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# Paradoxes and Epistemological Implications of Nick Bostrom's Transhumanism in Nietzsche's Genealogical Perspective

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## Abstract

Nick Bostrom, a transhumanist figure, referred human perfection on three pillars: including super longevity (super long life), super wellbeing (super happy) and super intelligence (super intelligent). This cyborg human model adheres to the epistemology of scientism which he values as anti-traditionalist culture, religious dogmas and metaphysics, but in principle Bostrom bases his perfect human model on Nietzsche (*Der ubermensch*), whereas scientism in Nietzsche's view is a form of religious ideas in a certain degree. This paper attempts to reveal the epistemological paradox of Bostrom's concept of transhumanism through Nietzsche's genealogical philosophy and its epistemological implications. The method used in this research is an epistemological and genealogical analysis on the three main pillars of Bostrom which are the basic foundations of its transhumanism. In this study, it is found first that the Bostrom paradox occurs not only in the misinterpretation of a perfect man, where Bostrom considers the fulfillment of the three pillars, whereas what Nietzsche means is as an independent human being in the sense of two things, namely: able to govern himself and be united or only rely on himself, and not relying on external reality or dogma. The second, paradoxes occur in the belief system of the pillars of Bostrom's transhumanism where he relies on the absolutism of science and negates all assumptions or arguments that come from metaphysics and religion. Meanwhile, what Nietzsche means is to hold on to the relativity of truth where humans will be weak and flawed if they rely on beliefs outside themselves, including science.

## Keywords

*der ubermensch*, the religiosity of science, transhumanism, nihilism, pessimism

## 1 Introduction

Historically, one of the crucial problems faced by humans both socially and philosophically is the problem of improving human quality. Is there an improvement in human qualities? What is the improvement of human qualities? (Lee, 2019, p. 49). and how does man obtain that quality improvement? These questions have been fundamental throughout the history of the issue of improving human quality. At first, man assumed the increase applied only to physical aspects, although at the same time it also assumed the existence of life after physical death (Mitchell, 2004, p. 12).

In the development of this idea, physical improvement in achieving immortality is one of the constituencies of various mystical college schools, one of which is Taoism. They used the power of natural harmony to gain that physical reinforcement (Lee, 2019). In its development, in addition to the mystical stream, science contributed to achieving this immortality through various discoveries of chemical drugs that could help in physical strengthening. Thus, at this point science, mystique, and even technology have mixed up in interpreting the improvement of human quality and immortality which tends towards the direction of physical improvement (Bostrom, 2005a, p. 1).

Theological perspective responded to the debate. But the response given tends to be theologically extreme to the efforts of physical strengthening and immortality, where according to Bostrom specifically Augustine, Albertus Magnus, and Thomas Aquinas reject the activity of chemical discovery because it is considered an activity that is not in line with the provisions of God's laws (William, 2004, p. 45).

Theological doctrines related to physical strengthening and immortality are both triggers and loopholes for the new era to provide answers to the problem of physical strengthening and immortality, which according to scientists of that era rests on rationality and scientific observation, thus giving birth to advanced human beings both in terms of science, morality, culture and even spirituality. (Bostrom, 2005a, p. 2) This era then became the philosophical basis for a school of thought that specifically solved the problem of physical improvement in achieving immortality. Which was later referred to as transhumanism.

“A transhumanist sees the current state of the human in an evolutionary transition, on a transitory journey from ape to human to posthuman, and thus its philosophy is called transhumanism. The goal of transhumanism, then, is the posthuman. The posthuman is a future person who constructs herself out of various technologies. The posthuman, although a speculative projection into the future, will be very different than current human” (Bishop, 2010, p. 701).

With this so, the improvement and immortality that Transhumanism refers to are in the transition of the physical human being, which is then the actuality of the phase of human development toward physical perfection using technology. Thus, transhumanism is a philosophical and scientific way of looking at assuming that human beings can be physically manipulated to transcend limitations in the developmental or transitional phases of their species: “*if human beings are formed from matter and obey the same rules as physical laws that work outside of ourselves, then it becomes quite possible in principle to study and manipulate in the same way as objects outside of ourselves (humans)*” (Bostrom, 2005a, p. 4).

According to transhumanism, the actuality applies to aspects that are considered limitations of the human being in achieving the phase of his physical perfection. These aspects according to the transhumanism perspective include limited survival ability (age and anti-disease), thinking ability, responsiveness, and ability to regulate emotionally (Bostrom, 2005b, pp. 6–7). Fourth, it is assumed to be central to human limitations with which one would not be said to be perfect. From this assumption, transhumanism seeks to transcend these human limitations so that humans are said to be perfect after surpassing them through three pillars, including super longevity (*Superlongevity*), super intelligence (*Super Intelligence*), and super Prosperous (*Super well-being*)” (Vikoulov, 2016).

