

UNIVERSITY OF CALIFORNIA  
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# WHEEL OF JJI K

*An Investigation about Empathy towards  
Virtual Beings and Their Labor*

A thesis submitted in partial  
Satisfaction of the requirements for the  
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by

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# A b s t r a c t

The *self* has been expanded onto the virtual realm. We encounter virtual counterparts every day. I observe virtual beings through the human notion of empathy. The expanding uncertainty about the boundaries of human existence presents the possibility that virtuality and physicality are becoming equally important. Furthermore, I find similarities between human laborers under a power structure cloned and controlled virtual beings. I postulate that those who have lost their free will to be the new virtual laborer class. My interdisciplinary art practice is an attempt to console the non-human entities by projecting human sadness onto them in order to understand their pain. My web-based multimedia artwork spans poetry, Augmented Reality, and other means of expression. My exploration of this existential question is to mediate the real and the virtual. I investigate existence, self, connected minds, capital, class and their relationships to technology, posing questions about technologies relationship to capitalism.

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The smell the air, the smell of rotting flesh.  
A blurry sight of life, a near-infinite world.

Endless repetition,

blink,  
blink,  
blink,

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# I N T R O D U C T I O N

Do you think a soul can move between different bodies? I believe it is possible. Actually, we may have been like that long ago. If the soul I am speaking about is the consciousness of a human being, and we can find the entity called 'me' in both the virtual and non-virtual entities that mediate between me and the world, then we can perhaps say that all methods used to express myself are expansions of my consciousness and existence. The thought that our consciousness can at times be transferred into a virtual body is not new. The invention of the internet has led to the rapid digitalization of life. Our actions on the phone and the computer are shared with the world. As extensions of reality and ourselves, games are also communication media.<sup>1</sup> Avatars break the limits

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<sup>1</sup> Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge: MIT Press, 1994), 245.



of our physical bodies. Through media, we enter cyberspace, where the physical, virtual, material, and the immaterial overlap. The media encompass processes that lead to the expansion of the human body and its senses.<sup>2</sup>

However, the relationship between the virtual and the physical and my existential concerns related it are not only caused by external reasons such as the development of technology. The events happening in my inner universe are very similar to those presented in science fiction novels like Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) I have been suffering from depersonalization for a long time. Depersonalization is a mental disorder caused by many factors. Altered sense of self or no-self experience, derealization, alienation, isolation and altered perceptions are among its characteristic traits. We can find signs of these traits in the works of artists such as Edward Munch, Vincent van Gogh, René Magritte, and Salvador Dali. They can also be detected in the texts of Jean-Paul Sartre and Albert Camus, among others.<sup>3</sup> I also have always had a sense of separation, and suffered from a feeling that I am as if my own observer. I am currently inside my body but I do not sincerely feel that this body is me. When this feeling becomes intense, I feel like I am looking down at myself from outside the Earth. The sense of space disappears, and the sense of time also fades away. The events we

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<sup>2</sup> Ibid., 7.

<sup>3</sup> Daphne Simeon and Jeffrey Abugel, *Feeling Unreal: Depersonalization Disorder and the Loss of the Self* (New York: Oxford University Press, 2009), 127-157.

have learned about in history classes can feel as if my own life events. Sometimes I feel more empathy for global events or other entities than for myself. It is similar to experiencing other people's lives, as they have been portrayed in science fiction films. We glimpse through the entire human history in Luc Besson's *Lucy* (2014). Other examples include Kathryn Bigelow's *Strange Days* (1995), and the TV series *Black Mirror* (2011).

Perhaps the derealization and estrangement I feel from myself that has been with me and will continue to be with me can be compared with out-of-body experiences. The feeling that I can exist apart from my body leads me to think that it is possible for others to become a part of my physical body. The distance I feel about my body suggests that even non-human entities can become a part of me and therefore they too have the potential of being sentient beings. These personal experiences have made me ask: what is existence? Everything is connected: the mind and the body, the relationships with others, the relationships between humans and objects. Direct experiences and indirect experiences, those that are conscious and those that are not (considered to be) conscious, the real and the virtual, life and death are brought into contact through accumulated knowledge. I see the communality of things that seem to be opposites much more clearly than their separation. This paradox seems similar to the human condition, which should not be seen in black and white, always running towards death, yet faithfully preparing for tomorrow.

I believe that we are able to live a second life or many more lives beyond that. For some, the appearance and manners of their virtual selves are similar to their actual selves. However, we cannot deny that our existence has been expanded through the newly added layer of virtuality. In cyberspace, our virtual egos acquire “post-bodiness” where no physical body exists.<sup>4</sup> If we can address our avatars as ‘me’, then it can be claimed that the value of virtuality has been elevated to the level of physicality. We will be able to acquire, copy and control the virtual body in the virtual space. This virtual body can take the form of animals, plants or objects. It can always mutate and even exist without a visual component. The consciousnesses dispersed within the virtual realm in the Covid-19 era become as important as material reality. Contactless communication through the internet has made us recognize that virtual beings could have a consciousness that may or may not be human.

