

**THE LOSS OF CONNECTION BETWEEN HUMANS AND NATURE
IN *SEA OF TRANQUILITY* BY EMILY ST. JOHN MANDEL**

THESIS

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FACULTY OF HUMANITIES
UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM
MALANG
2026**

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THESIS

Presented to
Universitas Islam Negeri Maulana Malik Ibrahim Malang
In Partial Fulfilment of the Requirements for the Degree of *Sarjana Sastra* (S.S.)

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2026

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I state that the thesis entitled "The Loss of Connection between Humans and Nature in *Sea of Tranquility* by Emily St. John Mandel" is my original work. I do not include any materials previously written or published by another person, except those cited as references and written in the bibliography. Hereby, if there is any objection or claim, I am the only person who is responsible for that.

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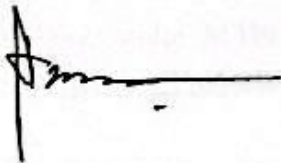
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This is to certify that Zahidan Yudianto's thesis entitled "The Loss of Connection between Humans and Nature in *Sea of Tranquility* by Emily St. John Mandel" has been approved for thesis examination at the Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang, as one of the requirements for the degree of *Sarjana Sastra* (S.S.).

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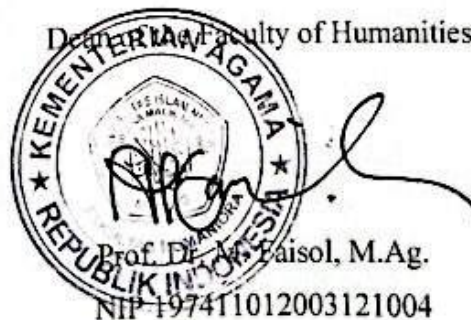
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MOTTO

“I’ll leave you choking on every word you left unspoken.

Rebuild all that you’ve broken. And now you know every wound will shape me.

Every scar will build my throne.”

(Throne, Bring Me the Horizon)

“Good things come to those who persevere,

and it takes blood, sweat, distance, and tears.

No fear, no excuses.”

(You Should See Me Now, Neck Deep)

DEDICATION

I dedicate this thesis to my parents, my family, and everyone who means a lot to me in my life.

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Bismillahirrahmanirrahim. In the name of Allah, the Most Gracious, the Most Merciful. All praise is due to Allah SWT, whose mercy, guidance, and blessings have given me the strength to complete this thesis. Peace and blessings be upon Prophet Muhammad SAW.

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2. My thesis supervisor (Miftahul Huda, M.Pd., Ph.D.), who has always made time to guide me. He has been patient with his students in any situation. Thank you for your guidance and support in the process of writing this thesis.
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ABSTRACT

Yudianto, Zahidan. (2026). The Loss of Connection between Humans and Nature in *Sea of Tranquility* by Emily St. John Mandel. Undergraduate Thesis. Department of English Literature, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang. Advisor: Miftahul Huda, M.Pd., Ph.D.

Keywords: Engineered environment, loss of connection, nature

This study examines the representation of the loss of connection between humans and nature in Emily St. John Mandel's novel *Sea of Tranquility* (2022). The study is motivated by the emergence of artificial environments shaped by human technology, which raises questions about how characters experience and respond to their relationship with nature. The purpose of this study is to analyze how the characters experience the loss of connection with nature and how engineered environments influence this condition. This study applies a literary criticism approach supported by Lawrence Buell's ecocritical theory. The data source of this study is the novel *Sea of Tranquility*, while the analysis focuses on the characters' experiences and the representation of engineered environments. The findings show that the loss of connection with nature is experienced differently by each character. It appears through feelings of alienation, discomfort, emotional distance, and uncertainty toward the environment. The findings also show that engineered environments strengthen this disconnection by replacing natural elements with human-made simulations that cannot fully provide ecological and emotional experience. Although the characters are able to adapt to these environments, their relationship with nature is still incomplete. This study concludes that the loss of connection between humans and nature in the novel occurs gradually through character experiences and technological intervention in the environment. This research suggests that further studies may explore the relationship between technological development and human ecological awareness in other literary works.

مستخلص البحث

يوديانتنو، زاهدان (٢٠٢٦) فقدان العلاقة بين الإنسان والطبيعة في رواية "Sea of Tranquility" للكاتبة إيميلي سانت جون ماندل. رسالة جامعية. قسم الأدب الإنجليزي، كلية العلوم الإنسانية، جامعة مولانا مالك إبراهيم الإسلامية الحكومية مالانج. المشرف: مفتاح الهدى، ماجستير، دكتوراه.

الكلمات الرئيسية: فقدان الاتصال، البيئة المصممة هندسياً، الطبيعة

تناول هذه الدراسة تمثيل فقدان العلاقة بين الإنسان والطبيعة في رواية "Sea of Tranquility" للكاتبة إيميلي سانت جون ماندل، والتي نُشرت عام ٢٠٢٢. تتطرق هذه الدراسة من ظهور البيئات الاصطناعية القائمة على التكنولوجيا البشرية، والتي تثير تساؤلات حول كيفية تجربة الشخصيات لعلاقتها بالنظام البيئي واستجابتها له. تهدف هذه الدراسة إلى تحليل كيفية معاناة الشخصيات من فقدان العلاقة مع الطبيعة، وكذلك كيفية تأثير البيئات الاصطناعية في هذه الحالة. تستخدم هذه الدراسة منهج النقد الأدبي من خلال نظرية النقد البيئي التي طرحها لورنس بويل. ويتمثل مصدر البيانات في رواية "Sea of Tranquility"، مع التركيز في التحليل على تجارب الشخصيات وتصوير البيئات الاصطناعية. أظهرت نتائج الدراسة أن فقدان العلاقة مع الطبيعة يختلف من شخصية إلى أخرى، حيث يظهر ذلك من خلال مشاعر الاغتراب وعدم الارتياح والابتعاد العاطفي عن البيئة الطبيعية. إضافة إلى ذلك، تعزز البيئات الاصطناعية هذا الانفصال لأنها تستبدل عناصر الطبيعة بحياة محاكاة اصطناعية من صنع الإنسان لا تستطيع أن توفر تجربة بيئية متكاملة. وعلى الرغم من محاولة الشخصيات التكيف، فإن شعورًا بالفراغ ظل حاضراً في تجربتهم مع الطبيعة. وتخلص الدراسة إلى أن انفصال الإنسان عن الطبيعة في الرواية يحدث بشكل تدريجي ويتأثر بتجارب كل شخصية والتدخل التكنولوجي البشري. وتقترح الدراسة أن تستكشف الدراسات المستقبلية العلاقة بين تطور التكنولوجيا والوعي البيئي لدى الإنسان في أعمال أدبية أخرى.

ABSTRAK

Yudianto, Zahidan. (2026). Hilangnya Keterikatan antara Manusia dan Alam dalam Novel ‘Sea of Tranquility’ karya Emily St. John Mandel. Skripsi. Program Studi Sastra Inggris, Fakultas Humaniora, Universitas Islam Negeri Maulana Malik Ibrahim Malang. Pembimbing: Miftahul Huda, M.Pd., Ph.D.

