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VISUALIZING ECOLOGY THROUGH TRADITION: A BIOPHILIC INTERPRETATION OF BALINESE *GANGGONG* ORNAMENT FOR CONTEMPORARY ENVIRONMENTAL COMMUNICATION DESIGN

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Abstract

This study examines the potential of Balinese *Ganggong* ornamentation as a conceptual resource for contemporary environmental communication design using biophilic design concepts and visual metaphor theory. Employing qualitative visual analysis, the study investigates a single author-produced *Ganggong* reinterpretation created in 2025 with reference to ornamentation on a *pelinggih kemulan*. The analysis addresses formal visual characteristics, nature-referential attributes, possible ecological metaphorical associations, and conceptual design implications. The findings identify coiled leaf forms, curvilinear contours, rhythmic repetition, and figure-ground relationships that can be interpreted in relation to biomorphic forms and patterns. Selected vegetal configurations and repeated ornamental units also provide possible associations with growth and continuity. These associations are treated as researcher-proposed interpretations rather than established cultural meanings or empirically confirmed audience responses. Building on these findings, the study proposes Biophilic Indigenous Visual Communication (BIVC) as a preliminary, case-derived interpretive framework connecting documented ornamental context, formal observation, qualified ecological interpretation, and conceptual design translation. Potential applications include modular campaign identity elements, nature-referential infographic framing, and motion graphic sequencing. The study proposes a structured interpretive approach for examining culturally situated ornamentation as a potential design resource without claiming demonstrated biophilic perception, increased environmental awareness, or communication effectiveness.

Keywords: *Ganggong* Ornament; Balinese Ornamentation; Biophilic Design; Visual Metaphor; Environmental Communication Design; Visual Interpretation.

INTRODUCTION

Environmental communication plays a significant role in shaping how ecological issues are represented, understood, and discussed in public discourse. Within visual communication design, images and symbolic forms provide resources for translating environmental concerns into accessible and culturally situated representations. However, the communicative

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implications of environmental imagery depend on more than its visual content alone. Duan et al. (2021) demonstrated that the effects of concrete and abstract climate change imagery on public responses vary according to audience characteristics. Similarly, Salazar et al. (2022) found that photographs depicting the negative impacts of marine plastic pollution attracted greater visitor engagement than positive ocean imagery in the exhibition context they investigated. These findings indicate that environmental visual communication requires careful consideration of representational strategies and their contexts rather than assumptions about the inherent effectiveness of particular visual approaches.

One challenge in environmental communication concerns repeated exposure to similar messages. Song and So (2023) examined message fatigue in climate change communication and identified its associations with counterarguing, attention, and message elaboration. A subsequent meta-analysis by Keating and Skurka (2024) further reported an association between message fatigue and unintended persuasive outcomes across the communication contexts included in their review. These studies provide grounds for examining the limitations of repetitive messaging, although they do not establish that crisis-oriented environmental imagery is universally ineffective. Accordingly, the exploration of alternative visual resources should be understood as an effort to expand the conceptual and cultural possibilities of environmental communication rather than as a claim of superior communicative effectiveness.

Biophilic design provides a theoretical perspective for examining visual characteristics that reference natural forms. Browning et al. (2024) identify biomorphic forms and patterns within the category of natural analogues, including symbolic references to forms and configurations occurring in nature. This classification provides a relevant conceptual basis for examining the curved contours, stylized vegetal elements, and recurring arrangements found in the selected *Ganggong* representation. However, identifying morphological similarities with natural forms does not establish that these characteristics produce psychological affinity toward nature. Accordingly, the present study employs biophilic design as an interpretive lens for formal visual analysis rather than as a measure of audience perception or emotional response.

Traditional Balinese ornamentation provides a culturally situated context for investigating relationships between visual form and nature. Artha and Nuriarta (2019), for example, examined the forms, functions, and meanings of ornaments on Balinese gamelan, demonstrating an approach to understanding ornamentation through its formal and symbolic dimensions. More specifically, Mahadi et al. (2022) discuss *Keketusan Ganggong* in relation to the stylization of *kapu-kapu* vegetation and emerging shoots. Utami and Swari (2021), meanwhile, describe *Patra Ganggong* as an ornament inspired by aquatic vegetation and organized through elongated, repetitive arrangements. Although these accounts differ in their terminology and descriptions of botanical inspiration, both document nature-referential characteristics within Balinese *Ganggong* ornamentation. These studies provide the cultural and morphological context for examining the selected representation without establishing a single, universally accepted botanical interpretation. This documentation establishes that the relationship between *Ganggong* and natural forms has already been addressed in the literature. The present research therefore does not claim to be the first to identify nature-derived characteristics or ecological associations in the ornament. Instead, it investigates how these documented characteristics may be reconsidered within an interpretive framework relevant to contemporary visual communication design.

Moving from nature-referential ornamentation to environmental communication requires a distinction between visual resemblance and metaphorical interpretation. Forceville

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(2017) demonstrated that the interpretation of visual and multimodal metaphors depends on contextual and cultural knowledge, and that intended metaphorical meanings may not be understood consistently across audiences. This distinction is particularly important when examining traditional ornamental forms in contemporary communication contexts. The resemblance of an ornamental element to a leaf, shoot, or other natural configuration does not necessarily establish a specific ecological metaphor. Associations with regeneration, adaptation, or ecological continuity must therefore be articulated as theoretically informed interpretations rather than inherent, universally recognized meanings. The present study uses visual metaphor analysis to investigate possible relationships between observable formal characteristics and ecological concepts while acknowledging the interpretive status of these relationships.

