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EXPLOITATIONS TOWARDS ASTRONAUTS IN ANDY WEIR'S THE MARTIAN

Mighfar Suganda¹, Rina Saraswati^{1}*

¹ *Department of English Literature, Faculty of Humanities, Universitas Airlangga, Surabaya-60286, Indonesia*

**Corresponding author: Rina Saraswati, Department of English Literature, Faculty of Humanities, Universitas Airlangga, Surabaya-60286, Indonesia. Email : rinasaraswati@fib.unair.ac.id; rinasaraswati@yahoo.com*

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ABSTRACT:

Background: After Soviet Union separated, NASA became the biggest space organization in the world. Exploitation towards astronaut has been considered as a negative side effect of NASA's capitalism. This phenomenon is also portrayed in Andy Weir's *The Martian* novel. Purpose: This study to analyze exploitation towards astronauts in *The Martian* and the way Watney negotiates his position as low-class society. Method: This study uses Karl Marx's Marxist Criticism about capitalist' ideology to examine the exploitation towards astronauts. Moreover, Marxist criticism approach and qualitative method are applied in this study. Result: The writer finds that Mark Watney represents an astronaut who stranded on Mars and exploited by boards of NASA. Bourgeoisie class is represented by boards of NASA, and Proletariat class is represented by Mark Watney. Watney negotiates his position as low-class society trough his class struggle and ambition towards boards of NASA. In the end, he was alive and won the negotiation, but boards of NASA did not lose and still got financial benefit from Watney. Conclusion: The exploitation could happen to anyone, even to educated astronaut.

Keywords:astronauts, exploitation, Martian, superpower

INTRODUCTION

After the World War II and Suez Crisis, British Empire greatly diminished; the two remaining superpowers were the United States and the Soviet Union

(Herring, 2008). At that time The Cold War happens, and they were competing to become the strongest country. The Cold War includes the competition in science like atomic and space age. In 1957, the Soviet Union launched the first satellite, Sputnik I. On the other hand, NASA (The National Aeronautics and Space Administration) was created by the United States in 1958, and launched Explorer I in 1958 (Garber, 2007). NASA strengthened the United States' leadership on Earth and in space and has a strong influence on politic, society, and economy of United States (Byrnes, 1994; NASA, 2017).

One of the requirements to become NASA astronauts is bachelor degree from accredited institution with major study in the appropriate field of engineering, physical science, mathematics, etc. (Collins, 2015; Seedhouse, 2018). It means NASA's astronauts are educated and experts. It makes astronauts' job is generally perceived as having a good reputation and decent salary, but quite contradictive with that, astronauts' job has many disadvantages. Firstly, astronauts face high risks, in the history of the space program. They risked their life, far away from their family for many years, suffer the health risk like vision loss, cardiac problems, and radiation hazards (Ramsey, 2014; Rosenfeld, 2019). Secondly, Astronauts work 24 hours a day, but their salary is only 66 thousand dollars to 140 thousand dollars a year. On the other hand, United States gives NASA approximately 17 billion dollars a year; it is not included commercial benefits using astronauts' image (Garber, 2007).

According to Dunk and Brush, there is commercial exploitation of astronauts' image, which is constrained by some emerging rules; it makes the status of astronauts as International civil servants (von der Dunk & Marcel, 2006). They mean NASA exploited astronauts to increase the number of commercial partners and economic benefits. The exploitation happens when capitalists are able to pay the worker less than the value produced by their labor (Marx, 2011a). This phenomenon also happens in literary works, in science fiction novel which written by Andy Weir's *The Martian*. It was Weir's first novel and published by Crown in 2014 (Weir, 2014). The story tells about NASA's astronaut named Mark Watney who survived alone on Mars in the year of 2035. The main character in *The Martian* is Mark Watney, he was an astronaut that survived alone on Mars. *The Martian* represents the social exploitation by the boards of NASA towards NASA's astronauts. Based on that brief explanation, the board of NASA can be perceived as the bourgeoisie, while astronauts are the proletariat. Marxist criticism is a suitable theory to analyze the exploitation and the different classes between bourgeoisie (board of NASA) and proletariat (NASA's astronauts).