Kata Kunci: Kehilangan keterhubungan, lingkungan rekayasa, alam

Penelitian ini mengkaji representasi kehilangan hubungan antara manusia dan alam dalam novel *Sea of Tranquility* (2022) karya Emily St. John Mandel. Penelitian ini dilatarbelakangi oleh kemunculan lingkungan buatan berbasis teknologi yang memunculkan pertanyaan tentang bagaimana para tokoh mengalami dan merespons hubungan mereka dengan alam. Tujuan penelitian ini adalah untuk menganalisis bagaimana para tokoh mengalami kehilangan keterhubungan dengan alam serta bagaimana lingkungan rekayasa memengaruhi kondisi tersebut. Penelitian ini menggunakan pendekatan kritik sastra yang didukung oleh teori ekokritik Lawrence Buell. Sumber data penelitian adalah novel *Sea of Tranquility*, sedangkan analisis difokuskan pada pengalaman para tokoh dan representasi lingkungan rekayasa. Hasil penelitian menunjukkan bahwa kehilangan keterhubungan dengan alam dialami secara berbeda oleh setiap tokoh. Kondisi tersebut tampak pada perasaan keterasingan, ketidaknyamanan, jarak emosional, dan ketidakpastian terhadap lingkungan. Temuan penelitian juga menunjukkan bahwa lingkungan rekayasa memperkuat keterputusan tersebut dengan menggantikan unsur-unsur alam melalui simulasi buatan manusia yang tidak sepenuhnya mampu memberikan pengalaman ekologis dan emosional. Meskipun para tokoh mampu beradaptasi dengan lingkungan tersebut, hubungan mereka dengan alam terasa hampa. Penelitian ini menyimpulkan bahwa kehilangan keterhubungan antara manusia dan alam dalam novel terjadi secara bertahap melalui pengalaman para tokoh dan intervensi teknologi manusia terhadap lingkungan. Penelitian ini menyarankan agar kajian selanjutnya dapat mengeksplorasi hubungan antara perkembangan teknologi dan kesadaran ekologis manusia dalam karya sastra lainnya.

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CHAPTER I

INTRODUCTION

This chapter presents the background of the study, research question, significance of the study, scope and limitation, and definition of key terms.

A. Background of the Study

Literary works are reflections of thoughts, life, and the environment that authors express through written language. They are not merely stories or entertainment, but also reflections of human life and the author's social environment (Siswanto, 2008). Literature, plays a vital role in human life because it can represent human experiences across different periods. According to Buell (2005) in *The Future of Environmental Criticism*, literary works also play a crucial role in shaping human awareness of the relationship between humans and their environment. Based on these views, it can be understood that literary works are always connected to human life and often reflect the experiences human beings in every era.

Besides representing human experiences, literary works can also portray environmental crises and invite readers to reflect on the relationship between humans and nature. Buell (2005) argues that literature plays an important role in environmental criticism, as it can help humans become more aware that nature is something that must be protected. Through literary works, environmental issues can be presented not only as ecological problems, but also as human problems.

Therefore, literature can become a medium for understanding how humans think about, treat, and respond to nature.

This research focuses on the novel *Sea of Tranquility* by Emily St. John Mandel. Mandel is a Canadian novelist known for her reflective works, such as *Station Eleven*, *The Glass Hotel*, and *Sea of Tranquility*. Her works often explore human relationships, trauma, memory, loss, and connection through a unique narrative style. For example, *Station Eleven* presents human life during and after a pandemic, while *The Glass Hotel* explores memory, loss, and moral consequences. Similarly, *Sea of Tranquility* also presents reflective themes that can be examined through an ecocritical perspective.

Sea of Tranquility (2022) explores how humans from the past and the future are connected through anomalous events across time. The story begins in 1912 with Edwin, a young Englishman exiled to Canada, who hears a mysterious voice in the forest. The same voice later reappears in the future and is experienced by Olive Llewellyn, a well-known writer living on a lunar colony in the twenty-third century. In another timeline, Gaspery-Jacques Roberts, a time traveller from the twenty-fifth century is assigned to investigate the anomaly. Through a story that crosses time and space, the novel reveals the subtle connection between human life and nature. It also shows that human awareness of existence remains important even when the world has changed drastically. The novel depicts humanity's longing for a natural environment that is no longer fully present. Thus, Mandel not only combines science fiction and realism, but also offers a reflection on what it means to be human in a world that is increasingly separated from nature.

Ecocritical theory is relevant for analyzing this novel because it focuses on the relationship between literature, humans, and the environment. According to Glotfelty (1996) in *The Ecocriticism Reader*, literature plays a significant role in shaping ecological awareness because literary imagination allows readers to rethink their values and attitudes toward nature. This idea shows the close relationship between humans and the natural world. *Sea of Tranquility* is interesting to study because it indirectly depicts modern human anxiety about environmental damage. This theme is relevant to the current global situation, especially when climate crisis, deforestation, and the exploitation of natural resources raise serious questions about the future of human life. Thus, the novel not only presents a fictional future, but also reflects the environmental realities human beings are facing today.

Several previous studies have examined *Sea of Tranquility* from speculative and philosophical perspectives. Kanaskie (2022) and El-Fert (2022) focus on the themes of time, memory, and the future. Their studies mainly discuss the use of speculative elements, such as time travel and the instability of reality. Meanwhile, Alvi et al. (2024) examine the novel through an existential approach. They focus on human struggle, the meaning of life, and uncertainty in a technologically advanced but fragile world. Overall, these studies show that the novel reflects the instability of human understanding of reality, history, and the future. They also suggest that the novel cannot be read simply as a work of science fiction. However, these studies tend to emphasize the philosophical and temporal aspects of the novel. While its environmental aspects have not been discussed as a central issue.

Other studies have focused on technologically mediated experience in *Sea of Tranquility*. Capllonch-Pérez (2025) argues that simulated and technologically mediated experiences shape the characters' understanding of reality. This is particularly evident when the boundaries between the real and the artificial become increasingly blurred. In this study, technology is not merely presented as a background, but as a crucial part of human experience itself. While Kanaskie (2022), El-Fert (2022), and Alvi et al. (2024) explain the importance of uncertainty and instability in the novel, Capllonch-Pérez (2025) expands this understanding by showing how uncertainty is experienced through technologically influenced conditions. These studies indirectly support the initial assumption that changes in the way humans understand reality through technology may also affect the way they inhabit and interact with an increasingly artificial world.

Furthermore, several studies have examined the application of an ecocritical approach in various literary works. Abror's (2025) study of *The Road* shows how environmental destruction is explicitly depicted through a post-apocalyptic world that has lost its ecological function. Meanwhile, Asharuddin (2024), in his study of *Where the Crawdads Sing*, emphasizes the character's sensitivity to the environment as a form of human emotional attachment to nature. In addition, Fauzan (2024), through his analysis of *The Wild Robot Protects*, shows how ecological issues can emerge in the relationship between technology and the environment. In general, these studies demonstrate that an ecocritical approach can be used to examine various forms of environmental representation in literature. Some studies discuss direct environmental destruction, while others explore the relationship between

humans, technology, and the environment. However, these studies mostly focus on literary works that explicitly present nature or ecological crises. Therefore, they have not fully discussed a condition in which the natural environment disappears and is replaced by artificial systems.

Several studies have also highlighted the role of ecocriticism in understanding modern literature more broadly. Al Fawareh et al. (2023), Usman and Anis (2025), and Adkoli (2024) show that literary works increasingly represent environmental issues as part of the reality of modern human life. These studies emphasize that literature functions not only as a medium of reflection, but also as a means of building readers ecological awareness of ongoing environmental crises. However, these studies tend to view environmental issues in a general framework. They have not specifically examined how the relationship between humans and nature changes when the natural environment is no longer present and is replaced by an artificial one.