These three supers will then be achieved by technological avenues that specifically include nanotechnology, information technology, cell generation, and the implantation of computer devices in the brain (Turner & Ronald, 2011, p. 1). These three pillars provide a discourse of serious debate in the field of ethics. Daniel Moseley states that there are three core debates from the birth of transhumanism, including conceptual problems related to the limits of the legitimacy of physical care and improvement, moral concerns about human authenticity and nature, and political problems related to government and the policy of transhumanism as a product (Juengst & Moseley, 2019).

In addition to the implications of the problem, I find a conceptual paradox in the human model he dreamed of where the concept of perfection rests on the concept of human perfection in Nietzsche's view. This is evident in his statement: “*it might be thought that a major inspiration for transhumanism was Friedrich Nietzsche famous for his doctrine of der Ubermensch*” (Bostrom, 2005a, p. 4). In addition to this statement as evidence, Bostrom also explains the context of his understanding of Nietzsche's concept of the perfect man within the framework of the concept of transhumanism. He drew a fragment of Nietzsche's statement saying: “*I teach you the overman. Man is something that shall be overcome. what have you done to overcome him? All beings so far have created something beyond themselves and do you want to be the ebb of this great flood and even go back to the beasts rather than overcome man?*”. (Bostrom, 2005a, p. 4) What Bostrom captures from this idea is the emphasis on the aspect of developing the potential of the human being as well as his culture. This is so that the intent of *overcoming* as a vital word is assumed to be the resolution of physical limitations and improving the quality of life. Thus Nietzsche became the foundation of the human representation intended by Bostrom, Yet Nietzsche in his concept of Genealogy and *ide fixe* states that the so-called perfect human beings are those who are independent and do not hold to the certainty of any paradigm outside of themselves including science (Nietzsche, 2001, p. 226). This is contrary to Bostrom who stated that the construction of the concept of transhumanism must be detached from the metaphysical and spiritually religious thing, thus only building his ideas on the positivistic science that he considered the most perfect and judging that epistemology or spirituality had no rational reason in the construction of his concepts (Bostrom, 2003, pp. 45–46).

From this statement, it is clear that Bostrom had metaphysical assumptions in Nietzsche's sense and also relied on one authority of belief in constructing the construction of his ideas, whereas what Nietzsche meant as perfect was detached from any authority. This paradox then leads to a question of how the

paradox and epistemological implications of Nick Bostrom's transhumanism are within the framework of Nietzsche's concept of genealogy. So if it is drawn to the formulation of the research problem then: what is the paradox of Bostrom's transhumanism from the point of view of Nietzsche's concept of genealogy? and what are the epistemological implications of Bostrom's transhumanism in Nietzsche's genealogical thought pattern? These two questions will be studied by philosophical and also comparative methods of analysis, to generate a description of how Nietzsche's genealogical framework assesses the consistency of Bostrom's idea of transhumanism epistemology.

The systematics that can be formulated according to the above explanation include: how are their constructed theories including Bostrom about his transhumanism and his epistemology, and Nietzsche about his Genealogy will be discussed. These two concepts will be the basic foundation for assessing and analyzing both ideas to find the sides of their philosophical relations, which then enter into an analysis of Bostrom's transhumanism within the framework of Nietzsche's genealogy and its epistemological implications. This discussion will be described as Nietzsche's view in assessing the consistency of Bostrom's transhumanism's perfect human construction with the human model he is referring to. In this point, it will also be argued how Nietzsche's views in general and his critique of science as a basis for assessing the implications of Bostrom's epistemological assumptions of transhumanism. Thus the systematics can answer the formulation of the problem raised.

## 2 Methods

The data collection method used in this study was bibliographical documentation. The researcher will collect various references that are relevant to the material as well as formal objects in this study which cover issues of transhumanism, mainly Bostrom's works which directly refer to Bostrom's main website. Bostrom's books which are used as material objects include; A History Of Transhumanist Thought (Bostrom, 2005a), Transhumanist Values (Bostrom, 2005b), Dignity and Enhancement (Bostrom, 2008a), Why I Want to Be a Posthuman When I Grow Up (Bostrom, 2008b), Global Catastrophic, Cognitive Enhancement : Method, Ethics Regularity and Challenges (Bostrom and Sanberg, 2009). Nietzsche's primary references as a perspective as well as a formal object include: On The Genealogy of Morals (Nietzsche, 1967), and The Gay Science (Nietzsche, 2001). While the secondary references used in this study are data that support the interpretation of the primary data.

The data analysis method used is epistemological and genealogical analysis. This epistemological analysis involves an analysis of various aspects of the knowledge base of Bostrom's Transhumanism which consists of knowledge sources, knowledge tools, and knowledge methods (Dancy, 1985). Genealogical analysis is related to Nietzsche's perspective which seeks to see symptoms of trust in humans (Nietzsche, 1981). This means that Nietzsche uses this analysis as a tool to identify how a person believes in his beliefs which will then have implications for two consequences of human nature. The first is a strong human being or Derubermench and the second is a weak human being who is considered not to give distance to his beliefs and even fully depends on his blind beliefs. These two analyzes (epistemological and genealogical) will be used on the three pillars and philosophical basis of transhumanism to then assess whether there is a paradox and whether Bostrom is categorized as a strong or weak human being.

