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CONTRASTING PARADIGMS: BETWEEN CAPRA'S ECO-LITERACY AND MULYADHI'S TRILOGY IN ADDRESSING THE ECOLOGICAL CRISIS

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Abstrak

Kata Kunci:
*Krisis Ekologi,
Ecocentrism,
Fritjof Capra,
Mulyadhi
Kartanegara,
Kesatuan Alam*

Penelitian ini mengeksplorasi pandangan filosofis Fritjof Capra dan Mulyadhi Kartanegara tentang alam, yang bertujuan untuk menggeser nalar antroposentris manusia modern. Dominasi pemikiran Barat di dunia modern yang bercirikan rasionalisme, materialisme, dan empirisme telah menyebabkan kurangnya kesadaran spiritual. Paradigma mekanistik ini menyebabkan manusia modern memandang alam sebagai objek yang beroperasi seperti mesin tanpa spiritualitas. Oleh karena itu, manusia mereduksi alam sebagai alat untuk dieksploitasi. Akibatnya, cara pandang ini menumbuhkan perilaku eksploitatif yang berkontribusi terhadap krisis ekologi yang sedang berlangsung. Untuk mengatasi masalah ini, Capra dan Kartanegara mengusulkan paradigma baru yang tidak hanya memprioritaskan kepentingan manusia, tetapi juga kesejahteraan alam semesta secara keseluruhan. Meskipun menggunakan pendekatan yang berbeda, kedua pemikir ini menawarkan paradigma alternatif yang menekankan pada kesatuan alam, penghormatan terhadap makhluk hidup, dan tanggung jawab manusia dalam menjaga keseimbangan ekologi. Capra mendasarkan pandangannya pada sains modern dan ekologi dari perspektif holistik, sementara Kartanegara mengambil dari teologi Islam dan filsafat klasik. Penelitian ini didasarkan pada studi literatur yang mengkaji tulisan-tulisan dari kedua cendekiawan tersebut bersama dengan sumber-sumber sekunder yang relevan.

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Abstract

Keywords:

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Unity of
Nation

This research explores the philosophical views of Fritjof Capra and Mulyadhi Kartanegara regarding nature, aiming to shift the anthropocentric reasoning of modern humans. The dominance of Western thought in the modern world, characterized by rationalism, materialism, and empiricism, has led to a lack of spiritual awareness. This mechanistic paradigm causes modern humans to perceive nature as a mere object, operating like a machine without spirituality, thus reducing it to an instrument for human exploitation. Consequently, this perspective fosters exploitative behaviours that contribute to the ongoing ecological crisis. To address this issue, Capra and Kartanegara propose new paradigms that prioritize not only human interests but also the well-being of the universe as a whole. Although they employ different approaches, both thinkers offer alternative paradigms emphasizing the unity of nature, respect for living beings, and human responsibility in maintaining ecological balance. Capra bases his views on modern science and ecology from a holistic perspective, while Kartanegara draws from Islamic theology and classical philosophy. This research is based on a literature study that examines the writings of both scholars alongside relevant secondary sources.

Introduction

The current environmental crisis implies that normalcy has been disrupted in dangerous directions and ways. It is not that there was no conflict between man and nature before, not because ten thousand years ago when man was still farming, his shift had no impact on the environment. However, such shifts did not create a crisis because of continuous ecological harmony.¹ Modern man tends to see himself as a separate part of nature. This atomistic view legalizes humans to continue to utilize nature by only considering human interests without thinking about the fate of nature's sustainability.²

Modern science also offers a mechanistic view of nature, where nature is seen as a mechanical entity that can only be explained

¹ Sayyed Hossein Nasr, *Antara Tuhan, Manusia, dan Alam* (Yogyakarta: IRCiSoD, 2021), 135.

² William Grey, "Anthropocentrism and Deep Ecology," *Australasian Journal of Philosophy* 71, no. 4 (December 1993): 463–75, <https://doi.org/10.1080/00048409312345442>.

mathematically. That nature only has a quantitative dimension and not a qualitative one.³ The quantitative character of science wants to reduce all quality to quantity and all that is essential in the meaning of metaphysics to material and substantial. In reality, the findings of quantitative science are considered to be the only valid and acceptable knowledge.⁴ Thus, Sayyed Hossein Nasr sees this ecological crisis as caused by a spiritual crisis.⁵ According to Nasr, the main problem facing Muslims today is the invasion of secular worldviews and philosophies, including secular views of nature, science, and technology, and the strict separation of science and religion in modern society.⁶ In the classical Islamic intellectual tradition, science and religion were not seen as separate domains.