Based on these previous studies, there is still a gap in literary research on *Sea of Tranquility*. The novel has been widely discussed in relation to time, memory, uncertainty, existence, and technology, but it has not been sufficiently examined through an ecocritical perspective. This gap is important because ecocriticism can reveal how the novel represents the relationship between humans and the environment in a technologically advanced world. By reading the novel through an ecocritical lens, this study examines how *Sea of Tranquility* depicts the loss of connection between humans and nature, both on earth and an artificial space. The novel also shows how this loss affects human identity, ecological awareness,

and the sense of belonging to nature. Thus, this research fills the gap by analyzing how the novel represents human alienation from nature in a world increasingly shaped by technology and artificial environments.

Analyzing *Sea of Tranquility* through an ecocritical approach might broaden the understanding of literature's role in raising ecological awareness. Amid the global climate crisis, literary works can encourage readers to reflect on their relationship with the environment. This relationship remains important, even in a future shaped by advanced technology. Therefore, this study is expected to contribute to literary studies, especially studies that connect science fiction, ecocriticism, and environmental awareness.

B. Research Questions

Based on the background of the study, this research addresses the following questions:

1. How do the characters in *Sea of Tranquility* experience loss of connection with nature?
2. How do engineered environments influence the loss of connection between characters and nature?

C. Significance of the Study

This study is significant because it shows that *Sea of Tranquility* not only presents a science fiction story about time travel and future technology, but also conveys an important message about the relationship between humans and nature.

Through an ecocritical approach, this research demonstrates how human alienation from the natural environment affects ecological awareness, human values, and the imagination of future sustainability.

Theoretically, this study is expected to enrich literary studies, particularly in the discussion of ecological issues in science fiction. Practically, this study may encourage readers to become more sensitive to environmental issues in real life. It can also serve as a reference for future researchers who are interested in exploring ecocriticism in modern literary works, especially works that represent the relationship between humans, technology, and artificial environments.

D. Scope and Limitation

This study focuses on the representation of the loss of connection between humans and nature in Emily St. John Mandel's novel *Sea of Tranquility*. The scope of the analysis is limited to two main aspects. First, this study examines how the characters experience the loss of connection with nature. The discussion focuses on two characters: Olive Llewellyn, and Gaspery-Jacques Roberts. These two characters are selected because their experiences show different forms of distance from nature across different times and spaces in the novel.

Second, this research analyzes how engineered environments influence the loss of connection between humans and nature. The discussion focuses on engineered environments on the Moon, especially how these artificial or technologically controlled spaces shape the characters perception of nature, place, and human existence. The focus of environmental engineering in this study places

a significant emphasis on the lunar colony environment. However, in addition to the artificial environment of the lunar dome, which is clearly visible in this study, this study also examines environmental engineering aspects that are also visible on Earth. A technologically saturated Earth also has a supportive influence on the relationship between humans and nature. However, it is important to remember that the Earth's surface is not the primary focus of attention. Thus, the analysis does not discuss all environmental issues in the novel, but specifically examines the relationship between engineered environments and human alienation from nature.

The study applies Lawrence Buell's ecocritical ideas as the main theoretical framework. It is used to examine how the novel represents the relationship between humans and the environment, especially in a world where natural spaces are increasingly replaced or controlled by artificial systems. Since this study is a text-based literary criticism, the analysis is limited to explicit and implicit data found in the novel's narrative, including narration, setting, character experiences, conflicts, and relevant dialogues.

E. Definition of Key Terms

1. *Engineered environment* refers to an environment shaped, controlled, or constructed through human technology. In this study, the term is used to describe artificial spaces that replace or alter the role of natural ecosystems in human life. This concept is related to Heise's (2008) view that the modern environment is no longer limited to untouched nature, but also includes spaces strongly influenced by human-made technology.

2. *Loss of connection between humans and nature* refers to a condition in which humans can no longer maintain a meaningful relationship with the natural environment because of artificial systems and technological control. In this study, the term is used to explain how characters experience distance from nature in a technologically shaped world. Buell (1995) argues that environment and nature are interconnected in shaping meaning in literary texts.
3. *Nature* is the elements of the physical environment that are not created by humans, such as plants, animals, landscapes, and ecological systems. Garrard (2012), in *Ecocriticism*, explains that nature refers to the physical environment outside human beings. However, nature is also understood and interpreted from a human cultural perspective. In this study, the term is used to the natural environment that is contrasted with engineered or artificial environments.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter explains the theoretical foundation of this research. It discusses the basic concepts and theories used to support the analysis, including: (a) humans, nature, and their connections; (b) ecocriticism and loss of connection between human and nature; and (c) Lawrence Buell's eco-criticism.

A. Humans, Nature, and Their Connections

The environment is a living space that includes physical, biological, and social elements that shape the ecosystem of human life. Scholars offer various understandings of this concept, particularly within ecological and cultural contexts. Lawrence Buell, in *The Future of Environmental Criticism* (2005), explains that the environment is both an ecological and cultural construct that is always present in human imagination and experience. For Buell, the environment is not only a physical place, but as an entity that has emotional and moral meaning. Similarly, Greg Garrard (2012), in *Ecocriticism*, emphasizes that the environment is a space where humans and non-human elements meet and form reciprocal relationships. This understanding shows that the environment is not static. Instead, it is shaped by continuous interaction among humans, nature, culture, and other living beings. Therefore, the concept of the environment cannot be separated from the way humans interpret their existence in the world in which they live.

Environmental change is an important factor that influences how humans perceive the world. Modernity, technology, and population growth have shifted many natural environments into artificial or human-made spaces. According to Kerridge (1998) in *Writing the Environment*, the modern environment is often filled with artificial constructions that distance humans from ecological intimacy. This condition changes people's perspective on nature because they no longer live closely with natural surroundings. Artificial environments may create emotional distance between humans and nature and weaken ecological connections. When nature is replaced by man-made structures, people's ecological experience also change. The impact is not only physical, but also psychological and cultural.

Literature, as a product of human imagination, is an important medium for representing various experiences, including the relationship between humans and the environment. Wellek and Warren (1949), in *Theory of Literature*, explain that literature is a reflection of life and cannot be separated from the socio-cultural context surrounding it. This means that environmental issues can also appear as part of representation of human experience in literary works. Luxemburg et al. (1984), in *Pengantar Ilmu Sastra*, state that literature is not only a reflection of real life, but also a form of expression that can criticize or challenge certain social conditions. Therefore, literature has the ability to present new perspectives and environmental issues that may not always be clearly seen in everyday life. Literature can show the impact of environmental damage in a more emotional and meaningful way. In this sense, literature acts as a medium that connects readers with environmental problems that are often overlooked.

As a medium of reflection and criticism, literature can raise issues of environmental crises caused by human behavior. Buell (2005) emphasizes that literary works can help build ecological awareness because narratives have the power to influence readers' imaginations. Many modern literary works show environmental decline through the depiction of climate change, pollution, and the loss of natural ecosystems. When literature presents these conditions, readers can understand that ecological problems are not only scientific issues, but also moral and humanitarian concerns. The representations of ecological crises in literature also help clarify the relationship between humans and nature. Therefore, literature can become an effective medium for criticizing the relationship between humans and their environment. This idea becomes one of the foundations for the development of ecocriticism in literary studies.

The relationship between humans and nature is an important concept that highlights humans' emotional, spiritual, and ecological closeness to the environment. Buell (2005) states that humans are fundamentally part of the ecosystem. Therefore, ecological relationships are an essential aspect of human existence. However, modernity often obscures this relationship as humans become increasingly dependent on technology and artificial objects. Morton (2007), in *Ecology without Nature*, refers to this condition as ecological alienation, a situation in which humans feel separated from nature due to structural changes in modern civilization. Heise (2008), in *Sense of Place and Sense of Planet*, also explains that humans' ecological imagination may weaken when people no longer live side by side with nature. If humans lose this connection, their ecological identity will be

disrupted. Thus, environmental changes may produce not only ecological problems, but also deep psychological and cultural effects.

