DIJEMSS: Dinasti International Journal of Education Management and Social Science
E-ISSN: 2686-6331
P-ISSN: 2686-6358
https://dinastipub.org/DIJEMSS dinasti.info@gmail.com +62 811 7404 455
DOI: https://doi.org/10.38035/dijemss.v6i1
https://creativecommons.org/licenses/by/4.0/
Received: 19 September 2024 | **Revised:** 21 October 2024 | **Publish:** 20 October 2024

Animation in Social Transformation: Representation of Environmental Destruction and Humanistic Solution for Solar Technology in *Scarygirl* (2023)

Putri Ayienda Dinanti[1], Daffa Afif Nabillah[2]
[1] Universitas Dian Nusantara, Indonesia
[2]Universitas Dian Nusantara, Indonesia

Corresponding Author: putri.ayienda.dinanti@dosen.undira.ac.id[1]

Abstract. Animation films can serve as a medium for addressing environmental issues in society. Within this context, this research aims to reveal how human technology exploits nature and renewable energy sources in the animation film *Scarygirl*. It was directed by Ricard Cussò in 2023, which includes themes addressing environmental issues. Using a qualitative descriptive method, the researcher obtained findings and conducted a deeper analysis of the film. This article employs Lawrence Buell's theory of Ecocriticism to analyze the scenes and dialogues from the film. The research demonstrates that the text and visuals depict intentional environmental destruction and the exploitation of solar energy for personal gain. These representations of environmental issues bring new thoughts and perspectives on humanistic solutions that can be implemented for social transformation.

Keywords: Ecocriticism, Animation, Environment, Solar Energy, Humanistic Solution

INTRODUCTION

As the world faces climate change, being more wisely in the use of natural and renewable sources is crucial to reduce the environmental damages. Solar power is one of the cleanest and most abundant renewable energy sources that comes from the sun and converted into thermal or electrical energy. Clean energy technologies like solar power offer sustainable alternatives and preserve ecosystems. Using clean energy in society can significantly change how we protect the environment (Iacobuţă et al., 2021). To build a good relationship with the environment, people must focus on sustainable practices and reduce the negative impacts. By adopting eco-friendly and humanistic habits, we can create a healthier planet for future generations.

In today's social context, animation plays a big role in raising awareness about environmental issues and promoting sustainability from a young age. Through compelling storytelling and visual creativity, animation can also communicate the urgency of environmental conservation and inspire collective action (Ahmadi, 2018). This is justified by what Buell also

stated, that works of art, including literature and film, have the potential to shape our perception and awareness of the environment and nature in new ways (Buell, 1995). Lawrence Buell is one of the theorists in the field of ecocriticism, which emphasizes the importance of how the natural environment is represented in literature. In his influential work, "The Environmental Imagination", Buell asserts that literature has the potential to shape our perception and awareness of nature. His concept of thinking can be applied to how literature, including animation films shapes our thinking and brings social transformation.

Buell's thoughts on ecocriticism can also be applied to the medium of animation film that will be studied in more depth, namely *Scarygirl* by Ricard Cussò. Based on information obtained through IMDB.com, Ricard's *Scarygirl* was released in 2023. The researcher finds that this animation raises issues about the environment. There are representations of the exploitation of nature and energy sources by humans found in the film. The main character is named Arkie, she lives on an island called Peninsula. She was always taught by her father, Blister (an octopus with regenerative ability), to always protect nature. After Blister was kidnapped, she was faced with Dr. Maybee and other entities from the city (City of Light) who irresponsibly utilize nature in order to create technology that eventually damages the earth. This leads to the destruction of the environment and energy resources which makes those who live on the island threatened.

In this research, Ricard Cussò's film *Scarygirl* is used as the primary source, which has not been previously researched. There are five different articles utilizing the same theory and can be referenced as part of previous studies. Williams, Bagaskara, and Suryanata (2019) were the first to use ecocriticism to examine environmental issues caused by human habits in the film *Wall-E*. Winata and Megasari (2019) similarly analyzed the downside of technology that destroys nature in The Disney movie *Moana*. Highlighting the inseparable human-natural connection and related environmental issues, Dubey, Singh, and Yadav (2024) explored the environmental themes in *Avatar*. Novitasari, Kuncara, and Fatimah (2023) discussed climate change and the main character's response in the movie *An Inconvenient Sequel: Truth To Power*. Lastly, Murtami and Dwi (2023) examined the relationship between humans and animals, showcasing human selfishness through animal characters in the short film *The Turning Point.*

The previous studies mentioned above have provided references and opportunity for this research to be conducted. The first two studies show similar topics, which both examine human habits and their relationship with nature and the environment. The next two studies provide a deeper insight into the research topic related to how the characters in the story deal with existing environmental issues. The last one is slightly different as it discusses the human selfishness toward nature represented by animal characters. These studies show the potential of ecocriticism theory to reveal environmental issues in animation films.