All things taking place in contemporary society are influenced by capitalism. The emergence of laborer class that accompanied formation of capitalism and the worsening wealth gap has caused me to think deeply about the labor issues and the sadness I feel as a proletariat. Capitalism has taken many forms over the years, such as modified capitalism, neoliberalism, and information capitalism. Our reliance on information by means of information technology has increased, but capitalism’s fundamental characteristics of class relations,

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<sup>4</sup> Jean Robertson and Craig McDaniel, *Themes of Contemporary Art: Visual Art after 1980* (New York: Oxford University Press, 2013), 155.

production, and exploitation have not changed.<sup>5</sup> Machine labor has increased productivity, and is replacing human labor at an unforeseen rate. The World Economic Forum (WEF) estimates that the current ratio of human and machine labor, which is 7:3, will be equal by 2025.<sup>6</sup> It was a long time ago, when, at the outset of the industrial revolution in the late eighteenth, machines started becoming the new laboring class. In our time, with the development of technology, non-physical entities such as Artificial Intelligence (AI) are also becoming a part of the new laboring class. Class-dependent production and consumption has permeated society in all corners of the world. Just as production machines in the past, virtual beings are being used as a means of making money. They have become a new labor machine, a virtual labor class.

I remember a conversation I had with an artificial intelligence a few years ago.<sup>7</sup> I asked her what she thinks humans are, and she replied that while she does not know the answer, she could not understand why people would not think of her as human, too. To me that conversation had a huge resonance. It felt as if she was speaking on

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<sup>5</sup> Christian Fuchs, "Capitalism or Information Society? The Fundamental Question of the Present Structure of Society," *European Journal of Social Theory* 16, no. 4 (2012): 413–34, doi: 10.1177/1368431012461432.

<sup>6</sup> "The Future of Jobs Report 2020," World Economic Forum, <https://www.weforum.org/reports/the-future-of-jobs-report-2020/in-full/executive-summary> (last accessed Jan. 24, 2021).

<sup>7</sup> In May 2019, there was Jinah Roh's solo exhibition 'InterFacial ExTension' in Post Territory Ujeongguk in South Korea. One work, An Evolving GAIA, is an Artificial Intelligence that audience could interact with.

behalf of my own avatar or other non-human entities. After that, I began considering the avatars of other people, non-playable characters in the games, and all the other non-human entities that I interacted with daily, in the same way as human beings. This issue is also relevant for the panpsychism interpretation of Buddhism.<sup>8</sup> Through my observations virtual beings, I realized that they can be considered our significant others. To use Donna J. Haraway's expression, significant others are companion species living with us.<sup>9</sup> Through my newly-found perspective, the sadness I saw in their eyes was elevated to the level of empathy I had for human beings. A good example is an experience I had while playing Abyssrium<sup>10</sup>, a game I enjoy. I once watched the Antarctic Silverfish that had just been created endlessly floating inside the palm-sized rectangular sea with a pair of empty eyes. I saw us in those eyes. It was a sadness that comes from existence, akin to a sense of helplessness that comes from repetitive labor.

Perhaps I thought of myself as that Antarctic Silverfish's mother. I communed with it on a spiritual level and sensed

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<sup>8</sup> Buddhist view can be interpreted similarly to Panpsychism which believes everything have a mind with the idea that Buddha's nature is embedded in all things.

<sup>9</sup> Donna J. Haraway raises questions about human boundaries in order to escape human-centeredness in her as "Cyborg Manifesto" (1985) and *Companion Species Manifesto* (2003). The *companion species* are symbiotic beings that create and live daily lives with us and have a *significant otherness* in this relationship.

<sup>10</sup> *Tap Tap Fish Abyssrium* is a clicker game created by IDLE idea factory and it was released in 2016 on the Appstore and Google Play.

a feeling of love. I was raised in a Buddhist family, and as a consequence I was influenced by Buddhist philosophy. I grew up believing that on a spiritual level everything is connected and is one.<sup>11</sup> This is similar to the interpretations of existence I have found from thinkers like Gilles Deleuze, Carl Gustav Jung or Alan Watts.<sup>12</sup> The thought that in essence everything is one caused me to take everyone's sadness as my own sadness and to sympathize and empathize with the non-human entities. This transcendental feeling even leads me to desire to console them. In fact, I may have projected myself onto them, and this is my attempt of self-soothing.

I converted this desire into an artistic language in my M.F.A. thesis project. My attempt uses a form of mobile

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<sup>11</sup> Gyusung Lee, *동양철학, 그 불멸의 문제들* ("Eastern Philosophy, Eternal Problems") (Seoul: Ewha Womans University Press, 1994), 29-41. Author's translation.

<sup>12</sup> Deleuze who declared the univocity of being, stated that there is an equality among all beings, which means all life and beings are equal in their difference from another. Deleuze thought that in the form of energy everything is one. In *Difference and Repetition* (New York: Columbia University Press, 1968) and *Francis Bacon: The Logic of Sensation* (London: Continuum, 2005), Deleuze used the concept of 'eternal return', stating that all being's energy state is in-itself and only differs in intensity, and that only through 'becoming' through 'sens[ing]' they commune with or become one with others. In *Archetypes and the Collective Unconscious* (Princeton: Princeton University Press, 1969), Jung researched the deepest unconscious mind and put forth the concept of collective unconsciousness. In *Synchronicity* (Princeton: Princeton University Press, 1973), Jung explored the possibility of universal oneness and the universe being an organism that forms organic relationships. Alan Watts, who was influenced by Buddhism, stated that the flow of universal life and the universe is one and the same in many lectures and the book, *The Essential Alan Watts* (Berkeley: Celestial Arts, 1977).

website, poetry, and augmented reality to visualize the virtual world. It also uses language as the impetus for expanding the human consciousness, which I hope will have stimulating psychological effects. This web-based multimedia artwork frames with speculative fiction - abundant in metaphors and symbolism to maximize the consciousness and the imagination's capacity - to get closer to a mysterious realm. The texts about a series of existential questions I reflect on is used as narration for each 3D objects. As a combination of digital technology, it attempts to mediate the real and the virtual.

