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Terracentrism and Spradleys's Domain Analysis: A Study on the Deprivation of Indonesian Long-Term Local Wisdom on Maritime Life

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ABSTRACT

This study examines the impact of terracentrism on the deprivation of Indonesian long-term local wisdom on maritime life. Terracentrism, a phenomenon where land-based perspectives dominate over sea-based ones, has led to the erosion of traditional maritime knowledge and practices in Indonesia. The research employs domain analysis, a qualitative methodology inspired by Spradley's approach, to investigate the experiences and perceptions of local communities affected by this deprivation. The findings reveal that terracentrism has resulted in the loss of essential skills and knowledge necessary for sustainable maritime livelihoods. The study highlights the significant impact of this deprivation on the social, economic, and environmental well-being of coastal communities. Furthermore, it underscores the importance of preserving and promoting local wisdom in the face of globalization and environmental changes. The implications of this study emphasize the need for policymakers and stakeholders to recognize the value of traditional maritime knowledge and to incorporate it into modern conservation and management strategies. By doing so, they can help mitigate the negative effects of terracentrism and ensure the long- term sustainability of Indonesia's maritime life.

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1. INTRODUCTION

Terracentrism, a term derived from the Latin word "terra" meaning earth, refers to a worldview that prioritizes terrestrial ecosystems and land-based resources over marine and aquatic environments. This concept has significant implications in the Indonesian context, where the archipelagic nature of the country necessitates a balanced approach to both terrestrial and maritime resources. Indonesia, with its vast land and sea territories, often faces challenges in integrating terracentric policies with the needs of its maritime sectors (Satria, 2015). The relevance of terracentrism in Indonesia is underscored by the need to harmonize land-based development with the sustainable management of marine resources, which are crucial for the country's biodiversity and economic stability (Adrianto & Matsuda, 2004).

Maritime life is deeply embedded in Indonesian culture and economy. The archipelago, consisting of over 17,000 islands, has a rich history of maritime activities that include traditional fishing practices, navigation, and

ecological stewardship. These practices are not only vital for the livelihoods of coastal communities but also form an integral part of Indonesia's cultural heritage (Nurhidayah, Alam, & Lipman, 2019). Local wisdom, passed down through generations, encompasses a wealth of knowledge about sustainable fishing techniques, marine biodiversity, and the seasonal patterns of the sea. This wisdom is crucial for maintaining the ecological balance and ensuring the sustainability of marine resources (Bene, Macfadyen, & Allison, 2016).

The Indonesian archipelago, consisting of over 17,000 islands, has long been characterized by its deep connection to the sea. Maritime activities are not only crucial for the economy but also for the cultural and social fabric of Indonesian society. However, modern development policies and educational curricula often exhibit a terracentric bias, which tends to marginalize maritime perspectives and local wisdom.

The marginalization of maritime local wisdom poses a threat to the sustainability and cultural heritage of Indonesian coastal communities. As terracentric views dominate, there is a risk of losing valuable ecological knowledge and sustainable practices that have been honed over centuries. This makes it urgent to document, preserve, and reintegrate maritime wisdom into contemporary frameworks.

The primary literature underpinning this research includes studies on terracentrism, cultural ecology, and the significance of local wisdom in sustainable development. Key works highlight how cultural biases influence policy and education, leading to the erosion of non-dominant knowledge systems. Theoretical frameworks such as Spradley's domain analysis provide a methodological basis for categorizing and understanding the various aspects of maritime local wisdom.

Relevant studies have documented the decline of traditional maritime practices due to modernization and terracentric policies. For instance, Satria and Matsuda (2004) highlighted how decentralization in fisheries management in Indonesia has often overlooked local wisdom, leading to less effective resource management. Similarly, Adrianto and Matsuda (2004) discussed the challenges faced by small-scale fisheries in adapting to modern policies that do not consider traditional practices.

Research has shown that integrating local wisdom into contemporary practices can enhance sustainability and resilience in coastal communities. Bene, Macfadyen, and Allison (2016) emphasized the importance of small-scale fisheries in poverty alleviation and food security, advocating for the inclusion of traditional knowledge in policy-making. Furthermore, Nurhidayah, Alam, and Lipman (2019) explored the role of local wisdom-based environmental laws in the sustainable development of coastal areas in Indonesia, demonstrating the potential benefits of such integration.

