FEMINISM AS REFLECTED IN MARGOT LEE SHETTERLY'S HIDDEN FIGURES NOVEL

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Abstract

This research is a study of Margot Lee Shetterly's views of feminism. The objectives of the research are to find out and explain the kinds of gender discrimination experienced by women in the novel, and to identify and describe the ideas of feminism reflected in the novel. To find out and explain the problems presented in the novel, feminism theory is used to answer the objectives of this research.Qualitative research method is applied in this study. The data of this research was taken from a novel entitled Hidden Figures written by Margot Lee Shetterly in 2016. The data analysis was conducted by classifying and categorizing the data to find the inferences. the researcher also reads and re-read the novel carefully and then recorded the data into a systematic framework based on the theory. The result of this study shows some important points. First, there are five kinds of gender discrimination; marginality, subordination, stereotype, violance, and double burden. Second, the ideas of feminism is mostly reflected by three main characters of the novel, Dorothy Voughan; Marry Jackson; Katherine Johson.

Keywords: *gender discriminations, feminism, hidden figures*

Introduction

Hidden figures is a non-fiction book written by Margot Shetterly in 2016. The book took the first ranks in the New York Times Non-Fiction Best Seller's List and got Anisfield-Wolf Book Award for Non-fiction in 2017. The novel was inspired of a filming by the same name which was nominated for three Oscars. This film was directed by Theodore Melfi and written by Melfi and Allison Schroeder, and the film received positive reviews from critics and grossed $236 million worldwide. Great women who helped win the space race. The book took place from the 1930s through the 1960s when women were still viewed as inferior to men. This biographical novel tells about three black American women, who overcame discrimination, as women and as African Americans while they were working at the National Aeronautics and Space Agency (NASA) as mathematicians (known as human computers). Through this novel, the author tries to describe the life experiences of the black woman in the era of world war,

and at the same time, they have to face **discrimination** and **segregation.** The problems of this research are formulated as follows:

1. What kind of gender discrimination experienced by women in *Hidden Figures?*
2. How does the idea of feminism reflected in *Hidden Figures?*

THEORETICAL REVIEW

According to Klarer (2004: 1), literature is a written expression or various expressions which is changed into literary works, but not every document can be categorized as literature. One of literature's media is novel. Novel is different from short story or novelette, and in this study the researcher uses novel as the data sources. One of the characteristic of novel is written in narration and description, and it has about more than 100 pages. Novel is derived from Italian word 'Novella' (Novelle in German) is a literary work at the same time called fiction because in its development, the novel is synonymous with fiction. Novel is longer than the short story. It presents something itemized, more detail, and involving complex problems (Nurgiyanto, 2013).

According to Abrams (1999:22) Biography connotes a relatively full account of a particular person's life, involving the attempt to set forth character, temperament, and milieu, as well as the subject's activities and experiences. The word biography originates from "bios" (liveliness, life) and "graphe" (script, form) and represents the texts written to tell the life stories of people (Taşdelen in Er , 2017:157). It can be concluded that biography is life's story or experiences of particular person written by someone else.

Feminism movement was born because of gender discrimination and gender inequality. All of women started to faight for their right and equal, rejecting everything that is marginalized and subordinated by the culture of men's domination in all life aspect. Humm (2002: 158) states that in general, feminism is an ideology of woman's liberation because *its approaches is the belief that women suffer injustice because of their* gender. It means feminism is a movement of women which demands equality and rights. Furthermore, feminism can be interpreted as a movement struggles for women's rights in rejecting everything that is marginalized and subordinated by the culture of men's domination in all aspect of life.

Gender discrimination is one of the problems discuss in this study, it is important to discuss more deep about gender discrimination, women's problem that still happen in this modern era, because of women regarded as weak and not important in social life. According to Humm (2002: 112), discrimination is an unpleasant treatment of women based on patriarchal belief that women have undesirable attributes. Humm says that discrimination statistically means that a woman can be rejected for a job not only because she is a woman but because she thinks statistically more likely to pay more attention to her family than men. From this statement, we know that there's still inequality between men and woman in every aspect of life especially in the field of work. In general, gender discrimination is motivated by a wrong stigma about gender in the

community. (Khotimah, 2009:6-8) stated thet Gender discrimination is caused by some factors such as: marginality, subordination, stereotype, violence, and double burden.