The reviewed literature provides relevant but distinct perspectives on environmental imagery, traditional Balinese ornamentation, biophilic design, and visual metaphor. Research on environmental communication has examined audience responses to different forms of imagery and repeated messaging (Duan et al., 2021; Salazar et al., 2022; Song & So, 2023). Studies of Balinese ornamentation have documented formal characteristics, applications, and symbolic interpretations (Artha and Nuriarta, 2019; Mahadi et al., 2022; Utami and Swari, 2021). Meanwhile, biophilic design literature provides conceptual categories for examining nature-referential visual attributes (Browning et al., 2024), while visual metaphor scholarship emphasizes the contextual and culturally dependent interpretation of visual meaning (Forceville, 2017, 2024). Building on these perspectives, the present study addresses a specific analytical task: to examine how formal characteristics of a selected *Ganggong* representation may be interpreted through biophilic and visual metaphor perspectives and subsequently translated into conceptual considerations for environmental communication design. Its proposed contribution lies in this structured interpretive synthesis rather than in establishing previously unknown ecological symbolism or demonstrating communication effectiveness.

Based on this research focus, three questions guide the investigation: (1) What formal visual characteristics are identifiable in the selected representation of the Balinese *Ganggong* ornament? (2) How may these characteristics be interpreted through biophilic design and visual metaphor perspectives in relation to ecological concepts? (3) What conceptual considerations for contemporary environmental communication design can be derived from these interpretations? The study employs a qualitative visual analysis of a single author-produced redrawing of the *Ganggong* ornament, created in 2025 with reference to architectural ornament documentation. By examining formal visual characteristics, possible ecological metaphors, and their conceptual design implications, the research seeks to develop an interpretive basis for considering *Ganggong* as a culturally situated visual resource. The study does not evaluate audience perception, produce an empirically tested communication campaign, or claim that the proposed interpretations represent universally established cultural meanings.

METHODOLOGY

This study adopts a qualitative visual analysis approach to examine a selected representation of the Balinese *Ganggong* ornament through the perspectives of biophilic design and visual metaphor theory. The approach is appropriate for investigating the formal organization of visual materials and developing contextually informed interpretations without requiring quantitative measurements of audience responses. Following the methodological considerations outlined by Rose (2023), the analysis distinguishes the visual properties of the research object, its production context, and the interpretations constructed through theoretical

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examination. Environmental communication design serves as the field within which the conceptual implications of the analysis are considered. Accordingly, the study is designed as an interpretive investigation rather than an experimental assessment of biophilic perception or communication effectiveness.

The study examines a single author-produced visual representation selected as a case because its formal characteristics and documented architectural reference correspond to the research questions. The primary visual material is an author-produced reinterpretation of the Balinese *Ganggong* ornament, created in 2025 as a personal artwork. The illustration was developed with reference to photographic documentation of ornamentation on a *pelinggih kemulan*, a traditional Balinese shrine structure. The overall composition of the referenced ornament was retained, while selected ornamental details and their arrangement were modified during the drawing process. The architectural photograph and the author-produced illustration are presented in Figures 1 and 2 to establish the relationship between the reference material and the image selected for analysis.



Figure 1. Photographic documentation of *Ganggong* ornamentation on a *pelinggih kemulan*, used as the visual reference for the author-produced illustration.
(Source: Photographic documentation provided by the author; building location and date of documentation not established).

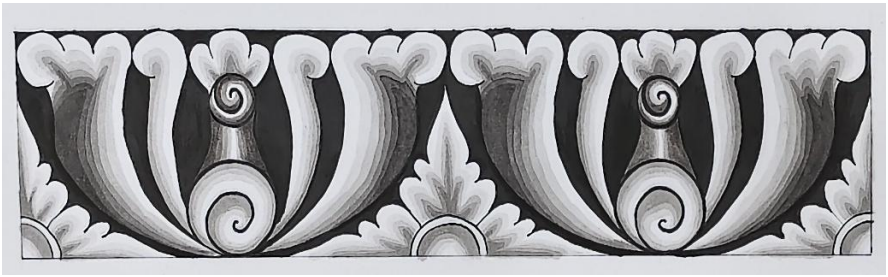

Figure 2. Author-produced visual reinterpretation of the Balinese *Ganggong* ornament (2025), retaining the overall composition of the architectural reference with modifications to selected ornamental details and element orientation.
(Source: Author's personal artwork, 2025).

The architectural photograph serves as contextual material for identifying the visual reference and documenting the origin of the reinterpretation. It is not treated as an independent case or a second primary object of analysis. The author-produced illustration constitutes the principal analytical unit because the research focuses on its formal organization and potential interpretive relationships with nature-referential visual concepts. The selection of a single image is consistent with the study's exploratory and interpretive scope and is not intended to provide statistical or typological representation of Balinese *Ganggong* ornamentation.

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Scholarly literature on Balinese ornamentation, biophilic design, visual metaphor, and environmental communication provides the theoretical and contextual foundation for the analysis.

The analytical framework consists of four interconnected stages: formal visual analysis, biophilic attribute analysis, visual metaphor interpretation, and environmental communication mapping. These stages are organized sequentially to distinguish direct visual observation from theoretical interpretation and subsequent conceptual design considerations. The first stage focuses on the formal organization of the selected illustration, including line, contour, curvature, spiral configuration, repetition, visual balance, directionality, and relationships between positive and negative spaces. The analysis uses these categories to identify and describe relevant visual features without assigning ecological meanings at the descriptive stage.

The second stage examines the correspondence between the identified formal characteristics and nature-referential attributes discussed in biophilic design literature. The analytical categories include biomorphic configurations, organic contours, plant-like structures, and nature-referential patterns. These categories are used to examine formal correspondences rather than to infer psychological effects or establish audience experiences of biophilia. The third stage employs visual metaphor theory to examine potential relationships between the identified visual features and ecological concepts. Drawing on Forceville (2017), the interpretation distinguishes the observable visual form, the proposed source and target domains, and the contextual reasoning supporting a metaphorical reading. Alternative interpretations are considered where the relationship between form and meaning is ambiguous. The fourth stage relates the preceding analyses to conceptual considerations in environmental communication design, focusing on possible relationships between formal visual principles, metaphorical interpretation, and design applications. This stage is limited to conceptual mapping and does not involve the production, implementation, or evaluation of an environmental communication campaign. The analytical dimensions, indicators, procedures, and intended outputs are summarized in Table 1.

