

The Role of Islamic Principles in Shaping Landscape Architecture: Insights from NTB, Sumenep, and Malaysia

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Abstract

This study examines the integration of Islamic principles into landscape architecture, emphasizing the spiritual, ecological, and cultural dimensions of design. Using a qualitative descriptive approach, the paper explores theoretical foundations drawn from the Qur'an and classical Islamic landscapes, alongside empirical cases from Indonesia (West Nusa Tenggara and Sumenep) and Malaysia. The findings demonstrate that Islamic values such as tauhid (unity), mizan (balance), khalifah (stewardship), and ihsan (excellence) provide a normative framework for sustainable landscape design. In Indonesia, pesantren gardens, mosque courtyards, and royal landscapes illustrate how Islamic ethics are localized in vernacular ecologies, while in Malaysia, contemporary Islamic gardens in urban centers reflect institutionalized approaches to sustainable design. By combining Islamic environmental ethics with landscape theory, this research argues that Islamic landscapes are not merely historical relics but evolving practices that strengthen cultural identity, ecological resilience, and spiritual meaning in contemporary urbanism.

Keywords: *Islamic landscape, sustainability, stewardship, cultural identity*

Abstrak

Penelitian ini mengkaji integrasi prinsip-prinsip Islam dalam arsitektur lanskap dengan menekankan dimensi spiritual, ekologi, dan budaya dalam desain. Dengan menggunakan pendekatan kualitatif deskriptif, kajian ini menelusuri fondasi teoritis dari Al-Qur'an dan lanskap Islam klasik, serta menganalisis kasus empiris dari Indonesia (Nusa Tenggara Barat dan Sumenep) dan Malaysia. Temuan menunjukkan bahwa nilai-nilai Islam seperti tauhid (keesaan), mizan (keseimbangan), khalifah (kepemimpinan ekologis), dan ihsan (keindahan dan kesempurnaan) memberikan kerangka normatif untuk desain lanskap berkelanjutan. Di Indonesia, taman pesantren, halaman masjid, dan lanskap keraton menggambarkan bagaimana etika Islam dilokalisasi dalam ekologi setempat, sementara di Malaysia taman Islam kontemporer di kawasan

perkotaan mencerminkan pendekatan institusional terhadap desain berkelanjutan. Dengan menggabungkan etika lingkungan Islam dan teori lanskap, penelitian ini menegaskan bahwa lanskap Islam bukan sekadar warisan sejarah, melainkan praktik yang terus berkembang dalam memperkuat identitas budaya, ketahanan ekologi, dan makna spiritual dalam perkotaan kontemporer.

Kata kunci: lanskap Islam, keberlanjutan, khalifah, identitas budaya

INTRODUCTION

Islamic civilizations historically embedded deep reverence for nature into their spatial designs. The Qur'an repeatedly depicts gardens as metaphors of paradise, such as *in jannāt tajrī min taḥtihā al-anhār* (gardens beneath which rivers flow; QS. Al-Baqarah: 25). These descriptions are not only eschatological promises but also cultural blueprints that shaped the Islamic worldview toward the environment. In this sense, the garden is both a theological construct and an architectural manifestation that reflects the harmonious relationship between humans, nature, and the Creator.

The legacy of Islamic landscape architecture is evident in iconic historical sites such as the Alhambra in Spain, the Taj Mahal in India, and the Shalimar Gardens in Lahore. These sites demonstrate how geometry, water elements, vegetation, and spatial order were carefully orchestrated to symbolize divine unity and balance. Scholars argue that such spaces exemplify the principle of *ihsan*—the pursuit of beauty and excellence in human creation that resonates with divine perfection (Grabar, 1999; Ruggles, 2008). The endurance of these landscapes underscores their cultural significance and their potential as models for contemporary practice.

In today's context, however, Muslim societies are confronted with escalating environmental crises. Rapid urbanization, climate change, and unsustainable resource use have created ecological strain while simultaneously eroding spiritual connections to nature. This disconnection contradicts the Qur'anic principle of *khalīfah fil-ardh* (human stewardship of the earth), raising urgent questions about how Islamic values can inform more sustainable design practices. Restoring the link between spirituality and ecology in landscape planning is therefore not merely an aesthetic concern but a moral and theological imperative.

