Post-postmodern Foresight from the Philosophy of Philip K. Dick: Warning to Our Technology-centered Society

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Introduction

Technology since the Industrial Revolution in the 18th Century has changed the life of human beings dramatically. After the innovative event started in the UK, technology started to prevail in other continents gradually, being developed at a tremendous speed. Nowadays, human beings cannot live without technology at all because we all are connected to it and we generally regard technology as something convenient to assist our lives. Even though technology has supported human activities, it does not always function for the better. At the same time, technology possesses the aspect of danger; the more convenient technology becomes, the more outstanding the danger of modern technology becomes.

The purpose of this thesis is to investigate what possible risks of advanced technology would threaten humanity in our modern world even though modern technology is considered a vehicle for making human life more and more convenient. In order to accomplish my goal in this thesis, I will utilize both traditional ideas on technology advocated after the middle of the 19th century and modern ideas, which encompasses postmodern ones. In addition, as seen in the current worldwide fashion of the genre, science fiction (SF), it is effective to analyze a field of SF as a clue to acquire wisdom for clarifying our future situation with highly developed technology. In this thesis, I will analyze works of one of the most representative American SF writers Philip K. Dick.

It is important to make clear the difference of semantic usage between technology and modern technology in order to distinguish the nuance of technology in this thesis. Therefore, I use "technology" when I refer to the general meaning, "machinery and equipment developed from scientific knowledge" based on the definition by Oxford Dictionary of English (2005). On the other hand, I mean "modern technology" when I refer to advanced technologies such as artificial intelligence (A.I.), robot, and virtual reality, which are based on Internet activity.

As I was a child, everyone utilized mobile phones as a means of communication with others. The more technology has spread to areas from developed countries to developing ones in the world, the more the technology has evolved in terms of not only speed, but also convenience. Technology continues to advance and be transformed into innovative devices or systems such as smartphone, virtual reality, Wi-Fi system and so on. Considering these situations above, there is no telling how much modern technology will have the capability to assist human beings for right or wrong in the future.

Despite the very high speed development of technology and its making the world more and more convenient, there is an attention to its possible risk brought about by technology itself. The world holds some massive problems such as global warming, terrorism, cyber-attack, and worldwide regional inequality caused by global capitalism. These issues are strongly related to the misuse of technology. One of the examples of the biggest incidents in Japan, which happened due to the misuse of technology, was in WWII that devastated Hiroshima and Nagasaki. The U.S firstly developed an atomic bomb and so did other dominant countries such as Germany and Russia successively. Nobody knew how much impact the atomic bomb would actually have.

A few philosophers and researchers started to realize the possible risk of technology, which might cause a catastrophic situation to the world after that horrific event. Some writers and scientists such as the English writers George Orwell and Aldous Huxley, and an American theoretical physicist Michio Kaku, and an American SF writer Dick showed their ideas on dystopia through their novels and research papers and people and even society paid attention to these ideas. As the rise of awareness of the concept, dystopia, spreads amongst people, the genre dystopia also became a contributing factor of making people realize the negative aspects of technology. A scholar of history, Claeys (2010) defined the term, dystopia, stating that it is often used "to describe a fictional portrayal of a society in which evil, or negative social and political developments, have the upper hand, or as a satire of utopian aspirations which attempts to show up their fallacies" (107). In other words, the definition of Claeys clarifies that there is no utopian society, which possesses a perfect social mechanism from the viewpoint of dystopia. In addition, the genre dystopia criticizes the fallacies rooted in the society, which blinds people to the negative aspects of the society. One of the most dystopian novels, Nineteen Eighty-Four, written by George Orwell depicted a world controlled by Big Brother who exercises total control through his totalitarian government. The novel implies that governments in our modern world could be the same as one in Nineteen *Eighty-Four*, leading to a world where people have no rights, government owns property, and all of possible risks depicted in the novel might occur.

In the actual world where human beings live, there is forthcoming danger caused by modern technology. One is the coming of 'Surveillance Society,' as seen in the situation that people are watched under the surveillance of security cameras. A sociologist, Garrett (2004) described, "London has the highest density of CCTV cameras anywhere in the world" (58). In addition, an American journalist, Draper (2018) explained "the number of surveillance cameras in London rose up to 72% from 2012-2015, which occupies one-third of the UK". These facts obviously show that people are seen anywhere and whatever they do. This paper will analyze the possible dangers of a dystopian society brought about by the advancement of modern technology to make people aware of and consider these issues, which might happen in the future and prevent these from actually occurring some day in modern world.

This thesis is not a place for discussing whether human beings should stop using technology or not. Judging from the human activities of their constantly developing technology all the time, it is inferred that human beings will have no choice but to continue to depend on more and more advanced technology. Since we are living through the era that we can make technology function as we wish, which is a false notion that people believe in, it is significant that people understand the ambivalence of technology because technology might threaten humanism as menaces to people in society as dystopian novels represents these awful situation. It is appropriate that we analyze SF novels, which criticize the negative aspects of over-advanced technology in order to grasp the ambivalence of technology. Therefore, I will try to examine the writing of Philip K. Dick and his philosophy to clarify what are human beings' attitudes towards technology.

In this thesis, Chapter One will focus on the world situation brought by technology more vividly. There are notable incidents caused by technology in the history and I will introduce these influences on the world to describe how much technology has affected with these negative aspects. As mentioned, technology also has contributed to human beings for right or wrong, which means it has not only merits, but also demerits. I will pick up a few debates on technology. Chapter Two will analyze one of the greatest SF writers in the U.S, Philip K. Dick, and his philosophy, introducing his representative works, *Do Androids Dream of Electric Sheep?* and *Minority Report*. These works were made into movies and had a large impact on people, the era and the world in those days and they do still now. By introducing his ideas, I aim to gain a deeper understanding of the theme: How human beings coexist with technology. Chapter Three will refer to how human beings should regard the negative aspects of technology for living in the world, which fully has been depending on technology.

After I analyze Dick's common philosophy, I will consider the post-postmodern insights on our technology-centered society in order to discover the relationship between human beings and technology. It is important to consider this theme in terms of time axis (tense) such as past, present, and future. I would like to underscore the future tense because time always keeps going forward. I believe that analyzing Philip K. Dick's view of postmodern world will contribute to considering how modern people should be attentive to modern technology.

Chapter 1: What is Happening in Our Modern World?

Chapter One concentrates on describing the situation of our world in a technology-centered society and examine current issues caused by modern technology. By inspecting these issues based on an understanding of the current situation, I aim to explore factors of causing these negative issues. Firstly, I will review the history of technology and its influences on human society, focusing on merits and demerits that technology has given to humans. Secondly, I will investigate two modern issues caused by modern technology in order to examine how people and society have reacted to these issues and discover what acts are needed for human beings to coexist with modern technology.

Chapter 1-1 Examples of Negative Issues Caused by Modern Technology

As mentioned in the introduction, technology has had an important role in making the world industrialized ever since the Industrial Revolution. It has contributed to each of the fields in different forms. In the field of medicine, technology has given people the possibility of living longer, curing cancer through new innovative medical equipment and serving effective medicines. Utilizing A.I. makes the process of diagnosis smoother and more accurate. In the field of chemistry, there have been some breakthroughs. For instance, researchers from the University of Edinburgh succeeded in producing the first cloned sheep named Dolly in 1996. Cloning technology was considered impossible until they succeeded. That experiment changed the world and people's idea: It is possible for human beings to produce creatures artificially. Besides these technological leaps, human beings have made their lives better through technology: for example, cars, video games, virtual reality, Global Positioning System (GPS), Social Networking System (SNS) and so on.

A 20th Century German philosopher, Martin Heidegger (1977), demonstrated his thoughts on technology. He advocated the skepticism of technology and its instrumentality through his ideas, explaining, "everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it (3)". In his era, the 20th Century, technology was already connected to and necessary for people's lives in those days. He also argued, "we ask the question concerning technology when we ask what it is. Everyone knows the two statements that answer our question. One says: Technology is a means to an end. The other says: Technology is a human activity. The two definitions of technology belong together (3)". In other words it could be interpreted as a lesson that technology should not be prior to our means of revealing facts. In terms of the lesson, he built up the theory: instrumentality of technology. As he

explained that technology is one form of human activity, people have utilized technology as a means of improving their lives. In this sense, technology is not a means to an end. Due to the over-development of technology, it could be said that modern technology has negatively come to become a means to an end. In other words, modern technology has started causing the destruction of our world, as I will explain in the following paragraph. Thus, people have misunderstood Heidegger's philosophy about the instrumentality of technology due to an extravagant use of technology.

While we enjoy our enriched life through technology, however, there are some massive problems in the world at the same time. Because of producing waste from industry by manufacturing products for ourselves, we make our planet Earth more polluted. According to the United Nations Environment Assembly (2017), we are emitting harmful gases such as carbon dioxides from burning coals, and waste materials such as plastics for supporting our industrialized world (15). As a result of the pollution in the air, they indicated "some 6.5 million people across the world die prematurely every year from exposure to outdoor and indoor air pollution" (14). In fact, some big corporations construct their factories in uncivilized and natural lands to conduct mass production, utilizing the modern technology such as robots and automation system. At the same time, they cause the devastation of natural environment, destroying forests and promoting the air pollution, with lack of a sense of responsibility. Some philosophers and scientists insist that the mechanism of Global Capitalism is attributable to the creation of profit-first principle in the world. Global Capitalism is strongly connected to modern technology because we make use of machines, complicated network systems to run business globally. Thus, modern technology is certainly one of the causes for making our world possibly devastated someday in the future.

