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## Abstract

The aim of this paper is to elucidate the new humanistic-
anthropocosmic paradigm as a framework for transforming urban
slum settlements in Indonesia amidst climate change and within a
multidimensional living context. The paper elaborates on the ideas
of Father Mangunwijaya and draws inspiration from the encyclical
Laudato Si. The methodology employed involves a literature review
and reflection on the paradigm of transforming slum settlements
that have been implemented in several cities in Indonesia. Findings
suggest that the Humanistic-Anthropocosmic paradigm, a fusion of
Father Mangunwijaya's ideas and inspiration from the encyclical
Laudato Si, holds the potential to facilitate sustainable and
environmentally friendly transformation of urban slum settlements,
considering social, economic, and environmental aspects. This
article contributes to the development of a paradigm for
ransforming urban slum settlements rooted in humanistic
architecture, education for liberation, ecological spirituality, integral
ecology, and anthropocosmism.
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## 1. Introduction

The issue of urbanization affects various cities around the world. To date, cities in various parts of the world have encountered numerous issues concerning the development of physical environments to accommodate the presence of inhabitants, which have almost evolved uncontrollably. On one hand, physical development yields increasingly modern and high-quality areas; on the other hand, it leaves behind areas that are the opposite, characterized as slums and far below the specified quality standards. One of the causes is the movement or mobility of the population, including migration or urbanization. Humans tend to accumulate and reside in cities because cities offer or provide a plethora of attractive and essential elements for humans, driven by various motivations. Slum settlements, as a result of urbanization or population migration from

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rural areas to cities, have become one of the chronic and enduring maladies afflicting cities in Indonesia and various other cities around the world.

The problems of slum settlements in urban areas are suspected to be caused by human factors. Urbanization leads to an increase in the urban population (Wendt, 1997) and population concentration occurs in slum areas. Additionally, economic factors and government political instability (Atika & Ikaputra, 2023) also influence the situation, as low-income communities tend to reside in slum areas due to cheaper land and housing prices (Santoso, 2007). There is a high health risk for residents in slum areas due to poor sanitation and inadequate solid waste management (Wondimu, 2021). These poor conditions can lead to depression, suicide, drug abuse, interpersonal violence, and excessive alcohol consumption.

Research in Malaysia provides evidence that poverty does not cause environmental degradation, as the knowledge, attitudes, and behaviors of urban poor communities regarding solid waste management are found to support the environment. This means that urban poor and low-income groups play a positive role in the environmental system, as they are users, scavengers, collectors, and reducers of solid waste (Murad & Hashim Nik Mustapha, 2010).

The urgent need to align adaptation strategies and resilience responses with the needs, capacities, and priorities of affected groups is necessary to address the various problems in urban slum areas (Adetokunbo & Emeka, 2015). The problems of slum settlements in urban areas affect the quality of the living environment, including environmental pollution and ecosystem degradation. Therefore, efforts to plan and improve slum settlements in urban areas are necessary, taking into account humanitarian and environmental aspects.

The transformation of slum settlements needs to be carried out. This article intentionally uses the term "transformation," which is interpreted as change towards betterment and improvement in all dimensions in the long run. Transformation refers to the process of change or fundamental change that occurs in a system, entity, or condition (Martin Harun OFM, 2016). In a broader context, transformation encompasses significant changes in various aspects of life, such as social, economic, political, and environmental.

In the context of the environment and sustainability, transformation often refers to fundamental changes in how humans interact with nature and natural resources. Transformation needs to involve changes in policies, practices, technologies, and behaviors to achieve environmental sustainability and address current environmental challenges, such as climate change, biodiversity loss, and environmental degradation (Martin Harun OFM, 2016).

Transformation also refers to changes in the paradigm or mindset of society as a whole, where sustainability values, environmental responsibility, and awareness of the impact of human actions are prioritized (Martin Harun OFM, 2016). By transforming various aspects or dimensions of human life, it is hoped that a more sustainable, balanced, and harmonious world will be built for future generations and beyond. The existing paradigm of urban slum transformation determines the direction, outcomes, and impacts of the changes that occur. The choice of paradigm for urban slum transformation determines how the changes occur and what is desired.

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### 2. Paradigm for Slum Settlements in Indonesia

There have been many approaches and perspectives on improving the quality of slum settlements. At least, several thinking paradigms have emerged. The physical-technical paradigm is evident in cases such as high-rise housing, Village Improvement Programs, land distribution, and low-cost apartments. The economic paradigm is evident in cases such as pro-poor tourism, socio-economic adaptation, and low-cost apartments. The participatory paradigm emerges in slum settlement management, pro-poor tourism, and thematic villages. The ecological paradigm is present in actions such as urban agriculture, city forests, land distribution, and green villages. The developed paradigms may be suitable for their respective cases, emphasizing managed dimensions, but they feel partial and local. Therefore, another paradigm is needed that touches on all aspects of human and environmental dimensions in a holistic and global manner.

Several paradigms have been used to transform urban slums, including physical, economic, tourism, social, and ecological paradigms. These paradigms have been identified in various cases in different cities, both in Indonesia and abroad. The applied paradigms have limitations, such as being local and limited in scope, focusing only on specific aspects. This means they are partial, not considering multi-dimensional and long-term aspects and preserving the integrity of creation. The paradigms that have been practiced are elaborated in the following presentation.