Table 1. Operational Framework for Qualitative Visual Analysis

Analytical Stage	Analytical Focus	Analytical Indicators	Procedure	Intended Output
Formal Visual Analysis	Morphology and compositional organization	Line, contour, curvature, spiral configuration, repetition, balance, directionality, positive and negative space	Identify and describe visual elements and their compositional relationships	Formal visual description
Biophilic Attribute Analysis	Correspondence with nature-referential visual attributes	Biomorphic forms, organic contours, plant-like configurations, nature-	Compare documented formal features with relevant biophilic design categories	Interpretation of potential biophilic attributes

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		referential patterns		
Visual Metaphor Interpretation	Possible relationships between visual forms and ecological concepts	Observable form, proposed source domain, target domain, interpretive justification, alternative readings	Examine and justify possible metaphorical associations	Contextually qualified metaphorical interpretations
Environmental Communication Mapping	Conceptual relevance to environmental communication design	Visual organization, motif repetition, nature-referential representation, potential design applications	Relate supported formal and interpretive characteristics to conceptual design considerations	Conceptual design implications

(Source: Developed for the present study based on the research questions and the selected analytical perspectives).

The analytical framework organizes the examination of the selected visual material into formal description, theoretical classification, qualified metaphorical interpretation, and conceptual design synthesis. Table 1 specifies the analytical categories and their intended functions. In presenting the findings, the study distinguishes directly observable features from contextual information documented in ornamental literature and ecological associations proposed by the researcher. The accompanying analytical tables make these distinctions explicit and identify limitations or alternative interpretations where relevant. The combination of theoretical perspectives supports conceptual comparison but does not constitute independent validation of the proposed meanings.

The research acknowledges the author's dual position as both the creator of the selected illustration and its interpreter. This position requires reflexive attention to the distinction between artistic decisions made during the reinterpretation process and interpretations developed during the research. The study therefore treats the author-produced illustration as a situated visual representation rather than an exact reproduction of the architectural reference. Its findings are limited to the selected image and cannot be generalized to all traditional *Ganggong* variants or their culturally established meanings. Furthermore, the absence of audience-based evaluation prevents conclusions concerning viewers' biophilic responses, ecological understanding, environmental awareness, or the effectiveness of potential communication applications. The study is consequently limited to formal visual examination, theoretically informed interpretation, and the development of conceptual considerations for subsequent design research.

RESULTS AND DISCUSSION

Formal Visual Characteristics of the *Ganggong* Ornament

The formal visual analysis was conducted on the author-produced reinterpretation of the Balinese *Ganggong* ornament created in 2025, using photographic documentation of ornamentation on a *pelinggih kemulan* as its architectural reference. Following the principles

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of compositional interpretation discussed by Rose (2023), the analysis examined the organization of lines, forms, spatial relationships, repetition, tonal contrast, and visual balance. The architectural reference and the author-produced reinterpretation are presented in Figures 1 and 2, respectively. Figure 3 provides the annotated representation used to identify the principal formal characteristics discussed in this section.

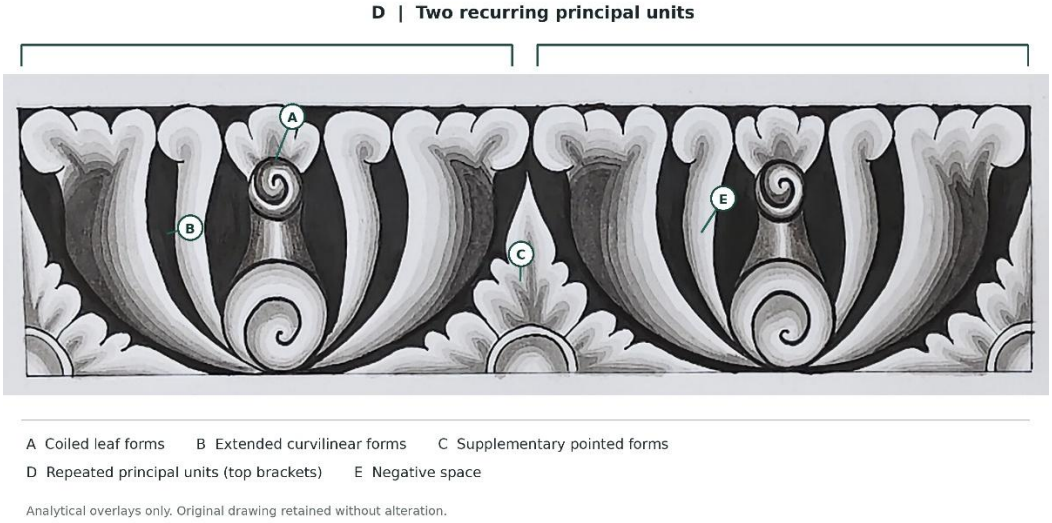

Figure 3. Annotated visual analysis of the author-produced *Ganggong* reinterpretation (2025). Labels A–E identify selected coiled leaf forms, curvilinear contours, supplementary ornamental elements, repeated units, and negative spaces. (Source: Author's artwork (2025), with analytical annotations).

The selected drawing presents an elongated horizontal composition organized around two principal ornamental units with comparable internal structures. Each unit combines extended curvilinear forms, coiled leaf configurations, and layered contours. Supplementary pointed and lobed elements occupy the spaces between the principal units and contribute to their visual connection. The arrangement establishes rhythmic repetition and approximate visual symmetry, while variations in contour, proportion, and internal detail prevent the units from being geometrically identical.

One of the most distinctive formal characteristics is the presence of coiled leaf forms within the principal ornamental units. These configurations are visible as inward-turning contours that create concentrated circular movements within the larger curvilinear arrangement. The artist identifies these elements as stylized leaves that curl into spiral configurations rather than as independent *kakul-kakulan* ornaments. This distinction is important because the appearance of a spiral does not automatically establish its identity within traditional Balinese ornamental terminology. The coiled leaf forms operate as points of visual emphasis within the repeated units, while the surrounding elongated contours extend toward the upper and lateral areas of the composition.

The broader curvilinear elements exhibit layered contours and variations in width. Their arrangement creates visual continuity between the lower portions of the ornamental units and the upper edges of the composition. Several forms terminate in rounded or curled configurations, whereas others extend into pointed or lobed elements. The visual relationship between these shapes produces variation within the recurring ornamental structure. The

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vertically oriented elements visible in the drawing describe formal directionality; they do not, by themselves, establish a symbolic meaning associated with biological growth.