Recent scholarship highlights the compatibility between Islamic environmental ethics and contemporary sustainability discourses. Concepts such as *mīzān* (balance), *wasatiyyah* (moderation), and *prohibition of isrāf*

(wastefulness) align closely with modern ecological principles, including resource efficiency, biodiversity conservation, and climate resilience (Foltz, 2003; Sardar, 2011; Ismail et al., 2020). Integrating these values into landscape architecture offers pathways to design green spaces that are not only environmentally functional but also spiritually resonant, fostering both ecological health and communal well-being.

This study aims to investigate the intersection of Islamic principles and landscape architecture. Specifically, it seeks to: (1) identify core Islamic design principles relevant to landscaping; and (2) analyze how these principles were manifested in classical gardens and their adaptation in modern urban contexts; By doing so, this research contributes to the discourse on sustainable landscape architecture while reaffirming Islam's holistic vision of the human-nature relationship.

LITERATURE REVIEW

The study of landscape in architectural and planning theory often positions landscape as both a physical environment and a cultural construct. Carl Sauer (1925) famously defined cultural landscapes as products of human interaction with the natural environment, while later scholars such as Cosgrove (1984) emphasized landscape as a way of seeing, shaped by ideology and symbolic meaning. In Islamic civilization, landscape similarly transcends its physicality; it is understood as a reflection of divine order, where spatial organization, vegetation, and water features are embedded with spiritual symbolism (Ruggles, 2008). This epistemological convergence between secular landscape theory and Islamic landscape philosophy provides a strong foundation for reinterpreting contemporary spaces in Muslim-majority contexts such as Indonesia.

Central to Islamic landscape thought is the doctrine of *tawḥīd* (the unity of God), which extends into a vision of unity across creation. Seyyed Hossein Nasr (1968) argues that Islam perceives nature as a sacred reality, not merely a backdrop for human activity but an integral part of divine manifestation. Within this framework, designing landscapes becomes an act of aligning human settlements with the natural order established by God. In parallel, landscape theory emphasizes ecological balance, resilience, and interdependence (Spirn, 1998), indicating a natural resonance between Islamic metaphysics and contemporary ecological design practices.

The Qur'anic imagery of *jannah* (paradise) has historically inspired the aesthetics and planning of Islamic gardens, where flowing water, shade-giving trees, and symmetrical geometry embody both sensory pleasure and

metaphysical order. Such designs, exemplified in Mughal and Andalusian gardens, demonstrate how landscape functions simultaneously as an ecological system and a spiritual symbol (Ruggles, 2008; Grabar, 1999). In Indonesia, this tradition finds expression not in palatial gardens but in the everyday integration of courtyards, communal wells, and shaded mosque compounds that reflect both climatic adaptation and religious sensibilities.

Indonesia's unique landscape—marked by tropical biodiversity, volcanic soil, and abundant rainfall—offers fertile ground for embedding Islamic values into spatial design. The widespread presence of mosque courtyards (*halaman masjid*), *pesantren* gardens, and sacred groves (*hutan keramat*) illustrates how local Muslim communities reinterpret Islamic landscape ideals within vernacular ecological settings (Ismail et al., 2020). Such practices mirror Sauer's cultural landscape thesis, where local ecologies are modified under the guidance of cultural and religious worldviews. Hence, the Indonesian case underscores how Islamic principles are not imported abstractions but localized practices deeply rooted in place-based ecological wisdom.

At the same time, rapid urbanization in Indonesian cities poses challenges to maintaining the ecological and spiritual integrity of landscapes. Sprawling developments, commercial exploitation of green spaces, and the decline of water-sensitive design stand in stark contrast to the Qur'anic prohibition against *isrāf* (wastefulness) (QS. Al-A'raf: 31). Integrating Islamic ethics into urban landscape design could therefore counterbalance unsustainable practices. As Foltz (2003) and Sardar (2011) argue, Islamic environmental ethics provide a moral anchor for sustainability, advocating moderation (*wasatiyyah*) and stewardship (*khalifah fil-ardh*) as guiding principles for environmental planning.