Physical paradigm. The city of Bandung has shifted its policy, upgrading slum villages from in-situ solutions to vertical housing towers, as a way for the city government to manage informal and slum settlements (Jones, 2017). In 2013, the Governor of Jakarta launched the Kampung Deret Program (KDP) as an alternative policy for improving slums in place (Nurdiansyah, 2018). The slum environmental management program in the Bantarsari neighborhood of Tasikmalaya city is carried out with an environmentally conscious Land Sharing concept, deemed suitable for implementation (Fadjarani & Ruli As'ari, 2018). Low-cost apartments (Rusunawa) have been established to address various problems in slum areas, such as the Rusunawa in Kudus Regency, in the village of Bakalan within the Krapyak settlement, developed as an effort to address problems in slum areas. However, the community is interested if it involves permanent ownership, not a rental system (Irfivanti & Widjonarko, 2014). The weakness of the physical paradigm in the transformation of slum settlements in Indonesia is its main focus on building and infrastructure aspects, without considering the social and economic aspects that are also important. However, its strength lies in providing tangible and visible physical improvements in slum settlements

**Economic Paradigm**. The concept of "pro-poor tourism" is being developed in Jakarta as a proposal for poverty alleviation for the poor residents in slum areas (Prasetyanti, 2015). Jakarta has vast impoverished areas known as "slum villages." The core of pro-poor tourism is the development of economy and culture (eco-cultural) based on slum village tourism. Community participation in improving the quality of life in slum areas is implemented by the Jakarta Provincial Government through the "Kampung Deret" program, especially in Petogogan (Lestari & Kurniawan, 2018). The weakness of the economic paradigm in the transformation of slum settlements in Indonesia is its tendency to prioritize economic development over social and environmental considerations, potentially leading to gentrification and displacement of the original residents. However, its strength lies in promoting economic opportunities and livelihood improvements for residents in slum areas

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**Tourism paradigm**, The creation of "thematic villages" in Malang city, which were originally slums, transformed by the community into habitable and attractive villages for tourists, and recognized by the World Bank (Akbar & Alfian, 2018). Other efforts involve managing slums by accommodating land use, population mobility, utilization of renewable energy, urban economic improvement, social development, and accessibility (Ervianto & Felasari, 2019). The weakness of the tourism paradigm in the transformation of slum settlements in Indonesia is its potential to commodify poverty and exploit the cultural authenticity of the community for commercial gain, leading to issues of authenticity and ethical concerns. However, its strength lies in the potential to generate income and employment opportunities for residents in slum areas, contributing to local economic development

**Social paradigm.** The transformation of slum areas is also carried out through slum upgrading and the creation of well-designed public spaces to accommodate community activities, thus fostering a better lifestyle physically, economically, socially, politically, culturally, psychologically, and emotionally (Meléndez Fuentes & Pintor Pirzkall, 2020). Interestingly, the spatial adaptation carried out by urban village communities creates economic activities for the residents of the urban village as well as places for interaction among them (Putri & Herlily, 2020). Even in Taiwan, entrepreneurship and informality are not always contradictory, but rather, through coevolution, urban informality can contribute to urban entrepreneurship variations (Chien, 2018). The local potentials developed in urban slum kampongs are part of efforts towards the development of Sustainable, Creative, Smart, and Prosperous Tourism Kampongs (Purbadi & Lake, 2019).

The idea of improving slum environments has several concepts that have evolved. The basic concept for physical improvement in slum settlements consists of three elements based on research in Banjarmasin: (1) organizing road networks as a fundamental system that builds the settlement structure, (2) constructing important public utility systems for livelihoods, and (3) providing public spaces and facilities as "external organs" that shape identity and reveal the physical beauty of the location (Michiani & Asano, 2019). Environmental improvement needs to be done both externally and internally. Improving the interior of residential houses in slum settlements is important for enhancing housing facilities, particularly as part of improving the health quality of slum dwellers, as evidenced by research in Mumbai, India (Sarkar & Bardhan, 2020). The row houses in Petogogan, Jakarta, still require improvement as they do not yet meet the standards for health and comfort of residential homes (Fang, 2020). Even the development of public spaces in the Stacked Village in Jetis Harjo, Yogyakarta, is aimed at becoming a space for social interaction, economic activities, and knowledge development (Mulyandari & Bhayusukma, 2015). The weakness of the social paradigm in the transformation of slum settlements in Indonesia is its reliance on community participation and empowerment, which may face challenges in terms of inclusivity and power dynamics within the community. However, its strength lies in fostering social cohesion, cultural preservation, and community resilience through collective action and mutual support

**Ecological paradigm.** Various efforts or actions have been undertaken to address the problems of urban slum settlements in Indonesia. There are efforts to establish (a) urban farming, (b) urban forests, (c) urban communities based on tourism integrating hotel management, food and beverage services, complementary services, tourism management, infrastructure, health, and education as integrated efforts to address

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various issues in slum environments (Ervianto & Felasari, 2019). In the Cawang and Kampung Melayu sub-districts of East Jakarta, communities along the Ciliwung River have developed ecological adaptation patterns and socio-economic survival strategies (mastering, protecting, enduring, and resisting) in response to the development of the Ciliwung River banks aimed at improving the quality of life in slum environments (Maring, 2016).

The concept of a green village (green kampong), with an approach based on green concepts and carbon footprint considering daily activities, building materials, fuel consumption, and to introduce the concept of renewable energy, is being developed in the Gampingan-Pakuncen Village in Yogyakarta (Setyowati, 2019). Another green village is being developed in Surabaya, in relation to environmental concern (Prasetiyo & Suyanto, 2013), on the coast of Riau (Suwarlan, 2020), in Jakarta (Solikhah & Fatimah, 2020)(Puspita & Dewi, 2013)(Inavonna, 2015). The green elements of plants are also utilized to alleviate environmental stress among children in the urban village environment, as seen in the case of Kampung Ngampilan, Yogyakarta (Sativa, 2019).