In conclusion, examining *Scarygirl* through the lens of ecocriticism offers a view of how literature, in this context is animation film, can shape and mirror societal values and changes. The evidence of dialogues and scenes that the researcher has found will prove the hypothesis of how the main character deals with the corresponding conflicts. *Scarygirl* is analyzed within the context of social transformation that focuses on environmental issues. It highlights the use of technology that relates with solar energy to represent the urgent need for current sustainable practices and humanistic solutions.

METHODS

This type of research is descriptive qualitative. This research uses Lawrence Buell's theory of Ecocriticism from his work entitled "The Environmental Imagination". There are 2 sources of data from this research, namely the animation film *Scarygirl* as the primary source and several relevant journal articles used for secondary sources. Scenes and dialogues are used as supporting evidence to analyze the representation of environmental issues from the animation. There are some humanistic solutions that can be discussed in this research related to solar energy. Researcher collected data through the following steps, (1) watching the object of research several times to deepen understanding, (2) determining the appropriate approach or theory, (3) linking the theory and findings, (4) selecting and identifying important scenes, visual elements, and dialog from the film to be analyzed, (5) drawing conclusions.

RESULTS AND DISCUSSIONS

In this section, the researcher will explain the findings of environmental issues found in the animation film. Some issues that appear in the film will be explained and studied more deeply by linking to the related theory. Later, there are discussions that center on the possible humanistic solution that are also represented throughout the film. The researcher divided the analysis into three categories: 1) Environmental Destruction Caused by Human, 2) Irresponsible Utilization of Technology by Human, and 3) Humanistic Solution and Action for the Future.

Environmental Destruction Caused by Human

The Exploitation of Sun

The first result found relates to the exploitation of the sun, the earth's main energy source. The film shows how extracting solar energy leads to widespread environmental destruction. There are depictions of characters in the film extracting the sun, despite it being one of the most valuable energy sources, which eventually causes environmental destruction.



Figure 1.
The extraction of solar nnergy

Dialogue at duration 1:00:14 shows the time when Dr. Maybee (the villain) wants to do his experiments with machines and utilize the sun. The experiments involve extracting energy from the sun, depleting solar power and damaging the environment. By uniting the power of the sun and the power of Blister (Arkie's father), Dr. Maybee can easily enhance the citizens in the city and re-create his long lost daughter. From these dialogues, it can be seen that Dr. Maybee is selfish without thinking about how the damage and utilization can harm many entities that reside. By doing that, he depends on large machines that are harming the planet. Moreover, Blister at duration 10:00 states to avoid machines, labeling them as 'dangerous'. Despite Arkie's eagerness to use the new technology because of the benefit, Blister keeps cautioning her about the associated risks.

These evidences reveal the depiction of natural resources exploitation, specifically the sun, for technological advancement at the expense of environmental health. Dr. Maybee's experiments,

which involve harnessing solar energy, symbolize broader social issues to prioritize technological and scientific progress over sustainability. His reliance on machines, which are depleting solar power and causing environmental degradation, shows a dilemma between the balance of innovation and environment. This narrative aligns with Moore's thoughts that discuss technological determinism and environmental ethics, which critique the belief that technological advancement is inherently beneficial without considering its environmental costs (Moore, 2015). Blister's dislike of machines and his warnings about their dangers highlight the film's message about the risks of irresponsible technological use that relates with solar energy. As what Buell (1995) also emphasizes, there is power of storytelling in reshaping environmental awareness and fostering a deeper ethical responsibility with nature. Through the characters and their interactions, the film stresses the importance of balancing human needs with environmental care toward the sun.

Degradation and Indifference to Environment

The second result highlights human indifference toward maintaining a cleaner environment and reducing pollution. The characters' disregard for sustainable practices or healthier environment reflect a broader societal neglect. There are issues that depict environmental damages that need to be undermined more.





