

From Shallow to Deep Ecology in Hayao Miyazaki's *Ponyo on the Cliff by the Sea*

Fatchu Dhofarudin, Fajria Noviana*

Diponegoro University, Japanese Language and Culture Department, Semarang, Indonesia

Abstract. The issue of the environment is still an existing topic until now. People from all around the world are still voicing their concern about conservation efforts to fight against pollution and resource depletion. These efforts are also often raised in literary works. One of the literary works considered to focus on the environment and the theme of ecology is the anime *Ponyo on the Cliff by the Sea*, directed by Hayao Miyazaki. Thus, this study focuses on the representation of changes in environmental virtue ethics applied in mentioned anime. This study applies the theory of deep ecology and shallow ecology proposed by Arne Naess and uses qualitative analysis methods and literary studies. According to the analysis, human indifference to nature manifests in the form of marine environment pollution in the form of garbage and household waste dumped into the ocean, which is the value of shallow ecology ethics. In addition, there are also forms of human concern for coexistence with nature and the emphasis on the rights of other creatures to live, which are the values of deep ecology ethics. Thus, we can see that the environmental virtue ethics have shifted from shallow ecology to deep ecology.

1 Introduction

Literary works are one of the media used in revealing the reality in society because they express the author's appreciation and experience of community at a particular time and place packed with imagination to make it more interesting. According to Damono [1], literature is a social institution that uses language as a medium. The literature presents a picture of life, and life itself is a social reality.

Some people expressed their concern about social problems in literary works. One is related to environmental issues, specifically conservation efforts to fight against pollution and resource depletion. Generally, what people do about their ecology depends on what they think about themselves about things around them and is deeply conditioned by beliefs about nature [2].

Hayao Miyazaki is one of the Japanese film directors and writers whose works focused on environmental mandates and themes about ecology. He was labeled an environmentalist [3] because of his works *Nausicaä of the Valley of the Wind* and *Ponyo on the Cliff by the Sea*. As the title implies, *Nausicaä's* setting is in a valley and meadow in a mountainous area, while *Ponyo's* setting is on a beach and ocean.

* Corresponding author: fajria.noviana@live.undip.ac.id

We can say that the anime *Ponyo on the Cliff by the Sea* is similar to Disney's *The Little Mermaid*, an adaptation of Hans Christian Andersen's work, because both tell the story of a mermaid's attempt to live on land. The anime tells the story of the friendship between a boy named Sosuke and Ponyo, a goldfish that Sosuke once found trapped in a glass bottle on the beach near his house.

In this study, Miyazaki's anime *Ponyo on the Cliff by the Sea* [4] will be used as the data source, considering that the anime tells the changes in environmental virtue ethics, which is still an existing topic until now. Thus, this research aims to describe the forms of ecological virtue ethics, divided into shallow and deep ecology ethics.

This anime has been widely studied from various points of view. One of them is Noviana's research which tried to discover the Japanese people's view of the sea as described in this anime through semiotic meanings [5]. Other research belongs to Yonemura, who described how nature and the environment are depicted in this anime [6].

According to Keraf [7], environmental virtue ethics is all things related to morals between humans and the environment and how human behavior should be towards the environment. The development of environmental virtue ethics demands expanding human perspective and moral behavior by including the environment as part of the moral community. A Norwegian philosopher named Arne Naess proposed one of the developments of environmental ethics theory. Naess divides ecological virtue ethics into shallow and deep ecology ethics [8]. Shallow ecology ethics defines actions focusing on everything in nature and the environment centered on humans. In shallow ecology ethics, all environmental crises are considered technical problems that do not require human self-awareness or ecological systems changes. Deep ecology demands a new ethic not centered on humans but on living beings in efforts to address environmental problems. In the view of deep ecology, the environmental crisis is caused by a more fundamental factor: the wrong way humans view themselves, nature, and their place in nature. Deep ecology theory demands recognizing that all organisms and living things are members of the same status. This recognition concerns the same right to live and develop, which applies not only to biological beings but also to non-biological ones.

