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THE WILL TO POWER AND THE WILL TO TECHNOLOGY

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Abstract

Nietzsche's doctrine of übermensch maintains that man should overcome himself through the will to power. Nowadays, transhumanism opts the contemporary emerging enhancement technologies that allow humans to grow beyond all known biological constraints. This thesis critically shows transhumanists effort to accomplish Nietzsche's vision of the overman as the posthuman through other means. It examines the similarity between Nietzsche's philosophy and transhumanism's aspiration to transcend human nature through enhancement technologies. Endorsing the posthuman as its ultimate vision, I argue that transhumanism is inherently interconnected with Nietzsche's envisage of the overman. Transforming humankind is not a mere ambitious, but logically attainable both traditionally and scientifically. However, radically changing human nature might be dangerous idea in all of human history as some argue, or perhaps the most liberative aspirations of humanity from the

pursuits of technoenthusiasts. Hence, critical examination is decisively important to mediate human-technology relationship. Updating human nature and creating new mankind needs not only technological revolution, it also requires a considerable social transformation that involves a profound shift in cultural attitude and values. This study ultimately shows the extent to which transhumanists' will to technology is embedded in the Nietzsche's notion of the will to power.

Keywords: human nature, self-overcoming, transhumanism, self-transformation, technologism, übermensch, posthuman, enhancement, emerging technologies

Introduction

Humans have always strived to overcome their limitations. This aspiration of transcending limitation has resulted in the development of different set of beliefs and theories. Though the aspiration of transcending limitation is as old as the history of human race, the quest to radically transcend the naturally confined human form by the way of contemporary advanced technology is really a new phenomenon of late 20th and early 21st century. After the advent of transhumanism, some of our basic biological limits began to be challenged through the direct application of modern medicine and sophisticated technologies (Bostrom, 2003:2).

Philosophically, the idea of "self-overcoming" and other known human predicament was systematically embedded in the works of Friedrich Nietzsche (1844-1900). Nietzsche was one of the prominent German philosophers commonly known for his doctrine of *Übermensch (*the term Übermensch (German) has been used as overhuman, overman, superman and higherman

interchangeably and stands for the ultimate goal of humanity in many of Nietzsche's works. Hereafter, I will interchangeably use the ubermensh with overman; it stands for human species and gender neutral), which maintains man as something that should be overcome. This is reflected in many of his works, especially in his book, *Thus Spoke Zarathustra* (1883). Nietzsche repeatedly insisted that man should overcome himself. The idea is that, human beings are not finished products; rather they can make themselves better than their current status. The '*Will to Power'* is the means by which he attempts to envisage the higher form of mankind. His notion of self-overcoming can be possible in accordance with this primary evolutionary principle demanding strength (Nietzsche, 1967: 367; 1996:32).

Nowadays, transhumanism employs contemporary emerging technologies that allow humans to grow beyond all known biological constraints and ultimately guide us toward "a posthuman condition", which is supposed to be a perfect human state of life after transcending all known natural limits (Murray, 2018:187). Nick Bostrom and Max More, the most prominent proponents' of trans-humanism, reveal 'the posthuman' as a being whose basic capacities radically exceed the capacities of the present day humans. For Nietzsche, it is not a man, but the overman that denotes the authenticated human form. Similarly, transhumanists conceive biological humans as weak and imperfect, whereas technologically enhanced individuals as a perfect and powerful human existence. Overall, one essential thing that knits Nietzsche and transhumanism together is their deliberate attempt to improve mankind beyond the previous and currently existing human conditions (Manzocco, 2019:4). In spite of employing different means of self-transformation, which in fact rest upon the civilization of their own day, both Nietzsche and transhumanism strive

to prepare humanity for one and the same supreme moment in which the 'beyond the human' realm is their common vision.

However, facilitating the progress of human evolution beyond Darwinian and Creationist views through conscious human interference might be the most dangerous idea in all of human history as some bioconservatives and religious fundamentalists argue (Fukuyama, 2004:42) or perhaps the most daring, courageous and imaginative ambitions of humanity as inspired by technoenthusiasts (Bailey, 2005:209).

In order to strength my position and to show the similarities as well as how transhumanism's advocacy and usage of contemporary emerging technology is influenced by Nietzsche's notion of the will to power, I will try to answer different questions concerning the issues under discussion: To what extent is the relation between Nietzsche and transhumanism valid? Is human nature infinitely transformable, or absolutely eternal? To what degree the possibility of beyond the human scenario and changing human nature might be acceptable? Is the radical extension of human life mere ambitious, or logically attainable?

1. Nietzsche and Transhumanism

As I tried to illustrate in the introduction part of this study, we can find certain relations between Nietzsche's philosophy and transhumanism directly or indirectly. I argue that even if transhumanism has its root in enlightenment humanism, it was systematically influenced by Nietzsche's doctrine of the overman. Anyone who gets acquainted with western philosophical tradition would witness the great effort made by Nietzsche to get over various human existential problems. The will to power is the means by which he attempts to

form a higher type of humanity, the overman. The will to power is humans' infinite drive demanding strength (Nietzsche, 1996:115).

After Nietzsche has explicated the overman as our human future higher beings, transhumanists render the posthuman as our future genuine humanity. Nietzsche believed in human improvement driven by humans will to power which is like a quantum force or energy endeavoring strength. His intensions of demanding strength and something higher has got scientific and techno-medical support in today's world (Bohan, 2019:23). Transhumanism is the one that advocates the use of emerging technologies like biotechnology or cognitive sciences and other classes of emerging technologies to revolutionize what it means to be a human. This is in fact necessary requires a systematic analysis to mediate human-technology relationship.