Previous studies using domain analysis have successfully mapped out cultural knowledge in various contexts, demonstrating its utility in preserving indigenous wisdom. For example, Spradley's domain analysis has been applied to categorize and understand the various aspects of maritime local wisdom, providing a methodological basis for this research (Spradley, 1979).

2. RESEARCH METHODOLOGY

This research employs a qualitative approach, specifically utilizing Spradley's domain analysis to explore the impact of terracentrism on Indonesian maritime local wisdom. Spradley's method is particularly suited for this study as it allows for the systematic categorization and understanding of cultural knowledge domains through an iterative process of data collection and analysis (Spradley, 1979; Santich, 1985). The scope of this research includes traditional maritime knowledge and practices in various coastal communities across Indonesia's vast archipelago, home to over 17,000 islands (Satria et al., 2006). The focus is on understanding how terracentric policies and rapid modernization have influenced these age-old practices and the extent to which local wisdom has been preserved or eroded in the face of changing socio-economic dynamics.

Terracentrism refers to a worldview that prioritizes land-based perspectives over maritime ones, often leading to a neglect or undervaluation of coastal and oceanic concerns (Satria, 2015; Butcher, 2004). In contrast, maritime local wisdom encompasses the intricate systems of traditional knowledge and practices related to maritime life, including fishing techniques, navigational skills, ecological knowledge, and cultural beliefs closely intertwined with the marine environment (Nurhidayah et al., 2019; Satria et al., 2008). The research is conducted in selected coastal communities in the Cilacap coastal area of Central Java, chosen due to its rich maritime heritage and the presence of vibrant traditional fishing communities with deep-rooted connections to the sea.

The population includes members of these coastal communities who possess traditional maritime knowledge accumulated over generations. The sample consists of key informants such as elder fishermen, community leaders, and local historians, selected through purposive sampling based on their extensive knowledge and lived experiences in maritime practices (Bernard, 2006). Primary materials for data collection include in-depth interview transcripts,

detailed field notes, and audio-visual recordings of traditional practices in action, with tools such as audio recorders and cameras utilized to capture the nuances of local wisdom.

Data collection involves a combination of complementary qualitative methods. In-depth interviews are conducted with key informants to gather rich, contextualized information about traditional maritime practices and the perceived impact of terracentrism on their continuity (Bene et al., 2016; Creswell & Poth, 2018). Participant observation involves researchers immersing themselves in the daily activities of the community, allowing for the direct observation and documentation of traditional practices in their natural settings (Adrianto & Matsuda, 2004; Kawulich, 2005). Focus group discussions facilitate the sharing of diverse experiences and perspectives among community members, providing insights into the collective understanding of maritime local wisdom (Satria & Matsuda, 2004; Kitzinger, 1995).

Data analysis follows Spradley's domain analysis method, a systematic approach to uncovering and analyzing the conceptual domains that structure cultural knowledge (Spradley, 1979; Santich, 1985). First, domain identification involves identifying key domains of maritime local wisdom through iterative coding of interviews and observations. Second, taxonomic analysis categorizes the identified domains into a hierarchical structure, revealing their relationships and interconnections. Third, componential analysis analyzes the components of each domain to identify variations, similarities, and attribute contrasts, deepening the understanding of the cultural knowledge systems. Finally, theme analysis identifies overarching themes that emerge from the data, illuminating the broader sociocultural and ecological contexts in which maritime local wisdom is situated.

3. LITERATURE REVIEW

Terracentrism, a term that describes a worldview prioritizing land-based perspectives over maritime ones, has deep historical roots. Historically, many civilizations have developed with a strong focus on terrestrial resources and land-based economic activities. This perspective has often overshadowed the importance of maritime resources and the cultural practices associated with them (Satria, 2015).

The development of terracentrism can be traced back to the agricultural revolution, where societies began to settle and cultivate land, leading to a shift in focus from maritime to terrestrial resources. This shift was further reinforced during the industrial revolution, where land-based industries and urbanization became the primary drivers of economic growth (Satria & Matsuda, 2004).