The relationship among the environment, literature, and humanity becomes clearer when literature depicts ecological change. Literature can show how humans experience ecological loss when nature disappears and artificial environments dominate daily life. In many literary works, the loss of nature is depicted as a loss of human identity as they no longer have a deep connection with the environment that has shaped their life and memory. This representation aligns with Buell's (2005) view that literary works can shape how humans understand environmental experience and ecological disconnection. By depicting futuristic worlds or artificial environments, literature allows readers to see how modernity changes humanity's relationship with nature. Therefore, literature not only reflects ecological conditions but also helps readers understand the consequences of environmental changes for human life.

B. Ecocriticism and Loss of Connection between Humans and Nature

Ecocriticism is an approach in literary studies that places the relationship between literary texts and the environment as its main focus. This approach developed from the awareness that literary works are never completely separate from the ecological context or the place where humans live. Cheryll Glotfelty, in *The Ecocriticism Reader* (1996), defines ecocriticism as the study of the relationship between literature and the physical environment. Through this approach, literature is not only understood as an expression of human experience,

but also as a representation of how humans view, treat, and relate to nature. Ecocriticism is based on the idea that literary texts can reveal the position of humans within ecological systems.

As it develops, ecocriticism is no longer limited to works that directly depict the natural world. Ursula Heise (2008), in *Sense of Place and Sense of Planet*, emphasizes that ecological crisis must be understood in a broader, global, and modern context. Discussions about the environment are not only related to forests, mountains, or other natural spaces. The modern environment, including technology, urbanization, and social change, is also part of the ecological condition that needs to be understood. This view shows that ecocriticism has developed into a broader approach. It not only highlights the beauty of nature, but also questions how humans live in systems that are increasingly distant from direct ecological experience.

This broader understanding shows that the main concern of ecocriticism is not only the representation of nature, but also the changing relationship between humans and the environment. As human life becomes increasingly influenced by technology and artificial systems, questions arise about how the place of nature is understood in modern life. At this point, ecocriticism becomes relevant for reading literary works that depict worlds no longer fully dependent on the natural environment. This condition also raises the issue of the disconnection between humans and nature, which has become an important concern in ecocritical studies.

One issue that emerges in ecocritical studies is the disconnection between humans and nature. In this study, this condition is referred to as the loss of connection between humans and nature. This term refers to a condition in which

humans no longer feel close to, directly involved with, or meaningfully connected to their natural environment. In modern life, human existence is increasingly governed by social and technological systems that shape the living environment differently from natural conditions. As a result, the relationship between humans and nature is no longer direct. It is mediated by artificial structures that gradually change the way humans interpret the environment. This loss of connection is not only an emotional condition, but also related a change in lifestyle, perception, and ecological awareness.

Timothy Morton's idea in *Ecology without Nature* (2007) helps explain this condition. Morton argues that the concept of nature in modern society is often understood as something separate from humans, as if nature exists outside everyday human life. This view creates distance between humans and the ecological systems they are actually involved in. When nature is viewed as a stand-alone object, humans tend to see themselves as distinct and separate from the environment. In such circumstances, ecological relationships no longer feel like part of the lived experience, but rather as something distant and abstract.

The loss of connection between humans and nature can be understood as the impact of modern society, which increasingly depends on artificial system and technology. Humans often live in controlled and structured environments that are detached from direct interaction with nature. This condition shows a change in the relationship between humans and the environment. Nature is no longer experienced as a familiar part of everyday life. In literary studies, this phenomenon can be examined through the representation of space, setting, and character experience,

which may show the distance between humans and their world. Therefore, the concept of loss of connection becomes a gateway to understanding the crisis in the relationship between humans and nature in literary texts.

In this study, Lawrence Buell's ecocritical thought serves as the main framework for interpreting ecological issues in literature. Buell argues that literary works can represent environmental conditions and shape readers awareness of the ecological crisis. Buell highlights that the ecological crisis may be portrayed in texts through the depiction of environmental degradation and an unbalanced world. In *The Future of Environmental Criticism*, Buell (2005) suggests that ecological crisis is not always presented explicitly as a major disaster. It can also appear through an atmosphere or narrative situation that indicates a disrupted relationship between humans and ecosystems. The representation of a world with limited natural elements can therefore be understood as a sign of ecological crisis in literature. Thus, literature functions as a reflection of ecological changes in human life.

C. Lawrence Buell's Eco-criticism

In this study, the ecocriticism theory used as the analytical framework is the theory developed by Lawrence Buell. The theory is chosen because it is relevant for examining the relationship between humans and the environment in literary texts. Buell (2005) views the environment not merely as a background setting, but as a crucial element that shapes the meaning of a story. His ideas on the relationship between literature and the environment are developed in several works, such as *The Environmental Imagination* (1995), *Writing for an Endangered World* (2001), and

The Future of Environmental Criticism (2005). Through these works, Buell emphasizes that literature has a significant role in shaping human perspectives on nature and ecological crisis.

In this study, Buell's ecocritical thought is used to examine the representation of the human-nature relationship and the forms of ecological crisis in *Sea of Tranquility*. Two concepts are particularly relevant to this study: environmental imagination and the representation of ecological crisis.

1. Environmental Imagination

Buell introduces the concept of environmental imagination to explain how literary texts shape the way readers imagine and understand the environment. According to Buell (1995), nature in literary works should not be understood merely as a decoration for the story. Instead, nature can appear as an element that has moral, cultural, and ideological significance. It may also influence character development, conflict, atmosphere, and the direction of the narrative. Therefore, environmental imagination emphasizes that the representation of nature in literary texts can develop readers ecological awareness.

This concept is useful for analyzing how a literary text positions humans in relation to the environment. Literature can show human closeness to nature, dependence on nature, distance from nature, or even domination over nature. Environmental imagination provides a framework for understanding how human-nature relations are constructed in a narrative. It also helps explain how this relationship reflects certain ecological conditions and values.

2. Representation of Ecological Crisis

In *Writing for an Endangered World*, Buell (2001) discusses how literature represents ecological crisis. He argues that environmental crises in literature are not always depicted through major disasters or spectacular destruction. Instead, a crisis can appear implicitly through changes in landscape, atmosphere, living conditions, or characters daily experiences. This view suggests that the ecological crisis can be understood not only as a sudden event, but also as a structural condition that gradually shapes human life.

This concept broadens the understanding of how literature narrates a world that is ecologically threatened or transformed. Ecological crisis may appear through the normalization of the loss of natural environments, changes in living spaces, or the emergence of habitats that are no longer naturally formed. In this context, Buell's concept emphasizes long-term ecological changes that affect the relationship between humans and their environment.

Overall, these two concepts serve as the main framework for analyzing *Sea of Tranquility*. The novel presents the relationship between humans and the environment in both natural and engineered spaces. It also shows a world that undergoes ecological change without depicting environmental crisis as a major disaster. Through the concept of environmental imagination, this study examines how the relationship between humans and nature is constructed in the novel. Meanwhile, through the representation of ecological crisis, this study interprets spatial changes and artificial habitats as signs of structural ecological crisis.

CHAPTER III

RESEARCH METHOD

This chapter explains the method used in this research. It consists of research design, data source, data collection, and data analysis. Overall, these sections describe how the researcher collected and analyzed the data to answer the research questions.