1.1. The Peril and Promises of Human Enhancement

Many people feel optimistic towards the technological reformation of human nature, while some still remain pessimistic. Traditional ways of human improvement through education and cultural refinement is vitally advantageous for many people. This is taken as gradual way of human enhancement and it is nearly indubitable. But, the contemporary attempt to improve humankind by the use of science and technology is extremely radical. Beyond the psychological and cultural human transformations, transhumanists now adapt the emerging medical and technological syntheses to augment human race, not only individual person but also up to species changes. Moreover, advocating the use and the expansion of human enhancement technology is the most leading principle of transhumanism. Beyond the therapeutic function of enhancement technologies (i.e., to correct genetic or hereditary problems), transhumanism ultimately seeks to improve and transform mankind into the posthuman species by the way of genetic engineering and other biomedical technologies. In order

to achieve its intended goal, transhumanists strive to make a direct intervention in the human genetics by directly linking the machine and human being. In this manner, contemporary transhumanist technologies are able to radically alter human self-definitions and that of their institutions in varieties of ways. This is certainly not an easy attempt.

Humanity which is the product of complex long evolutionary process may not easily be transformed by the use of mere science and technology. Indeed, fundamental human trans-formation necessarily requires a systematic social discussion. Different philosophers, theologians and critical social theorists had already questioned the authority of science and technology in relation to human society and their environments. Generally, some regard human enhancement technology as a threat to human dignity, while others consider it as a way to advance human autonomy. The fundamental transformation of human nature might be the most dangerous idea in all of human history (as Leon Kass, Francis Fukuyama and Michael Sandel argues), or perhaps the most daring, courageous and imaginative aspirations of humanity (as Ronald Bailey, Ray Kurzweil, Eric Drexler, Simon Young, Zoltan Istvan and many others). There is a series of debate on the application of human enhancement technologies. The discussions of enhancement technology create two antagonistic groups: one that argue for it and the other that argue against it. Bioconservatives and religious fundamentalists oppose the possibility of transhumanism whereas the technoenthusiasts strongly admit it. One may asks how dare to know the validity of such cases. Probably, many scholars affirm the possibility of updating human nature even though certain individuals remain skeptical. In the following, I will discuss some theological and bioconservatives objections against transhumanism. Parallely, I will also give responses to the objections.

1.1.1 The Theological Reaction

On average, certain groups of scholars totally deny the possibility of transhumanist movement. Many of the opponents are religious fundamentalists and bioconservatives. Some theologians prescribe scriptural arguments against transhumanism for it glorifies humankind than God. The opponents of transhumanism basically rely on more of scriptural arguments to glorify God than the human will. Theologically, human nature is fundamentally constituted in relation to the supernatural power and thus, any attempt to overcome our nature is often considered as 'playing God' or replacing God's plan for humankind (Fisher, 2015:24). Zaro Fisher (2015) considers a phrase 'playing God' as any attempt to overcome human nature, since theologically it was believed that our human nature is fundamentally constituted in relation to the supernatural power. Thus, we [humans] should preserve human nature as it was given by God's will and intention. Any effort that refutes this general rule of creation defies human dignity gifted by God and brings condemnation, particularly according to Christian theology (Donaldson, 2018:133; Lebacqz, 2011:56).

However, some theologians who pursue God from secular perspective mandate humankinds to use science and technology as means in order to expand their capacity. For example, Lincoln Cannon (2017) states that the "Mormon Scripture" or "Mormonism" allows humans to use science and technology improve and save ourselves as a wisdom given by God. According to this secular version of Christianity, it is our mandate to use science and technology as a means to accomplish what we may want. Thus, Mormonism admits science and technology as among the means prescribed by God (Cannon, 2017:50). In giving a prominent role to science and technology, Mormonism shares common elements with secular humanism and

transhumanism. But, many theologians in general oppose transhumanism since it paves the way for secularism. Theological arguments ultimately rest up on the Creationist view of human understanding. The power of God occupies a prominent place above all things and human beings should obey and glorify the power of creation according to this outlook. This objection to transhumanism is not much effective. Because, transhumanism is incompatible with the stagnant God-centered view of human nature.

As Bostrom (2003; 2005) and other argued, transhumanism is an extension of secular humanism that applauds science and technology to enhance human condition above all else. Transhumanists hold that human self-transformation is attainable through reason, science and technology, not through faith or worship. Like secular humanism, transhumanism praises science and technology to glorify humanity than God. Transhumanism is based on a strong faith in science. The transhumanists assumption is that, science has done various promising candidate for humanity than religion. They claim that, science provides easy access to transportation and information, expansion of medical and pharmaceutical companies and etc. that save human energy, time and expenditure. With the help of technology, trans-humanism aims at overcoming both biblical and biological limits, and strives to rapidly accelerate human improvement more than the traditional attempt. Unlike biblical idea of man which portray humans as a readymade and finished product, as something impossible to change, transhumanist movement admits humanity as continual process of self-transformation. For instances, one biblical verse asked “can Ethiopian changed his skin or…the leopard his spot” (Jeremiah 13:23) (Jeremiah Holy Bible|OldTestaments| King James|Book24, The Book of The prophet Jeremiah) to show the impossibility of changing what was given by God, or perhaps what was natural.