What in the world are the specific difference between technology and modern technology? A specialist of information system, Ramey (2012) argued the meaning of modern technology, explaining "we use technology on a daily basis to accomplish specific tasks or interests. Modern technology or evolved technology at times may replace previously used technology due to its increased benefits or newfound popularity". In this sense, modern technology in the field of information and communication technology (ICT) should be newer than older communication tools such as telegram or fixed-line phone. In addition, the invention of the developed processing system using A.I. made human activities smoother, faster and more convenient. It is also one of the modern technologies. Thus, I define modern technology as the new technology developed as a substitute for the older technology in order to enhance the capacity of human activity.

There is another serious issue that technology will bring or already has brought to human beings. It is the arrival of a "Surveillance Society". In the famous dystopian novel *Nineteen Eighty-Four* (1949) written by George Orwell, surveillance society is delineated. In *Nineteen Eighty-Four*, there is a massive surveillance system with a highly developed screen called telescreen. This surveillance system controls people and leads to a dehumanized, autocratic regime society. Getting the subject back to our actual world, the threat of surveillance society, which is similar with the world of *Nineteen Eighty-Four*, is in controversy. There are thousands and thousands of security cameras dotted in cities, inside buildings, and wherever people live and especially in the UK, as Garrett pointed out, it has "the highest density of CCTV cameras"(58). What is more, BBC (2013) stated "There are up to 5.9 million CCTV cameras in Britain, according to a report by The British Security Industry Association."

Contrary to the frightening number of cameras in the world, there are plausible reasons for this surveillance situation. First is the rise of "Terrorism" all around the world. One of the biggest terrorist incidents, which lies in people's mind strongly, is the September 11th attacks which occurred in the U.S. in 2001. The unprecedented terror killed about 3,000 people and shocked the entire humanity all around the world. With this as its beginning, there are a series of terrorism having been happening in some areas one after another with the use of bombs, guns and any other arms. For preventing these from occurring, security cameras are necessary. Second is for the profit of corporations, organizations or even governments. For example, glossary stores set up cameras in the building in order to watch customers and prevent them from stealing foods. This is the accepted range in terms of humanitarian act. On the other hand, we see some news about political fraud misusing technology such as wiretapping by politicians to get some information for the sake of their political victory. These facts make technology, which originally intended to be used for good sake, notorious. As seen in the examples of misuses of technology, our world might have fallacies related to the use of technology, which is the characteristic of dystopia as mentioned earlier.

This section described the situation of technology by tracing back to its history and background. In spite of its great contribution to human beings, it is unavoidable for us to consider the ambivalence of technology; otherwise it is obvious that the world human created will be totally controlled by technology in near future as the world of *Nineteen Eighty-Four* does. Therefore, the next section will examine two modern issues caused by modern technology to comprehend its ambivalence.

Chapter 1-2 Surveillance Society

The previous section briefly explained the situations happening in the world. To describe these situations in more detail, I choose two negative social issues, which have been brought about by the influence of the modern technology: Surveillance Society and Identity Crisis. Both this section and the next will consider these two issues for analyzing technology's negative impacts on human beings. In this section, I will focus on "Surveillance Society" to examine the ambivalence of technology and the possibility that surveillance society would lead to the world degradation and even the world of dystopia.

After the horrific terrorist attacks on September 11, 2001, people were forced to reckon with the fact that they may face the danger of an attack at any time. In regard to the timing of the beginning of surveillance system, Lyon (2007) explained "in recent years, government-led surveillance has been intensified significantly since 9/11" (1). Thus, government in each country started to realize the significance and necessity of introducing the use of surveillance cameras to prevent unexpected incidents from happening since the 9/11 attacks.

Reacting to this, surveillance cameras are equipped in cities, buildings, and many other places in rich countries and even developing ones. The number of surveillance cameras has been increasing from year to year. Recently, concerning the number in London, Draper stated that "from 2012 to 2015 the city saw a 72 percent increase in cameras, making up one-third of the U.K.'s cameras overall". Moreover, according to the statistics by the BBC (2009), London has 7431 CCTV cameras, which are approximately seven times more than that of San Francisco. These two facts in regard to the U.K. indicate how much the government depends on cameras for inspecting citizens. Because of the enormous number of cameras dotted throughout the city, London is considered as one of the most surveilled cities in the world. It could be assumed that the situation that people are inspected through cameras from everywhere at any time might create a psychological stress for citizens even though surveillance cameras are effective for improving the security. This is one component of the ambivalence, which technology creates.

In another example, China is one of the fastest developing countries, and in recent years has been following – or perhaps even exceeding – the UK's example. A journalist of The New York Times Paul (2018) reported "China has an estimated 200 million surveillance cameras, which is four times as many as the United States". China even has a facial recognition system, which can monitor a portion of the 1.4 billion people at all times. This A.I. monitoring helps police officers in China find suspects during events.

Although this countermeasure against the threats of terrorism and crimes are firmly developed in the form of "surveillance" through technology, there are issues that have arisen due to the introduction of mass surveillance systems. I select two situations happening in our actual world to analyze which part of surveillance system would be harmful to everyday people.

The first issue to be discussed is the rise of the electronic eyes, for example: cameras, satellites, face-scanning devices, and so on. As mentioned earlier, some countries realized the necessity of depending on surveillance systems against terrorism, unpredicted crimes, and any other threats towards citizens. In the field of literature, the British writer George Orwell published the dystopian novel Nineteen Eighty-Four, which envisions a society controlled by the totalitarian government. The novel shocked people on its release, with its famous sentence: "Big Brother is watching you." After the publication of this frightening novel, some companies and other organizations were influenced by the fictional surveillance society and started to realize the significance of watching people as if they had followed Big Brother 's world in Nineteen Eighty-Four, which monitors citizens by "telescreen" so that the government can watch what the citizens are doing at any time. According to Draper, for example, an American company released the first commercially available Closed Circuit TV system (CCTV) in 1949. Two years later, in 1951, Kodak introduced its Brownie portable movie camera to an awestruck public. It could be said that this is the turning point of how people were watched: from face-to-face, to electronic devices. Additionally, companies such as Kodak, YouTube and Amazon exploited a burgeoning surveillance camera market and obtained a profit by manufacturing electronic devices. Therefore, the intention of companies' yielding profit contributed to creation of surveillance society. This is how the surveillance society in our actual world has been created.

There seems to be a lot of merits to make use of cameras to strengthen the security and public safety to prevent disasters from happening. From the viewpoint of citizens, however, how should this matter be considered? According to Draper, today more than 2.5 trillion images are shared or stored on the Internet annually, to say nothing of the billions more photographs and videos people keep to themselves. Due to that, some companies have failed with the use of Social Network Service (SNS). Bgr media (2018) reported that "the personal data of nearly 50 millions" Facebook users was left exposed online for anyone to access. This failure scared users of Facebook with the possibility that their personal information or images could be shared or misused by unknown people. Thus, the electronic eyes – cameras and SNS – produce both beneficial and potentially horrific situations for citizens.

The second issue is the digitization of managing people. When we start working at a company, we are generally asked to submit our information such as name, e-mail, home address, phone number, family information, etc. The personal information is then kept on an employer's database. People think that this is usual way of managing workers with no doubt. How is the matter considered if the case was in the following? As the number of crimes by children in the UK rose, as Garrett pointed out, information technologies system, which manages "children and young people who are at risk of offending," were introduced: The Connexions Service (62-64). He additionally explained, from August 2001, children between the age of 13 and 19 were issued with a Connexions Card. This is an identity card issued for 2.4 million young British people. The card can be used to monitor and check attendance on courses, pay for education-related expenses and earn 'points' following the completion of training, education or voluntary work. It could be said that this method of managing children using a chip embedded in a card, reminds us of the perfectly controlled society of Orwell's in Nineteen Eighty-Four. In the world of Nineteen Eighty-Four, people who conspire against their autocratic state disappeared suddenly. The digitization of managing people would be one attribute of our actual world changing into a world where people are scared of being watched.

This chapter analyzed two modern issues related to surveillance. Originally, surveillance systems were made for protecting people from threats to society. At the same time, however, it is certain that people are afraid of over-advanced technology. Governments or even companies should not lose sight of the negative facets caused by technology for the sake of their benefits, or with a simplistic and short-term idea. We ought to consider these issues with a long-term view. The next chapter will explore another serious issue, which is considered as one big component of the negative results of technology: Identity Crisis.

Chapter 1-3: Identity Crisis

The section explores another social issue: Identity Crisis of humanity. I will examine this particular issue as pertaining to the Internet. I will briefly refer to the history of the Internet and how it became indispensable for supporting human activities. Then, I will examine characteristics of Social Network Sites (SNSs), which allowed people to communicate online even though they are remote from each other in order to consider reasons why SNSs attract people and how it changed the form of communication. Lastly, I will investigate Identity Crisis, which is supposedly caused by the Internet with the example of Twitter and the propaganda by the media in order to

understand how people are taken themselves over by the Internet.

