

**RELATIONSHIP BETWEEN HUMAN AND ENVIRONMENT USING
ECOCRITICISM IN *THE LEGACY OF HEOROT* NOVEL BY LARRY NIVEN,
JERRY POURNELLE, AND STEVEN BARNES**

Theodorick Ardauid Manullang^{1,*}, Singgih Daru Kuncara², & Fatimah M.³

Department of English Literature, Faculty of Cultural Sciences,
Mulawarman University

*Email: ardauidtheo@gmail.com

Abstract: This research deals with the relationship between human and environment as seen in *The Legacy Of Heorot* Novel by Larry Niven, Jerry Pournelle, and Steven Barnes. The purpose of this research is to find out the relation between humans and the environment that affect the ecology of Avalon. This research uses qualitative method and ecocriticism theory by Greg Garrad. The theory of pastoral, wilderness, and the animal are used to analyze the relationship between human and environment and the behavior of main character towards nature. The result of this research shows that there are several relationships between human and the environment in the novel. The relationship that shows in the novel such as overhunting towards wild animal and land consumption that leads to the destruction of wild animal habitat, wild animal extinction, and overpopulation of other wild animals. Meanwhile, the main character shows his behavior towards nature to re-establish the ecology from his speech such as telling people on Avalon to stop building human settlement, prohibit overhunting activity, and reducing the overpopulated wild animal. The main character also shows his behavior from his action such as killing overpopulated Grendel using electric fence, deadfall trap, and controlling Grendel's territory and population.

keywords: ecocriticism, ecology, keystone species, *The Legacy of Heorot*

Abstrak: Penelitian ini membahas tentang hubungan antara manusia dan lingkungan seperti yang terlihat dalam Novel *The Legacy Of Heorot* karya Larry Niven, Jerry Pournelle, dan Steven Barnes. Tujuan dari penelitian ini adalah untuk mengetahui hubungan antara manusia dan lingkungan yang mempengaruhi ekologi Avalon. Penelitian ini menggunakan metode kualitatif dan teori ecocriticism oleh Greg Garrad. Teori pastoral, wilderness, dan the animal digunakan untuk menganalisis hubungan antara manusia dan lingkungan dan tindakan dari karakter utama terhadap alam. Hasil dari penelitian ini memperlihatkan bahwa terdapat beberapa hubungan antara manusia dan lingkungan yang terdapat di dalam novel. Hubungan yang terlihat dalam novel seperti perburuan berlebihan terhadap hewan liar dan penggunaan lahan yang berdampak pada kehancuran habitat hewan liar. Sementara itu, karakter utama menunjukkan tindakannya terhadap alam untuk memperbaiki ekologi seperti mengatakan kepada orang-orang di Avalon untuk berhenti membangun pemukiman manusia, melarang aktivitas perburuan berlebihan, dan mengurangi jumlah hewan liar yang

mengalami kelebihan populasi. Karakter utama juga menunjukkan tindakannya seperti membunuh Grendel yang telah mengalami populasi berlebih menggunakan pagar listrik, membuat perangkap, dan mengendalikan wilayah dan populasi Grendel.

Kata kunci: ecocriticism, ekologi, spesies utama, *The Legacy of Heorot*

A. INTRODUCTION

The Earth is the only known planet that can support life until now. Nature makes life sustain on this planet. The nature is an important aspect of supporting human beings because it provides the resources on which humans need for living. Humans need natural resources such as animals, plants, liquid water, oxygen, and sunlight to sustain human life and other living things on Earth. Due to the resources that nature provides for human beings, it is important to keep and to protect the nature so that the ecology will be sustainable. Nowadays, an environmental disaster becomes a major concern for this planet. The most striking reason for environmental disasters is because rapid exploitation and increasing energy consumption that leads to environmental degradation (Appanagari 153). The increase of the human population needs more resources from the nature and causes massive exploitations such as overhunting, overfishing, and deforestation. Humans have caused the extinction of between 5-20% of species in many groups of organisms (Rao and Larsen 28). The extinction of organism can disrupt important ecosystem processes and the identity. Species that present in a community can strongly influence the ecosystem functions.

Based on the illustration of the background, the researcher formulates the problem which is the relation between the human and the environment that represented in *The Legacy of Heorot* novel that affect the ecology of Avalon. The purposes of the research are, to find out the relation between humans and the environment that affect the Ecology of Avalon and to find out the behavior of the main character towards nature to re-establish the ecology of Avalon. The significance of this research focuses on theoretically and practically. Theoretically, this research can give information and understanding of the theory of ecocriticism portrayed in the novel. Practically, the result of this research can be a reference to analyze another novel based on the environment and nature. The researcher used ecocriticism theory by Greg Garrard which are pastoral, wilderness, and Animal.

