

A Critical Theory Perspective On Sustainability Efforts

Tutut Arif Rachman^{1*}, Agung Winarno²

^{1,2}Universitas Negeri Malang

e-mail: tutut.arif.2404138@students.um.ac.id^{1*}, agung.winarno.fe@um.ac.id²

Abstract

The development of an increasingly advanced era, along with more and more human needs that must be met to achieve better expectations, but it also has an impact on nature which is starting to erode. Human exploitation of natural resources continues to cause concern, so environmental conservation and environmental sustainability efforts are needed. Both of these are not only the responsibility of certain parties but of each of us individually. Each individual must have critical thinking to play a role in the idealism of criticizing environmental damage. This research will use the scoping review method to map the perspectives of critical theory to respond to the problems of conservation and environmental sustainability. The critical theory perspective explores how political, economic, social and cultural challenges affect efforts to mitigate environmental damage.

Keywords : Environment, Nature, Critical Theory, Sustainability

INTRODUCTION

The phenomenon of environmental degradation is increasingly developing. The relentless fulfillment of human needs, coupled with natural resources that cannot regenerate quickly, has worsened environmental conditions. Examples of human activities such as industrialization and urbanization have led to pollution and habitat destruction. However, humans can utilize technological advancements to address environmental challenges. Innovations in green technology can reduce ecological damage and promote sustainable resource management. This effort aims to usher in a new era where technology serves as a solution to broader social and environmental challenges, referred to as Society 5.0. Humans cannot avoid the changes of the times, but they can strive to adapt to them. This study focuses on environmental and social sustainability, often debated as merely a form of organizational image-building to meet societal expectations.

Critical environmental theory offers an analysis of current issues concerning the domination of humans over nature and pathways to achieve future sustainability. It seeks to explain and provide perspectives on the relationship between humans and nature and their impact on environmental conservation and activities that support sustainability performance. Critical theory aims to critique and transform society by combining normative perspectives with analysis based on real experiences of societal conflicts, contradictions, and tendencies. It is an approach to cultural studies and social philosophy that focuses on society and culture to uncover, critique, and challenge or transform power structures (Britannica, 2022). Originating in the 1930s at the Institute for Social Research in Frankfurt, this school of thought is renowned for its research.

Regarding nature, the perspective sees nature as something distinct and beyond full human comprehension. According to Adorno, Horkheimer, and Marcuse, "nature" is a product of human activity (Vogel & Steven, 1996). Marcuse's work also highlights this view, presenting nature as a resource for addressing ecological crises by combining criticism of science and technology with the idea that social transformation must include a changed aesthetic relationship with nature (Feenberg, 2023). Critical theory is one of the few remaining discursive traditions, like ecological science, unafraid to adopt a totality perspective. Practical philosophy, as Gramsci (1971) suggests, considers the environment or nature as inherently economic and social. Thus, the opposition of abstract analyses that uphold dualistic reification, empowering the "economy" to sustainably develop the "environment" or allowing the "social" to regulate the "environment," only perpetuates existing contradictions. To address this impasse, critical environmental practice philosophy fully

acknowledges that nature is always economic, and ecology involves the lives of human and nonhuman societies (Horkheimer & Adorno, 1972).

Environmental critical theory, therefore, critiques all environments to guide new practices for change. Instead of merely preventing environmental damage or controlling nature to revitalize society, deliberate ways of elaborating critical theory must focus on nature and society together. Nature is only known through social interactions, and society can only be re-created insofar as relationships with nature evolve over time. Any truly political critical environmental discourse in its implementation must seek technical means to reconcile the workings of advanced economies with nature in qualitatively new modes of production. To extend Haeckel's understanding of ecology—as a science addressing the totality of relationships between organisms and their organic and inorganic environments—to its political boundaries, critical environmental theory can reconfigure emerging scientific practices and concepts to evaluate and oppose the full impact of corporate capital production forces on the ecological balance of nature. By ultimately treating the "totality of relationships" between all organisms and their environments, including their built environments, critical environmental theory can far surpass the fragmented and specialized knowledge of more orthodox life sciences, such as zoology, biochemistry, biophysics, or microbiology, which are used by states to conceptualize ecology for their technical needs (Luke, 2003, pp. 238-250).