The identification of these visual forms can be contextualized through Balinese ornamental literature. Mahadi et al. (2022) describe *Keketusan Ganggong* in relation to stylized *kapu-kapu* vegetation and shoot-like elements, while Utami and Swari, (2021) characterize *Patra Ganggong* through its aquatic-vegetation reference and repeated elongated arrangement. These accounts provide contextual support for examining nature-referential and repetitive characteristics in the selected representation. However, differences in ornamental classification and botanical attribution do not permit an exact correspondence between every component of the author's drawing and historically documented motif categories. In particular, the coiled leaf forms are distinguished from separate *kakul-kakulan* motifs in accordance with the artist's explanation of their construction. Other pointed and supplementary forms are described according to their observable characteristics where their specific traditional identities cannot be established from the available documentation.

The horizontal repetition of the two principal units contributes to the composition's visual rhythm. Similar relationships among curved contours, coiled forms, and elongated ornamental elements recur across the rectangular field. At the same time, variations in internal detail prevent the repetition from appearing completely uniform. Supplementary forms occupy the intervals between the principal units and along the lower edge, contributing to the distribution of visual weight. The composition consequently combines recurring structural relationships with localized formal variation.

The relationship between positive and negative spaces further clarifies the arrangement of ornamental elements. The dark background defines the silhouettes of the lighter forms and separates adjacent contours. Tonal gradations within the ornamental surfaces provide additional differentiation among the layered shapes. These contrasts establish a recognizable figure-ground relationship and reinforce the distinction between the principal units and their surrounding spaces. The formal observations are summarized in Table 2.

Table 2. Formal Visual Characteristics of the Selected *Ganggong* Representation

Visual Element	Observable Characteristics	Formal Interpretation	Evidence Reference
Coiled leaf forms	Inward-turning contours within the principal ornamental units	Circular movement and localized visual emphasis	Figure 3, A
Extended curvilinear forms	Elongated, layered contours extending across each unit	Continuity of line and directional movement	Figure 3, B
Supplementary pointed forms	Pointed and lobed elements occupying intervening spaces	Spatial articulation and compositional infill	Figure 3, C
Repeated ornamental units	Two principal units with comparable configurations and minor variations	Horizontal rhythm and approximate visual symmetry	Figure 3, D
Negative spaces	Dark areas separating and surrounding lighter ornamental forms	Figure-ground differentiation and contour emphasis	Figure 3, E

(Source: Author's qualitative visual analysis of the selected *Ganggong* reinterpretation (2025)).

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Comparison with the architectural reference indicates that the author-produced drawing retains the general horizontal arrangement of the ornamental composition while introducing minor modifications to selected details. The photographed ornament displays downward-oriented leaf-like elements, whereas comparable forms in the drawing extend upward. This difference identifies a change in the arrangement of the selected representation and should not be interpreted as evidence that either orientation is exclusive to traditional *Ganggong* ornamentation. The available architectural photograph also has insufficient detail to establish exact correspondence among all ornamental components. Consequently, the analysis treats the drawing as a situated reinterpretation rather than a precise reproduction of the architectural source.

Overall, the formal analysis identifies five interrelated characteristics: coiled leaf configurations, extended curvilinear contours, supplementary pointed forms, rhythmic repetition of principal units, and contrasting positive and negative spaces. These characteristics describe the visual organization of the selected drawing and provide the observational foundation for the subsequent analysis of nature-referential attributes. The findings at this stage do not establish ecological symbolism, biophilic responses, or communication effectiveness, which lie beyond the scope of formal visual description.

Biophilic Attributes of the *Ganggong* Ornament

The formal characteristics of the selected *Ganggong* representation may be examined through the concept of biomorphic forms and patterns within biophilic design. Browning et al. (2024) identify biomorphic forms and patterns as a category of natural analogues involving visual references to forms and arrangements found in nature. This category offers a basis for considering the selected ornament's nature-referential characteristics without assuming that the ornament produces measurable psychological responses.

The coiled leaf configurations and elongated curvilinear contours constitute the clearest formal correspondences with biomorphic characteristics. Their curved and coiled configurations provide recognizable references to stylized vegetal forms. This resemblance is supported by the documented association of *Ganggong* with ornamental interpretations of aquatic vegetation, although the specific forms in the selected drawing have been modified by its creator. The identified relationship therefore concerns visual morphology and botanical reference, not a demonstrated experience of biophilia.

The repeated ornamental units also establish an organized pattern characterized by recurrence and variation. Comparable configurations appear across the horizontal composition, while differences in contour and proportion prevent complete uniformity. Repetition and variation may be discussed as compositional characteristics compatible with nature-referential patterning. However, rhythmic repetition alone does not establish a specifically biophilic attribute, since similar organizational principles also occur in geometric and non-nature-derived ornamentation.

The relationship between lighter ornamental surfaces and darker negative spaces further contributes to the legibility of the vegetal configurations. These figure-ground relationships are important to the formal organization of the selected representation, but they should not be treated as independent evidence of biophilic perception. Their relevance lies in supporting the visibility and differentiation of the shapes examined through the biomorphic perspective.

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Overall, the strongest biophilic correspondence identified in the selected drawing concerns biomorphic forms and patterns, particularly the stylized leaf configurations and curvilinear structures. Other biophilic design patterns involving direct sensory contact with nature, natural materials, or spatial environmental conditions cannot be established from the analyzed two-dimensional image. The analysis therefore identifies a limited formal correspondence with nature-referential design concepts rather than evidence of psychological affinity, restorative experience, or audience engagement. This distinction provides a theoretical foundation for the subsequent exploration of possible ecological metaphorical associations.