In contrast to Nasr, Norwegian philosopher-naturalist Arne Naess in 1973, in an article entitled "The Shallow and the Deep, Long-Range Ecology Movement: A Summary", offers the theory of *Deep ecology* as a paradigm of modern human thinking to replace the anthropocentric paradigm. *Deep Ecology* emphasizes the intrinsic value of all living things and advocates for biospheric egalitarianism.⁷ *Deep ecology* is a new metaphysical, epistemological, and cosmological theory that fundamentally opposes the dominant social paradigm and its utilitarian view of nature.⁸

Besides them, there is Fritjof Capra, an American physicist and Ecologist who came up with the theory of *eco-literacy*. Born in Austria in 1939, he is still actively dedicated to ecology at the Center for Eco-literacy, which he founded in 1995 and is based in Berkeley. Fritjof Capra was born in Vienna, Austria on February 1, 1939. Capra's intellectual contributions

³ Hossein Nasr, *Antara Tuhan, Manusia, dan Alam*, 40.

⁴ Hossein Nasr, *Antara Tuhan, Manusia, dan Alam*, 41.

⁵ Md Sayem, "The Eco-Philosophy of Seyyed Hossein Nasr: Spiritual Crisis and Environmental Degradation," *Islamic Studies* 58 (November 29, 2019): 271–95.

⁶ Mehmet Vural, "Seyyed Hossein Nasr and Traditionalism" 7 (July 4, 2024): 126–41.

⁷ Milan Miskovic, "Deep Ecology: A Movement and a New Approach to Solving Environmental Problems," *Socioloski Pregled* 50, no. 2 (2016): 247–66, <https://doi.org/10.5937/socpreg1602247M>.

⁸ Bill Devall, "The Deep Ecology Movement," *Natural Resources Journal* 20, no. 2 (April 1, 1980): 299–322.

have become a source of pride for the United States of America, particularly regarding the evolution of its political policies. The evolution of Capra's environmental studies is deeply intertwined with local or cultural values that are transmitted across generations. As a thinker and author, Capra's work is inextricably linked to the concepts that emerge within societal contexts. The research presented encompasses examinations of crises and disasters in the environment, which serve as significant forces within society. According to Capra, the environmental degradation observed is attributable to anthropogenic behaviours detrimental to ecological well-being. Capra posits that his research synthesizes three distinct modes of thought: positivistic, empirical, and rational. The theoretical framework he develops is rooted in physics as a foundational pure science. This perspective is shaped by the Post-Positivistic and Constructivistic paradigms, which inform the analysis of social phenomena.⁹

Capra asserts that human existence within the domains of ecology, culture, society, politics, and economics has evolved and endured sustainably. This paradigm fosters an awareness of the interconnectedness that enables individuals to interpret the current circumstances accurately. A profound comprehension of the systems of life is essential for cultivating a sustainable society. Humans recognize that their multifaceted relationships embody essential differences, diversity, and plurality. This awareness also prompts individuals to understand the consequences of environmental destruction, including the ramifications of climate change. Consequently, this paper analyzes Fritjof Capra's perspectives on A Science for Sustainable Living, Ecological Literacy, and Climate Change.¹⁰

In Indonesia, Mulyadhi Kartanegara, a philosophy expert, addresses

⁹ Irwan et al., "Fritjof Capra's Philosophy in Analyzing a Science for Sustainable Living," *Jurnal Pendidikan Sosiologi dan Humaniora* 14, no. 2 (October 18, 2023): 268–278, <https://doi.org/10.26418/j-psh.v14i2.65417>.

¹⁰ A. Sonny Keraf, "Fritjof Capra Tentang Melek Ekologi Menuju Masyarakat Berkelanjutan," *Diskursus-Jurnal Filsafat Dan Teologi STF Driyarkara* 12, no. 1 (April 22, 2013): 54–81, <https://doi.org/10.36383/diskursus.v12i1.118>.

the issue of ecological crisis by actualizing the thoughts of classical Muslim philosophers around the spiritualization of nature. Mulyadhi Kartanegara is one of the important figures in the Islamic world, especially in Indonesia. Haidar Bagir describes him as a unique figure because of his deep interest in Islamic philosophy, a field that rarely attracts those who pursue it. For him, the ideas of classical Muslim scholars are very relevant to be represented as a new paradigm offer to shift the dominance of the Western secular anthropocentrism paradigm.

