

PRESERVING COASTAL CULTURAL HERITAGE: THE *NEBE* FISHING TRADITION IN PULAU PINANG, TAMBELAN DISTRICT, KEPULAUAN RIAU PROVINCE

Dhina Hardianti¹, Herdio Fernando², Ajahra Fatimah³ Nikodemus Niko⁴

^{1,2,3,4}Department of Sociology, Faculty of Social and Political Science, Universitas Maritim Raja Ali Haji, Tanjung Pinang, Indonesia

e-mail: nikodemusn@umrah.ac.id

ABSTRAK

Desa Pulau Pinang merupakan salah satu kawasan pesisir yang masih mempertahankan praktik budaya leluhur dalam kehidupan sehari-hari masyarakatnya. Salah satu tradisi yang masih bertahan hingga kini adalah *Nebe*, yaitu teknik penangkapan ikan secara tradisional yang dilakukan tanpa menggunakan jaring maupun umpan. Praktik ini memanfaatkan batang kayu untuk menemukan ikan yang bersembunyi di celah-celah batu atau karang di perairan dangkal sepanjang pesisir. Keberadaan tradisi ini menarik untuk dikaji karena tidak hanya berkaitan dengan aktivitas ekonomi masyarakat nelayan, tetapi juga merefleksikan pengetahuan lokal, keterampilan ekologis, serta nilai-nilai sosial yang diwariskan secara turun-temurun. Penelitian ini menggunakan pendekatan kualitatif dengan metode deskriptif untuk memahami makna sosial dan budaya dari praktik *Nebe* dalam kehidupan masyarakat Desa Pulau Pinang. Data diperoleh melalui observasi lapangan, wawancara dengan masyarakat setempat, serta dokumentasi terhadap pelaksanaan tradisi tersebut, khususnya pada saat kegiatan bersama maupun perlombaan antarwarga. Pendekatan ini memungkinkan peneliti menggambarkan secara mendalam bagaimana praktik *Nebe* dijalankan serta bagaimana masyarakat memaknai tradisi tersebut dalam konteks kehidupan sosial mereka. Hasil penelitian menunjukkan bahwa *Nebe* tidak hanya berfungsi sebagai teknik tradisional menangkap ikan, tetapi juga memiliki dimensi sosial dan budaya yang kuat. Tradisi ini menjadi simbol identitas masyarakat pesisir sekaligus mencerminkan hubungan harmonis antara manusia dan lingkungan laut. Selain itu, penyelenggaraan *Nebe* dalam bentuk perlombaan atau kegiatan komunal turut memperkuat interaksi sosial, solidaritas, dan rasa kebersamaan antarwarga. Praktik ini juga berperan dalam mentransmisikan nilai-nilai kearifan lokal seperti kerja sama, sportivitas, kejujuran, serta penghormatan terhadap warisan budaya leluhur kepada generasi muda. *Nebe* dapat dipahami sebagai bagian penting dari sistem budaya masyarakat Desa Pulau Pinang yang terus dipertahankan keberlanjutannya.

Kata Kunci: Tradisi Nebe, Pulau Pinang, Identitas, Budaya

ABSTRACT

Pulau Pinang Village represents a coastal community where ancestral cultural practices continue to be maintained in everyday social life. One of the traditions that remains practiced today is Nebe, a traditional fish-catching technique carried out without the use of nets or bait. This practice involves using a wooden stick to locate fish hiding within crevices among rocks or coral in the shallow coastal waters. The persistence of this tradition is significant not only because it relates to the economic activities of local fishermen, but also because it reflects locally embedded knowledge, ecological skills, and social values that have been transmitted across generations. This study employs a qualitative approach using a descriptive method to explore the social and cultural meanings of the Nebe practice within the community of Pulau Pinang Village. Data were collected through field observations, interviews with local residents, and documentation of the practice, particularly during communal activities and village competitions where Nebe is performed collectively. This methodological approach enables a deeper understanding of how the practice is carried out and how community members interpret its significance within their broader social life. The findings indicate that Nebe functions not merely as a traditional fishing technique but also embodies strong social and cultural dimensions. The tradition serves as a symbol of coastal community identity while reflecting a harmonious relationship between humans and the marine environment. Furthermore, the organization of Nebe in the form of competitions or communal events strengthens social interaction, solidarity, and collective belonging among villagers. The practice also plays an important role in transmitting local wisdom—such as cooperation, sportsmanship, honesty, and respect for ancestral heritage—to younger generations. In this sense, Nebe can be understood as an integral component of the cultural system of Pulau Pinang Village, whose continuity continues to be actively preserved by the community.

