals' home videos following popular singer's songs and choreographies. Through the collection of home videos of individuals who films from the same camera angles and repeats the same action, it reveals that entertaining oneself, which seemed to be free, is actually a repetition of mimicry. Individuals voluntarily let themselves into the repetition of image reproduction. It is interesting to note that Bookchin's video uses soundtracks of the two films made in 1935, Busby Berkeley's *Gold Diggers* (1935) and Leni Riefenstahl's *Triumph of the Will* (1935) as the background music. Broadway showgirls in *Gold Diggers* dance and perform intensely to earn money, and in *Triumph of the Will*, fanatic Nazis in the Nazi regime shows mechanically unified movements. If the images from these films are easily associated with individuals who enjoy dancing the same or showing the same poses of *Mass Ornament* (2009), one has to start doubting the opinion that Internet platforms no longer promotes an individual's social status or freedom of expressions is only superficial. Bookchin records the number of views along with each video. The most representative way for evaluating the contents of YouTube, a classic Internet platform for freely sharing video contents among people, is the number of views. The ranking of contents encouraged 'representation of resemblance,' which adopts duplications of popular themes and parts of popular videos, to become a typical method of content creation. The appearances of homogenized individuals observed in *Mass Ornament* are so common and familiar that it is meaningless to collect them now.

We can infer contents on the Internet platforms tend to be eventually carried away in one direction. It is because that the evaluation criteria stimulate competition for popular themes, embracing biased sharing and less diversity in similar contents. Despite the constant self-referentiality system and environmental limitations, the responsibility for the novelty of contents remains solely on the individual. The creative attempts are given to an individual only to allow limited differences within the system frame. If the contents do not become popular, they are lost from the recommended list ever. The evaluation process is faster as the amount of content produced increases. In a competitive system where each other agitates another, individuals create products more actively without clear separation between work and leisure time. For critical theorists of the web, personal communication and content production are considered as labor exploitation because there is a separate capitalist who benefits from the productional structure disguised as a democratic way. Information produced by individuals is converted into a product called data and eventually sold back to individuals. In the production and consumption chain, an individual becomes labor and consumer concurrently, gradually losing their subjectivity. In other words, one is degenerated into a consumable object in a consumer society by constructing the cycles of production and consumption that forces one to exploit oneself.

According to sociologist Christian Fuchs, "Web 2.0 surveillance is directed at large user groups who help to hegemonically produce and reproduce surveillance by providing user-generated (self-produced) content. We can, therefore, characterize Web 2.0 surveillance as mass self-surveillance."[18] Homogenized data is constantly produced by individuals and is kindly exploited by the capitalistic watcher, generating an endless vicious cycle in which an individual is strategically transformed into a standardized slave of labor. While homogenized individuals are easily controlled and exploited, it is difficult for them to notice watcher's surveillance. New watchers in the Digital Age exploit

[18] Fuchs, Christian, et al. *Internet and Surveillance: The Challenges of Web 2. 0 and Social Media*. Taylor & Francis Group, 2011, p. 48, ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/washington/detail.action?docID=981641. Created from Washington on 2020-04-11 01:07:27.

information on personal daily activities through a democratic and broad form that can be easily accessed. It seems to be impossible to deviate from the surveillant garden as its strategy is transparent and robust. In Chapter 1.2, the clear strategy of watchers for exploitation will be scrutinized.

1.2. Transparent and Hermetic Digital Garden

> "I'm happy to be here. In Blacksmith, in the supermarket, in the rooming house, on the Hill. I feel I'm learning important things every day. Death, disease, afterlife, outer space. It's all much clearer here. I can think and see."
>
> -in Murray's saying in White Noise by Don DeLillo

The exploitation of new social watchers is conducted democratically and intimately. Their digital network system disguises as a beautiful garden with people's participation and communication from which induces them not to deviate. In the European Modern Ages, nobles hid a well-made mechanic system at the back of their garden to maintain it more natural-like. The garden was filled with artificial singing birds, sophisticated mazes, and mythical symbols for a more realistic experience. The labor's hard work to erase the boundary between natural and artificial continues to be maintained. While people gathered in the gardens for their social and cultural exchanges, political and capital gains were returned to the nobles, who owned the gardens. On the other hand, today's digital garden owners have given everyone a piece of land to create a garden that can be named after them. People compete to transform a land named after them into a more beautiful garden, and the owner of the digital gardens can accumulate twice more profit than previously by monitoring people without paying for their labor.

Figure. 5. Hortus Palatinus at Heidelberg Castel, Germany by Salomon de Caus, 1614.

The function of capitalism in the 21st century became possible by exploiting information from people that can be transformed into data. Digital platforms have emerged as a new business model of capitalism that can effectively extract, analyze, and use a large amount of data. The digital platform generally means "digital infrastructures that enable two or more groups to interact"[19] and refers to a network space after Web 2.0 where most users participate freely, such as search engines, social networking, and online banking. Search engines and social networking platforms, specifically, have settled down as a daily platform for people to meet their immediate needs or prompt communication. Companies with high usage share in these platform businesses, including Google or Facebook, have become a monopoly, which extracts user's data and turns the data into advertising revenue. In other words, the more users search on Google, the better their search algorithm will be. This process makes Google more valuable to its users, which then leads to a natural entrance to a monopoly. As more users can attract more users and produce data, it leads to rapid business expansion. The same holds for "Apple's App Store, which enabled the production of numerous useful apps that increasingly tied users and software developers into its ecosystem."[20] Because people are likely to join a platform where friends or family have already joined, a few predominant companies can easily attract new

[19] Srnicek, Nick. *Platform Capitalism.* Playbook ed., Cambridge, UK: Polity Press, 2017, p. 31.

[20] Ibid., p. 33.

users and maintain their monopoly without difficulty. Through upgrading their platform to the media ecosystem, including diverse media autonomously (by itself) such as search engines, music, and news, they can retain existing users and seize power for a long time. In fact, the ranking of U.S. adult usages on several major platforms, including Facebook, Pinterest, LinkedIn, Snapchat, and Twitter, has remained almost the same for the past eight years since 2012.[21]

Whether platforms in monopoly exploit individual labor is often controversial because no coercion of individual's activities has surfaced. Posting extremely personal daily life or searching for questions in real-time not only cannot become labor itself but also is considered as an individual's minor daily life information. Of course, not all information becomes data; however, the more information there is, the greater probability there is to translate the information into data. The first thing to be clear is that there is a difference between data and knowledge. Data include information about 'what' but do not require information about 'why' to be included.[22] Data is utilized through correlation. In other words, data is used to reveal cause-effect relationships like when A occurs, B is likely to occur. Platforms organize, analyze, and store sensed and collected information in a standardized format in order to infer countless correlations. Likewise, in the process of processing information into usable data, homogenization among individuals occurs. When super-capacity data meets AI, the effect is amplified. If AI is combined with individual behaviors that can produce cultural data, it can "[predict] our future aesthetic decisions and tastes and potentially guid[e] us towards choices preferred by the majority."[23] In the example of a recommendation engine, an algorithm suggests popular items that most users have used. There is a controversy over whether users have decreased or increased the chance of getting exposed to a wide variety of items that users themselves cannot search. However,

[21] Perrin, Andren, Anderson, Monica. "Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018." *Pew Research Center*. 10 April 2019. https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/. Accessed 12 April 2020.

[22] Srnicek, Nick. *Platform Capitalism.* Playbook ed., Cambridge, UK: Polity Press, 2017, p. 29.

[23] Manovich, Lev. *AI Aesthetics*. Kindle ed., Moscow: Strelka Press, 2018, Location No. 19-20.

the fact is that the algorithmic method by recommendation engine is definitely leading an individual to the taste of the general public.

On the other hand, self-referential search results isolate individuals. The search algorithm method adopted by platforms in general prioritizes and shows results similar to the saved previous record of users. This method is opposite to the 'associative search,' relating to public taste. Not only gender, age, occupation, and educational background but also search history, location, language, time, and previous clicking behaviors of users are persistently tracked in real-time. The search results that appear when users perform a new search selectively show results, reflecting their online traces. Everyone, in fact, is looking at their own Google. For instance, if you constantly have been searching novels recently, the novel [Weather] (2020) would appear fairly at the top of your search results among weather in your area when you search for the keyword 'weather.' An increasing number of book advertisements can also be seen in the layouts on the screen. A user's browsers increasingly "becomes a kind of one-way mirror, reflecting his/her own interest while algorithmic observers watch what his/her clicks[,]"[24] and the search results are "increasingly biased to share his/her own view."[25] At this point, it is not only harder for the user to objectively judge right from wrong about his/her search results, but also the user is at risk of generalizing his/her thoughts by the trust in the popularity of multi-view mass media, internet. Platforms dampen the uniqueness of an individual and isolate the users by exposing them only to polarized information such as popular or self-referential information. Castells, a sociologist, defines "mass self-communication"[26] as a self-mimicking communication method that only allows self-generated and self-selected communication while reaching a global audience. As a result, an individual erases oneself and assimilates to the public or becomes to have

[24] Pariser, Eli. *The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think*. Kindle ed., New York, N.Y: Penguin Books, 2011, p. 3.

[25] Ibid.

[26] Castells, Manuel. *Communication Power*. Oxford, UK: Oxford University Press, 2013, p. 55.

characteristics of homophily. In other words, individuals look for things that are similar to themselves and get trapped in the feedback loop of "narcissistic self-reference."[27]

The platform's other friendly monitoring for easy data extraction is a strategy to obtain more accurate and diverse information of users by leading or forcing them to utilize various applications. If a company makes applications that are accessible 24 hours, the company can understand a user's daily life without any gaps and suggest more advertisements that fit them. For example, a user's 30-minutes morning schedule of checking emails, searching for breakfast recipes, playing music, searching for weather and news, uploading photos of the sky on his/her social network platforms, looking at the map comparing transit and driving durations can be done with applications from one company. And the company that is in monopoly is able to develop massive advertisement strategies based on the user's predicted schedules. Moreover, it is possible to pinpoint when and where users do not use applications. Based on this information, the company leads users to do more production activities by recommending new applications tailored to the user's daily life and by achieving user's consumption with precisely targeted advertisement marketing. The users have an inevitable choice but to agree with the consent regarding personal information shared among applications. Because the user's privacy policy that the companies present is for them that they are legally granted to sell the user's information to the advertisers, the application cannot be used without agreeing to these terms.

An individual's diversity and characteristics are suppressed and controlled not only at the production but also at data analysis stages. All of the analysis of the Digital Age is computed to countable things. Then, the question of how to make cultural diversity and aesthetic values measurable in a numeric system arises. Unfortunately, in relation to this issue, individual tastes and preferences lose dimensionality and flatten as these are quantitatively measured, such as by digitization,

[27] Byung-Chul, Han. *The Expulsion of the Other: Society, Perception and Communication Today*. trans. Wieland Hoban, Kindle ed., Medford, MA: Polity Press, 2018, p. 19.

categorization, automation, and aggregative and statistical approach, with bias. Quantitative and aggregated methods of cultural data reduce an individual's diverse experience to flat, digitized 'cumulative numbers.' Relationships in social media are replaced by 'connections,' and various positive emotions, including consent, support, affection, and crush, are counted with the number of 'like' or 'share.' Manovich stated that a digital quantitative analysis method like this has a limitation in carrying cultural experiences.

> *Quantitative studies of social media instead rely on the explicit signs and traces of the experience of a large number of users, such as likes and shares on social media. While larger samples allow them to draw more accurate conclusions, such signs and traces can't cover the full range of aesthetic experiences, and this is a very big limitation of this approach.*[28]

Another predominant way of measuring cultural content is the statistical approach. The statistical approach eliminates heterogeneous data that do not fall within the average category and excludes out-of-category possibilities. Multiple results are replaced with a single average number. Therefore, only personal information that falls in major categories becomes useful data, and those out of major categories are considered as useless or as 'error' or 'noise.' As the statistical method measures what appears consistently, it contradicts the measurement of diversity.

Manovich says that he "do[es] not want to explain most or even some of the data using a simple mathematical model and treat the rest of 'error' or 'noise'[,]"[29] but contradictorily claims that "some

[28] Manovich, *Lev. AI Aesthetics*. Kindle ed., Moscow: Strelka Press, 2018, Location No. 312-314.

[29] Manovich, Lev. "Can we think without categories?." *Digital Culture & Society*, vol. 4, no. 1, 2018, pp. 17-28, https://doi.org/10.14361/dcs-2018-0103/. Accessed 10 April 2020.

reduction is inevitable and actually desirable" [30] for cultural analytics. Cultural diversity can start with an attempt to recognize it as a new category rather than overlooking entities that deviated from the majority of categories during the analysis as inevitable. It is not an unrealistic story to include every entity without deviated ones. Research about what entities are excluded from the existing taxonomy, digital aggregate, and average calculation methods that can cover diverse cultural contents and why they are eliminated from a group of specific majorities, and what these exclusions mean culturally and socially need to be preceded. Only then can we be prepared to experience cultural diversity.

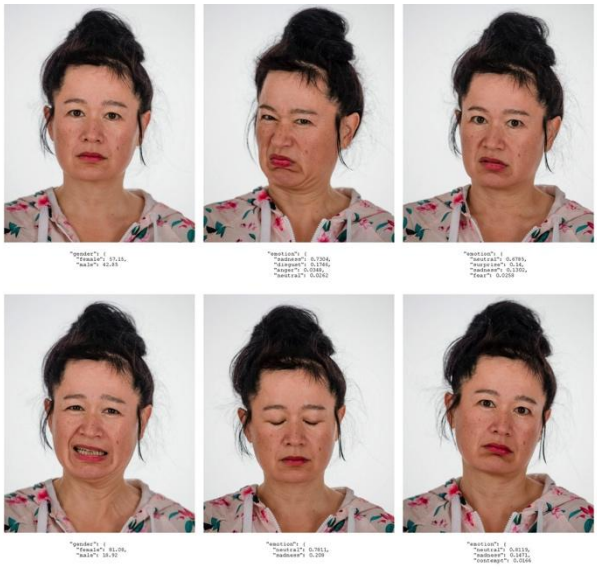

Figure. 6. Trevor Paglen, *Machine Readable Hito*, 2017.

Paglen's hundreds of photos of artist Hito's many facial expressions are digitized and analyzed by Face recognition algorithms that are designed to determine age, gender, emotion, and other details about the subject. One of Hito's facial expressions shows the analysis results of {"surprise": 0.14} and {"sadness": 0.1302} but looks angry. In addition, her two photos in the left column show gender ratio analysis—not only this gender ratio analysis algorithm shows dichotomous numerical values for

[30] Manovich, Lev. *AI Aesthetics*. Kindle ed., Moscow: Strelka Press, 2018. Location No. 333, 343.

females and males revealing the cultural limitations that do not include diverse genders but also the basis for the big difference observed between the top and bottom picture, {"female": 57.15} and {"female": 81.08} cannot be understood. At this time, we have no choice but to question what criteria image data was classified and accumulated, which AI has been trained from. Who can decide at which stage the 'some reduction' Manovich mentioned for cultural analysis? Prejudices and exclusions that look at our faces are digitized and used as data, and the results of these algorithms are signifiers of ourselves consumed by Facebook (DeepFace) and Google (FaceNet) that we use every day. The aggregated, average majority data are irrelevant to objective truth and diverse cultural analysis. These data are extracted from targeted individuals who are determined to be able to make profits in the consumption culture and are monitored and analyzed for the efficient operation of the consumption system. Paglen refers to AI as "Monsters of Capitalism."[31] It became an immortal predator to exploit the working class in the capitalist system.