In *The Martian* Novel, Watney was the main character who described as the lowest rank among his crews. It also explains that he was a civil astronaut, not military astronauts. The fact is civil astronauts have a lower salary than military astronauts (NASA, 2017). It means Mark Watney had the lowest salary among his crews. Watney was a manual labor in space because he was a botanist and engineer. When he worked with his crews, his jobs were to fix

anything broken, carried Mars' stone to their rocket, and plant potatoes. When he struggled alone on Mars, he had a longer time to work and did harder work than usual. This novel explains how he carried many solar boards every morning to be charged, he hoed soil to plant potatoes, he also created manure from his human waste, and he just ate potatoes. Meanwhile, on Earth, in the comfortable and safe place, Teddy Sanders NASA's chief thought that NASA would not rescue Watney because it would cost more budget. Derives from that issue, this research is aimed to examine the exploitation towards astronauts portrayed in Andy Weir's *The Martian* and how Watney negotiates his position as low-class society.

THEORETICAL FRAMEWORK

Marxism and literature

In twentieth-century, Karl Marx's philosophical assumptions developed a variety of Marxist approaches to analyze literary works. These approaches focus on the relationship between literary works and the society. Bressler said that Marx added dimensions of literature and society, because Marx shows how literary works can give truths about our social interaction and how society reflected by literature (Bressler, 2011). The author of *Marxism and Literary Criticism*, Terry Eagleton, explained Marxist Criticism's important role. He explained, "Marxist criticism's aim is to explain the literary work more detail such as forms, meanings, and styles, so Marxist Criticism is not only a sociology of literature, Marxist also concerned how novels get published and whether they mention the working class. Those explanations give the conclusion that Marxist criticism can be applied in literary works because literary works show and describe the matters of society such as economic and social issues. In Marxism perspective, literary works show the connection between low and high class in real life.

Exploitation in capitalist system

Marx and Engel explain about capitalism into two classes, bourgeoisie or capitalist power who pays workers as little as possible and gets benefits as much as possible. Meanwhile, proletariat sells its labor to the capitalist. Through economic power, the capitalists or the bourgeoisie have successfully enslaved and exploited the working class, or the proletariat. Bourgeoisie and Proletariat are socioeconomic class which differences classes between "haves" and "have-nots". When talking about class structure, Marxist refers to socioeconomic class rather than economic class (Marx, Engels, Kuhn, Moore, & Draper, 2012). Bressler states that by controlling material relationship, the bourgeoisie could control a society's ideology. As consequence, when they control society's ideology, the bourgeoisie has power in their hand to force others to follow their rules in conscious and unconscious ways. Capitalist's ideology in society caused worker no longer have contact with entire process of producing, distributing, and consuming material goods. The bourgeoisie have the economic power to control their society. They will control the dominant discourse and articulate its beliefs, values, and arts to develop its ideology (Bressler, 2011).

Marx in *Manifesto of the Communist Party* defines the condition in which labors are oppressed under modern industry by the bourgeoisie. Marx said that bourgeoisie organize laborers like soldiers. They are placed under the command of a perfect hierarchy of officers and sergeants, as privates of the industrial army. They are not only enslaved by the bourgeoisie class, they are daily and hourly enslaved by the machine (Marx, 2011b). There is no longer distinctive of age and sex among the working class. The less the skill and extortion of strength will put anyone in lower strata. In modern industry, anyone with less qualification cannot fight higher strata since the modern industry becomes more developed. They are valued based on how much they can produce with their labor power.

Furthermore, Parker defines capitalist in Marxism as follows: For Marx, capital is not simply money that can be exchanged for goods or labor. It is money that is used to purchase goods or labor for the purpose of making profit. Typically, the profit comes from purchasing good and then selling them again. Hence capital, refers to more money and on again it continues circulation. Capitalists understand that their practices as natural, because capitalists privilege capital over labor, whereas Marx privileged labor over capital (Parker, 2011). Capitalist is interested to hire working class because of their labor power.