Keywords: *Nebe Tradition, Pulau Pinang, Identity, Culture*

I. INTRODUCTION

Coastal communities in many parts of Indonesia maintain cultural practices that reflect long-standing relationships between humans, marine environments, and inherited knowledge systems (Zamzami & Iwabuchi, 2025; Efendi et. Al., 2025). These traditions often function not merely as economic activities but as cultural frameworks through which communities interpret nature, social relations, and collective identity. Within this context, local fishing practices frequently embody ecological knowledge that has developed through generations of interaction with coastal ecosystems. Such practices are embedded in daily livelihood strategies while

simultaneously carrying symbolic meanings that strengthen community cohesion and cultural continuity.

Pulau Pinang Village represents one example of a coastal community where local traditions remain deeply integrated into everyday life. Historically, the village derives its name from the abundance of areca nut trees that once grew across the surrounding islands, leading the area to be locally remembered as “Pinang Seribu,” a reference to the large number of pinang fruits found there. Despite the social and economic changes experienced by many coastal areas, the community of Pulau Pinang continues to preserve several cultural practices inherited from earlier

generations. Among these practices, the tradition known as *Nebe* occupies a particularly distinctive position in the cultural life of the village.

Nebe refers to a traditional fish-catching technique performed without the use of nets or bait. Instead, fishers use a wooden stick to search for fish hidden among rocks and coral formations in shallow coastal waters. Conceptually, this practice illustrates a form of embodied ecological knowledge, where skill, experience, and environmental familiarity become essential components of the fishing process. In Pulau Pinang, *Nebe* is not limited to subsistence fishing; it has also developed into a communal cultural activity that is sometimes organized as a friendly competition among residents. Through such events, the practice becomes a social arena where cultural identity, cooperation, and local pride are publicly expressed (Rosenmann, Reese & Cameron, 2016).

The socio-economic life of Pulau Pinang residents remains closely connected to marine and coastal resources. Most households rely on fishing activities and the processing of dried coconuts, which are collected, dried, and later sold to local agents for further production such as cooking oil. At the same time, the village functions as a temporary refuge for *kapal lengkong*—fishing vessels that seek shelter along the coast during unfavorable weather conditions. These interactions often generate reciprocal exchanges between fishermen and local residents, reinforcing informal networks of cooperation within the coastal economy. Nevertheless, the sustainability of marine resources around the village has occasionally been threatened by destructive fishing practices, such as fish bombing conducted by actors from outside the island. Such activities highlight the tension

between local ecological stewardship and external pressures on marine environments.

From a conceptual perspective, traditions can be understood as socially reproduced practices transmitted across generations through informal learning processes (Ouma, 2022). They often operate as cultural mechanisms that preserve collective values and regulate social relations within communities. Scholars have emphasized that traditions are not simply repetitive actions but systems of meaning shaped by shared norms and historical experience. As noted by Finke (2004), traditional practices tend to emphasize depth of meaning and technical mastery rather than constant innovation, with intuitive cultural sensibilities guiding their continuation. Similarly, Nettle (2009) suggests that traditions function as patterned expressions of life that may evolve through social interaction and external influences.

Within this framework, traditions serve several important social functions: maintaining collective identity, structuring social interaction, and transmitting moral and cultural values across generations (Ismail, 2021). In many Indonesian communities, traditional practices also incorporate religious and cosmological dimensions that promote harmony between humans, nature, and spiritual beliefs. Consequently, the persistence of practices such as *Nebe* reflects more than the survival of a fishing technique; it illustrates the ongoing negotiation between livelihood, ecological knowledge, and cultural identity within coastal societies.

