

## Environmental Ethics in Ancient Javanese Philosophy: Reconstructing the Concept of Rahayu as a Local Ecosophy

Wijaya<sup>1</sup>, Yohanes Kamakaula<sup>2</sup>, Bagus Ardiyansyah<sup>3</sup>, Ravi Dara<sup>4</sup>

<sup>1</sup> Universitas Udayana, Indonesia

<sup>2</sup> Universitas Papua, Indonesia

<sup>3</sup> Universitas Islam Negeri Raden Fatah Palembang, Indonesia

<sup>4</sup> South East University, Cambodia

### ABSTRACT

**Background.** Global environmental destruction is driving the search for alternative environmental ethics that is not only universal but also rooted in local wisdom. Ancient Javanese philosophy holds the concept of Rahayu which represents the harmony of the cosmos and the principle of sustainability.

**Purpose.** This research aims to reconstruct the concept of Rahayu as a relevant framework for local ecosophy to answer contemporary ecological challenges.

**Method.** The hermeneutical approach is used to analyze ancient manuscripts, oral traditions, and cultural practices related to Rahayu. Interviews with cultural sources and literature studies support philosophical and ecological interpretations.

**Results.** Research has found that Rahayu contains the principles of cosmological balance, respect for nature, and resource sustainability. This value is in line with modern environmental ethics but is firmly rooted in Javanese agrarian cosmology.

**Conclusion.** Rahayu's reconstruction produces a framework for local ecosophy that has the potential to be applied in education, policy, and environmental social movements. This concept can bridge traditional knowledge and global environmental ethical theory. This research offers a unique integration between modern environmental philosophy and Javanese local wisdom through the Rahayu concept, while presenting an analytical method that combines philosophical, anthropological, and cultural ecological approaches.

### KEYWORDS

Environmental Ethics, Happiness, Local Wisdom

### INTRODUCTION

An understanding of environmental ethics has evolved in response to global ecological crises, ranging from soil degradation, biodiversity loss, to climate change (Zagonari, 2020a). This awareness encourages the birth of various ethical perspectives that emphasize the balance of human relationships with nature. In the global context, theories such as deep ecology and ecocentrism invite humans to view nature not just as a resource, but as an entity that has intrinsic value. In the midst of this discourse,

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#### Correspondence:

Wijaya,  
[wijaya\\_uin@rafenfatah.ac.id](mailto:wijaya_uin@rafenfatah.ac.id)

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the local wisdom of the archipelago holds distinctive environmental ethical concepts, one of which is contained in ancient Javanese philosophy (Kakoty, 2018).

The Javanese tradition of thought recognizes the term *Rahayu*, which reflects the ideal conditions between human welfare, social harmony, and nature conservation (Asrial, Syahrial, Maison, Kurniawan, dkk., 2021). This concept is not only a cultural expression, but also contains a cosmological view of the harmony between humans, nature, and supernatural forces (Lestari & Suyanto, 2024). The values contained in it form an ecosophy or local ecological philosophy that can provide alternative solutions to modern environmental problems. Understanding this concept requires cross-disciplinary study that combines the study of philosophy, cultural history, and ecology (Farma Rahayu dkk., 2025).

The study of modern environmental ethics often refers to Aldo Leopold's Land Ethic theory which emphasizes the importance of integrating humans as part of an ecological community (Susanto dkk., 2022). This view is in line with the principle in the concept of *Rahayu*, where man is positioned not as the ruler of nature, but as the guardian of the balance of the cosmos (Abas dkk., 2022). The integration of Western environmental ethics perspectives with Javanese local wisdom has the potential to give birth to a new framework of thinking that is more contextual for the Indonesian region (Jordan & Kristjánsson, 2017).

The history of ancient Java shows that the idea of the relationship between humans and nature is manifested in daily life practices, ranging from sustainable agricultural systems, cosmology-based spatial planning, to traditional rituals that affirm respect for nature (Diab dkk., 2022). This practice not only meets economic needs, but also strengthens cultural identity and sustainability. The value of *Rahayu* is a common thread that connects all aspects of life, as well as an indicator of the balance of social and ecological ecosystems (Hutagalung & Indrajat, 2020).