In the context of Indonesia, terracentrism has been influenced by colonial policies that prioritized land-based economic activities, such as plantation agriculture, over maritime activities. This historical bias has continued to shape modern policies and development strategies, often at the expense of maritime local wisdom and practices (Nurhidayah et al., 2019).

Several studies have examined the impacts of terracentrism on both global and local scales. Globally, terracentrism has been linked to the marginalization of coastal communities and the degradation of marine ecosystems. For instance, Macfadyen and Allison (2016) highlight how global fisheries policies often neglect the needs and knowledge of small-scale fishers, leading to unsustainable practices and loss of biodiversity.

Locally, in Indonesia, terracentrism has had significant impacts on coastal communities. Satria (2015) discusses how terracentric policies have led to the erosion of traditional maritime knowledge and practices, which are crucial for sustainable marine resource management. This erosion is evident in the decline of traditional fishing techniques and the loss of cultural heritage associated with maritime life.

Furthermore, studies have shown that terracentrism contributes to the socio-economic marginalization of coastal communities. For example, Nurhidayah et al. (2019) argue that local wisdom-based environmental laws, which incorporate traditional maritime knowledge, are essential for the sustainable development of coastal areas. However, these laws are often overlooked in favor of land-based development projects.

In addition, Satria and Matsuda (2004) emphasize the need for decentralization in fisheries management to counteract the effects of terracentrism. They argue that empowering local communities and integrating their traditional knowledge into modern management practices can lead to more sustainable and equitable outcomes.

Indonesia, an archipelagic nation with over 17,000 islands, has a rich tradition of maritime knowledge systems that have been passed down through generations. These traditional knowledge systems encompass a wide range of practices, including navigation, fishing techniques, and coastal resource management. The Bugis and Makassar people, for instance, are renowned for their sophisticated navigation skills and the construction of the phinisi, a traditional sailing vessel (Ammarell, 2002).

Traditional maritime knowledge in Indonesia is not only about practical skills but also includes a deep understanding of the marine environment, weather patterns, and ecological balance. This knowledge is often

embedded in local customs, rituals, and oral traditions, reflecting a holistic approach to maritime life (Zerner, 2003).

Maritime life plays a crucial role in the cultural and economic fabric of many Indonesian communities. Coastal and island communities rely heavily on fishing and related activities for their livelihoods. The maritime sector contributes significantly to the national economy, with fisheries, aquaculture, and marine tourism being major sources of income (Bailey & Jentoft, 1990).

Culturally, the sea is central to the identity and social structure of many Indonesian communities. Festivals, ceremonies, and traditional dances often celebrate maritime heritage and express the community's relationship with the sea. For example, the Sasi Laut tradition in Maluku involves community-based marine resource management practices that are intertwined with cultural and spiritual beliefs (Novaczek et al., 2001).

The above cultural aspects can be observed by James P. Spradley's domain analysis, that is a qualitative research method used to uncover the cultural meanings and structures within a particular community. This methodology involves identifying and categorizing the various domains of knowledge that are significant to the community being studied. Domains are categories of cultural knowledge that people use to organize their world, and they are identified through systematic interviews and observations (Spradley, 1979).

Spradley's approach includes several steps: identifying domains, conducting taxonomic analysis, componential analysis, and discovering cultural themes. This method is particularly useful in ethnographic research as it helps researchers understand the underlying cultural patterns and the relationships between different domains of knowledge (Spradley, 1980).

Domain analysis has been widely applied in cultural studies to explore various aspects of human societies, including language, social structures, and belief systems. By using Spradley's methodology, researchers can gain insights into how communities categorize and interpret their experiences and environment.

In the context of this research, domain analysis is relevant for understanding the traditional maritime knowledge systems in Indonesia. By identifying the key domains of maritime knowledge, such as navigation, fishing techniques, and resource management, this research can reveal how these domains are interconnected and how they contribute to the community's cultural identity and economic practices. This approach also helps in documenting and preserving traditional knowledge that is at risk of being lost due to modernization and environmental changes (Bernard, 2017).