Karl Marx said that “Commodities are in the relation of exchange, their exchange-value manifests itself as something totally independent of their use-value. The common factor in the exchange relation, or in the exchange-value of the commodity, is therefore its value” (Marx, 2011a). Bourgeoisie treat proletariat as an object which has exchange value. They give wages to proletariat because of exchange value, to get economic benefit. The bourgeoisie takes chance to control the superstructure. If the profits are not reinvested in the workers instead to grow more factories, this system leads the richer become richer and the poor become poorer, working class will live in a more suffer and oppression. Working class should negotiate their position, in order to withstand the suffer and oppression from capitalist.

Marx explained alienation, “In your enjoyment, or use, of my product I would have the direct enjoyment both of being conscious of having satisfied a human need by my work” (Hook, 1994). Karl Marx identified four types of alienation that occur to the worker laboring under a capitalist system of industrial production. The alienation from the self is a consequence of being a mechanistic part of a social class, the condition of which estranges a person from their humanity Proletariat hold fast by the original views of their masters, in opposition to the progressive historical development of the proletariat. They, therefore, endeavor, and that consistently, to deaden the class struggle, and to reconcile the class antagonisms. Derives from that issue, this research will analyze how exploitation towards astronauts is portrayed in Andy Weir's *The Martian* and to analyze how Watney negotiates his position as low-class

society.

RESEARCH METHOD

Qualitative descriptive method is applied in this research. Close reading is the important technique in doing qualitative research, which is reading the text carefully and repeatedly to find the meaning in a text (Bressler, 2011). Moreover, readers will be able to find the chronology and connection between the data source and the text from close reading. According to Matthew B. Miles et.al, a source of valid explanations and descriptions is involved in the qualitative data approaches. A research is expected to have its flow chronologically so that the connection between events and its consequences can be seen and also a rich explanation can be deduced (Miles, Huberman, & Saldaña, 2014). This research uses Marxist approach which focuses on the exploitation in capitalist system. The main point in Marxist approach is examining and the class divisions between proletariat and bourgeoisie classes in the novel.

Marxist approach is a set of methods to identify an issue like exploitation in capitalist system through the formal elements such as characterization, plot, and symbol. The primary source in this study is *The Martian* novel written by Andy Weir. The secondary sources are obtained from books, thesis, and journal articles that mainly discuss the relevant issues like exploitation, class division, and astronauts. In the technique of data analysis, the writer chose the literary theory which discusses the issue. A theory by Karl Marx about exploitation is chosen as the theoretical framework because it is related to the issue of this study. In analysis part, the writer elaborated the class divisions, exploitation in class system inside the novel along with the dialogue and plot that related to exploitation towards astronauts.

RESEARCH FINDINGS AND DISCUSSION

Exploitations toward Astronauts

The Exploitation toward Astronaut highlights the theme of *The Martian* novel. It appears, when the owners of means productions place labors in inappropriate environment and pay labors cheaply. As explained above, upper class is the one who owns private property. In *The Martian*, the boards of NASA employed the astronauts; the upper class or capitalist is boards of NASA. On the other hand, the lower class is the astronaut who is lack of money and power. This is in line with the statement of Bressler that the class in society had changed the economic base from feudal to capitalist system. A system from inherited based on a system based on the ownership of private (Bressler, 2011).

Social differentiation

In this novel, the bourgeoisie class is depicted through Boards of NASA. They are the owners of means production. The setting of the board of NASA in *The Martian* shows the luxurious facility which is very expensive and beautiful scenery out of the windows. They enjoy a comfortable place because they

have billions of dollars which are enough to afford expensive facility and VIP room. Very important person (VIP) have special treatment, because of their status. The special treatment is different from common people; they receive more comfortable service than common people. Boards of NASA have a multibillion-dollar communications network (Herzig & Auerbach, 2017; Messeri, 2016). Moreover, their authority as boards of NASA gives them the power to get the best facility. If a person has authority, he deserves anything he wants, one of them is facility. One of the boards of NASA is Teddy Sanders; he is the administrator of NASA and the most important person in NASA. As the most important person, he wears an expensive suit and usually adjusting his cufflinks and blazer to look perfect. Suit is a symbol of a business or office suit that used by upper class (Johnson, 2013). It shows that Teddy is high class, and he represents the bourgeoisie class.