2 Methods

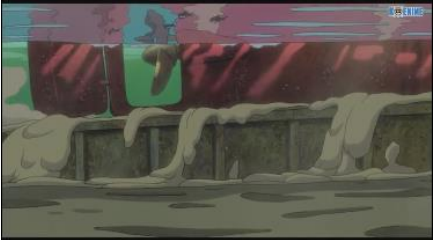
This research is qualitative research with the sociology of literature study that focuses on the ecocriticism of literary works on the object of research, namely the animated film *Ponyo on the Cliff by the Sea*. The data was collected using observation and record techniques, then analyzed using Naess' deep and shallow ecology ethics. The data analysis was carried out by investigating deep and shallow ecology ethics in this animation. The data were then analyzed and interpreted. After that, the data is presented as a description and concluded.

3 Result and Discussion

3.1 Result

This research has found five scenes representing environmental virtue ethics in the data sources. Based on the data analysis, it was found that five scenes represent environmental virtue ethics: littering into the sea, waste pollution that causes mud piles, waste pollution that causes changes in marine life, and the start of efforts to clean up waste and rubbish in the oceans and humans who began to coexist with nature, as depicted in the table below.

Table 1. Environmental virtue ethics scenes and their description.

Scenes	Description
	Household rubbish dumped carelessly in the ocean causes marine life to be disrupted.
	Waste oil and ship fuels that cause sludge build-up in the ocean
	Dredging rubbish as an effort to reduce marine litter pollution
	Ponyo and Sosuke who helped each other during the great floods

3.2 Discussion

Naess divides environmental virtue ethics into two: shallow and deep ecology ethics. In the animated film *Ponyo on the Cliff by the Sea*, three scenes represent shallow ecology ethics, and two represent deep ecology ethics.

3.2.1 Shallow Ecology Ethics Representation

Shallow ecology ethics defines actions focusing on everything in nature and the environment centered on humans. Although in this environmental virtue ethics, there are actions to reduce pollution and conserve natural resources, these actions are intended for the good of humanity. Several actions represent shallow ecology ethics in the animated film *Ponyo on the Cliff by the Sea*. Among them are the accumulation of household waste in the ocean and pollution caused by waste produced by ships.



Fig. 1. Rubbish in the ocean

The picture shows an ocean filled with household waste in cans, bottles, drink boxes, and others. It can be seen that the rubbish in the Sea is items that humans often use. Because these items are no longer helpful, they are thrown into the Sea. This action is intended to prevent the accumulation of garbage on land because it can interfere with health, become a breeding ground for various diseases, and disturb the view. The presence of rubbish disrupts the life of marine life. It can be seen from the scene where the character Ponyo is trapped in a used bottle thrown into the ocean.



Fig. 2. Ponyo trapped in a bottle

Besides household waste, there is also marine pollution caused by ship waste, as seen in the scene below.



Fig. 3. Marine pollution caused by ship waste

The picture above shows a build-up of sludge at the seaside. It is due to the absence of waste treatment from ships before disposal. The waste in the form of oil then mixes with ocean sand which causes mud in the ocean. Of course, this is detrimental to marine life. The

substances discharged into the Sea can cause changes in the water's pH, threatening the survival of marine life.

The result of some of the above actions directly shown in the animated film *Ponyo on the Cliff by the Sea* is a genetic change in one marine life, namely Ponyo. Ponyo was originally a fish, but his form changed to a human in the story's development.



Fig. 4. Ponyo changed into a human

The picture above shows Ponyo's form, which began to resemble a human. The change was caused by Ponyo drinking Sosuke's blood. It represents that chemicals created by humans can easily affect the genetics of marine life. Moreover, in figure 3, it can be seen that humans dispose of waste and chemicals into the ocean carelessly.

Some of the actions above prove the lack of human concern for the environment. This lack of respect underlies human actions to dispose of waste and certain chemicals carelessly without prior processing. As long as it does not harm human life, they will not change it. It follows shallow ecology ethics.

3.2.2 Deep Ecology Ethics Representation

Deep ecology demands a new ethic not centered on humans but on living beings in efforts to address environmental problems. In the development of the story of the animated film *Ponyo on the Cliff by the Sea*, actions that reflect human concern for nature begin to appear. Such as the dredging of garbage at the bottom of the Sea and the character Sosuke helping Ponyo.