Nevertheless, after the introduction of transhumanism's technologies, changing skin is relatively become a trivial, an old fashioned business and cheap job of cosmetic companies. Some individuals are able to undergo surgical procedure and change not only their skin color, but also their total appearances nowadays. Additionally, many sources indicate that Michael Jackson, the famous American artist, underwent cosmetic surgery and changed his skin color and also lived in a sort of virtual reality (i.e., computer stimulated environment or events). Even if Jackson was not transhumanist, his way of life was certainly reflects the way to transhuman. Currently there are some few transhumans that are technologically enhanced. For example, Kevin Warwick a professor of Cybernetic at University of Reading in England turned himself into a cyborg for the first time in late 1998 (Clark, 2003:18-19). Jesse Sullivan, the first world's first "bionic man" who replaces his damaged arm by artificial robotic prosthetic arm in 2005 was another transhuman person. Jens Newmann was the first person to get 'artificial vision system' or an electronic eye that directly connects to his visual cortex through brain implants. These are few technologically enhanced individuals in early 21st century.

1.1.2 The Bioconsevative Thesis

The opponents of transhumanism did not rest up on the common argument. But, several of them are attracted to certain specified claim. For instance, rather than technical and legal possibility to pursue genetic and biomedical enhancement, bioconservatives focus on the moral wrongness to engage in this attempt (Douglas, 2011:465). They argue that even if enhancement is good for the individuals, it will be bad for the others. This involves the interest of social considerations. Assume that, if a certain person enhances one's own intelligence she or he will disadvantages the unenhanced fellows by surpassing them in different competitions. This involves

discrimination against the unenhanced individuals on the basis of their lower or weak intelligence (Sandel, 2007:11-12; Kass, 2003:15).

The other basic concern of bioconservative thinkers was the side effect of using enhancement technology. They contend that genetic enhancement by biomedical technologies undermine our human dignity. As one can see, even if contemporary technologies are promised many things for humanity, it may lead us toward unintended consequences and disturbs human security, freedom, or to humanity in general (Fukuyama, 2002:81; Kass, 2003:9). Francis Fukuyama was probably right that enhancement technologies will bring some forms of unwanted consequences. But, it is obvious that while we use technological apparatus for simple or complex issues, risk is always there. The thing is to minimize or avoid the risk as much as possible. If we fear the risks of biotechnology, it is also impossible to use biotechnology for therapeutic purpose (which Fukuyama and Kass admits as ethically tolerable).

Most arguments of bioconservatives are embedded in theological response to transhumanism. For example, the source of human dignity is the Christian tradition which maintains man as a being created in the image and likeness of God (Fukuyama, 2002:7). The point is that, human nature which is the most defining and determinant of our human basic character is a gift of God and hence it should not be subjected to change. This entails that human nature should shape and limit any thought and ideology pursued by mankind at any time according to this claim. Any procedure that attempts to change human nature is considered as ‘playing God’ (Kass, 2003:10). Bio-conservatives in general focus on the unwanted side effects of enhancement technology more than its promises. They provides many objections and scenarios to show the dangers of applying enhancement technologies. However, their argument

against enhancement technology is little bit exaggerated and seems to be fulfilled by irrational fear.

Holding the radical view of transforming human nature, transhumanism seems to make a big jump (upon which it was thrown to skeptics). It seems that, it is in relation to this point that Fukuyama dubs it as "the world's most dangerous ideas". Transhumanism for him is "a strange liberation movement" whose "crusaders aim much higher than civil rights campaigners, feminists, or gay-rights advocates." This movement, Fukuyama says, wants "nothing less than to liberate the human race from its biological constraints" (Fukuyama, 2004:42). But, contrary to Fukuyama many transhumanists argue that transhumanism is not only a vision of liberating society from biological limitations, rather it is a movement that seeks to transform currently existing society in many ways. Among others, it unifies science and ethics and it is an alternative academic postmodernism religious theism, and radical environmentalism according to Simon Young. According to Bailey (2004), the struggle from biological constraint is not a new lesson begun by transhumanist movement. He critically stated that,

Human liberation from our biological constraints began when an ancestor first sharpened a stick and used it to kill an animal for food. Further liberation from biological constraints followed with fire, the wheel, domesticating animals, agriculture, metallurgy, city building, textiles, information storage by means of writing, the internal combustion engine, electric power generation, antibiotics, vaccines, transplants, and contraception. In a sense, *the* goal toward which humanity has been striving for millennia has been to liberate ourselves from more and more of our ancestors' biological constraints (www.nickbostrom.com).

In fact people have been improving their body through physical exercises and brain capacities through learning. Through a time, sophisticated instruments of physical exercise and tools of learning have been advancing and this facilitates our physical and mental capacities in many ways. This ambition is rapidly growing, notably after the advancement biomedical technologies and genetic engineering. However, in favor of Darwin's theory Fukuyama claim that "we humans are miraculously complex products of a long evolutionary process", which is a natural process of random variation and adaptation that move to the next stage as species. Probably, he was right at making a doubt, but he was not able to successfully defend his position. As it has been said earlier, natural evolution is unguided and too slow to bring change to our life. Thus, rapid and conscious evolution or the designer evolution should substitute Darwin's theory according transhumanist thinkers. This is the point of departure between bioconservatives and transhumanists.

For Christians and bioconservatives perspective, the conscious evolution of human race on the basis of reason, science and technological exercise is labeled as playing God and morally wrong attempt. In relation to this, Leon Kass strongly argues that, it is pretty sure that our world offers plenty of material progress, yet it '*is empty in spirit*'. Kass's viewpoint was common with many religious fundamentalists who repeat the old age warnings and extremely oppose technological human enhancement. Transhumanists are also strive to improve spiritual development after the neuroscientific discovery of the 'God Module' part of human brain that correspond to spiritual experiences.