Ecological Metaphor Interpretations of the *Ganggong* Ornament

The interpretation of ecological metaphors in the selected *Ganggong* representation requires a distinction between observable visual characteristics, documented ornamental knowledge, and meanings proposed by the researcher. These three levels of evidence are not interchangeable. Visual resemblance to natural forms does not necessarily establish a metaphor, while documented botanical inspiration does not automatically confirm a particular ecological meaning. Forceville (2017) emphasizes the role of contextual and cultural knowledge in interpreting visual metaphors, whereas Forceville (2024) highlights methodological challenges in their identification and interpretation. Accordingly, the present analysis examines possible relationships between visual source characteristics and ecological target concepts without treating these relationships as established cultural meanings or independently recognizable messages.

The formal analysis identified coiled leaf forms, elongated curvilinear contours, pointed vegetal configurations, and repeated ornamental units. These features constitute the observable evidence underlying the subsequent interpretation. The identification of the coiled elements as stylized leaves is also informed by the author's account of the drawing process. This identification distinguishes the elements from separate *kakul-kakulan* motifs but does not establish their ecological symbolism. At the level of documented ornamental knowledge, Mahadi et al. (2022) and Utami and Swari (2021) describe *Ganggong* through nature-referential ornamental characteristics, although their accounts differ in terminology and botanical attribution. These sources support the documented relationship between *Ganggong* and stylized aquatic vegetation but do not establish that the selected representation traditionally symbolizes ecological adaptation, regeneration, or sustainability.

Among the observed characteristics, the pointed vegetal configurations provide a comparatively plausible basis for an association with growth. Their resemblance to emerging plant forms allows the visual idea of upward extension to be considered in relation to botanical development. The potential conceptual mapping involves the transfer of a perceived characteristic of plant growth, namely emergence or extension, to the more general notion of development. However, this relationship remains an interpretive possibility rather than an established pictorial metaphor, because the drawing does not explicitly present growth as a separate conceptual target. The proposed association also does not justify a stronger claim of ecological regeneration, which implies processes of recovery or renewal that are not directly represented.

The repeated ornamental units provide another possible basis for conceptual interpretation. Their recurring arrangement establishes rhythm and continuity within the composition. In an environmental communication context, the formal characteristic of recurrence could potentially be mapped onto the concept of continuity in natural processes.

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Nevertheless, the relationship depends on contextual framing because repetition alone does not identify a particular ecological process. The same visual arrangement could also be interpreted simply as decorative rhythm, compositional unity, or structural repetition. Therefore, continuity is retained as a possible conceptual association rather than a culturally verified ecological meaning.

Other proposed relationships are less adequately supported by the selected representation. The curvature of the leaf forms may suggest organic movement or flexibility, but it does not depict an organism adapting to environmental conditions. Similarly, the circular organization of the coiled leaves may invite an association with recurrence, although it does not represent a complete ecological cycle. Neither outward extension nor repetition provides sufficient semantic grounds for interpreting sustainability, while the central organization of the composition does not establish a rooted structure or ecological stability. These interpretations are therefore excluded from the principal metaphorical propositions.

The relationships between visual evidence, documented ornamental knowledge, and proposed ecological interpretations are presented in Table 3. The table distinguishes the basis of each interpretation and identifies alternative readings or limitations that prevent the proposed association from being treated as an established meaning.

Table 3. Evidence-Based Assessment of Proposed Ecological Metaphorical Readings

Observable Visual Feature	Documented Ornamental Knowledge	Proposed Association or Tentative Reading	Semantic Justification and Limitation
Pointed vegetal configurations with upward orientation	*Ganggong* is associated with stylized aquatic vegetation; the orientation examined belongs to the author's representation	Growth or emergence	Resemblance to extending plant forms permits a growth-related reading, but regeneration is not depicted
Repeated principal ornamental units	The selected arrangement is observable in the author's drawing; no specific ecological meaning of its repetition is established by the cited source	Continuity	Formal recurrence may provide an analogy for continuity, but decorative rhythm is an equally plausible interpretation
Coiled leaf forms	Botanical inspiration is documented; the identification of the specific coiled elements as leaves comes from the drawing's creator	Possible recurrence	Circular form suggests recurrence but does not demonstrate a biological or ecological cycle
Extended curvilinear contours	Nature-derived ornamental forms are documented, but no specific adaptive meaning is established	Possible flexibility	Curvature permits an association with flexibility, but no adaptive process or

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			environmental response is represented

(Source: Author's interpretive analysis of the selected Ganggong representation (2025). The documented ornamental context is informed by Mahadi et al. (2022) and Utami and Swari (2021), while the distinction between visual evidence and metaphorical interpretation is informed by Forceville (2017, 2024). The proposed associations have not been confirmed through cultural or audience-based evaluation).

The analysis therefore identifies a limited set of possible conceptual associations rather than a system of established ecological metaphors. Growth and continuity offer the more defensible interpretive directions because their proposed meanings can be related to specific features of the selected representation. Even in these cases, the visual evidence is insufficient to establish that viewers would independently recognize the intended ecological concepts. The potential ecological interpretations depend on the relationship between ornamental form, theoretical framing, and the communication context in which the forms might subsequently be used.

This distinction is particularly relevant because the selected drawing is an author-produced reinterpretation of an architectural ornament. Although its overall composition is derived from the documented source, variations in ornamental detail and element orientation prevent its visual characteristics from being treated as direct evidence of culturally established meanings. The analysis consequently does not attribute the proposed ecological readings to the broader *Ganggong* tradition or claim that the ornament communicates environmental messages without contextual support.

The contribution of this analysis lies in identifying which formal characteristics may provide defensible starting points for ecological metaphor construction and which associations exceed the available evidence. This distinction establishes a conceptual basis for considering *Ganggong*-derived visual forms within environmental communication design. Their eventual communicative meaning would depend on subsequent design decisions, including message framing, visual context, and the intended audience, none of which have been empirically evaluated in the present study.

Ganggong as a Biophilic Communication Structure

The preceding formal and metaphorical analyses provide a basis for reconsidering the selected *Ganggong* representation as a potential visual resource for environmental communication design. This interpretation does not imply that the ornament independently communicates ecological messages or generates measurable biophilic responses. Rather, the term *biophilic communication structure* is employed provisionally to describe an analytical relationship between nature-referential visual characteristics, theoretically informed ecological interpretations, and their possible application within contemporary visual communication design. The proposed relationship concerns the conceptual organization of visual information rather than an empirically demonstrated communication process.