Furthermore, Indonesian landscape scholarship emphasizes resilience and multifunctionality of green infrastructure (Nurisyah, 2016; Setiawan & Nasution, 2021). When combined with Islamic values, this perspective can generate a hybrid framework for sustainable urban landscapes that are ecologically resilient, socially inclusive, and spiritually meaningful. For example, integrating rainwater gardens in mosque courtyards or establishing edible landscapes around *pesantren* could embody both ecological adaptation and Islamic ethical values. This synthesis positions Islamic landscape thought as not merely heritage but a dynamic and contemporary design paradigm.

Inference, theoretical dialogues between landscape studies and Islamic philosophy reveal significant synergies that are particularly relevant to Indonesia. Landscape theory highlights human-environment interdependence, while Islam frames this relationship in moral and theological

terms. The Indonesian context provides a living laboratory where these concepts intersect in everyday practice, from mosque courtyards to sacred groves. Re-engaging Islamic ethics in landscape planning can thus enrich both sustainability discourse and religious practice, ensuring that future landscapes embody ecological functionality, cultural identity, and spiritual resonance.

METODE

The integration of Islamic values into landscape architecture has increasingly become a subject of scholarly attention, particularly as Muslim societies revisit the Qur'anic principles of balance (mizan), stewardship (khalifah), and sustainability in urban contexts. To examine these intersections, this study employs a qualitative approach with descriptive analysis, focusing on textual sources, case studies, and site-based observations. The paper is structured in three stages: first, it reviews theoretical and historical foundations of Islamic landscape traditions; second, it analyzes empirical cases from Indonesia and Malaysia to illustrate contemporary applications; and finally, it synthesizes findings to propose a conceptual framework for understanding Islamic landscapes as both cultural heritage and sustainable practice. By combining literature review, interpretive analysis, and contextual case discussion, the paper demonstrates how landscape architecture can be read as both a spatial and spiritual expression of Islam (Creswell & Poth, 2018; Miles et al., 2020).