B. METHOD

1. Research Design

The qualitative method is the process of exploring and understanding the problem experienced by human beings that occur in a natural setting (Cresswell 432). The researcher explains the data in the form of words and sentences. *The Legacy of Heorot* novel that analyzed by the researcher is about animal extinction caused by humans that lead to the uncontrolled predator population and animal food chain being in chaos. The researcher explores the research object and understands that there are problems between humans and animals inside the novel. The researcher analyzes the novel based on dialogue between characters and narrations.

2. Data and Source of Data

The data are the information that the researcher uses for answering the research questions. The source of data is where the data are taken. The source of data is the novel *The Legacy of Heorot* by Larry Niven, Jerry Pournelle, and Steven Barnes. The novel has 448 pages and it was published on February 4th 2020. Data of the research are narration and quotation. The dialog and narration are taken from *The Legacy of Heorot* novel which shows the relationship between human and environment against Cadmann Weyland as the main character.

3. Data Collection

Data collection is about the role of the researcher set the stage for discussions of issues in collecting data (Cresswell 239). The researcher uses several steps to collect data that needed to be analyzed. The first step is to read *The Legacy of Heorot* novel to get the general idea of the story. The second step is to re-read *The Legacy of Heorot* novel to find the narration and quotations that show the relationship between humans and animals that affect the environment. The third step is to observe the obtained data and used the ecocriticism theory and previous study to support the analysis.

4. Data Analysis

By using the principles and practices of textual analysis espoused by ecocriticism, ecocriticism concerning nature, humanity, and the environment (Bressler 236). It can be concluded that the researcher describes the data by using the concept of ecocriticism and elements of novels. The researcher also uses the theory of intrinsic element of novel which is character and characterization. The researcher analyzes *The Legacy of Heorot* novel that is related to research questions. First, the researcher uses the concept of ecocriticism to show the relation between the human and environment that can affect the ecology of Avalon. Second, the researcher uses the character and characterization theory to show the behaviors of the main character towards nature to re-establish the ecology of Avalon.

C. RESULT AND DISCUSSIONS

1. Result

a. Relation between Human and Environment in *The Legacy of Heorot* Novel

There is a river called Miskatonic River for supporting human life on Avalon. **“The stream flowed past the camp and over the bluff above Miskatonic River, the greatest body of running water on the island.”** (Niven et al. 19). This narration indicates ecocriticism which is pastoral that emphasizes the relation of human agricultural activity and natural landscape. Miskatonic River is one of the natural landscapes on Avalon. The river flowed through the camp of people on Avalon which useful to support their life. People on Avalon use the Miskatonic River for agricultural activity such as irrigation system.

Cadmenn realizes the environment of Avalon is a dangerous place. A dangerous wild animal has entered the human settlement. **“He heard her words, but**

his mind was still on the chicken cage as they had found it that morning, its wire mesh ripped out and mangled, the wooden frame shattered, blood and feathers and little clotted chunks of raw chicken littering the ground like the aftermath of a ghoulish picnic.” (Niven et al. 53). This narration shows the concept of wilderness which is explained wild animals live freely in the unpopulated environment. There is some unknown wild animal that lives on Avalon and they started to enter the human settlement and attack their livestock. The animal has destroyed the chicken cage and killed their chicken fiercely. The chicken blood and their feathers have scattered everywhere. People on Avalon started to feel that they are living in a dangerous environment.

Cadmann assumes the wild animal that has entered the human settlement because the wild animal was searching for prey. **“I say that until proven otherwise, we make the simplest assumption—that there is an unknown life-form, and that we have invaded its territory.”** (Niven et al. 87). The dialogue shows the concept of the animal which explained building a human settlement on the wild environment can cause the wild animal lose their habitat and lead to extinction. The impact of human settlement on the environment of Avalon has caused wild animal lost their habitat. Wild animals on Avalon feel like human has invaded their territory.

b. Main the character’s behavior towards nature to re-establish the ecology of Avalon

Cadmann realizes that he needs to re-establish the ecology of Avalon. Cadmann has arranged a plan to re-establish the ecology of Avalon. **“So ordered. Colonel?” “Thank you. People, this meeting is too large to get anything decided. Some things are obvious. We’ll have to evacuate this place. As soon as you leave this meeting, go pack. Divide things: essential, important, frivolous, waste.”** (Niven et al. 344). This dialogue shows the main character's behavior towards nature through speech. The concept of animal can be seen from Cadmann's speech when he told other people to pack the important things to prepare for evacuation to re-establish the ecology.

To re-establish the ecology on Avalon, Cadmann needs to kill some of the Grendel that has been overpopulating. Cadmann behavior to re-establish the ecology of Avalon can be seen from his action. He uses the electric fence to protect people from Grendel's attack and kill some Grendel to reduce the Grendel population. Cadman action can be proven from this data, **“power goes on in ten minutes. ten minutes to fence power. Naturally, Cadmann would wait until the last minute of light to power the fences.** (Niven et al. 368). The concept of animal can be seen from Cadmann behavior toward his action. His action to use an electric fence to reduce Grendel's overpopulation is an effective way to save people from Grendel's attack and controlling Grendel's population. Reducing the Grendel population can help Cadmann fix the broken animal food chain and re-establish the ecology of Avalon.