In Mulyadhi Kartanegara's view, nature is understood through a holistic-dialogical paradigm, which sees reality as an interacting whole. Nature does not only consist of isolated parts but is a living system with the ability to self-regulate, which he calls the sunnah of God. This paradigm asserts that nature has consciousness, intelligence and beauty that often exceeds that of humans. This thinking critiques the reductionist approach that often views nature as an inanimate object separate from humans.¹¹

Mulyadhi borrows the concept of *Insān Kabīr* from Ikhwān al-Ṣafā' to describe nature as a "great human being." This view places nature on an equal footing with humans as living beings that have a soul and universal reason. The intelligence of nature is said to surpass humans because the order and dynamics of nature show clear evidence of this intelligence. Through this analogy, Mulyadhi seeks to erase the dichotomy between humans and nature and reveal the close dialogue between the two.¹² Mulyadhi's paradigm of nature connects classical Islamic philosophy such as the views of Rumi and Ibn Arabi and integrates cutting-edge scientific evidence to explain nature's living nature. This approach is relevant to answering the modern ecological crisis by offering

¹¹ Thaufiq Hidayat, "The Holistic-Dialogical Paradigm of Mulyadhi Kartanegara: A Study of the Concept of Nature," *Jurnal Fuaduna: Jurnal Kajian Keagamaan Dan Kemasyarakatan* 6, no. 2 (December 31, 2022): 118–132, <https://doi.org/10.30983/fuaduna.v6i2.5519>.

¹² Nuruddin Al Akbar, "Spiritual Homo Deus: Mulyadhi Kartanegara Infegenous Islamic Environmentalism Thought," *International Journal on Integration of Knowledge* 1, no. 2 (June 5, 2024): 15–35, <https://doi.org/10.31436/ijok.v1i2.14>.

a new perspective that treats nature as a subject equal to humans.¹³

So, this research will explore how Mulyadhi Kartanegara's thought can provide a philosophical solution to the problem of the relationship between God, humans, and nature amid today's ecological challenges, which is based on holistic-dialogical paradigm rooted in Islamic philosophy, and explore Capra's concept of eco-literacy, which is based on modern systems science to highlight a new perspective on treating nature amid contemporary ecological challenges.

Fritjof Capra's Eco-Literacy

Fritjof Capra is an esteemed physicist and systems theorist recognized for his significant contributions to ecological literacy and sustainable practices. His scholarly pursuits culminated in a Doctorate in theoretical physics, and he has penned numerous seminal works, including "The Tao of Physics" and "The Web of Life." Capra's scholarship underscores the interdependence of living systems and the necessity of an integrative methodology for comprehending intricate systems, particularly within environmental sustainability and climate change frameworks.¹⁴

Eco-literacy comes from two words: eco and literacy. The word eco comes from Greek, which means household. It can also be interpreted as a universe that includes its inhabiting creatures, which coexist with each other like a household. Meanwhile, literacy has the basic meaning of knowing, understanding, and realizing. So, when combined, eco-literacy can be understood as a state when someone already understands and is aware of the importance of the environment.

Hence, *eco-literacy* is often translated in Bahasa Indonesia as "ecological literacy". It is a term used by Capra to describe humans who have reached a high level of awareness about the importance of the environment. People who have reached the level of *eco-literacy* are those

¹³ Hidayat, "The Holistic-Dialogical Paradigm of Mulyadhi Kartanegara."

¹⁴ Irwan et al., "Fritjof Capra's Philosophy in Analyzing a Science for Sustainable Living."

who deeply understand how important it is to preserve and care for the Earth, ecosystems, and nature as a place for life to grow and develop, where every inhabitant of nature has a share or contribution in the development of environmental ecosystems so that the existence of every creature must be considered.¹⁵

Capra also defines *eco-literacy* as a condition when a person has understood the principles of how nature works and then applies them in everyday life.¹⁶ They do not just have concern for the environment without sufficient knowledge about nature. However, they are people who understand how nature works, and then realize that humans as part of nature also follow these rules, so that knowledge of how nature works then shapes human behaviour in every interaction with other inhabitants of nature.

Thus, those who understand *eco-literacy* will live in harmony with the principles of nature in organizing and building an ordinary life on Earth to create a sustainable society.¹⁷ The principles of how nature works that Capra refers to the principle of natural independence; recycling; partnership; flexibility; and diversity.

The principle of natural independence

This principle emphasizes that all beings in the ecological community exist, live, and acquire all their essential characteristics. Humans and other creatures such as animals, plants, and even water are also entities that exist, live, and have their characteristics. Compared to the human body, each cell in a human organ has its characteristic function. None of these cells are useless and do not contribute anything to the work of the organ. Everything lives in an interconnected whole through a vast network of relationships called the web of life. Nature is the same. A stone

¹⁵ A. Sonny Keraf, "Fritjof Capra tentang Melek Ekologi Menuju Masyarakat Berkelanjutan," *Diskursus-Jurnal Filsafat Dan Teologi STF Driyarkara* 12, no. 1 (April 22, 2013): 54–81, <https://doi.org/10.36383/diskursus.v12i1.118>.

¹⁶ Fritjof Capra, "Sustainable Living, Ecological Literacy, and the Breath of Life," *Canadian Journal of Environmental Education*, 2007, 9–19.

¹⁷ Capra, "Sustainable Living, Ecological Literacy, and the Breath of Life,".

in the depths of a river is often considered useless; in fact, it contributes to maintaining the balance of the river ecosystem.