Efforts to reduce carbon emissions are also being developed, as seen in the case study of Gampingan-Pakuncen Village, Yogyakarta. This village, known for its dense population, is located in the city center not far from Malioboro, the commercial and business district of Yogyakarta City, and has been proven to reduce carbon emissions in the environment (Setyowati, 2019). The presence of green spaces in urban villages holds many meanings, one of which is its significance for the socio-cultural identity of the residents (Putra, 2019), besides its meaning as natural environment. The weakness of the ecological paradigm in the transformation of slum settlements in Indonesia is its potential to prioritize environmental conservation over the immediate needs and rights of the residents, leading to conflicts and displacement. However, its strength lies in promoting sustainable and environmentally friendly practices that can improve the living conditions and resilience of the community in the long term.

In the context of data from scientific journal publications, it is evident that several paradigms have been used to transform urban slums in Indonesia. Physical, economic, tourism, social, and ecological paradigms have been applied. These paradigms have some fundamental limitations, such as being local and limited in scope, focusing only on specific aspects. These paradigms may be suitable for their respective cases, emphasizing the managed dimensions, but they feel partial and local. Therefore, another paradigm is needed that touches on all aspects of human and environmental dimensions in a holistic and global manner. This global discourse is crucial in the present and future, as human awareness of inhabiting the earth as a shared home has evolved and become increasingly important in the present and future.

### 3. Method

The method employed involves a review of scientific journal literature and a critique of the strengths and weaknesses of each paradigm. The advantages and impacts of each on their application are examined, followed by a reflection on the approaches taken by Father Mangunwijaya and the ideas presented in Laudato Si. Subsequently, a paradigm that integrates the ideas of Laudato Si and Father Mangunwijaya is believed and formulated to become a new paradigm that is more holistic and global in transforming slum settlements in Indonesia.

## 4. **Result and Discussion**

This article presents a framework of ideas from Father Mangunwijaya and the encyclical Laudato Si as the basis for thinking about the transformation of slum settlements in all their dimensions, with a global orientation. The sources of ideas are drawn from Father Mangunwijaya and the Laudato Si Encyclical, with several arguments as follows: First, Father Mangunwijaya's concept of Humanist Architecture is highly suitable for humanizing humanity. Slum settlements are the arena of human life, so the approach should start and be based on humanity and human existence. Second, Mangunwijaya's approach is multidimensional. The social, economic, and environmental dimensions are explicitly utilized. This thinking is highly appropriate for viewing humans in a multidimensional way. It even includes the concept of emancipatory education, which encompasses formal and informal education aimed at the residents of slum settlements.

Third, the inspiration from the encyclical Laudato Si comes from an explicit global perspective, different from the perspectives that have existed so far. This means its explicit completeness is broader than what has been advocated thus far. The encyclical Laudato Si emphasizes the global aspect, along with related principles. Fourth, ecology is viewed from a more abstract yet relevant perspective, namely in the concept of ecological spirituality. Ecology as the human habitat is not only physical-natural but also a gift from the Creator to humanity. As a result, there is an obligation for all humans to care for the earth as our common home. Fifth, there is the concept of anthropocosmism that goes beyond anthropocentrism. Anthropocentrism is the previous concept that emphasizes humans as the center and focus of everything for human interests. Anthropocosmism is a worldview that considers humans are part of nature, while anthropocentrism views humans as rulers of nature.

Sixth, the concept of integral ecology provides a clearer way to manage the earth as our common home and inspires slum settlements to become an integral part of the earth as our common home. There are several ecological dimensions that need to be considered, namely environmental ecology, economic ecology, social ecology, and cultural ecology. Seventh, it is highly beneficial to integrate both, like text with context. Mangunwijaya's expertise as an "architect-plus" combined and reinforced with the ideas of Laudato Si is believed to be a complete combination. Architecture as the human habitat, developed with humanistic awareness and based on integral ecology, thus becomes a comprehensive effort.

	IDEAS OF MANGUNWIJAYA	IDEAS OF LAUDATO SI ENCYCLICAL
1	Humanistic Architecture	Ecological Spirituality
2	Social Aspect	Holistic Understanding (Anthropocosmic)
3	Economic Aspect	
4	Environmental Aspect (Ecology)	Environmental Education (Integral Ecology)
5		Heart Change
6		Cross-sector Collaboration
7		Solidarity and Subsidiarity

*Figure 1.* Combined Map of the Core Ideas of Romo Mangunwijaya and Laudato Si Encyclical Source: Analysis-synthesis, 2024.

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# Inspiration from Father Mangunwijaya related with human dignity and global issues.

The core ideas of Father Mangunwijaya encompass both technical, mechanical aspects and non-technical, humanistic aspects. Mangunwijaya's ideas are systematically documented in a book titled "Wastucitra (Mangunwijaya, 1990), and some refer to it as "Indonesia Regionalism Local Wisdom" (Loanoto, 2019). In the design process, Father Mangunwijaya employs an intuitive method to shape architectural concepts that align with the needs and desires of the clients. Concepts with strong potential for application include "humanistic architecture" and "sustainable environmental friendliness," which consider both human and environmental aspects in design.

The characteristic features of Mangunwijaya's architecture are the emphasis on wastu citra (utility and beauty), wastu widya (architectural knowledge), Christian teachings (the foundation of his faith, without the intention of converting others to Christianity), local cultural values (real life, custom design), and the traditional Javanese architectural style that harmonizes with the natural environment (Asiku & Wardani, 2014). Essentially, in Mangunwijaya's architectural works, Christian teachings establish a harmonious relationship with the culture of the surrounding community, as vernacular architecture that characterizes Indonesia (Hidayatun, 2013).

Furthermore, Father Mangunwijaya emphasizes the importance of humanistic architecture that humanizes people and values learning opportunities. The main concept of humanistic architecture is to create homes that not only serve as living spaces but also as places for learning and personal development for their occupants (Warnata, 2017). Humanistic architecture emphasizes the importance of humanizing people and considering humanitarian values in design. The concept of humanistic architecture also involves a holistic approach, which takes into account social, economic, and environmental aspects in design. Father Mangunwijaya sets an example of how to address slum settlement issues in a multidimensional manner (C. B. Mulyatno, 2020).