II. RESEARCH METHOD

This study employs a qualitative approach using an ethnographic method to explore the cultural meanings embedded in the *Nebe* tradition practiced by the

community of Pulau Pinang Village. Ethnography is particularly suitable for examining cultural practices because it enables researchers to understand how social meanings, values, and behaviors are produced and maintained within a specific cultural group. As explained by Creswell & Poth (2016), ethnography is a qualitative research procedure designed to describe, analyze, and interpret elements of a cultural group, including patterns of behavior, belief systems, and language that develop over time within a particular social setting.

Data for this study were collected through several qualitative techniques. The primary method was in-depth interviews with community members of Pulau Pinang Village, particularly individuals who actively participate in or possess knowledge about the *Nebe* tradition. These interviews focused on exploring the historical background, cultural meaning, modes of implementation, and social functions of *Nebe* within the everyday life of the community. Through these conversations, the study aimed to capture local perspectives and interpretations regarding the significance of the tradition.

In addition to interviews, the research involved direct participation and observation during the implementation of *Nebe* activities. Participatory observation allowed the researcher to closely examine patterns of interaction among participants, symbolic elements embedded in the practice, and the sequence of activities that occur during the tradition. This approach provided a deeper understanding of how *Nebe* operates as both a cultural performance and a social practice within the community.

Document analysis was also conducted to complement field observations and interview data. Relevant materials were collected from

village records, local written sources, and historical notes related to the *Nebe* tradition. These documents helped contextualize the historical development of the practice and supported the interpretation of empirical findings. Furthermore, visual documentation was used as an additional data source by capturing photographs of community members while performing the *Nebe* tradition, providing a descriptive record of the practice as it occurs in the local setting.

III. RESULT AND DISCUSSION

3.1 Overview of Pulau Pinang Village

Pulau Pinang Village is one of the coastal settlements located in Tambelan District, Bintan Regency. The village is characterized by a marine ecosystem with considerable biodiversity and abundant coastal resources, including the presence of sea turtles in its surrounding waters. Geographically, Pulau Pinang Village is situated approximately 444 kilometers from the administrative center of Bandar Sri Bintan and about 166 kilometers south of Tambelan. The village shares maritime boundaries with several nearby islands, including Mentebung Island and Pengikik Island. Access to Pulau Pinang is relatively limited and requires a combination of transportation modes. Visitors may travel by sea through ports such as Tanjung Pinang or Kijang, or via ferry services from Tanjung Uban. Alternatively, air transportation can be used to reach Tambelan District, after which travel continues by sea using small fishing vessels or motorboats (*kapal motor*), with the journey typically taking between five and six hours to reach the village.

The primary economic potential of Pulau Pinang Village is closely linked to the marine sector, with fishing serving as the main

livelihood for most residents. Within the local fishing economy, fishers can generally be categorized into three main types based on their methods and access to resources.

First, wage fishers (*nelayan buruh*) operate using fishing vessels and equipment that are financed or owned by local capital holders, commonly referred to as *tauke*. In this arrangement, the *tauke* provides boats and operational capital to the fishers. In return, fishers are required to sell their catch to the *tauke* at a previously agreed price. This patron–client relationship is common in many fishing communities and is also evident in Pulau Pinang Village, where many fishers rely on boats borrowed from *tauke* based in Tambelan.

Second, traditional fishers continue to practice small-scale fishing methods using relatively simple equipment such as nets, fishing lines, traps (*bubu*), and longlines (*rawai*). These fishers generally do not rely on modern navigation technologies such as GPS or fish-detection radar. Instead, they depend on traditional ecological knowledge accumulated through generational experience, including their understanding of wind directions, ocean currents, and seasonal fish migration patterns.

Third, modern fishers utilize more advanced fishing technologies and equipment. These fishers typically operate motorized boats and make use of navigation systems such as GPS—locally referred to as “satellite”—to determine fishing locations and navigation routes. Some vessels are also equipped with radar systems used to detect fish both in shallow and deeper waters. In addition, fishing boats from Pulau Pinang commonly use VHF radio communication

systems to maintain contact with other fishers while operating at sea.