However, I believe that what transhumanists lack might religiosity, not spirituality be from contemporary response to Kass. Many have showed that transhumanism is an alternative to religious theism. As a result, it seeks to provide an alternative to religious ethics. Transhumanists strive to actualize the

"*possibilities of increased mental powers, powers of memory, reasoning, and concentration, or the possibility of increased physical powers, strength, stamina, endurance, speed of reaction, and the like* (emphasize added; Harry, 2007:8). Isn't this pragmatically useful for humankind? Unlike many bioconcervatives and religious dogmatists who widely reject the notion of human improvement and rush to see more of its dangers than its gain, John Harris and other many of its advocators strongly believe that there is nothing wrong with enhancement of human beings even if it seems paradoxical. Many of us are already enhanced: nearly many of us are beneficiary of genetically modified crops/ animals, some of us are wearing glasses, use cell phone, use makeup, many of us have been immunized. Without exception all of us have benefited from enhancing technologies, even if you have not, said Harry, you will have benefited from the so-called "herd immunity" created by the fact that others have. To strength this, Young in most cases depicted that;

transhumanism is not the advocacy of some tyrannical eugenic breeding program by mad scientists in white coats or master-race fantasists, but the belief in the freedom of individual men and women to increase their own wellbeing and that of their children (the instinctive drive of every human being on earth) by means of the emerging technology available to them in the miraculous technowonderland of the modern world (Young, 2006:22).

Transhumanism's human enhancement technologies are partially physical liberation from biological constraints such as pain, short lifespan, unwanted physical appearance, unnecessary bodily suffering, low speed of reactions and etc. Yet, beside physical enhancement many have agreed that we also seek moral improvement. Our sociopolitical and cultural institutions also need to be improved beyond the biblical instructions for it knows little about

contemporary biomedical medicines. Hence, a profound shift in cultural attitude and values are important from other sides and this in fact requires deep philosophical investigation on technology.

In sum, while transhumanists are highly drawn on technology to profoundly transform human nature their socio-cultural institutions, they did not only depend on its positive effects. Some transhumanists made critical study on the precautionary principle of this movement as Max More (2013) and other argued. Since transhumanism's leading power is technology, its critical investigation is quite important to mediate human-technology relationship at a moderate standard. Today's technologies are enhancing life and at the same time, it may endangers human society and their environment. Therefore, it may not be totally and wholly dangerous as Fukuyama (2004) said, or its opportunities are not wholly wonderful as Bailey (2004) contended. Therefore, mediating these two extreme views is decisively important to bring a fruitful change to human life.

1.2 Humanism and Transhumanism

It is somehow controversial to know whether transhumanism undermines humanism or not. The strongest objection to transhumanism is a dystopian vision. Some critics see transhumanism as a threat to humanity. For instances, Aldous Huxley's *Brave New World* and Mary Shelly's *Frankenstein, or The Modern Prometheus* reflects the destructive image of future technology on human life (Dinello, 2005: 41 & 190). Such early science fictions project a powerful anti-science and human enhancement technology. The future use of technology to manipulate humanity might be leads to the dehumanization and accommodation of humans. Probably this will result in the destruction of human species according to this view. Those who rely on the general principle of human dignity strongly consider transhumanism as the most dangerous idea

that oppose humanity. The most expectation is that, the irresponsible and uncheckable use of enhancement technology brings about destruction of mankind and their environment. Relying on this assumption the traditionalists and conservative thinkers develop a pessimistic vision of enhancement technology that oppose the possibility of transhumanism. Nevertheless, transhumanist enthusiasts believe that enhancement do not harm human dignity but it strengthen the values of humanity in a new and advanced way.

Many authors have distinguished transhumanism as an extension of humanism. For instance, Bostrom argue that transhumanism was partially derived from secular humanist thinking. Like humanists whose fundamental focus is on the improvement of humanity, transhumanists also strive to enhance human nature beyond the natural and cultural values in a more advanced manner than ever before. Therefore, transhumanism is not at odd with humanism. It is an outgrowth of enlightenment humanism (Tirosh-Samuelson, 2011:55). Transhumanism employs the transformative technologies that lead humanity far beyond the traditional means of improving human nature through education and cultural reform. It directs the application of biomedical and genetic technologies to overcome some of our basic biological limits as well as to transform oneself in a higher being.

Given that humankind is an evolutionary species, transhumanism is not at odd with humanism. The progress of human civilizations lead them towards another new set of living system. This is an inevitable condition of human existence. Some human traits might be subjected to change and new condition might also be devised. As mankind paths from certain stage of life to another some values are subjected change. They seek to adapt other principles of life which is more appropriate than the previous. Through evolution human beings are always getting better for they are capable of adapting new and better

instruments into their life. Human culture is getting refined through continual advancement of learning. Aesthetically, human beings and their tools are always getting smarter. As a result, if we accept humanity as a work in a progress, we also conceive its dynamic aspects of life. Every aspect of human life is subjected to change including politics, culture, art and religion and etc., and hence nothing remains stagnant in this sense. But, there are few individuals who find some contradiction between transhumanism and humanism. Certain thinkers identify transhumanism as strange trend that oppose humanism. I am not going to deeply address the position of transhumanism's opponents since I am pursuing transhumanism from humanistic perspective. A lots of humanists promote the further advancement of science for the development human civilization. I will briefly elaborate on Nietzsche, science education and the progress of transhumanism as follows.