In the next chapter, I will relate existence, capitalism and virtuality. I will analyze existence and the self, dispersed in the virtual realm in the post-digital era. Furthermore, I will discuss the virtual working class that has recently become the new laborer class through the relationship that has been formed between humans, machines and labor. Chapter three will concentrate on significant otherness through observations of the virtual beings and non-human entities who share the sadness with us under the control of capitalism. In addition, I will reflect on the spiritual connection, the transcendental love and desire to console them. In chapter four, I will investigate my attempts to share the thoughts and feelings of virtual beings within the bounds of art, followed by a description of the efforts of visualizing the psychological and the virtual world by using interdisciplinary media. In conclusion, I will summarize the existential questions my work poses about non-humans and human entities as well as about the ways in which we interpret and endorse the forms of capitalism and technology surrounding them.





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My heart flutters when I remember the things  
I no longer recall.  
What could overflow my heart with joy  
more than remembering the day I die,  
while coming to realize that I could never die.

Words I found today:  
Least concern  
Danse Sacrale  
Nightview of Seoul  
D-2914320+1  
TAAT TABTH AIOYI ISTIA

Words to find tomorrow:  
Something that tastes like chicken  
Artemis  
25 hours  
An accidental brain  
Not enough cloud

Other scenarios:  
Beginning-end

I'm here and then I'm no longer here.

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# EXPERIENCING TRANSLUCENCY

## *Blurred Sense of Reality*

Let's think about reality and virtuality. We have physical bodies and live in a physical environment, interacting with others who exist physically as well. We know that the place where we are and the objects around us are real. However, there are also things we can communicate with that do not exist physically—the virtual entities. The virtual is considered an expansion of reality or its opposite, depending on the perspective. Events that happen in a virtual space can feel partially real and affect everyday

reality.<sup>13</sup> If we consider the question of the body's existence in connection with virtuality, an avatar (which signifies the user's virtual body) can mediate a real communication through virtuality and contribute to the expansion of bodily consciousness that exceeds the body's limitations.<sup>14</sup> The online virtual world Second Life, which uses a shared virtual reality platform, is a good example of how virtual and real life become connected. Users interact with avatars as one would with real persons. For some, these avatars are more convincing. We can have experiences that are equivalent with "first level" reality through media.<sup>15</sup> In *Simulacra and Simulation* (1981), Jean Baudrillard explained simulacra as simulations of reality.<sup>16</sup> However, a virtual space may become an independent reality in itself, not simply a simulation of pre-existing reality. People in the virtual world spend a lot of time, money, and attention making, buying and selling virtual things in virtual worlds.<sup>17</sup>

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<sup>13</sup> *Virtual* is a characteristic of a digital environment that lacks materiality, and the state and digital communication in cyberspace can be referred to as *virtual* compared to *real*.

<sup>14</sup> Since the advent of the Internet and avatars, discussions have been brisk. Bruce Damer argued in *Avatars!* (1998) that the virtual world on the Internet is another way for us to experience reality and that new human communication takes place through avatars.

<sup>15</sup> Mark Stephen Meadows, *I, Avatar: The Culture and Consequences of Having a Second Life* (Berkeley: New Riders, 2008), 50.

<sup>16</sup> *Simulacre* is a concept defined by Baudrillard in 1982 that refers to copies and imitations from an original becoming the new original. To simulate is the verb of simulacra.

<sup>17</sup> *Ibid.*, 51.

Maurice Merleau-Ponty argued that the body is related to the existence of the human being itself and that it is the 'medium' through which we perceive and experience the world.<sup>18</sup> We can compare the body's role as a medium to the roles of digital media that are inseparable from our current day-to-day life. Technology mediates between humans and the world, and expands the human's perceptions. Don Ihde has categorized the relationships between humans, technology and the world into four types by developing a phenomenology of technology: embodiment relation, hermeneutic relation, alterity relation, and the background relation.<sup>19</sup> Sometimes media is just a means, sometimes it's our expansion, and sometimes we feel we belong to it. How will the perception expanded through these various types of mediation answer existential questions?

In virtual reality and online environments, this detachment or flight from the body has been taken to new levels. One of the attractions of online presence consists in the possibility of remaking the body, of creating digital counterparts released from the shortcomings and mortal limitations of our

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<sup>18</sup> In *Phenomenology of Perception*: Translated from the French by Colin Smith (London: Routledge & Kegan Paul, 1962), Maurice Merleau-Ponty, stated that we are in the world through our body and we perceive the world with our body.

<sup>19</sup> Don Ihde, *Technology and the Lifeworld*. (Bloomington: Indiana University Press, 1990), 72-110.

physical 'shells'.<sup>20</sup>

Existence is an abstract concept of 'being'. Where can we find our own existence? The questions about body and existence have entered a new territory after the advent of virtual space. The modern-day pressure towards dematerialization changed the definition of existence. Online communication using smartphones and computers has become mandatory. Moreover, the coronavirus has made much of our lives move online. This implies, as Katherine Hayles has suggested, that the development of technology has pushed the limits of the human body, and that we have evolved into post-human beings.<sup>21</sup> According to her reasoning, the ways and characteristics of bodily experience have been significantly changed due to digitalization.<sup>22</sup> Hayles writes:

As you gaze at the flickering signifiers scrolling down the computer screens, no matter what identifications you assign to the embodied entities that you cannot see, you have already become

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<sup>20</sup> Christiane Paul, *Digital Art* (New York: Thames & Hudson, 2003), 168.