The formal analysis identified coiled leaf forms, extended curvilinear contours, repeated ornamental units, and contrasting positive and negative spaces in the author-produced representation. These characteristics constitute the observable foundation of the proposed framework. From a biophilic design perspective, their resemblance to organic and vegetal configurations permits a theoretical reading in relation to biomorphic forms and patterns.

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However, the identification of nature-referential attributes remains distinct from the psychological experience of biophilia. Since the present study does not investigate audience perception, it cannot establish whether the selected forms evoke feelings of connection with nature or produce particular emotional responses.

The ecological metaphor analysis introduces a second interpretive dimension. As discussed in the preceding section, the pointed vegetal forms and repeated ornamental units provide possible starting points for conceptual associations with growth and continuity. These associations depend on theoretically informed interpretation and contextual framing rather than on meanings that are inherently or universally communicated by the ornament. Their relevance to environmental communication therefore lies in their potential use as conceptual resources for message construction. The analysis does not establish that the identified forms independently communicate ecological adaptation, regeneration, sustainability, or environmental awareness.

The relationship between these analytical dimensions is presented in Figure 4. The proposed framework distinguishes three levels: formal visual observation, theory-guided interpretation, and conceptual design implications. The first level concerns the observable organization of the selected illustration. The second level brings these characteristics into dialogue with biophilic design categories and possible ecological metaphorical readings. The third level considers how the resulting interpretations may inform decisions concerning visual organization, nature-referential imagery, and contextual message development in environmental communication design. The connections among these levels represent analytical transitions rather than causal relationships.

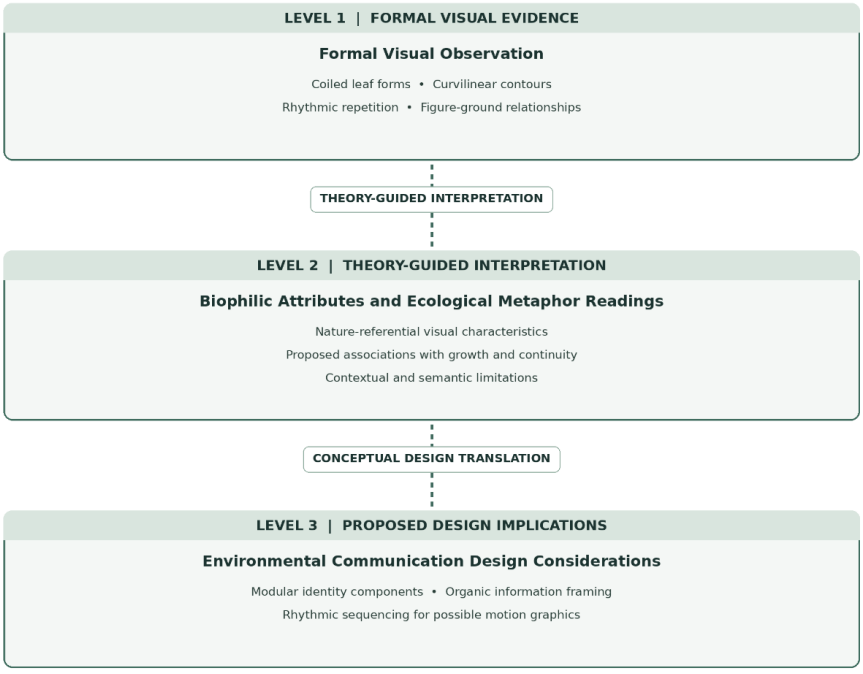

Figure 4. Interpretive framework for *Ganggong*-based environmental communication design. The framework distinguishes formal visual evidence, theory-guided interpretation, and proposed design implications. Its connections indicate analytical relationships rather than empirically demonstrated causal effects. (Source: Developed by the author based on the selected *Ganggong* representation (2025)).

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Within this framework, the formal characteristics of *Ganggong* do not directly determine ecological meanings. Instead, their potential communicative relevance emerges through interpretive decisions that connect particular visual features with concepts appropriate to a defined communication context. Such decisions may include the selection of ornamental elements, their organization within a visual composition, and their relationship with accompanying textual or contextual information. The framework therefore provides a way to examine possible design applications without assuming that visual resemblance to nature is sufficient to produce environmental understanding.

This distinction is important when considering the relationship between nature-referential ornamentation and established strategies of environmental communication. Research on environmental imagery has shown that audience engagement depends on representational choices and communication contexts, while studies of message fatigue have identified challenges associated with repeated exposure to similar messages (O'Neill & Nicholson-Cole, 2009; Song & So, 2023). These findings provide a broader rationale for exploring diverse visual resources but do not demonstrate that *Ganggong*-based representations are more effective than crisis-oriented imagery. The present study consequently positions traditional ornamentation as an additional conceptual possibility rather than an empirically superior communication strategy.

The proposed framework contributes to the discussion of culturally situated environmental communication design by organizing relationships among the selected ornament's formal features, nature-referential characteristics, and possible ecological interpretations. Its contribution is analytical rather than predictive. The framework does not establish that the sequence from visual form to environmental meaning occurs automatically, nor does it demonstrate that viewers would recognize the proposed associations. Further application would require the development of communication materials and evaluation within specific audience and cultural contexts. Within the scope of the present study, *Ganggong* is therefore considered a potential resource for biophilically informed visual communication rather than a validated mechanism for generating ecological awareness.

Implications for Contemporary Environmental Communication Design

The preceding analyses suggest that the selected *Ganggong* representation may serve as a conceptual visual resource for contemporary environmental communication design. Its potential relevance lies not in demonstrated communication effectiveness but in the possibility of translating identifiable ornamental characteristics into design considerations. The formal analysis identified coiled leaf forms, extended curvilinear contours, rhythmic repetition, and contrasting positive and negative spaces. These characteristics provide a basis for considering how selected elements of the ornament might be adapted to different visual communication formats. The proposed applications are therefore derived from formal and interpretive findings rather than from implemented or evaluated design outcomes.