I will briefly describe the history of the Internet. According to a D.C.-based politics writer, Fitzpatrick (2017), the Internet traces its roots back to 1962. A scientist from Advanced Research Projects Agency (ARPA) and Massachusetts Institute of Technology (MIT) suggested the creation of the Internet system (later referred to as ARPAnet) that connected computers in order to have computing and science power superior to that of the Soviet Union. After that, scientists and engineers in the U.S. successively developed Internet systems, which made it possible for people to communicate with each other, deal with business matters, as well as many other human activities. In addition, the advent of smart phones that could connect to the Internet has contributed to human activities. People are able to deal with their activities with just one small device. Two of the most notable mobile phone companies are Samsung and Apple. As soon as both companies announced smart phones, people immediately started to utilize them. It is commonly assumed that smart phones led to human activities being more effective than before it was developed. The development of applications is also closely related to successes of smart phones. It allowed people to install applications designed for many purposes through smart phones. Thus, the Internet entirely has changed human's lives.

One of the most remarkable achievements of the Internet is the creation of Social Network Sites (SNSs). People formed their identity through websites in order to inform their existence, discuss issues with others online, and even make friends with people they had never previously known. As for the definition of SNSs, scholars of social media Boyd & Ellison (2007) explained "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system"(211). As they explain, SNSs are the place for people interacting with others, communicating online and doing their activities through the sites. For specific people who rely on SNSs, online communication with others might be an easier and more effective way than face-to-face communication. Thus, the Internet has provided people with innovative systems and continues to develop constantly. Despite its convenience and contributions, the Internet has also had negative influences on people.

SNSs often have negative effects on people if misused. Despite being invented by intelligent, well-meaning people, smart sites such as Facebook and Twitter have been involved in their fair share of misuse. Recently, we have seen news stories about teen cyber bullying, the miscegenation of fake political news, and data leaks putting the

personal information of these sties' users at risk. According to a scholar of science, technology and innovation studies Ingram (2018), in the case of Facebook, most recently it was reported that the company inadvertently was responsible for data leaks of up to 87 million of the site's suers. Such leaks often lead to information being exploited by anonymous online criminals. The news frightened many users of SNSs and became a highly controversial incident. The CEO of Facebook, Mark Zuckerberg had to answer questions from the press for nearly an hour after it happened. Before analyzing the identity crisis deeply, it is necessary to understand how technology affects identity of people in cultural, social and political contexts. As mentioned, new technology such as SNSs are intimately related to different fields of human activities in both beneficial and detrimental ways. I will examine the relationship between people's identity and SNSs in the era of information technology.

I shall confirm the meaning of 'identity' to be clear when I analyze identity crisis. According to a Turkish businessman Mustafa (2006), 'identity' is defined as "a constitution based on the recognition of familiar and shared derivations" (37). In other words, it could be said that identity is a sense of belonging to one group with ideas shared and created by each person in the group. In a globalized world with ICT, the method of people's forming and feeling their identity has been transformed by ICT. To be more precise, there are many people, who discover their identity in SNSs. Twitter is one of the representative SNSs and it is a clear example to explain why people find their identity with technology. When we utilize Twitter, we are required to register our own account with User ID, which identifies the person on Twitter. One of the remarkable advantages of SNSs, as symbolized by Twitter, is that users can gain information, deliver their views, and communicate with friends through online chat anonymously. Its anonymity makes users feel their identity: a sense of belonging to one group without a specific personal information: name, age and information. Users do not have to expose their real name. They can pretend to be totally different personality online. The situation is contradictory in that it is possible for users to hide who they are when using SNSs. However, they create online communities through group chats on Twitter, which would lead to creation of identity for users. For instance, in terms of making friends, perhaps, one might reckon that online chat is easier and more effective than meeting people, chatting only for a few hours, and then making a promise of contacting next time. The latter way requires more time to make friends. Thus, the convenience of SNSs in terms of making and interacting with friends causes the identity crisis.

Another symbol of identity crisis is the propaganda of media. People witness a great amount of news through SNSs, and they are apt to trust them, not doubting its

credibility. The propaganda by media may be crucial to international events. Brexit is one example. A researcher on social media Drainville (2016) explained that the UK Independence Party (UKIP), one of the two major players, which became involved in the leave campaign, has been reportedly criticized for their deceptive movement to lead people's decision on Brexit to Leave. They reportedly created fake billboards depicting long queues of brown-skinned migrants, as if to imply that these immigrants had crowded into the UK. However, it was not completely the truth. Drainville reported that they actually had moved from one border to another in Slovenia. UKIP created the fake billboard to agitate people and to frighten them of the immigration issue. In regard to the actual case about Brexit, it must be noted that being skeptical about the information or images from media is essential. As seen in the Brexit case, propaganda in the media has the power to make people change their thoughts. Accordingly, I discovered characteristics or SNSs' negative effects on people: in brief, SNSs often function to both restrict people's ideas, and discourage them from forming their own ideas. Instead, people would come to follow the propaganda disseminated by the media. The restriction of people's idea symbolizes identity crisis.

This section explored the negative aspects of the Internet, focusing on Identity Crisis. Some people find their identity in not real world, but SNSs, which might cause them to lose their real identity. Then I discovered another serious issue, the propaganda of media towards people. People gain and trust information through SNSs, even though the information lacks credibility. These two issues restrict people's feeling. If propaganda spread more seriously, our world might turn into the world where people are forced to feel no more than single idea as the world of *Nineteen Eighty-Four* indicated.

This chapter explored the negative affects inherent in a worldwide, technology-centered society. As mentioned, two modern issues, Surveillance Society and Identity Crisis, represent world degradation caused by modern technology and they are issues severe enough to make us consider technological ambivalence seriously. Now that I examined how massively modern technology has created negative issues in our present society, we need a comprehensive provision towards the possible risk of modern technology. In other words, it is necessary to examine our postmodern world in a technology-centered society. Examining Philip K. Dick's works will absolutely reveals clues to consider our postmodern world. Dick is a postmodernist American SF writer who often criticized societies with over-advanced technology. Therefore, the next chapter explores Dick's philosophy, investigating his two works, *Minority Report* and *Do Androids Dream of Electric Sheep?*.

Chapter 2 Philosophy of Philip K. Dick

Chapter Two focuses on the analysis of the philosophy of American SF writer Philip K. Dick in order to consider the post-postmodern ideas in a technology-centered society from the 21st Century's view. I will clarify the meaning of 'post-postmodernism' before beginning the analysis. After clarifying it, Dick's brief profile and background will be introduced. Then, I will closely examine two works of Philip K. Dick: *Minority Report* (1956) and *Do Androids Dream of Electric Sheep*? (1968) in order to acquire a better understanding of Dick's philosophy on postmodernism and apply his futuristic ideas to the post-postmodernism.

Chapter2-1 Post-postmodernism and Philip K. Dick

It was observed in the preceding chapter that a new type of disastrous incidents caused by the modern technology have been occurring in our actual world in the 21st century. It is entirely fair to say that these facts should not be discussed along with postmodernism because the idea, postmodernism, is incapable of describing these high-technological disasters any more. In other words, our world shifted to the next period: post-postmodernism as modern technology has appeared. Therefore, it is necessary to verify and examine the ongoing idea: post-postmodernism.

Firstly, I investigate postmodernism in the thesis so as to make clear possible factors of post-postmodernism's reaction against postmodernism and discover a definition of our post-postmodern era. When it comes to treating the temporal concepts such as modernism and postmodernism, we need to understand 'paradigm shift,' which is transition from one period to the next. Oxford Dictionary of English (2005) defined the term, paradigm shift as "a fundamental change in approach or underlying assumptions." More concretely, postmodern theorists Best & Kellner argued (1997) "we are currently between the modern and the postmodern, in an interregnum between paradigms, experiencing the breakdown of modern theory, culture, and society and the emergence of new postmodern forms" (52). To be more precise, there are many reactions, in the fields of culture, politics, economics, and many other social aspects, towards modernism from postmodernism, and the modern theory should be shifted to the new postmodern forms. Thus, it seems reasonable to suppose that there are factors in a postmodern world, which create reactions. These reactions argue that the postmodern world should be shifted to the post-postmodern world in the 21st century in the same method as the modernism was shifted to the postmodernism. We have to keep this understanding of paradigm shift in mind to understand the background of transition between periods.

With regard to historical aspect of the term postmodernism, according to Brooker's *A Glossary of Cultural Theory* (1999), 'postmodernism' was first used in an individual context in the late nineteenth and early twentieth centuries. The term has included elusive meaning in its range of reference. The term, postmodernism, is meant to describe the difficulties of definitions, which can be exaggerated, and which are seen as a symptom of the mood or condition of indeterminacy (202-204). In addition, a Marxist political theorist Fredric Jameson (1991) argued, "It is essential to grasp 'postmodernism' not as a style, but rather as a cultural dominant: a conception which allows for the presence and coexistence of a range of very different'' (56). As indicated in the previous chapter, moreover, nowadays each culture all over the world has been transformed at a tremendous speed by the advent of modern technology. It could be assumed that the variety of modern technology is one of the crucial components, which accelerates cultural mutation.