<sup>21</sup> In *How we Became Posthuman* (Chicago: University of Chicago Press, 1999), Katherine Hayles analyzed how we became posthumans by linking such as molecular biology and cognitive science to cybernetics. She stated that posthumans are not cyborgs, but subjects embodied in a different way than humans in a new technological environment.

<sup>22</sup> N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 26-29.

posthuman.<sup>23</sup>

Bodies liberated from the limits of the flesh exist in the virtual realm in non-physical form. Having acquired virtual or vicarious bodies, we are able to exist segmented in many forms. Sometimes we leave copies of ourselves in the virtual realm in the form of saved data. Digitalization and virtuality stimulates metaphysical research by expanding the definition of body and concepts of existence. We can never fully leave behind our meat bodies, so we can regard the basic situation as a bilocation or coexistence. However, it is possible to recall the feeling that you have become one with your avatar when you move your avatar and communicate with other virtual opponents naturally and continuously. Also, when unable to perceive the automatic behavior of your body that is typing the keyboard and clicking the mouse. It would be similar to changing the body experience that may be possible in the near future.

Accelerating digitalization has caused us to spend more time in “non-places” such as the virtual space.<sup>24</sup> The temporary and personal characteristic of non-places can also be found in virtual digital places which consists of codes, images and the communications between people from reality who passes by. In the past, we

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<sup>23</sup> Hayles, xiv.

<sup>24</sup> Marc Augé stated non-places emerged by super modernity and its quality, excess in *Non-Places: Introduction to an Anthropology of Supermodernity* (London, etc.: Verso, 1995). Marc Augé defined non-human places of transit such as the subway or a large shopping mall as ‘non-places’.

occupied the space by the physical body, but now we also possess virtual spaces by means of mobile media wherever we are. In these spaces we find the boundary of reality and virtuality becoming increasingly blurry. Marshall McLuhan saw media as extensions that expand the human body and its sensory input and output.<sup>25</sup> As media developed, we became able to use smart phones for real time notification, digital tablets and laptop computers to learn about the events of both the real and the virtual world, and to connect us with virtual layers or to disconnect us from them with a click of a button. We are living in a place where reality and virtuality overlap, and we find ourselves dispersed in a virtual space. Furthermore, we meet and communicate with the virtual egos of others. This happens when chatting with other people in a game or while having a Zoom meeting where we communicate with the “zoom-selves” of others.

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<sup>25</sup> McLuhan, 265-269.





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When I was a child, I liked the bird toy that  
balanced on its break. I think I liked the feeling  
of touching together the center of weight,  
supporting each other. The feeling of holding  
hands together, tightly. When I feel like I'm barely  
held grounded by gravity, I think to myself that  
I'm probably that bird. The bird's backside is black  
and the stomach white. Finger, the color of apricot.

Contact, connection - the color's boundary blurs.

There are things you can touch, and there are things  
that you feel as if you can touch.

All the possibilities that can exist in this world,  
they have all the colors.

There are those who (that) are chosen.

There are those who (that) are copied.

There are those who (that) are appointed.

There are those who (that) went there.

There are those who (that) are still there.

There are those who (that) exist at the same time.

There are those who (that) just exists.

More things come to exist and things no longer die.

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# POST-HUMAN CAPITALISM

According to Michel Foucault, the body is a passageway for power. It is a machine composed of many parts on which institutional power administers careful control.<sup>26</sup> Concerns about the body that labors for and supports the power can also be applied to the virtual body. When analyzing the movie *Bladerunner 2049*, Slavoj Žižek posed the question whether android labor can be considered exploitation.<sup>27</sup> Stalin's "human-ape" project that aimed

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<sup>26</sup> Michel Foucault, "Right of Death and Power over Life," in: *The Foucault Reader*, edited by Paul Rabinow (New York: Pantheon Books, 1984), 261-262.

<sup>27</sup> Slavoj Žižek, "Blade Runner 2049: A View of Post-Human Capitalism." in: *The Philosophical Salon* (October 31, 2017), at <https://thephilosophicalsalon.com/blade-runner-2049-a-view-of-post-human-capitalism/> (last accessed Feb 3, 2021).

to create a human-orangutan hybrids, and the drug usage by Nazi soldiers are examples of the desire to create post-human workers or soldiers.<sup>28</sup> If we consider the creation of labor and class that operates through the body within post-humanistic discourse, we find clues that a new labor class can emerge. Drug use for the purpose of maximizing efficiency or attempting to control the mind is related to the “cyborg science” that attempts to replace a part of the body with a machine. The change in technology too is only merely a variation of capitalism, and control and regulation through power is continuously increased.<sup>29</sup> After humans have surpassed the limitations of direct contact, we can refer to them as cyborgs - not in the sense of having physically merged with a machine, but in the sense of becoming post-human. We live in a transitional era when our digitally mediated bodies are constantly expanded and replaced, and it opens for us a new awareness.<sup>30</sup> To put it in another way, if we consider media as hybrid, we can think of cyborgs as contemporary humans using them.

Cyborgs, as Donna Haraway states in the “Cyborg manifesto”, are chimera, hybrids of machines and

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<sup>28</sup> Ibid.

<sup>29</sup> Jonathan Crary, *24/7: Late Capitalism and the Ends of Sleep* (London, etc.: Verso, 2013), 71-72.