Three potential applications are considered particularly relevant to the identified characteristics: environmental campaign visual identity, environmental infographics and educational materials, and motion graphics. These applications were selected because they offer distinct opportunities to translate the ornament's compositional structure, organic contours, and rhythmic organization into visual design decisions. The discussion does not propose that the complete ornament must be reproduced in every application. Instead, it

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considers how selected formal principles may be adapted while maintaining a recognizable relationship with the ornamental source.

In environmental campaign visual identity, the repeated principal units of the *Ganggong* representation may inform the development of a modular graphic system. Rather than functioning as a complete visual identity in themselves, selected ornamental elements could be abstracted into recurring graphic components for use across posters, digital layouts, and supporting campaign materials. The coiled leaf forms could serve as secondary identity elements, while the repeated curvilinear structures could provide a consistent ornamental rhythm across different formats. Such an approach could provide a visual reference to selected characteristics of Balinese ornamentation without reproducing the complete composition. However, consistency of visual appearance should not be equated with message recognition or campaign effectiveness, which would require further design development and audience evaluation.

A second potential application concerns environmental infographics and educational materials. The extended curvilinear contours and relationships between positive and negative spaces may provide a basis for developing nature-referential framing devices and supporting visual structures. For example, simplified ornamental contours could be positioned around explanatory content or used to distinguish sections of an environmental information layout. The compositional role of these elements would be to provide a culturally situated visual context while preserving the clarity of the information presented. Importantly, the organic contours should remain subordinate to essential data, labels, and explanatory text. The present study does not establish that *Ganggong*-derived framing improves comprehension, reading efficiency, or information retention. Such outcomes would need to be evaluated through subsequent design and user-based research.

The rhythmic organization of the ornament also offers a possible basis for motion graphics. The repetition of similar ornamental units and the continuity of curvilinear contours could inform the conceptual sequencing of visual elements. For instance, repeated units might be introduced progressively, while selected contours could provide a basis for transitions between graphic states. These possibilities are derived from the spatial characteristics of the static drawing rather than from an existing animated representation. Consequently, the proposed movement patterns remain design hypotheses and do not establish that animation would strengthen ecological understanding or emotional engagement.

The relationship between the identified ornamental features and their possible design applications is summarized in Table 4. The table distinguishes the visual evidence underlying each proposal, the corresponding design consideration, and the limitations that would need to be addressed during subsequent development.

Table 4. Conceptual Translation of *Ganggong* Visual Characteristics into Environmental Communication Design

Proposed Application	Visual Characteristics Identified	Proposed Design Translation	Intended Design Function	Limitation
Environmental campaign visual identity	Repeated ornamental units, coiled leaf forms,	Abstract selected elements into a	Establish visual consistency	Identity recognition, cultural

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	rhythmic curvilinear arrangements	modular system of recurring graphic components	and a recognizable ornamental reference across campaign materials	interpretation, and campaign effectiveness have not been evaluated
Environmental infographics and educational materials	Extended organic contours, positive-negative space relationships, layered forms	Adapt simplified contours as secondary framing and section-organizing elements	Provide nature-referential visual context while supporting information organization	Readability, comprehension, and information retention have not been tested
Environmental motion graphics	Rhythmic repetition, curvilinear continuity, recurring ornamental configurations	Translate spatial repetition into proposed sequences, progressive appearances, and transitions	Explore temporal organization based on the ornament's static formal structure	No animation prototype, motion evaluation, or audience testing has been conducted

(Source: Author's conceptual design interpretation based on the formal visual analysis of the selected Ganggong representation (2025). The proposed applications have not been implemented or empirically evaluated).

The proposed translations illustrate that the potential relevance of *Ganggong* to environmental communication design depends on the selection and adaptation of specific visual characteristics rather than on the assumption that traditional ornamentation inherently conveys ecological messages. In each application, the ornamental elements would require integration with communication objectives, textual information, audience considerations, and the intended media format. The interpretive associations with growth and continuity discussed in the preceding section may offer possible conceptual directions, but they do not independently establish the meanings that future audiences would derive from the designs.

The cultural origin of the ornament also requires consideration in its potential adaptation. The selected drawing is an author-produced reinterpretation based on architectural ornamentation rather than a comprehensive representation of the *Ganggong* tradition. Therefore, its use in contemporary design should distinguish between documented ornamental characteristics, modifications introduced by the author, and new meanings proposed through environmental communication. Cultural references should be presented with appropriate contextual information rather than treated as universal symbols of sustainability.

These implications remain conceptual and should not be interpreted as evidence that *Ganggong*-based designs improve environmental awareness, emotional engagement, or communication effectiveness. Their contribution lies in specifying how identifiable formal characteristics may be translated into potential design strategies. Future research could develop and evaluate selected applications to examine their visual clarity, cultural appropriateness, audience interpretation, and communication performance. Within the scope of the present

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study, the proposed translations provide an analytical bridge between the formal characteristics of *Ganggong* and possible directions for contemporary environmental communication design.

Toward a Biophilic Indigenous Visual Communication Framework

The preceding analyses provide the basis for proposing *Biophilic Indigenous Visual Communication* (BIVC) as a preliminary interpretive framework derived from the selected Ganggong case. The framework integrates culturally situated ornamental studies, biophilic design, and visual metaphor theory to organize the relationship between documented visual traditions, observable ornamental characteristics, proposed ecological interpretations, and conceptual implications for environmental communication design. Its contribution lies in the structured application and synthesis of these perspectives rather than in establishing a new theory of biophilic perception or a validated model of communication effectiveness.

The term *indigenous* is employed provisionally to acknowledge the documented relationship between Ganggong and Balinese ornamental traditions. It is not intended to establish the selected representation as an authoritative expression of indigenous ecological knowledge or to imply that its proposed meanings have been confirmed by the communities associated with the tradition. The empirical scope is limited to an author-produced visual reinterpretation created in 2025 with reference to architectural ornamentation on a *pelinggih kemulan*. Accordingly, BIVC is presented as a case-derived analytical proposal whose wider applicability remains to be investigated.