Learning, according to Father Mangunwijaya, is within the framework of integral environmental education, which includes the development of knowledge, intensive cooperation, direct interaction with nature, and continuous habituation to environmental care (Carolus Borromeus Mulyatno, 2022). Integral environmental education is a collaborative movement that nurtures children comprehensively. Environmental education provides space for students to explore nature, build brotherhood and cooperation, and perform acts of kindness for the less fortunate as an expression of respect to God, the Creator.

Father Mangunwijaya sought to develop a sustainable and environmentally friendly slum settlement design model by considering social, economic, and environmental aspects. Through the implementation of these ideas, Father Mangunwijaya hoped to help address the challenges of slum settlements in urban areas, while still respecting and valuing local cultural identities. Through a holistic and sustainable approach, he aimed to create a better settlement environment that not only considers technical aspects but also human values and sustainability (Istanto, 1999).

### Inspiration from Laudato Si related with human life and global issues.

Climate change is the central question of this century, a call for urgent global action needs to be loudly and passionately echoed. Increasing evidence indicates that the current generation and civilization are on the brink of a human-made disaster on a global scale (Orobator, 2021). Laudato Si is an encyclical by Pope Francis, published on June 18, 2015,

in 8 languages (Italian, German, English, Spanish, French, Polish, Portuguese, and Arabic) (Martin Harun OFM, 2016), it calls for global concern over the destruction of the Earth.

The core idea of Laudato Si is the importance of spirituality in "caring for the environment and sustainability" because the environment is a gift from God that must be safeguarded and preserved (Christie, 2020). Laudato Si' is a sustained theological and ethical reflection on ecology (Peppard, 2016), it's a beautiful visionary view from Pope Francis (Tilche, 2015). It offers ecological spirituality within the call of Laudato Si (Platovnjak, 2019), which for the Catholic Church portrays the relationship between the church and the world as an "ecosystem" (Gruber, 2017).

There are several core ideas from Laudato Si that are relevant to slum settlements. Firstly, the concept of ecological spirituality, referring to humanity's worldview and attitude towards the environment and human life based on faith beliefs. Ecological spirituality emphasizes the importance of seeing the environment and human life as gifts from God that must be cared for and nurtured with love (Martin Harun OFM, 2016). Ecological spirituality encompasses changes in how we view the environment and human life, as well as changes in how humans interact with the environment and human life. Ecological spirituality also involves changes in habits and lifestyles, as well as changes in policies and actions towards the environment and human life.

Ecological spirituality emphasizes the importance of considering the impact of human actions on the environment and human life, as well as advocating for social justice and human rights. Ecological spirituality also emphasizes the importance of preserving biodiversity and culture, as well as maintaining the sustainability of natural resources for future generations. Ecological spirituality helps understand more sustainable actions towards the environment that affect human well-being and the environment as a whole. Ecological spirituality assists humans in advocating for social justice and human rights, as well as preserving biodiversity and culture for future generations.

In his encyclical, Pope Francis strongly condemns the "technoscientific paradigm," the anthropocentric view, and the Western-centric paradigm (Damour, 2021). In his view, the technoscientific method has been developed as a "technique of ownership, domination, and transformation," excessive domination has increased its efficiency by sacrificing an integrative global vision, and humans are confused by the transformation of the world based on the worldview into a set of resources (Damour, 2021). Second, the idea of Integral Ecology. Laudato Si emphasizes a holistic understanding of the environment and sustainability, which includes ecological, social, economic, and cultural aspects (integral ecology) (Damour, 2021; Sakimoto, 2019; Sršen, 2021). Integral ecology allows humans to redirect technological actions, to maintain "the power of technology" without making it "technology as power"; a technology that is not a source of domination but of liberation. This concept proposes that ecology must be understood holistically, considering all aspects of human life and the environment. Integral ecology consists of four interconnected dimensions: environmental ecology, economic ecology, social ecology, and cultural ecology (Martin Harun OFM, 2016). All four have interconnected dimensions and must be considered together in efforts to preserve the environment and life.

Environmental ecology is related to ecosystem balance and environmental sustainability. The goal of environmental ecology is to understand how living organisms adapt to their environment and how the environment influences the survival of living

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organisms. Economic ecology is related to justice in the distribution of resources and sustainable economic development. Economic ecology emphasizes the importance of considering the economic impact of our decisions and actions on the environment and human life. Social ecology is related to social justice and human rights. Social ecology emphasizes the importance of considering the social impact of our decisions and actions on the environment and human life. Cultural ecology is related to the values, beliefs, and practices that shape how we understand and act in the world. Cultural ecology emphasizes the importance of preserving and respecting the cultural diversity of human beings and the relationship between humans and nature. Cultural ecology emphasizes the importance of understanding how human culture affects the environment and how the environment affects human culture. Third, Pope Francis advocates a shift from anthropocentrism to anthropocosmism (Damour, 2021). Anthropocentrism is a perspective or attitude that places humans at the center or focal point of everything in the universe. Anthropocentrism refers to the tendency of humans to view everything from a human perspective, seeing and assessing the significance of nature based on its impact or benefit to humans.

Anthropocentrism is a perspective or attitude that places humans at the center of everything, where everything is measured and evaluated based on its relationship with humans (Martin Harun OFM, 2016). In the context of the environment and ecology, anthropocentrism is often considered detrimental because it tends to overlook environmental values and other creatures solely for human benefit. The anthropocentric view often leads to excessive exploitation of natural resources, environmental damage, and ecosystem imbalance. Anthropocentrism is considered one of the root causes of environmental problems because humans often forget their interconnectedness and dependence on nature. Pope Francis in the encyclical Laudato Si' emphasizes the importance of shifting from an anthropocentric view to an ecological perspective that considers the sustainability of all of God's creation, not just human interests. In anthropocosmism, the focus is placed on the cosmos or the whole world, no longer on the perspective of humans as the center.