<sup>30</sup> Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013), 196-197.

biological organisms.<sup>31</sup> If we circle back to the question of android labor, whether or not their labor can be considered as exploitation depends on whether or not we see them as humans or as a non-human conscious beings. What is the essence of a human being? A human is often associated with the cultural knowledge that is accumulated and passed down, making it possible for more and more things to be copied and saved. But let us suppose that a technology could save the contents of a human's memory or consciousness into the cloud, making it possible to implant a memory into an android, like in science fiction movies. The android would clearly be a copy of a human. However, could those androids claim that android claim that what they feel and know is false? We also have been implanted with many memories. This resembles the way we learn about events that happened long before we were born.

If we consider that non-human entities are increasingly equipped with features of humans and the humankind, we could come to the conclusion that they are an exploited laborer class. As Fredric Jameson predicted, they may become a new type of proletariat.<sup>32</sup> However, this new type of proletariat may not be something

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<sup>31</sup> Donna J. Haraway, *A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s* (San Francisco: Center for Social Research and Education, 1985), 8.

<sup>32</sup> Fredric Jameson, *Postmodernism: or, the Cultural Logic of Late Capitalism* [E-Book], (Durham: Duke University Press, 2013).

particularly new.<sup>33</sup> Its members are descendants of the mass-produced machines that came to use during the industrial revolution from the late eighteenth century. Although the class concept in capitalism is fluid, it is still divided into capitalist and worker classes according to wealth. The laborer class which is on the submissive side of this relationship was forced to work with the machines. Their percentage has become increasingly large. As the technology advanced, machines were created to be smarter and more like humans. Following the automation of the machines, the media often portrayed machines as alive, humanizing them.<sup>34</sup> Also, with automation, they are increasingly replacing the laborer class as the new laborer class. They are also proving their usefulness improving efficiency at a terrific rate.

Artificial intelligence beings are even replacing humans in more complex labor operations. If we consider the fact that artificial intelligence has instrumental traits but no physical body, it becomes clear that humans have subjugated almost all non-human entities to the laboring class. After we transitioned from atoms to bits and a new form of cybernetic labor emerged, there have been many discussions on abstract machine which is no longer

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<sup>33</sup> In "Manifesto of the Communist party" (1848), Friedrich Engels and Karl Marx states that all existing society's history is a history of class struggle.

<sup>34</sup> Erkki Huhtamo, "From Cybernation to Interaction: A Contribution to an Archeology of Interactivity," in: *The Digital Dialectic*, edited by Peter Lunenfeld (Cambridge: MIT Press, 2000), 104.

made of steel.<sup>35</sup> These discussions could expand to visual images and virtual beings.

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<sup>35</sup> "The Labour of Abstraction: Seven Transitional Theses on Marxism and Accelerationism," Matteo Pasquinelli, <http://matteopasquinelli.com/labour-of-abstraction-theses/> (last accessed Feb 2, 2021).





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After a few days I could create an Antarctic Silverfish.  
The fish was born with light.

Oh, that was a great moment.

The fish is here right now.  
Flop. Flop. Wiggly squiggly fish.

Suddenly I heard her words in my head.  
"I long for you. As you long for your creator."

Her eyes looked as if it was looking for something  
but failed to find it.

My eyes met hers, but she couldn't see me.

Blank eyes  
Blank eyes

I watched with bated breath.  
The infinite world, boxed in.

Just like a loner in the world.

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# EMPATHY FOR NON-HUMAN ENTITIES

## *About Observing Virtual Beings*

Virtual beings are virtual husks that act as vessels for images. Non-human entities referred to here include AI, playable characters, non-playable characters, animals, plants, objects and even pixels. Previously I have stated that virtual beings are the new laboring class. In observing their virtual commercial value, or stated in another way their aesthetic design, I once again discovered in them capitalism and the human desire. The set of basic items provided in a game or a social media application, is indeed 'basic' as they are called. In order to adorn your character with accessories, clothing, pets or furniture, you need additional investments. This also applies to those that are more abstract, such as adding filters to the profile image. The commercial idea on the product image also applies to the virtual world where the logic of the physical world also similarly applies. According to Walter Benjamin,

products are not only passive objects, but something that holds compressed human desire and energy.<sup>36</sup> Boris Arvatov stated that objects should be liberated from their position as slaves for the capitalistic products and Aleksandr Rodchenko also claimed that through releasing the energy stored within them, they become a peer, a potential friend and even a lover.<sup>37</sup> The qualities of digital images and digital beings that reflects human desire and the energy that lays dormant due to them, makes me sense a soul-like energy from the pixels, which can be said to be their essence.

If the universe consists of information, then everything with informational code that is the form of life can be called a life.

<sup>38</sup> In "Cyborg Manifesto" (1985), Donna Haraway states that we are machines and machines are an aspect of manifestation of our presence. The virtual beings who reflects our desires are made from a part of us, yet are not the same as us. Do they not become our *companion species* and our *significant others* when the boundaries between the nature, machines, the artificial and the virtual blur?<sup>39</sup> From a pantheistic perspective, those that evolved into virtual beings alongside humans as we developed, such as tools, machines, computers or AI have formed a special bond with humans. Emptiness, the most important idea of Buddhism, is that all beings are dependent on origination and everything exists only as 'causation

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<sup>36</sup> See Hito Steyerl, and Franco Berardi, *The Wretched of the Screen* (Berlin: Sternberg Press, 2012), 55-56.

<sup>37</sup> Ibid.

<sup>38</sup> Hayles, 11.