Figure 1. the fishers in Pulau Pinang



Source: Field Documentation (2025)

The daily routines of fishers in Pulau Pinang also reflect the challenging environmental conditions of coastal livelihoods. Many fishers spend nights aboard their motorboats (*muto*), both to safeguard their vessels and to remain prepared for sudden weather changes. When extreme weather conditions occur, such as strong winds or high waves, fishers may relocate their boats to nearby villages where the waters provide safer shelter. Staying on board also allows fishers to monitor the condition of their vessels, particularly to prevent water from accumulating inside the boat due to leaks or rainfall. Regularly removing water from the boat helps protect the engine and ensures that fishing equipment and other belongings remain secure. These practices illustrate the adaptive strategies developed by fishers in Pulau Pinang as they navigate the uncertainties of working within a marine environment.

3.2 *Nebe* Tradition among the Coastal Community of Pulau Pinang

The coastal community of Pulau Pinang Village, located in Tambelan District, maintains a range of cultural practices that emerge from their long-standing interaction

with the marine environment. One of the traditions that continues to exist today is *Nebe*, a traditional fishing method that relies on the use of wooden sticks rather than nets or bait. This practice is typically carried out in shallow coastal waters and rocky shoreline areas, where fishers draw upon local knowledge of fish behavior, tidal patterns, and coral formations. Within the social life of the village, *Nebe* represents more than a subsistence activity; it forms part of the broader cultural system that structures relationships between community members and the coastal ecosystem.

Figure 1. *Nebe* Fishing Practice



Source: Field Documentation (2025)

The practice of *Nebe* is generally performed collectively. Participants begin by surrounding an area where fish are believed to gather, forming a circular formation led by one individual who guides the movement of the group. As fish become visible, participants strike the water using wooden sticks in order to herd the fish toward the shore, where they can be captured more easily. This cooperative process highlights the strong presence of collective values such as solidarity, cooperation, and communal participation within the social structure of Pulau Pinang. The catch is commonly shared for household consumption rather than being solely intended for commercial trade. In this sense, *Nebe* illustrates a form of local ecological wisdom developed through

continuous interaction with the marine environment, reflecting a fishing technique that remains relatively simple yet environmentally sustainable.

From a sociological and anthropological perspective, *Nebe* can be interpreted as a manifestation of traditional ecological knowledge that has been transmitted across generations (Ruddle, 1993; Asmani, Lemehiue & Sauer, 2018). The method embodies practical environmental awareness, demonstrating how communities adapt their livelihood practices to specific ecological conditions. Historically, the practice also functioned as an everyday strategy for securing food when households lacked other sources of protein (Niko, 2025; LaDuke, 1994). In addition to its practical function, *Nebe* occasionally becomes a communal event, particularly during national celebrations such as Independence Day competitions, where participants compete to obtain the largest number of fish.

Over time, however, the role of *Nebe* has evolved alongside broader technological and economic transformations in the fishing sector. While modern fishing equipment has gradually altered local livelihood practices, *Nebe* has persisted as a cultural symbol that reinforces social ties and collective identity within the community. The tradition is now frequently performed as part of communal gatherings or cultural events, serving as a means of strengthening social interaction among villagers. Despite these changes, the fundamental values embedded in the practice—such as solidarity, respect for nature, and appreciation of ancestral heritage—remain central to its continued relevance.

In this regard, the *Nebe* tradition can be understood as a socio-ecological adaptation

shaped by the geographical characteristics and natural resources of the Pulau Pinang coastal environment. As a community whose daily life is closely connected to the sea, residents have developed fishing techniques that correspond to the ecological conditions of shallow and rocky waters. The emergence of *Nebe* was not merely a matter of habit, but rather a practical response to limited technological resources and the need to utilize marine resources efficiently. Through this practice, informal social norms are also maintained, including the organization of roles during fishing activities, temporary leadership structures, and shared agreements regarding the distribution of the catch (Wahyuni et al., 2023). These unwritten rules function as mechanisms that regulate social interaction while maintaining balance within the fishing community.