## 3 Result

### 3.1 The Concept of Transhumanism and Its Three Pillars

In terms of the meaning of Transhumanism according to Thomas D. Philbeck it "refers to the use of science and technology to expand human opportunities and potential by transforming humans, so that their capacities and capabilities can solve various problems of natural human limitations such as aging, death, suffering, intellectual, moral capacity, and so on" (Ranisch & Sorgner, 2014, p. 175). This explanation shows that what is referred to as transhumanism is an idea of a perspective that seeks to increase the potential and opportunity of human beings to reach the limits of their capacities and abilities using the path of science and technology. In other words, as explained by Sorgner Transhumanism seeks to make man seize the opportunity beyond his humanity. (Ranisch & Sorgner, 2014, p. 30).

In explaining in more detail the so-called transhumanism, Roberto Manzocco an Italian Scientist who focuses on the fields of philosophy of biology and technology describes the pillars of transhumanism:

life extension; cryonics; human enhancement, i.e., the enhancement of human physical, psychological and mental abilities, through every possible technological measure, from genetic manipulation to neural implants; nanotechnologies, or, more specifically, nano-machines; mind-uploading, that is, the transfer of human consciousness into a form of non-biological support; the Technological Singularity (Manzocco, 2019, p. 74).

The description shows that the pillars of transhumanism rest on increasing the extension of human life or human lifespan by improving physical and psychological aspects through genetic manipulation and neural implantation. In addition, it is also through the improvement of human intelligence by embedding devices or components of technological components such as chips into the brain. So that the pillars that explain transhumanism are summarized by Vikolouv into three pillars, superintelligence (superintelligence), super longevity (super longevity), and super prosperity (super wellbeing). (Vikoulov, 2016)

Thus Bostrom's Transhumanism had a central idea that he referred to as General Central Capacity. This capacity of capacity then always exists in the context of Bostrom's transhumanism talks (Bostrom, 2008, p. 1–2). That is to say when you talk about Bostrom's Transhumanism then these capacities are what Bostrom refers to so transhumanism is nothing but centered on those capacities in the context of his debate.

### ***3.1.1 Super Intelligent (Superintelligence)***

Super Smart is one of the central ideas of Nick Bostrom's Transhumanism. By definition of super-intelligent, it is defined as: " Super intelligent an intellect that superbly exceeds or surpasses any human performance" (Bostrom, 2014, p. 22). This is so that what is meant by super-intelligent is an intellect that transcends human cognitive performance near the entire domain of human cognitive ability. In transcending the cognitive domain of the human being, Bostrom divides them into three categories that are vital cognitive aspects of the human being among others; speed, collectiveness, and quality. Thus superintelligence as an idea to transcend human cognitive abilities are divided into three; Speed Superintelligence, Collective Superintelligence, and Quality Superintelligence (Bostrom, 2014, p. 52).

Speed Superintelligence or super intelligent speed is a system that can do what human cognition can do but faster (Bostrom, 2014, p. 53). In explaining further about superintelligence, Bostrom states that the brain of human biology in its maximum working process can reach a speed of ten thousand times. At this speed, humans seem to him to be able to read books in a few seconds, and even work on a full night's dissertation. He thinks that if the speed of brain emulation is increased many times with hardware then humans will produce brilliant works quickly in large quantities (Leis, 2021).

In addition, it analogizes super-intelligent speed to the speed of light, which is compared to ordinary speed as the speed of a jet engine. The speed of light according to him can travel millions of times faster than jet engines. This is so that it can reach a wider and farther area than jet engines. Thus that super-intelligent speed is an increase in the speed of human cognitive performance through computer hardware to reach farther and more data while processing the data quickly (Bostrom, 2014, p. 53).

In addition to Super Smart Speed, Bostrom shows another model called super intelligent collectivity. Super-intelligent collectivity he interprets as a system that composes a large number of thoughts of mind as a system of performance that transcends many general domains beyond any type of cognitive system today (Chalmers, 2014). This means that super-intelligent collectives seek to structure and connect the information in various levels of human experience. This intelligence is especially needed in looking at abstract schemes and analyzing experiential experiences on a wide variety of consciousness levels to reach one specific logical conclusion (Bostrom, 2014, p. 55).

Bostrom in explaining the super-intelligent collective focuses on the concept of integration as the core concept in explaining this model of intelligence. The integration in question is the integration between experiences at their various levels. He analogized this model of intelligence to a planet and mega-earth, where the two are connected by the same level of coordination and communication. If only it were assumed that on planet earth there were great people like Einstein and Newton who were one out of every 10 million people, then in a great world there were thousands more people like them. And they all exist in the same level of integration and the same coordination forming a great controlled mind.