In Marcuse's [One-Dimensional Man] (1964), an individual, who lives in 'one-dimensional society,' is an object that indiscriminately consumes through the advertisement promoted by mass media and is indoctrinated and manipulated by monopolistic capitalism that controls one's desire to produce, distribute, and consume goods. He describes 'one-dimensional society' as 'totalitarian' that is "not only a terroristic political coordination of society, but also a non-terroristic economic-technical coordination which operates through the manipulation of needs by vested interest."[32] Despite the emergence of media with democratic communications, monopolistic capitalism that governs and exploits individuals through media continues to exist in different forms. Individuals are increasingly guided into a classification for totalitarian control, and within it, each other gradually assimilates.

[31] Abrams, Loney. "You're Being Watched: Trevor Paglen on How Machine-Made Images Are Policing Society & Changing Art History." *Artspace*, 15 September 2017, https://www.artspace.com/magazine/interviews_features/qa/qa-trevor-paglen-on-how-machine-made-images-are-asserting-power-over-society-54992/. Accessed 2 June 2020.

[32] Marcuse, Herbert. *One-Dimensional Man*. Kindle ed., New York, NY: Routledge, 2002. p. 5.

> *Today this private space has been invaded and whittled down by technological reality. Mass production and mass distribution claim the entire individual, and industrial psychology has long since ceased to be confined to the factory. The manifold processes of introjection seem to be ossified in almost mechanical reaction. The result is, not adjustment but mimesis: an immediate identification of the individual with his society and, through it, with the society as a whole.*[33]

In the era of Digital capitalism, hegemony has been modified slyly in a democratic way, making it easy to confine and govern people through a colluded way of surveillance and brainwashing. Ideal extractive and analytic apparatuses have been invented to exploit individuals more efficiently, and at last, we are facing AI, a "mechanism for influencing the imaginations of billions."[34] As much rewards we get from entertainment and convenience as a user, how can we respond to the question of the destroyed dignity of an individual? Is it possible to have private time and space when and where "I do not become an image or object" at this time in which even I monitor and replicate myself rampantly? How can various knowledge and cultural contents be produced in this current monitoring and analytical system that promotes consistency and homogeneity? In response to these questions, the current dissertation seeks to find answers from artworks in Net art, destroying existing hegemony and criticizing the limitation of online culture.

[33] Ibid., pp. 11-12.

[34] Manovich, Lev. *AI Aesthetics*. Kindle ed., Moscow: Strelka Press, 2018, Chapter 1. Location No. 17.

2. Extro-Categorized Internet Arts

2.1. Concept and Category of the Internet Art

The definition of Internet Art is constantly changing.

Depending on how the Internet is defined and utilized within artistic movements, artists and critics tried to call their art by defining it as Net art, Net.art (net-dot-art), Neen, Post-Internet, Internet Aware Art, New Aesthetics, Web-based art, etc. These artworks have been aimed to 'utilize and criticize the Internet environment that can change the virtual and physical social structures'[35] without limiting its form or medium. Among them, Net.art and Post-Internet showed prominent activity, which has contradicting differences in the way it uses the Internet media. However, Net.art and Post-Internet have a common value seek to succeed Marcel Duchamp and Dada[36] in their own art-historical context and have avant-garde spirits to break down traditional forms of art and political hegemony.

Net.art (net-dot-art) was "a distinctive movement with activist tendencies that existed between 1994 and 1999."[37] Russian artist Olia Lialina (b.1971) and Alexei Shulgin (b. 1963) who 'found'[38] the term of Net.art (net-dot-art), Slovenian artist Vuk Ćosić (b.1966), and Dutch-Belgium duo Jodi, Joan

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[35] Shin, Boseul. "Drawing the topographic map of contemporary visual arts: Part 3. From Net art to Post-Internet art, the open possibility of Post-Internet Art." *Aliceonnet*, 7 January 2019, https://aliceon.tistory.com/3038?category=220749/. Accessed 15 April 2020.

[36] Dada (1916 – mid 1920s): There is some controversy as to when and where Dada occurred first, but officially, the first point of occurrence is Carbaret Voltaire (1916) opened by Hugo Ball (1886 – 1927), who moved to Zurich, Switzerland, the neutral country. Because it was an international movement that was self-generated in at least seven cities, including Zurich, New York, Barcelona, Paris, Berlin, Cologne, and Hannover, Dada was not consistent in terms of art and politics. However, its spirits consistently laid in denying and severing the existing forms of art and pursuing simultaneous, autonomous, coincidental, meaningless, anarchistic art.

[37] Meixnerova, Marie. "Net.art – [...] J8~g#|\;Net. Art{-^s1 [...]." *#mm net art: Internet Art in the Virtual and Physical Space of Its Presentation*, ed. Marie Meixnerova, trans. Helena Fikerová et al., Coppell, TX: PAF, z.s. and Link Editions, 2019, pp. 50-51.

[38] Bazzichelli, Tatiana. *Networking: The Net as Artwork*. Digital Aesthetics Research Center, 2008, p. 180.

Heemaskers (b. 1968) and Dirk Paesmans (b. 1965), are among the artists representing the art movement. They created experimental works on the screen through the decentralized structure and telecommunication-based interactions that Internet media has and continued the distinct avant-garde movement that criticized the political reality and expanded the limits of the media.

On the other hand, the term Post-Internet is coined by German artist and curator, Marisa Olson(b. 1977), while giving an interview on *We Make Money Not Art*[39] in 2008. She referred to her works not being 'on the Internet,' but rather, 'after the Internet.' Doulas describes that she redefined Internet art that "can no longer be distinguished as being strictly computer or internet-based, but can rather be identified as any type of art that is in some way 'influenced' by the Internet and digital media."[40] Post-Internet was intended to include all topics, including the imaging of texts caused by Internet culture, the reproduction and dissemination of images, new procedures for distribution and consumption, the difference between visible and invisible, and hybrids of virtual and real. The term came to imply things outside the Internet, but because it encompasses everything outside the Internet, the term eventually became to have a contradictory character representing nothing. The theme of Post-Internet art was closer to 'the art changed by the Internet' rather than 'the Internet thought by art.' One year after announcing the definition of 'Post-Internet,' artist McHugh listed five ways to talk about 'Post-Internet' in his blog:

> *1. New media art made after the launch of the World Wide Web and, thus, the introduction of [the] mainstream culture of the Internet.*

[39] Debatty, Régine. "Interview with Marisa Olson." *We Make Money Not Art*, 2008, https://we-make-money-not-art.com/how_does_one_become_marisa/. Accessed 1 May 2020.

[40] Doulas, Louis. "Within Post-Internet: Part One." *Pool,* Revised version, 4 June 2011, http://pooool.info/within-post-internet-part-i/. Accessed 1 May 2020.

2. Marisa Olson's definition: Art made after one's use of the Internet. "The yield" of her surfing and computer use, as she describes it.

3. Art responding to a general cultural condition that may also be described as "Post Internet" - when the Internet is less a novelty and more a banality.

4. What Guthrie Lonergan described as "Internet Aware" - or when the photo of the art object is more widely dispersed than the object itself.

5. Art from the Internet world that mutates to the conventions of the art world. As the work mutates itself to become more like art world art, the work mutates art world art to become more like the Internet. [41]

Ten years after the creation of his blog post, we still cannot provide a definite answer as to whether Post-Internet Art is an independent art movement recognized as a new form in art history for three reasons. First, as artist Harm van den Dorpel pointed out, it has been long since "the impact of the Internet on arts reach far beyond art that deals with the Internet."[42] Next, it is still impossible to define specific contents and forms to be classified as a new art movement. Lastly, the Internet is not new because of its commonality.

The remarkable contribution of the post-internet to the formation of Internet Art was to actively embrace the 'multiple variations of the same object' derived as an individual 'translate' space. Artist and curator Chan explains that the characteristics of post-internet practices are the "hybridity and hyper-mediation of existing genres, platform-oriented activity, slippage between the formal output of

[41] McHugh, Gene. *Post Internet: Notes on the Internet and Art 12.29.09 > 09.05.10*. Brescia: Link Editions, 2011, p. 15.

[42] @harmvddorpel (Harm van den Dorpel). "Doesn't the impact of the internet on arts reach far beyond art that deals with the internet?" *Twitter*, 24 Feb. 2011, http://twitter.com/#!/harmvddorpel/.

digital and physical environments, and tactical web surfing."[43] They certainly brought the activities of netizens into the realm of art. Artist Connor points out that compared to artists of Net.art (net-dot-art), Post-Internet artists cannot be positioned as critical observers of continuously-evolving culture because they "[are] fully immersed in a networked culture."[44] They used to remove the artist's unique authority by enjoying the effects of various visual effects that could be used in a virtual digital space and by placing the artist and audience in parallel on platforms. Their critical attitude is certainly compromising compared to Net.art. Post-Internet practices were adopting several methods derived from the ease of existing aggressive attitudes in the direction of exploiting convenience in the adventure of new technologies and in the direction of returning to mainstream art markets rather than deviating from it. Nevertheless, the current dissertation includes Net.art and Post-Internet artworks because Post-Internet artworks show not only the flow dealing with the most recent Internet environment but also the inheritance of how to criticize the unified or distorted culture controlled within the system of the Internet platform. The works of Ulaman and Bookchin that we looked at previously utilized the corresponding Internet platform, and because of that, a logical satire could be made to criticize them further.

Quaranta says it is appropriate to use many terms that define Internet Art, including Net.art (net-dot-art), as 'Net art.' This is because the Internet represents a place, not a medium, and the term is not only a practice defined by the medium, such as Video Art and Land Art but also "art made by Netizens, citizens of the Internet, who make the cultural background and habits [in the Internet.]"[45] 'Net.art (net-dot-art)' looks similar to 'Net art' at first, but due to the existence of a dot, the term is

[43] Chan, Jennifer. "Notes on Post-Internet." *You are here art after the internet*, ed. Omar Kholeif, Manchester: HOME; London: SPACE, 2017. pp. 106-123.

[44] Cornor, Michael. "Post-Internet: What It Is and What It Was." *You are here art after the internet*, ed. Omar Kholeif, Manchester: HOME; London: SPACE, 2017, pp. 56-65.

[45] Quaranta, Domenico. "The Art of the Netizens." *#mm net art: Internet Art in the Virtual and Physical Space of Its Presentation*, ed. Marie Meixnerova, trans. Helena Fikerová et al., oppell, TX: PAF, z.s. and Link Editions, 2019, pp. 69-73.

criticized for not having the word 'art' with 'a parody of an art label,'[46] which makes it no different from the file extension or domain. In this context, Chapter 2.2. Methodology to Reveal Mechanical Category on the Internet examines works by integrating Internet-based artworks so far into Net Art rather than looking at Net.art and Post-Internet separately.

Connor says, "outside the Internet is not presumed to exist."[47] However, there is an '*Internet outside humans*.' While the Internet was interpreted as the cultural space of humankind, Speculative Realism has argued that it is necessary to think about areas outside of correlationism, human-centered thinking. While people believe that the theme of communication and collaboration promoted by Web 2.0 will reach the ideal results, the categories of machines, areas outside of humans surrounding the Internet, have been neglected. Moreover, the confusion between the realm of machine and humanity has allowed it to hide the manipulation of social and cultural surveillance to gain capitalist interests behind the excuse of mechanical convenience. In Chapter 1, we discussed the dangers of our social and cultural values being adjusted because it is not easy to recognize the monitoring system on the Internet as it is designed to be kind and transparent. Their trick is to erase the lines of the category of the surveillance system transparently. Revealing the mechanical system behind the beautiful garden, which looks like perfect nature, means making the garden owner's intentions transparent. On the other hand, there is no intention or prejudice in the realm of the machine itself. A problem arises when the monopoly powers abuse the purity of the machine for their own profit. It is necessary to recognize that the Internet environment is not only a public communication space but also a '*space for machines in operation*.' This is because the clear classification of the realm of machines makes the transparently concealed surveillance system opaque, allowing us to recognize the monitor's presence continuously. At this time, the opaque surveillant can also become a target for monitoring.

[46] Ibid.

[47] Connor, Michael. "Post-Internet: What It Is and What It was." *You are here art after the internet*, ed. Omar Kholeif, Manchester: HOME; London: SPACE, 2017, pp. 56-65.

The classification of the machine's domain is possible through the mythical simulation that human perception or ability cannot reach. In other words, the mythical simulation is the implementation of a machine's randomized automation system. The classification of the machine's domain is also possible to reveal that the digitalization on the Internet is not created by purely mechanical processes. The sharing and communication process may be reasonable, but there is distortion in converting the result to a number. A society in which a majority of opinions is respected can encourage universal judgment, but it is calculated as a measure of evaluation that urges the exclusion of various views. In the next chapter, we will select and study the artworks of Net Art that make us think by separating human and mechanical domains in the network environment. The methods in which these artworks reveal the mechanical domain are analyzed by dividing them into mechanical properties of 'coincidence,' 'collection of heterogeneous materials,' 'translation,' and 'annihilation.'

2.2. Methodology to Reveal Mechanical Category on the Internet

2.2.1. Persistence of Coincidence

A coincidence is ‘an event that brings the disconnection from the past.’ The expression of coincidence in art history prior to the emergence of computer algorithms represented the denial of the logic and rationality that established art has advocated. The randomness as an art form was actively adopted by the Dadaists to express the coincidence of life itself, including unpredictable disasters like a World War I. In addition, in the Events and Happenings in the 1950s, a coincidence as an art form was explored by studying unpredictable commands and one-time forms that cannot be reproduced. The expression method of coincidence in the 20th century emerged from anarchistic ideas that deny structure and system and had irrational and chaotic characteristics. Clear mark with coincidence on the paintings begun from ‘Action Painting’ by Pollak. In this artwork, Pollak creates traces of new paint droplets from each contingent movement, regardless of previous paint droplet traces. Reproduction is impossible, and individual paint droplets form layers on top of one another, separated from each other. There is no narrative that connects the beginning and end of his painting. It is a collection of coincidental elements that are not counted.

Figure. 7. Jackson Pollock, 1950. Photograph by Hans Namuth.

Leaving unpredictable traces of paint that splashes simultaneously to different directions with his single movement reminds us about Badiou's 'multiple beings.' Since Badiou's ontology is based on mathematics, multiple means a set. Beings always exist as a set. Because a set always includes countless null sets as an element, it inevitably contains infinity. Multiple beings exist individually. As they are initially different beings, inconsistency does not exist among multiple beings. Badiou argues that his ontology exists independently of alterity or relationship.

