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Transhuman in the Science Fiction Novel Penjelajah Antariksa 3 Kunin Bergolak by Djokolelono

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Abstract. This study aims to describe the transhuman form in the science fiction novel The Space Explorer 3 Kunin Bergolak. This study uses a qualitative descriptive type of literature. The data of this research is sourced from the novel Explorer of Space 3 Kunin Bergolak. Data collection techniques used are reading techniques and note-taking techniques. Furthermore, the data were analyzed by using the content analysis approach (content analysis). The use of the content analysis approach is based on the data to be taken from the written data in the selected novel. The results show that the transhuman form in the science fiction novel Penjelajah Antariksa 3 Kunin Bergolak by Djokollono is in the form of a T2GP electro capsule, computer, electronic whiteboard, robot, microchip, pacemaker in the body which is used to increase the capacity of the characters used by the author in the story. The specialty of this study lies in one science fiction that there are several forms of transhuman while other studies have not found such a thing, so this is a variation of the transhuman form in science fiction that supports each other.

Keywords: Transhuman Form, Technology, Science Fiction, Space Explorer

INTRODUCTION

Advances in technology in this modern world, have a great impact on human life. This makes humans have a dependency on technology. Since the end of the 20th century, humans have seen and felt various technological advances that have changed the boundaries of life. The convenience offered through technology makes it easy for humans to travel everywhere, access the latest information in a very short time, buy goods quickly, and even communicate with people around the world via the internet. The relationship between science and technology in the 21st century has both positive and negative impacts. Science and technology can reshape aspects of human life that have relationships that lead people to always look for a better and more comfortable world so that everything related to human activities is taken over by technology [1] There are many reasons why humans rely on technology in their lives, one of which makes it easier for them to find what they want. But consciously or not, technology can harm humans if not used properly. The current reality is that humans have been in the pleasures of life governed by technology. The current phenomenon of humans can not be separated from a variety of bionic life. This is certainly related to transhuman forms in everyday life. The transformation of humanity into a new era where humans are always looking for important points in their lives to be improved with the help of technology.

Nowadays humans are starting to try to improve their abilities and nowadays humans are on the verge of transformation due to technology. Evolutionary humanism was first created by Huxley in 1957 as a remnant of humans but has the ability to overcome biological limitations [2]. Transhumanists value positively the gradual process of humans becoming beings who are perfected both physically and mentally.

Transhumanism focuses on the potential achievements of technological developments, the desire to develop new technologies and enhance current human capabilities [3]. Transhumanists view nature as a work in progress to reshape today's humanity which could be the endpoint of evolution.

Furthermore, Bostrom also argues that transhumanism is a movement that advocates the voluntary use of technology in order to increase human capacity and extend the span of human health [4]. In this case, technology is an alternative in improving human thinking and prolonging human life. Furthermore, Bostrom [4] states "Transhumanists view human nature as a work in progress to shape humanity through science and technology." The use of science, technology is a rational way that will eventually become a posthuman being with much greater abilities than humans. The main goal of transhumanism is to eradicate all diseases, delay and stop death, and increase human abilities and intelligence. Transhumanism is considered to be able to change into transhuman and posthuman which are hyper humans who live longer, healthier, smarter, stronger, and more useful than humans today [5].

Transhumanism is seen as an extension of humanism. Humanists view that humans are important. So it is necessary to improve the human condition by improving ourselves. Transhumanists value autonomy, the ability, and the right of individuals to plan and choose their own lives. [6] emphasizes that the greatness of science and technology must be paid for with the fragility, vulnerability, and even the threat of "extinction" of the human species (which is human) so that the survival and sustainability of humans and humanity in addition to culture and civilization are on the verge of danger.

In the last half of the 20th century, the development of information theory and digital and electronic computing moved from mechanical technology to digital electronics [7]. Revolution is built on digital but is characterized by a set of artificial technologies. Man-made technology shows the superiority of humans who have equality between humans and machines. Advanced technology can be found in science fiction.

"Science fiction has the most effective function as a mirror to know the human condition and technology." [6] Science fiction according to [8] One type of science fiction that describes the life of the future world is the novel *Penjelajah Antariksa 3* by Djokolelono. The success of science fiction in mainstream culture led to a wider interest in reflection on the technological future of mankind. Prior to the hype about gene technology in the last two decades, the techno-futurist discourse has been primarily interested in artificial intelligence, robotics, and nanotechnology. Furthermore, [9] "The use of technology to bridge the gap between the human mind and the external environment is no longer restricted to science fiction and is now a reality that is permeating our everyday life".