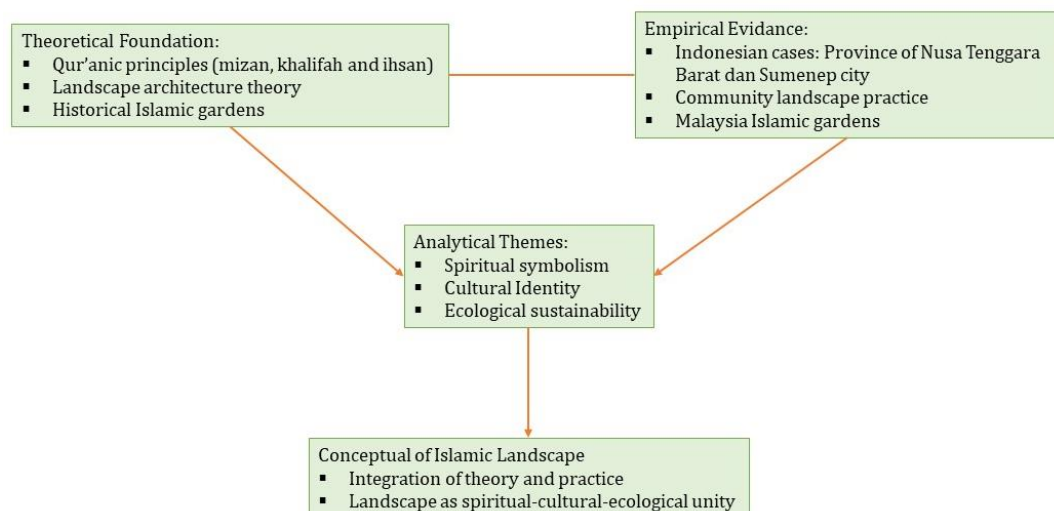


Figure 1: Conceptual of Islamic Landscape Framework

The conceptual framework of this study is grounded in the intersection of Islamic principles and landscape theory, structured to provide an integrative understanding of how spirituality, culture, and ecology interact in shaping the built and natural environment. The theoretical foundation draws on Qur'anic concepts such as *mizan* (balance), *khalifah* (stewardship), and *ihsan* (excellence), which provide normative guidance for environmental stewardship and spatial order. These principles are further contextualized through classical landscape theories and the historical precedent of Islamic gardens, which symbolize paradise and harmony between humans and nature (Ruggles, 2008; Omer, 2021).

Building upon these foundations, empirical evidence is drawn primarily from the Indonesian and Malaysian contexts. In Indonesia, examples from *pesantren* environments, traditional settlements in Sumenep, and community landscapes in West Nusa Tenggara (NTB) illustrate the ways in which Islamic values are materialized in everyday landscape practices. These cases highlight the integration of prayer spaces, water elements, and shaded communal areas that reflect both functional and spiritual needs (Syafurudin & Pradoto, 2019). Meanwhile, Malaysian Islamic Garden designs further enrich the empirical perspective by demonstrating formalized interpretations of Qur'anic symbolism in landscape planning (Nasir & Musa, 2022).

The synthesis of theoretical and empirical insights leads to the identification of three analytical themes: spiritual symbolism, cultural identity, and ecological sustainability. These themes serve as bridging elements that explain how Islamic teachings are embedded within local landscape practices and how they can be adapted in modern design. Finally, the conceptual framework proposes the Islamic Landscape as a holistic model, emphasizing the unity of spiritual, cultural, and ecological dimensions. This framework not only strengthens the cultural identity of Muslim communities but also provides design guidelines that align with global sustainability agendas, positioning Islamic landscape architecture as both a local tradition and a universal paradigm for resilient and ethical environmental design.

RESULT AND DISCUSSION

The findings of this study demonstrate that Islamic landscape principles, derived from Qur'anic teachings and Prophetic traditions, continue to play a vital role in shaping spatial practices in Indonesia and Malaysia. The concept of *tauhid*—the unity between Creator, humans, and nature—provides a theological foundation that ensures landscapes are not only ecological systems but also spaces of spiritual orientation. This unity is visible in

community-based landscapes such as pesantren gardens, where design decisions reflect the interconnectedness of learning, prayer, and nature (Nurrahmah et al., 2022). In this sense, Islamic landscape design diverges from purely aesthetic approaches and instead emphasizes an ecological-spiritual synthesis, aligning closely with landscape theory's recognition of the cultural and symbolic layers of space (Corner, 1999; Antrop, 2006).

In the case of West Nusa Tenggara (NTB), the Islamic Center of Mataram exemplifies this integration. The design combines monumental architecture with landscaped plazas, water elements, and shaded spaces that embody both functional and symbolic purposes (Walidaen et al., 2017). These spaces are not only utilized for worship but also for social interaction and education, representing a multi-functional Islamic landscape. This corresponds with the idea of "landscape as palimpsest" in landscape theory, where layers of meaning, history, and function coexist within a single environment (Ingold, 2011). The NTB case demonstrates how contemporary Islamic landscapes can act as nodes of cultural identity, simultaneously reinforcing local religious expression and promoting ecological awareness.

Similarly, the Keraton Sumenep in Madura represents a historical manifestation of Islamic landscape traditions in Indonesia. Its mosque and palace gardens embody symbolic elements derived from Islamic cosmology, while also integrating Javanese cultural motifs (Sujai & Alfian, 2024). This layered hybridity reflects Cosgrove's (1998) notion of landscape as a cultural image, where spatial forms are shaped by both religious worldviews and local cultural adaptations. The Keraton landscape thus serves as a living testimony of how Islamic values were historically localized, creating a unique synthesis that remains socially and spiritually relevant today.