Therefore, the principle of the independence of nature agrees that every creature depends on its relationships and interactions with other creatures to realize its existence, life, and development. Thus, the life and development of each creature must influence each other so that the existence of the entire ecological community determines its existence.¹⁸

On the one hand, a plethora of living systems exist wherein all autopoietic entities perpetually regenerate themselves into their essence while simultaneously engaging in interactions and interrelationships with other living organisms. A profound interdependence enables a living system to evolve and renew its existence within itself continuously. Consequently, all life forms in nature invariably rely upon other life forms. All living entities co-evolve and are interconnected, which starkly contrasts a mechanistic interpretation of the universe.¹⁹

According to Capra, akin to ecological communities, human communities are only likely to prosper and endure sustainably when founded upon an understanding of the diverse and interconnected relationships among their members, reminiscent of the principle of interdependence observed in nature. The flourishing of human communities is contingent upon an awareness of these varied relationships. Difference, diversity, and plurality constitute the essence of life and must serve as the foundational principles of human communal existence. Nevertheless, nature and life can solely exist and thrive amidst difference, diversity, and plurality precisely because of, and through, interdependence. Each entity requires the other, and this mutual necessity forms a pattern of interlocking connections. This embodies the principle of life, the principle of the universe.²⁰

¹⁸ Keraf, "Fritjof Capra tentang Melek Ekologi Menuju Masyarakat Berkelanjutan."

¹⁹ A. Sonny Keraf, *Filsafat Lingkungan Hidup: Alam Semesta Sebagai Sebuah Sistem Kehidupan* (Sleman: PT. Kanisius, 2014), 132.

²⁰ A. Sonny Keraf, *Filsafat Lingkungan Hidup: Alam Semesta Sebagai Sebuah Sistem Kehidupan*, 133.

Thus, Capra denies the anthropocentric understanding that presupposes the dualism of nature: humans as subjects and others as objects. Humans are considered the only type of living being that deserves to be preserved. Meanwhile, the existence of others is used as capital for human life without being recognized. This dualism has given birth to human exploitative behaviours towards nature, which Capra seeks to alleviate.²¹

The principle of *recycling*

The principle of *recycling* emphasizes that relationships in nature are cyclical, not linear, like the mechanistic mindset. Capra states sustainable life occurs through a cyclical pattern of interrelated relationships in open systems that exchange energy and matter. In this system, each creature produces waste that is then absorbed by other creatures as a source of energy and matter, which in turn produces new waste to be reused by other creatures. For humans, for example, all the outputs of their activities will be consumed and processed by other creatures and, in turn, will return to humans.

In breathing, humans inhale oxygen, which is then processed by the body and produces carbon dioxide as an output. This carbon dioxide is then consumed by plants, then processed and produces oxygen as the output, which humans will inhale again. This process is not only in the process of breathing; in all processes of living things, activity will go through a similar cycle. This cycle then creates a continuous chain.

With this understanding, Capra emphasizes the urgency of every being's existence in the universe. Each plays an active role in this cycle, and it is impossible not to be involved. If one being is absent from this cycle, it can disrupt the development of the ecosystem in the environment.²² Conversely, if each being can fulfil its role well, the

²¹ Fellyanus Habaora, "Konsep Perbaikan Kerusakan Lingkungan Berdasarkan Falsafah Sains Fritjof Capra," *Kebudayaan* 15, no. 1 (September 21, 2020): 41–52, <https://doi.org/10.24832/jk.v15i1.327>.

²² Capra, "Sustainable Living, Ecological Literacy, and the Breath of Life."

ecosystem will develop well. Therefore, for Capra, the destruction of just one living being will destroy the entire environment.

Capra advocates for establishing human communities predicated upon the principles of non-linear, cyclical relationships inherent in nature, which have facilitated the evolution and sustainability of ecological systems over billions of years. Regrettably, the foundation of the human community has been constructed upon erroneous understandings and principles. Precisely, our models of economic and industrial progress are predicated on a linear framework, in stark contrast to the non-linear, cyclical patterns of interdependence exemplified by nature. We must alter our development, industry, and commerce paradigms to reflect the non-linear, cyclical interdependencies within natural systems. Capra asserts, "Our businesses extract natural resources, convert them into products as well as waste, and subsequently market these products to consumers, who generate additional waste upon consumption. Our approach to sustainable production and consumption necessitates a transformation into a cyclical model that emulates the cyclical processes observed in nature. To achieve this, we must undertake a comprehensive redesign of our businesses and economic systems."²³ Our enterprises, economies, and political structures must undergo reconfiguration to reabsorb the waste generated during the production process, transforming it into a valuable resource rather than relegating it to the status of waste.