On the other hand, the lower class is placed by working class or well-known as the proletariat. People in this class do not own means of production. They are less powerful and have less money than bourgeoisie class. In this novel, Andy Weir describes the main character, Mark Watney, as an educated astronaut, but not owns means production. He represents an astronaut who is powerless, suffered, and has less money. *The Martian* shows how an educated person like Mark Watney actually suffers and represents proletariat class. Watney is controlled by boards of NASA who have the power to oppress Watney. Moreover, his education backgrounds are botanists and engineer (8), which leads him to do manual and physical labor, such as growing crops and fixing broken electronics. As explained by Bressler that the class in society had changed the economic base from feudal to capitalist system. A system from inherited based on a system based on the ownership of private property (Bressler, 2011). Thus, in that condition, the exploitation appears, when the owners of means productions place labors in inappropriate environment and pay labors cheaply. Moreover, As explained above, upper class is the one who owns private property. In *The Martian*, the boards of NASA employed the astronauts; the upper class or capitalist is boards of NASA. On the other hand, the lower class is the astronaut who is lack of money and power.

Labor slavery

According to Marx, that labors are organized like soldiers and industrial army, they are placed under command of a perfect hierarchy of officers and sergeants (Marx et al., 2012). Even after he did manual labor, Watney as a soldier was commanded by his officer. Under the cruel system, astronauts are enslaved by boards of NASA. They are enslaved by their labor powers and their time. There is no distinction in industrial army to hire a person to be its soldier. Industrial army has no concern to the sex of a soldier to be but industrial army concerns with how much wealth can be produced by a soldier. It does not matter how hard Watney work all day along, he still cannot eat properly. Watney even has to fantasy how it would be like if he eats meat. Even if astronauts work harder than their boss, it does not put them into a good life easily.

Commodification and Alienation

As explained by Karl Marx that “Commodities are in the relation of exchange, their exchange-value manifests itself as something totally independent of their use-value” (Lukács, 2017). Boards of NASA treat Mark Watney like an object who has exchange value. He is not only become NASA’s astronaut. He gives boards of NASA economic benefit. In Watney’s case, he worked and survived alone on Mars for several years (Weir, 2014). As explained by Karl Marx in Gouldner’s book, “the alienation from the self is a consequence of being a mechanistic part of a social class, the condition of which estranges a person from their humanity” (Shah, 2015). For 200 sols, Mark Watney could not live in normal life, even to take a bath. Moreover, he worked overtime than astronaut normally did. He was alone on Mars, and far away from human being. Mark Watney miss his family, beautiful ladies, and his friends. In this story, he was far away from everyone. This is a consequence of beingastronaut. Society considered astronauts as decent and respected job, but they are actually doing a difficult job.

Watney’s negotiation

As low-class society and the main character in *The Martian*, Watney should survive in his ways, he should negotiate his position as low-class society towards bourgeoisie class domination. Those negotiations lead him to win or lose when fight boards of NASA. Watney’s first negotiation is class struggle. This phenomenon happens when proletariat class struggles to be the high class or bourgeoisie. From the lifestyle, facility, and domination. Sometimes, proletariat class does an alternative to be like bourgeoisie does. They think bourgeoisie class as the right thing, ideal life, and their life objective. Class struggle is a conflict between different classes, it could be a war fought for starvation, poverty, and unsafe working condition.

Capitalists understand that their practices as natural, because capitalists privilege capital over labor, whereas Marx privileged labor over capital” (Parker, 2011). Capitalist’s objective is to earn money as much as possible, by reducing their outcome and increase their income. Boards of NASA wants to reduce their outcome, so they ordered the astronauts to save the MAV, and left Watney when he lost on Mars. Their money is more important than Watney’s life. Moreover, boards of NASA planned to salvage precious thing on Mars. They used public sympathy to Mark Watney’s family to get money from congress. On the other hand, Watney survived and moved around HAB, boards of NASA realized the truth, and their plan to take benefit failed(Strychacz, 2017).