Anthropocosmism is a perspective or belief that places humans as an integral part of the cosmos or the universe as a whole. In this concept, humans are considered equally important as other natural elements, such as plants, animals, and other natural elements. Anthropocosmism emphasizes the close relationship between humans and nature and the importance of maintaining balance and harmony between humans and nature. In the Laudato Si' movement, the concept of anthropocosmism is seen as an effort to improve the relationship between humans and nature and to restore harmony between humans, nature, and God as the Creator. Pope Francis encourages humans to see themselves as part of a complex and interconnected ecosystem and to be responsible for the sustainability of the universe; protecting, preserving, and safeguarding the integrity of creation (Martin Harun OFM, 2016).

#### Humanistic-Anthropocosmic Paradigm in Urban Areas.

Humanistic-Anthropocosmic as a Holistic Approach. This paradigm is considered important because it encompasses aspects of humanity, the environment, and spirituality holistically. By considering these dimensions simultaneously, the transformation of slums can be carried out comprehensively and sustainably. The importance of balance between humans and the environment. This paradigm emphasizes the importance of maintaining a balance between human needs and environmental sustainability. By considering social, economic, and environmental aspects in a balanced manner, the transformation of slums can provide long-term benefits for both the community and the surrounding ecosystem.

Contribution to understanding and local identity. The Humanistic-Anthropocosmic paradigm is also considered important because it contributes to the understanding and strengthening of local identity. By considering cultural values, spirituality, and local wisdom in the transformation of slums, communities can feel more connected to their living environment. Liberation and education-based approach. This paradigm also supports a liberation and education-based approach for communities living in slums. By considering the educational aspects for liberation, the transformation focuses not only on physical improvements but also on empowering the community comprehensively.

The essence of this writing is to explain the combination of ideas between Father Mangunwijaya and the ideas of Laudato Si', as a paradigm and foundation for a new approach to addressing the problems for the transformation of slum settlements. Father Mangunwijaya focuses on working with humans and their environment in a more humane way, while Laudato Si' focuses on the philosophical aspect of the relationship between nature and humanity at a more fundamental and global level, encompassing the entire universe. The human aspect is seen as content and container (Doxiadis, 1970), and in multi-dimensional relationships, while the environment is seen more broadly, even very broadly (global, mondial); philosophically. This proposal complements other existing paradigms (which are partial, not yet global).

The idea of Laudato Si' encompasses an important concept, namely the anthropocosmic view. This means that anthropological and cosmic universality become essential components in this thought. The anthropological view focuses on its human aspects, while the cosmic elements tend to look towards broader, even global universality. People are no longer just talking about environmental sustainability at the local level but are becoming global in nature. The concept of environmental care in Laudato Si' emphasizes the importance of preserving the environment and sustainability on a global scale. Pope Francis highlights the negative impacts of climate change and environmental degradation caused by human activities. In the context of architecture, the ideas of Laudato Si' are applied in environmentally friendly and sustainable design. Architects need to consider environmental aspects in their designs, such as the use of environmental care according to Laudato Si' has great potential to serve as a foundation in designing buildings that are environmentally friendly and sustainable in the long term and on a global scale.

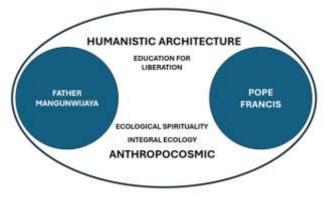


Figure 2. Scheme of Humanistic-Anthropocosmic Architecture Paradigm (2024)

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The concept of humanistic architecture in the context of environmental care according to Laudato Si' is an approach that encompasses technical and mechanical aspects as well as non-technical, humanistic aspects. In the context of architecture, the humanistic concept emphasizes the importance of humanistic architecture that humanizes people and values the opportunity for learning. In the context of environmental care, the humanistic concept is applied in environmentally friendly design with the use of environmentally friendly materials and energy conservation. The concept of environmental care according to Laudato Si' emphasizes the importance of preserving the environmentally friendly and sustainability. In the context of architecture, this concept is applied in environmentally friendly materials. Furthermore, the concept of environmental care also includes a holistic approach, considering social, economic, and environmental aspects in design on a very broad, even global scale.

## Strategic steps for implementing the Humanistic-Anthropocosmic paradigm.

The strategic steps to implement the Humanistic-Anthropocosmic paradigm in this article include integrating human, environmental, and spiritual values in the planning and implementation of urban slum transformation. These steps involve a participatory approach that engages the local community in the planning and decision-making process, the application of humanistic architectural design that considers local needs and identity, the implementation of educational programs for community empowerment, and efforts to maintain ecological balance by considering environmental aspects in every transformation step. Thus, the implementation of the Humanistic-Anthropocosmic paradigm not only focuses on physical aspects but also on social, cultural, and environmental aspects to create sustainable transformation and positive impacts for all involved communities.

Practical steps to implement the Humanistic-Anthropocosmic paradigm involve a series of concrete actions for transforming urban slums. Firstly, these steps include the identification and deep understanding of the social, economic, and environmental conditions in the slum settlements to be revitalized. This involves active participation from the local community to uncover their needs, aspirations, and potentials. Secondly, practical steps involve the design and implementation of educational programs aimed at empowering the community to manage their surrounding environment sustainably. These programs may include skills training, raising awareness of the importance of environmental conservation, and strengthening community capacity in decision-making related to the transformation of urban slums.

Third, practical steps to implement the Humanistic-Anthropocosmic paradigm also involve designing architecture that is humanistic and environmentally friendly. This includes developing spatial plans that consider community needs, using environmentally friendly materials, and utilizing green technology to enhance energy efficiency and reduce carbon footprint. Fourth, integrating spiritual and cultural elements into architectural design is also an important part of these practical steps, to strengthen local identity and build harmonious relationships between humans and the environment. Thus, through these practical steps, it is hoped that the implementation of the Humanistic-Anthropocosmic paradigm can create sustainable, inclusive, and meaningful transformations for the community and the environment in urban slums.