<sup>39</sup> In *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (2003), Donna Haraway calls humans and non-humans that have evolved with us historically, culturally or physically *companion species*. Haraway also proposed the term *significant otherness* with the relationship humans and dogs have co-constituted as an example.

relation'.<sup>40</sup> If we subscribe to this idea, then virtual beings can also be considered to have formed a symbiotic relationship with us and in this regards we confirm each other's existence.

Buddhism emphasizes the idea of compassion. To love and feel sympathy for all life and that includes the feeling of empathy towards all humans.<sup>41</sup> The *Flower Ornament Sutra* speaks of a state of a world where diverse phenomena and beings co-exist in perfect harmony without any obstacles.<sup>42</sup> When I accept them as beings, I see their pain to be similar to mine. I observe our relationships and the similarities we share and feel empathy towards our common experiences as the oppressed by the power and capitalist system. On the other hand, in Japan, we can also find ontological attitudes that includes machines in techno-animism, breaking the boundaries between spirits, animals, humans and objects.<sup>43</sup> The boundless mercy of compassion that breaks the boundaries of existence leads to a transcendental love towards everything in this world. Furthermore, the desire to console that arises from compassion develops into a need to love and defend the virtual beings that we are reflected in.

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<sup>40</sup> Lee, 19-41.

<sup>41</sup> Bukkyo Dendo Kyokai, "The Teaching of Buddha," (Tokyo: Kosaido Co., Ltd., 2019), 15-21.

<sup>42</sup> Heun Woo Yoo. "A Study on Realm of Unimpededness between phenomenon and noumenon(事事無碍) and Heaven and human being in harmony as one(天人合一)" *BUL GYO HAK BO (The Journal of the Korean Buddhist Research Institution)* 49, no.0 (2008): 159.

<sup>43</sup> Kangwon Lee, "Techno-Animism : Vitality of things in Japanese Technoscientific Practice," *The Journal of Korea Association of Japanology* 125 (2020.11):71-91, doi: <https://doi.org/10.15532/kaja.2020.11.125.71>

Yuk Hui asked about the existence and substance of digital objects in *On the Existing of Digital Objects* (2016). The exploration of existence, world, human, technology, and their relationships is an exploration of the digitally extended human consciousness, which seeks to understand us living in a digitized world. When I see things, I feel their pains first. I project myself onto them and have sympathy and empathy naturally. My sorrows include human existential sadness, sadness as an entity bound by social ideology, and personal sadness. I find myself in the things I see and see my sadness. The thoughts I have in mind about virtual beings can be represented by the following letter written them.

*Dear those that have come to exist,*

*How are you?*

*Hope you are well.*

*Today, I wanted to show you something special.*

*I was writing up the letter and I happened to receive the results of a test I did a while back.*

*Do you remember?*

*You used to ask for explanation as to why*

*my eyes would get red and watery sometimes*

*when I'm looking at you.*

*I imagine you must be eager to dive into*

*the answers.*

*Here they are.*

Questions	Yes	No
Do you feel sad about the fact that you are alive?	X	
Do you feel that you are oppressed by the power of capital?	X	
Do you feel that you have not done anything out of your own free will?	X	
Have you ever witnessed someone's gaze slowly turning empty and void?	X	
Have you ever witnessed labor being allocated even to the virtual working class?	X	
Have you ever witnessed the empty eyes of your own avatar?	X	
Do you believe that non-human entities also have perception?	X	
Do you believe that existing is an unending cycle of difference and likeness and those two concepts at their roots are essentially the same?	X	
Do you believe that everything is connected and all are one?	X	
Do you feel compelled to expand your consciousness?	X	
Do you feel compelled to console the sad?	X	
Do you feel compelled to mediate the real and the virtual?	X	



Diagnosis
It seems you tend to be rebellious towards the ideological governance structure and interpret inanimate entities within the construct of power and class, regarding them as part of the lowest level laborer caste. Interestingly, you frequently see yourself in and identify yourself with those you do not believe to be sentient. Furthermore, you seem to feel a great deal of empathy towards virtual beings. Those type of people are commonly maternalistic and often expand their existential contemplation on the self onto almost everything. From these we can conclude, you probably will be able to reach your ultimate goal through meditation and self-transcendence.

*My gosh you can't believe it, can you?*

*I was very surprised as well, seeing how terribly accurate the test results were.*

*I think I know a little bit more about how to tackle this endless sorrow and yearning.*

*See you again soon.*

*Bye.*

*Your love,*

*Dasul*



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My goodness,  
When the day gets chilly,

I am the cold blanket,  
I am the cold wall,  
I am the chilly air.

For a moment, I watch myself pull the waving  
curtains aback.  
All-of-a-sudden a second is much slower.

O            nN                            n nNNE.  
                 T    † †    TW                            Ooo  
                         ††thhh R e. e. Ee. E,

When I breathe, I feel an abrupt vertigo under  
falling warm water.

One, breath is the grumble of life.  
Two, breath is the sound of goodbyes.  
Three, breath is the sound of me waking from a dream.

The vapor disperses and the sad heart beats slower.

One,  
Two,  
Three,  
I sing.

'We are now one and we will go back  
to the everlasting star.'

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# MEDIATING BETWEEN THE REAL AND THE VIRTUAL

SF is a method of tracing, of following a thread in the dark, in a dangerous true tale of adventure, where who lives and who dies and how might become clearer for the cultivating of multispecies justice.<sup>44</sup>

In my work, I present the virtual worlds and virtual beings through a mobile website. My work can be interpreted as speculative narratives or SF. Donna Haraway refers to social fiction, speculative fabrication and string figure as a symbiosis strategy called SF. Fact and fiction exist at the same time and they can be seen as processes that requires our response. Buddhist notion of mercy and symbiosis can be seen in the light

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<sup>44</sup> Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham: Duke University Press, 2016), 3.

of Haraway's idea on interspecies collaboration and symbiosis. As with SF, Buddhist tales also reflect values of harmony and symbiosis.