Bearing these ideas on postmodernism in mind, it is significant to understand the indeterminacy of the definition of postmodernism and take it into account from the viewpoint of cultural mutation. For that reason, it is possible to define post-postmodernism as any circumstances in the 21st century world, which might transform its form depending on bustling cultural mutation through modern technology. Therefore, it is significant to have awareness that our world has entered a new era called post-postmodern era, which continues to change all the time because of the fast-developing modern technology.

Philip K. Dick is one of the postmodernists, who inspired my ideas of post-postmodernism as mentioned above. Therefore, it is certainly worth examining his postmodern philosophy. I will briefly describe his profile and background as a writer in order to grasp his intention to write postmodern SF works. *Oxford Dictionary of English* (2005) defined the term 'science fiction' as "fiction based on imagined future scientific or technological advances and major social or environmental changes, frequently portraying space or time travel and life on other planets". Dick is a visionary SF writer renowned as award winning author of more than thirty novels. Some of representative SF films such as *Minority Report*, *Total Recall* and *Blade Runner* were adapted from Dick's works. These films affected or still have affected people with sophisticated visual effects and above all with Dick's creative way of plot development.

With regard to his method of novel writing, Dick had an eccentric approach. In an interview with DePerez (1976) in *Science Fiction Review*, Dick explained his reasons for his creative writing, when asked about LSD (lysergic acid diethylamide):

I'm very optimistic about it. I think it's gonna be a really exciting thing. And although I put down drugs, and I certainly don't recommend that anybody take them, I think that some of the people who took LSD experienced a little of this. And I think that there was certain validity in what, like, Huxley said about the doorways of perception....There is another reality very close, that's impinging on our reality, and will probably very soon break through to our reality. Either we will break through to it, or it will break through to us.

Although Dick experienced some delusions due to the use of drugs, it seemed that he regarded the use of LSD as a tool to enhance the creativity and make up his original world. Considering his ideas on the drugs, Dick has a distinct method of perceiving world values among other writers, and it could be said that his strange background and mind strongly affects his novels. In addition, it seems that Dick believed the plurality of reality, which precisely means a single reality does not exist. Therefore it could be assumed that he created his works based on these notions.

As seen through his novels, the targets of Dick's criticism are intended for philosophical, social, and political themes, with stories dominated by monopolistic corporations, alternative universes, authoritarian governments, and altered states of consciousness. One more characteristic of Dick that could be inferred from his remarks is that Aldous Huxley might influence Dick and his thought as he referred to Huxley. In Huxley's book, *Brave New World*, which was published in 1932, there is a drug called Soma. It makes people feel happy in an autocratic regime. People in the world can escape from reality if they took the drug. Consequently, it could be assumed that Dick perceived the world differently with the power of drug, having been influenced by Huxley's philosophy. Even though I mentioned Dick used drugs as a tool to enhance his creativity, the use of drug does not underlie the notable discovery in this section. It is more significant to concentrate on Dick's perspectives on how the world should be observed. That is to say, it could be assumed that he believed there is no determinate world and perceived the world from the perspective of pluralism.

In this section, I analyzed one theory, paradigm shift, and postmodernism in order to uncover the insight on post-postmodernism. I demonstrated that postmodernism is no longer capable of describing our technology-centered society because of cultural mutation influenced by modern technology. Thus, we are required to regard our world according to the new periodical notion, post-postmodernism. Next, I analyzed Dick's philosophy and his unique recognition of the world. It seems that he was aware of the notion that reality exists in plural. Accordingly, it is obvious that his works represent the philosophy of Dick. Therefore, the next section will explore Dick's criticism through his two works, *Minority Report* and *Do Androids Dream of Electric Sheep?*, and his creative insight through his works to examine our post-postmodern world, taking Dick's eccentric approach into account.

Chapter 2-2 Minority Report

This section explores, one of the short stories by Dick and especially focuses on the analysis of the surveillance society in the novel in order to compare the surveillance system in the near future in the novel with our current surveillance society as I discussed earlier. By comparing these two, it will provide clues about how we should face the technology-centered society and its post-postmodern world.

Firstly, I will describe the historical background of the middle 20th century in order to infer Dick's background of writing *Minority Report*. The era, in the middle of the 20th century, when the novel was published was a transitional period to the postwar period filled with the aftermath of prevalence of despotism. In Germany, the Nazis led by Hitler oppressed citizens, controlling people for realizing the dictatorship until the end of WWII in 1945. Even after the WWII, the Soviet Union exercised authority over citizens in the form of authoritarian socialism until its collapse in 1991. Considering these historical facts, it could be assumed that the existence of autocratic regimes in the real world, as seen in the examples of the Nazis and Soviet Union, is closely related to one of the backgrounds of Dick's intention to write *Minority Report*.

Next, I will briefly describe the plot of the 1956 short-novel, *Minority Report*. Crime is virtually eliminated thanks to the predictive system "Precrime." Society uses three gifted humans (called "Pre-Cogs") with special powers to see into the future and predict crimes beforehand. The Protagonist, John Anderton, heads Precrime and believes in the system's flawlessness steadfastly. One day, however, Anderton sees the prediction that he will commit a murder himself. To make matters worse, Anderton does not even know the victim that he is supposed to murder. He decides to investigate the mystery's core by finding out the 'minority report', which could be made by one pre-cog out of three. In analyzing this novel, I concentrate on two themes: authority's exploitation of people and the social mechanism in surveillance society.

Before examining the two themes it is necessary to explain the Precrime system. In the novel, there is a unique surveillance system, which prevents major crimes from occurring in the society. The protagonist, John Anderton, is the inventor of the seemingly flawless system. The three pre-cogs, which possess special ability, see a quite limited span into the future, one or two week ahead at the very most. Much data would be discarded but the remainder would be essential materials for the system. It is passed on to the appropriate agencies and they in turn trade data. The data of the suspects are collected automatically, chosen by the machinery. Most of the remainder record petty crimes: thefts, and income tax evasion. In addition, actual murder or treason seldom happens. After all, culprits know they would be sent to the detention camp a week before they have a chance to commit the crime. We can see how society is being kept safe thanks to the system as the conversation between Anderton and his assistant, Witwer, indicates:

"When was the last time an actual murder was committed?" Witwer asked. "Five years ago," Anderton said, pride in his voice...."One murder in five years." Witwer's confidence was returning. "Quite an impressive record... something to be proud of." Quietly Anderton said: "I am proud...." (74)

As seen in the conversation above, the last time that a crime in the society occurred was five years ago. If it existed in our actual world in 2001, the system could prevent the terrorism incident, 9.11, from happening and, in general, reduce number of crimes in society. However, in fact, police or other organizations did not have such an innovative surveillance system in our actual world, and they could not prevent people from scheming to commit a crime in those days. Even if our world had an innovative system, which detects weapons or something harmful on human beings to prevent terrorism from happening beforehand, we have not achieved the development of the Precrime system yet. Although it seems a splendid system, it looks weird that the suspect who is arrested by the system would be sent to camp, without actually committing a crime. They are called "would-be criminals.' This is the very opposite feature to the principal of law in our actual world: presumed innocence. Considering the Precrime system from a perspective of presumed innocence, it is obvious that the system completely ignores human rights, for the sake of aiming to reduce the number of crimes.

I examine the first theme: exploitation of the Precrime system for power authority. To tell the denouement of the story, Leopold Kaplan, General of the Army of the Federated West Bloc Alliance, manipulated the system in order to get his power back. As told in the summary of story previously, the Precrime system expects that Anderton would murder Leopold Kaplan, who he did not know at the time. Then, Anderton doubts the system is flawed. Thanks to the system, there was no need for the army to exercise control over society. Kaplan lost power due to the invention of the Precrime system.

As for someone losing power, I discover Dick's inclination to depict downfalls psychologically and physically when he criticizes a power holder or an authority that exploits highly developed technology system. It is clear that the Precrime system is a source for Kaplan to regain his power. It could be assumed that the psychological tendency of Kaplan depending on manipulation of the system is possibly connected to the notion of instrumentalism advocated by Heidegger. Heidegger said that Instrumentality is regarded as "the fundamental characteristic of technology" (12). He also insisted that we utilize technology for revealing reality, not as a means (12). In the case of Kaplan manipulated the Precrime system to regain his power (escaping from the Precrime system), and bend it to his benefit. It is totally different from the meaning of technology's existence, which was beyond Heidegger's meaning.

Another factor of causing exploitation of technology is the difference between pre-modern technology and modern technology. Technology such as making a fire and fishing handled by ancient people could only be used for simplistic purposes. On the other hand, the modern technology such as computer and Internet could be used for several purposes and they have capabilities to change situations dramatically for good or bad. Therefore the capability of modern technology might become the inducement for people to exploit modern technology that could be used for several purposes.

The next theme that I argue is social ideology resulted from propaganda in surveillance society. In the society in *Minority Report*, it could be assumed that citizens in the society are unconsciously obliged to trust the Precrime system in the form of ideology. Here is one scene at the end of the story: "Anderton listened idly, only half-hearing the words. The crowd, however, listened *with great interest*. General Kaplan was now gathering up a summary made from the minority report. He explained what it was and how it had come into existence" (99, italic use my emphasis). This scene indicates that citizens are interested in the result of the minority report announced by Kaplan, getting relieved that they are safe because of the Precrime system. People do not doubt the meaning of the existence of the Precrime system. Consequently, the situation that people completely depend on and even enjoy the existing technology system could be a result of the situation that citizens are steeped in ideology.