## 5. Conclusion

The proposed paradigm for transforming slum settlements in this article, which combines the ideas of Father Mangunwijaya and inspiration from the encyclical Laudato Si, forms the Humanistic-Anthropocosmic paradigm. This paradigm has the potential to guide the transformation of slum settlements into sustainable and environmentally friendly ones by considering social, economic, and environmental aspects. The contribution of this article lies in the development of a paradigm for transforming slum settlements rooted in humanistic architecture, education for liberation, ecological spirituality, integral ecology, and anthropocosmism.

Father Mangunwijaya's ideas emphasize the importance of humanistic architecture and value the aspect of learning opportunities. His emphasis lies in humanizing humans both physically and non-physically, through a liberating learning process. On the other hand, the Laudato Si' concept emphasizes the importance of maintaining a healthy environment and sustainability as the common home for all humanity in a sustainable manner, based on ecological spirituality (Platovnjak, 2019), that which is reinforced as an illustration of the relationship between the church and the world as an "ecosystem" (Gruber, 2017).

In the context of environmental friendliness, the humanistic concept is applied in environmentally friendly design with the use of local environmentally friendly and energy-efficient materials. This means that the concept of humanistic architecture in the context of environmental friendliness according to Laudato Si has great potential to serve as a foundation in designing buildings that consider human values and sustainability, as well as the global environment.

In the context of Laudato Si, Pope Francis emphasizes the importance of improving the global economic system that is unjust and damaging to the environment, as well as proposing more sustainable and fair alternatives. Pope Francis also stresses the importance of advocating for social justice and human rights, especially in the context of climate change and environmental damage that adversely affect the most vulnerable communities. He also emphasizes the importance of respecting cultural diversity and local traditions, as well as advocating for the rights of indigenous peoples and minority groups in the context of climate change and environmental damage.

With a holistic and sustainable approach, humanistic architecture helps create a better environment and considers humanistic and sustainable values, as well as preserving the environment as a whole (globally). The concept of humanistic and environmentally friendly architecture according to Laudato Si is applied in the design of environmentally friendly and sustainable buildings, thus creating a better environment and considering humanistic and sustainable values. All of this contributes to efforts to protect, preserve, and maintain the integrity of creation (Martin Harun OFM, 2016).

## References

- Adetokunbo, I., & Emeka, M. (2015). Urbanization, housing, homelessness and climate change adaptation in Lagos, Nigeria: Lessons from Asia. *Journal of Design and Built Environment*, 15(2), 15–28. https://doi.org/10.22452/jdbe.vol15no2.3
- Akbar, T., & Alfian, F. (2018). Kampung Tematik Sebagai Bentuk Partisipasi Masyarakat Dalam Permasalahan Permukiman Kumuh Di Kota Malang (Thematic Kampong as a Form of Community Participation in Addressing Urban Slum Issues in Malang

Yohanes Djarot Purbadi, Reginaldo Christophori Lake

City). Wahana, 70(2), 37-48. https://doi.org/10.36456/wahana.v70i2.1741

- Asiku, K. S., & Wardani, L. K. (2014). Gaya Desain Interior Ruang Ibadah Karya Y.B. Mangunwijaya di Jawa Tengah (The Interior Design Style of Worship Spaces by Y.B. Mangunwijaya in Central Java). Jurnal INTRA, 2(2), 712–721.
- Atika, F. A., & Ikaputra, I. (2023). Permukiman Kumuh Ditinjau dari Kontinum Formal dan Informal, Studi Kasus: Permukiman Kumuh Lintas Negara)(Slum Settlements Viewed from the Formal and Informal Continuum, Case Study: Cross-Country Slum Settlements). *Media Komunikasi Geografi*, 24(2), 168–188.
- Chien, K. H. (2018). Entrepreneurialising urban informality: Transforming governance of informal settlements in Taipei. Urban Studies, 55(13), 2886–2902. https://doi.org/10.1177/0042098017726739
- Christie, D. E. (2020). Becoming painfully aware: Spirituality and solidarity in Laudato Si'. *The Theological and Ecological Vision of Laudato Si': Everything is Connected*, 2017. https://doi.org/10.5040/9780567673190.0015
- Damour, F. (2021). The Encyclical Laudato Si' and the Overcoming of Humanism. *Journal* of Posthuman Studies, 5(2), 190–205. https://doi.org/10.5325/jpoststud.5.2.0190
- Doxiadis, C. A. (1970). Ekistics, the science of human settlements. عد Book ( عدد , 170. عد , 170. عد , 3956). Hutchinson. https://doi.org/10.1126/science.170.3956.393
- Ervianto, W. I., & Felasari, S. (2019). Pengelolaan Permukiman Kumuh berkelanjutan Di Perkotaan (Sustainable Urban Slums Management). *Jurnal Spektran*, 7(2), 178–186.
- Fadjarani, S., & Ruli As'ari. (2018). Penataan Permukiman Kumuh Berbasis Lingkungan (Environmental-Based Urban Slum Arrangement). *Jurnal Geografi*, 15(1), 56–67. https://journal.unnes.ac.id/nju/index.php/JG/index
- Fang, F., Bambang Susetyarto, M., Lianto, F., & Hendra Siwi, S. (2020). Study of Lighting, Humidity, and Ventilation in RISHA Design at Kampung Deret Petogogan, Jakarta. *IOP Conference Series: Materials Science and Engineering*, 1007, 012080. https://doi.org/10.1088/1757-899x/1007/1/012080
- Gruber, J. (2017). Ec(o)clesiology: Ecology as Ecclesiology in Laudato Si'. *Theological Studies*, 78(4), 807–824. https://doi.org/10.1177/0040563917731747
- Hidayatun, M. I., Prijotomo, J., & Rachmawati, M. (2013). Materials As Part Of The Identity Of Indonesian Architecture . ( Locality and universality value in Mangunwijaya and Eko Prawoto works ). *SB Dubai Paper*, *153*(xx), 1–8.
- Inavonna, Gandarum, D. N., & Ischak, M. (2015). Peran Gas Rumah Kaca Pada Produktifitas Hijau Menuju Eco-Kampung Kota di Jakarta, Studi Kasus Kampung Kelurahan Petamburan (The Role of Greenhouse Gases in Green Productivity Toward Urban Eco-Villages in Jakarta, Case Study of Petamburan Village). *Mitigating and Adapting Built Environments for Climate Change in the Tropics*.
- Irfiyanti, Z., & Widjonarko. (2014). Penyediaan Rumah Susun Sederhana Sewa Ditinjau Dari Preferensi Masyarakat Berpenghasilan Rendah Di Kabupaten Kudus (Provision of Simple Rental Flats Reviewed from the Preferences of Low-Income Communities in Kudus Regency). *Teknik PWK (Perencanaan Wilayah Kota)*, 3(4), 626-636.
- Istanto, F. H. (1999). Arsitektur "Guna dan Citra" Sang Romo Mangun in Memoriam:

Yusuf Bilyarta Mangunwijaya 6 mei 1029 - 10 Februari 1999 (Architecture "Utility and Image" of Father Mangun in Memoriam: Yusuf Bilyarta Mangunwijaya May 6, 1929 - February 10, 1999). *Dimensi Teknik Arsitektur*, 27(2), 40–47. http://puslit.petra.ac.id/journals/architecture/

- Jones, P. (2017). Formalizing the informal: Understanding the position of informal settlements and slums in sustainable urbanization policies and strategies in Bandung, Indonesia. *Sustainability (Switzerland)*, 9(8), 1–27. https://doi.org/10.3390/su9081436
- Lestari, D. E. P., & Kurniawan, T. (2018). Community participation in upgrading slum area: Study of the implementation of "kampung Deret" in Petogogan, Jakarta. *IOP Conference Series: Earth and Environmental Science*, 179(1). https://doi.org/10.1088/1755-1315/179/1/012032
- Loanoto, S. Y. (2019). Wastu Citra as an Indonesia Regionalism Local Wisdom. *International Journal of Architecture and Urbanism*, 3(1), 69–80. https://doi.org/10.32734/ijau.v3i1.779
- Mangunwijaya, Y. B. (1990). Wastu Citra. Gramedia Pustaka Utama.
- Maring, P., Hasugian, F., & Kaligis, R. A. (2016). Social Strategy of Ciliwung River Bank Community. Komunitas: International Journal of Indonesian Society and Culture, 7(1), 102. https://doi.org/10.15294/komunitas.v7i1.3600
- Martin Harun OFM. (2016). Ensiklik Laudato Si' Paus Fransiskus: Tentang Perawatan Rumah Kita Bersama (Encyclical Laudato Si' by Pope Francis: On Care for Our Common Home). Penerbit Obor.
- Meléndez Fuentes, N., & Pintor Pirzkall, H. C. (2020). Slum upgrading and placemaking: improving informal settlements and creating places. *Revista Brasileira de Planejamento e Desenvolvimento*, 9(2), 285. https://doi.org/10.3895/rbpd.v9n2.8906
- Michiani, M. V., & Asano, J. (2019). Physical upgrading plan for slum riverside settlement in traditional area: A case study in Kuin Utara, Banjarmasin, Indonesia. *Frontiers of Architectural Research*, 8(3), 378–395. https://doi.org/10.1016/j.foar.2019.03.005
- Mulyandari, H., & Bhayusukma, M. Y. (2015). Prospek Public Space Pada Kampung Susun Sebagai Ruang Interaksi Sosial, Ekonomi Dan Pengembangan Ilmu di Area Bantaran Sungai. *Jurnal Teknik Sipil dan Perencanaan*, 17(2), 89–98. https://doi.org/10.15294/jtsp.v17i2.6883
- Mulyatno, C. B. (2020). Religiosity and Socio-Ecological Spirituality of Indonesian Community According to Y. B. Mangunwijaya. *International Journal of Science and Society*, 2(2), 394–409. https://doi.org/10.54783/ijsoc.v2i2.378
- Mulyatno, Carolus Borromeus. (2022). Pendidikan Lingkungan Sejak Usia Dini dalam Perspektif Teologi Pemerdekaan Y.B Mangunwijaya (Early Childhood Environmental Education in the Perspective of Y.B. Mangunwijaya's Theology of Liberation). Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6(5), 4099–4110. https://doi.org/10.31004/obsesi.v6i5.2570
- Murad, W., & Hashim Nik Mustapha, N. (2010). Does poverty cause environmental degradation? Evidence from waste management practices of the squatter and low-cost flat housholds in Kuala Lumpur. *World Journal of Science, Technology and*

Yohanes Djarot Purbadi, Reginaldo Christophori Lake

Sustainable Development, 7(3), 275–289. https://doi.org/10.1108/20425945201000018