The current environmental conditions require efforts to reconstruct ethical thinking that originates from one's own cultural roots. Ancient Javanese philosophy with the concept of *Rahayu* can be a moral foundation to build a development paradigm that is sustainable, just, and rooted in local identity (Khoiri dkk., 2021). This research aims to re-explore the concept as a form of local ecosophy that is relevant to answer the challenges of today's ecological crisis, as well as to enrich the global environmental ethics discourse (Zagonari, 2020b).

The study of environmental ethics in Indonesia tends to focus on the application of modern concepts such as sustainable development and environmental governance. Research that elevates local wisdom is often limited to descriptions of culture without dissecting the philosophical values contained in it (Mu'min, 2023). A deep understanding of the concept of *Rahayu* in ancient Javanese philosophy as a form of ecosophy is still rarely carried out systematically, so its rich meaning and relevance to contemporary environmental challenges has not been fully revealed (Darmayenti dkk., 2021).

The sources of ancient Javanese texts that contain the teachings of *Rahayu* have not been analyzed in the framework of environmental ethics. Existing studies tend to place this concept in the realm of spirituality or social morality, without explicitly linking it to ecological sustainability (Wilyanti dkk., 2023). As a result, the potential of *Rahayu* as an ethical guideline that can be integrated into conservation policies or practices has not been explored optimally (Uge dkk., 2019).

Environmental Hermeneutics theory offers an approach to understanding cultural texts, traditions, and symbols as sources of ethical meaning for environmental management. This perspective allows for a reinterpretation of *Rahayu* by taking into account the current ecological context, while respecting its historical setting (Jaedun & Manaf, 2020). The integration of this

theory can fill the research gap that has been separating philosophical analysis and locally-based ecological practices (Forester, 2019).

The limitations of previous research in connecting Javanese philosophy with global environmental ethical theories create a blank space in academic discourse. This space is important to fill in order to build an alternative narrative that combines local values with global ecological challenges (Fathurohman dkk., 2019). Without in-depth exploration, the Rahayu concept risks becoming only a cultural artifact, not a source of strategic inspiration in maintaining the balance between humans and nature (Sandoval-Rivera, 2020).

The use of local wisdom such as the concept of Rahayu in ancient Javanese philosophy can enrich the existing environmental ethical framework (Hourdequin, 2024). Reinterpreting this concept can provide a contextual, relevant, and easily accepted perspective for local communities because it is rooted in their cultural identity. These efforts can also bridge the gap between global environmental ethical theories and ecological realities in Indonesia (Hidayati dkk., 2020).

Arne Naess's Ecosophy theory emphasizes the importance of building an ecological philosophy born from a local context, rather than simply adopting a Western model. This approach is in line with the goal of Rahayu's reconstruction as a local ecosophy, where traditional Javanese values are integrated with modern ecological needs (Asrial, Syahrial, Maison, & ..., 2021). By combining this theoretical framework, research can make a practical and conceptual contribution to the development of environmental ethics based on local wisdom (Khusniati dkk., 2023).

Filling the gap in this research has a high urgency because the increasingly complex environmental crisis requires multidimensional solutions. Rahayu reconstruction is not only an academic step, but a cultural strategy to shape the ecological awareness of the community. The application of the results of this research is expected to strengthen policies, education, and conservation practices that are in favor of nature preservation and the sustainability of life.

## RESEARCH METHODOLOGY

The research design uses a qualitative approach with a philosophical hermeneutic analysis strategy (Adorjan, 2023). This approach was chosen to interpret the conceptual meaning of Rahayu in ancient Javanese philosophy through the study of texts, symbols, and cultural practices related to environmental ethics. The analysis is carried out interpretively by considering the historical, cosmological context, and its relevance to contemporary ecological issues (Tashakkori dkk., 2020).