> *...it doesn't see 'the other' as a problem. Alterity is what there is. Everything is different from everything else, everything is other than everything else. Given that I am in an ontology that is radically an ontology of the multiple, difference, or alterity is what I set out from: it's the regime of being. In a sense, alterity is not my problem...that there is alterity doesn't mean there is a relation between the various terms. I would even state that my ontology is primarily an ontology of alterity without relation. There aren't then, relations at the level of being.*[48]

For him, a being exists as an infinity of multiplicities that cannot be unified and as new multiplicities that can decompose infinitely. That is why being always has uncertainty. A being is there, by coincidence. Pollack's works deny 'the certainty of single being' and illustrate 'the uncertainty of multiple being.' While creating his works, he builds up layers of uncertain coincidences that do not know where to begin and end.

In this performance, we can question the 'autonomy of coincidence itself.' Strictly, it is hard to say that his work has an 'autonomous coincidence itself' that does not reflect his sensory experience and conscious judgment at all because his work produces coincidence from him. He can affect the paint

[48] Badiou, Alain. *Philosophy and the Event*. trans. Louise Burchill, Cambridge, UK: Polity Press, 2013, p. 57.

color, the direction in which the paint splashes, the amount of paint, and the degree to which the paint splashes with some selection in his performance. Paint traces cannot be created independently of him. The autonomous existence of the work is understood as a characteristic that cannot be compatible with the artist's authority because it is impossible to understand the object itself due to the artist's intervention. Nevertheless, his '*Action Painting*' still represents 'uncertainty' because some certainty cannot overturn uncertain facts.

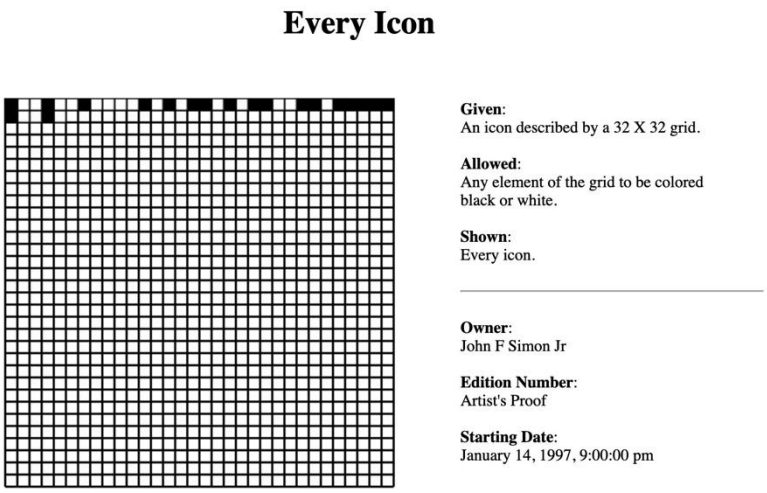

Figure. 8. John F Simon Jr, *Every Icon*, 1997.

Badiou claims that only mathematics can explain the multiplicities that can decompose infinitely. In this respect, the digitized coincidence was closer to his infinity. The randomness of the algorithm that runs computer software has a difference in that it is logical and permanent from the coincidence in the existing art movements. The coincidence of algorithms has gained additional characteristics of more distinct 'uncertain infinity,' which is different from before. Simon's *Every Icon* (1997-) provides a simple monochromatic grid of 1024 small squares divided in a 32 x 32 matrix. The algorithm calculates and shows all possible permutations within this matrix. It takes about 16 months to display

all 4.3 billion variants in the top row and about 6 billion years in the second row due to exponentially increased probability of variants.

An infinite extension of endless time unfolds in our minds. What every icon alludes to is not only the existence of oneself but also an endless variation in the infinity that can reduce the extinction of the human race and the Earth to an instantaneous blink. In any category, we cannot bound transcendental mobility of the matrix, which will exist in an infinitely different form. For Badiou, multiple beings coming to light are from the null set in the set, in other words, from the void. A void means 'meaningless.' So, beings exist 'meaningless.' The mystery of a being does not exist at all. The essence and meaning of an object are absent and just exist as a well-ordered infinity. The coincidence of logical and infinite algorithms represents the world without any distortion and confusion. No such thing as a limited category exists there.

Mechanical myths become possible within an order of infinite coincidence. Humans fill absolutely empty space that exists beyond their reach and range with representations of human-centered thoughts. Otherwise, the inevitability of absoluteness cannot be established. Meillassoux argues that one can reject distorted fantasy about absolute objects when one recognizes events beyond the range as an accidental inevitability.

Recognition of coincidence is important. It brings doubts in judgment aggregation and opens up the possibility for the future. Reasonable doubts do not limit possibilities by not filling the space of possibility with hallucinations and keeping it empty. Classifications and categories that exclude coincidence put unrecognizable entities that exist differently into a single category of 'unknown' and close down their possibilities. As they replicated over and over, doubts and misunderstandings toward the closed-door wander with their identity worn away. Many data to predict the future do not contain

faithful future possibilities. The monitoring system for processing data easily fixes the continuity from the past and destroys the future possibilities through cultural stagnation and brainwashing.

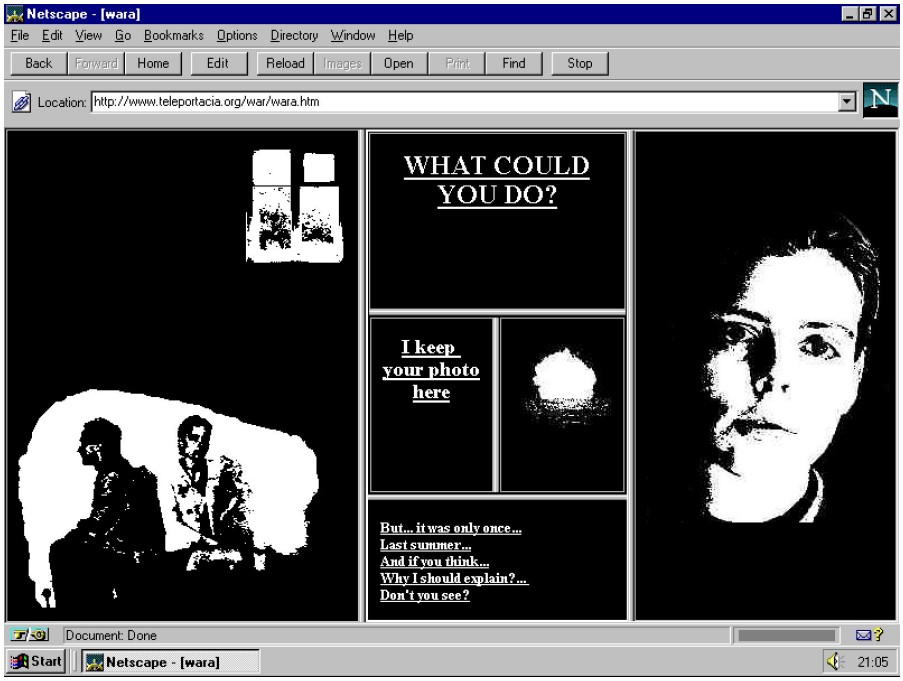

Figure. 9. Olia Lialina, *My Boyfriend Came Back from the War*, 1996.

If the coincidence can be observed through *Action Painting* and *Every Icon*, the viewers will experience the coincidence through Olia Liarina's artworks that adopt the method of hyper-links. Coincidence is produced from the fluctuations in the delay between disconnected events. Olia Lialina's *My Boyfriend Came Back from the War* (1996) reminds Sergei Eisenstein's interactive parallel montage technique. The fragments of the broken narrative are arranged through the appearance of segmented space and animations across the webpage, depending on the viewer's choice. It is an uncertain narrative that may be repeated forever or may not progress further. In another work *Agatha Appears* (1997), she uses URL addresses as a narrative tool. She sets up situations through the relationship of animations and narratives appearing in URL addresses, thereby providing multiple space-times outside one browser. The following is an excerpt from some of the URL addresses that can be experienced in *Agatha Appears*.

http://www.c3.hu/collection/agatha/big_city_night_street.html

http://www.c3.hu/collection/agatha/next_night_sysads_apartment.html

http://www.johannes-p-osterhoff.com/agatha/makes_stupid_things.html

http://www.tommoody.us/agatha/already_tired.html

http://www.tema.ru/agatha/has_no_idea.html

http://www.irational.org/agatha/wants_to_teleport.html

Figure. 10. Selected URL addresses in *Agatha Appears* (1997).

For example, while the story progress from "Agatha/big_city_tonight_street" to "Agatha/next_night_sysads_apartment" by clicking on the window located in the parent folder Collection, which is associated with a series of one of the URL addresses, the image of a woman presumed to be Agatha shows an animation in which a location or clothes change in space. The story information of each URL moves and expands the limited black browser window space to the 'streets of large cities' or 'apartments' that are possible only in the viewer's imagination. Additionally, the narrative of hyperlinks that progress as the domain itself changes is disconnected but dynamically enables unlimited teleports that continue infinitely. As you can see from above URL addresses (Fig. 10), as the speaker changes multiple times, such as Johannes, Tommoody, or Tema, the viewer imagines an invisible person in a story or assimilates themselves and exists as a person who constantly changes along with Agatha.

In addition, her other work, *Summer* (2013), is a work played through a browser where frames of animation of a girl riding on a swing appearing at the top of the browser window are redirected to

various other websites. While contemplating whether the girl's swing continues beyond the space, or whether the multiple girls exist simultaneously in several spaces, the viewer transcends the space on the screen. Connor estimated that the incompatible relationship between the autonomy of the artworks and the artist's authority is achieved in Lialina's artworks with a "semi-autonomous zone"[49] through a series of movements of each independent URL. By constructing space-time through her own Internet platform, she was able to acquire stronger immersion for viewers and artworks instead of giving up communication and sharing among viewers that can be satisfied on the existing Internet platform. The branding of the URL she constructed was a signature that maintains the authenticity of artwork and artist, which regressed after the Internet as the original became meaningless. In [The World of Art in the Age of Mechanical Reproduction] (1935), the URL address represents the absolute original that cannot be copied from the online space where one can neutralize the mechanical reproduction would lead to the loss of aura, 'authenticity' of artwork, warned by Benjamin. Mechanical coincidence as an artistic expression technique allowed the audience to imagine infinite space-time without limit while maintaining both autonomy and uniqueness of the work.

2.2.2. Heterogeneous Materials by the Neutral Collector

The collection by the machine does not exclude the heterogeneity of the physical world in which we live. Although the collection of machines contains information, it does not include an intention to be dataized. The collections of the Cabinet of Curiosity in the 16th and 17th centuries existed as raw data owned by individuals. After the Renaissance, a collection culture became popular among royalty and wealthy middle-classes across Europe as human-centered thoughts became widespread and as people desired to gain knowledge through scientific observations and experiences. They wanted to obtain

[49] Connor, Michael. "Post-Internet: What It Is and What It was." *You are here art after the Internet*, ed. Omar Kholeif, Manchester: Home; London: SPACE, 2017, pp. 56- 77.

intelligence to read the laws of the universe as well as the history and culture of humankind through collected objects. For this reason, strange and rare objects that stimulate their intellectual interest, such as those with very unique or unfamiliar shapes or rare or exotic things, were preferably collected. The space displaying these collected objects was called *Kunstkammer* or *Wunderkammer* in Germany, *Studiolo* in Italy, and *Cabinet of Curiosity* in England.[50] The occupation of individual collectors who enjoyed creating private collection spaces and collecting objects was diverse from aristocrats to doctors, lawyers, scholars, and clergy. The physical form of the space also varied from cabinets to wings of a palace, depending on the collector's taste and social status. Each collection space has its uniqueness in the type, number, and display method of the objects due to an individual's preferences and the spatial characteristics of the collection space. Cabinet of Curiosity was a social space where an individual's identity could be recognized. Simmons, the author of [Museums: A History] (2016), summarizes social activities promoted through the Cabinet of Curiosity based on Tibby's explanation.

> *Exhibiting a cabinet of curiosities in one's home soon became an important means of expressing (or sometimes increasing) prestige and social standing throughout Europe, with collectors linked through individual contacts and the circulation of manuscripts, handbooks, and other literature. ...Some of the best-known, most widely read periodicals (including Mercure de France and Journal des savants in France and Giornale dei letterati in Italy) published accounts of travelers' visits to private collections, further reinforcing the social networks among collectors.*[51]

[50] The cabinet of curiosities went by many names, including *museo, teatro, microcosm, gallery, gazophylacium, study, wonder cabinet, memory, theater, Kunstkammer* – derived from *Kunst* (art) and *Kammer* (room or chamber) – Wunderkammer (wonder room), *Schatzkammer* (treasure room), *studiolo*, and *cabinet de curieux*. Several historians have attempted to parse these terms into discrete categorical units based on the physical spaces they described, what objects were in them, and how they were used, but consensus has been difficult to achieve due to overlapping meaning s and contradictory usage. In general, a *Kunstkammer* was a chamber of artifice or chamber of art, as was a *Schatzkammer.* A *Wunderkammer* was a chamber of wonders or a curiosity cabinet. For further information, see Simmons (2016).

[51] Simmons, John E. *Museums: A History*. Lanham, MD: Rowman & Littlefield, 2016, pp. 72-73.

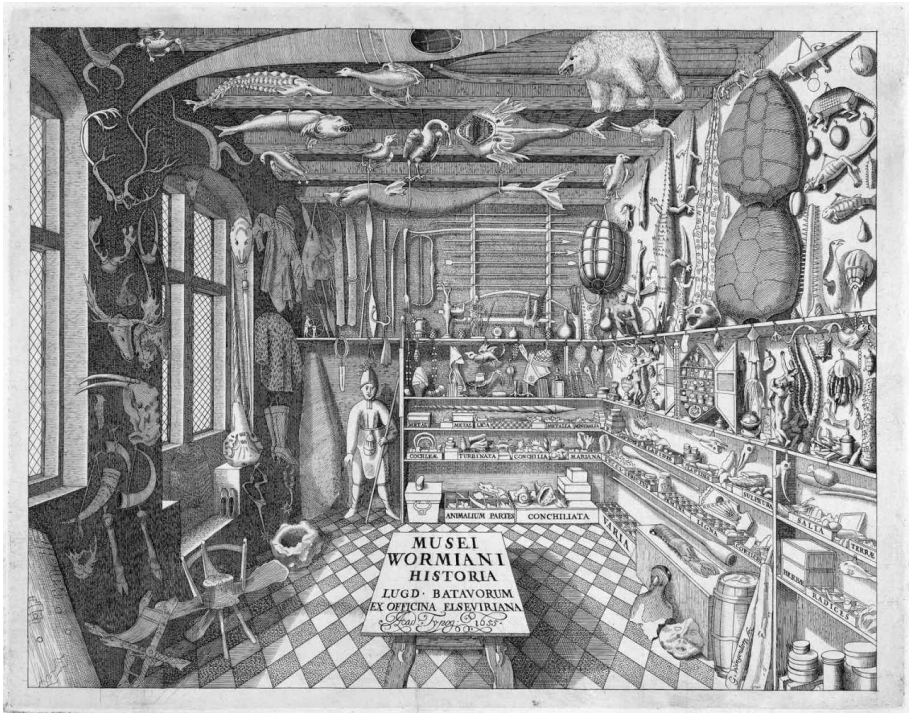

Figure. 11. Ole Worm, *Cabinet of Curiosities*, 1655.