1.3 Science Education and Transhumanism

Since the course of human progress is not over, human beings start to challenge their biological limits through a time, mostly after the advent of transhumanism. When certain condition is realized to be a problematic, certain solution is also forwarded to handle the issues at hand. For example, the rise of renaissance and enlightenment overcome the religious era of medieval periods to some degree. Likely, transhumanism strives to overcome humans' biological limits to some extent through reformative technological development (Lipowicz, 2019:208). Improving human condition and their institutions through education, training and cultural modification are quietly acceptable attempt. Through learning, people overcome many of their primitive behaviors and uncheckable sources of convictions that confine them to act in certain way or not to do something which in reality needs to be reformulated.

Nietzsche's notion of the will to power indicates his appreciation for scientific knowledge. In other words, he identifies the will to power as knowledge which based on science followed by consistency, unlike morality. He critically separates the will to power from morality, for there are no such things as moral facts. Traditional morality for Nietzsche is simply a subjective interpretation of certain phenomena, or perhaps a misinterpretation of them. He indorsed the will to power as knowledge (Nietzsche, 1967:261) and knowledge according to many authors is a power. It is obvious that many scholars etymologically equate science with knowledge. Knowledge is a tool of motivating power and these two (knowledge plus power) are directly proportional, but both are inverse to morality. Nietzsche contends that after morality is eliminated, physics proves to be a boon and science start to acquire a new charm. Morality is a hostile to science (ibid: 245) and an enemy of nature for him (Nietzsche, 2007:24). Hence, it is a scientific education that is supposed to increase human power, not moral order. Improving human has to do the increment of creativity, intelligence and insight which in general can possible in the realm of science beyond the customary attempt of the moral good and evil. This because the conventional notion of being more virtuous is an opposite of what Nietzsche has thought. He argues that it is naïve to believe that man will become another through moral improvements.

This widely shows how Nietzsche's will to power has linked to science. A typical kind of education that Nietzsche advocates is an education that enhances the feeling of power or the will to power. He absolutely rejects the traditional morality and religion since degenerates the feeling power. Nietzsche was deeply fond of science education and its capacity to transform human society than religious instructions. He hopes that the future science will radically transform human society after the old moral order is terminated.

Because, traditional religion along with its morality is against scientifically minded individuals who strive to transform society on the base of science, not on the base of old cultural and moral formula. Moreover, both Nietzsche and transhumanists seek to secularize the world and this secularization pave the way for the development of science and technology (Lipowicz, 2019: 202).

Therefore, we can conclude that both Nietzsche and transhumanists have nearly the same outlook on human nature and human institutions which is opposite to the world of Christianity. Both Nietzsche and transhumanists favor the revaluation of values in order to devise a new goal and meaning to human existence (Sorgner, 2009:32). They prefer Evolutionary theory to Creationist view, though their understanding of evolution is different from the old Darwinian view. For Nietzsche as well as for transhumanists, a conscious evolutionary progress is preferable than the unconscious Darwin. Science in general occupies a prominent place for both Nietzsche and transhumanism.

1.4 Harmonizing Human with Technology

Our will to life in this century influences us to use technology in many ways. We are living in technological era. We are users and beneficiary of modern technology like that of sophisticated home furniture, transportation, media, medical center and etc. The best approach to today's technology is discussing on how to properly use them rather than to use or not to use debate. For example, it is obvious that by the end of medieval period the era Renaissance and Enlightenment were introduced. As people had begun to employ reason to justify and defend their claim, the authority of conservative religious dogma began to decline. More than other institutions, religion had played a major role and occupies a prominent place during medieval period. It had been a time when any opinion outside church was taken as heresy. The church leaders silenced and burnt any of unconventional opinion as a form of

heretical doctrine. Roman Catholic Church leaders burnt many works of Gurdon Bruno and Francis Bacon for their works attack the religious power of that time. Many people feared to see through Galileo's telescope and because of his scientific outlook Galileo was silenced by church leaders. These and other achievements of early 15th and 16th century's scientific achievement were critically opposed at the beginning, even though it got a world wide support then after. Though, scientists were silenced earlier, finally they had got power to reverse the situations with practical evidences.

Similarly, early stage of transhumanism may face some challenges like what early scientific progress has faced. When new opinion is emerged, people do not simply accept it. Some remain skeptical or neutral, while others get convinced to accept it depend on their power of imagination. This implies, the case of two contrasting groups on contemporary and potentially anticipated future human enhancement technology was no more different from this. Transhumanists advocates the use and development of human enhancement technologies in a broad carefulness and allow individuals the right to choose enhancements as they want. However, bioconservatives and Christians strongly oppose this movement. Some theologians prescribe scriptural arguments against transhumanism for it glorifies humankind than God. But, secular humanists have already showed their strong claim of glorifying humanity than God. Basically, I am not convinced with their scriptural arguments which rely on religion, for I do believe in the following hypothesis.

Given that transhumanism is a scientific and technological enterprise, it attempts to enhance human condition on the basis of science and technology. Religion is better at improving moral and spiritual condition, rather than physical and mental enlightenment. Science has done various promising aspiration for humanity than religion from sophisticated modern home furniture

to the world wide electric power generation. It provides easy access to transportation and information, expansion of medical and pharmaceutical companies and etc. that save human energy, time and expenditure. Pragmatically speaking, if the merits are sufficiently beneficial and the risks are acceptable, an attempt to make relevant improvement of humankind and be justified in so doing, it is definitely important to create further conducive environment for such changes.