In addition, he also stated that the massive distribution between thoughts will open up opportunities for communication that produces many solutions to solve certain problems considering that each data provides and constructs information that can provide opportunities to produce complete ideas. It is like a World Wide Web company. This company later became a very influential company in distributing various thoughts through social media software. The collaborative system makes people from various fields more likely to be able to collaborate on their thoughts to construct new thoughts that are more comprehensive in providing solutions (Bostrom & Sanberg, 2009, pp. 321–322). This is because according to him if we increase the integration between these levels of mind, a big mind will be formed in the sense that one whole and strong mind is integrated.

The last model of super-intelligent is super-intelligent quality. In explaining this type of intelligence Bostrom took as an example the intelligence of animals compared to humans. Animals according to him at some level have intelligence that then the intelligence depends largely on the environment that forms it. For example, an ant that is then intelligent in organizing or managing its comrades to obtain a specific goal for its survival or an elephant trained by an instructor. Both animals are intelligent because of the environment that constantly shapes their state which we then consider intelligent because it can follow some complex human activities supported by collective intelligence and speed as the model of the two bits of intelligence described earlier (Bostrom, 2014, pp. 56–57).

However, according to him, for a human being, environmental factors that support speed and collective intelligence are not the main factors for the increase in the level of human intelligence because biologically humans already have intelligence qualities that surpass any species (Warby, 2021). This is even in humans who in an isolated condition can still increase their intelligence. Due to the potential for higher intelligence qualities than any type of species (Bostrom, 2014, p. 57). This is so that there is a third dimension apart from the previous two intelligence models. Where this intelligence is referred to as quality intelligence. According to him, if this dimension is improved, it can support the progress of the level of human intelligence in general.

### ***3.1.2 Super Longevity***

In the context of this second principle discussion, Bostrom in some of his writings often uses other keywords to indicate this term. Usually, he uses the word lifespan or healthspan which means the same, namely super longevity. Bostrom defines this principle as "a capacity that can maintain health, vitality, and productivity both mentally and physically" (Bostrom, 2008, p. 2). But to know more details can be known through the various characteristics of this principle model.

In the introductory book of transhumanism, he explains one of the main principles of what is meant as this principle. He said that man by this principle should have determined for himself when and how he died or did not die (Leis, 2021). "Ideally man should be able to choose freely when and how he should die" (Bostrom, 2003, p. 34). With this in principle super longevity principled makes a man able to choose at will the age and manner of death. The reason for this principle according to him is that human beings want to experience a longer life experience. Because the length of life by way of quoting the words of the organization of cryonics is to determine the wisdom of life (Bostrom, 2003, p. 34).

In explaining the importance of this principle dimension in a person's life, Bostrom explained survey data, the data shows that in fact, most people want to live over a hundred years to realize their respective ideal lives. The survey he conducted, showed that 27% of respondents wanted to have an age above 100 years. But this certainly does not prove that the majority of respondents want to live over 100 years. Bostrom in this case gave the respondents the next question. He told his respondents to imagine and think that they were staying away from certain activities that threatened their survival such as; diet, quitting smoking, staying away from stress and alcohol, and exercising regularly, and "are all those efforts worthwhile?" Bostrom said. The results showed that from the original 27% increased to 64% percent. This, according to Bostrom, shows how much more people are aware of being reminded through their practical lives than concepts that are only in the mind (Bostrom, 2008, p. 7) (Bostrom, 2005b, pp. 5–6). This is so that in fact according to Bostrom humans tend to choose to live a long time in achieving their ideal life.

In the context of completing the basis of his transhumanism in his article Bostrom continues how later this model became a principle. According to him, the extension of a person's life will provide the possibility of one's experience to achieve the ideal values he refers to (Bostrom, 2008, p. 13). So that in principle, longevity he made in the pattern of his ideas as a determinant and condition of possibility for the realization of two other models of the principle of transhumanism, namely: super intelligent and super prosperous.



### 3.1.3 Super Prosperous (Super Wellbeing)

In this principle, Bostrom often uses the term emotion modification. He defines it as "an ability or capacity to enjoy or enjoy life and respond to the surroundings and others with the right emotions." (Bostrom, 2008, p. 2). In other words, this principle model makes the user able to adapt to all the problems he faces both physically and emotionally to be able to enjoy life.

The emergence of this idea is motivated by our limitations in the face of genetic pressures that make us unable to achieve our well-being both emotionally and physically. According to him, we often fail in the face of these pressures, for example, someone who always fails in destroying bad habits that he does not want to have and becomes stable. In fact, according to Bostrom, at the beginning of the formation of the habit, we did not deliberately choose it so that it always happened and eventually formed into a habit. This is due to our limitations in resisting or repressing these genetic pressures (Bostrom, 2005b, p. 7). So that Super Prosperous according to Bostrom is not solely interpreted as an enhancer of one's mood (mood brighter), but rather certain emotional and physical improvements to achieve one's subjective well-being by suppressing its deterministic limitations.