- Nurdiansyah, A. (2018). Urban Slum Upgrading Policy In Jakarta (Case Study: Kampung Deret Program Implementation). *The Indonesian Journal of Planning and Development*, 3(1), 19. https://doi.org/10.14710/ijpd.3.1.19-31
- Orobator, A. E. (2021). Laudato Si': A Prophetic Message. *Journal of Catholic Education*, 24(1), 300–305. https://doi.org/10.15365/joce.2401192021
- Peppard, C. Z. (2016). Hydrology, theology, and Laudato Si'. *Theological Studies*, 77(2), 416–435. https://doi.org/10.1177/0040563916640448
- Platovnjak, I. (2019). The Ecological Spirituality in the Light of Laudatosì. *Nova Prisutnost*, 17(1), 75–91. https://doi.org/10.31192/np.17.1.5
- Prasetiyo, W. H., & Suyanto, T. (2013). Strategi Pendidikan Karakter Peduli Lingkungan Melalui Program Kampung Hijau Di Kampung Margorukun Surabaya (Character Education Strategy on Environmental Concern Through the Green Village Program in Margorukun Village, Surabaya). Kajian Moral dan Kewarganegaraan Nomor, 1(1), 302–316. www.menlh.go.id/langit-biru-
- Prasetyanti, R. (2015). Slum Kampong Tourism "Jakarta Hidden Tour": Designing Eco-Cultural Based Pro-Poor Tourism. *European Journal of Interdisciplinary Studies*, 3(1), 111. https://doi.org/10.26417/ejis.v3i1.p111-122
- Purbadi, Y. D., & Lake, R. C. (2019). Konsep Kampung-Wisata Sejahtera, Kreatif, Cerdas dan Lestari Berkelanjutan (The Concept of Prosperous, Creative, Smart and Sustainable Tourism Kampung). *EMARA: Indonesian Journal of Architecture*, 5(1), 12– 23. https://doi.org/10.29080/eija.v5i1.641
- Puspita, K. M., & Dewi, S. P. (2013). Analisis Peran Gerakan Kampung Hijau Sebagai Upaya Pengelolaan Di Kelurahan Rawajati Kecamatan Pancoran Jakarta Selatan (Analysis of the Role of the Green Village Movement as Management Efforts in Rawajati Sub-District, Pancoran District, South Jakarta). *Ruang: Jurnal Perencanaan Wilayah dan Kota*, 1(1), 71–80.
- Putra, B. D., Horne, R., & Hurley, J. (2019). Place, space and identity through greening in kampung kota. *Journal of Regional and City Planning*, 30(3), 211–223. https://doi.org/10.5614/jpwk.2019.30.3.3
- Putri, N. S., & Herlily. (2020). Communal spatial adaptation in respond to urban kampung vulnerability, study case: Public toilet of Kampung Muka, North Jakarta. *AIP Conference Proceedings*, 2230. https://doi.org/10.1063/5.0004812
- Sakimoto, P. J. (2019). Climate Change and Integral Ecology. *The Trumpeter, Journal of Ecosphy*, 34(1), 62–78. https://doi.org/10.7202/1060949ar
- Santoso, D. D. (2007). Toleransi Keruangan dalam Permukiman Padat, Studi Kasus: Rumah Kontrakan di Kampung Pajeksan dan Jogonegaran, Yogyakarta (Spatial Tolerance in Dense Settlements, Case Study: Boarding Houses in Pajeksan and Jogonegaran Villages, Yogyakarta). Universitas Gadjah Mada.
- Sarkar, A., & Bardhan, R. (2020). Improved indoor environment through optimised ventilator and furniture positioning: A case of slum rehabilitation housing, Mumbai, India. Frontiers of Architectural Research, 9(2), 350–369. https://doi.org/10.1016/j.foar.2019.12.001

- Sativa, S., Setiawan, B., Wijono, D., & Adiyanti, M. (2019). Seting Alami Sebagai Sarana Anak Untuk Mengatasi Tekanan Lingkungan di Kampung Kota (Natural Setting as a Means for Children to Cope with Environmental Pressure in Urban Villages). *Jurnal Arsitektur Komposisi*, 11(6), 279. https://doi.org/10.24002/jars.v11i6.1377
- Setyowati, E., Pribadi, S. B., Aditama K. Aidon Uda, S., Rizkyvea Debby, T., & Harsritanto, B. I. R. (2019). The Planning and Design of Kampong Pakuncen in Yogyakarta Based on the Green Concept. *Journal of Architecture and Urbanism*, 43(1), 21–35. https://doi.org/10.3846/jau.2019.6123
- Solikhah, N., & Fatimah, T. (2020). Kampung Hijau Pada Kampung Kota (Studi Kasus: Kampung Tanjung Gedong Rt.05/ Rw.08, Jakarta Barat)(Green Village in Urban Areas, Case Study: Tanjung Gedong Village Rt.05/Rw.08, West Jakarta). Jurnal Bakti Masyarakat Indonesia, 3(1), 137–147. https://doi.org/10.24912/jbmi.v3i1.7996
- Sršen, A. (2021). Sociological perspectives on Laudato Si' –Towards a coherent social and an ecological conversion. Nova Prisutnost, 19(3), 559–570. https://doi.org/10.31192/NP.19.3.6
- Suwarlan, S. A. (2020). Perancangan Urban Farming Pada Pesisir Kampung Kelembak Kepulauan Riau (Designing Urban Farming on the Coast of Kelembak Village, Riau Islands). *Jurnal Linears*, *3*(1), 20–25. https://doi.org/10.26618/j-linears.v3i1.3134
- Tilche, A., Nociti, A., & Renard, N. (2015). Laudato si': the beauty of Pope Francis' vision. *Surveys and Perspectives Integrating Environment and Society*, 8(November 2015), 1.
- Warnata, I. N. (2017). Guna dan Citra dalam Arsitektur (Function and Image in Architecture). *Undagi*, 5(1), 1–8.
- Wendt, S. (1997). Slum And Squatter Settlements In Dhaka, A study of consolidation processes in Dhaka's low- income settlement areas (عدد). Roskilde University.
- Wondimu, H. (2021). The Subsequent Challenges of the Slum and Squatter Settlements: In the City of Addis Ababa. European Journal of Research Development and Sustainability (EJRDS), 2(1), 24–34. https://doi.org/10.2139/ssrn.3877007