Research method

Cresswell, in his book Research Design (2014:294-295), stated that Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. From the statement, it can be concluded that Qualitative research design identifies the data in the form of sentences related to social or human problems. This study applied descriptive qualitative research design since it did not deal with numbers or measures. In this research, the main data taken from *Hidden Figures* novel. There are several steps to collect the data which are described as follows: coding, decoding, categorizing, and confirmation.

In this study, mimetic approach was used to analyze the data taken from the novel. The explanation of the technique is described below:

1. identifying and selecting the data which are relevant with the research questions
2. classifying the data in the forms of sentences and discourses based on the categories. This process was based on the research questions' needs.
3. analyzing the data based on mimetic approach. Connections between the data or quotation with true events occur in the real life, extracting the data to create an interpretation was made in this step

Findings

Types of Gender Discrimination

The kind of gender discrimination presented in the story of Hidden Figures was found after reading and analyzing the data from the novel. There are five kinds of gender discrimination; Marginality, Subordination, Stereotype, Violence, and Double Burden.

The Idea of Feminism Reflected in the Novel

The ideas of feminism reflected by the three black women, the main characters of the novel; Dorothy Vaughan, the first black woman who worked as the supervisor in NASA, Katherine Goble Johnson who worked as a mathematician, who described the orbital trajectory of John Glenn's flight, and Marry Jackson, a black woman who calculated the aerodynamic. They are the three black women were fight for the fate of black women in NASA. They fight for their own life and career in NASA.

Discussion

1. Kinds of Gender Discrimination Experienced by Women in *Hidden Figures*

a. Marginality

1). Women Always be the 'Hidden' Figures

The setting of the story is taken in America in the middle of World War II, and the Cold War between America and Uni Soviet. At that time women's role was not important, it is why even they give big contributions for their country. There had not been appreciation. It can be noticed in the following narration :

And while the black women are the most hidden of the mathematicians who worked at the NASA the National Advisory Committee for Aeronautics, and later at NASA, they were not sitting alone in the shadows: the white women who made up the majority of Langley's computing workforce over the years have hardly been recognized for their contributions to the agency's long-term success. (Shetterly, 2016 : xvi (prologue))

The narration above shows that women who worked for NASA and gave contribution of their hard work, they were not appreciated and unrecognized, they were sit in the shadow.

2). Low Pay for Their Hard Work

Most of the women at the time worked as maid and laundry worker, they worked for the job that gives them low pay.

Laundry workers existed at the bottom of the war's great pyramid, invisible and invaluable at the same time. One aircraft industry executive estimated that each laundry worker supported three workers at his plants; with someone else to tend to their dirty clothing, men and women on the production lines had lower rates of absenteeism. The laundry workers earned 40 cents an hour, ranking them among the lowest paid of all war workers, but with few job options available to them, it felt like a windfall. (Shetterly,2016:10)

Katherine Johnson, a NASA mathematician, one of the three main characters in the novel faced the same problem. She was paid less for her hard work as mathematician. It can be noticed in the following narration:

Despite the relatively large group of women now working at the center, most female technical professionals, black and white— even someone as gifted as Katherine Johnson—were classified as mathematicians or computers, ranked below engineers and paid less, even if they were doing the same work. (Shetterly, 2016: 196-197)

3). Live in Poverty

The impact of the stigma and stereotype that women are not important is they live in poverty. Dorothy Vaughan for example, she worked hard for her children but it did not reduce her burden. The situation is described in the narration below:

Even with a salary of $2,000 a year—the average monthly wage for black women in the 1940s was just $96—providing for the needs of six children meant that outings like the ones at Log

Cabin Beach did not come often or easily. With the shadow of the Depression always at the back of her mind, Dorothy Vaughan sewed clothes for herself and her children, clipped coupons, and wore shoes until her feet started to push through the worn soles. If she could give more to her children by sacrificing her own comforts, she did it (Shetterly, 2016:79)

Poverty caused by marginality forced her to do anything for her children, she even sacrificed her comfort just for her children. The poverty is not just because she was a woman but also she was a black woman.

b. Subordination

1). The Limitation to Choose Their Career

Katherine Goble was a smart and brilliant woman, but she had to give away her career to serve her family. The situations are described in the following narration :

After the summer session, Katherine decided to leave WVU's graduate program for a life as a full-time wife and mother, the call of domestic life winning out over career ambition. (Shetterly, 2016:25)

2). Women Always Be Inferior

Because of the stigma about women, women always be inferior to men, their existence was not considered. They always placed in the second position, they always waited for a command. It is described in the following narration:

Women were "supposed" to wait for the assignments from their supervisors, and weren't expected to take the lead by asking questions or pushing for plum assignments. Men were engineers and women were computers; men did the analytical thinking and women did the calculations. Men gave the orders and women took notes (Shetterly 2016: 180)

c. Violence

Women were regarded as weak and they had no power to protect them self, it is why in our social life women always be the target of violence. The thought that women position is lower than men makes women's condition getting worse. Blacks caught sitting in white sections of buses or trolleys, no matter how crowded, were subject to fines. More than a few violators were dragged off city buses, some beaten by police. Members of a ladies' club called Les Femmes wrote a letter to the bus company complaining of the derogatory treatment their drivers routinely directed at Negro women (Shetterly, 2016:31).

d. Stereotype

1.) Women Are Disable to Do the Big Thing

Women always underestimated by men because they are deemed incapable of doing the big jobs that are basically just done by men, engineering for example. It described in the following narration:

Virginia Biggins worked the Langley beat for the *Daily Press*

newspaper, covering the space program starting everyone said, 'This is a scientist, this is an engineer,' and it was always a man," she said in a 1990 panel on Langley's human computers. She never got to meet any of the women. (Shetterly,2016:31)

From the narration above we know that the big jobs just for men, not for women.

2). Engineering School Just for Men

Most of the country's top engineering schools didn't accept women. Kitty O'Brien Joyner, the laboratory's only female engineer from the time Pearl Young left until the middle of the 1950s, had been forced to sue the University of Virginia to enroll in the school's all-male undergraduate engineering school in 1939. As for black female engineers, there weren't enough of them in the country to constitute a rounding error. In 1952, Howard University had only two female engineering graduates in its history. (Shetterly, 2016: 144)

At the time, there were just a few women who graduated as a scholar, even Howward University just had two female engineering, this is because the almost all the engineering school did not accept women as students. this is the result of gender stereotype.

e. Double Burden

Only a week had elapsed between the end of the school year at Robert Russa Moton, the Negro high school in Farmville, Virginia, where Dorothy worked as a math teacher, and her first day of work at Camp Pickett. In the summer of 1943, Dorothy jumped at the chance to head to Camp Pickett and earn extra money during the school break. (Shetterly, 2016: 10)

Another woman in Dorothy's situation might have seen the laundry job as unthinkable, regardless of the economics. Wasn't the purpose of a college degree to get away from the need to work dirty and difficult jobs? And the location of the camp, thirty miles southeast of Farmville, meant that she lived in worker housing during the week and got back home only on weekends. But the 40 cents an hour Dorothy earned as a laundry sorter bested what she earned as a teacher, and with four children, a summer of extra income would be put to good and immediate use (Shetterly, 2016: 11). Dorothy Vaughan, a mother with 4 children had to work in two places at the same time. She worked as a math teacher and as a worker in Camp Picket. In other hand, she had to take care of her children. She did the entire job for extra money even though she was a college degree. But her household duties were not reduce.

2. The Idea of Feminism Reflected in the novel
   a. Feminism Reflected by Dorothy Vaughan
      1). Women Can Gain Their Independence

And Dorothy was of an unusually independent mind, Education topped her list of ideals; it was the surest hedge against a world that would require more of her children than white children, and attempt to give them less in return.Standing on her feet all day in the sweltering laundry was an opportunity if the tumbled military uniforms bought new school clothes, if each sock made a down payment on her children's college educations (Shetterly, 2016:11). In the segregation and discrimination era, education was something hard to get by black people especially black women, but Dorothy placed education as the number one. It made Dorothy became an independent woman, fight for her children education.

2). Give Support to Other Women

Dorothy and other women who worked at Langley, they support one to each other. They do not let the job pressure kills their spirit and enthusiasm to take a chance for a better life. The narration below shows it:

Not everyone could take the long hours and high stakes of working at Langley, but most of the women in West Computing felt that if they didn't stand up to the pressure, they'd forfeit their opportunity, and maybe opportunity for the women who would come after them. They had more riding on the jobs at Langley than most. The relationships begun in those early days in West Computing would blossom into friendships that extended throughout the women's lifetimes and beyond, into the lives of their children. Dorothy Vaughan, Miriam Mann, and Kathryn Peddrew were becoming a band of sisters in and out of work, each day bringing them closer to each other and tethering them to the place that was transforming them as they helped to transform it (Shetterly,2016:49). Dorothy also pushed her women partner to step ahead, to compete with the development of technology. She wanted all of the women in Langley to do the same.