In principle, Super Prosperous has two main objectives, including improving the socio-cultural dimension, and leading a person to achieve his ideality in enjoying life or eliminating the emotional feelings that hinder him in achieving the ideality of life:

"but from two other directions. One of these is the socio-cultural dimension, which I shall discuss in the next section. The other is the potential use of emotional "enhancements" by individuals to clip the wings of their souls. This would be the result if we used emotional enhancers in ways that would cause us to become so "well-adjusted" and psychologically adaptable that we lost hold of our ideals, our loves and hates, or our capacity to respond spontaneously with the full register of human emotion to the exigencies of life" (Bostrom, 2007, p. 18).

In this statement, the purpose of this principle is first as an introduction that can realize one's happiness by eliminating negative feelings in one's psychology. So that emotionally human beings can adapt to different types of environments and problems they experience. While the second goal of emotional modification, also affects socio-cultural aspects. According to Bostrom, this can happen indirectly through individual improvements. Such improvements can indirectly affect the idealistic model of one's qualities that society collectively aspires to. So that the modification of emotions indirectly according to Bostrom provides an ideal picture of the socio-cultural qualities of society which will then become the ideal standard of society itself (Bostrom, 2007, p. 18).

### 3.3 Epistemology of Transhumanism

Epistemology from the side of language has historically derived from the Greek "episteme" (knowledge, or understanding) and "logos" (argument or reasoning). The Stanford Encyclopedia of Philosophy defines it as "*epistemology seeks to understand one or another kind of cognitive success (or, correspondingly, cognitive failure)*" (Matthias & Ram, 2020). From this explanation, it can be understood that epistemology is a science that seeks to understand various ways of obtaining knowledge both in terms of truth and error in the process of obtaining such knowledge (Bostrom, 2003).

Concerning transhumanism then, transhumanism becomes the object of epistemology where it will be traced how this process of view derives its knowledge and justifies its truthfulness. Transhumanism which in this context is Bostrom's idea states how transhumanists have a special position from the side of their epistemology. He explained in his journal indirectly entitled *A History of Transhumanist Thought*. In the journal, he said how transhumanism could be born into an ideology and he later explained that the birth of transhumanism was rooted in the humanism of the renaissance century (*renaissance humanism*). He argued that renaissance humanism was the figure of the ideal people. Bostrom considered them to be people who scientifically, culturally, and even spiritually had a high degree. (Bostrom, 2005a, p. 2)

In addition, he also firmly said that things of a spiritual nature and religious dogmas have no solid evidence. This is certainly the case because in its evidentiary pattern transhumanism as Bostrom states do not use a priori principles but rather scientific observations. (Bostrom, 2008, p. 2) In the context of his explanation of the difference between transhumanism and religion, Bostrom states that transhumanism is not like a religion that uses the intervention of divine authority or supernatural powers to make everyone's dreams come true, but rather uses the power of empiricism and rationality through scientific discoveries in human development. (Bostrom, 2003, pp. 45-46)

Through these characteristics, it can be said that the idea leads to a scientific perspective. This is in keeping with Tom Sorel's definition of the following science: "*Saintism is a belief that science, especially natural science, is more valuable in human learning because it is more authoritative, useful, and serious in science*". (Sorel, 1991, p. 1) As mentioned, Bostrom fully adheres to the principle of science in the sense of the century of enlightenment in which it is purely considered a representation of empiricism and rationalism that is strong and scientific as an authoritative science. Thus epistemologically Bostrom clings to the stance or principle of the scientific viewpoint.

## 4 Analysis

### 4.1 The Concept of Genealogy as a Symptomatic Analysis

This concept Nietzsche discusses systematically in his work entitled *The Gay Science* as mentioned in the previous discussion. In his thought on Genealogy, Nietzsche departed from an idea of the most fundamental mechanism of the human self. He mentioned that it was a will (Nietzsche, 2001, p. 205). This means that the will becomes the center or the most central thing of the human self which will then explain the mechanism of the belief system. Genealogy for Nietzsche was an attempt to answer the question of what the will wanted or wanted. This can be referred to in other words as what the will desires. Departing from this question Nietzsche discovered that it was what he would then look for in his philosophical search. In this context he considers himself a physio-genealogist: that is to say, he seeks to see the symptom for the vitality of the thinker (Wibowo, 2017, p. 226). Departing through the idea, it can be understood that what Nietzsche is trying to know is not the idea of what a person believes, or not the content of the thought of the thinker, but rather the mechanism of how the person can believe something. Because as mentioned that it seeks to see the mechanism of a person in believing reality outside of himself, not what content he believes. Thus Nietzsche treats the object of his study as a *symptom* diagnosed by a physio-psychologist and it ends in an analysis of the vitality or rigidity of the mechanisms of the human will. This is so that the final justification of this way of philosophical analysis leads to a typology of weak and strong rather than right and wrong (Nietzsche, 2001, p. 206).