In this plot, Watney successfully negotiated his position as low-class society. He made boards of NASA’s plans failed, and he made the survival possibility increased. Furthermore, he made boards of NASA reputation decreased, because they made Watney stranded on Mars. Boards of NASA need to keep their reputation, and was forced to save Watney’s life. Next, Mitch helped

Watney to fight Teddy decision. Although Teddy was the most powerful and have the biggest authority as the administrator of NASA. Mitch made a big move, he told Watney's crews to disobey boards of NASA's order, just for saving Watney's life. Actually, Mitch had lower rank than Teddy, so he abused his leader decision, in order to save Watney. When the Hermes turn around the Earth, boards of NASA realized that Watney's crews would save Watney without NASA's permission. This drama continued, Teddy realized that Mitch was disobey his decision, and he would fire him, if he had enough evidence. Watney's crews turned around the Hermes towards Mars, but the boards of NASA did not want to lose the Hermes, so they were indirectly forced to save Watney. They did not want the public know that their astronauts disobey their order. Teddy did not want to save Watney, because it put Watney's crew in danger too, but Mitch said that Teddy did not care about Watney's life, Teddy just wanted to reduce his outcome. It means Watney's negotiation touches Mitch's heart. As a bourgeoisie Mitch has means production and could save his worker or not. In this case, Teddy was a bourgeoisie who chose their properties, but Mitch was a bourgeoisie who chose their labors. Watney was alive and saved by his crews (Weir, 2017). Watney successfully negotiated his position as low-class society, he could change the decision from the administrator or NASA.

As explained before, bourgeoisie treat proletariat as soldier, so the proletariat should do anything what the commander want (Marx et al., 2012). In this case, Watney negotiated his position to save his own life. On the other hand, Teddy Sanders as boards of NASA still got benefit from Watney, because the Hermes was still in good condition, and Watney would be a precious thing. He would tell his knowledge when he survived on Mars, and it would be valuable for boards of NASA. Public pressure through media, save Watney's life. It forces Boards of NASA change their decision to save Mark Watney. Although Mark Watney indirectly negotiates his position, his struggle and survival touch public's heart. Usually bourgeoisie win the negotiation towards proletariat, but in this case, Mark Watney win the negotiation because he has education, and also public pressure through media.

The second is when he negotiates his ambition. Watney had many ambitions which could negotiates his position as lowclass society. He was an optimistic man and believe in himself. Watney said, "How come Aqua man can control whales? They're mammals! Makes no sense". Bourgeoisie class control proletariat class, it is literal meaning, that Aqua man is represented by boards of NASA. On the other hand, whales are represented by astronauts. Watney negotiated his position with said that astronauts are special, so they should not be controlled by boards of NASA. In the end, boards of NASA controlled every part in NASA, included astronauts(Weir, 2017).

Astronauts are special, educated, and high skills, but they are part of NASA, so boards of NASA could control them. It likes whales which could controlled by Aqua Man, although they are mammals, they are part of the sea. He would

be controlled by boards of NASA, if he was still working as an astronaut. He wanted to create his own NASA, so he could become boards of NASA. Moreover, he thought that he could make a little NASA. His ambition led him to research his experiments for himself, because NASA never taught him about it before. His research was original and brand new. He was greedy and wanted to own little NASA. Every Watney's knowledge would be a benefit for boards of NASA, he should tell his result of research on Mars to boards of NASA(Weir, 2014).

Watney named an unknown place on Mars Lewis Valley. he could call it whatever he wanted, because he thought that he was King of Mars. This ambition makes him forget his position, he named a place like a hero or the most important person on Mars. Lewis Valley. Lewis is his commander, it means he likes his commander, but indirectly means that he was higher position than commander, and has equal position as boards of NASA who could name a place in space. He called himself King of Mars, it means he has equal position with Presidents and have much more power than boards of NASA. King of Mars means dominate the entire planet, other than Earth. If there are no inhabitant in place, he could be a King, however in reality he could not become King of Mars when he went home on Earth. On the other hand, he could not live on Mars forever. It means he will be King of Mars for short time. In the end, Watney won the negotiation as a first person who liven in alone in Mars, and made EVAs record, but NASA also won the game(Weir, 2014).

CONCLUSIONS

Watney is a proletariat because he does not own means production. On the other hand, boards of NASA did anything to take benefit as much as possible from Watney. Watney negotiates his position as low-class society trough his class struggle and ambition towards boards of NASA. In the end, he was alive and won the negotiation, but boards of NASA did not lose and still got financial benefit from Watney.

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