Unlike the dependent method of converting or saving their collections according to the representative platform's designated format used by many netizens today, the collectors of the cabinet of curiosity could plan and create their own independent space for socialization. The collectors of the cabinet of curiosity were socialized individuals with subjectivity and uniqueness.

They had a contradictory attitude of science and superstition about the unknown (unidentified) object that cannot be understood. In the 16th and 17th centuries, two contrasting movements due to the chaos caused by the religious breakdown, the movement to cultivate science-based rational judgment, and the obsessive movement to find continuity between nature and humankind were simultaneously mixed. As much as their scientific curiosity and trust are high, the collectors of the cabinet of curiosity regarded collections that were not scientifically explained or violated the laws of nature as 'impossible' events and granted and shared false religious beliefs. Hooper, an educator of museum studies, argues that individual collections in the Cabinet of Curiosities are "unreasonable relationships

or disordered mixes and rationally unrecognized forms of knowledge"[52] of disconnected objects. When people try to interpret things that cannot be explained with human recognition to be explainable, false beliefs and distortions occur. The category of the 'unknown object' becomes possible by recognizing that there may exist areas beyond human recognition. After classifying the area beyond human recognition as a neutral category of 'coincidence,' scientific analysis and access become possible. Coincidences captured by machines sometimes promote neutral thinking about distorted or hidden domains. Machine-made coincidence has equality and purity that does not rule out any cases.

Random means the most certain 'pure coincidence collection' that can represent the state of 'equality,' 'uncertainty,' or 'meaningless.' One of the art pieces that illustrate the characteristics of unpredictable coincidences, in other words, randomness, is !Mediengruppe Bitnik's *Random Darknet Shopper* (2014 – 16). An automated online shopping robot purchases random items in the deep web with a bitcoin allocated one hundred dollars per week, and then the items are directly delivered to the gallery space. Whenever new items arrive, they are added to the vitrine and presented. Delivered items are comprised of objects that are rarely encountered in ordinary daily life or with unknown uses, including Canadian gold coin, a tutorial for hacking a Coca-Cola machine, template for a British gas bill, voice changer mobile phone dual sim, a Viagra generic, a passport scan, fake Lacoste shirt, etc. The network mediation, which contains the possibilities of being manipulated, is given the objectivity of phenomenon in the gallery due to the randomness of 'meaningless'-based algorithms. Then, viewers have a reasonable question about their superficial view of the Internet environment they were accessing and the area hidden below the surface. In this sense, the most interesting thing about this work is that it brings out items that are invisibly traded in an unindexed hidden web by the standard web search-engines to the surface.[53] By using the consumption and distribution process, it shows the

[52] Hooper-Greenhill, Eilean. *Museum and the Shaping of Knowledge*. London, UK: Routledge, 1992, p. 79.

[53] Raghavan, Sriram; Garcia-Molina, Hector. *Crawling the Hidden Web*. Proceeding of the 27th International Conference on Very Large Databases, Rome, September 2001.

conversion of hidden virtuality of the Internet into reality in real-time. Closed dematerialized things that potentially existed underground are randomly materialized and reveal their existence. *Random Darknet Shopper* suddenly intrudes disordered and unplanned beings into the current situation.

Figure. 12. ! Mediengruppe Bitnik, *Random Darknet Shopper*, 2014 - 16.

Badiou's 'event' is "the occurrence or the flash, the dazzling revelation or an instant, of the void subjacent to the situation, buried in the structures."[54] It represents the intrusion of contradictory beings that suddenly appear through elements of an existing set, namely the emergence of alterity. As invisible transactions, which were suppressed by the structure of the Internet media, reveal their existence, they raise doubts about the structure of the Internet environment decorated with equality and openness.

Agreements between what is seen and being seen and what is said and being said will remain as confirmations of simple repetition. Events change everything. What you have

[54] Badiou, Alain. *Philosophy and the Event*. trans. Louise Burchill, Cambridge, UK: Polity Press, 2013, p. 142.

seen is erroneously seen, and what you have said is incorrectly said. ...Likewise, it can be said that all revolutionary changes begin at the "wrongly seen and said" moments related to the event.[55]

What the Robot's purchases of *Random Darknet Shopper* are heterogeneous products produced from the concealed distribution process through a dematerialized environment and currency. By randomized purchase, in other words, the objective choice of a machine that is unbiased by anything is exchanged for material and placed in the physical world. Rather, viewers can recognize that the Internet environment we are watching is filtered. The machine's eyes do not exclude the area of coincidence.

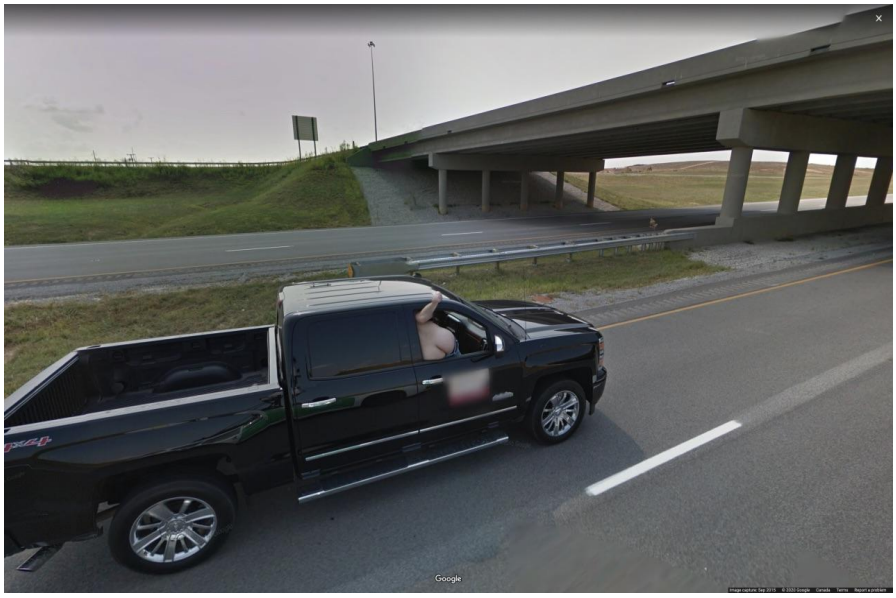

Figure. 13. John Rafman, *Nine Eyes of Google Street View,* 2018 - ongoing.

John Rafman's *Nine Eyes of Google Street View* (2008) collects the heterogenous coincidences that appear in Google street view images. Through the automated recording of cameras mounted on

[55] Badiou, Alain. *베케트에 대하여.* trans. 서용순; 임수현, 민음사, 2013, p. 267.

moving vehicles, in the process of documenting all streets, it is not important what contents captured images contain because the purpose of collecting all street images is to structure the map (panoramic stitch). So, the gaze of an automated machine takes a picture from a 'neutral position without clear consideration of any ethics or aesthetics.'[56] Unusual scenes, such as a child stuck in a window sill, children aiming a toy gun at the head of another person, a person lying on the road destined to be hit by a running car, a car stuck in the ground, a lion appearing in the city, and unknown texts and color smears on the screen, are captured and collected from the Google street view by Rafman.

The captured unusual moments illustrate deviated images that cannot be established by daily life and coincidence as well as virtual and real. However, his photos are not simply ridiculous or surprising because the coincidence implies our true everyday life that an undiscerning neutral witness is watching.

Figure.14. Artie Vierkant, *Image Objects*, 2011 - ongoing.

[56] "Net Art Anthology: Nine Eyes of Google Street View." *Net Art Anthology*, 21 December 2017, https://anthology.rhizome.org/9-eyes/. Accessed 15 May 2020.

On the premise of a clear polarity between online and offline, Post-Internet Art, specifically tries to diversely translate the difference between the two by transforming one of them to the other, substituting the two, or even trying mash-up. These attempts rather rupture the seamless stitching online and offline. Heterogeneous results created in the process of crossing the borders between the two worlds continued to imprint with the existence of empty space between virtual and real.

In Image Objects (2011 – ongoing), Vierkant changes digital image files into physical sculptures and then exhibits them in real space. His sculptures that materialize the simultaneous gaze, including both virtual and real, are new objects that do not exist in the physical world. Images as objects in real space are recorded as photographs and displayed in the next exhibition by transforming again into new physical objects. During this exhibition and recording process, an image constantly forms a new identity as it goes through repeated reproductions over virtual and real. Objects are no longer fixed but transformed into existence. His artwork, which defines the continuously changing identity of an object from time to time, overturns the category of human perception that fixes an object's properties. The digital world is the simultaneous existence of the same object with different properties but can also replicate the same objects. The collection of heterogeneous objects created by a hybrid of virtual and real spaces makes it possible to clarify the differences between virtual and real spaces, as well as the differences between digital and human recognition.

2.2.3. Parallel Translation

Several artworks highlighting the 'translation of the artwork through the distribution process itself' that cross over online and offline have achieved measurable results as Internet artworks that go beyond the Internet system. The artists intended to regain a position as a critical observer through

these artworks, freeing from the irony form that makes them to rely on the Internet platform while criticizing the networked capitalism. In Dispersion (2002-), Seth Price stated that Distributed media's "space into which the work of art must project itself lest it be outdistanced entirely by these corporate interests, and new strategies are needed to keep up with commercial distribution, decentralization, and dispersion. You must fight something in order to understand it."[57]

Figure. 15. Seth Price, *Dispersion*, Self-produced Booklet, 2002.

Price finds the ideal form of artwork that deviates from the institutional system in 'simultaneous and multiple media format' of the work. Distribution-oriented artworks did not need to be installed in a gallery space because they had an equally flexible structure to transmit to different media other than a hierarchical structure between original and copy. *Dispersion* was first released as a free distributed art-historical essay on Price's personal website. This essay points out that the inherent meaning of the artwork can be expanded further during the distribution stage through the communication network than during the production stage. In this sense, Price positioned *Dispersion* with different distributed media formats, including a free PDF, printed publications, and sculptural objects, to demonstrate the possibility of the work created differently having equal status beyond economic distribution. While

[57] Price, Seth. *Dispersion*. n.p., 2002, http://www.distributedhistory.com/Disperzone.html. Accessed 15 June 2020.

the classical avant-garde was against the institutional condition in a way to shun social communication and to aggressively achieve radicalness, his strategy was a bit moderate and decentralized, yet sly to survive from political and communicative cycles of mass distribution.

As he discusses how artwork is consumed today, Price mentions that most people experienced Duchamp's Fountain (1917) with images and interpretations rather than actually seeing it. Price also says that we can share information and perform new cultural reinterpretations through the products from the past, thanks to the Internet's function as a popular archive that never annihilates.

> *With more and more media readily available through this unruly archive, the task becomes one of packaging, producing, reframing, and distributing; a mode of production analogous not to the creation of material goods, but to the production of social contexts, using existing material. Anything on the internet is a fragment, provisional, pointing elsewhere. Nothing is finished.*[58]

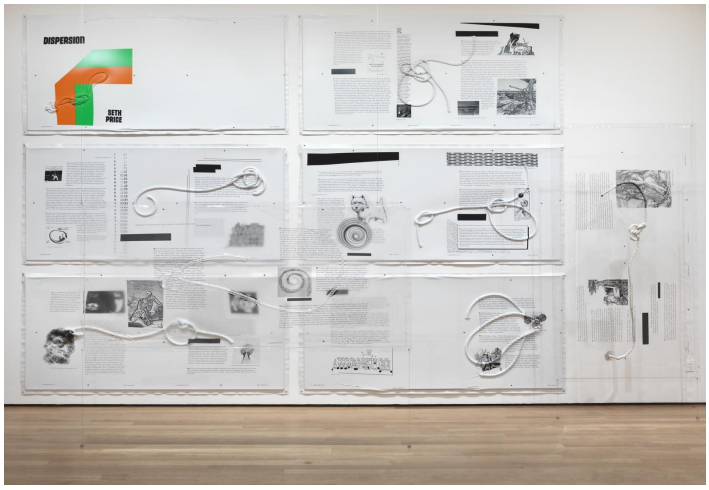

Figure. 16. Seth Price, *Essay with Ropes*, 2008.

[58] Ibid.

Like Duchamp distributed the ‘notion’ through *Fountain*, Price argues that through the cycle of rereading, we can find a possibility to resist the institutions that control definitions of cultural meaning. For him, the materialization of artworks from the Internet meant reinterpretation through different distribution modes and the possibility of deviating from any institutional frame which controls Internet media at the same time. These artworks, because they can be seen in multiple media spaces, showed a somewhat optimistic attitude that they could maintain independence from the capitalists who control each media space. However, the control still seems to be in effect. As artworks have more distribution models, the more adverse effects of adding institutions’ or capitalists’ rights to control each distributed media occurred. In *Disperse*, the pdf digital file is forced to be influenced by the Internet platforms, and ironically, Price’s print books and objects are controlled by different control systems, from publishers publishing books and organizations organizing exhibitions. In terms of keeping the process of distribution open, the PDF and printed book have the potential to disperse and transform, but I am skeptical about whether objectified *Dispersions* (see Fig. 16) contributed to the form of artwork that can spread beyond the framework of the art market.

In Oliver Laric's *Versions* (2009-2012), multiple variations of the same object are expressed in terms of time. His work is suggestive of a meme that roams the Internet. According to him, culture continues to repeat, and searching for the original is just a human habit. He breaks down the hierarchy between images, such as the relationship between originals and copies, and argues the individuality of reproduction. *Versions* provide different versions of videos, each produced similarly in 2009, 2010, and 2012. In *Version*’s video, Laric juxtaposes homogeneous classic and contemporary images. The video shows horrifyingly similar scenes in terms of the characters' movements and backgrounds in the other two animated films and also allows the audience to compare statues with similar movements and costumes in ancient Greek, Roman, and Neoclassicism. The narration with a female computer voice reads his essays, compiling writings by artists and thinkers, including Susan Sontag, Friedrich Nietzsche, and Jorge Luis Borges.

Figure. 17. Oliver Laric, *Versions*, 2010.