A. Research Design

This research uses literary criticism as its research method. According to Abrams (1999), literary criticism is a method in literary studies that focuses on the analysis, interpretation, and evaluation of literary works. Literary criticism can use various approaches, such as formalism, feminism, psychoanalysis, postcolonialism, and ecocriticism.

In this research, the approach used is ecocriticism, particularly Lawrence Buell's ecocritical theory as developed in *The Environmental Imagination* (1995) and *Writing for an Endangered World* (2001). This approach is used to examine the relationship between humans and the environment as represented in literary works. Through this approach, the research analyzes how the characters experience the loss of connection with nature and how engineered environments influence this condition in Emily St. John Mandel's *Sea of Tranquility*.

B. Data Source

The data source for this study is Emily St. John Mandel's novel *Sea of Tranquility*, published in 2022 by Alfred A. Knopf. The novel consists of 218 pages. It is selected because it presents issues related to the relationship between humans, nature, and engineered environments.

The data in this study are taken from the text of the novel in the form of words, phrases, sentences, dialogues, and narrations that are relevant to the research focus. The selected data are related to the two characters experiences of losing connection with nature, and the representation of engineered environments in the novel.

C. Data Collection

The data collection process was carried out through several stages:

1. Reading the entire novel *Sea of Tranquility* using close reading techniques to understand the plot, characters, setting, and major issues in the story.
2. Rereading the novel to identify parts of the text related to the relationship between humans and nature.
3. Marking texts that show the characters loss of connection with nature and the representation of engineered environments.
4. Selecting the most relevant data based on the research questions.
5. Classifying the data into two categories: the characters loss of connection with nature and engineered environments that influence such a loss.

D. Data Analysis

Data analysis is a crucial part of this research as it is used to answer the research questions. The data analysis was conducted by:

1. Interpreting the classified data by examining the narrative context, character experiences, setting, and environmental representation in the novel.
2. Relating the interpretation to Lawrence Buell's ecocritical concepts, especially environmental imagination and the representation of ecological crisis.
3. Explaining how the selected data show the loss of connection between humans and nature.
4. Synthesizing the findings to answer the research questions and draw the conclusion of the study.

CHAPTER IV

FINDINGS AND DISCUSSION

This chapter presents the findings and analysis of the data by connecting them with Lawrence Buell's theory of ecocriticism. The analysis focuses on the characters sense of disconnection from the natural environment, which in this study is referred to as the loss of connection between humans and nature. This chapter also examines how engineered environments influence this loss of connection. Therefore, the discussion is divided into two main sections based in the research questions.

A. Experience of Loss of Connection with Nature

This section discusses how *Sea of Tranquility* represents the loss of connection between humans and nature through the experiences of two characters. The discussion focuses on answering the first research question. It examines how the novel depicts the changing relationship between humans and the environment through character experiences, especially moments of alienation, distance, and limited interaction with nature.

The two characters analyses in this section are Olive Llewellyn, and Gaspary-Jacques Roberts. Olive Llewellyn is a famous writer who lives on a lunar colony and travels to Earth for her book tour. Gaspary-Jacques Roberts is a detective from Night City who works for the Time Institute and is assigned to investigate time anomalies that connect several events in the novel. These two

characters live in different time periods and spaces, and their experiences reveal different forms of disconnection from nature.

In this context, the loss of connection is not always presented explicitly through environmental destruction or major ecological disasters. Instead, it often appears implicitly through the characters feelings of alienation, their limited interaction with the natural environment, and their experiences of living in spaces that no longer provide a strong sense of ecological belonging.

1. Olive's Experiences

The first character who experiences the loss of connection with nature is Olive Llewellyn. In the novel, Olive is on a book tour on Earth while her husband and daughter remain on the lunar colony. On the one hand, she misses her family deeply. On the other hand, she enjoys the solitude and freedom she experiences on Earth. This situation not only reflects Olive's emotional condition, but also shows the contrast between Earth's natural environment and the artificial environment on the Moon. While walking through the empty streets of Salt Lake City one morning, Olive experiences something she cannot fully experience in her home on the lunar colony.

"Olive missed her husband and daughter with a desperate passion, but she also really liked being alone in the empty streets of Salt Lake City. There's something to be said for looking up at a clear blue sky and knowing that it isn't a dome."
(p.59)

The quotation shows the difference between natural and artificial environments in Olive's experience. Although Olive misses her family, she enjoys being on Earth because the environment feels more open and real. The clear blue

sky becomes meaningful because it is not part of a dome or a controlled structure. For Olive, the sky on Earth is not an artificial surface created to imitate nature, but a real natural space above her. Her awareness that “*it isn’t a dome*” suggests that she is used to living in an engineered environment where even the sky is limited and controlled.

The significance of this moment lies not only in the difference between Earth and the Moon, but also in how Olive experiences that difference. On the lunar colony, the environment is regulated by artificial systems. This limits Olive’s direct experience of nature. In contrast, Earth gives her an experience of openness that cannot be fully produced by technology. The comfort Olive feels came from an environment that exists beyond human construction and control. This moment shows that the human relationship with nature contains an emotional quality that cannot be completely replaced by man-made or engineered environments.

Olive’s experience can be understood through Buell’s concept of environmental imagination. Buell (1995) explains that the environment in literary works shapes how humans perceive and understand the world around them. From Olive’s experience, Earth allows her to imagine and experience nature as something real and meaningful. The natural sky gives her a sense of connection that is absent from the dome of the lunar colony. The contrast implies that the engineered environment on the Moon may support human survival, but it cannot replace the emotional and ecological meaning of nature. From Olive’s experience, she felt a longing for Earth and an awareness of what she experienced in the lunar environment. She felt something strange when she was in the lunar environment.

She realized that the lunar environment was a place where she lived but did not live out her need for a spiritual connection with nature. There was a feeling that the engineered environment on the moon was not able to create the connection she desired when she was on Earth.

From Buell's ecocritical perspective, Olive's experience represents a difference in the quality of the relationship between humans and the environment. On Earth, Olive still feels a direct connection with nature. However, her experience also confirms that in the lunar colony, such a connection is limited. She can live in an artificial environment, but that environment does not provide the same sense of ecological belonging. Thus, Olive's experience may be viewed as the representation of a loss of connection between humans and nature, in which human life continues within engineered systems, but meaningful connection with the natural world are weakening.

Olive experiences a similar moment later during her book tour on Earth. After spending time outside, she returns to her hotel and notices a small object stuck to her sock. She later realizes that it is part of a thorny plant. At first, the object looks ordinary, but it becomes meaningful for her because it comes from the natural environment. Olive reaches renewed awareness of the difference between the natural environment on Earth and the artificial one she knows on the lunar colony.

"They were so perfectly hard and shiny that they could've passed for biotech, but when she pulled one apart, she saw that it was real. No, real wasn't the word for it... it was a thing that grew." (p.60)

The quotation above shows a shift in Olive's perception of the natural world. At first, she thinks the thorn may be something technologically created because its shape looks too perfect. Her first response suggests that her way of seeing has been

influenced by life in the lunar colony, where many things are artificial, designed, and controlled. However, when she realizes that the thorn is “*a thing that grew*,” she begins to recognize it as part of a living natural process. The phrase emphasizes that the object is not manufactured, but grows independently through nature.

What is significant in this passage is not only the object Olive finds, but also her response to it. She does not treat the thorn as a meaningless object. Instead, she sees it as something unique and worth keeping. Her desire to show it to her children suggests that direct contact with something natural is both rare and valuable for her. Through this object, Olive experiences a form of natural reality that cannot be found in her daily life on the Moon.