2. Discussions

In this research, the researcher used the intrinsic element of novel to analyze *The Legacy of Heorot* novel, they are character and characterization to find out the relationship between human and Environment in the novel. The researcher also analyze *The Legacy of Heorot* novel with the ecocriticism theory by Greg Garrard. In this research, the researcher used three concept of ecocriticism by Greg Garrard. The concept that the researcher used are pastoral, wilderness, and animal. Those three concepts were used by the researcher to show that the novel and the concepts are relevant and can be used to analyze *The Legacy of Heorot* novel.

The significant differences between this research and previous researches are the object of the research and the theory of ecocriticism by Greg Garrard. The researcher used *The Legacy of Heorot* novel as the object of the research. The researcher used three concept of ecocriticism they are they are pastoral, wilderness, and the animal to analyze the relationship between human and environment that affect the ecology of Avalon in *The Legacy of Heorot* novel. The researcher also used character and characterization to find out the behavior of main character towards nature to re-establish the ecology of Avalon.

The researcher used pastoral concept of ecocriticism by Greg Garrard and found the data that shows the relation between human and land as a part of environment in Avalon. The pastoral concept by Greg Garrard explain about the relationship between human activities like agricultural towards environment. The data in findings shows the agricultural activities by people on Avalon such as farming and raising livestock. People use the land as part of the environment to build settlements and agricultural activities. They do not realize opening more land for agricultural activity and building settlements on Avalon have a negative effect. One of the negative effects is a wild animal species called Grendel on Avalon has lost its habitat. This makes Grendel started to enter the human settlement and kill people and livestock.

The wilderness concept is shown through Avalon's environment. The environment of Avalon is a place uncontaminated by any human civilization and activity. The concept of wilderness explained environment without human activity or civilization is a place to protect particular habitats and species. The researcher found some data that shows the relationship between human and the environment that related to wilderness concept. The data that the researcher has found shows that people on Avalon have started a civilization by building their settlements and destroyed Grendel's habitat.

The animal concept by Greg Garrard prohibited humans from building settlements in wild animal habitats. The extinction of one species of animal can make a huge impact on another living organism. The researcher found some data that shows the relationship between human and environment that related to the animal concept. The data that the researcher has found shows that people on Avalon started to hunt all Grendel on Avalon when one of the predators started to attack human settlements. Humans are afraid other Grendel will come to their settlement and kill one of them. The overhunting activity caused the extinction of Grendel on Avalon. The data that the researcher found using the animal concept shows overhunting activity can affect the ecology of Avalon.

The researcher used the intrinsic element of novel which are character and characterization. The researcher found Cadmann tries to re-establish the ecology of Avalon from his speech by telling other people to stop building settlements. He also told other people to burn some Grendel by using kerosene and flames. Based on the data that the researcher found, Cadmann's speech by telling people to stop building settlements manage to prevent more destruction to wild animal's habitat and reducing the overpopulated Grendel to re-establish the ecology of Avalon.

The researcher also found some data that shows Cadmann's action to re-establish the ecology of Avalon by using character and characterization. Cadmann tries to re-establish the ecology by killing some Grendel that has overpopulated. He kills Grendel by using the electric fence and deadfall trap. His action also shown like controlling Grendel's population and territories. Based on the data that the researcher found using character and characterization from the action of the main character, Cadmann manages to re-establish the ecology of Avalon.

D. CONCLUSION

Having analyzed and discussed widely about the relationship between human and the environment in *The Legacy of Heorot* novel in the chapter IV, finally the researcher comes to the conclusion part. The researcher conclude that the ecocriticism theory can be seen from *The Legacy of Heorot* novel through the relationship between human and environment such as overhunting towards wild animal and land consumption for building human settlement. Humans tend to ignore the extinction of wild animals that can affect other animal species which can change the ecology. Humans only care about building settlements while ignoring that their activity such as overhunting and building human settlement has caused animal extinction and destroy the ecology of Avalon. Humans should realize animals have the same right to be treated as they should be and humans should not overhunting wild animals and destroy their habitat.

REFERENCES

- Reddy, Appanagari Ramamohana. (2017). Environmental Pollution Causes and Consequences. *North Asian International Research Journal of Social Science & Humanitie*, 3(8), 153.
- Larsen, Trond & Madhu Rao. (2010). Ecological Consequences of Extinction. *Center for Biodiversity and Conservation*, 3, 28-32. Diambil dari ncep.amnh.org/linc/.
- Creswell, John W. (2014). *Research Design: Qualitative, Quantitative and Mixed Method Approaches*(4). USA: Sage.
- Bresler, Charles E. (2011). *Literary Criticism: An Introduction to Theory and Practice* (5). Boston: Pearson.