In Malaysia, the Islamic Garden movement has become an institutionalized framework for sustainable urban design. Projects in Putrajaya and Kuala Lumpur adopt Islamic Garden typologies—such as the charbagh and geometric water channels—not merely as aesthetic features but as ecological strategies for cooling, water management, and biodiversity conservation (Jani et al., 2018; Nasir & Musa, 2022). These initiatives align Islamic principles of khalifah (stewardship) with global sustainability goals, particularly SDG 11 on sustainable cities. This suggests that Islamic landscape design can provide a culturally embedded alternative to imported Western sustainability models, offering context-sensitive approaches rooted in faith and identity.

The discussion across NTB, Sumenep, and Malaysia also highlights the centrality of water as both a spiritual and ecological element. In Islamic teachings, water is considered a symbol of purity and life (Qur'an, 21:30). Landscape theory similarly identifies water as a structuring element of place,

shaping ecological patterns and social practices (Nassauer, 1995). In NTB's plazas, Sumenep's palace gardens, and Malaysia's contemporary Islamic parks, water features are not only visually significant but also functionally critical for microclimate regulation, biodiversity, and ritual purification. This dual role reinforces the Islamic imperative to balance form, function, and faith.

Another key finding is the principle of moderation (*wasatiyyah*) and avoidance of extravagance (*israf*), which has direct implications for landscape sustainability. Empirical evidence from pesantren landscapes in Indonesia reveals design practices that prioritize native vegetation, low-cost maintenance, and multifunctional spaces, reflecting Islamic ethics of moderation (Nurrahmah et al., 2022). From a theoretical perspective, this resonates with Sporn's (1998) ecological urbanism, which advocates for design grounded in natural processes and cultural narratives. The pesantren gardens, therefore, stand as contemporary laboratories of Islamic environmental ethics in practice.

The principle of *ihsan*—creating beauty with excellence—also emerged strongly across the cases studied. In NTB, aesthetic dimensions of gardens and plazas are carefully integrated with spiritual symbolism, while in Sumenep, architectural ornamentation and landscape form reveal a harmonious balance between utility and transcendence. This reflects the idea that landscapes are not passive backdrops but active mediums for cultivating moral and spiritual sensibilities (Clope & Jones, 2001). The Islamic aesthetic paradigm, therefore, advances a deeper dimension of landscape experience by fostering reflection, humility, and remembrance of God, moving beyond superficial visual pleasure.

By bringing together empirical insights from Indonesia and Malaysia, this study illustrates that Islamic landscape design is both a cultural heritage and a living, evolving practice. The Keraton gardens of Sumenep represent historical continuity, the NTB Islamic Center demonstrates regional adaptation, and Malaysia's Islamic parks showcase modern institutionalization. Collectively, these examples reinforce landscape theory's assertion that landscapes are dynamic processes shaped by historical memory, cultural identity, and ecological conditions (Antrop, 2006). The Islamic perspective adds a distinctive moral-spiritual layer to this dynamic, offering unique contributions to global landscape discourse.

Importantly, these cases also point toward the relevance of Islamic landscape principles for addressing contemporary urban challenges. Issues such as climate change, urban heat islands, and declining public spirituality demand integrative solutions. The ecological ethics of *khalifah* and *mizan* (balance) provide a normative framework for embedding sustainability into everyday landscapes. As recent scholarship has shown, Islamic gardens can be reimagined as sustainable urban infrastructures that contribute to

biodiversity, water management, and cultural education (Salam et al., 2025). Thus, Islamic landscapes are not static relics but dynamic tools for resilient and ethical urbanism.

Finally, the synthesis of results and discussion underscores that Islamic landscape architecture in Indonesia and Malaysia represents more than just a stylistic tradition. It is a comprehensive worldview that integrates theology, ecology, and culture into spatial practice. By situating Islamic values within broader landscape theory, this study argues that Islamic landscape architecture can function as a bridge between global sustainability discourse and local cultural contexts. This framework reaffirms that landscapes are simultaneously ecological systems, cultural texts, and spiritual sanctuaries—dimensions that are inseparable in the Islamic worldview.