What are possible factors of the creation of ideology? Assuming that there are two organizations depicted in *Minority Report*, the army and police, which are in charge of securing the society, it could be inferred that social dominant classes such as government and police are strongly related to the factor of ideology. Kaplan wanted to

get his power back after losing his power. As a result of his arrogance, he manipulated the system so that he could regain his power by proving the flaw of the Precrime system. On the other hand, policing organization is also involved in the creation of ideology even though they did not engage in fraud. The Precrime system was considered a flawless system. However, authorized person or group could have an access to the system. This privilege of access by people in a high position is the symbol of the totalitarian society, which diffuses the dogmatic ideology by forcing citizens to trust the Precrime system. Therefore, the stereotype that the Precrime system is the only method of protecting citizens in the society is misled ideas prevailed in the society. In other words, the absolute one-way mechanism by authoritative organizations as seen in the story such as the existence of the Precrime system without an enough understanding of citizens could be one of the factors of creating ideology.

Considering these analyses of ideology in *Minority Report*, Dick meant to warn people of the danger of the situation that people are propagated, which would lead to the creation of ideology, and the established regime, of which people are not skeptical, and the situation that propaganda (i.e., the Precrime system itself) turns into ideology (i.e., the situation people depend on the system) would transform the mechanism of society into dystopia, where people are controlled under an autocratic government.

I have examined two themes: exploitation of people for authority and social ideology in surveillance society so as to probe Dick's philosophy towards the use of modern technology and people's mindset to modern technology. The novel, *Minority Report*, is worthwhile in that it not only prompts us to consider the unique technology system, the Precrime system, as an entertainment, but also cautions that it might bring a disaster if citizens in the society were relieved of the existing system, without skepticism. I will examine the relationship between Dick's philosophy and our world's situation more closely in the Chapter Three. The next section explores another work *Do Androids Dream of Electric Sheep*? with the theme: identity crisis in order to examine Dick's ideas on identity and its influence on our actual world.

Chapter 2-3 Do Androids Dream of Electric Sheep?

The purpose of this section is to investigate another one of the most influential works of Dick: *Do Androids Dream of Electric Sheep?* in order to examine two themes discussed in the novel: utilization of the machines, the Empathy Box, and the loss of individual identity. Before analyzing each theme, I will introduce the story of the work in brief and infer Dick's intention of creating the story by researching the background of the time when the work was created. After gaining enough understanding of the work, I

will begin in-depth analysis of these themes in order to consider the lessons of identity issues in the society, which possesses highly developed robots with a human appearance, namely androids and apply my analysis to our post-postmodern world.

I will introduce the brief outline of the story: In post-apocalyptic world in 1992, after "World War Terminus," the Earth's dirty atmosphere leads the United Nations to encourage mass emigrations to colonies in other planets to preserve humanity's genetic integrity, with the incentive of free personal androids, which is a robot servant identical to humans. On the Earth, owning real live animals is a status symbol, because of mass extinctions and the cultural push for greater empathy that has motivated a technology-based religion called Mercerism. The poor can only afford realistic-looking electric animals. Mercerism uses the Empathy Box, which links users simultaneously to a collective virtual reality of communal suffering. The protagonist, Rick Deckard, is a bounty hunter whose job is responsible for killing androids that escaped from colonies on the other planet. He meets Rachael Rosen, who is one of the Androids. Deckard becomes confused about his true identity, and humanity's identity, especially between humans and androids.

I infer Dick's incentive to create the novel, with the example, The Black Power Movement, analyzing the Black people's action to discover their racial identity. The analysis will provide me with the validity of examining the themes in the novel. According to a scholar of study of race Joseph (2009), in 1960s there was social and political movement called The Black Power Movement, which emphasized racial pride, self-sufficiency, and equality for all Black and African people. The movement existed alongside civil rights struggles of the 1950s and early 1960s. (752-755) Black people who joined the movement attempted to prevail civil rights and, it radically altered the structure of American democracy in the postwar era. It is commonly assumed that the movement was a watershed in the history of America in that people sought their identity in the period of postwar by taking actions. At the same time, it is certain that the movement created a sensation of what identity is. Consequently, the period of the postwar with the movement of seeking identity in the U.S possibly inspired Dick to write the novel in 1968. Next, I will explore two themes: utilization of the machine, the Empathy Box, and the loss of true identity in order to consider Dick's viewpoint towards identity and apply his idea to my analysis of identity issue which could occur in our post-postmodern world.

The first theme that I examine is utilization of the machine, the Empathy Box. The purpose of the analysis is to investigate how the use of a technological device affects human identities in both positive and negative ways. One of the main characters in the work, J.R. Isidore, who is called "special" (lowest class in the society), laments the devastated situation in the world with the story of "kipple," which is explained as "useless objects, like junk mail or match folders after you use the last match or gumwrappers or yesterday's homeopape"(52). He continues to explain, "No one can win against kipple," and then says, "the entire universe is moving toward a final state of total, absolute kippleization"(52). These remarks by Isidore exactly symbolizes that the remaining people on the deteriorated Earth believe firmly that kippleization will lead the world to the end of humanity. Contrary to the terrible situation, Dick depicts a religion called Mercerism, which saves people on the Earth by the technological device, the Empathy Box. The followers of Mercerism make use of the Empathy Box in order to transport their spirits into a spiritual domain, which allows them to fuse their feelings, with Wibur Mercer, and the other users. Moreover, as an American economist, Sims (2009) pointed out, Mercerism is "the remedy that humanity has created for itself to manage the destruction of its most sophisticated and powerful attempt at civilization and the dispersal of the remaining human population"(79). On the other hand, Buster Friendly, who runs a TV show called "Buster Friendly and his Friendly Friends," ridicules the Empathy Box and Wilbur Mercer itself through his show. In the end, he exposes that Mercerism is a completely fake and Wilbur Mercer does not even exist. The fact that the whole system of Mercerism was a fraud disturbed and provoked the viewer. Was the Mercerism essential for the remaining people even though it was completely a fabrication?

It is necessary to examine the justice of the system, which appears paradoxical, but still attempts to save human life: through the example of Mercerism, I will analyze the effects of technology systems in general. With regards to the significance of the existence of the Mercerism, Sims explained, "though Mercerism is exposed as fraudulent in the novel, it still works, and Dick seems to be saying that this is because in terms of the human experience the perception of reality is more important to the production of reality than reality itself"(85). In other words, Sims advocated that Mercerism and the Empathy Box became a medium in a sense where they created the virtual reality, which could be perceived by people, allowing people to experience the delusional ideal. One cannot readily believe, however, that the system of the Mercerism still works although the whole system collapsed because of the disclosure by Buster Friendly. It is essential that we take the Mercerism into account including its ambivalence, especially negative facets. To be more precise, we should confront or notice the fact: once the system on which people fully depend collapsed, the society or country would become devastated unless they possess alternative solutions. Besides, the world in the novel is such a situation as described. Consequently, it is imperative that we should be aware of the existing system we are engaged with a skeptical attitude.

The second theme that I examine is the loss of individual identity. Through the use of the Empathy Box, people are able to connect their spirit with Mercer and other users as mentioned earlier. As for the fusion through the device, this is what a researcher on communication technology Galvan (1997) explained the matter: "Technology thus drastically compromises an insulated human community in two ways: it separates the individual from human contact; but more significantly, it makes her dependent upon-addicted to the life of the machine" (418). In the case of the Empathy Box, the device dispossessed the individual identity of people by urging them to connect with others collectively. Moreover, highly developed technology such as the Empathy Box could be one of the factors that allow people to be complacent about the current situation. Hence, it could be assumed that Dick criticized the society addicted with modern technology. In addition, it is inferred that he demonstrated the risk of ideological system such as Mercerism. Therefore, it is essential that people be skeptical of the current situation in which we might be satisfied, with a solid individual identity.

This section analyzed two themes: utilization of the machine "Empathy Box" and the loss of individual identity. It revealed that both themes insisted it is necessary for us to be aware of the existing system skeptically, which might already affect us in the form of ideology. In addition, I criticized the ambivalence of technology in my analysis. Technology works for good or bad as seen in the example of Mercerism. This section analyzed the situation that people are satisfied with the existing system, and the possibility of the system turning into an ideology, which could be used to control people.

This chapter explored Dick's philosophy towards postmodernism through his works: *Minority Report* and *Do Androids Dream of Electric Sheep?*. Throughout these works, the analysis revealed the ideological mechanism of the technology systems. Ideology, especially closely tied with modern technology, carries the risk of blinding people to the flaws of systems. Now that I examined Dick's works, the next chapter investigates Dick's philosophy more closely, focusing on common themes or Dick's consistent ideas throughout his life and books in order to predict the future of the post-postmodern world and analyze the relationship between human and technology.