Figure 2 and 3.
Dirty and polluted environment

The second image at 28:08 to 29:00 shows the destruction of nature and the environment on the Peninsula. It was caused by humans from the city who came to the Peninsula island and kidnapped Blister using sophisticated traps that they created. They also use vehicles that can fly and destroy everything on the Peninsula. This illustrates how technology created by humans can unconsciously have an impact on the destruction of nature. In the third figure at duration 46:00 to 46:25, Arkie and her two friends have arrived in the city to rescue Blister, who was kidnapped by Dr. Maybee. As soon as they arrived, they fell in the heaps of trash and a lot of garbage was scattered. This proves that there is also the lack of human awareness of the environment. It can be seen how the garbage that emits an unpleasant odor is destroying the environment, while humans look busy and ignorant toward it all.

There is a critique of exploitation and environmental degradation that aligns with the narrative. There are issues related to environmental humanities, which argue that technological advancements, while beneficial, often lead to significant ecological harm when used irresponsibly (Bennett, 2020). Furthermore, the encountered heaps of garbage, highlights the issue of environmental neglect in urban development. The scattered trash and foul odors reveal a

widespread societal neglect of the environment, as people prioritize progress and convenience over health. These scenes highlight the urgent need for a more mindful approach to technological development, one that balances human progress with environmental preservation. Buell (1995) also argues that literature and media have a crucial role in reshaping the interconnection of human and ecological health. By showcasing the consequences of environmental disregard, the film wants viewers to reconsider their own relationship with nature and the impacts on the planet.

Irresponsible Utilization of Technology by Human
Harmful Innovation

The third result found relates to the harmful innovation created by humans. The film shows how the reliance of solar energy leads to widespread environmental destruction. With Dr. Maybee's obsession over progress and innovation, he caused negative impacts on the environment without considering ethics.



Figure 4.
Machine drains the sun

Dr. Maybee explains his experiments and their reliance on solar energy, arguing that they are necessary for progress and innovation (1:05:11). However, The experiments require drawing energy from the sun, which has been draining out solar power and harming the environment. Dr. Maybee is reliant on giant machines that have been destroying the planet. Dr. Maybee's justifications often reveal a lack of concern for the environmental consequences, showcasing a critical view of the uncontrollable use of energy sources. Maybee's reliance on solar energy to power his experiments, highlighting the potential of harnessing renewable energy without considering its ethical and environmental impacts.

Maybee's actions reflect a broader critique of humanity's irresponsible innovation and its harmful impact on nature. The experiment serves as a caution, demonstrating the dangers of prioritizing scientific progress over nature preservation. As Buell (1995) stated, environmental imagination needs to be more integrated into our moral and political understanding, emphasizing the need for ethical considerations in technology. By highlighting these issues, the film encourages viewers to reflect on the consequences of their actions and promotes a more sustainable and responsible approach to innovation. It emphasizes the importance of integrating environmental ethics into scientific research and the wiser use of energy sources. By ignoring the consequences, Maybee's approach illustrates the risks of uncontrolled innovation growth.

Unethical Use of Technology

The fourth result found relates to representation of the unethical use of technology. The dangers of overusing technology and ignoring natural limits are depicted in the film. Obsessed with power, Dr. Maybee neglects the planet's health and even others' well-being. It shows how this issue can lead to the destruction of not only the environment, but also oneself as a proper human.

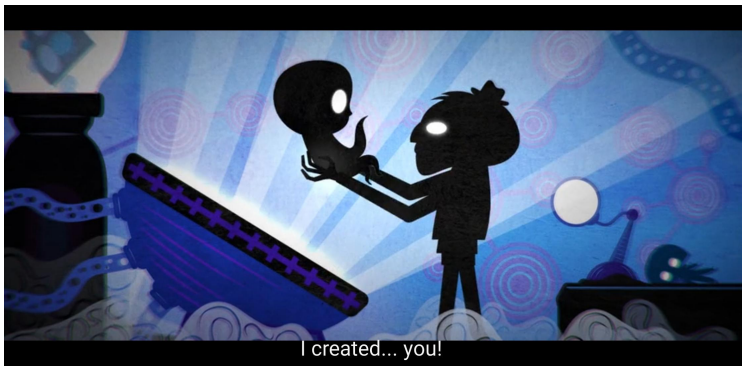


Figure 5.
Dr. Maybee creates half-human Arkie

In the past before the main story started, Dr. Maybee and old-self Arkie had to move to a new planet. They discovered Blister, an octopus with regenerative abilities. He believed Blister could help restore the human race. During an attempt to capture Blister, Arkie was killed. Dr. Maybee then tried to revive her by using Blister's DNA and solar power, resulting in the creation of a half-human, half-octopus child (1:05:29). Eventually, Dr. Maybee became so obsessed with his power that he disregarded the well-being of the planet and his daughter. He rejected Arkie, expressing the intention to capture her as well to recreate a 'perfect daughter' using her DNA. Dr. Maybee claimed that Arkie no longer had any value to him. It can be seen from this dialog "I realised that even if I were to fix you, you would still be nothing like my beautiful little girl." (1:14:35).