Our economic systems, businesses, industrial sectors, and political frameworks must be restructured to ensure the perpetual recycling of all byproducts of the production process, allowing these materials to serve as raw inputs and energy for subsequent production cycles, thereby minimizing the disposal of materials as worthless waste.²⁴

²³ Keraf, *Filsafat Lingkungan Hidup: Alam Semesta Sebagai Sebuah Sistem Kehidupan*, 134.

²⁴ Keraf, *Filsafat Lingkungan Hidup: Alam Semesta Sebagai Sebuah Sistem Kehidupan*, 135.

The principle of *partnership*

The principle of partnership is closely related to the previous two principles: interdependence and the recycling of nature. Since every creature has the independence to live and work with a cyclical system, cooperation or partnership between living beings is inevitable. With their independence, the cyclical way of working will not be realized without cooperation between members of the community of life.²⁵

Each member will work together to create a healthy ecosystem.²⁶ One member produces output that will become food for another member. This other member will also process its food to produce outputs that will become energy for other members, and so on. If even one member does not do their job, the lives of other members will be jeopardized. Thus, the death of one member can lead to the deaths of other members because they do not get enough energy. Through this cycle, life on Earth can survive for billions of years due to the collaboration between living things on Earth.

Humans are included When it comes to community members living in nature. They play an active role in the *recycling* process or the cycle of nature. Therefore, humans must cooperate or establish good partnerships with other creatures. Not to fulfil their interests but to fulfil the needs of natural development through the cycle. It is shocking if humans behave as they wish, even though they are part of a cycle, they will bear the damage themselves when part of it is damaged.

The principle of flexibility

In the way it works, nature always has flexibility. This flexibility allows nature to adjust to various changes and conditions during its development process. Like plants that will constantly adjust to grow facing

²⁵ A. Sonny Keraf, "Fritjof Capra Tentang Melek Ekologi Menuju Masyarakat Berkelanjutan," *Diskursus: Jurnal Filsafat Dan Teologi STF Driyarkara* 12, no. 1 (April 22, 2013): 54–81, <https://doi.org/10.36383/diskursus.v12i1.118>.

²⁶ Habaora, "Konsep Perbaikan Kerusakan Lingkungan Berdasarkan Falsafah Sains Fritjof Capra."

the sun, even if certain circumstances prevent it.

Flexibility allows nature to quickly restore balance and maintain its integrity when faced with irregularities or anomalies.²⁷ Moreover, in its cycles, nature involves all its members to evolve. If one faces an obstacle, you can be sure that the other members will adjust to overcome the problem.

Capra raises this principle so that humans understand that humans have flexibility as part of nature. Instead of being rigid creatures, with this flexibility, humans should be able to adapt to new conditions and challenges that lie ahead. Flexibility allows humans to innovate when facing tensions or conflicts in life.²⁸

Human communities must also be built by adopting this flexibility. Difference, diversity and plurality in nature always imply that there will be conflict, deviation and change in the process of life. There is tension between order and freedom, stability and change, tradition and breakthrough. Human society can only develop sustainably if it can respond to these tensions and conflicts flexibly. This means that human communities must be open to change, not drift into it. The human community must change by, on the one hand, maintaining its identity and identity while adapting to change and absorbing the changes and progress that occur around it.²⁹

In the issue of ecological crisis, for example, after realizing the problem, humans need to use their flexibility to adjust themselves to restore the balance of nature and maintain its integrity. Because if left alone, it is impossible for humans themselves not to feel the adverse effects of the ecological crisis that occurs.

²⁷ Fritjof Capra, *Ecology, Community, and Agriculture* (Berkeley, California: Center for Ecoliteracy, 1996), 5.

²⁸ Irwan et al., "Fritjof Capra's Philosophy in Analyzing a Science for Sustainable Living."

²⁹ Keraf, *Filsafat Lingkungan Hidup: Alam Semesta Sebagai Sebuah Sistem Kehidupan*, 137.

The principle of diversity

Diversity is a given in nature, including humans. The diversity of nature's inhabitants means that there is also a diversity of roles in the environment. This diversity allows nature and life to develop dynamically and opens up opportunities for interdependence and flexibility. With diversity, nature can accept and absorb outside influences while still influencing the development of other life.³⁰ Without diversity, it would be impossible for the environment to be as organized as it is. Therefore, diversity implies acceptance, respect and cooperation among living beings. Even though they are diverse, the inhabitants of nature have become a unit under the name "nature," and their lives are bound together and influence each other.³¹

The principle of diversity, for Capra, is that ecosystems can withstand various shocks and obstacles because of the richness of life and the complexity of the ecological web. The greater the diversity of life in nature, the more ecosystems are resilient to various shocks, obstacles, and hindrances. That is why, farming patterns, and cultivation patterns that are uniform with only one type of plant in a large expanse, or what is known as monoculture, will naturally lead to ecological disasters that destroy life in the form of the development of various pests that destroy life. Conversely, multicultural crop cultivation patterns are precisely by this principle of diversity will lead as it is to maintain and enable life to develop sustainably. A uniform pattern of life will naturally kill life because it contradicts the religious nature of life. In contrast, a diverse or multicultural pattern of life will preserve life precisely because it allows partnerships, interdependencies, and cyclical interrelationships as the basic principles of ecology.³²

The concept of eco-literacy is a strategy to mobilize the wider

³⁰ Capra, *Ecology, Community, and Agriculture*, 7.