Influenced by Nietzsche's philosophy, I argue that, transhumanists in general employ scientific and technical instrument to actualize Nietzsche's doctrine of the overman as the posthuman via technology. Many transhumanists claim, though Nietzsche's notion of human improvement was not by science and technology, currently his idea of overman has got scientific and technical support. The notion of human improvement through the will to power is fundamentally natural or inner prospective from within, while transhumanists are in search of instrumental or external drives (chemicals) to enhance human's capacity. The contemporary emerging enhancement technologies are probably supposed to afford a new and higher potentiality that enhance mankind beyond the present day human intelligence in the future (Kurzweil, 2005; Bostrom, 2014). In certain narrow domains, technology tends to go beyond human capacity and hence tends to dominate human thought and activities. Take for example, chess playing machine and scientific calculator. Some computer program artificial intelligence and software defeats the world champion many times in human history. For instances, 'checkers program' by Arthur Samuel was supposed to be the first to play game better than its inventor. 'The chinook' and 'the backgammon' are another program to defeat or beat world champion by far surpassing the best human player (Bostrom, 2014:27-29). Electronic calculator also far exceeds human speed of doing some complex equations. In

buying and selling stocks, computer exceeds human intelligence. Ray Kurzweil in *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* expose the possibility of computer intelligence to achieve human level intelligence in a near recent future. Computer can remember billion of facts in which humans are not. Computer swiftly remember and give us the result of what we have saved than we naturally do. For example, our mobile phone easily displays the numbers and the contacts we have saved in which we are hard to remember. Thus, there is strong supposition to create superhuman artificial intelligent nearly in the future on the basis of the current rapid and exponential growth of technology.

On the other hand, if what was made by human capacity in turn tends to dominate or surpass human activity humans are no more human. Since technology is the products of human creative will, it should be under the control of human thought. Unless and other otherwise, dehumanization, alienation and other related predicaments will appear on human society, sooner or later and humanity will probably lost in long run. In upholding human dignity Nietzsche was certainly right when he portray the overman as a being beyond no one should supposed to go. The overman for him denotes a man who raise himself above all else, a man who made himself a god. It is a being beyond nothing exists. This means, no power is expected to move beyond the overman; neither God nor science and technology. In other words, the overman is man who always seek to overcome every forces of barrier and imposition. However, contemporary emerging technologies are supposed to surpass human intelligence in the future according many futurists. Few scientists and futurists propose the *Super Intelligence* (Bostrom, 2014), *Artificial General Intelligence* (Goertzel, 2013), *The Singularity is Near* (Kurzweil, 2005), and *Technological Singularity* (Vinge, 1993) to show the transformative power of contemporary

emerging technologies in creating artificial super intelligent or the singularity which technically exceeds human level intelligence.

Hoping its transformative power, some transhumanists praise technology to the divine status more than human or posthuman. This certainly brings an alienation or dehumanization in long run. Above all else, since technology is the result of human activities, it should not move beyond human creative will. Designing person with machine fusion will finally commodify personhood as a mere object to be bought and sold, and the chemicals to be manipulated. The development of newly and emerging technologies may have an impact on the lives of many people and their natural environment. New technology may affect our life as well as the lives of many generations to come. Unlike the usual means of improving oneself (through physical exercise, reading books, watching televisions or films as well as caffeine, nicotine or vitamin supplements or glucose), neurochemical enhancement that go inside the humans' body may affect their physiological and psychological traits. Hence, as the way out we always need to systematize our relationship with technology in order to properly protect ourselves and our surrounding environment.

1.5 Democratizing Technology

The proper and systematic use of science and technology have a bright vision. Pragmatically speaking, the advantage of using technology far exceeds some of the unwanted consequences it may bring. I am not saying that there is no danger of using enhancement technologies. Humans should systematize their relationship with technological artifacts in order to bring proper consequences by minimize the risks. Regulatory agencies are crucially important to maintain a balanced human-technology relationship. This will promotes safety and efficiency and also promotes the role of enhancement technology without fear.

In general, the religious and philosophical discussion on the enhancement technology is the two main dominant views. The religious objections are echoed by many theologians and bioethicists as I have discussed before. According to many western religious tradition, man is created in the image of God and hence, human nature is considered to be "sacred, perfect and untouchable" (Chu, 2014:201). Unless and otherwise human dignity is devalued and thus, enhancement technology is incompatible. The religious view of enhancement technology is extremely arrogant when compared with the philosophical analysis of technology. Since technology is the main asset for transhumanist movement, a critical study of technology through rational examination is decisively important in this regard.

Some philosophers of technology develop the perspective that significantly examines the relationship between human beings and technology. Philosophers of technology play a vital role in a critical evaluation of technology (Feenberg, 2009; Ihde, 1990; Heidegger, 1977; Marcuse, 1964; Russel, 1924 and others) and as well as in the ethical discussions on human enhancement technology (Brey, 2009; Verbeek, 2009, 2005; Harris, 2007; Habermas, 2003; Latour, 2002 and etc.). Specifically, the contemporary emerging technologies that are designed to reform human condition will produce some societal benefit. It may also result in harmful consequences. Technology may endanger humanity by reducing humans to material functions (commodification) and suffocate their interactions with their environment (Verbeek, 2005:21). Thus, philosophers of technology and applied ethicists can play a key role in critical evaluation of emerging technologies (Dusek, 2006; Verbeek, 2005). In line to this, Don Ihde in *Technology and The Lifeworld* (1990) stated that in recent decades the philosophy of technology has devoted much attention to analyze the relationship between humans and technologies.