Djokolelono is a native Indonesian child who became one of the pioneers in science fiction writing in Indonesia. The *Space Explorer 3 Kunin Bergolak* novel is one of seven science fiction novel series. Djokolelono is also an author of original and translated books. In *Antarctic Explorer 3*, Kunin Bergolak's novel describes the people of Terra or Earth who are looking for a place that is safe from war. So that the inhabitants of the earth are scattered looking for planets that they can live in and this is of course assisted by advanced artificial knowledge and technology by humans to be able to go to other planets. But the vast space planets apparently want to be controlled by the interplanetary union. The author describes one of the places called Kunin to be a prison planet for prisoners of the interplanetary union. At the same time, there is a group of space rescue lifeboats belonging to a general who wants to take control of Kunin and organize a force to attack the interplanetary union or Starx. Various technological tools are used even to send spies to use technology that can be stored in the skin to provide information to the group being defended.

"The term "transhuman" was coined by one of the futurists F. M. Esfandiari, who considers implants, asexual reproduction, and the absence of sex to be characteristic components of this concept [10]." (The term transhuman was coined by a futurist named FM Esfendiari who considers implants, sexual reproduction as part of the transhuman component). A transhuman is an intermediate form of a human to posthuman evolution which is part of the transhumanist view. Posthumans are creatures that are very similar to humans but have many abilities, are healthier, and live longer. In science fiction, transhumans are described as genetically enhanced individuals or bionics. Science fiction writers always describe futuristic technology with different scenarios about humans through transformation [1]. One example of the transhuman is placing implants in the body to eliminate disability and disease in order to improve human abilities. In science fiction, transhumans have special abilities. Bionic people and cyborgs in science fiction are people who have similarities to humans but both contain artificial organic parts. An example of a quote showing transhumans in the novel *Explorer of Space 3 Kunin Bergolak* is as follows.

"With a device hidden in the palm of Messi's left hand, the balloon can be controlled to stop at a certain place in the sky, out of sight of anyone, and descend rapidly if needed. The linkage and electric shock weapon had been operated and hidden under the skin of his palm. At first glance, it would not be obvious that he was carrying such a complex piece of equipment."

From the quote above, the author describes how the character of Mesi, a member of the Space Union, disguises himself. The use of technology hidden under the skin makes his disguise successful when entering the Kunin planet or prison that prohibits the use of technological tools. The depiction of the character Mesi is part of a transhuman because he tries to increase his inner ability to become a superhuman to protect himself from the threat of danger that appears in Kunin prison. With this disguise, the Mesi character can join the community in Kunin prison without his identity being known. The influence of transhumans in the quote above clearly provides benefits for the use of futuristic technology in society to maintain its existence in this world. In today's world, placing technological devices on the skin or commonly known as chip implants is starting to be carried out to help facilitate human activities [11]

The research road map related to this research was carried out by Ornella which discusses the influence of technology in bridging new possibilities for communication and seeing the world in an ever-new perspective. The aspect that is most emphasized in Ornella's research on future technologies that are used as future interactions is between future technologies in increasing sexuality. Furthermore, research conducted by [12], analyzed human dependence on technology in the novel *Neuromancer* by [12]. The results of the study found 3 important points, namely: (1) how technology causes human dependence on sensations and facilities available in technology, (2) technology is described as potentially threatening human life, (3) technological innovation is inseparable from the ideology of the ruling class.

Furthermore, a study entitled *Exploitation of the Cyber Organism Body in the novel The Windup Girl* by Paolo Bacigalupi. The focus of the research is on the main female character who describes the complexity of her attitude, character, and position as a cyborg in the midst of humanism discourse [6]. Santosa's research does not describe a passive subject but focuses on the efforts of the female main character Emiko as a cyborg human to try to negotiate with humans and human discourse itself. The emergence of an organism in literary works confronts humans in an era known as posthumanism.

This research is certainly different from the two studies above. The object of study in this research is the science fiction *Space Explorer 3 Kunin Bergolak* which will be analyzed from the transhumanist perspective of Bostrom. The focus of this research is on the transhuman form in Djokolono's science fiction *Space Explorer 3 Kunin Bergolak*. This research will produce something new because no one has studied the novel *Explorer of the Space* with a transhumanist perspective. There are so many literary works that have transcended humanism where these literary works question human existence and human dependence on technology needs to be studied carefully. Based on the background of the problem above, the focus of this research is on the transhuman form in the novel *Penjelajah Antariksa 3 Kunin Bergolak* by Djokolelono.

METHODS

The type of research used in qualitative research is descriptive. This means that the analysis is described in the form of words and sentences, not in the form of numbers [13]. Thus, data processing in this study does not use numbers or statistical data. The approach used is a content analysis approach (content study). The use of the content analysis approach is based on the data to be taken from the written data in the selected novel. The researcher is the main instrument because it acts to collect data.