This moment can also be understood through the Buell’s concept of environmental imagination. Buell (1995) argues that the environment in literature shapes how humans perceive and value the world around them. In Olive’s experience, the thorn changes from an ordinary object into a meaningful sign of nature. It reminds her that nature is not only something to be seen from a distance, but also something that grows, touches, surprises, and enters human experience directly. This suggests that Olive’s experience in the engineered environment on the moon was incapable of creating a real experience. She felt no connection when she was in the lunar dome environment. From Buell’s perspective, Olive’s encounter with the thorn reveals the weakened relationship between humans and nature in the engineered world.

The story continues with Olive, who is still on her tour on Earth. She is at the airport and watches the sunrise from a distance. This moment seems simple, but

it carries deep meaning for Olive. During a journey that takes her far from her family, she feels a desire to stay on Earth longer. At the same time, Olive also misses her home on the lunar colony, where her daughter and husband live. These conflicting feelings create a paradox in Olive's mind.

"Paradox: I want to go home, but I could watch Earth's sunrises forever." (p.70)

The quotation shows the tension between two different forms of attachment in Olive's life. On the one hand, home remains an important place because it is where her family is. On the other hand, Earth offers an experience that she cannot fully find in her home on the lunar colony. The sunrise she sees is not an everyday occurrence. It becomes a special experience for her because it appears real and not mediated by artificial structures. The sunrise on Earth gives her a direct encounter with natural beauty.

Olive's desire to watch the Earth's sunrise "*forever*" shows that the experience has emotional and ecological value. What she sees gives her a sense of connection with the natural world. In an engineered environment, natural phenomena like sunrises may be visually recreated; however, they cannot produce the same atmosphere and emotional effect. There must be a difference between the natural experience and the human-made imitation. For Olive, the sunrise becomes a reminder of something that the lunar colony cannot fully provide. Earth becomes a place where Olive experiences a direct relationship with the natural world, while the lunar colony represents a space where her contact is limited by artificial systems.

The above situation demonstrates a difference in the quality of the relationship between humans and their environment. Olive still has a home on the

Moon, but her experience on Earth reveals that her relationship is not fully fulfilled in that engineered environment. Her paradox shows that human belonging is not only connected to family or residence, but also to the natural world. Therefore, this moment represents a loss of connection between humans and nature.

2. Jacques' Experiences

Another incident that demonstrates the loss of connection between humans and nature occurs through the character Gaspary-Jacques Roberts. In this part of the novel, Jacques lives on a lunar colony and has spent a long time in Colony One. The dome is illuminated by artificial lighting designed to resemble natural conditions on Earth. The sky looks blue, and artificial clouds move across it. This environment is created to imitate the atmosphere of Earth and make human life on the Moon feel more familiar. At one moment, Jacques sees the sun setting behind the dome, with orange and pink colours reflected across the sky. The view seems beautiful, but Jacques responds to it differently. Although he has lived in that environment for a year, something about it still feels unnatural to him.

"The sun was setting in a wash of oranges and pinks on the far side of the dome. I'd lived for a year in Colony One, and the dome lighting still looked like theater to me." (p.98)

The quotation shows that the beauty that Jacques sees does not produce a real sense of. The sunset resembles a natural phenomena on Earth, but Jacques realizes that it is artificial. When he says that the dome lighting "*looked like theatre,*" he suggests that what he sees is only a performance or stage image. It is created for display, not formed naturally. This response shows that even though the

lunar environment is designed to imitate natural conditions, the experience it produces is different from the experience of real nature.

What needs to be emphasized is that Jacques perceives the environment after living in it for a long time. He does not fully accept it as natural. Instead, the longer he lives there, the more he recognizes the distance separating himself from the environment he inhabits. The artificial sunset should create comfort or familiarity, but it instead reminds him that the environment is manufactured. Its beauty does not bring a complete sense of calm to Jacques.

Jacques experience can be understood through Buell's (2005) concept of environmental imagination, that the environment in literary works may shape how humans perceive their surroundings. In Jacques case, the lunar environment fails to create an emotional experience because what he sees is a technological imitation of nature. Although the dome visually resembles Earth's sky, it does not produce a convincing sense of natural presence. The artificial sunset shows that technology may imitate natural beauty, but it cannot fully replace the meaning and experience of nature itself.

According to the ecocritical perspective of Buell (1995), this situation shows that the relationship between humans and the environment cannot be established only through simulation or visual imitation. When the environment does not come from natural processes, the experience may feel inauthentic. Jacques lives in a place that resembles the natural world, but he does not experience a complete connection with it. The lunar colony provides a livable space, but it cannot provide

the ecological and emotional experience that comes from direct contact with nature. This moment represents the loss of connection between humans and nature.

Another moment that reveals Jacques' loss of connection with nature occurs when he is sent back in time through advanced technology of a time machine. His journey takes him to a beach on Earth, specifically on Caiette Island. Unlike the lunar colony, the environment he sees is natural, not created by human technology. He sees a vast ocean in front of him, with the rising sun reflecting blue and pink colours on the surface of the water. This scene presents a calm and beautiful natural view. However, the moment also becomes a point of reflection for Jacques that the ocean does not carry deep emotional meaning for him.

"...the ocean carried no weight in his heart. it was just a place he'd seen in movies." (p.168)

What Jacques experiences at that moment demonstrates the distance between him and the real ocean before him. Although he is physically present in a natural environment, he cannot experience a deep emotional connection with it. The ocean, which may be meaningful for people who have lived with it or grown up near it, feels unfamiliar to Jacques. For him, the ocean is not part of his personal memory or lived experience. It is only an image he has seen in movies. Therefore, his response shows that direct physical presence in nature does not automatically create meaningful connection.

Jacques' experience becomes clearer when it is compared with his mother's relationship with the ocean. His mother had lived on Earth as a child and had an emotional connection to the sea. Jacques remembered that his mother placed a photograph of the ocean and the sun in the kitchen, and during childhood he saw

her mother cooking with that image in view. For his mother, the ocean is connected to memory, place, and feeling. However, Jacques does not share his mother's experience. He can admire the ocean's beauty, but he does not understand it as something personally meaningful. This contrast shows the difference between two generations: the mother who has lived with natural environments, and the son who has grown up in a technologically dominated world.

Through this contrast, the novel shows that Jacques loss of connection is not only caused by the absence of nature. Even when nature is physically present in front of him, he still cannot fully connect with it because he does not have lived experience that could give it meaning. His life in an engineered environment (lunar colony) has shaped the way he understands nature. As a result, the real ocean becomes something distant, even when he is standing before it.

Jacques experience can be viewed from Buell's (1995) argument that the environment shapes how humans value nature. For Jacques, the natural environment does not create a meaningful experience because his imagination of the ocean has been formed through theatre images rather than direct experience. The ocean is physically real, but it does not fully resonate with him. This shows that environmental connection depends not only on the presence of nature, but also on memory and repeated interaction with the natural world.

Jacques situation represents a deeper form of loss of connection between humans and nature. Humans may stand directly in a natural environment, but they may still struggle to form a deep connection with it. This occurs when their life experiences have been shaped more by artificial spaces than by direct contact with

nature. The novel illustrates that the loss of connection with nature refers not only to the spatial but also to the experiential and emotional dimensions.

B. Engineered Environments and the Loss of Connection with Nature

This section focuses on how engineered environments are represented in *Sea of Tranquility* as a manifestation of the loss of connection between humans and nature. This section differs from the discussion in the previous one, which focuses more on the characters direct experiences with the natural environment. In this section, the discussion examines spaces that are shaped by technology. In the novel, Engineered environments appear through lunar colonies, domes, artificial lighting, and simulation systems designed to replace or imitate the functions of nature.