METHOD

The scoping review method adopted in this study follows the approach of Arksey & O'Malley (2005). Arksey & O'Malley (2005) use a five-step scoping review framework, as outlined below:

1. Identifying the Research Question

The first step in the scoping review involves identifying the research question. By defining the research question, researchers can design a strategy for conducting a literature search while ensuring that substantive areas are covered (Arksey & O'Malley, 2005). The research question for this study is: "What is known from the existing literature about the critical theory perspective on environmental sustainability efforts?"

2. Identifying Relevant Studies

To identify literature relevant to the research question, keywords were developed. The key search terms included "Critical Theory," "Environment," "Nature," and "Sustainability." Electronic literature sources such as ScienceDirect, JSTOR, Elsevier, Academia, Krisis, Sage, and ResearchGate were used to locate research articles on the phenomenon of critical theory and environmental sustainability. The selected timeframe for the search was 10 years, covering the period from 2013 to 2023.

3. Study Selection

This process initially identified 256 documents. Research articles were the selected type of publication. Titles, abstracts, and keywords were carefully reviewed, resulting in the exclusion of 162 papers due to their irrelevance to the research topic. Applying this filter reduced the total number of papers to 40. After this screening, 40 full articles were obtained for in-depth reading to verify their relevance to the objectives of this study. Following this, 27 articles were shortlisted. Reviews were found for comparative consideration with the research conducted in this paper, although they were not included among the selected papers. Ultimately, nine articles were chosen for this study related to environmental and social sustainability.

4. Mapping the Data

In the data charting stage, the selected articles were extracted to summarize the most substantive data. The data extracted included information about the authors, year of publication, research objectives, design/methods, and findings.

Table 1. Mapping the Data

No.	Authors	Year	Research Objective	Method	Findings
1	Tracey Skillington	2023	Assessing the contribution of critical inquiry traditions to understanding the impact of climate change on subjective experiences.	Literature Study	Climate change influences critical thinking and responses concerning justice and responsibility.
2	Sahota Sarkar	2013	Exploring the intersection of environmental ethics, decision-making, and ecological restoration.	Literature Study	The need to think from a critical theory perspective in environmental decision-making.
3	N.P. Hariram, K.B. Mekha, Vipinraj Suganthan, & K. Sudhakar	2024	Investigating how Sustainalism affects quality of life, social well-being, and global happiness through philosophical perspectives.	Literature Study	The interconnection of human welfare, economic prosperity, social equity, and planetary health as key components of a harmonious society.
4	Ulrich Brand	2016	Conceptualizing a comprehensive understanding of social-ecological transformation systematically, addressing the complexity of environmental crises and limitations of existing global governance.	Literature Study	Existing power relations significantly influence how environmental crises are addressed, often maintaining the status quo rather than driving change.
5	Jeff Rose & Adrienne Cachelin	2018	Critiquing traditional conceptualizations and practices of sustainability.	Literature Study	Criticism of traditional sustainability frameworks for often prioritizing economic growth over social and environmental considerations.
6	Jay Odenbaugh	2014	Exploring the transformation of conservation biology.	Literature Study	Transformation of conservation biology into a socio-ecological and value-oriented discipline utilizing advanced computational tools for systematic conservation planning.
7	Leilani Nishime	2023	Providing alternative understandings of the climate crisis using theories from critical	Literature Study	The importance of communication in addressing the climate crisis, highlighting that information alone is

			rhetoric and cultural studies.		insufficient to motivate action.
8	Dorothea Born	2024	Exploring the implications of critical theory critiques of enlightenment for climate change communication practices.	Essay	A critical reassessment of how climate knowledge is produced and communicated.
9	Zoltán Somogyi	2024	Creating a comprehensive global environmental sustainability theory that can effectively explain various phenomena and be applied in practice to analyze and solve sustainability situations.	Quantitative Study	The provided context lacks specific results or findings from the research paper.

Source: by the researcher

5. Collating, Summarizing, and Reporting the Results

The final stage of the scoping review involves collating, summarizing, and reporting the research results. Collation produces a table containing the article extractions conducted during the data mapping stage. Summarizing yields key themes or patterns from the main findings, and reporting produces the report format, which in this case is intended for publication.

RESULTS AND DISCUSSION

With a time span of 10 years, from 2013 to 2023, nine empirical studies were found to be the most relevant to the research question and keywords developed. Within this timeframe, three articles were published in 2024, followed by two articles in 2023, one study each in 2018, 2016, 2014, and 2013. No studies relevant to the research question and keywords were found in other years. Eight studies used literature review methods, while one article employed a quantitative method to establish sustainability theory.