Thanks to the visual and audible source as well as to the user-friendly software that is easy to manipulate on the Internet, artists and users have no reason to choose new production instead of easy reproduction. There, the individuality of the image was recognized to some extent by just repeating the interpretation. Reinterpretations meant another reality. Laric's quote from Borges follows:

> *With famous books, the first time is already the second, since we approach them already knowing them. The cautious comments saying rereading the classic turns out to be an innocent voracity. […] We are always somehow rereading a classic, because we have encountered some previous incarnation of it, a refraction, in other stories, texts, or versions.*[59]

I agree that originals may not exist. The concept of the original could be a human desire for the first or the truth. As borrowing other's words, Laric said that in *Variations* (2010), 'several resemblances between two things' mean that each of them is a different reality, and it is just human's frequent habit to recognize that only one of them is true. However, the problem with his argument is that first, our

[59] Waisman, Sergio. *Borges and Translation: The Irreverence of the Periphery*. Lewisburg, PA: Bucknell University Press, 2005, p. 52.

perception cannot go beyond the limits of our own habits, and second, he confuses reread with reuse. Since two animations in Fig. 17 are presumed to share the same motion picture footage while using the same rotoscope technique, it cannot be an example of content that can explain 'rereading.' If one was more impressed by the similarities than the differences between juxtaposed images while watching his video, Laric failed to persuade his proposition, "same, same, but different." He suggests 'multiple iterations of the same with different artworks' in the video, *Variations*, but each of his three versions showed discordant intentions of 'multiple iterations of the 'same' artwork with 'variations'.'

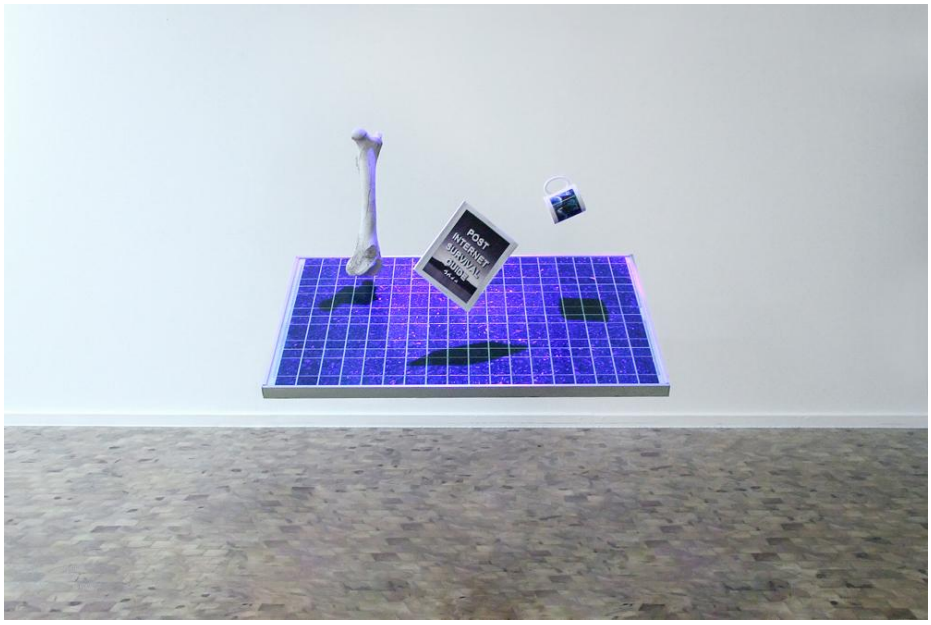

Figure. 18. Katja Novitskova, *Post Internet Survival Guide*, 2010.

Another example of a parallel translation of the same artwork is *Post Internet Survival Guide* (2010) by Katja Novitskova. It is interesting to note that ironically, she considered how to 'survive' the fast changes in meaning created by today's digitized era via Google. *Post Internet Survival Guide* is also in a PDF and printed book format and has been transformed into sculpture, like *Dispersion* by Price. In her writing, Novitskova organized the chapters by "Google search results for 'survival guide': size up the situation, use all your senses, remember where you are, value living, improvise, vanquish fear

and panic, act like the natives, learn basic skills."[60] Her book, demonstrating daily experience of how modern people, after the Internet, obtain information and knowledge, tries translation to different media to expand experience beyond the Internet. Novitskova's translation of the artwork leads us to contemplate the perceptual difference between the Internet and the real world and how it affects our perception and understanding of real objects.

Approximations (2012-) by Katja Novitskova reveals the differences in the visual perception between machine and human-beings. She culled exotic animal images from search engines and printed them larger than the life-size and displayed them in the physical space. The unfamiliarity brought by the images to space not only makes the boundary between virtual and real-world more clear but also gives a chance to recognize how we perceive animals via the Internet. As Martin who is an art historian and critic said about *Approximations*, "in the virtual realm, exotic animals have been reduced to a "sympathetic" meme, an aspect of mediated reality, which to a slightly more critical gaze should reveal important differences between our everyday experience and what is seen on Retina display." The images she pulled out to a three-dimensional space lead us to ask ourselves about any two-dimensional experience of the Internet platform in learning objects.

[60] Novitskova, Katja. "Post Internet Survival Guide 2010." https://www.katjanovi.net/postinternetsurvivalguide.html/. Accessed 16 June 2020.

Figure. 19. Katja Novitskova, *Approximations (Storm Time)*, 2016.

Images with high resolution and an infrared camera imply the machinery realm on the Internet inaccessible to human perception. She revealed that the Internet is not a space only for human beings. Chan said what Seth Price called 'Dispersions,' Oliver Laric called 'Versions,' and Hito Steyerl called 'circulationism' "occurs as a contingency of decontextualized image ecology."[61] Simultaneous and multiple forms of an artwork that transform across media to expand recognition have an apparent potential to migrate the homogenous contents caused by 'indiscriminate over-sharing'[62] and surveillance systems in the Internet platforms. As objects that have been experienced as flat images on a screen are translated into three-dimensional objects and exist simultaneously, through the metamorphosis of the image object, multiple and diverse cultural and art forms can be expected.

[61] Chan, Jennifer. "Notes on Post-Internet." *You are here art after the internet*, ed. Omar Kholeif, Manchester: HOME; London: SPACE, 2017, pp. 106-123.

[62] Ibid.

2.2.4. Annihilation

Death is the most obvious characteristic that distinguishes between virtual and real. Death is an uncertain event that comes to anyone in the physical world. It comes as a coincidental event by 'uncertainty' of unknown time. It always comes as my own 'individual death.' There is no such thing as dying on behalf of someone. There was no alterity in the death interpreted by the correlationism philosophies. For them, death was interpreted as the subject's uniqueness that was not related to anything. However, 'death' in the digital world, in fact, is not just another uncertain and accident event. In this space, the moment and process of death are not important, whether it gradually fades away or sudden. That is because death in the digital space does not mean 'the end.'

Figure. 20. Trevor Paglen, Eigenface (Even the Dead Are Not Safe), 2017.

Paglen's *Eigenface* series demonstrates that death in the physical world is not valid in digital space. Even dead philosophers like Frantz Fanon and Simone Weil are no exceptions to face recognition algorithms that identify individual identities. There is not a perception of oblivion or death in the

machine's gaze. In an interview with Abrams, Paglen said, "it determines what's different from your face and every other face of humans in the world. […] It's native form is to be indivisible to humans."[63] He argues that in his artwork, the Eigenface algorithm embodies the way pure machines look. However, we need to be more strict in categorizing 'the domain of pure machines.' The fact that the training image set that made the machine's gaze recognize Frantz as Frantz was selected from someone represents that the algorithm can never be the native form of the machine. In addition, as Paglen said because the raw data collection of photos to activate the face recognition algorithm is possible from "[…] taking all of the pictures of you that you've uploaded or other people have tagged with your name,"[64] it is a process in which the pure mechanical domain cannot be preserved at first.

However, the contemplation that his *Eigenface* series can throw at the audience is the immortality of the audience's image that will continue to be consumed even after their death. Space possible immortality redefines that death as mutability liberated from interpreting death as physical or mental death that Heidegger defined. Death, which has the "eternal and lawless possible becoming of every law,"[65] exists as an apparent inevitability.

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[63] Abrams, Loney. "You're Being Watched: Trevor Paglen on How Machine-Made Images Are Policing Society & Changing Art History." *Artspace*, 15 September 2017, https://www.artspace.com/magazine/interviews_features/qa/qa-trevor-paglen-on-how-machine-made-images-are-asserting-power-over-society-54992/. Accessed 5 June 2020.

[64] Ibid.

[65] Meillassoux, Quentin, *After Finitude: An Essay on the Necessity of Contingency*. trans. Ray Brassier, London: Continuum, 2008, p. 64.

Figure. 21. Mark Napier, *The Shredder*, 1998.

An example literally illustrating digital death is Napier's *The Shredder* (1998).[66] *The Shredder* is an alternative web browser that destroys the identity of web pages. In *Shredder*'s browser, the audience can enter the webpage address the user wants to disassemble or select a representative Internet platform, such as Google or Yahoo. The texts, graphics, and underlying HTML code of the webpage are annihilated and scattered, creating a pictorial screen suggestive of Jackson Pollock's *Action Painting*. *The Shredder* intentionally returns the ecosystem of metaphor to meaninglessness by "expos[ing] the raw material that make[s] up the design, content, and information of the web"[67] in real-time. The representation of the Internet platform is transformed into a continuously changing coincidental arrangement.

[66] You can experience this work at http://potatoland.org/shredder/shredder.html

[67] Greene, Rachel. *Internet Art*. London; New York: Thames & Hudson, 2004, p. 100.

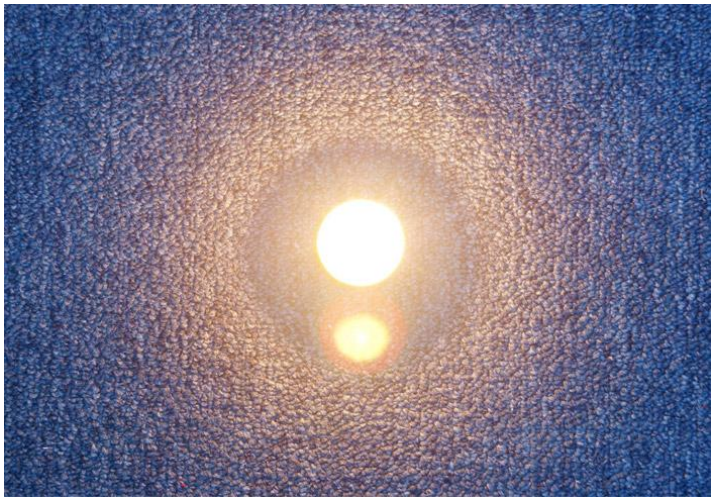

Figure. 22. Kevin Bewersdorf, *PUREKev*, 2009 - 14.

Accidental coincidence in the Internet environment and reproduction of uncertain death appeared in *PUREKev* (2009 – 14). In 2009, *PUREKev* by Bewersdorf began with a small flickering flame of .gif file being placed on a blue background on purekev.com, which now exists as a completely different website. The flame was created there for annihilation from the beginning. For a long five years, this flickering flame became smaller and disappeared. In contrast to most of the time on the Internet was spent as for creation, *PUREKev*'s time, conversely, was slowly and gradually disappearing at a rate different from that of the Internet world in which it exists.

> *As one return[s] to the work again and again – not daily (although, perhaps daily) - one views a mutation in time as the flicker goes deeper and deeper and deeper into the void.*[68]

After three years, the flame that gradually diminished became invisible, and it became a white page that remained blank for two years. Many audiences tried to meditate by projecting the traces of the

[68] McHugh, Gene. *Post Internet: Notes on the Internet and Art 12.29.09 > 09.05.10*. Brescia: Link Editions, 2011, p. 40.

flame and connecting one's mind to the void period. The majority of reviews regarding this work analyzes that the work is about *PUREKev*'s performance for three years and exists as two years of the void period. On the other hand, this should definitely be redefined as a five-year performance. An object exists with the void and decomposes infinitely. The void period of two years exists as 'nothing,' but would have changed infinitely. It was just a 'change' outside of our perception. Meillassoux questions if humans can think about 14 billion years ago when no human consciousness and life existed. The framework of human experience-centered thoughts cannot approach the reality that exists regardless of human existence. In strict conformity with the logic called, 'the logic of categories,' we lose the possibility of another world that exists outside in which categories were inherent. The annihilation of machines exists beyond human perception. The suggestion of the possibility of 'coincidental uncertain death of annihilation' that does not exist in the Internet space is a refutation of the necessity of the mechanical domain through the sense of loss that the mythical realm is destroyed.

Machines have a system that sees what we cannot see, produces infinite coincidences and new objects that we cannot imagine, and perceives death as a constant change. We still think of an object in our cognition system, and this structure inevitably to us. Also, escape from the structure like magic will not occur. However, the bright future can be formed only by the idea that there are infinitely many different deducible worlds outside of this structure in the Internet world. One of them is the world of machines, and it is desperately needed to think of the existence of the domain as a mechanical category distinct from our cognition system. The category's potential is not the medium of communication for exploiting Internet platforms but must be used to accommodate human cognitive limitations and diverse social and cultural views.

3. Natural Individuals

Natural Individuals consists of Virtual Reality Mobile Application, *Metamorphosis into Self-resemblance* (2020) and Generative Scultures, *The Space Beyond Recognition* (2020), that explores what can be lost in the Internet experience. This dissertation started by investigating how much information on the Internet embraces objectivity and diverse perspectives on the object. In particular, the space of platforms provided by Web 2.0, characterized by sharing and communication, seemed to have the possibility to access more accurate information in that they could include more people's participation and perspectives. Wikipedia demonstrated the potential as an ideal informative media of the Internet platform where many people can voluntarily share objective, diverse, and constantly evolving information on knowledge. However, the structure and form that most internet platforms consist of, except the structure and form adopted by Wikipedia, have been progressed as a means of effectively managing the capitalist system and generating profits rather than improving knowledge and culture.

The systems of knowledge and culture on the Internet are very similar to the representation of 'resemblance' that Foucault posed as a universal method in the 16th century to acquire knowledge. In the internet platform's environment, the way of expanding knowledge degenerated, and the function of language reduced images losing narrativity. Even at the stages of classification and analysis, language has been used as an index sign or tool for criticizing, and hierarchical numeric evaluation has become an important element of these stages. The classification system from around the 18th century originated from observations based on science and rationality about external objects, but today it has deteriorated. The outside of the framework of human's limited cognition left by the knowledgeable system of that era was filled again with anxiety and false beliefs. *Natural Individuals* tried to visualize and criticize the flaws and limitations of knowledgeable and cognition systems

recognized through the internet platform. In particular, the criticism, which was recently raised from a philosophical standpoint, that the knowledge of Western culture was explored only from a human-centered point of view without considering changes in the laws of nature has influenced the selection of materials of *Natural Individuals*. I tried to examine the understanding of human beings about natural objects through the image data searched on the Internet.