Furthermore, *Nebe* operates as an important medium for the intergenerational transmission of cultural values. Participation by younger community members allows them to learn not only technical fishing skills but also broader social principles such as cooperation, patience, honesty, and respect for the natural environment. Through direct participation, cultural knowledge is transmitted experientially rather than through formal educational structures.

The persistence of *Nebe* also reflects broader processes of social change within the Pulau Pinang coastal community. Rather than abandoning traditional practices entirely, the community selectively preserves cultural elements that continue to hold symbolic and social significance. In this context, *Nebe* has gradually shifted from being a primary subsistence activity to becoming a cultural marker that reinforces a shared sense of identity among coastal residents.

At the same time, the everyday life of Pulau Pinang residents is shaped by a wider socio-economic structure typical of many fishing communities. Most households depend on marine-based livelihoods, working either as traditional fishers, wage fishers, or small-scale operators using more modern fishing technologies. This livelihood pattern also generates particular social relations, especially between fishers and capital owners (often referred to locally as *tauke*), which influence the distribution of fishing income and patterns of economic dependence. The community's reliance on marine resources makes them vulnerable to environmental fluctuations, including seasonal fish availability and extreme weather conditions.

As part of their adaptive strategies, residents maintain reciprocal relationships with fishers from outside the island, particularly crews of *kapal lengkong* that temporarily anchor along the coast during unfavorable weather. These interactions often involve exchanges of fish or other basic necessities, reinforcing informal networks of cooperation among coastal communities. At the institutional level, the presence of community-based surveillance groups (*Pokmaswas*) also demonstrates increasing collective awareness regarding the protection of marine resources, particularly in response to destructive fishing practices such as fish bombing conducted by external actors.

In addition to fishing activities, the community has diversified its livelihood strategies through the processing of mature coconuts, which are dried and later sold to local agents for further production. This household-based activity reflects the integration of family labor into the local economy and serves as an important supplementary source of income. Taken

together, these social, economic, and institutional dynamics form the broader context in which the *Nebe* tradition continues to exist. The tradition therefore cannot be understood solely as a cultural practice of fishing, but rather as part of a complex system of coastal life that encompasses ecological knowledge, social organization, economic adaptation, and the preservation of local cultural identity.

3.3 Gender Dynamic within the Nebe Tradition

The *Nebe* tradition practiced in Pulau Pinang Village reflects a distinct pattern of gendered division of labor commonly found in coastal communities. Men tend to dominate the physically demanding aspects of the activity, particularly the process of catching fish in shallow and rocky coastal waters. This activity is usually carried out collectively, with one individual acting as a temporary leader who directs the group in surrounding and driving the fish toward the shore using wooden sticks. The practice emphasizes attributes commonly associated with masculine roles within fishing societies, including physical endurance, the ability to confront waves and coastal currents, and practical ecological knowledge of marine conditions.

In contrast, women are more frequently involved in activities related to the post-catch stage of the livelihood system. Their roles include distributing fish for household consumption, processing marine products, and participating in other forms of domestic economic work, such as drying and processing mature coconuts. These responsibilities position women within the household-based economic sphere while simultaneously contributing to the

sustainability of family livelihoods. Such patterns illustrate how gendered labor structures shape the organization of economic activities in Pulau Pinang's coastal society.

This gendered division of roles also mirrors the broader social structure of the fishing sector in the village. Fishing activities—whether carried out by traditional fishers, wage laborers, or those using more modern equipment—are predominantly controlled by men. Meanwhile, women contribute through supporting activities that occur after the catch has been secured. Male dominance is also visible within local institutional structures, such as the community-based surveillance group (*Pokmaswas*), which is responsible for protecting coastal waters from destructive fishing practices, including fish bombing. The predominance of men in these institutional roles suggests that authority over marine resource management is largely concentrated among male community members.

As a consequence, women tend to have more limited participation in decision-making processes related to coastal resource governance, despite their dependence on marine resources and fishing outcomes for household subsistence. Within the implementation of *Nebe* itself, collective work patterns emphasize male solidarity in the role of primary fishers, while women generally provide logistical support from the shore, such as preparing equipment or processing the catch after the activity concludes. When *Nebe* is organized as a community competition, particularly during national celebrations such as Independence Day, the event can reinforce masculine forms of prestige, as success is often measured by the number of fish captured, which

contributes to the social recognition of male participants.