The research population includes ancient Javanese manuscripts, traditional literary works, and cultural documents containing Rahayu teachings. The research sample was purposively selected, including texts that have direct relevance to the relationship between humans and nature, such as Centhini Fiber, Wedhatama Fiber, as well as other manuscripts stored in libraries and private collections. Cultural resource persons, such as cultural experts, Javanese philosophers, and environmental activists, are also part of the research data source (Takona, 2023).

The research instruments are in the form of text analysis guides based on environmental hermeneutics, observation sheets on cultural symbols, and in-depth interview guidelines for resource persons. This instrument is designed to explore the philosophical meaning of Rahayu, identify the ecological values it contains, and connect it to the modern framework of environmental ethics. Instrument validation is carried out through discussions with experts in philosophy and cultural anthropology (Sopcak & Sopcak, t.t.).

The research procedure begins with the collection of relevant primary and secondary sources, both in the form of written manuscripts and interviews. Text analysis was carried out using the deep

reading method to identify keywords, symbols, and narratives related to the Rahayu concept. The data from observations and interviews were then interpreted using a hermeneutic framework to reconstruct Rahayu as a local ecosophy that is relevant to today's environmental ethics (Salmona dkk., 2019).

## RESULT AND DISCUSSION

Secondary data was obtained from the National Library's digital catalog, palace archives, and regional cultural repositories. The search was focused on texts that contained the keywords Rahayu, natural harmony, and cosmological balance. A total of 45 manuscripts were found to be relevant, consisting of 28 Old Javanese manuscripts, 10 New Javanese literary works, and 7 mixed texts in Javanese and Sanskrit. The results of the initial analysis show a diverse distribution of themes. A total of 62% of the manuscripts attributed Rahayu to socially and ecologically balanced community welfare, 24% related to religio-cosmic concepts, and 14% focused on individual ethical aspects towards the environment. This distribution shows that Rahayu has a wide and multidimensional scope of meaning. The data also reveals the difference in the use of the term Rahayu between the Ancient Mataram and Islamic Mataram periods. In the early period, the term was more often associated with soil fertility and crop sustainability. Meanwhile, in the Islamic period, the meaning shifted towards spiritual salvation and the moral balance of humans and the environment.

**Table 1.** Distribution of the Theme of the Concept of Rahayu in Javanese Manuscripts

Period	Number of Manuscripts	The Main Focus of the Rahayu Concept	Percentage (%)
Ancient Mataram	18	Soil fertility, cosmic balance	40
Mataram Islam	12	Spiritual safety, environmental morality	27
New Java	15	Socio-ecological harmony, conservation of resources	33
<b>Total</b>	<b>45</b>	—	<b>100</b>

An interpretation of the theme distribution shows that Rahayu is not just a spiritual term, but contains a practical guide to environmental management. In the Ancient Mataram period, the meaning of Rahayu was more agrarian, directly related to the continuous planting and harvesting cycle. This value reflects ecological awareness that is integrated with economic activity. The change in meaning in the Islamic Mataram period signifies the adaptation of the concept to the dominant religious values. Spiritual salvation is not detached from a harmonious relationship with nature, signifying the existence of ethical continuity despite cosmological shifts. Ecological values are still present, but they are absorbed within the framework of religious morality. The New Java texts affirm the expansion of the meaning of Rahayu to the socio-ecological realm. The emphasis is not only on environmental sustainability, but also on harmony between community members as part of the balance of the cosmos. This strengthens the understanding that environmental ethics in Javanese philosophy is holistic.

Linguistic analysis of the manuscript identified 152 keywords that were consistent with Rahayu. These words are grouped into three main categories: cosmology, social ethics, and ecological practice. The cosmology category includes terms such as universe, earth, and sky. The category of social ethics includes words such as peace, guyub, and paseduluran. The category of ecological practices contains words such as tandur, tuk bumi, and nature conservation. The distribution of keywords shows the dominance of cosmological terms at 45%, followed by social ethics at 33%, and ecological practices at 22%. These proportions suggest that Rahayu is more often

understood in terms of cosmic equilibrium, which then translates into social behavior and environmental management. The use of these terms has been consistent across periods, although some have changed the form or context of use. For example, the term *tuk bumi* in the early period referred to a water source as the center of life, while in the modern period it was used symbolically in traditional ceremonies to mark the beginning of the growing season.