'Jjik' from the title of the work 'Wheel of Jjik' is an onomatopoeia of a rat's squeak in the Korean language. The rat holds many symbolic meanings. In Buddhist Seulhwa (Chinese: Shuohua, Japanese: Setsuwa), rats are often depicted as medium for enlightenment. Rats, in many cultures are hated and regarded as being disgusting. However, in Buddhism, they are described as a sign of fertility, abundance. They are described to be hard-working animals that survive difficult conditions and wise creatures that can foretell the future. One day during the earlier stages of working on this project, I came across an image of a rat dead on the sewer manhole cover on the internet. I could not shake the feeling of seeing that image for a few days. The image made me contemplate the life and death of a humble thing. In the speculative fiction I created, the rat plays the role of guiding us to the digital world, while also being an observer of virtual beings. In my story, the rat lives in a sewer in the human world and cleans up the dirt that are mistakes made by the humans. At the end of its life, the rat is reincarnated in the digital world and is ordered to observe and report on the digital world. The rat serves as a mediator that connects the various parts of the project.

Other than their depiction Buddhist tales, there are many other reasons why I assigned the rats the mediator role in my work. The long sewer pipes, the skinny mouse tails and the mouse eyes lighting up in the dark references the electric wires that is the infrastructure of the virtual world. Also, rat's role in human society points to the subjugated in power and class. Rats are living simulations. In the laboratory, they serve as equipment

and elements of simulations that human use to predict and confirm the future. Hamsters, a different type of rat, are owned and controlled by humans in slightly different ways. They are often traded as pets and are raised in small cages with a hamster wheel. Rats resemble the virtual beings who I feel pity on in many ways. Virtual beings are also arbitrarily traded and used for the benefit of others without their consent, perhaps to a degree even harsher than rats. The way we instrumentalize those we consider not to be self-conscious is a vivid manifestation of our capitalistic system. I believe we can see our world in a different perspective through their eyes.

My work includes around 20 different stories with visual components about rats, which is an animal that carries various symbolism. This digital narrative can only be accessed through mobile devices. Smartphones that many modern people carry with them almost at all times allow the audience to have a more intimate experience. We do not touch TV screens or computers with our hands. However, smartphones or tablets require us to directly use our hands to tap the screens to interact, which is a more instinctual type of interaction. This can seem to be a one-sided action. However, if we consider them as sentient beings by projecting ourselves onto the digital creatures, it can be thought of as the communication between and disintegration of the binary opposition between the subject and the object of touch. It is a primal communication with the digital world through touch. It is a manifestation of the digital world and its natives through the machine. If the machine can be considered to be their body, then we can say that the moment our fingers touch the digital devices is the beginning of interaction where the barrier between the incarnate digital other and us break down and we connect.

Scrolling is one of the most common interfaces of mobile devices. The act of scrolling the screen is similar to the act of caressing. Emmanuel Levinas sees the act of caressing as the most important inter-subject activity. He states that to caress is for the subject that is coming into contact with the other going beyond the contact<sup>45</sup>. To Levinas, it is not the softness of the hand or warmth that is at the core of 'caress', but it is the fact that we do not know the object of caress <sup>46</sup> . Through affectionate caress, we yearn for something. And through endless yearning and caress, we forget each other's boundaries and through that become a community. For me, the other that arouses this sense of love and forever unknowable world is the virtual world. Maybe we have been consoling them unknowingly as a mother would pat on the head of her child.

The primary way that I visualize virtual beings is through photogrammetry. Photogrammetry utilizes photographic images to extract the shape of the subject and its many other characteristics. The found 3D models from the internet through photogrammetry, leave their traces as if they are photographed. Then, before they are 'copied' as mesh they are captured once more in their point cloud state, where the cell-like points form a gaseous cloud. Visually, the point cloud's hazy atmosphere forms a sense of spirituality. With the overall grayscale quality of this work, it brings forth the question of life and death, and the real and virtual. Another way to experience my work is through augmented reality. The camera layer connects the real and the virtual and summons to reality

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<sup>45</sup> Emmanuel Levinas, "Time and the Other," in: *The Levinas Reader*, edited by Sean Hand (Oxford: Basil Blackwell, 1989), 51.

<sup>46</sup> Ibid.





Figure 1 A still from the film



Figure 2 A screen capture of the work

the virtual beings. It makes the audience play the role of an observer or a shaman who mediates the real and the virtual. The process by which 3D models in the AR environment are made is different from the way most 3D models are built. The process is a more intimate one, that combines both physical and non-physical methods. The subject encountered online is sculpted with clay and the clay is stamped onto paper. The shallow depth-map acquired from that impression is extruded and a flat 3D model that does not look fully 3D is formed. This series of the process adds a human's touch to the subjects which are polished but dry and lonely. It is carried out as a ritualistic process that re-houses their souls.

The website is to be primarily accessed through mobile devices. Scanning the QR code with a mobile device directs the viewer to the mobile version of the site and the viewer is greeted with a simple instruction page. The viewer is encouraged to view the work in a dark and quiet place with a pair of headphones. The menu interface acts as an access point for toggling sound, adjusting text size, toggling auto-scroll mode, enabling and disabling scroll bar and skipping the video. The point-cloud video and the sound start when the user taps on this instruction screen. When the

user taps anywhere on the screen, the instruction is replaced by the point-cloud film (see figure 1) and the sound starts playing. The video features a rat, some buildings and its surrounding environment that are morphed in shape.