Nevertheless, certain situations reveal a more flexible pattern of gender interaction. For instance, during periods of unfavorable weather when fishing activities are reduced, exchanges between local residents and visiting *kapal lengkong* crews often involve women in processes of barter or trade, indicating their role within broader social and economic networks. In addition, women in Pulau Pinang have developed alternative sources of income through small-scale coconut processing activities. This process typically involves drying, crushing, and packaging mature coconuts before selling them to local agents, thereby providing supplementary household income beyond fishing activities.

Despite these contributions, infrastructural limitations—such as restricted access to electricity and clean water—tend to affect women more significantly, as domestic responsibilities place them at the center of household management (Niko et al., 2024). Such conditions can limit women's mobility and participation in broader public activities within the community. These dynamics reflect a pattern of gender adaptation commonly found in coastal societies, where biological considerations, such as the physical demands of fishing, intersect with socially constructed roles related to household care and resource management.

A central challenge within this structure lies in the unequal distribution of access to economic resources. Men typically control fishing capital, including boats and financial relationships with fish traders or *tauke*, while women's economic roles remain closely tied to domestic and small-scale household production. However, opportunities for

gradual change are emerging, particularly through the increasing use of digital media to document and promote local cultural traditions such as *Nebe*. These platforms may create new spaces for women to participate in cultural representation and community promotion.

From a sociological perspective, the gender configuration observed in Pulau Pinang Village reflects patterns widely found in many Indonesian coastal communities, where traditional practices often reinforce patriarchal structures while simultaneously adapting to evolving economic and social conditions. The persistence of these dynamics demonstrates how cultural traditions, economic organization, and gender relations remain interconnected within the broader context of coastal livelihoods.

IV. CONCLUSION AND RECOMENDATION

4.1 Conclusion

The findings demonstrate that the *Nebe* tradition in Pulau Pinang Village represents more than a conventional fishing technique; it constitutes an integral component of the coastal community's cultural and socio-ecological system. Practiced collectively in shallow and rocky coastal waters, *Nebe* embodies local ecological knowledge that has been developed through generations of interaction with the marine environment. The tradition illustrates how communities adapt their livelihood practices to specific ecological conditions while simultaneously maintaining social cohesion through cooperation, collective leadership, and shared distribution of resources. Although modern fishing technologies have increasingly influenced local livelihoods, *Nebe* continues to persist as

a cultural marker that reinforces community identity, social solidarity, and respect for ancestral heritage within the coastal society of Pulau Pinang.

At the same time, the continuation of the *Nebe* tradition is closely connected to broader social dynamics within the village, including gender relations, economic structures, and local institutional arrangements. The practice reflects a gendered division of labor typical of fishing communities, where men predominantly engage in fishing activities while women contribute through post-harvest processing and household-based economic roles. In addition, the livelihood system of Pulau Pinang is shaped by diverse fishing practices, patron–client relations between fishers and capital owners, and adaptive strategies in response to environmental uncertainties. Within this context, *Nebe* functions not only as a cultural practice but also as a social mechanism through which ecological awareness, cooperative values, and cultural knowledge are transmitted across generations, thereby supporting the resilience and continuity of coastal community life.

4.2 Recommendation

Several recommendations can be proposed based on the findings of this study. First, local traditions such as *Nebe* should be recognized and supported as part of the cultural heritage of coastal communities. Local governments and cultural institutions may play an important role in documenting, preserving, and promoting this tradition through cultural programs, community festivals, or educational initiatives. Such efforts can strengthen cultural identity while also raising awareness of local ecological

knowledge embedded in traditional fishing practices.