CONCLUSION

A. Conclusion

This study concludes that Islamic landscape design, when interpreted through the principles of tauhid (unity of God), jannah (paradise imagery), ihsan (excellence in practice), and sustainability, provides a holistic framework for rethinking the relationship between humans, the environment, and spirituality. Rather than limiting itself to ornamental forms, Islamic landscape embodies an integrated worldview that connects ecological resilience, cultural identity, and religious values. The synthesis of theoretical perspectives with case studies from Indonesia and Malaysia demonstrates that such an approach can enrich both the academic discourse and practical applications of contemporary landscape architecture.

The findings also highlight the unique role of local contexts—such as the Islamic Center in NTB and the Keraton landscape of Sumenep—as living laboratories for integrating Islamic values into spatial design. These cases illustrate that Islamic landscapes are not only heritage markers but also evolving cultural assets that reflect community aspirations, ecological sensitivity, and faith-based stewardship. By drawing on both traditional wisdom and modern landscape theory, these examples reveal pathways for urban design that remain locally grounded while responding to global challenges.

B. Recommendation

Based on this conceptual exploration, it is recommended that future research adopt a qualitative, participatory approach to involve communities, religious leaders, and local governments in shaping landscapes that embody

Islamic principles. Such participatory methods would not only validate cultural relevance but also enhance public acceptance and long-term sustainability. Furthermore, integrating Islamic landscape concepts into academic curricula and professional training can ensure that future practitioners are equipped with both theoretical and practical knowledge to design spaces that harmonize faith, culture, and ecology.

Policymakers and urban planners are encouraged to recognize Islamic landscape design as a potential model for faith-based urban sustainability. Embedding its principles into planning regulations, heritage preservation strategies, and green infrastructure development could strengthen resilience while preserving spiritual identity. By doing so, Indonesia and Malaysia may emerge as leaders in advancing an alternative, value-driven framework for sustainable urban landscapes that can inspire other Muslim-majority contexts across the globe.

C. Limitation and Future research

This study is primarily conceptual in nature, relying on qualitative descriptive analysis and the synthesis of existing literature with selected empirical cases from Indonesia and Malaysia. While this approach provides a robust theoretical foundation, it also limits the depth of empirical verification. The case illustrations, though insightful, do not represent the full diversity of Islamic landscape practices across different regions. For instance, urban contexts in Java, rural environments in Sumatra, and coastal settlements in Eastern Indonesia may demonstrate unique landscape dynamics that were not fully captured within the scope of this paper.

Another limitation lies in the reliance on secondary data and existing scholarship, which may not fully reflect the most recent community-driven innovations or informal practices emerging at the grassroots level. Direct fieldwork, including ethnographic observations, participatory mapping, and interviews with stakeholders, would provide richer insights into how Islamic values are enacted and negotiated in contemporary landscape practices. Moreover, while this study has referenced comparative perspectives from Malaysia, broader cross-cultural comparisons with other Muslim-majority countries in the Middle East, South Asia, and North Africa remain unexplored.

Future research should therefore pursue more empirical, field-based investigations that engage with communities, local authorities, and professional practitioners. Mixed-method approaches—combining qualitative ethnography with spatial analysis, GIS mapping, or even landscape performance metrics—could enhance the robustness of findings. Such methods would also allow researchers to better evaluate the ecological, social, and spiritual impacts of Islamic-inspired landscape designs in measurable

terms.

Additionally, there is significant potential for exploring how Islamic landscape principles intersect with global sustainability frameworks, such as the United Nations Sustainable Development Goals (SDGs) and the Resilient Cities agenda. Future studies could focus on operationalizing Islamic concepts of stewardship (khalifah) and balance (mizan) into planning indicators, policy guidelines, and design standards. This would not only bridge the gap between faith-based values and scientific methodologies but also position Islamic landscape architecture as a critical contributor to sustainable urban futures on a global scale.