The data in this study were sourced from the science fiction novel *The Space Explorer 3 Kunin Bergolak* by Djokollono. Data in the form of sentences and paragraphs were collected through library procedures. The technique used in analyzing the data uses the activity flow proposed by [14] The flow of the activity contains four ways starting with (1) data collection, before conducting data analysis, data will be collected according to the research focus. This study uses sentences and paragraphs that describe the forms and uses of transhumans through the characters in the story. (2) Simplification of data, data obtained through reading techniques will then be simplified by recording. (3) Presentation of data, data obtained through selection and rechecking, then collected, (4) Drawing conclusions, in this activity the researcher will draw up conclusions that are adjusted to the data that has been analyzed [14]

RESULTS AND DISCUSSION

The science fiction novel *The Space Explorer 3 Kunin Bergolak* is a novel that tells the story of life on the planet in space, written by Djokoleno. The transhuman form is found in science fiction novels.

Transhuman via T2GP Electro Capsule

The story of life on a space planet makes everyone want to use their knowledge and technological tools to avoid their opponents. An overview of the use of these technologies can be seen in the quote below.

“Under the threat of Colonel Vereva who had inserted the Electro T2GP capsule-capsule that was detonated by thought waves into Stri's body, Veta managed to come up with a clever ploy. He told the whole lifeboat to pretend to be in eternal sleep until they were brought into the Aug-2 by Inspector General Stab. Then at the right moment, all came out of their bedrooms and took possession of the Aug-2. (Page 24)”

The data above illustrates the existence of a transhuman that occurs by the way Veta's character makes T2GP electro in the form of a capsule which can be a wave device to explode thought waves in the body of Stri's character to create eternal sleep. The transhuman form here is described through the manufacture of a T2GP electro capsule that is inserted into the body. This of course has a negative impact on health, but for the sake of carrying out the mission, it can actually have a positive impact so that the enemy's actions are not known by pretending to be an eternal sleep. This is part of transhumanism to make humans become super people and able to achieve what they want. The understanding of body and mind can unite by representing a denial not only of materialism but of dualism as well. This observation is relevant to the transhumanist perspective. Transhumanists hope with the hope that they can transcend the human body to form a living existence. Transhumanists imagine the human mind being transferred to a new body or to a computer to bring cyberspace to life[15].

Transhuman via Computer

The story about the Great Admiral who starts to look gloomy shows the condition of their fate because their equipment has been damaged. So ordered that all host computers must be connected to the central computer. This is done to avoid attacks from other planets that try to attack them. Worry arose from an Admiral because he was afraid of a sudden attack, so he decided that all Generals should pay attention to the main computer so that they could communicate directly with the central computer. We can see this in the quote below.

"Good. Now you guys go back to your places. And, remember! Whatever happens, only my orders apply. It doesn't matter if there's an order from Starx. Keep that in mind and each host computer must be connected to a central computer. (p.41)”

The quote above describes how the Admiral Agung ordered each of his generals to be on guard and provide information as soon as possible through the main computer that has been integrated with the central computer. So that whatever happens can be monitored through a central computer by the Admiral. In today's digital world, all data related to humans can be known through technological tools and even a person's whereabouts can be tracked with increasingly sophisticated technological tools such as gadgets and computers. Transhuman occurs through technology in interacting and considers technology a part of his life. Human dependence on technology will certainly change the mindset of humans indirectly. The presence of technology is undeniably very helpful in human life to facilitate all activities of daily life.

Transhuman via Electronic Whiteboard

General Tago has limited hearing because he is old, so General Tago is not interested in getting involved in politics. General Tago's hearing was already disturbed. So within these limitations he uses one of the technological tools that can overcome his limitations, namely an electronic whiteboard to facilitate communication. This can be seen in the quote below.

“He conversed with his aide using the electronic whiteboard touching a few words on the small electronic board he was carrying and then showing it to his aide. If his adjutant has read and written the answer the board is returned to him (Page 45)”

The quote above describes General Tago who used an electronic whiteboard to assist himself in communicating with someone. General Tago had hearing loss and had to use an electronic board to communicate. It is not without reason to use an electronic whiteboard but the selection on an electronic whiteboard keeps the possibility of what is communicated with someone else being known. Often as humans we need technological tools to overcome our limitations. This is in line with what was stated by [4] "The purpose of transhumanism is to increase human capacity and prolong human health." Transhumanism is one way to overcome human limitations.