The discussion specifically focuses on engineered environments on the Moon. This environment function not only as settings but also as systems that regulate how humans live, interact, and understand reality. In this context, the analysis is directed at examining how artificial environments on the Moon cannot fully give the same experience as the natural environment. Although these engineered environments support human life, human beings feel distant from direct ecological experience.

Based on the data collected, this section answers the second research question, i.e., how engineered environments influence the loss of connection between humans and nature in the novel. The main focus lies in how artificial systems on the Moon shape the way humans build relationships with their environment. Using Buell's (2001) concept of representation of ecological crisis,

this analysis demonstrates that ecological crisis does not always manifest as direct environmental destruction. It can also appear through the dominance of engineered environments that gradually replace the role of nature. The conditions depicted in the novel show that the loss of connection occurs not only because nature is absent but also because engineered environments are unable to fully replace the experience, meaning, and connection produced by the natural environment.

1. Moon Colony

In *Sea of Tranquility*, the lunar colony is represented as an engineered environment built to provide an alternative space for human habitation. At that time, conditions on Earth had deteriorated due to overpopulation and environmental disasters. The colony is designed to mimic conditions on Earth, particularly through the sky's appearance and time cycle. However, the lunar colony later experiences a system failure. The dome lighting, which is supposed to simulate the sky and the natural rhythm of day and night, no longer functions properly. This failure not only affects the visual appearance of the colony but also changes the way humans experience their daily lives within it.

"...no more carefully calibrated preprogrammed sunrises and sunsets. The failure of the dome lighting removed the illusion of the twenty-four-hour day." (p.89)

The quotation shows that the environment on the lunar colony strongly depends on technological systems. The day-night cycle is not a natural process, but programmed simulations created to resemble life on Earth. When these systems fail, the colony can no longer maintain the illusion of a natural environment. The loss of the twenty-four-hour day reveals that the colony's sense of normal life is fragile.

This condition shows that an engineered environment can imitate nature, but it cannot fully replace the stability and natural rhythm of the Earth.

The failure of the system in the lunar colony exposes the limits of artificial environments. As long as the technology works, the colony can appear comfortable. However, when the system breaks down, humans are reminded that their environment depends on human-made structures. The absence of normal sunrises and sunsets affects not only the appearance of the colony, but also the rhythm of human life. When the system fails to provide the experience as expected, humans will abandon it. This differs from the human relationship with nature on the Earth. Humans on Earth cannot simply abandon the natural environment because it is not only a visual background but also a system that shapes their daily experience.

From Buell's ecocritical perspective, the failure of the dome lighting represents the inability of engineered environments to fully replace the function of the natural world. When the systems that support the environment are damaged, the human relationship with the space they occupy also changes. This condition represents the loss of connection between humans and nature. Humans may live in a space that imitates natural condition, but the imitation remains fragile because it does not come from natural ecological processes.

Jacques also experiences a sense of strangeness when he observes the reality around him on the Moon. As he observes his surroundings, he begins to question whether the world he inhabits is real. He no longer views his environment simply as a living space, but begins to doubt its authenticity. He shares this thought with Talia, one of the characters, and asks for her opinion about the possibility that their

world is a simulation. This moment shows a shift in Jacques's understanding of the environment. What seemed ordinary becomes gradually questionable.

"...I returned to the exercise of noticing everything and telling myself that none of the things I noticed were real." (p.111)

The quotation above shows that the environment no longer provides Jacques with a stable sense of reality. He begins to observe everything around him as if it might be a part of a simulation rather than the real world. His conversation with Talia strengthens this doubt. Jacques notices the broken streetlights and the deteriorating condition of the colony, and these flaws make the environment feel strange rather than convincing. The artificial environment is not only artificial but also unstable. Therefore, he cannot completely trust the world he inhabits.

Jacques perception of the environment changes after this realization. He does not see the environment as something he can fully trust, even when he is in a seemingly normal space. He feels a distance between himself and the environment because he is no longer certain of its authenticity. This demonstrates that the relationship between humans and the environment depends not only on physical presence, but also on the belief that the environment has a real basis. When that belief is getting weaker, the relationship also becomes more fragile.

Jacques condition can be understood through the representation of the ecological crisis concept as proposed by Buell (2001). In Jacques case, the crisis is not shown through visible environmental damage, but through the collapse of trust in the reality of the environment itself. When humans begin to doubt whether the world is real, their connection with the world becomes increasingly unstable.

Through Buell's perspective, this condition shows that engineered environments not only limit human interaction with nature but also blur the boundaries between what is real and what is not. When these boundaries become unclear, humans lose the basis for a meaningful relationship with the environment. Jacques experience represents another form of the loss of connection. He is not only separated from the natural environment, but also loses trust in the reality of the artificial environment he inhabits. This loss of trust makes the relationship between humans and nature less meaningful.

Another example that demonstrates the influence of engineered environments on the loss of connection between humans and nature can be seen through the artificial environment of Colony One. In the lunar colony, the dome is equipped with a lighting system designed to imitate natural conditions on Earth. The system produces artificial skies, clouds, sunrises, and sunsets in order to create a familiar atmosphere for its inhabitants. Through this technological system, nature is reconstructed and presented in an artificial form. One evening, Jacques observes the sunset created by the dome lighting system. Although the colours resemble a natural sunset, the experience does not appear completely convincing to him.

"The sun was setting in a wash of oranges and pinks on the far side of the dome. I'd lived for a year in Colony One, and the dome lighting still looked like theater to me." (p.98)

The quotation shows how the lunar colony attempts to reproduce natural conditions through technology. The orange and pink colours imitate the appearance of a sunset on Earth, while the dome functions as a substitute for the natural sky. However, the environment that is produced remains artificial because it is created through technological intervention rather than natural processes. The description of

the sunset as something that “*looked like theater*” suggests that the environment functions more as a performance than as an authentic ecological experience. Although the visual appearance resembles nature, the process behind it remains entirely artificial.

The engineered environment in Colony One is designed to reduce the differences between life on the Moon and life on Earth. Artificial skies and sunsets are created to provide comfort and familiarity for the colonists. However, the passage suggests that technological imitation cannot completely reproduce the experience of nature itself. The existence of the dome constantly reminds its inhabitants that the environment around them has been manufactured. Instead of eliminating the distance between humans and nature, the technological system highlights the absence of the natural world that it attempts to replace.

This condition can be understood through Buell’s (2005) concept of environmental imagination. Buell argues that the environment influences the way humans understand and experience the world around them. In this case, the lunar colony presents an environment that is carefully designed through technology. The artificial sky and sunset shape the colonists’ perception of nature by replacing direct contact with natural processes. As a result, the experience of nature becomes mediated through technological systems rather than through the natural environment itself.

From Buell’s ecocritical perspective, the dome lighting system represents an engineered environment that influences the relationship between humans and nature. The artificial sunset demonstrates how technology can imitate natural

appearances while simultaneously distancing humans from the ecological processes that produce them. Therefore, the lunar colony does not merely function as a place to live, but also as an engineered environment that contributes to the loss of connection between humans and nature.

Another example that demonstrates how engineered environments influence the loss of connection between humans and nature can be seen through Jacques' encounter with the ocean on Caiette Island. At this point in the novel, Jacques is sent back in time through advanced technology and arrives on Earth. Standing on the beach, he observes a natural landscape that is very different from the environment in which he has spent most of his life. Unlike the lunar colony, the ocean, the waves, and the sunrise before him are not products of technological intervention. However, despite being surrounded by a natural environment, Jacques finds that the ocean does not create a strong emotional response within him.