From this system of thinking Nietzsche criticizes and seeks to trace all forms of fixed ideas, or ascertained ideas of all human ideas, through genealogy analysis on symptoms or symptomatic that are struck by the will in other words he seeks what his will (man) wants or desires and what his will does not want and why it can happen and why a person wants his will more about A and not for B. in an attempt to answer this Nietzsche elaborated in GS "*Believers and their need to the believe. The extent to which one needs a faith to flourish, how much that is 'firm' and that one does not want to be shaken because one clings to it – that is a measure of the degree of one strength (or to speak more clearly one's weakness*". (Nietzsche, 2001, p. 205). In this explanation, it can be drawn from the core idea that Nietzsche discovered that belief as an existing reality requires something for its existence, namely a sense of need for the trust itself. It is this sense of need for trust that gives the element of always wanting to lean on trust or what Nietzsche commonly calls the pen-stabilizing element (Nietzsche, 1967, pp. 290–291). It is this relationship between trust and the need to believe that Nietzsche will analyze as a parameter to determine the qualities of a person. This quality will boil down to the conclusion of strong and weak humans. The standard prescribed in analyzing a person's level of power is the extent to which man can keep a distance from the need for his trust in the trust he trusts (Wibowo, 2017, p. 227). If the need to believe in him cannot be controlled in the sense of being kept at a distance from the beliefs or beliefs he wants to believe then the person will be considered weak.

In the next mechanism, Nietzsche explains that this process is always related to the subject who invests his trust, and the content of trust outside of himself. In Nietzsche's view, there is a term referred to as fanaticism. This term he defined as a person who invests a little trust outside of himself (Nietzsche, 2001, p. 206). This means that fanaticism is for those who lack a variety of views of their external beliefs. But would people who have many or various perceptions about reality be strongly assumed by Nietzsche's genealogical system? This is certainly not in his opinion, because the many different perspectives or perspectives, for example, scientists are not a guarantee for the person not to drag on a belief. It is mentioned earlier that the quality of man is determined by the extent to which his need to believe can be controlled and kept at a distance from beliefs outside of himself. This is so that even if a person is highly educated and educated from a wide variety of sciences and thoughts, he is not necessarily considered a



strong or non-fanatical person in Nietzsche's sense. Thus, the quantity of thought content is not a standard and is merely a number or amount received or invested by the subject (Nietzsche, 2001, p. 206).

According to Nietzsche, the control of the need for trust is named a psychological investment. This is so that it is the psychological investment that determines the extent to which the human being he values is strong. In other words, whether he is fanatic or relativistic. According to him, the basic problem of bigotry is man's inability to temper his will for certainty as opposed to relativistic opposites. This then ushered in further discussion of his critique of dogmas that were not only religion but also science, patriotism, philosophy, atheism, and any form of authority of thought (Nietzsche, 2001, pp. 206–207). According to him, the problem is not the content of the belief, but the purpose of his genealogical analysis, namely the subject who believes in it. It is this sense of need for a handle on life and certainty that makes people fanatical. If the need for the handle is large then of course what will be the content of the handle is diverse. Starting from scientific, rational, or even mythical depending on where he first invested in his thinking. Nietzsche's thought, shows very clearly how his perspective on the variety of worldviews or paradigms he analyzes uses a genealogical perspective, where according to him, the need for a definite backing and understanding creates a variety of constructs of thoughts and ideas that are then considered absolute. The idea of an absolute necessity in these various viewpoints is what Nietzsche calls a weak instinct.

In the description, Nietzsche also sees the weak side behind the solidity of religious beliefs in Europe, the trend of using and glorifying the greatness of the scientific methods of his time. He sees that all forms of dissolution of these various isms are a form of servitude of self-inadequacy or self-helplessness in the face of reality, where the reality that he considers to be *chaos* is the reason for man's difficulty to be independent and creative so that he is unable to produce new things and instead leans and feels satisfied with absolute ideas outside of himself (Nietzsche, 2001, p. 205).

According to Nietzsche, the will as the deepest element of man has other elements which then occur as a mechanism of need for something outside of man that is considered certain. These elements include thinking, affection, and also motor stimuli of the human body. He explains how the will as the deepest element determines a force built by man to be able to keep his distance from the belief in the certainty in the outer reality of himself. This view also at once Nietzsche gives the possibility of a cultured and powerful human judgment by which he can stand or be sovereign without relying on anything other than himself. He considers these humans to be those who can govern themselves without having to seek orders from outside themselves to determine their life orientation. Nietzsche in the context of this explanation explains that there are two important elements to which Nietzsche's unequivocal definition of the meaning of the will. He mentions it as an *affek ruling* and *affek uniting itself* (Nietzsche, 1967, p. 291). This is what Nietzsche means as a strong man is a person who can control his will with meaning that he can govern himself and unite himself without any intervention of outside orders. This is what he later referred to as ultimate freedom, in which man is independent and sovereign at the behest and unification of beliefs that exist only in himself (Nietzsche, 2001, pp. 205–206).