Natural Individuals solo exhibition opened in January 2020 at the Gallery 4Culture and the next month at the Jack Straw New Media Gallery in Seattle. In Gallery 4Culture, in particular, an artificial pond with plants and a small waterfall was physically installed. Visitors can view the artwork by putting their phone into the Cardboard VR viewer displayed on the gallery wall after installing and running the Natural Individuals application directly on their Android smartphones by scanning the QR Code on the wall. For visitors with ios-based phones or without smartphones, three iPads with application pre-installed were displayed in the exhibition space. In order to publish an ios-based application to App Store, a developer must pass the Apple review, but despite the multiple long discussions with the reviewer directly, I could not make productive progress other than the feedback stated in the review guideline manual, lack of 'Minimum Functionality.' In the first discussion, the direct feedback service requested from me, the reviewer confused this VR application with AR and then replied that she did not have a VR viewer from before in the next contact. Even after *Metamorphosis into Self-resemblance* added the function of running it as a full screen without a VR viewer, the Apple review continued to decline the publishing of the application for the same reason without further explanation.

Metamorphosis into Self-resemblance uses the open library supported by Google that interacts with the viewer's gaze as the principal mechanism. This library can be achieved only in mobile VR. Mobile VR still could not be free from the censorship of application issuance that can be exercised by monopolistic companies and has the disadvantage of providing relatively less realistic spectacles.

However, compared to other VR headsets that have sensors recognizing the user's movement in space, mobile VR has the convenience of allowing multiple viewers with a smartphone to freely own and simultaneously enjoy content anytime, anywhere. I believe these characteristics of mobile VR have a high potential as a form of artwork. It allows artworks to be released not only physically from the gallery space but also in the marketplace. Additionally, it is meaningful in a Virtual Reality that the full-screen mode is provided as another option in that the viewer's eyes can be free. Mobile VR is expected as a new art form that allows the audience to communicate directly with artists and artists to continuously update their artworks, which could not be done previously.

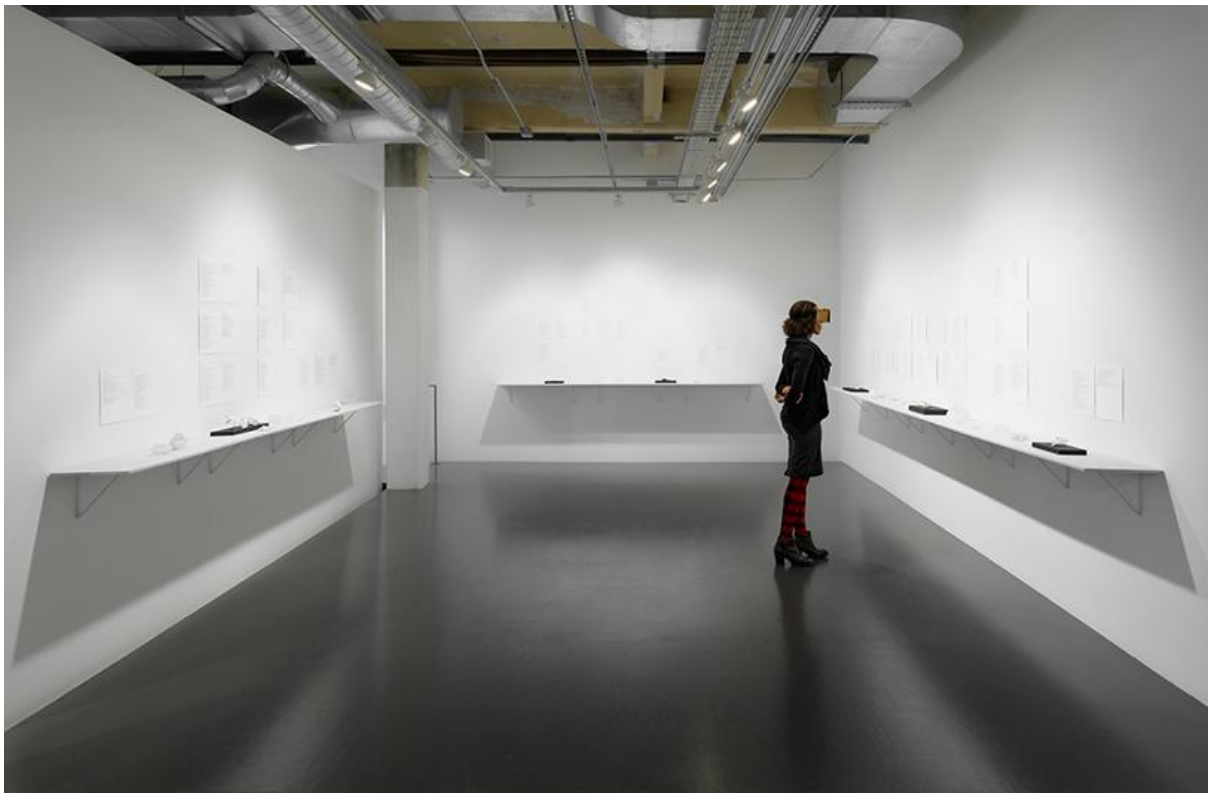

Figure. 23. Yunmi Her, Natural Individuals Exhibition View, 2020.

Viewers standing next to the artificial pond in the exhibition space of *Natural Individuals*, see a virtual pond revealed by their eyes through the VR cardboard viewer, but in the end, the actual pond conceived by the individual does not exist. And there are no real natural objects either. On the shelf installed along the wall, natural objects collected from the Internet are 3D printed and represented in three dimensions. On the paper pasted on the wall, the URL addresses where collected images through searching each natural object with keywords exist are listed. Through the sculptures in a form far from the images associated with each keyword, it reveals the existence of our ambiguous and distorted understanding of those objects. After all, the most innate or the most natural object existing in the exhibition space of *Natural Individuals* is only individuals, viewers who think reality through virtual images.

3.1. Metamorphosis into Self-resemblance

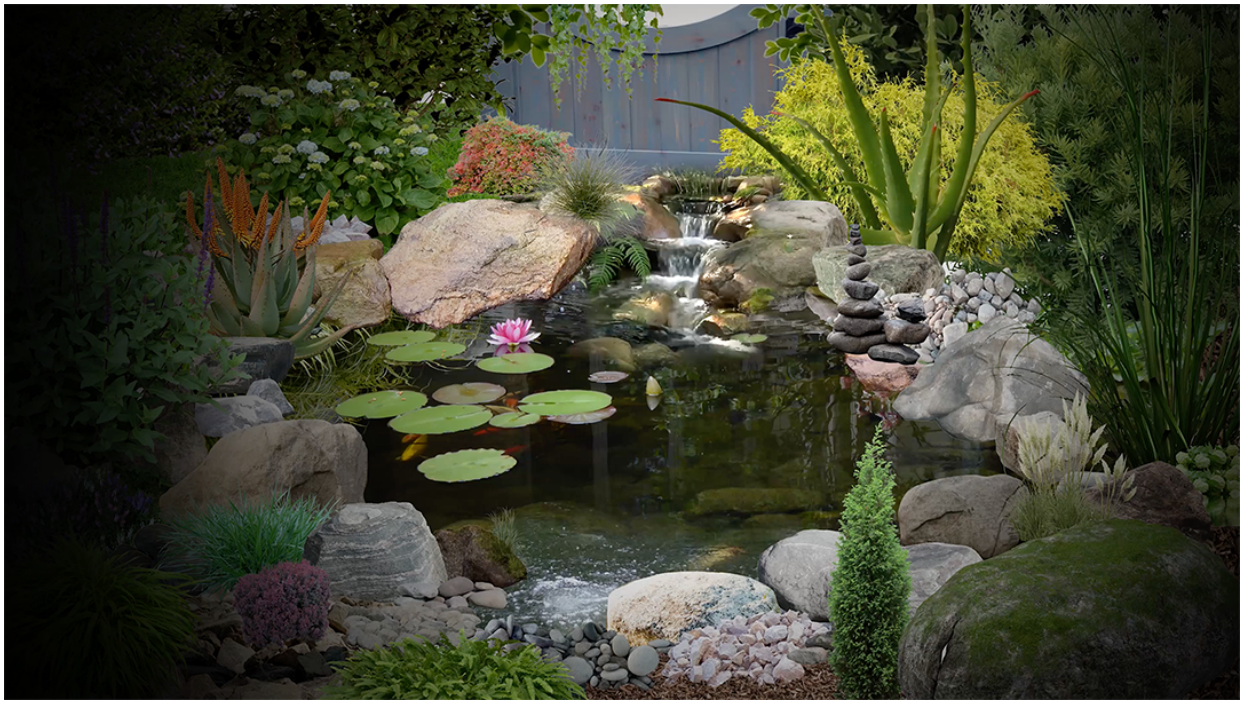

Figure. 24. Yunmi Her, *Metamorphosis into Self-resemblance*, 2020.

The first scene of *Metamorphosis into Self-resemblance* (Fig. 25) is the sound of a waterfall heard in one direction and the light penetrating the dark through a tiny hole. Something seen through the hole continues to glow but still cannot be identified. When not looking at the hole, only the sound of the waterfall is heard, and darkness continues without any changes. However, when the viewer looks at the hole, the hole gradually expands and reveals a pond hidden in the darkness. The viewer's perspective acts as an absolute mechanism that removes the darkness and brings changes.

Figure. 25. Yunmi Her, *Metamorphosis into Self-resemblance: Scene 1*, 2020.

The linear perspective, which symbolizes an absolute single perspective, was widely disseminated in Renaissance in the 15th century and was a scientific way to reproduce the three-dimensional reality in two dimensions. Until modern times, the representation of the image created by the linear perspective was considered the most rational and authoritative way. As the photo, 'The Perfect Reproduction of the Linear perspective,' showed the illusion surpassing the epistemological reality that the artists in the 19th century once believed could be reached only by humans, the artists started to research various elements of reality that photo could not contain, such as movements, time, and narratives. After modern times, the linear perspective image has been criticized as shackles, which fix the viewer's eyes, and a moment that does not contain the continuity of time. The viewers had to fix their eyes at a single vanishing point to control the entire image and immerse into the space of the illusion.

Marcel Duchamp's last, posthumous work, *Étant donnés* (1946-1966), also points out the limitations of views created by the linear perspective. What appears through two holes in the old wooden door is a woman's naked body, a lamp in her hand, and the waterfall in the background. To look inside the door, one needs to identify the object within the range permitted by the holes by adjusting one eye at

each hole and looking at the object from different angles several times. Despite the long voyeuristic observations, we still cannot recognize whether her face and limbs are not cut off and cannot find any clue what situation was given. The water should be pouring vigorously, and the fire should be burning brightly, but they lose mobility and remain calm, like an audience who needs to keep an eye on the hole in the door. In an interview with Pierre, Duchamp said that his works were built based on a very scientific method, and that is why he can criticize the credibility of visual experience based on the scientific method.

Figure. 26. Marcel Duchamp, *Étant donnés: (Given: 1. The Waterfall, 2. The Illuminating Gas)*, 1946 - 1966.

> *All painting, beginning with Impressionism, is antiscientific, even Seurat. I was interested in introducing the precise and exact aspect of science, which hadn't often been done, or at least hadn't been talked about very much. It wasn't for [the] love of science that I did this; on the contrary, it was rather in order to discredit it, mildly, lightly, unimportantly. But [the] irony was present.*[69]

[69] Cabanne, Pierre. *Dialogues with Marcel Duchamp*. trans. Ron Padgett, New York, NY: Da Capo Press, 1987, p. 39.

Criticism of the absolute perspective is also made in Scene 1 of *Metamorphosis into Self-resemblance*. The beautiful pond, revealed as the dark hole expands, appears only when the animation of the expanding hole is played by the interaction between the viewer's gaze and the space in the hole. Only when the viewer's gaze exactly touches the small waterfall in the hole, the hole is enlarged, and the entire pond behind the hole becomes visible. The viewer's eyes function like an 'insight revealing the truth,' uncovering what was hidden in the darkness. Thus, the viewer falls into the illusion that he/she is in control of the environment. However, when the pond is fully revealed, the viewer can no longer approach the illusion and realizes that his/her body is fixed in one place to only look at the illusion of the pond in front. Once changed from the dark space to space with the pond, the power of the viewer's gaze no longer works. Because of his/her previous experience of the interaction between the gaze and environment, the viewer is even more lost and wanders what he/she should see here. Then, doubts about the small waterfall that recognized the viewer's gaze occur. While various elements that make up the pond, including pebbles, water, fish, grass, lotus, etc., are placed individually still without seams, the small waterfall is so naturally flowing in the center of the pond disguised as if it was the only real thing there. The small waterfall leaves the identity of the pond, a mysterious object that cannot be reasoned.

All images in the pond (including the video of the small waterfall) were collected from the Internet. There is no original image in the digitized space. Everything exists as a property of modifications itself. The Cambridge Dictionary defines a pond as "an area of water small than a lake, often artificially made."[70] A pond originates from its natural form, but it is more familiar to us as domestic artificial installations. When searching a 'pond' on the Internet, there is significantly more information about ponds as artificial installations than actual ponds (although it is difficult to determine what a real pond is). Examples include videos with titles, such as musician 'pond,' 'DIY

[70] "pond." Dictionary.Cambridge.org *Cambridge Dictionary*, https:// dictionary.cambridge.org/us/dictionary/english/pond. Accessed 1 May 2020.

backyard garden pond,' 'how to build a pond,' shop advertisements to install various ponds, and images to promote well-groomed private ponds. To us, ponds no longer mean the native pond in nature. The reproduction of a pond preceded the actual pond. Simulacrum, named by Baudrillard, means a reproduction that exists subjectively beyond the originals. He defines 'simulacra' as in the sentences below:

> *Simulation is no longer that of territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal. ...It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for real.*[71]

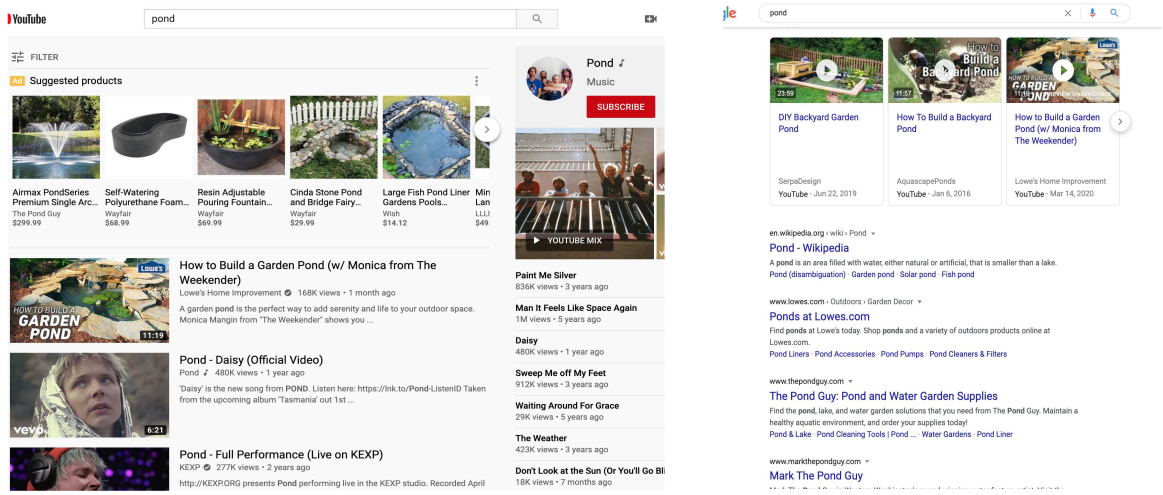

Figure. 27. Websites showing the search results of 'pond' on YouTube and Google, Accessed 8 May 2020.