³¹ Habaora, "Konsep Perbaikan Kerusakan Lingkungan Berdasarkan Falsafah Sains Fritjof Capra."

³² Irwan et al., "Fritjof Capra's Philosophy in Analyzing a Science for Sustainable Living."

community to quickly change their perspective on the reality of life on planet Earth and make the necessary reforms.³³ Through the five principles of the mini way of working, Capra wants the human community to develop based on these five principles. Human beings are independent inhabitants of nature, meaning they are well aware of the important role humans play in developing nature while recognizing the existence of other beings who also play an active role. Then, growing according to the flow of recycling means that humans are involved in cycles that will affect the survival of their lives and other creatures, so humans cannot selfishly favour their interests over the interests of other creatures.

Furthermore, partnering with other communities means humans must build good partnerships with other creatures. If not, humans suffer the consequences, as nature works in a cyclical system. Then, humans have flexibility like nature, which allows them to adjust to changes. This means that humans are required to utilize this potential flexibility to live in an orderly manner, as nature always acts flexibly.

Finally, realizing diversity as a natural inevitability will create humans who interpret other beings with complete acceptance, respect, and partnership. Capra supposes that if humans can understand this paradigm and manifest it in their behaviour, the ecological crisis will gradually be overcome.

Mulyadhi Kartanegara's Trilogy of God, Nature, and Man

As an expert in Islamic Philosophy in Indonesia, Mulyadhi Kartanegara defines nature as everything other than God. This includes the physical world that can be seen and other worlds that are invisible to human senses. Hence, the Qurán uses the term "*al-‘alamīn*," meaning all of nature, when referring to God as *Rabb al-‘alamīn* (Lord of all nature). This concept includes various levels of nature, such as the imaginal realm

³³ Habaora, "Konsep Perbaikan Kerusakan Lingkungan Berdasarkan Falsafah Sains Fritjof Capra."

(*al-'alam al-misāl*), the spiritual realm (*al-'alam al-jabarūt*), as well as the mineral, plant, animal, human, jinn, angelic realms, and even the world after death, the grave, and the afterlife.³⁴

To understand God, man, and nature and the interrelationship of the three, Mulyadhi Kartanegara expressed in his work entitled *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia* (The Lantern of Life: Guide to Understanding God, Nature, and Man). In many of his works, Mulyadi Kartanegara also expresses his anxiety regarding the ecological crisis that has hit the world in the last three centuries. He agrees with Sayyed Hussein Nasr that the crisis is caused by the exploitative behaviour of humans towards nature, which is motivated by the materialist mindset of modern humans. Nature is seen only as a material instrument worth utilizing as human please, without seeing the spiritual side of nature. Therefore, for Mulyadhi Kartanegara, philosophical awareness of the relationship between God, nature, and humans can be a hacker of the environmental crisis currently experiencing a sharp decline.

Religious values and philosophical wisdom are needed to balance the universe from this crisis. Efforts to save and preserve nature and the environment need to be actualized. This means that Muslims are challenged to explore the values and philosophical formulations regarding environmental conservation, which are to be practised as moral guidance in all aspects of life. There are three explanations from Mulyadhi Kartanegara about the relationship between nature, humans, and God.

Nature and God

In the Islamic view, nature, no matter how large and powerful, is not considered independent or stand-alone because it does not create, regulate, or function independently. Nature is always connected to a higher reality known as God. No matter what theory of creation is put forward, nature is still connected to God.

Monotheistic thinkers generally describe God as a transcendent

³⁴ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia*.

entity far removed from nature, governing the universe from His throne ('Arsy) as in QS. 32:5. Aristotle, al-Kindi, and al-Farabi, on the other hand, understood this relationship as "The First Cause" (*al-'Illah al-'Ulā*) or "The First Mover" (*al-Muḥarrik al-Awwal*) who through a series of causes influences nature.³⁵ Although seemingly remote, nature depends on God for its existence and movement. This is the general view of Muslim philosophers on the relationship between nature and God.

Understanding nature as God's creation makes it impossible to project nature as a separate entity from the divine element. Its presence indicates the existence of God, who creates, cares for and regulates it. Therefore, understanding nature as God's creation is expected to foster awareness of human responsibility to treat nature well, as humans treat other humans as fellow creatures of God.