Chapter 3 Relationship between Humans and Modern Technology in Our Post-postmodern World

Chapter Three examines our post-postmodern world in a technology-centered society by examining Dick's philosophy. Now that I examined two works of Dick in the previous chapter, it is necessary to demonstrate significant insights on our post-postmodern world from his philosophy. It is essential, moreover, to reveal how people should coexist with modern technology in the post-postmodern world in the 21st century. Firstly, I will examine common themes through Dick's works in order to probe consistent ideas of Dick himself. Secondly, I will apply Dick's philosophy to our imagined post-postmodern world. Lastly, I will demonstrate a relationship between humans and technology.

Chapter 3-1 Common Themes and Consistent Ideas from Dick's Works

In this section I examine common themes and coherent ideas that Dick implied through two of his works: *Minority Report* and *Do Androids Dream of Electric Sheep?*. As the previous chapter provided a deep understanding of the background of Dick and his works, it is significant to infer what Dick coherently criticized through his works. The analysis will bring lessons or indication from Dick's view to our post-postmodern world and offer constructive relationships between humans and technology. Firstly, I will analyze common themes through which Dick implied in his works in order to grasp his overall ideas. After the analysis, I will begin investigating each theme closely.

The first common theme is the ambiguity of the ending in the story. A scholar of postmodern literature Vest (2009) argued, "Dick's unresolved resolutions and ambivalent narratives repeatedly demonstrate that his characters cannot successfully embrace or enact the humanist values of individuality, self determination, and personal freedom for which they strive" (197). As Vest indicated, Dick offered readers the opportunity to imagine the story after his unresolved ending. Thus it is worth investigating Dick's style of writing, especially method of writing the ending, in order to discover themes and his postmodern ideas with his imaginative insight into the future. As for *Minority Report*, the story ends with a conversation between the protagonist, Anderton and his subordinate, Witwer:

Anxiously, Witwer trotted along beside the truck, his smooth, blond face creased with worry. "Will it happen again? Should we overhaul the set-up?" "It can happen only in one circumstance," Anderton said. "My case was unique, since I had access to the data. It could happen again — but only to the next Police Commissioner. So

watch your step." Briefly, he grinned, deriving no inconsiderable comfort from Witwer's strained expression. Beside him, Lisa's red lips twitched and her hand reached out and closed over his. Better keep your eyes open," he informed young Witwer. (101)

After Anderton shot Kaplan in order to keep the Precrime system, the incident ceased. In the ending as seen above, Witwer is curious about the possibility that the incident schemed by Kaplan, namely the fraud of technology system, would recur. In addition, Anderton ambiguously replies to Witwer, "It might happen to you at any time." If the story would have a clear ending, it could be assumed as following: the Precrime system collapsed or was transformed after the fraud. However, the ending in the story indicates people in the society still believe that the system would continue to exist, without mentioning the justice of whether the system should disappear or keep existing. It is one of the remarkable characteristics of Dick's writing that he ended the story with ambiguity.

How does the other work *Do Androids Dream of Electric Sheep?* end? It also ends with unclearness. It ends with chatting between Deckard and his wife, Iran. Deckard settled his mission to kill androids and he was acclaimed as the best bounty hunter on the earth. Then, he experienced delusions regarding Mercerism as the following conversation between Deckard and Mrs. Marsten, a secretary of Deckard's boss, shows:

"I had the absolute, utter, completely real delusion that I had become Mercer and people were lobbing rocks at me. But not the way you experience it when you hold the handles of an empathy box. When you use an empathy box you feel you're with Mercer. The difference is I wasn't with anyone; I was alone." "They're saying now that Mercer is a fake." "Mercer isn't a fake," he said. "Unless reality is a fake." (185-186)

Deckard experienced a peculiar illusion and insisted Wilbur Mercer was not a fake even though Mercerism was fraud. Deckard advocates abstract idea in the conversation: "Unless reality is a fake" contrary to the fact that Mercerism was a fake. Moreover, there is a difference of perception of the reality between Deckard and Mrs. Marsten. Unlike Deckard, Mrs. Marsten sincerely accepts the fact that Mercerism was a fraud. On the other hand, Deckard supposes that there is another reality even though it was a fake system. Thus, Dick argued the possibility of plural realities and indicated it is up to readers which reality to take. The unclearness of the story ending makes readers consider more actively and critically.

As seen in both works, Dick ended each story with an ambiguous and abstract story plot. Regarding the ending of *Minority Report*, the fraud would have happened if the system still continued to exist. Or it could be considered the Precrime system would manipulate people in society, with its autocratic method of arresting people and securing the society. Dick provided readers with the opportunity to deeply consider themes he implied with not passive, but positive and skeptical attitude. Therefore, it is obvious that the ambiguity of the story ending is one of the rhetoric that Dick utilized. Besides, it is certain that the positive and skeptical attitude that Dick offered could be applied to the method of our considering the state of our post-postmodern world.

Secondly, I argue the next theme: The ideological technology system, in order to examine the factors of these technology systems, which drive society to transform itself into uniformity. Generally speaking, it is obvious that human society in the 21st century fully depends on modern technology. The more sophisticated technology develops, the more society relies on modern technology. Dick is one of the postmodern writers who criticized the negative effects of the development of society, concentrating on the by ideological technology possible risks caused systems. Hence, our technology-centered world could acquire the perception of risks in the long run in utilizing technology by investigating the relationship between technology and ideology with Dick's postmodern insight. Therefore, I will analyze the characteristics of ideological technology systems from his works.

In *Minority Report*, there is a unique system with highly developed and sophisticated technology called Precrime System as mentioned in the previous chapter. I analyzed the situation in which people are relieved of the technology system and demonstrated the risk of creation of ideology derived from propaganda. Reviewing the original meaning of ideology, as Brooker defined, the term means "both as a fixed set of ideas and as a process whereby the partial views of a ruling class come to hold sway over the whole of a society"(133). Although the meaning of ideology could be defined from the perspective of various fields, Brooker's definition in terms of class, is appropriate for applying to my analysis, for the existence of hierarchy is possibly one of the themes that Dick argued. Keeping the definition of ideology by Brooker in mind, it is natural to regard the Precrime system as an ideological system created with the intention of dominating and controlling society by the dominant class, namely official organizations such as police and government in the novel. The social ruling class manipulates people in the society, blinding them to the risk of the ideological system on the pretext of protecting people from the fear of crimes beforehand.

The analysis in *Do Androids Dream of Electric Sheep*? in Chapter 2-3, revealed that the utilization of the machine, the Empathy Box, facilitates the loss of individual identity. I argued that with regard to the use of the machine, the religious system, Mercerism, which promotes collective spirit through the machine, is one factor of creating the ideology. Sociologists Gareth & Hughie (1992) discussed the matter on ideology and appropriation of technology. They illuminated the possibility of technology to form the users' individual identity with the example of personal computer (PC), which is one of the modern technologies. (PC provides users with multiple purposes unlike another technology, railroad. Railroad is a medium for transporting people between places. On the other hand), PC has much more complicated system, which enables people to utilize it for multiple purposes. They insisted that the use of PC allowed users to project their individual identity on the world they experienced through the PC (705-708).

This assertion of Gareth & Hughie could be an antithesis if the PC is replaced with the Empathy Box, which is more highly developed technology. While PC allows users to create their own identity in a way they wish, the Empathy Box forces users to join the spirit with Mercer collectively in virtual reality in order to share feelings with others. As for sharing feelings with others, the crucial difference between PC and the Empathy Box is how free they share with others. As mentioned, PC users can create their identities in a way they prefer as opposed to the way of the Empathy Box. On the other hand, it is possible to argue that the Empathy Box is intended to confuse and replace users' identity by providing them with the collective connection of spirit with Mercer's attempt to control citizens in an ideological method in order to maintain the decadent world. These examples of ideological high-technology systems in these two works are symbols of what Dick envisioned and foresaw towards the unpredictable future. It is obvious that he was well aware of threats that technology might cause and cautioned people to consider the social mechanism and surroundings of technology with a skeptical attitude.

This section examined two themes: the ambiguity of the ending in the story and ideological technology system in order to demonstrate Dick's common messages and philosophy for applying his ideas to the post-postmodern theory that I will illuminate in Chapter 3-2 and 3-3. The analysis impressed upon us the necessity to consider the future with skeptical foresight. The next section will investigate more closely our post-postmodern world with Dick's philosophy.

Chapter 3-2 Insight on Our Post-postmodern World

The purpose of this section is to probe our post-postmodern world by applying Dick's postmodern ideas when I investigate our future society, which might be developed into more highly advanced technology-centered society. I will utilize Dick's consistent ideas through his novels and his postmodern ideas and compare them with the situation in our present world in order to acquire insight on post-postmodern world. In addition, I will analyze social reactions to the period after Dick created his novels between 1950s and 1960s: when he envisioned the upcoming transitional period from modernism to postmodernism through his sci-fi stories, focusing on the relationship between modern technology and ideology. Lastly, I will demonstrate insight on ongoing post-postmodern society by investigating factors, which inspire society to transform social mechanisms with development of technology.