Val Dusek also state that "with the advent of genetic engineering and the specter of human cloning in the late 1970s, with the possibility of technologically manipulating human heredity and even human nature, there was yet another set of issues and impulses for the critical evaluation of technology" (Dusek, 2006:2). Accordingly, philosophy of technology plays a paramount role in the critical examination of currently emerging technologies and some intellectual movement that seeks the continued evolution of human life beyond its current status.

Due to the wide spread of regenerative technology in this era, the relationship between people and technology should be conceptualized. Besides the instrumental and anthropological understanding of technology (as a means to an end), Martin Heidegger stresses the essence of technology as a way of 'revealing of the truth'. He linked the etymology of term technology, the *techne* (Greek term from which it was derived) to the *episteme,* in addition to its association with skills of the craftsman. Both 'techne' and 'episteme' in this sense a name for knowing in a widest sense; to understand and to expert in it (Heidegger, 1977:13-14). Therefore, technology is also a way of revealing and not merely a means to an end. This act of revealing is possible neither beyond man nor exclusive to man, rather it happens decisively through man. This implies that technology in itself follows no particular direction, neither toward a completion nor toward destruction. Only human beings can give its direction; it is in itself neutral, and "it requires guidance" (Verbeek, 2005:39). It is in a no position to give itself ends and is only the means for realizing ends provided by human beings. Andrew Feenberg in *Critical Theory of Technology* argues that technology like any other human institution should be subjected to change by human actions. It cannot be separated from society, and thus it is adapted to specific social and political systems (Feenberg, 2009:146).

However, contemporary transhumanist technologies are designed to create new social status and identity and strive to bring about revaluation of values. A philosopher of technology Philip Brey also addresses that technological human enhancement (augmentation) is likely to have serious implications for personal identity and their social status. He states,

…if a new class of rational (or subrational or superrational) beings emerges that transcends human nature, the notion of inherent moral equality does not seem to apply, because such a class is not fully human, and any notion of a social contract may not apply either, because that social contract was agreed upon among humans. It is likely, therefore, that human enhancement will lead to new, unjustified inequalities, and may even undermine the core Western notion of moral equality. This gives us a reason for being cautious about the application of HETs (HETs → Stands for Human Enhancement Technologies) (Brey, 2009:182).

Since the main goal of transhumanism is not to pave way for western morality, but certainly aims at revaluation of values in its pursuits of the posthuman, what Brey has in mind was probably not a big deal for transhumanists. From Platonic-Christian to Kant, mankind is considered as a perfect being. Nearly all western morality conceive human person as a privilege being governed by natural and divine law according to secular and religious view respectively. For instance, Kantian view of human being as "end" describes how mankind was portrayed as a perfect or finished product. On the bases of Nietzsche's refutation of this general law and consider man as a raw material, imperfect and unshaped things that needs to redesign as well as conceiving humanity as a perpetual process of development, transhumanists regard biological human as a weak being and humanity as a work in a progress. Thus, biomedical and genetic engineers a devising an intelligent tools that

enable them redesign and recreate human nature in a desirable way. In this case, transhumanists are establishing some new norms that probably undermine with the existing principle, value and other social orders. The principle of 'Self-transformation' and 'Morphological Freedom' is going to be adapted as basic core of transhumanist extropian principles. Self-transformation is humans' continual and boundless expansion of their capabilities by their own choice. This principle involves both "biological and neurological augmentation" and "rejection of central control and maximum sustainable freedom" (More, 1990:17). Morphological freedom is "an extension of one's right to one's body, not just self-ownership but also the right to modify oneself according to one's desires" (Sandberg, 2013:56). These and other elements of extropian principles affirm the necessary and desirable role of science and technology to augment human species which was indeed denied by traditional centralized control.

In general, Max More in *True Transhumanism: A Reply to Don Ihde* (2011) insists that transhumanists reject every view that denies humans in their attempt to alter the conditions of life for better. Transhumanists seek neither "utopia nor dystopia". They seek a continual human progress and eager to amend human constitutions. Transhumanists want the continual improvement in ourselves (physically, intellectually, and psychologically), our cultures, and our environments. They value the perpetual pursuit of knowledge and understanding (More, 2011:140). This principle conveys the way transhumanists challenge traditional assertion which conceive human nature as static and timelessly constant to conform the will of God or what is considered "natural" for More. According to traditional view, we should leave human nature as it is and any attempt to fundamentally change human nature is considerably forbidden. This traditional claim implicitly involves the theological objection to transhumanism. Nonetheless, transhumanism is

incompatible with the God-centered traditional view of humanity. Among others, transhumanism like enlightenment humanism favors to forward a new set of opportunity for human life on the basis of secular thought.

I believe that Brey's attempts of rethinking about the use of modern medicines that lead us beyond the state of normal (healthy) condition is necessarily an important discussion to mediate human-technology relationship. As far as we know, medicine has a role of restoring the impaired human function to the state of healthy or normality. However, since human enhancement medicines guide us beyond this function, it should be reinvestigated. It is inevitable that transforming human nature is followed by reformation of human institutions. The consequence of this attempt is yet certainly hypothetical. In one way, it may be dangerous as some critics of human enhancements, like Fukuyama and Kass who strongly opposes the practice human enhancement. Or perhaps, it might be the most liberating movement that strives to improve human life by setting humankind free from biological limitations in another way.