Fig. 5. A ship dredging rubbish in the ocean

The picture above shows a ship dredging the rubbish on the seabed. The waste is considered to be detrimental to marine life. Although dredging cannot remove all the junk, especially in the form of chemicals that cause piles of lumps, it shows the awareness of

humans to protect the survival of marine life. The dredging also uses nets that have large enough holes so that marine life swimming around the dredging area will not be affected.

In addition to the dredging of garbage, some actions reflect concern for the environment. The action is centered on the character Sosuke who often helps Ponyo.



Fig. 6. Sosuke try help Ponyo get out of the bottle

In the scene, Sosuke is seen trying to help Ponyo, still in the form of a fish, get out of the bottle. As the story progresses, Sosuke also takes care of Ponyo. These small actions reflect human concern for the lives of other creatures.

The story's development also shows that Sosuke and Ponyo help each other during a big flood that drowns the city where Sosuke lives.



Fig. 7. Ponyo and Sosuke help each other during a big flood

The picture shows Ponyo and Sosuke in a small boat and trying to find an evacuation site together. During the flood disaster, they encountered various problems, and even Ponyo experienced abnormalities. Ponyo, who is in human form, suddenly changes strangely. It can be seen in the following scene.



Fig. 8. Sosuke tried to help Ponyo

The change in Ponyo is caused by Ponyo using too much power so that she experiences fatigue. The picture also shows Sosuke, who immediately tried to help Ponyo even though he did not know what to do. It shows Sosuke's concern for Ponyo.

Some of the actions above show human concern for the lives of other creatures. It is in line with the principle of deep ecology ethics, which cares for the right to life of other living things.

4 Conclusion

In the animated film *Ponyo on the Cliff by the Sea* by Hayao Miyazaki, several forms of shallow and deep ecology ethics are represented. The action of shallow ecology ethics is in the form of human activities that throw rubbish and waste carelessly into the Sea. It is a lack of human concern for the lives of other living things. It indirectly describes the current situation, where many humans still make litter. Based on research published by the United Nations Convention on Biological Diversity in 2016 [9], marine litter in the form of plastic waste and other chemicals can endanger the lives of more than 800 species. However, as time passes, there is a change in human behavior, as seen in the scene where humans begin to dredge garbage at the bottom of the Sea and Sosuke's concern for Ponyo. It indicates a change in environmental virtue ethics from shallow to deep ecology.

We want to thank the Faculty of Humanities, Diponegoro University, for their support in preparing this paper, funded by DIPA funds for the 2022 fiscal year.

References

1. S. D. Damono, *Sosiologi Sastra*. Jakarta: Gramedia Pustaka Utama, 2004.
2. C. Glotfelty and H. Fromm, *The Ecocriticism Reader: Landmarks in Literary Ecology*. Georgia: University of Georgia Press, 1996.
3. P. Gossin, "Animated Nature: Aesthetics, Ethics, and Empathy in Miyazaki Hayao's Ecophilosophy," *Mechademia*, **10**, (2015)
4. H. Miyazaki, Japan. *Ponyo on the Cliff by the Sea*, (2008).
5. F. Noviana, "Semiotic Study of Japanese Views on Sea in Hayao Miyazaki's Ponyo on the Cliff by the Sea," in *E3S Web of Conferences*, **202**, (2020).
6. M. Yonemura, "Representations of the environment in Hayao Miyazaki's Ponyo on the Cliff by the Sea : Japan's cultural landscape and the representation of disasters," Tokyo, 294, (2018). [Online]. Available: <https://senshu->

u.repo.nii.ac.jp/?action=repository_action_common_download&item_id=6963&item_no=1&attribute_id=32&file_no=1

7. A. S. Keraf, *Etika Lingkungan Hidup*. Jakarta: Kompas, 2010.
8. A. Naess, "The Shallow and the Deep, Long-Range Ecology Movement. A Summary," *Inquiry*, **16**, (1973).
9. Secretariat of the Convention on Biological Diversity United Nations Environment Programme, "UN Biodiversity Conference results in significant commitments for action on biodiversity," (2016). [Online]. Available: www.cbd.int