BIBLIOGRAPHY

- Antrop, M. (2006). Sustainable landscapes: Contradiction, fiction or utopia? *Landscape and Urban Planning*, 75(3-4), 187–197. <https://doi.org/10.1016/j.landurbplan.2005.02.014>
- Cloke, P., & Jones, O. (2001). Dwelling, place, and landscape: An orchard in Somerset. *Environment and Planning A*, 33(4), 649–666. <https://doi.org/10.1068/a3383>
- Corner, J. (1999). The agency of mapping: Speculation, critique and invention. In D. Cosgrove (Ed.), *Mappings* (pp. 213–252). London: Reaktion Books.
- Cosgrove, D. (1998). *Social formation and symbolic landscape* (2nd ed.). Madison: University of Wisconsin Press.
- Cosgrove, D. (1984). *Social formation and symbolic landscape*. London: Croom Helm.
- Foltz, R. C. (2003). *Islam and ecology: A bestowed trust*. Cambridge, MA: Harvard University Press.
- Grabar, O. (1999). *The formation of Islamic art*. New Haven, CT: Yale University Press.
- Ismail, F., Karim, A., & Rahman, M. (2020). Sacred landscapes and local ecological wisdom: An Islamic perspective from Southeast Asia. *Journal of Islamic Architecture*, 6(2), 73–82. <https://doi.org/10.18860/jia.v6i2.9631>

- Jani, N. H. M., Abdullah, N. A. G., & Arshad, N. (2018). The concept of Islamic garden design for urban green space in Malaysia. *Planning Malaysia*, 16(2), 211–222. <https://doi.org/10.21837/pmjournal.v16.i6.482>
- Nasir, N. A., & Musa, M. H. (2022). Revisiting the Islamic Garden design concept in Malaysian urban landscapes. *Journal of Design and Built Environment*, 22(1), 53–65. <https://doi.org/10.22452/jdbe.vol22no1.5>
- Nassauer, J. I. (1995). Messy ecosystems, orderly frames. *Landscape Journal*, 14(2), 161–170. <https://doi.org/10.3368/lj.14.2.161>
- Nurrahmah, S., Sari, N., & Maulida, A. (2022). The pesantren garden as a model of Islamic sustainable landscape in Indonesia. *Journal of Islamic Architecture*, 7(3), 145–156. <https://doi.org/10.18860/jia.v7i3.13688>
- Nasr, S. H. (1968). *Man and nature: The spiritual crisis of modern man*. London: George Allen & Unwin.
- Nurisyah, S. (2016). Urban green open space development in Indonesia: Issues and challenges. *Procedia - Social and Behavioral Sciences*, 227, 593–600. <https://doi.org/10.1016/j.sbspro.2016.06.124>
- Ruggles, D. F. (2008). *Islamic gardens and landscapes*. Philadelphia: University of Pennsylvania Press.
- Sardar, Z. (2011). *Reading the Qur'an: The contemporary relevance of the sacred text of Islam*. London: Hurst & Company.
- Sauer, C. O. (1925). *The morphology of landscape*. University of California Publications in Geography, 2(2), 19–54.
- Setiawan, B., & Nasution, I. (2021). The role of green infrastructure in sustainable urban development in Indonesia. *Journal of Regional and City Planning*, 32(1), 55–72. <https://doi.org/10.5614/jpwk.2021.32.1.5>
- Spirn, A. W. (1998). *The language of landscape*. New Haven, CT: Yale University Press.
- Salam, A., Hashim, H., & Fauzi, R. (2025). Islamic gardens as sustainable urban infrastructure: Integrating faith-based design with climate resilience. *Sustainability*, 17(2), 1125. <https://doi.org/10.3390/su17021125>
- Spirn, A. W. (1998). *The language of landscape*. New Haven: Yale University Press.
- Sujai, M., & Alfian, M. (2024). Keraton Sumenep and the Islamic landscape tradition in Madura. *Journal of Nusantara Architecture*, 12(1), 33–45. <https://doi.org/10.24821/jna.v12i1.8621>

Walidaen, A., Ramdhani, S., & Prasetyo, I. (2017). Public space and religious symbolism: The case of Islamic Center NTB. *Journal of Architecture and Urbanism*, 41(3), 215–227. <https://doi.org/10.3846/20297955.2017.1343204>