Numerous websites show many and detailed ways to make a more realistic pond than the real one, subsequently leading to consumption to own a more realistic pond personally. Everything you need to

[71] Baudrillard, Jean. *Simulacra and simulation*. trans. Sheila Faria Glaser, Ann Arbor, MI: University of Michigan Press, 1994, pp. 1-2.

make a small natural ecosystem in front of your home, including peanut-shaped tubes, water pumps, pebbles/rocks, and even living aquatic plants, is done through online ordering. Ponds have a contradictory fate that must be natural yet artificial at the same time within themselves. The fate of digital photographs is now the same. Although photographs were born with a property of perfect representation of reality, we now take digital photographs for modifying and retouching. It is impossible to prove the facts with digital photos that can be manipulated. Likewise, if we get confused by the changes in the pond's identity, it is not because of the variability of the object's identity, but in the perception that it does not admit the variability. In other words, it is just nostalgia for the original pond. While the form of the object is developing in a new category, leaving the world where it was before, our perception still holds the object's meaning in the category of its original form.

Figure. 28. René Magritte, *The Treachery of Images*, 1929.

Foucault's 'resemblance' means the sameness, mimesis, and reproduction that is distinct from 'similarity.' 'Similarity' by him refers to a concept similar to Baudrillard's simulacrum, that is, a replica that exists independently regardless of the original. Foucault defines similarity through a three-dimensional image of a pipe floating in the air and the figure legend below the image, "this is not a

pipe," in René Magritte's *The Treachery of Images* (1929). It is a thorough separation in which texts and images do not match at all. The image of the pipe, the signifier (signifiant), loses the signified (signifié) due to the phrase "it is not a pipe" and wanders as a surreal object. The pipe image is "not something that is similar to a pipe but is a similarity not representing anything"[72] and refers to a divorce from the original, "the reference anchor."[73] On the other hand, 'resemblance' "presumes a primary reference that prescribes and classes copies on the basis of the rigor of their mimetic relation to itself. [The] resemblance serves and is dominated by representation."[74] While images of 'similarity' have parallel structures in repetition with differences, images of 'resemblance' have distinct hierarchical structures between the original and its copies.

Previously, I mentioned that the pond we are consuming is reborn as an independent artificial pond different from the original one. It is true. Indeed, artificial ponds overturned the values of the original meaning of the natural ponds. Ponds of various appearances that individuals brought to their front yard exist as equally different. There are numerous other built ponds, but the truth is that they are no longer ponds. New definitions of objects in which they are still called as ponds and are in relation to the original ponds are settled and remain incomplete. As we can easily see from the search, there are many different appearances of ponds, but all of them cannot be completely separated from the original 'ponds' as they are defined as 'ponds' (the term that has been used from before). If we try to make something resembling nature, keeping conditions like 'pebbles/rocks that looks real,' 'natural waterfalls,' and 'the natural ecosystem in front of your house' in mind while making a private pond, it certainly is that our perception has not yet separated the object, the pond, from the representation of that in nature although it is no longer a natural pond because it is delivered through eBay and Amazon. We no longer recognize Mickey Mouse as a mouse. Mickey Mouse doesn't even need to

[72] Foucault, Michel. *This is Not a Pipe with Illustrations and letters by Rene Magritte*. trans.& edit. James Harkness, Berkeley; Los Angeles, CA; London, England: University of California Press, 1983, p. 48.

[73] Ibid., p. 10.

[74] Ibid., p. 9.

resemble a mouse. It is only indicated as an imaginary symbol itself. In *Metamorphosis into Self-resemblance*, a ‘pond’ means ‘impure simulacrum’ in which reality and representation, original and reproduction, and signifier and signified do not completely match or separate.

There is a pond neither as a representation with sutured seamlessly nor as an independent new object disassembled representation through ruptured seams, but with no roots and no identity. In this space that has not matured in either way, a ladybug suddenly crawls up a rock, goes into a crack, and disappears. The viewer’s gaze also follows the disappeared ladybug and gets sucked into the crack.

Figure. 29. Yunmi Her, *Metamorphosis into Self-resemblance: Scene 2*, 2020.

The world one faces by following a ladybug into the crack has miscellaneous things derived from the ladybug. They are numerous symbols that contain the meaning of a ladybug. Everything in the category with red and black dots, ladybug animation characters, and images of ‘bugs’ or ‘lady,’ including part of ‘ladybug’ text, are expanded there. The viewer’s perspective that was fixed in the first scene can be adjusted and moved forward with depth but cannot be stopped. When the constantly

moving viewer's perspective encounters images derived from ladybugs, a voice "gajja mudangbeollae" is played in Korean, which means "a fake ladybug" in English. Eventually, the active viewer is unable to find the real ladybug he/she lost in the previous scene and is sucked into a pile of ladybug-related images with its expanded meaning.

Internet image search results still show representations of 'resemblance.' In Western culture in the 16th and 17th centuries, 'resemblance' was a common method to play a constructive role in acquiring knowledge. According to Foucault, 'resemblance'[75] was the one that largely guided exegesis and the interpretation of texts, systemized symbols, made acknowledgment of visible and invisible things possible and controlled the art of representation. 'Resemblance' is considered as a manner in which a mirror-like overlapping representation repeats another representation.

> *Plethoric because it is limitless. ... It is, therefore, a knowledge that can, and must, proceed by the infinite accumulation of confirmations all dependent on one another ... By positing resemblance as the link between signs and what they indicate, sixteenth-century knowledge condemned itself to never knowing anything but the same thing and to know that thing only at the unattainable end of an endless journey.*[76]

[75] Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. Kindle ed., trans. Les Mots et les choses, New York, NY: Vintage Books, 1994, p. 17.

[76] Ibid. p. 30.

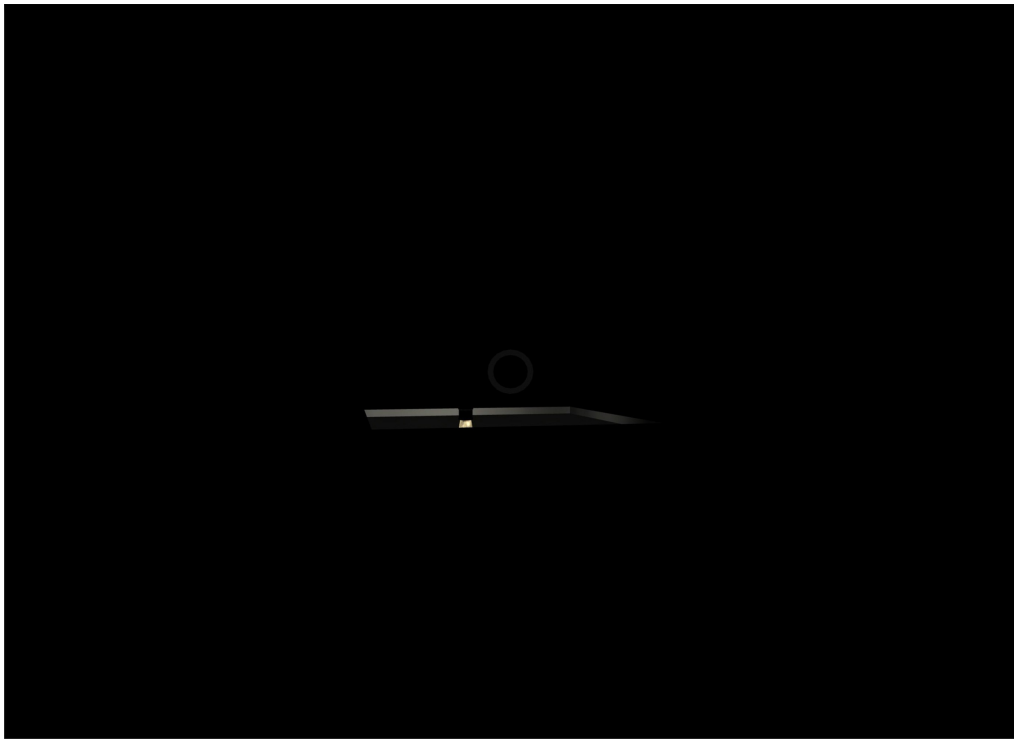

Figure. 30. Yunmi Her, *Metamorphosis into Self-resemblance: Scene 3*, 2020.

The nature of things, their coexistence, and the chain, which connects things and allows them to communicate with each other, in the Internet world are classified and thought by the form of knowledge based on ‘resemblance’ and ‘commonality’ among things. Internet image search results, such as a ladybug, a woman wearing a top with a pattern of black dots in red background, a ride and shoes with that pattern, a fairy tale book with the tag of a ladybug, a round red bag, and other insects resembling a ladybug, show a train of numerous symbols of ‘resemblance’ and ‘representation.’ The ladybug is not only one that refers to it but exists as a number of similar yet different entities. These symbols (images) of many ladybugs do not fully represent the ladybug itself and gradually lose the link of ‘resemblance.’ The viewer’s gaze in *Metamorphosis into Self-resemblance* eventually moves to a dark room without finding the lost ladybug. The sound of a small waterfall can be heard from the endless deep hole on the ground under the light in the darkroom, and the viewer’s gaze falls into the infinite blank space.

3.2. The Space Beyond Recognition

Figure 31. Left, Yunmi Her, *The Space Beyond Recognition: Ladybug*, 2020.

Figure 32. Right, Yunmi Her, *The Space Beyond Recognition: Conch shell I*, 2020.

The Space Beyond Recognition is generative sculptures in which images corresponding to each keyword in a search engine were collected and converted into three-dimensional objects. *The Space Beyond Recognition: Ladybug* and *The Space Beyond Recognition: Conch shell I* went through the process of screening out images that have structurally identical shapes among images corresponding to the keywords ‘ladybug’ and ‘conch shell’ and rearranging them into three-dimensional structures. PhotoscanPro software was utilized to perform photogrammetric processing of the images (Fig. 33). This software allows one to automatically obtain a three-dimensional model of an object by importing photos taken from various directions while maintaining the same environmental conditions, such as light and background, The irregularly arranged blue squares around the sphere as shown in the figure below indicate the angle at which an object was photographed, in other words, the camera positions. Regardless of the order of the photos listed, the software recognizes the shape of an object shared in common among images taken at different angles, automatically finds and arranges the positions of the camera, and provides the final shape of the object. When shooting photos of an object placed on an

opaque table, the top and bottom of the object are taken independently and saved the photos separately in each folder chunk1 and 2. By merging the top images in chunk 1 with the bottom images in chunk 2, it is possible to make a complete three-dimensional shape of an object. As using 'Merge' function with several parts of an object, the user has to manually specify at which points of each model needs to be connected to each other, requiring a considerable quantity of marker designation, because the software does not recognize the complete shape of the object. By simultaneously assigning the same numbered markers to the points where each model is connected, the user makes the sutures with the software.

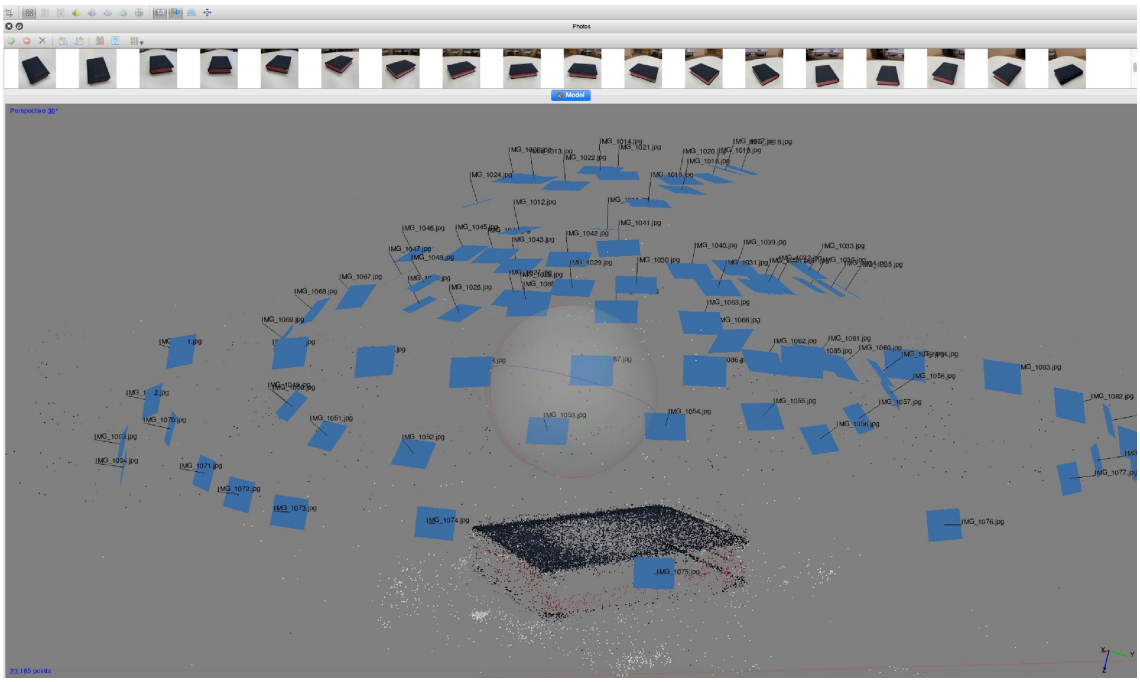

Figure. 33. Screenshot examples of PhotoscanPro.

For example, in the figures below showing the same ladybug model at different angles, one can find that the same numbered marker is assigned to the same location in the ladybug model. In *The Space Beyond Recognition*, this marker designation is a particularly important process because the collected and sorted out images from the Internet, taken from various angles, but are not from the same object. In other words, the images all have the appearance of an insect ladybug, but because they are not the

same ladybug, they do not have the exact same motion, color, and body proportions. That is, *The Space Beyond Recognition* is not a collection of photos of the same object taken from various angles, but a process of reverting a set of images of multiple resembling beings with the same meaning into one object. Therefore, PhotoscanPro, which is based on the recognition of the same object, came to omit and did not recognize many of the collected images from the list. In the case of the ladybug example, a total of 182 images were imported, and 18 markers were used to indicate the common location of distinctive body shape characteristics on all images, such as the tip of the antennae and leg joints. As a result, a total of 51 images could be merged manually.