The findings of this review align with the objectives of a scoping review, highlighting the need for further empirical research to deeply explore the ontological foundations integrated into management decisions, especially in marketing management—a domain that still lacks extensive research and could serve as a direction for future studies Key Findings from the Reviewed Articles:

Skillington (2023) This study critically examines the impacts of climate change and explores how environmental events and ecological challenges shift perspectives on social and environmental conditions. A critical perspective fosters a desire for justice and life struggles to protect nature through imaginative approaches to addressing climate change. The findings suggest that subjective feelings play a crucial role in reshaping perspectives on ecological challenges and the social origins of environmental issues. Moreover, a collective recognition of rights and responsibilities drives legal and social changes. The article recommends creating frameworks to engage more people as agents of change against climate change threats. Sarkar (2014) This study explores the intersection of environmental ethics, decision-making, and ecological restoration. Addressing critiques regarding biodiversity definitions in conservation biology, the study defends the normative aspects of biodiversity by criticizing the objectives of ecological restoration. Sarkar supports practices such as habitat reconstruction, rewilding, and assisted migration where feasible and normatively acceptable. It emphasizes the need for critical theory perspectives in formalizing environmental decision-making Hariram, Mekha, Suganthan, & Sudhakar (2024) Focusing on sustainabilism, a multidisciplinary

approach addressing socio-economic and environmental challenges, this study explores its intersection with contemporary philosophy.

Sustainability promotes global happiness and world peace by addressing unsustainable practices. The study highlights the interconnectedness of human well-being, economic prosperity, social equity, and planetary health as essential components of a harmonious society. It emphasizes the benefits of stronger social bonds and a sense of belonging in fostering sustainable communities and environments Brand (2016) This study examines the historical-materialist approach to socio-ecological transformations, emphasizing theoretical foundations to understand the driving forces behind societal changes and their implications for sustainability.

It reveals that existing power relations significantly influence how environmental crises are managed, often maintaining the status quo rather than encouraging change. The study advocates for democratic control over resources and societal relationships with nature and emphasizes the importance of critical perspectives to address governance structures. Rose & Cachelin (2018) The study critiques traditional sustainability conceptualizations and practices, particularly those influenced by capitalist ideologies, and explores their ethical and political implications. The authors advocate for a critical sustainability perspective, emphasizing inclusivity and addressing the needs of marginalized communities. They highlight the contradictions and challenges in sustainability discourses and stress the importance of incorporating diverse socio-ecological contexts and marginalized voices in sustainability practices.

Odenbaugh (2014) This study focuses on the conceptual foundations of conservation biology and its implications for ethical theories and human welfare. It discusses the transformation of conservation biology into a value-oriented socio-ecological discipline. The study emphasizes systematic conservation planning and the development of computational tools for conservation networks. It advocates for robust accounts of human welfare that transcend mere demand values, calling for justifiable moral preferences in environmental decision-making. Nishime (2023) The study redefines climate activism, emphasizing the importance of amplifying marginalized voices and understanding power dynamics in climate discourse. It highlights the role of communication in addressing climate crises, noting that information alone is insufficient to motivate action. The study underscores the anxiety felt by marginalized groups regarding climate change, advocating for transformative communication practices that address these challenges effectively.

Born (2019) This article analyzes the entanglement of science with capitalist production modes and its impact on understanding climate change. It advocates for a critical reflection on the role of science in climate discourse, emphasizing the importance of local knowledge and human-nature interconnections. The study calls for a transformation in climate communication practices to foster deeper understandings of socio-economic contexts and non-human agency.

Somogyi (2024) The primary aim of this study is to develop a comprehensive global environmental sustainability theory that can effectively analyze and resolve sustainability challenges. While the study lacks specific results, it stresses that assumptions about lifestyle changes alone are insufficient for achieving sustainability. It highlights the complexity of environmental issues and the need for cohesive sustainability theories.

The review indicates that critical theory plays a significant role in advocating for environmental and climate change movements. Climate change drives individuals to care more about the environment and its broader impacts. Critical theory enables transformative movements for sustainability, emphasizing the integration of environmental and social sustainability alongside economic sustainability. However, social and environmental sustainability often remain marginalized or treated as mere compliance measures, while economic interests dominate organizational priorities.