By considering this evidence, the film highlights the dangers of excessive technological use and ignoring natural limits. Dr. Maybee becomes so obsessed with power that he neglects the planet's health and his daughter's well-being. He plans to capture Arkie to recreate his ideal daughter using her DNA, calling the present Arkie worthless. According to Nixon, the gradual, often unseen environmental destruction can be caused by technological and industrial advancement (Nixon, 2011). Dr. Maybee's actions serve as a warning about the long-term, negative impacts of prioritizing technological progress over ecological and ethical considerations. It highlights the consequences of such unethical practice will not only destroy the environment, but oneself as a proper human being. People often change and lose their true selves in the name of 'progress.' While they claim to bring solutions, they often end up hurting others in the process.

Flora and Fauna Unethical Utilization

The fifth result depicts the unethical utilization of technology on animals and plants. The film portrays the exploitation of them for the sake of technological progress. This depiction reflects social issues in which flora and fauna are not only utilized but also commodified for their distinctive properties. This issue demonstrates how irresponsible technological practices can lead to the destruction of the environment and the disruption of ecosystems.





Fig. 6 and 7.
Confinement of octopuses

The 4th figure at 1:06:20 shows when Blister gets captured and brought to Dr. Maybee's laboratory. His regenerative DNA is extracted and transferred to other citizens to enhance their strength. Dr. Maybee carries out these experiments in return for substantial payments from his clients. Moreover, In the 5th figure at duration 54:32, people in the city are seen searching for octopuses and catching them, followed by the dialog of one of Arkie's friends named Bunniguru who said “The thing is kid, tentacles...they are rare, they have a kind of ‘bounty’ on them in the city, people will pay big rewards for them”. Therefore, when Arkie is in the city, she becomes the target of people because Arkie is a half-octopus. "Friends? we can be friends with you, and with your tentacle." The dialogue quote was spoken by one of the entities in the city who first realized that Arkie had a tentacle next to her hand. Seeming friendly at first, they still chased Arkie to catch her for a big reward.

Not only related to fauna, there is some evidence that shows unethical technology utilization towards plants sources. In the 6th figure at duration 25:04, Bunniguru is seen hitting while scolding his damaged vehicle using a carrot plant. This can be attributed to the behavior of humans who sometimes do not care about the damage to their food sources. Moreover, in the 7th figure at duration 29:28, all the plants that Arkie and her father always protected on the island have been damaged and destroyed. It was caused by the actions of humans in the city when they came to the Peninsula. The plant life and environment that they once carefully cared for are nothing for the people from the City of Light.





Figure 8 and 9.
Damages to plants

From these evidences, the exploitation of flora and fauna for technological advancement is vividly illustrated. It captures a broader societal response where flora and fauna are not only utilized, but also commodified for their unique properties. “Octopuses” in the movie, as well as Arkie being half-octopus become targets due to the high value placed on tentacles. They underscore the dangers of such possible exploitation. Not only that, the behavior of humans to neglect and cause damage to the flora and food sources are also undermined. These align with the discourse of environmental humanities, which argue that the utilization and commodification of natural entities for technological purposes often lead to unethical and ecological issues (Bennett, 2020). The film emphasizes the urgent need for a more ethical and sustainable approach to the inclusion of biological elements in technology, highlighting the potential consequences of exploiting natural resources for human gain.

Humanistic Solution and Action for the Future

In *Scarygirl*, the film presents humanistic solutions to environmental destruction and emphasizes the use of solar energy as an important renewable source. Through its narrative, the film encourages a deeper reflection on the relationship between technology and nature. Then, from the perspective of ecocriticism, there is a crucial role of humanity's awareness and proactive measures in addressing the environmental threats for the future.





Figure 10 and 11.
Sun finally brightly shines

At the end of the film, the injured Dr. Maybee tries to get revenge by using his machines to drain all the solar energy and destroy the planet. Arkie and her friends work hard to stop him and finally succeed. They save the world, and everyone celebrates as the sun shines brightly again (1:21:07). This shows Arkie and her friends' resilience and determination against technological misuse. It highlights the importance of working together to fight environmental threats. Ultimately, the film sends a hopeful message that even in great danger, people can unite to protect their world and restore balance.