"...the ocean carried no weight in his heart. it was just a place he'd seen in movies." (p.168)

The quotation shows that Jacques' perception of the ocean has been shaped by indirect experience rather than direct interaction. The ocean exists physically in front of him, yet he understands it mainly as an image that has appeared in films. Instead of recognizing it as a meaningful part of his life, he views it as something distant and unfamiliar. This response suggests that his relationship with nature has been influenced by the environment in which he was raised.

The significance of this moment becomes clearer when Jacques' experience is connected to the lunar colony where he spent most of his life. Living in an engineered environment limits direct interaction with natural landscapes such as

oceans, forests, and open ecosystems. Everyday life in the colony takes place within technologically controlled spaces that replace natural conditions with artificial systems. As a result, Jacques grows up without the repeated experiences that usually allow individuals to form emotional bonds with nature. The ocean therefore appears unfamiliar, even though it is physically present before him.

This situation can be understood through Buell's (2005) concept of environmental imagination. Buell argues that the environment influences how people perceive and understand the world around them. In Jacques case, the engineered environment of the lunar colony shapes his understanding of nature by reducing opportunities for direct ecological experience. His perception of the ocean is formed through mediated representations rather than lived interaction. Consequently, nature becomes something observed from a distance instead of something experienced as part of everyday life.

From Buell's ecocritical perspective, this passage illustrates how engineered environments can influence the relationship between humans and nature. The problem is not simply the absence of nature, but the replacement of direct ecological experiences with technologically mediated ones. Jacques inability to form a meaningful connection with the ocean suggests that long-term life in an engineered environment affects the way nature is perceived and valued. Therefore, the lunar colony contributes to the loss of connection between humans and nature by limiting opportunities for direct engagement with the natural world.

2. Supporting Representation on Earth

The representation of an engineered environment on Earth can be seen through Jacques experience in the final phase of his life. At this point, Jacques is older and lives in a farmhouse, far from the crowded life of the outside world. His daily life seems peaceful. He plays music, cooks, walks through the fields, and lives in a quiet rural environment. However, this life is surrounded by advanced technology. On this farm, many activities are controlled by robots and technological systems. His life appears comfortable and stable, but it also raises questions about the kind of world he inhabits.

Jacques reflects on his life and remembers the question he has ever asked about whether the world might be a simulation. Jacques reflection shows his awareness that reality itself may be uncertain or technologically constructed.

“...if definitive proof emerges that we're living in a simulation... So what? A life lived in a simulation is still a life.” (p.203)

The quotation shows Jacques acceptance of the world he inhabits. He no longer questions whether the world is real or simulated. In his later years, he concludes that life in a simulation can still be lived like normal life. Daily activities continue, human relationships continue, and nothing completely prevents people from living. Jacques response shows a kind of human adaptation to an engineered environment. He accepts that even if reality is artificial, human life still goes on.

Jacques acceptance, however, also suggests a deeper condition: humans may become accustomed to engineered realities until they no longer question what

has been lost. The environment he inhabits may support life, but it cannot fully replace the experience of direct connection with the natural world. The presence of technology in many aspects of his life confirms that his environment is entirely natural, but shaped by human systems and artificial control.

The concept of the representation of ecological crisis proposed by Buell (2001) can be used to analyze what Jacques experiences. The ecological crisis appears through the normalization of life in an engineered world. He accepts this condition without questioning whether his life is still meaningfully connected to nature. From Buell's ecocritical perspective, this condition shows that the loss of connection between humans and nature is not always manifested through conflict with the artificial environment. Rather, it can occur when humans begin to accept engineered conditions as normal. Jacques no longer asks whether his life is connected to nature because he has adapted to the world around him. However, within this acceptance, the novel implies that connection with nature is no longer a significant part of his life, and this condition represents a deeper form of loss of connection.

CHAPTER V

CONCLUSION AND SUGGESTION

This section presents the conclusion of the research and suggestions for further researchers and readers.

A. Conclusion

This study aims to examine how *Sea of Tranquility* represents the loss of connection between humans and nature. It also explores how engineered environments shape this condition. Based on the analysis, the researcher finds that the loss of connection between humans and nature is not always represented through major ecological disasters or visible environmental destruction. Instead, it appears through small and everyday experiences, particularly in the characters feelings of distance, alienation, and uncertainty toward their environment.

The findings related to the first research question show that the loss of connection with nature is represented through the spatial and emotional experiences of these two characters. Olive and Jacques experience different forms of distance from nature. Some characters live in environments that resemble familiar places but do not provide the same sense of belonging. Others see real natural environments but cannot fully build emotional connection with them. These findings show that human connection with nature depends not only on the physical presence of nature, but also on direct experience, memory, familiarity, and meaningful interaction. When these experiences are absent, the connection weakens or even disappears.

The findings related to the second research question show that engineered environments in the novel are represented as spaces that attempt to replace the function of nature. However, this replacement is never entirely successful. Lunar colonies, domes, artificial lighting, and simulation systems can imitate natural conditions, but they cannot provide the same ecological and emotional experiences as the natural environment. At several moments, the characters realize that the environments they inhabit are artificial or unstable. In other moments, they begin to accept these engineered environments as normal. This acceptance shows a deeper form of disconnection because humans can continue their daily lives while losing a meaningful relationship with nature.

In general, this study shows that the loss of connection between humans and nature in *Sea of Tranquility* occurs gradually. It emerges through changes in how humans perceive, experience, and interpret their surroundings. In some cases, the characters are still aware of their distance from nature. In other cases, the loss becomes normalized as part of technologically mediated life. This finding is in line with Buell's view in *Writing for an Endangered World* (2001) that ecological crisis in literature can also appear through everyday experiences and changing environmental relationships.

B. Suggestion

Based on the findings and limitations of this research, several suggestions can be offered here. Future researchers, for example, may examine other important aspects of the novel, such as technological development, human identity in simulations, the role of time, or the philosophical meaning of reality in the novel.

This study only uses one novel as the object of analysis. Future researchers may expand the discussion by comparing *Sea of Tranquility* with other literary works that present similar themes. A comparative study may provide a broader understanding of how literature represents the changing connection between humans and nature in various contexts. In addition, this study does textual analysis and does not involve reader responses. Therefore, future researchers may consider using literary reception studies to examine how readers respond to environmental representations in literary works.

For readers, this research is expected to encourage greater awareness of the relationship between humans and nature. Through literary works, readers can reflect on how nature is often treated as a resource to be exploited, as well as on its crucial role in shaping human life, experience, and perspective.

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SYNOPSIS

Sea of Tranquility tells the story of several characters from different eras who are unknowingly connected by a mysterious event. The story begins in the early twentieth century with Edwin St. Andrew, a young Englishman who is sent to Canada after failing to meet his family's expectations. While living on Vancouver Island, Edwin experiences a strange event that remains in his memory.

The story then moves to the future, where humans have settled on a lunar colony. One of the characters is Olive Llewellyn, a famous author who travels to Earth for a book tour during a widespread pandemic. During her journey, Olive begins to notice significant differences between life on Earth and life on the lunar colony. Meanwhile, Gaspary-Jacques Roberts, a detective from Night City, is assigned to investigate a time anomaly that seems to connect several characters from different eras. As the story progresses, Jacques investigation leads him to uncover important secrets about time, reality, and human life in the future.

The novel blends elements of science fiction, time travel, and the future in a calm narrative. Through the movement across time and the experiences of each character, *Sea of Tranquility* depicts how humans face loneliness, changes in the world, loss, and the search for meaning of the midst of increasingly advanced technological development.

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