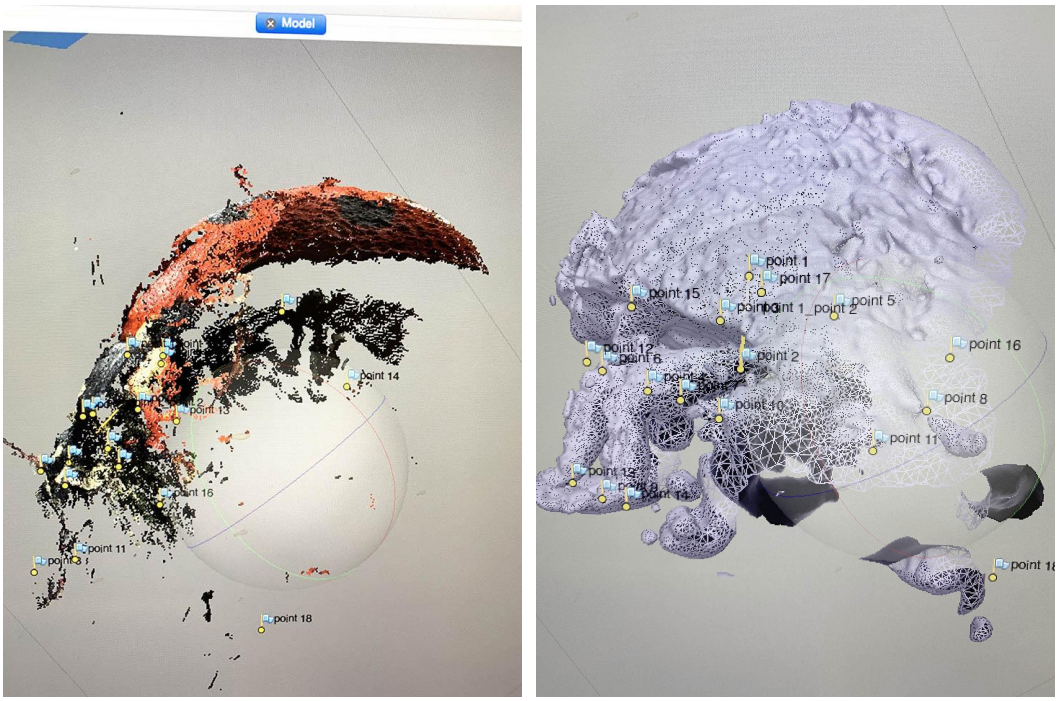

Figure. 34. Examples showing marker designations on objects using PhotoscanPro.

Images of objects that do not resemble or are not identical are omitted, and parts commonly recognized in a specific angle among images of objects with the same identity are accumulated and formed the shape of the object. Ultimately, accumulated fragments of resemblance among objects or parts of the objects are fitted together by forming unsmooth ‘wrinkles’ and ‘grooves.’

The Space Beyond Recognition attempts to prove how closely an object recognized from a series of similar images shows a representation close to the truth. The shape of the antennae and legs in the sculpted form of a ladybug, as well as the distinctive horns on the front of the conch shell, closely resemble the images of the objects we can associate with. These parts demonstrating the structures close to the real object are the common and repetitive parts of images posted on the Internet. That is, these parts are the common elements of shapes that are essential for people to recognize an object as what the object is. With these common parts recognized, the produced sculptures do not completely resemble the original appearances of objects but have shapes that can be inferred at a glance. The abstractness of produced sculptures demonstrates the limitation of people's perception of an object. The hidden invisible area is visualized in the order created by the representations of 'resemblance.' The interesting thing is the parts that have completely different shapes from the object. In the case of a conch shell, three different versions of sculptures were created, each with a combination of different images, and each version demonstrated different free shapes except the front horns. In another case, the ladybug, the right side and bottom of the body is hardly formed. Through this, we can guess that the image data of ladybug posted on the Internet is focused on specific angles. The empty space of ladybug, as well as unspecific form of conch shell except for the front horns, illustrate how skewed the internet image data collected from people is. Additionally, the imperfections of a series of representations of 'resemblance,' which began from the biased understanding of an object, and the limitations of the framework of recognition about human-centered objects are clearly revealed with the empty space.

Since the middle of the 17th century, the epistemic knowledge system, which is based on science excluding human's sensual experience, was established, but in the end, we saw earlier that such rational epistemology has limitations in which humans can understand objects only within their perception system. Likewise, multiple sharing is also not a solution to expand the framework of cognition. If you agree that the Internet is a mass media that profoundly affects human perception, reflections on the fact that the knowledge of information consisting of numerous participations posted

on the Internet and its classification system visualize only objects that can be recognized only within the framework of human perception must be accompanied. Also, reflections on the fact that the knowledge of information and its classification system build a knowledge system that does not allow changes in natural laws and distort commonality into objective facts must be accompanied. We need to find new possibilities for AI. I believe one can expect advancement in art and culture by constructing directions as a potential tool to show the domain of imagination and thoughts beyond human perception, not by promoting individual taste and cultural uniformity as it is now.

4. Future Direction: Self-contained ecosystem with AI

In *Natural Individuals*, we have found that image search results through Internet search engines do not show the domain beyond our perception. While the Internet, as a mass media, lacks maturity in knowledgeable data about the object, it surpassed our cognitive domain in terms of a mirror for self-reflection. In the Internet world, the cognition domain that AI expanded is used to collect individuals' metadata to build structures and systems in which capitalism can be efficiently managed. Revolutionary advancements in technology have become a tool for capitalistic function rather than scientific research. Facebook's DeepFace algorithm makes it possible to distinguish every side of the faces of billions of people by producing three-dimensional abstractions of individuals' faces. This algorithm promotes expansion and sharing of relationships among people, and the networks thus formed are used as a chain of production and consumption, leading to more data acquisition, advertising revenue, and insurance raise. The visual cognition domain that AI expanded has been trained to classify people's classes rather than to advance the way people perceive. The visual cognition domain that can be seen by the machine can distinguish very slight differences and individualities of objects and can recognize very ultra fine-sized and blurry objects. In *Blowup* (1966), the blurry image in Thomas' photo presumed to be a corpse is no longer left as an estimation and can now remove ambiguity and secure exact referentiality. The image seen by the machine recognizes and distinguishes things that our cognition domain cannot see. Although AI penetrates our everyday lives intimately and deeply, we know nothing about how the machine sees us.

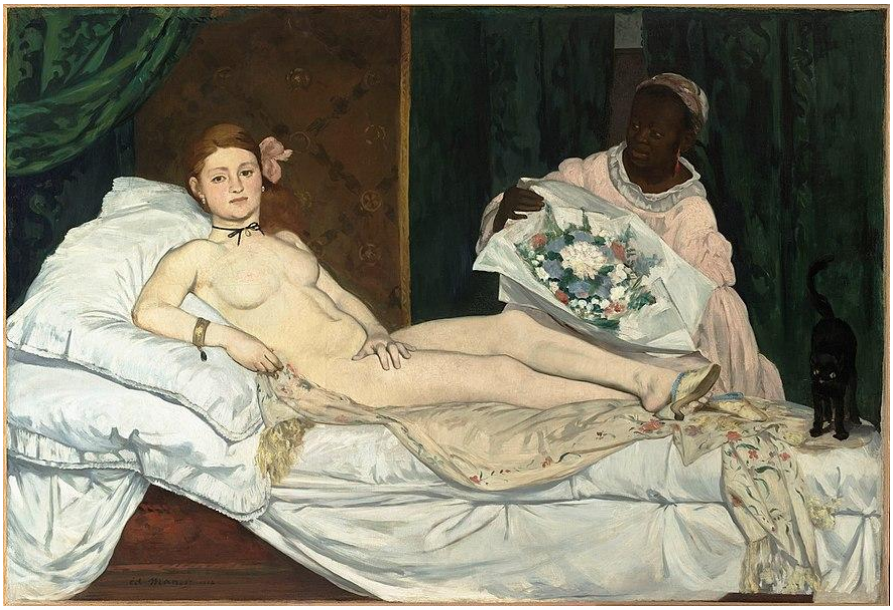

Figure 35. Édouard Manet, *Olympia*, 1863.

Al algorithm should not remain unclear complexity that cannot be read. Generally, Conventional Neural Networks (CNN), popularly called "deep learning" networks, recognized Manet's Olympia (1863) as a burrito. Moreover, in 2015, the image of two African Americans in the Google photo search was tagged as 'gorillas.' Dinkins points out that the latter example has the biases and discriminations that can be obtained by the AI algorithm, which can be considered neutral. In her project, *Conversations with Bina48* (2014 – present), Bina48, which learned African American family history from Dinkins, gives a subjective answer that reflects personal history to a question about African American history. Dinkins explains why the biases in algorithms appear as algorithms "were created by a largely homogeneous pool of programmers applying a limited dataset that did not represent or describe the diversity of the human family."[77] Whether the search engine classification intended it or not or whether the frequency of events is high or low, the point is that the algorithm that constitutes the mass media has the possibility that can plant serious social and ethical problems within our system. We are not sure for what reason the algorithm has reached the classification above. It is

[77] Dinkins, Stephanie. "Op-Ed: Artificial Intelligence Is A Human Problem." *New Museum: New INC,* ed. Rain Embuscade, 6 July 2017, https://www.newinc.org/archive/artificial-intelligence-stephanie-dinkins-jaxsr

because it is ‘domain beyond the category’ that we cannot recognize. As Meillassoux criticized for rationalizing events beyond the category with less frequency and relying only on accumulated results, we need effective measures regarding unpredictable results that machines learned.

Figure 36. Stephanie Dinkins, *Conversations with Bina48*, 2014 - ongoing.

Many culture producers and artists try to accuse the way a machine sees existence opaquely beyond our perception and inform that it threatens human’s visual culture through ‘counter-hegemonic visual strategies.’ However, artist Paglen points out that it is not wise to destroy and emasculate the way AI algorithms see us.

> *There’s no obvious way to intervene in machine-machine systems using visual strategies developed from human-human culture. Faced with this impasse, some artists and cultural workers are attempting to challenge machine vision systems by creating forms of seeing that are legible to humans but illegible to machines. ... In the long run, developing visual strategies to defeat machine vision algorithms is a losing strategy. [...] [I]n order to truly hide from machine vision systems, the tactics deployed today must be*

able to resist not only algorithms deployed at present but algorithms that will be deployed in the future.[78]

Like the law of nature we face, another sporadicalness, the AI algorithm environment is also not always maintained in a stagnant manner. At each time the algorithm is trained and updated, we cannot predict the volatility of the decision that the algorithm reaches. For this reason, creating images that it cannot recognize is an only temporary immature rebellion that cannot reach any consensus or solution for the future. It is necessary to deviate from the way humans see in order to understand the invisible world seen by machines. The invisible domain is not an alternative taxonomy that is distinct from the images we see but is inherent in a set of visualized images.

Figure. 37. Ian Cheng, *Emissary in the Squat of Gods*, 2015.

[78] Paglen, Trevor. "Invisible Images (Your Pictures Are Looking at You)." *The New Inquiry*, 8 December 2016, https://thenewinquiry.com/invisible-images-your-pictures-are-looking-at-you/. Accessed 1 June 2020.

In *Emissary* Trilogy (2015-17) by Ian Cheng, I read a clue in an attempt to understand the machine's point of view. *Emissary* is a series of live simulation works created using a video game engine. He explains his work as "a video game that plays itself."[79] According to Cheng, "creating a kind of auto-generative system - with creating a set of conditions that could together create more and more complex behaviors from very simple base behaviors [...] resulted in a foundation [...] to make these simulations that have the capacity to continuously change on their own, potentially infinitely."[80] Animal and human characters in a simulation, which is based on real tribal life, forms infinite open-ended narratives that collide and combine within the regularity of each other's life. The contents of simulation flow in a direction Cheng cannot predict at all. Once his simulation is activated, it is completely out of his control from then on.

In the world he composed, stories are produced accidentally and flowed. For example, in *Emissary in the Squat of Gods* (2015) (see Fig. 37), the protagonist, a girl in prehistoric ages responding to a threat of volcanic eruptions, sometimes causes protractions, such as staring at volcanic ash over two hours, getting lost in a landscape, or failing to persuade other characters. These unpredictable blockages carry variability in results and duration by affecting the interaction among characters in the entire simulation and the composition and construction of the story. In addition, his works are characterized by 'coincidentally changing infinity' in the sense that the emissary agent is reborn, and the story begins again if the emissary agent is killed by other characters. In Cheng's interview with Stuart, he sees nature "as chaos and complexity that is yet to be revealed as systems,"[81] but his simulations tell about constant attempts to understand and solve sudden changes of nature in the order of coincidence. Whether it is natural, cultural, or technical, the system is a constantly mutating and evolving

[79] Comer, Stuart; Cheng, Ian. "Ian Cheng's Emissaries." *MoMA Magazine*, 6 March 2019, https://www.moma.org/magazine/articles/40/. Accessed 18 May 2020.

[80] Ibid.

[81] Ibid.

ecosystem, whereas humanity, which has no choice but to live life within the system, constantly tries to understand the unpredictable and infinite changes in his work.

The 'self-contained ecosystem' by digital images that Cheng threw on the screen does not produce imitative images. It does not hide that it is a mechanical ecosystem with a specific orientation, initially designed by a programmer. It aims for a 'pure operation only for machines' that received missions without any bias or intention in itself. AI algorithms also keep neutrality only when understood in the domain of pure machines. Recognizing AI robots as things that threaten our existence is when we treat their presence as copies of human existence. Only when the advancement in AI is achieved through neutral data training that is completely separated from human thoughts as well as through its own operation, scientific approach to unpredictable contingencies is possible to solve them. Darwin's theory of biological evolution suggests that in relational thinking, where humans are considered as clones of human-like monkeys (or vice versa, considering monkeys as clones of monkey-like humans), human- or monkey-specific ontological existence and neutral approach are impossible. Likewise, a transparent approach to coincidental events in our environment can become possible by studying without linking the invisible realm of AI algorithms with the human domain. While watching the environment of *Emissary* beyond the screen, which draws a clear boundary between the machinery and human-being realm, we can maintain our role as critical observers.

Tarby asks Badiou's thoughts about Heidegger's view of technological advancement as the dark fate of humankind when looking at the relationship between technology and science. Badiou points out that there is a problem in an attempt to commercialize the technology rather than technology per se.

> *Science can't itself be reduced to technology; it has an autonomy of truth. Yet, there exists an entire network of science's practical uses, which, while not prescribed by science, are nonetheless made possible by it. It's not technology that one should rail*

against, therefore, but science's being subjected to the system of its possible practical outcomes – its subjection to the capitalist mode of production.[82]

The technology is beside us as a neutral medium that has the potential to expand the limits of human's sensuous domain and can distinguish biased truth created by ideology. Rather than producing imitation copies of humanity and using to surveil and control the capitalistic system, the autonomous operation of the machine itself and efforts to maintain the transparency of its structure should be accompanied. As I close this dissertation, I hope that the direction of my next work will contain the future that can show the automated mechanical ecosystem, the utopia achieved through such respect and effort. Even if it sounds unrealistic, as an artist, I truly believe that the progress of social and cultural perspectives can be made from a single step toward reaching the ideal world.

[82] Badiou, Alain. *Philosophy and the Event*. trans. Louise Burchill, Cambridge, UK: Polity Press, 2013, p. 93.

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