For Mulyadhi, God gives nature to humans as signs of His greatness, not only through the universe but also through humans. The Qur'an states, "We will show them Our signs in nature and themselves, that they may know that it (the Qur'an) is truly from their Lord" (QS. 41:53). The purpose of these signs is for humanity to realize that nature is not the ultimate reality, as secular thinkers see it, but rather a clue to the existence of a Supreme Being behind all natural phenomena, i.e. a God who orchestrates all events in the universe.³⁶

How do we understand nature as a sign of God? If observed, the Earth humans live on is very large. Amazingly, this huge Earth is just a grain of dust among the cluster of solar systems, so it can be understood that this universe is vast. If the sign alone is that big, then what about the owner of the sign, God? If the sign alone is so beautiful, then how can the beauty of God be imagined? Such is nature as a sign of God. So, by contemplating nature as God's sign, the behaviour of destroying nature is

³⁵ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia*, 77.

³⁶ Ida Munfarida, "Relevansi Nilai-Nilai Tasawuf bagi Pengembangan Etika Lingkungan Hidup," *Indonesian Journal of Islamic Theology and Philosophy* 2 (June 2020): 18–40, <http://dx.doi.org/10.24042/ijtp.v2i1.3901>.

also the behaviour of destroying God's sign. If one fully realizes the nature of nature as a sign of God, then it is impossible to destroy nature.

Other than that, nature as the manifestation of God shows that nature is a place for the appearance of God, or in the term 'Abd al-Karim al-Jīlī, *Maṣār tajalliyāt*, both in terms of names (*asmā'*), actions (*af'āl*), and His Essence (*Ẓāt*).³⁷ Other terms often used to describe this concept are "hierophany" from Greek, meaning the appearance of the Holy, or "theophany," i.e. the embodiment of God in nature and man. In the context of the relationship between nature and God, the term "manifestation" implies closeness (immanent) compared to the concept of "nature as a sign," where God is still considered to be outside of nature (transcendent).³⁸

Ibn Arabī's concept of *tajallī* is based on his concept of love. Based on love, God *tajallī* to nature. God loves to be known, and it is because of this love that God confronts His will to *tajallī* nature and, based on love, also the return of all manifestations to their original and essential essence. In terms of His Substance, God is entirely different from nature, but in terms of His *asmā'* and attributes-which are manifested in nature, reveal Himself and makes Himself known because of His love. Therefore, loving nature means loving God. That is, if one loves God, one must also love nature.³⁹ With this paradigm, it is impossible to imagine human beings as God's creation destroying God's other creations because destroying nature means destroying the signs of God and harming the manifestation or *tajallī* of God.

In another article, Mulyadhi Kartanegara formulates three ways Sufis interpret nature. First, nature is a blessing. During life, humans are treated well by nature. When humans breathe for the first time, nature

³⁷ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuban, Alam, Dan Manusia*, 78.

³⁸ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuban, Alam, Dan Manusia*, 85.

³⁹ Supian, "Eco-Philosophy sebagai Cetak Biru Filsafat Ramah Lingkungan," *Teosofi: Jurnal Tasawuf Dan Pemikiran Islam* 4, no. 2 (September 17, 2015): 508, <https://doi.org/10.15642/teosofi.2014.4.2.508-532>.

provides clean air for them. When eating and drinking, nature takes good care of plants and animals so that humans can consume them until they become a source of energy for humans. Likewise, when humans produce waste, it is nature that processes the output so that it can be used by other creatures, whose goodness will also return to humans. In this way, the relationship between humans and nature must be recognized as very intimate. Nature is a blessing for humans, without which humans would not thrive.

Second, nature is a sign of God. This discussion has been described previously, that as nature is a sign or symbol, it shows the existence of other higher realities, which lead to the Owner of the sign. Knowledge of this can at least make humans realize that being kind to the signs means being kind to the Owner of the signs. Conversely, damaging the signs means damaging the Owner of the signs.⁴⁰

Third, nature as *Mi'rāj*. In the Sufi view, the human journey does not end in the physical world. Beyond physical reality, humans still have to take transcendent spiritual journeys. Therefore, for Sufis, nature is a ladder or human *Mi'rāj* that ascends to the level of non-physical spiritual journeys. As a manifestation of the physical world where humans live, nature is only one of the other worlds. It acts as a human ladder to make a spiritual ascent to the pinnacle of being, namely God, the Creator of the universe. In this way, nature cannot be separated from the element of Godhead, where treating nature well also increases the stages of climbing towards a higher reality.⁴¹

Nature and Human

Furthermore, regarding the relationship between nature and humans, Mulyadhi Kartanegara strengthens Ikhwān al-Ṣafā's view that nature is a significant human being because it has a universal soul like the

⁴⁰ Mulyadhi Kartanegara, *Mengislamkan Nalar: Sebuah Respon Terhadap Modernitas* (Jakarta: Arelangga, 2007), 157.