Transhuman via Robot

Space travel begins. Vied and Raz who are brothers must learn about space travel. Humans who are supposed to be producers of food and air-making machines, as well as teaching are taken in by a robot named Curtis. Curtis robots are like humans who carry out activities like humans in general. This can be seen in the quote below.

“Curtis serves air and food making machines and in between activities, Curtis teaches Vied and Raz the language and manners of the Starx people. (Page 69)”

The quote above describes the transhuman form of a robot. Robot is a posthuman what is called a human machine. The activities carried out by Curtis are part of the work that must be done by humans, but here Curtis does the work that serves to ease the work of humans. Technology and robots are part of transhumans that can help human life in the future. If these findings are robots can help human life but [6] "Technology and robots are considered to bring dreams, hopes, and images of more advanced human life in the future but technology and robots have also shown that they have the ability to be an oppressor to man." This can be seen in the following quote.

"I don't know why, it is," he said later. On my planet, pregnancy and childbearing were just a minute or two. Contains can be entrusted to the TNA robot. Giving birth we feel nothing. But here every time I bear my child, I have to suffer nine ono. Giving birth must be so painful. It really hurts. Everything is primitive. My life is at stake.”

The quote above explains how the character Rahi, a hacker, begins to suffer without technology. While in Kunin, Rahi had to live like a primitive person without technological tools even though he was a computer expert but the ban on using technology in Kunin made him suffer because he was used to using TNA robots that could help him, conceive and give birth in just one to two minutes. just. The impact of excessive use of technology can also make someone become complacent about the use of technology as illustrated by the character Rahi who complains when she wants to give birth without the help of a TNA robot. In line with the findings above, [5] “Transhumanists uphold the principles of bodily autonomy and freedom of procreation. In the sense that parents are allowed to choose for themselves whether to reproduce with the use of technology or genetic treatment.” So, the above findings support the perspective of transhumanists to improve humans to be healthy and happy.

Transhuman Via Microchip

Mesi is one of the space members who is used as a spy in Kunin prison. Mesi disguised herself to blend in with the Kunin people. Mesi also carries out a mission and hides a technological device under the skin of his palm that is used to connect with the planet Starx. This can be found in the quote below.

“With a device hidden in the palm of Messi's left hand, the balloon can be controlled to stop at a certain place in the sky, out of sight of anyone, and descend rapidly if needed. The controller as well as some other basic tools, such as a linkage and an electric shock gun, had been operated and hidden under the skin of his palms. At first glance it would not be caught carrying such a complicated piece of equipment. (Page 18)”

The quote above explains how Mesi began to carry out his duties as a spy in Kunin. Armed with a tool hidden in the skin of his palm, he was able to freely convey the conditions that had occurred in Kunin to Starx. The use of technological tools under the skin has begun to be carried out with the term microchip implantation to make it easier for humans to carry out their duties, indirectly that person has become a transhuman. This is part of the transformation of humanity through technology commonly known as transhuman that can develop human capacity. Technology and humans are inseparable. Implantable devices will operate well beyond simple electrical or mechanical simulators designed to restore lost organ functions such as blood pumping, voiding, hormone delivery, and tissue regeneration [16].

Transhuman through the Pacemaker in the Body

Mesi is a member of Starx who has more power than the people living in Kunin. The people in Kunin do not know that in Mesi's body there is a technological tool as a means of communication. This can be seen in the quote below.

"Oh, what a fool these people are, Mesi thought. They are a generation too late, the technological advancements alone by about fifty years. They certainly do not know that various means of communication no longer use metal. For example, the transmitter in the palm of my hand. Or the various pacemakers in my body that allow me to run faster and have more power than others (p. 143)."

The quote above describes the character of Mesi who becomes a transhuman human. The implantation of pacemakers in his body gave him strength beyond his physical abilities. The people of Kunin do not know that he is an emissary from Starx to monitor the movements of the people living in Kunin. The people living in Kunin are so out of touch with advanced technology that Mesi's disguise is completely unknown. And this is what makes Mesi have greater strength than the residents of Kunin. [17] "Almost all of us today are bionics, because our natural senses and functions have been replaced by devices such as glasses, pacemakers, muscles, even computers and so on.

CONCLUSION

Based on the results of the study and discussion, it can be concluded that in the science fiction "Antariksa Explorer 3 Kunin Bergolak" there are transhuman forms found, namely: transhuman T2GP electro capsules, computers, electronic whiteboards, robots, microchips, and pacemakers in the body. All forms of transhumans found are in accordance with the results of other studies that the existence of these transhuman forms makes humans healthier, happier, and helps in completing work. The specialty of this study lies in a science fiction that has several forms of transhumans in it while other studies have not found such a thing. However, these studies support each other.

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