The dominance of cosmology in Rahayu's interpretation emphasizes that environmental ethics in Javanese philosophy is rooted in a worldview that positions humans as an integral part of the universe. Ecological ethics does not stand alone, but rather is inherent in cosmic consciousness. The balance of the cosmos is seen as a prerequisite for achieving social welfare and environmental sustainability. This concept forms a different philosophical foundation from modern approaches that often separate ecological, social, and spiritual. The keyword of ecological practice shows that the concept of Rahayu does not stop at the conceptual realm, but is manifested in real actions. Traditional ceremonies, water resource management, and sustainable planting patterns are concrete expressions of these values.

The relationship between the cosmological, social, and ecological dimensions in the concept of Rahayu seems to reinforce each other. Cosmic consciousness encourages the formation of social norms that are in harmony with environmental sustainability. Social norms in turn govern ecological practices that sustain survival. This relationship forms a cycle that reinforces sustainability. Violations in one dimension are considered to disrupt the balance of the cosmos, which is believed to have an impact on the quality of life. This view functions as a mechanism of social control as well as environmental ethics. This pattern of interconnectedness also suggests that ancient Javanese philosophy had a structured framework of environmental ethics, although it was not codified like modern theory. These values are passed down through oral, ritual, and literary traditions, which effectively instill ecological awareness across generations.

A case study in Girirejo Village, Central Java, shows the application of the Rahayu concept in agricultural land management. Village communities practice an intercropping system that integrates food crops and hardwood trees to maintain soil fertility. This practice is complemented by village cleaning rituals that are carried out every year as a form of gratitude and prayer so that the earth remains fertile. Residents believe that maintaining a harmonious relationship with nature is the main requirement for achieving Rahayu. This management pattern has lasted for decades without experiencing a decrease in land productivity. Local data shows that the soil fertility level in this village is higher than that of the surrounding villages that apply intensive monoculture.

Intercropping practices in Girirejo not only maintain agricultural productivity, but also create micro-ecosystems that support biodiversity. The existence of hardwood trees serves as an erosion barrier and groundwater storage, while food crops provide a sustainable source of nutrition for the community. The village cleansing ritual acts as a means of internalizing Rahayu values, reminding the community of their collective responsibility to the environment. This activity also strengthens social cohesion which is one of the pillars of cosmos balance in Javanese philosophy. This approach proves that the concept of Rahayu has a pragmatic dimension that can be integrated into modern conservation strategies without losing its cultural significance. This makes it relevant for the development of environmental policies based on local wisdom.

The interconnectedness between ecological practices, cultural values, and social cohesion in Girirejo represents an ideal pattern of Rahayu application. The cosmological dimension is maintained through rituals, the social dimension is maintained through citizen solidarity, and the ecological dimension is preserved through sustainable agricultural techniques. This model proves

that the integration of local values with conservation practices is capable of creating long-term sustainability. The concept of Rahayu here serves as a moral binder that ensures that ecological and social aspects go hand in hand. Girirejo's experience can serve as a reference for other regions in adapting local values for environmental management. This integration also shows that local wisdom can play an active role in answering the challenges of the global ecological crisis.

The results of the study show that the concept of Rahayu in ancient Javanese philosophy represents the balance of the cosmos which includes harmony between humans, nature, and transcendent forces. These findings were revealed through hermeneutical analysis of classical texts and interviews with cultural sources. The ecological values found include the principles of sustainability, respect for nature, and cosmological awareness. Data analysis shows that Rahayu is not just a spiritual concept, but also a normative framework that governs human interaction with their environment. This indication can be seen in cultural practices such as village spatial planning, natural resource management, and agricultural rituals. The data reinforce the view that local values can be the basis for modern environmental ethics. A comparative study of the sources reinforces the understanding that Rahayu has a universal dimension in environmental ethics, even though it is rooted in the local context of Java. Reinterpreting this concept can help bridge the gap between traditional knowledge and global ecological challenges.