Literally speaking, the technology of human enhancement is not a new acquisition. The way transhumanists employ currently emerging techno-logies are however relatively newer than ever before. Working at genetic level transhumanists strive to enhance humanity by contemporary regenerative genetic and intelligence technologies above the natural function. Overall, this attempt may expose humanity for two general existential risks. First, it may provide a new opportunity and next stage of human development as far as evolutionary understanding of humankind is concerned. Second, it may lead us to toward the extinction of humanity given that there might be a divine purpose for creating humankind in the way they are.

From historical study of humanity, different stages have been witnessed through which humanity have been passed. All stages have contributed to the development of human progress according to the civilization of their own time. In all experiments, no one creates new mankind in every previous epochs of human history. It is all about reforming and updating human conditions in a more informed manner that increases human satisfaction and minimize human cost of living. The effort of transhumanism in a recent time is probably no more different for I believe that it is matter of human civilization that enables contemporary scientists to think about humanity beyond the previous customary understanding of what it means to be human.

The early human civilization has done various promising discoveries for the farther development of human civilizations. Much of early scholars have made unforgettable historical contributions for the wellbeing of humanity. I hope that recent scientists, philosophers, scholars and futurists have also a duty to make a new history and opportunity for the further advancement of human development rather than simply repeating the past historical records (for which traditional religious activity was blamed). In this case, transhumanists are laying the most hopeful imagination from enhancement up to minimizing or eliminating the ancient as well as the recent human problem of aging and death in the future by altering human biogenetical makeup. Many people fear as this quest was done without investigations. The practice of transhumanism is the result of interdisciplinary professional researchers such as philosopher, biomedical and genetic engineers, neuroscientists as well as including humanists, activists and the like. Transforming human nature and magnifying new opportunity needs not only technological revolution, but it also requires a considerable social transformation. Profound shift in cultural attitude and values are also essential part of concerns. Thus, renegotiation of social contrast for

contemporary science is exceptionally important. This new civilizational paradigm necessarily requires new philosophy and ideology, new ethics, new culture, new psychology and even new metaphysics. It is inevitable that transforming of human nature necessarily influences the reformation of societal institutions (family, education, politics, religion and economics, for example) and its administrations.

In a nutshell, transhumanist movement has got a key inspirational awareness from Nietzsche's devotion to scientific education than religious prescriptions. As Sorgner and some others argued, there is structural similarity between Nietzsche's concept of education and transhumanists idea of enhancements. In *Human, All Too Human* Nietzsche stresses that, "no matter how far a man may extend himself with his knowledge" and likely transhumanism insists reason, science and technology to improve human life. These are analogues procedure in attempt to enlarge human capabilities. The will to power through which Nietzsche attempts to form the overman endorsed transhumanism to adopt the will to technology to form the posthuman scenario. As Nietzsche hopes for human improvement through the will to power, transhumanism believes in the power of contemporary emerging technologies to enhance human life. In order to promote the further radical development of mankind, transhumanists argue to use human enhancement technologies in addition to the will to power. Conversely, since using such technology may lead human society to some consequences for good or bad, it should primary get investigation before totally penetrating into human's life.

Working at genetic level, transhumanism attempts to revolutionize human nature and this should necessary involve the revaluation of human institutions and values altogether. Since transhumanism is a recent and new paradigm for thinking about the future of humanity, it is incompatible with

some of the old fashion theological, cultural, political or legal responses. Therefore, it is quite important to devise new philosophy and ideology that best fits with this movement. Max More's exropianism can be taken as an exemplar to serve this concern. Since technology is main asset to effect changes, its systematic study should be necessary monitored above all else. If this has been critically done, it will certainly result in a positive effects for ourselves and for our future generations to come.

Nowadays, humanism which is our most sympathetic understanding and treatment of human nature tends to be transhumanism; the movement that attempts to revolutionize human nature via technological advancements. However, since such attempts strive to penetrate fundamental change for humanity, its consequences might be dangerous or perhaps the most beneficial one. To mitigate its suffering and to increase the intended results, it is decisively important to undertake critical analysis of human-technology relationship. Moreover, philosophers of technology should do more in advancing philosophy of technology that significantly examines and mediates the relationship between human development and technological progress. It is in this relation that Peter-Paul Verbeek strongly argues: it is high time for philosophy of technology to play a more role in today's ethical discussions on human enhancement and in a critical analysis of the contemporary emerging technologies in order to create a conducive environment between human-technology relationships.

Contemporary transhumanist technologies are able to radically alter human self-definitions and that of their institution in varieties of ways. Since transhumanism is a recent trend for thinking about humanity, it is incompatible with some of the traditional and cultural ideological system. Thus, it necessarily requires new philosophy and ideology, or in general the revaluation of values.

More's exropianism can be taken as an exemplar to serve this new civilizational paradigm. In actual fact, this is not an easy attempt since humanity, which is the product of complex long evolutionary process may not easily transformed by the use of mere science and technology. It requires systematic, wide social discussions and deepest social transformations. Therefore, as Nietzsche devises new philosophy for his envision of overman and to bring about transvaluation of all values into existence, philosophers of transhumanism should also require to establish (or at least reform) a new ideology and principles that guide the life of the posthuman conditions. To bring a genuine social transformation in the age of technological revolution, we critically need to reform our socio-cultural ideologies and values. The more we rationalize our technology, the better and efficiently manageable live we lead.

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