The last chapter clarified Dick's coherent ideas through his novels. By analyzing Dick's philosophy I demonstrated that it is essential to consider our current society with a skeptical attitude. Moreover, I infer from my analysis that he criticized the ideological technology system, concentrating on depicting the characters' dilemma caused by highly developed technological society and its ambivalence. What ideas of Dick can we apply to the theory of post-postmodernism? As a key to grasp the point of the question, it is indispensable to clarify our world's reactions to the future periods. After making clear the reactions, I will consider the post-postmodern world with the philosophy of Dick.

With regard to one of the modern breakthroughs in the field of modern technology, current A.I. has contributed to the worldwide prosperity, especially taking place in a wide range of scenes from official occasions (i.e. politics, business, and economics) to daily lives (i.e. People's use of Internet and integrated circuit card). A.I. made human activities dramatically more efficient with an automatic process by the computer system. As seen in the term itself, A.I. is artificial computer system that allows people to accomplish their purposes more easily. While the innovative system has prevailed in the world and assist people's lives, there is an argument on the relationship between A.I. and its ideology these days. By investigating this representative of highly developed technology, I will clarify reactions of the current society towards the post-postmodern world.

A scholar in Economic History, Anton Howes (2015) argued the matter of A.I. related to ideology. He exemplified "deep learning," one of the component skills of A.I., as a means to discuss the distinction between human activities and A.I. related to ideology. Howes discussed the feature of deep learning: it learns like humans do. When people perceive new experiences, they learn through the process of trial and error.

Howes insisted that people receive a vast amount of data and filter it based on their hypotheses and conjectures. In the case of deep leaning, on the other hand, people are required to encode the filtering system on A.I. to deal with enormous data. He claimed that even if we could encode it, the encoding would "lead to certain hypotheses or conjectures" as he called them as ideologies. In other words, the hypotheses of the data filtered by A.I. could be only one answer for people in a way of forcing people to trust. This one-way method of dispatching information would root its credibility in people's mind: ideology. Moreover, he argued that while people are intuitively tossing out their conjectures, they spend energy to refute them. On the other hand, A.I. simultaneously discards a vast amount of data with its superior processing ability. Unlike A.I., people extrapolate from what they perceived. Assuming that A.I. processes automatically as Howes indicated, our world would be filled with ideologies provided by A.I. if people would keep trusting and depending on the computer systems, without realizing its addition, it might cause the uniform society, possible risks. In where modern-technological ideologies control people and constrain their mind. Considering these analyses of Howes' thoughts on A.I. and ideology, what reactions should be taken to the future? In order to prevent the uniform society from occurring, it is necessary that people have awareness of coexisting with modern technology. Otherwise, as indicated above, it would insidiously result in creating a mentally constrained society caused by modern-technology.

Next, I will compare technology systems of our actual world with Dick's highly developed technology system in order to extrapolate the post-postmodern social situation of our technology-centered world from these differences. As analyzed in the previous chapter, Dick depicted fictional technology society with highly advanced technology systems such as Precrime system and the Empathy Box. I discovered a feature of these systems: Dick focused on depicting a highly developed system as a stimulus to the creation of ideological society, where people are unconsciously forced to rely on the system. I reckon that the psychological movement, namely unconscious condition when people utilize technology systems, is one of the strongest factors, which would lead to the surveillance society in *Minority Report* or the identity crisis via fake virtual reality experience in *Do Androids Dream of Electric Sheep*?

I have reviewed Dick's viewpoints towards the postmodern situations with technology-centered society. How could the situation in our post-postmodern world be considered if modern technology continued to be developed? A British journalist Cornwell is one of the advocators who criticize the entire humanism crisis from a post-postmodern perspective. Cornwell (2018) discussed the ambivalence of modern

technology; ambivalence "between enthusiasm and skepticism, utopian dreams and dystopian nightmares". Cornwell adopted the theory of Marten Rees, a British cosmologist, in order to strengthen his theory. According to Cornwell, Rees argued the characteristics of contemporary capitalism tendency, exemplifying the story about A.I.'s takeover in place of humans. He especially concentrated on the A.I.'s marvelous function calling "machine imagination," which means "capacity to envisage future events, or moves, and their consequences at prodigious speeds and quantities of data" as cited in Cornwell. With regard to the function, Cornwell stated that "the future of self-learning systems, scaled up and applied to problem-solving in the real world, will lead, Rees warns, to the delegation, and ultimately takeover, of crucial decision-making to machines". In other words, Cornwell predicted the threats of machines such as A.I. would control people's minds in considering and determining decisions.

In addition to the A.I.'s takeover of human determinism, Cornwell criticized the social and political tendency, namely "Corporate and government short-termism and self-interest," blaming companies and government for the misleading society to creating uniformed, constrained, and controlled people by A.I. for the sake of their immediate benefit. As Cornwell predicted the risks of our future society, it is obvious that we must reconsider and question what our attitudes towards the use of modern technology should be. Moreover, it is imperative that we should consider our situation not just in the short-term, but also in the long-term. Consequently, our actual world should realize risks of high technology such as AI, which would cause a catastrophic situation; being taken over by A.I., otherwise machines would determine our future world.

I have analyzed the risks, regarding the use of modern technology, that the modern world would affect the future. I discovered the interrelation between Dick's ideas and the situation of modern world in terms of technological hegemony: modern technology would control people and society in both direct (i.e. surveillance system) and indirect (i.e. technological ideology) ways. Dick's ideas and his stories reflect the situation after technology would already have controlled people and society. These ideas warn us to consider the unpredicted future, doubting the current technology systems. On the other hand, the situation of our actual world is located at the transitional period. Hence, we are facing the imminent moment to seriously consider what our post-postmodern world is. Assuming that interrelation between Dick's ideas and the situation of modern world would be the clues in envisioning our post-postmodern world, it is apparent that we should understand the danger: we should realize the technological ideologies in utilizing modern technology with a skeptical mind.

This section examined the insight on post-postmodern technological world,

exemplifying A.I., representative modern technology in our world and compared Dick's ideas with the situation of our world. These examinations hypothesized that we are just in the middle of transitional period and interrelation between Dick's ideas and the situation of modern world in terms of technological hegemony provided the significant danger on our post-postmodern world: we should realize the technological ideologies in utilizing modern technology with a skeptical mind.

Chapter 3-3 Future Humanism in a Technology-centered World

The purpose of this section is to examine our future humanism, which means how humans should identify themselves in a technology-centered world in order to probe desirable relationships between humans and modern technology in the post-postmodern world. The last section revealed possible dangers in the post-postmodern world, based on Dick's philosophy. Now that it is established that we people should be warily aware of the existing technology system and its aspect of ideology, it is essential to investigate the ideal form of world where people would coexist with modern technology without their being controlled by the ideological technology. In the beginning, I will clarify the original meaning and its background of humanism in order to discover the crises or risks of future humanism. Then, after the analysis, I will examine the crisis of humanism making use of insights on post-postmodern world, which I mentioned in the previous chapter. Lastly, I will demonstrate a desirable attitude towards technology in a technology-centered world for the prosperity of our future humanity.

The term, humanism, is used as interdisciplinary term. The term also can be interpreted in different contexts. What does the term humanism stand for in terms of philosophical aspects? It is therefore necessary to clarify the meaning of humanism along with the realm of my study. Brooker defined humanism as "the term for a general philosophical view that places the human at the centre of the world; or, more specifically, sees inner being or the individual mind as the determinate source of meaning and action"(125). When it comes to the meaning of humanism, as mentioned earlier, it could be considered complicated term and used for wide-ranging fields of study. Pivoting around the facts that humanism possesses risks of crises, people have faced difficulties so far concerning humanism.

There is a view on a crisis of humanism from the perspective of different field of study. A scholar of geography, Andrew Baldwin (2017) dissented from the definition of humanism by Brooker. He described humanism from the perspective of environment stating, "Man possessed the capacity to control Nature. This belief figures centrally within genres of humanist thought in which the human is said to be unique amongst all

other living and nonliving entities" (2). Baldwin regarded humanism as existences, which possess power over nature. What is more, he described the crisis of humanism as, "nature is not simply available to human manipulation without consequence, but contains the ever-present capacity to overwhelm humans" (2). As Baldwin explained the crisis of humanism, people gradually possess less power over nature as people make use of them. For example, people have faced serious environmental issues such as the rise in the sea level due to the global warming and, drought and acid rain caused by the climate change. Bearing Baldwins' opinion in mind, humans have faced crisis since they have misused technology only with the intention to gain their benefits, sacrificing nature instead. Therefore, it could be said that Baldwin is criticizing selfish, arrogant and ignorant misuse of technology. Although people have confronted and dealt with these serious issues, is it actually true that environmental issues are main factors that threaten humanism in our post-postmodern world? In addition to the traditional opinion on human crisis, it is necessary to consider factors of the crisis of humanism from the perspective of modern technological context in order to examine future humanism along with the tide of technology-centered world.

In fact, modern technology such as the Internet, virtual reality and A.I., is becoming another major factor of the crisis of humanism as the world becomes digitized and cybernetic. Information technology such as media is one of the modern technologies, which has contributed to the development of human activities. At the same time, it is said that media technology is one of the possible factors that threaten the humanism. A scholar of sociology, Nicholas Gane (2005) argued the post-humanism, associating it with the theory of the media theorist, Friedrich Kittler, who advocated the primacy of technology. Gane cast doubt on the post-humanism, which has existed in the era of media technology. In the era called "new digital technology" (34) since 1990s, Gane offered the theme related to the cybernetic theory in terms of control. He mentioned Kittler's two grounds for his radical insistence: "there can be no fundamental division between technology and communication" (34) and "embedded within media technologies are power structures that elude the control of the user and configure the basis of communication from within" (34). In other words, the power structure that conceals the feelings of utilizing the technology from users confuses the division between technology and communication.