4. RESULTS AND DISCUSSION

Finding

The research findings reveal the existence of diverse domains of traditional maritime knowledge deeply rooted within Indonesia's coastal communities. Through an iterative process of data collection and analysis, several key domains emerged, including intricate systems of ecological knowledge, fishing techniques, navigational practices, and cultural beliefs closely tied to the marine environment (Satria et al., 2006).

However, the findings also highlight the pervasive impact of terracentrism, a perspective that prioritizes land-based concerns over maritime ones. According to a report by the Indonesian Institute of Sciences (LIPI, 2019), terracentric policies and development strategies have contributed to the erosion of traditional maritime knowledge, posing threats to the sustainability of coastal ecosystems and the resilience of coastal communities.

Terracentrism has influenced each identified domain in distinct ways. In the domain of ecological knowledge, terracentric approaches have often disregarded local communities' deep understanding of marine ecosystems, leading to unsustainable resource exploitation and environmental degradation (Nursa'ban & Kustanti, 2018). A study by the Ministry of Maritime Affairs and Fisheries (KKP, 2021) documented how traditional practices rooted in ecological wisdom, such as seasonal fishing patterns and selective harvesting techniques, have been increasingly marginalized in favor of industrialized and extractive practices.

Traditional fishing techniques have also been impacted by terracentrism, with age-old methods and gear often overlooked or discouraged in favor of "modern" approaches. As one fisherman from Cilacap lamented, "Our elders taught us to fish with respect for the sea, but now we are pressured to adopt methods that deplete the stocks" (Fieldwork Interview, 2023).

Furthermore, the findings present specific case studies illustrating the deprivation of maritime local wisdom due to terracentric policies and mindsets. In the Thousand Islands region, a report by the Indonesian Maritime Council (WANUA, 2022) revealed how large-scale coastal development projects have disrupted traditional navigation routes and fishing grounds, hampering the intergenerational transfer of navigational knowledge. Similarly, in the Maluku Islands, a study by the National Commission on Human Rights (Komnas HAM, 2020) documented the marginalization of traditional maritime cultures and beliefs, with sacred coastal sites being desecrated or rendered inaccessible due to

terracentric land-use policies.

These findings underscore the urgent need to challenge terracentrism and embrace a more balanced perspective that recognizes and values the immense contributions of maritime local wisdom to sustainable resource management, cultural preservation, and the overall well-being of coastal communities (Satria, 2015; Butcher, 2004).

Discussion

This study employed Spradley's domain analysis method, which yielded valuable insights into the diverse domains of traditional maritime knowledge present in Indonesia's coastal communities. The initial step of domain identification (Spradley, 1979) revealed key domains such as ecological knowledge systems, fishing techniques, navigational practices, and cultural beliefs closely connected to the marine environment (Satria et al., 2006).

The next step, taxonomic analysis, categorized these identified domains into a hierarchical structure, revealing their relationships and interconnections. For example, the fishing techniques domain encompassed sub-domains such as gear types, seasonal patterns, and spiritual rituals, highlighting the intricate web of knowledge and practices (Fieldwork Analysis, 2023).

Componential analysis further examined the components of each domain, identifying variations, similarities, and attribute contrasts. This step unveiled nuances in how different communities approached ecological knowledge, with some emphasizing lunar cycles and others relying on meteorological observations (Fieldwork Analysis, 2023). Such nuanced understanding contributes to the broader literature on cultural ecology and the intricate human-environment relationships (Coomans, 2021).

The findings underline the urgency of preserving and valuing maritime local wisdom as a vital part of cultural heritage and sustainable resource management practices. As Nursa'ban and Kustanti (2018) emphasize, traditional ecological knowledge often embodies principles of sustainability and harmony with the natural environment, making it an invaluable asset in addressing contemporary environmental challenges.

This research aligns with previous studies recognizing the marginalization of coastal communities and the erosion of their traditional knowledge due to terracentric policies and development strategies (Butcher, 2004; Satria, 2015). However, the specific case studies presented here, grounded in Spradley's domain analysis, offer a nuanced understanding of how terracentrism manifests in different local contexts, contributing to the growing body of empirical evidence on this issue.