b. Ideas of Feminism Reflected by Marry Jackson

1). Dedication for the Young Girl's Education

Education is the important thing, especially for Marry Jackson. Her family made a community for the young girls, because her family motto was 'sharing and caring'. It is proved in the narration below:

Mary became a combination of teacher, big sister, and fairy godmother, helping her girls with algebra homework, sewing dresses for their proms and steering them toward college. (Shetterly, 2016: 97)

Marry assumed that these young women should be trained and educated so that they also have a bright future, not just being low worker. That is why Marry taught many things to the young

women. she act as a mother, friend, and helper for them.

2). She Got A Big Opportunity to Work at Wind Tunnel Controls

Kaz Czarnecki was a white man who believed that Marry had the capability in engineer, it is why there was no doubt when he put marry in the controls of wind tunnel. Her ability and curiosity brought her to a big chance, as described in the narration bellow

From the beginning, Czarnecki had put Mary at the controls in the wind tunnel, showing her how to fire up the tunnel's roaring sixty-thousand-horsepower engines (the noise from years of work in the tunnel eventually damaging Mary's hearing). He showed her how to work with the mechanics to correctly position a model in the test section (Shetterly,2016:142-143).

Marry even got a chance to test the Apollo capsule and the award received by her. That work earned her an Apollo Team Achievement Award.

c. Ideas of Feminism Reflected by Katherine Johnson

1). Curiosity Brings Her to a New Experience

Katherine Johnson was a genius woman that full of curiosity. She worked in Research Flight Division in 1954 as a mathematician. Her curiosity and confidence made her be able to compete with men.

Katherine Asked for a question, 'why she can't go to the meeting?' but the answer of the men did not satisfy her, so he kept repeating the same question and in the end, they gave up and let her joined the meeting. This is a form of struggle against gender discrimination but in a smart way.

2.) Calculate the Orbital Path

Katherine volunteered to calculate the orbital flight of rocket launch. She was a black woman who was brave to face the new challenges. She took the great responsibility at the moment, she had to succeed in determining the orbital flight and send the rocket through the atmosphere. She was the first woman who sent men to the moon.Even John Glenn, one of the best astronaut of NASA, trusted Katherine to calculate the number of the orbital. He was ready to go when Katherine said that everything was good. Katherine was the big reason behind John Glens's successful mission. It described in the narration bellow

She was the first black woman who calculated the flight orbital. She proved that women can do anything they want. Women are not weak, they have unlimited power. She changed the stereotype about women.

CONCLUSION

After analyzing Margot Lee Shetterly's *Hidden Figures* based on feminism

perspective, focusing on gender discrimination and the idea of feminism, how the three black women fight for their and other women's rights and equality, the researcher concludes several points as follows. First, Women's major problems in society are caused by gender discriminations which are described in Margot Lee Shetterly's *Hidden Figures*. In the novel, women's discriminations are divided into four categories: marginality, subordination, violence, stereotype, and double burden. Women are treated unfairly because of the stigma about women's role and position in social life. women always regarded as weak and not have important role in society. Second, Dorothy, Marry Jackson and Katherine Goble as the main female characters show the ideas feminism, shows their struggles for independence life. Their efforts to fight against discrimination are presented in the Novel. They prove that women, especially black women have ability and chance to change their life as inferior. In conclusion, the three black women; Dorothy Vaughan, Marry Jackson, Katherine Goble Coleman as the main female characters in the novel represents women in general who can gain their independence and have a smart and brave attitude to take the important decisions in their life. They can solve their problems by showing the struggles and abilities in gaining their independence.

References

Creswell, J. W. (2014). *Research Design 4th Edition, Qualitative, Quantitative,and Mixed Methods Approach.* California: SAGE Publication.

Er, H. (2017). A Sample Application for Use of Biography in Social Studies; Science, Technology and Social Change Course. *Journal of Education and Training Studies* , 156-170.

Humm, M. (2002). *Ensiklopedia Feminisme.* yogyakarta: Fajar Pustaka Baru.

Klarer, M. (2004). *An Introduction to Literary Studies Second Edition.* New York: Routledge.

Nurgiyanto, B. (2013). *Teori Pengkaji Fiksi.* Yogyakarta: Gadjah Mada University Press.

Shetterly, M. L. (2016). *Hidden Figures.* London: William Collins.