The review highlights the need for collaboration between individuals and governments. Individuals are encouraged to voice their critiques for justice, as evidenced by the findings of Goundar et al. (2024), which advocate for sustainable agricultural practices through policymaking. Achieving equitable sustainability requires philosophical, artistic, and scientific critique to seriously address the significant challenges society faces concerning inner and outer nature (Gregoratto et al., 2022).

CONCLUSION

In addressing environmental issues or climate change, as individuals, we must adopt a forward-thinking and sustainable attitude. Sustainability in this research focuses on environmental and social sustainability, though economic sustainability must also be considered. However, environmental and social sustainability requires critical examination. This is due to the many cases of environmental degradation that persist. Regulatory transformations may have been implemented, but in practice, the regulations governing environmental conservation are often singular and fail to drive meaningful change. Therefore, from the perspective of critical theory, individuals should not remain passive in the face of adverse conditions—specifically, injustices in accessing a healthy natural and social environment—caused by the misuse of natural resources and exploitation by irresponsible parties.

REFERENCES

- Andler, D. (2019). Critical Naturalism For The Human Sciences. *The Routledge Handbook of Liberal Naturalism*, (March), 419–428. <https://doi.org/10.4324/9781351209472-39>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Born, D. (2019). Remembering Nature in Climate Change. *Author (s): Dorothea Born Source : RCC Perspectives , No . 4 , COMMUNICATING THE CLIMATE : From Knowing Change to Changing Knowledge (2019)*, pp . 79-86 Published by : Rachel Carson Center Stable URL : [https://www.js. \(4\), 79–86](https://www.js. (4), 79–86).
- Brand, U. (2016). How to Get Out of the Multiple Crisis? Contours of a Critical Theory of Social-Ecological Transformation. *Environmental Values*, 25(5), 503–525. <https://doi.org/10.3197/096327116X14703858759017>
- Feenberg, A. (2023). Marcuse's critique of technology today. *Philosophy and Social Criticism*, 49(6), 672–685. <https://doi.org/10.1177/01914537231164657>
- Goundar, K., Ali Wani, O., Hassan, S., Kumar, S., & Kumar, V. (2024). Prospects of the sugarcane industry in Fiji for carbon sequestration and environmental sustainability amidst changing climate: a critical overview. *Discover Agriculture*, 2. <https://doi.org/10.1007/s44279-024-00101-7>
- Gregoratto, F., Ikäheimo, H., Renault, E., Särkelä, A., & Testa, I. (2022). Critical Naturalism: A Manifesto. *Krisis: Journal for Contemporary Philosophy*, 42(1), 108–124.
- Hariram, N. P., Mekha, K. B., Suganthan, V., & Sudhakar, K. (2024). Decoding the epics of sustainable world: Sustainalism. *Social Sciences & Humanities Open*, 10, 100958. <https://doi.org/https://doi.org/10.1016/j.ssaho.2024.100958>
- Nishime, L. (2023). Critical Approaches to the Climate Crisis. *Social Media and Society*, 9(2), 10–13. <https://doi.org/10.1177/20563051231177941>
- Odenbaugh, J. (2014). Environmental philosophy 2.0: Ethics and conservation biology for the 21st century. *Studies in History and Philosophy of Science Part C :Studies in History and Philosophy of Biological and Biomedical Sciences*, 45(1), 92–96. <https://doi.org/10.1016/j.shpsc.2013.11.002>
- Rose, J., & Cachelin, A. (2018). Critical sustainability: incorporating critical theories into contested sustainabilities. *Journal of Environmental Studies and Sciences*, 8(4), 518–525. <https://doi.org/10.1007/s13412-018-0502-9>
- Sarkar, S. (2014). Environmental philosophy: Response to critics. *Studies in History and Philosophy of Science Part C :Studies in History and Philosophy of Biological and Biomedical Sciences*, 45(1), 105–109. <https://doi.org/10.1016/j.shpsc.2013.10.011>
- Skillington, T. (2023). Thinking beyond the ecological present: Critical theory on the self-problematization of society and its transformation. *European Journal of Social Theory*, 26(2), 236–257. <https://doi.org/10.1177/13684310231154492>
- Somogyi, Z. (2024). Theory of global environmental sustainability.