In *Scarygirl*, the film's climax highlights ecocriticism by showing the importance of humanity's awareness and action in facing environmental threats. When the injured Dr. Maybee tries to drain all the solar energy and destroy the planet, Arkie and her friends show remarkable resilience and determination to stop him and they succeed in saving the world. This demonstrates the crucial role of humanistic solution and action in addressing ecological crises. This narrative aligns with ecocriticism, which emphasizes the interconnection between humans and the environment and the need for ethical management of natural resources (Buell, 1995). The film ultimately delivers a hopeful message that even in significant danger, united human efforts can

protect the planet and restore ecological balance, highlighting the potential for positive change through awareness and cooperation.

Further Discussion

To address the environmental destruction depicted in the movie, humanistic solutions emphasize the need for ethical and sustainable technological practices. The film illustrates the reckless use of solar energy by Dr. Maybee leads to severe environmental damage. It urges viewers to consider the broader implications of their technological choices. By adopting a humanistic approach, we can ensure that technological advancements are aligned with environmental preservation and sustainability. This perspective aligns with Buell's ecocriticism, which stresses the importance of integrating ethical considerations into the development and use of technology to prevent ecological harm. Implementing policies that promote renewable energy sources and sustainable practices can help reduce the negative impact of technology and the downside of innovation to the environment.

Through action where Arkie and her friends successfully defeat Dr. Maybee's plan to drain all solar energy, there is also the importance of awareness and cooperation in addressing environmental threats. We, as humans, should be aware of the need for collective action to manage natural resources ethically (Buell, 1995). The film sends a hopeful message that united efforts can overcome significant challenges and restore ecological balance. By having a sense of responsibility and encouraging collaborative efforts, society can develop and implement solutions that prioritize both environmental health and technological progress toward the future. This approach not only addresses immediate environmental concerns, but also promotes a sustainable energy and ethical framework for future technological advancements.

CONCLUSION

In conclusion, an animation film can demonstrate how nature and humans have a very strong interconnection. *Scarygirl* highlights the misuse of solar energy and the dangers of prioritizing progress over sustainability. By highlighting the effects, it promotes the importance of ethical technological development and urges people to use nature wisely. It reminds us of the choices humanity must make for progress by implementing cleaner and more sustainable energy. This animation film can play a crucial role to make changes in a social transformation, where people should care more about preserving the environment and maintaining the renewable energy sources for the best of future generations. Thank you to the Directorate General of Ristekdikti, Civitas of Universitas Dian Nusantara, and the reviewers who have facilitated and provided suggestions and input for the improvement of this research.

REFERENCES

Ahmadi, A. (2018). *Promoting the environment to children through animated movie: An alternative to growing love to the environment.* In Proceeding International Conference Technopreneur and Education 2018 (Vol. 1, No. 1).

Bennett, J. (2020). *Vibrant Matter: A Political Ecology of Things.* Duke University Press.

Buell, L. (1995). *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. Research Gate, 1996.

Cussò, R. (2023). *Scarygirl*. IMDb. Retrieved on June 04, 2024. https://www.imdb.com/title/tt4556264/

Dubey, A., Singh, M., & Yadav, R. (2024). *A Critical Study of James Cameron's Avatar through the Lens of Ecocriticism*. The SPL Journal of Literary Hermeneutics: A Biannual International Journal of Independent Critical Thinking, *4*(1), 216-228.

Iacobuţă, G. I., Höhne, N., van Soest, H. L., & Leemans, R. (2021). *Transitioning to low-carbon economies under the 2030 agenda: Minimizing trade-offs and enhancing co-benefits of climate-change action for the sdgs*. Sustainability, 13(19), 10774.

Moore, J. W. (2015). *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. Verso Books.

Murtami, N., & Dwi, M. (2023). *An Analysis Of Ecocriticism In Revealing Human Greed Found In The Turning Point Short Movie by Steve Cutts*.

Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*. Harvard University Press.

Sari, N., Kuncara, S. D., & Fatimah, M. (2023). *The Adaptation to Climate Change Portrayed Through Al Gore's Character in An Inconvenient Sequel: Truth to Power Film (An Ecocriticism Study)*. Ilmu Budaya: Jurnal Bahasa, Sastra, Seni, dan Budaya, *7*(4), 1163-1172.

Williams, O.B., Bagaskara, S.B., & Suryanata, Y.M.D. *The Analysis of Environment Destruction Portrayed in the Wall-E Movie*. English Language And Literature: Their Contemporary Roles, 184.

Winata, S., & Megasari, F. *Anthropocentrism and its Consequences as Reflected in Disney's Movie Moana*. English Language And Literature: Their Contemporary Roles, 44.