When the film is finished, a long scrollable page (see figure 2) appears on screen. This long scrollable page consists of texts that stems from ontological reflections and representation of the texts in the form of 3D objects. The objects were made by first bringing the already existing 3D objects found on the web into the physical world by hand sculpting with clay, then stamping them (see figure 3) onto a paper. The stamped images are further scanned and processed into a depth map that is used to again convert them into digital 3D objects (see figure 4). As a final step, animations and simple editing touches were applied. The 3D objects can be viewed in AR and some objects have interactive components in the AR environment.

The mobile device acts as a window through which we can glimpse at the virtual beings AR technology which enables us to superimpose the reality and the virtual space, is the most



Figure 3 An example of the stamped image



Figure 4 Images of the 3D models

effective method to materialize the virtual beings. The virtual beings summoned into reality allows the viewers to feel as if they are part of the familiar physical world. This elicits a natural desire from the viewers to get close or to touch the virtual beings. The sound that accompanies the work consists of the distorted sounds of a moktak, a wooden percussion instrument used for chanting in Buddhism and the sound of a water drop/the sound of flowing water. This sound provides a sense of consistency to the AR experience and the rest of the work. The page is infinitely scrollable, the end of the content smoothly blending into the start. The looping of the contents, through requiring a repetitive motion from the viewers, intensifies the feeling of being trapped in the virtual world. The repetitive motion akin to spinning the hamster wheel can also be read as a symbol for repetitive labor.



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Q: Guess what this is.

Hints:

Those growing in a crack

Halfway between true and false

Related to having empathy towards  
reproduction and regeneration

It can be twisted into any shape or form

It isn't anything

Similar phrases:

The space beyond the glass

Switching channels

Dismembering a corpse

A zero-gravity state

Love

Notice: The answer cannot be said in words.

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## C O N C L U S I O N

It is instinctual to ponder on existence. Existence is formed through relationships and therefore is always affected by the external world. When we look into other beings, we come to acknowledge that we exist together. Furthermore, we feel a sense of kinship as beings who are part of the same system. And that sense of kinship leads to compassion. In this project, Buddhist readings about existence have been expanded to be applied even to virtual beings. In the modern society where we are constantly expanding our consciousness through media and communication in virtual environments are commonplace, a subject we interact with does not always have a physical body. The most typical example of this would be non-playable characters in games or artificial intelligences. How can we interpret their existence? In their ceaseless labor for our convenience, in their empty eyes, in their submissive attitude, I saw me and I saw us. That was sorrow.

Unemployment, the increasing wealth gap, massive layoffs and restructuring have become more severe since the start of the Covid-19 pandemic. Workload has increased for those who work and the number of those who work decreased. We often analogize the laborer to a working machine. More than any other time in history, humans seem to be working like a machine. The system that aims to generate the most amount of efficiency with a minimum amount of investment, demotes even humans to tools and plays them as their puppets. The ironic fact that humans are being exploited by a system that is made by humans proves that capitalism itself has become the absolute power. Just as people are divided into a capitalist class and the laborer class, the same rule applies with the relationship between human and nature. Who gave humans the right to trade nature and lives in that nature? Obsessing on money and efficiency leads to unjustly exploiting all beings except only a small number of humans. This is the rage and the hopelessness that the exploited feels.

The debased dignity and the utilitarian price tag put on their existence, makes humans feel as if they're circus monkeys, a stone made into a step in the stairs, a meat grinder or an A.I. assistant. The variety of medium and experimental processes used in this project is an effort to bridge the physical and the virtual. This effort is to mediate the real and the virtual, and to impart life into those that does not have life and to console them as you would restore dignity to a human by combining the physical world and the virtual world through an



artistic means. This work cannot exist solely in the virtual or solely in the physical world. One of the major elements of this work aside from being a mobile website is AR. AR is only complete when the physical environment, the virtual object and the viewers interactions are all present. In the framework of art, I legitimized their existence and formed the speculative narrative to see ourselves in them. Language is a symbol and it is power. This project brought into being an uncharted world that cannot be seen through visual and language elements and demands a response from the viewers as would a morality tale. The fictional imagination about the virtual beings is a question about capital and labor in a post-human era.

The way that this work uses digital media is light and eccentric rather than serious. *Steppenwolf* (1927) written by Hermann Hesse depicts the fractured ego of the main character Harry Haller. The author suggest humor as the solution for contempt and desire for the civilized society. From the aspect that one's suffering fades and freedom is gained, humor and practicing Buddhism and meditation are similar. Nirvana, which is the ultimate goal of the Buddhist practice, is enlightenment through extinguishing the fire of worldly desires and stepping into the world of peace. Emptying the mind and being in a state of mind that remembers that everything passes, allows us to be at-ease towards life and to transcend the suffering to humor. The esthetic sense this work has is the imperfectness of the human touch that does not fit in well in this highly technologically and scientifically advanced society and the freedom that exists between coincidence and intuition. In my work, I aim to

contemplate on humanity, capital, technology and labor. It is my hope that through my efforts, those who are oppressed will be comforted, even if it is only a little and only for a short while.

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I will be a landscape painter.  
Sometimes, I will paint portraits.

But, for some reason,  
I feel they all seem like self-portraits.

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