## 4.2 Critical Analysis of Nietzsche's Genealogy on the Three Pillars of Bostrom's Transhumanism and Its Epistemological Implications

In this point, it will be studied how Nietzsche's genealogical concept indirectly analyzes the symptoms that occur in Bostrom as a person who has the idea of Transhumanism, also contextualizes the concept of perfect human transhumanism in superhumans or strong humans referred to by Nietzsche as well as analyzing Bostrom's epistemology within the framework of Nietzsche's Genealogy. This is nothing but a step to answer the formulation of the problem raised. Related to this will first be presented the three pillars of Bostrom and related to the concept of *Der Ubermensch* Nietzsche to see if there is a further paradox of the Bostrom idea and in which aspects does the paradox occur? As previously explained, Bostrom has a perfect human achievement that is realized from the fulfillment of the three pillars through physical editing.

The three pillars are as presented, namely superintelligence, immortality, and happiness, all of which must be passed through the procedures of science and technology (Turner & Ronald, 2011, p. 1). In summary, it was also discussed earlier that superintelligence is nothing but a multi-fold increase in ingenuity than human intelligence in general cognitively. Cognition Bostrom refers to three aspects that he considers vital namely: the speed of memory, collectiveness, and the quality of the cognition power itself, one of which is done by implanting chips into the brain. In addition, it is on the aspect of immortality as its second pillar. As referred to, Bostrom defines this principle as "a capacity that can *maintain health, activity,*

*and productivity both mentally and physically*" (Bostrom, 2008, p. 2). this means that eternal are those who can be continuously in a healthy state both mentally and physically and it is assumed that with that state humans can continue to be productive. In addition, the idea of super happy or well-being is *emotion modification* and he defines it densely as *"an ability or capacity to enjoy or enjoy in life and respond to the surroundings and others with the right emotions"* (Bostrom, 2008, p. 2).

From various explanations about the details of the definition of each of these pillars, it is clear that Bostrom sees man as a physical material that can be edited and actualized his potential to achieve mental satisfaction. This satisfaction reflects as perfection and if mana is not fulfilled then man is not said to be actual potential. As seen from this side, Bostrom also has the assumption of human evolutionary Darwinism where humans, according to him, exist in an order of physical evolutionary change that at the end of this modern era the most perfect form of man is physically evolutionary but still on condition that it must be exceeded by the use of technology as Bishop's analysis an expert on Transhumanism said:

"A transhumanist sees the current state of the human in an evolutionary transition, on a transitory journey from ape to human to posthuman, and thus its philosophy is called transhumanism. The goal of transhumanism, then, is the posthuman. The posthuman is a future being person who constructs herself out of various technologies. The posthuman, although a speculative projection into the future, will be very different than current human" (Bishop, 2010, p. 701).

From this explanation, it is clear that the transition of human evolution to after human (posthuman) is the goal of the view of transhumanism. At the same time assume that *post-human* is an inevitability in the evolutionary developmental route of human Darwinism. This picture when viewed from Nietzsche's genealogy as explained in the previous discussion is certainly very different from *Der Ubermech* referred to by Nietzsche. This is seen in terms of the meaning of perfection that is not reduced to the three pillars as its representation. Nietzsche interprets perfection as an independent human being as mentioned earlier that he does not hold to any paradigm outside of himself (Nietzsche, 2001, p. 206).

The keyword that became the concept of perfection in Nietzsche's perspective was *affek* ruling and *affek* converging. These two words will boil down to an understanding of the renunciation of a weak will that is incapable of standing tall based on unification and governance within itself. Departing from these two concepts (unification and government) it is clear that what *Der Ubermech* is aiming for is not perfection in the physical sense that is a form of self-government and self-unification in which a person escapes the need to rely on certainty beyond himself. So far, Nietzsche considered a man from century to century or from the pattern of development of his time unable to control himself to need an effect of government or unification of outside reality. This is evidenced by his showing that religion, especially in Europe, has never disappeared because it is still needed by humans and humans are unable to deal with *the chaos* of reality so it needs to be on religious backing. Likewise, science has a trend to gain an absolute understanding of reality and with it, humans become calm because they get orders to analyze reality definitively with various scientific methods (Nietzsche, 2001, pp. 205–206). Thus the three pillars that Bostrom refers to are highly irrelevant both in terms of the context of their meaning and the metaphysical foundations of what is referred to as *Der Ubermech* Nietzsche.

In addition to the irrelevance of the contextualization of *Der Ubermech* Nietzsche's understanding of the perfection of the three transhumanist pillars, there are also various contradictions. It can be found in *Der Ubermech* as a human form that does not rest on any paradigm with the three pillars of transhumanism as a paradigm that rests on the absolutism of science. This is so that if traced further Relativism and absolutism form the basis of the assessment that these two ideas boil down to the paradox of the theory of truth. In Bostrom's understanding, it can be seen when he makes science the only thing that is true and says that all metaphysical things cannot be proved rationally, whereas in Nietzsche's ideas it can be found in his statement that the search for certainty is the main feature of human weakness. This is because the search for certainty is a form of a person incapable of governing himself in the face of the chaotic reality that gathers truth and error in it.