Second, community development programs in Pulau Pinang Village should consider strengthening the participation of both men and women in cultural and economic activities related to coastal resources. Support for sustainable fisheries management, improvement of basic infrastructure, and the promotion of alternative livelihoods—such as small-scale coconut processing and community-based tourism—can contribute to improving the welfare of local residents. In addition, encouraging the involvement of younger generations in cultural documentation and digital promotion may help ensure the long-term continuity of the *Nebe* tradition while adapting to contemporary social changes.

REFERENCES

- Aswani, S., Lemahieu, A., & Sauer, W. H. (2018). Global trends of local ecological knowledge and future implications. *PloS one*, *13*(4), e0195440. <https://doi.org/10.1371/journal.pone.0195440>
- Berkes, F., Colding, J., & Folke, C. (2000). Rediscovery of traditional ecological knowledge as adaptive management. *Ecological applications*, *10*(5), 1251-1262. [https://doi.org/10.1890/1051-0761\(2000\)010\[1251:ROTEKA\]2.0.CO;2](https://doi.org/10.1890/1051-0761(2000)010[1251:ROTEKA]2.0.CO;2)
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Efendi, A. N., Ahmadi, A., Indarti, T., Kurniawati, E., Sya'adah, H., Sanubarianto, S. T., & Rokhmawati, Z. (2025). Retro-Propective analysis of indigenous ecological narratives:

- Ecosemiotic-cultural perspectives on sustainable development. *Entita: Jurnal Pendidikan Ilmu Pengetahuan Sosial dan Ilmu-Ilmu Sosial*, 205-220. <https://doi.org/10.19105/ejpis.v1i.19094>
- Finke, R. (2004). Innovative returns to tradition: Using core teachings as the foundation for innovative accommodation. *Journal for the scientific study of religion*, 43(1), 19-34. <https://doi.org/10.1111/j.1468-5906.2004.00215.x>
- Ismail, A. B. (2021). Tradition and Social Identity Formation in Society. *Journal of Social Science Studies*, 1(2), 221-226.
- LaDuke, W. (1994). Traditional ecological knowledge and enviromental futures. *Colo. J. Int'l Envtl. L. & Pol'y*, 5, 127.
- Nettle, D. (2009). Beyond nature versus culture: cultural variation as an evolved characteristic. *Journal of the Royal Anthropological Institute*, 15(2), 223-240. <https://doi.org/10.1111/j.1467-9655.2009.01561.x>
- Niko, N. (2025). Indigenous Women in the Food Chain System: The Marginalization and Alienation of Indigenous Knowledge on Environmental Management. *Asian Politics & Policy*, 17(2), e70014. <https://doi.org/10.1111/aspp.70014>
- Niko, N., Widianingsih, I., Sulaeman, M., & Fedryansyah, M. (2024). Indigenous Women's Connection to Forest: Colonialism, Lack of Land Ownership and Livelihood Deprivations of Dayak Benawan in Indonesia. *Feminist Encounters: A Journal of Critical Studies in Culture and Politics*, 8(1). <https://doi.org/10.20897/femenc/14233>
- Ouma, A. (2022). Intergenerational learning processes of traditional medicinal knowledge and socio-spatial transformation dynamics. *Frontiers in Sociology*, 7, 661992. <https://doi.org/10.3389/fsoc.2022.661992>
- Rosenmann, A., Reese, G., & Cameron, J. E. (2016). Social identities in a globalized world: Challenges and opportunities for collective action. *Perspectives on psychological science*, 11(2), 202-221. <https://doi.org/10.1177/1745691615621272>
- Ruddle, K. (1993). The transmission of traditional ecological knowledge. *Traditional ecological knowledge: concepts and cases*, 1(10), 17-31.
- Wahyuni, S., Syafitri, R., Niko, N., & Ahsan, Z. R. (2023). Affirmation of Traditional Rights and Indigenous Women's Knowledge on Post-Mining Livelihood in Dompok Island, Riau Islands. *Indonesian Journal of Social and Environmental Issues (IJSEI)*, 4(2), 133-141. <https://doi.org/10.47540/ijsei.v4i2.940>
- Zamzami, L., & Iwabuchi, A. (2025). Perspectives of the Framework of Maritime Anthropology in Development in Indonesia. *Journal of Global South Development Studies*, 1(1), 1-1.