Moreover, Gane articulated that the physical minimization of media tools and pre-programmed machine (software) "plays a vital role here by hiding the underlying processes of the machine from immediate view, while at the same time giving the impression of openness"(36). This idea is plausible in that people do not understand the

mechanism of the process by sophisticatedly programmed machine or software and do not even realize its possible risks to themselves. For example, as mentioned earlier, the data leak of Facebook user's information could be possibly one of the most notable cases of the negative effects of programmed machine. Users do not realize that their information was exposed to unknown people due to the error of the system or cyber-attack from hackers. They even do not know how to prevent the case from recurring. This would result in the vicious circle of use of modern technology. In this sense, it could be assumed that people are controlled by technology in that invisibility of information and media technology (i.e. Internet) conceal the risks of new digital technology from people, as seen in the theory of information technology by Kittler.

Now that the analysis of media technology revealed the risks of humanism by technology, it is essential to ponder the relationship between human and modern technology. Gane insisted "some might object to the strong technological determinism of this position, but in an age in which decisions increasingly are made for us by media systems we have little choice but to use"(40). This remark concedes itself as the oath that people would align themselves with the tendency of technological determinism. I partially agree with the idea of Gane in that people should continue to utilize technology for the sake of development of our world, since it has achieved many breakthroughs. Nevertheless, it is obvious that people should possess solid humanistic identity in a technology-centered world. In other words, people must have critical realization on how people establish the sustainable relationship with technology.

These critical realizations are strongly connected to the insights on post-postmodern world. In this sense, it is effective to articulate Dick's ideas on SF. As mentioned above, SF is the creation of imagined world with the development of technology. In other words, the genre, SF, deserves to be examined in our post-postmodern world, which places technology on the center of human activities. Dick asserted in his interview with DePerez from *Science Fiction Review* about SF and its value when asked about massive sales of his SF books in foreign countries:

Perhaps it's the general attitude towards science fiction in European countries, accepting it as a legitimate form of literature, instead of relegating it to the ghetto, with the genre, and regarding it as sub-standard.... And I think also one of the reasons — especially in France — is that they're aware that it's a field of ideas. The science fiction novel is a novel of ideas, and they're interested in the ideas. There's an intelligentsia in Europe among the students that appreciates the ideas. You don't have the equivalent intelligentsia here. We just don't have that interest in books of

ideas that they have there. They appreciate the philosophical and other types of ideas in science fiction, and look forward to science fiction novels. They have a voracious appetite for them.

With regard to the value of SF, as we can see from the above, Dick regarded it as the place of creating ideas. In addition, he referred to the distinction between standard and sub-standard. Assuming that Dick had an eccentric way of creating stories, he was well aware of the border on "standard": what is standard, and what is not standard. Besides, the ideological technology, as examined in the previous chapters, has relationship to standard in that ideology is a fixed and forced idea, which could be also explained: ideology might become the standard for people. Thus, Dick's ideas on SF provided us with one solid caution for humanism: people should cast doubt on standards with a skeptical attitude, otherwise we would lose humanism, which would lead to the world controlled by modern technology.

This section examined the desirable attitudes towards modern technology in order to consider the ideal relationship between human and technology. I demonstrated the meaning of humanism in order to acquire an understanding of what possible risks might threaten humanism in our technology-centered world. The example of information and media technology revealed that people have confronted possible risks of being controlled by modern technology. Finally, I demonstrated the desirable attitudes towards technology, utilizing Dick's ideas on SF. It clarified one caution for humanism: people should cast doubt on standards with a skeptical attitude.

This chapter explored insights on our post-postmodern world in a technology-centered society by examining Dick's philosophy. In addition, it clarified the humanism crisis as the technology become more sophisticated. Dick's philosophy on technology from the perspective of postmodernism provided us with the caution towards our post-postmodern world: people should be wary of negative aspects of modern technology and its possible risks that control people in the form of ideology.

Conclusion

On the whole, this thesis explored our post-postmodern world in a technology-centered society by examining Dick's postmodern ideas through his remarkable works. The purpose of this paper is to analyze the possible dangers of our technology-centered society brought about by modern technology with the purpose of making people realize and consider these issues.

Chapter One introduced the current situation of our world with the examples of negative issues caused by modern technology. I exemplified two issues, surveillance society and identity crisis in order to gain a deeper understanding of the state of affairs and its essential causes. The analysis of these two issues revealed the necessity of considering the ambivalence of technology and comprehensive provision towards possible risks of modern technology with a post-postmodern idea.

Chapter Two analyzed Dick's works in order to apply his ideas to the examination of the insights on our post-postmodern world in a technology-centered society. Before getting into the analysis of his works, I organized periodical stream and analyzed the theory of paradigm shift, namely reactions to the future by clarifying the meaning of postmodernism in order to verify the necessity of post-postmodernism. As a result of investigation, I defined post-postmodernism as any circumstances in the world, which might transform the social mechanism depending on cultural mutation, through modern technology. Subsequently, I investigated Minority Report and Do Androids Dream of Electric Sheep?, focusing on survey of Dick's coherent ideas on highly developed technology and postmodernism. The analysis revealed that Dick's works indicated two common themes: the ambiguity of the ending in the story and the ideological technology system. The first theme demonstrated that Dick provided readers with the opportunity to deeply consider themes with not passive, but positive and skeptical attitude. The second theme indicated the risk of the existing technology system, which controls people in the form of ideology. The theme implied great wariness that human could be ruled by ideology resulting from over-advanced technology. Accordingly, it is essential that we people be attentive to the existing technology system with a skeptical attitude.

Chapter Three concentrated on examining insights on post-postmodern world in a technology-centered society, applying Dick's ideas on postmodernism. It revealed the danger in a post-postmodern world, exemplifying the possible risk of A.I., representative modern technology in our world and compared Dick's ideas with the current situation in our world. Finally, I examined desirable attitudes towards modern technology in order to consider the ideal relationship between humans and modern

technology. The example of information and media technology revealed that people have faced possible risks of being controlled by technology, especially modern and highly developed technology. The analysis clarified one warning for humanity: people should cast doubt on standards.

My series of analysis suggests one question: Could it be possible that humans create the ideal relationship with modern technology without causing any negative effects? People have enjoyed technology, which has been constantly developed, in an attempt to make their lives meaningful and improve the entire human species. On the other hand, as indicated in Chapter One, humans have failed in utilizing technology in many circumstances. They have sacrificed animals, nature in an environmental context, and the innocent lives of a large number of people because of terrorism and so on. The misuse of technology, as seen in the example that the North Korea with its autocratic leader conducts a nuclear bombing test as a deterrent, might lead to the creation of totalitarian society. Even though none of the causes of these recent disasters are necessarily attributable to modern technology, it could be responsible for harming people.

Considering these facts, it might be difficult for humans to establish a perfectly balanced relationship with technology and especially modern technology. Instead, it is possible that we have a common awareness in solidarity when we interact with modern technology. Humans crucially possess an arrogant awareness in utilizing technology as Sims (2013) adopted the idea of a polish poet Rojcewicz and explained, "humans would then pose as 'masters of the earth,' and yet their self-blindness would make them slaves"(41). We are no longer "masters of the earth" due to modern technology. We should discard such a superior mind because technology, as it becomes advanced, is already invading humanity. What we can do is think creatively and act positively, not being taken over by modern technology.

Although these actions might seem ordinary, it is obviously true that modern technology blinds people to the negative effects of itself. It could be said that it is worth appreciating Dick's ideas in that he re-suggested the significance of considering skeptically. In addition, Dick prophesied the importance of creative thinking, with foresighted view in his interview with DePerez, stating, "SF is a field of ideas". Consequently, we are required not only to reconsider our consciousness of utilizing technology, but also to have a solid sense or attitude to consider creatively and determine responsibly for fear that we court a decadent era where technology would determine our fate.

Throughout this entire thesis, I put a value on analyzing Dick's philosophy in our

era than practicing creative thinking and positive action since these ideas might be already common and required ideas as mentioned earlier. Dick's works were nothing but fictional story for those who lived in postmodern era. However, the situation of our post-postmodern world surrounded by modern technology is no longer fiction that Dick portrayed. We are just experiencing a cycle of technological leaps and disasters, which is an ambivalence that Dick wrote in his works. In other words, we are facing the transitional period that modern technology might take over human beings and become a center of our world, which threatens humanity.

As we can see the growing popularity of Dick's works these days, his foreseen philosophy is directed to our unawareness of imminent dangers caused by modern technology. All things considered, Dick could be one of the pioneers who warn our world of possessing dangers. In conclusion, it is essential that we should take Dick's warnings seriously and understand our world's situation which could be eroded by current modern technology. The significance of this thesis is that I suggested a post-postmodern viewpoint of humans' attitude towards modern technology by examining Dick who conveyed the wariness to our world.

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