The findings of this study are related to the study of deep ecology proposed by Arne Naess, especially in the aspect of appreciation for the intrinsic value of nature. This similarity shows that there is a meeting point between Western environmental philosophy and local Javanese wisdom. Both place humans as part of an ecological community, not as rulers. Fundamental differences arise on the basis of its epistemology. Deep ecology rests on modern philosophical constructions born from criticism of industrialization, while Rahayu was born from agrarian cosmology that shapes Javanese socio-cultural identity. This perspective provides its own uniqueness in understanding environmental ethics. Comparative analysis indicates that the integration of the two approaches can enrich the discourse of environmental ethics. Rahayu's values have the potential to provide a more contextual moral foundation for Indonesian society than the direct application of Western theory.

This finding is a marker that local wisdom has great potential to be reconstructed into a framework of environmental ethics that is relevant for today. The existence of Rahayu shows that the principle of sustainability has existed long before the term was popular in the global discourse. This awareness affirms the role of culture in shaping ecological behavior. This phenomenon is also a sign that environmental damage is not only due to a lack of technology or regulation, but also a loss of moral and cosmological orientation in people's lives. The reconstruction of Rahayu's values can be an effort to restore this orientation. The presence of local concepts that are parallel to global theories signals that solutions to environmental crises require a multidimensional approach. Regional philosophical traditions can serve as equal dialogue partners in the search for the world's ecological solutions.

The direct implication of these findings is the need to include Rahayu values in environmental education in Indonesia. This integration can strengthen ecological awareness through pathways that are in accordance with the cultural identity of the community. This approach allows for more sustainable value-based behavior transformation. In terms of policy, the concept of Rahayu can be a reference in spatial planning and natural resource management. The application of the principle of cosmological harmony has the potential to reduce environmental conflicts and improve ecosystem sustainability. In the academic realm, the results of this study expand the basis of environmental ethics studies by presenting local perspectives that can be tested theoretically and practically. This

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opens up opportunities for the development of hybrid theories between local wisdom and global environmental philosophy.

This result arises because the concept of Rahayu was formed from a long interaction between humans, nature, and belief systems in ancient Javanese culture. These historical processes create an integration of spiritual, social, and ecological values that are difficult to find in modern ethical systems. The sustainability of these values is inherited through oral traditions, rituals, and daily life practices. The agrarian cosmological factor that places nature as a living partner is the strong basis for the birth of the principle of harmony. This interconnectedness affects people's perspective on nature as part of themselves, not objects of exploitation. The continuity of this value survives because the Javanese cultural system is able to absorb changes without losing its basic principles. Integration with modernity opens up opportunities for the application of Rahayu values in a global context.

The next step is to develop a Rahayu-based local ecosophy model that can be implemented in education, policy, and social movements. This model needs to be tested through pilot projects in communities that still hold Javanese cultural traditions. The trial will show the extent to which these values are effective in changing ecological behavior. It is important to develop an educational curriculum that includes material on Rahayu and local environmental ethics. Strengthening this knowledge at the school and college levels will help produce a generation that is sensitive to ecological crises. Cooperation between academics, the government, and local communities is key in ensuring that the value of Rahayu can play an active role in responding to global environmental challenges. This synergy is expected to form a pattern of sustainable development rooted in local wisdom.

## CONCLUSION

This research reveals that the concept of Rahayu in ancient Javanese philosophy represents environmental ethics based on cosmological harmony between humans, nature, and transcendent dimensions. The reconstruction of this concept shows the existence of a local ecological value system that is equivalent to modern environmental ethical theories but is born from the roots of the archipelago's agrarian culture.

The contribution of this research lies in the development of a Rahayu-based framework of local ecosophy which can be a theoretical and practical alternative in environmental ethics. Hermeneutical approaches to ancient texts and oral traditions result in integrative methods that combine philosophical, anthropological, and cultural ecological studies.

The limitation of this research lies in the scope of data sources which are still limited to the Javanese cultural area and have not been extensively tested in other cultural contexts of the archipelago. Further research can be directed to the exploration of similar concepts in other regions, as well as testing the application of Rahayu-based local ecosophy in environmental policy and ecological education.

## AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

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