⁴¹ Mulyadhi Kartanegara, *Mengislamkan Nalar: Sebuah Respon Terhadap Modernitas*, 158.

human soul. In contrast, humans are minor because they contain all the elements that exist in nature. Usually, when referring to nature, it is called the Macrocosm (Great Nature). However, why did Ikhwān al-Ṣafā choose "Great Man" for nature and "Small Nature" for humans? According to Mulyadhi, they want to describe a closer relationship between the two, which is not so strongly reflected in the terms macrocosm and microcosm.

With this, perhaps it is intended that humans can learn about nature from themselves, and vice versa; humans themselves can understand more about humans by studying nature carefully. So far, modern humans may have thought of nature as something inanimate. If something can produce something alive and intelligent, then it must be alive and intelligent, even more alive and intelligent than it produces. Learning from human life and intelligence, it can be seen that nature is also alive and intelligent. Perhaps this is the "message" that Ikhwān al-Ṣafā wants to convey when naming nature with "Big Man" and with "Small Nature".⁴²

What is the reason for Ikhwān al-Ṣafā's naming nature with the Great Man? The answer is that they wanted to explain nature in comparison to man. They said: "Nature is called the Great Man, because just as man has a soul, which makes him alive, so nature also has a soul, namely the "Universal Soul" (*al-Nafs al-Kullīyyah*), which makes itself also alive. Moreover, just as man also has a mind that makes him intelligent, so too nature has a mind, namely the "Universal Intellect", which makes nature also intelligent, even more intelligent than man. The soul of nature comes from the natural (universal) intellect, and this natural intellect comes or emanates from the One God. Suppose the soul is the principle of motion and life. In that case, reason is the principle of intelligence, and the cooperation of these two has produced a nature that is so organized and dynamic in a natural order.

Furthermore, it is related to humans as a Small Nature (mikrocosmos), which, of course, is not unique from the angle of quantity

⁴² Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia*, 151.

or volume but is special from another angle, namely the quality that he collects in himself from all forms that exist in this nature. Of course, a mountain or an elephant is more significant than a human being, but in terms of quality, i.e. his qualities or abilities, a human being can surpass the others. Man's speciality lies in the fact that, despite his relatively small size, he contains all the elements of the universe - minerals, plants, animals and even angels. That is why he is called a minor nature (microcosm): even though it is small, it contains all the elements of this universe.⁴³

In addition, Mulyadhi Kartanegara also agrees that humans are the ultimate goal of God's creation, as in the qudsi hadith, "If not for you (Muhammad), I would not have created this universe". Of course, the "you" in the hadith refers to the Prophet Muhammad. But for most Sufis. The Prophet Muhammad is the ideal type of "Perfect Man". Thus, the hadith is interpreted as: "Had it not been for the sake of man, i.e. the Perfect Human, God would not have created the universe". For this reason, it is said that man is the ultimate goal of the creation of nature. In other words, God's creation of nature aims to produce or present humans on this Earth.⁴⁴

This interpretation is further emphasized by Maulana Rumi, who compares humans to the fruit of a tree. Fruit, of course, is the purpose of a farmer or planter in planting. For example, the purpose of planting rice or bananas is to expect fruit. "If not for the hope of fruit," says Rumi, "would planters plant trees?" The answer is, of course, not. Although the fruit usually appears at the end of the branch, it is for the sake of the fruit that a tree grows.⁴⁵

⁴³ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia*, 155.

⁴⁴ Kartanegara, *Lentera Kehidupan: Panduan Memahami Tuhan, Alam, dan Manusia*, 156.

⁴⁵ Mulyadhi Kartanegara, *Jalaluddin Rumi: Guru Syfi Dan Penyair Agung* (Jakarta Selatan: Teraju, 2004), 66.

Conclusion

Fritjof Capra and Mulyadhi Kartanegara both reject the anthropocentric paradigm and advocate for an eco-centric approach. Anthropocentrism prioritizes human interests at the expense of the environment, fostering unsustainable practices. In contrast, an eco-centric worldview acknowledges the interconnectedness of all life forms and the necessity of preserving nature. Capra's concept of eco-literacy integrates ecological principles into human society, highlighting interdependence, recycling, partnership, flexibility, and diversity as key tenets. His approach is rooted in scientific and ecological studies, emphasizing systemic thinking and sustainability.

Mulyadhi Kartanegara, on the other hand, frames his ecological perspective within Islamic theology and classical philosophy. He views nature as a manifestation of God's greatness, advocating for environmental responsibility as a spiritual duty. According to Mulyadhi, destroying nature equates to disregarding divine signs and undermining God's creation. Despite their differing foundations, Capra and Mulyadhi share a common goal: fostering a sustainable and harmonious relationship between humans and nature. By integrating ecological literacy with spiritual awareness, societies can develop holistic solutions to environmental crises. Implementing these principles in education, industry, and daily life can help create a more sustainable future.

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