Having explained the paradoxical side and irrelevance of the concept of the perfect man of Bostrom's Transhumanism with *Der Ubermech* Nietzsche, it is necessary to look at the epistemological side that occurs in the concept of Bostrom's transhumanism within the framework of Nietzsche's genealogy. This is as discussed the urgency, namely to answer the formulation of the second problem. Bostrom's epistemology as previously explained that he has a full attachment and rests fully on the knowledge system of science (Bostrom, 2005a, p. 2). As he said that natural science is the most authoritative knowledge where it has both empirical and rational characteristics and negates all knowledge that is not based on that principle as

opposed to knowledge that cannot be scientifically accounted for (Bostrom, 2005a, pp. 2–3). So how then did Nietzsche see this attitude in terms of his thinking as a psycho-physiologist on the symptomatology or symptoms of Bostrom's epistemological system of thinking? It is worth emphasizing that Nietzsche's genealogical analysis should boil down to the assessment of subjects who are likely to enter one of the categories i.e. weak or not weak, (Nietzsche, 2001, p. 205). not on the level of thought content. This is so what are the epistemological implications of Bostrom's attitude in believing in science as a system of thinking whether it is then categorized as a strong subject or just the opposite?

In Nietzsche's view of the *Idee fixe*, where this viewpoint as an attempt to find the ultimate or the final truth, (Wibowo, 2017, pp. 226–227) becomes a basis that can be used as a benchmark for seeing one's attitude to a particular paradigm. In this regard, science is treated as an object of belief that is how its adherents respond to that belief. Bostrom presented his attitude and his assumptions about science, although not explicitly mentioned by him (science as the ultimate) in his work, he still considers that the scientific method is the only accountable way to understand reality. This is in his scientific view where he explicitly mentions science as the only authoritative science and negates all forms of religious-metaphysical knowledge as the foundation for approaching and understanding reality. This statement could be key to how such attitudes have epistemological implications within the framework of Nietzschean. Indirectly, when viewed through Nietzsche's glasses or point of view, this is an attempt to appropriate or discard part of the possibility of reality by reducing it only to things that are categorized as scientific. Even then, it is defined as a naturalistic science. The reason Nietzsche states so is because it is an attempt to fixate on a reality that he considers *chaos* (Nietzsche, 2001, p. 200).

Attempts at fixation as a way of addressing science as Bostrom did would lead to what Nietzsche calls *cities*. In an epistemological context, a *city* is understood as a solid shield or fortress that is ready to sort out various ideologies or preconceived notions that are considered unscientific with a naturalistic point of view and would consider them as hypotheses (Wibowo, 2017, p. 229). Not quite there, the presumptions that had previously been restricted with naturalistic glasses were also sorted by methods that had been restricted based on experiments. This is nothing but an attempt by science to provide a perfect perspective that they regard as missing subjectivity. Everyone should put off all their subjective prejudices and subject them to a method and perspective that is considered time. But is it true that according to Nietzsche science with this kind of perspective escapes subjectivity? Nietzsche shows how science has assumptions of unconscionable will. This means that it can be analogous to science as a king that selects things that in this context are knowledge. In the selection process, science demands a scientific procedural for all knowledge but forgets that itself as knowledge escapes the process (Wibowo, 2017, p. 230) From this analysis, Nietzsche saw sharply how science wants an objective ratio, which is when the desire as mentioned comes from something that is also assertive and irrational. There is something arguably imperative that passes censorship in an attempt to selectively select knowledge and claim to itself and arbitrarily or arbitrarily sort other knowledge by the standards it makes itself. This analysis shows that Nietzsche's genealogical view sees the implications of science as leading to its paradox and by looking at science like this as Bostrom did it leads to weaknesses and rationally unsubstantiated truth claims also amputate the reality that Nietzsche truly considers chaos.

## 5 Conclusion

From the presentation of the analysis above, two formulations that were previously raised can be answered. This is among other things that the paradox of Bostrom occurs not only lies in the misinterpretation of the perfect man which Bostrom considers to be the fulfillment of the three pillars whereas what Nietzsche means is as an independent human being in the sense of two things that can rule from him and unite or rely only on himself and not rely on reality or dogma outside of himself as a form of the wildness of desire or will to believe. In addition, a paradox occurs in Bostrom's belief system where he relies on the so-called absolutism of science where he adheres to scientific understanding and negates all assumptions or arguments derived from metaphysics or religion. Whereas Nietzsche held to the relativity of truth in which man would be said to be weak and flawed if he had to rely on beliefs outside of himself. The implications of Bostrom's epistemology of transhumanism judged from the Nietzschean framework lead to the reduction of reality that Nietzsche considers chaos and it will amputate reality to things that are only scientifically experimental, and forget or forcibly discard things that are independent of the scientific method. In addition, Nietzsche's incisive analysis indirectly also proves that science is inseparable from

subjectivity and arbitrarily seeing or judging other knowledge without judging itself as an object of knowledge that Nietzsche also finds unscientific and rational.

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