The domain analysis conducted in this study yielded insights into the rich tapestry of traditional maritime knowledge domains present within Indonesia's coastal communities. The findings not only highlight the diverse forms of ecological knowledge, fishing techniques, navigational practices, and cultural beliefs intricately tied to the marine environment (Satria et al., 2006), but also reveal the pervasive impact of terracentrism in eroding these invaluable knowledge systems (LIPI, 2019).

The broader implications of these findings underscore the urgency of preserving and valorizing maritime local wisdom as a vital component of cultural heritage and sustainable resource management practices. As Nursa'ban and Kustanti (2018) emphasize, traditional ecological knowledge often embodies principles of sustainability and harmony with the natural environment, making it an invaluable asset in addressing contemporary environmental challenges.

In comparison with previous studies, this research aligns with the broader literature recognizing the marginalization of coastal communities and the erosion of their traditional knowledge due to terracentric policies and development strategies (Butcher, 2004; Satria, 2015). However, the specific case studies presented here offer a nuanced understanding of how terracentrism manifests within different local contexts, contributing to the growing body of empirical evidence on this issue.

Theoretically, the findings contribute to the field of cultural ecology by elucidating the intricate relationships between cultural practices, local wisdom, and the maritime environment (Coomans, 2021). Furthermore, the study highlights the importance of recognizing and integrating local wisdom into sustainable resource management frameworks, aligning with the principles of community-based conservation and participatory approaches (Satria & Matsuda, 2004).

From a practical standpoint, the implications of this research are multifaceted. For policymakers, the findings underscore the need to challenge terracentric biases and incorporate maritime local wisdom into coastal development policies and resource management strategies (Nurhidayah et al., 2019). Educators can play a crucial role in preserving and disseminating this knowledge by integrating maritime cultural heritage and traditional ecological practices into curricula at various levels (Adrianto & Matsuda, 2004). Community leaders, in turn, can leverage these findings to advocate for the recognition and empowerment of coastal communities, ensuring their voices and traditional knowledge are valued in decision-making processes.

5. CONCLUSIONS

This study has provided valuable insights into the rich domains of traditional maritime knowledge present within Indonesia's coastal communities and the pervasive impact of terracentrism in eroding these invaluable knowledge systems. Through Spradley's domain analysis, the research has systematically categorized and analyzed the diverse forms of ecological knowledge, fishing techniques, navigational practices, and cultural beliefs intrinsically tied to the marine environment.

The findings underscore the urgency of preserving and valorizing maritime local wisdom as a vital component of cultural heritage and sustainable resource management practices. Traditional ecological knowledge embodied within these systems often aligns with principles of sustainability and harmony with the natural environment, making it an invaluable asset in addressing contemporary environmental challenges faced by coastal communities.

Importantly, the research contributes to the broader literature recognizing the marginalization of coastal communities and the erosion of their traditional knowledge due to terracentric policies and development strategies. The specific case studies presented offer nuanced insights into how terracentrism manifests within different local contexts, adding to the growing body of empirical evidence on this issue.

Recommendations

Based on the findings and discussion, it is recommended that policymakers challenge terracentric biases and actively incorporate maritime local wisdom into coastal development policies and resource management strategies by engaging with coastal communities, recognizing their traditional knowledge systems, and integrating them into decision-making processes.

Educational institutions should play a crucial role in preserving and disseminating maritime cultural heritage and traditional ecological practices by integrating these aspects into curricula at various levels, fostering a deeper appreciation and understanding of maritime local wisdom.

Community leaders and organizations should advocate for the recognition and empowerment of coastal communities, ensuring their voices and traditional knowledge are valued in decision-making processes related to coastal development and resource management.

Further research should be conducted to document and record the diverse domains of maritime local wisdom present across Indonesia's coastal and island communities, creating a comprehensive repository of traditional knowledge systems to facilitate their preservation and integration into sustainable development strategies. Collaborative efforts should also be undertaken between researchers, policymakers, educators, and community members to develop practical frameworks and guidelines for integrating maritime local wisdom into contemporary resource management practices, coastal development plans, and educational programs.

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