The framework comprises four interrelated components: cultural and visual contextualization, formal and biophilic interpretation, ecological metaphorical interpretation, and conceptual design translation. The first component establishes the provenance and representational status of the visual material, distinguishing the documented architectural reference from the author's reinterpretation. The second examines observable formal characteristics in relation to nature-referential design categories. The third evaluates possible ecological associations by separating visual evidence, documented ornamental knowledge, and researcher-proposed meanings. The fourth considers how selected characteristics and qualified interpretations may inform conceptual decisions in environmental communication design. These components guide analytical reasoning and do not constitute sequential stages of a demonstrated psychological or communicative mechanism.

The framework draws on established scholarship while specifying its application to the selected visual case. Rose (2023) provides methodological guidance for examining visual materials and their contexts, while biophilic design concepts inform the classification of nature-referential forms. Forceville (2017, 2024) provides theoretical considerations for distinguishing visual resemblance from metaphorical interpretation and for recognizing the role of context in meaning construction. Mahadi et al. (2022) and Utami and Swari (2021) provide documented ornamental context for the nature-referential characteristics and visual organization of *Ganggong*, while also illustrating differences in its classification and botanical interpretation across sources. The case-specific contribution consists of applying these perspectives to the identified coiled leaf configurations, curvilinear contours, repeated ornamental units, and spatial relationships of the selected representation, while distinguishing supported observations from interpretations requiring additional evidence. The components and limitations of this proposed synthesis are summarized in Table 5.

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Table 5. Components, Theoretical Foundations, and Scope of the Proposed BIVC Framework

Framework Component	Foundation in Existing Scholarship	Contribution Derived from the Ganggong Case	Scope and Limitation
Cultural and visual contextualization	Balinese ornamental studies and visual research methodology	Distinguishes the architectural reference from the author-produced reinterpretation and identifies its representational status	Does not establish comprehensive historical or community-validated meanings
Formal and biophilic interpretation	Compositional visual analysis and biophilic design concepts	Relates observed coiled leaf forms, curvilinear contours, repetition, and spatial relationships to nature-referential categories	Does not demonstrate psychological or emotional responses to the ornament
Ecological metaphorical interpretation	Visual metaphor theory and contextual interpretation	Develops qualified associations with growth and continuity while rejecting insufficiently supported mappings to sustainability or ecological stability	Proposed meanings are not confirmed cultural interpretations or audience responses
Conceptual design translation	Visual communication design principles and the preceding interpretive analysis	Proposes modular visual identity elements, organic information framing, and rhythmic motion sequences as possible applications	Design applications and their communication effectiveness have not been implemented or evaluated

(Source: Author's conceptual synthesis based on the selected Ganggong representation (2025), drawing on visual research methodology (Rose, 2023), biophilic design concepts (Browning et al., 2024), visual metaphor theory (Forceville, 2017, 2024), and documented Balinese ornamental studies (Mahadi et al., 2022; Utami and Swari, 2021)).

The four components elaborate the three analytical levels presented in Figure 4. Cultural and visual contextualization establishes the conditions for examining formal visual evidence, while formal and biophilic interpretation and ecological metaphorical interpretation operate within the level of theory-guided analysis. Conceptual design translation corresponds to the level of proposed design implications. These relationships describe the organization of interpretive reasoning rather than causal transitions from ornamental forms to audience perception or environmental awareness. The framework also requires the separation of documented cultural information from meanings introduced through contemporary reinterpretation, particularly when the analyzed image has been modified from its architectural reference.

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BIVC is therefore proposed as a provisional framework for examining how culturally situated ornamental forms may inform environmental communication design through explicit and qualified interpretation. Its use requires identifiable visual sources, systematic formal analysis, contextual support for cultural claims, and transparent justification of proposed metaphorical and design relationships. The present case does not establish the framework's validity across other ornamental traditions or its ability to produce particular communication outcomes. Further comparative studies, cultural contextualization, design development, and audience-based evaluation would be necessary to assess its transferability and practical relevance.

CONCLUSION

This study examined the potential relevance of Balinese *Ganggong* ornamentation to contemporary environmental communication design through qualitative visual analysis, biophilic design concepts, and visual metaphor theory. The analysis of an author-produced *Ganggong* reinterpretation created in 2025 identified several formal characteristics, including coiled leaf forms, extended curvilinear contours, repeated ornamental units, and relationships between positive and negative spaces. These characteristics provide observable evidence of nature-referential visual organization and support a theoretical interpretation in relation to biomorphic forms and patterns. However, their presence does not establish that the ornament produces biophilic perception or particular psychological responses.

The ecological metaphor analysis identified growth and continuity as possible conceptual associations arising from selected vegetal configurations and repetitive structures. These associations represent interpretations proposed by the researcher rather than culturally verified meanings or messages independently recognized by viewers. Other proposed relationships, particularly those linking ornamental expansion to sustainability or central compositional organization to ecological stability, were not supported by sufficient semantic evidence. The findings therefore distinguish observable visual characteristics, documented ornamental context, and context-dependent ecological interpretations.

The principal contribution of this study lies in proposing a structured approach to interpreting and translating selected characteristics of *Ganggong* into conceptual considerations for environmental communication design. Building upon existing studies of Balinese ornamentation, biophilic design, and visual metaphor, the study introduces Biophilic Indigenous Visual Communication (BIVC) as a preliminary, case-derived interpretive framework. Its contribution is the explicit integration of cultural contextualization, formal visual analysis, qualified ecological metaphor interpretation, and conceptual design translation. The framework suggests possible applications through modular campaign identity elements, organic framing in environmental infographics, and rhythmic sequencing in motion graphics. These applications are proposed design directions rather than implemented or validated communication strategies.

The findings are subject to several limitations. The analysis focuses on a single author-produced reinterpretation informed by an architectural reference and therefore cannot represent the full diversity of *Ganggong* ornamentation or establish its culturally shared meanings. The study did not include community-based interpretation, audience perception research, completed communication prototypes, or evaluations of communication effectiveness. Consequently, neither the proposed ecological associations nor the BIVC framework can be regarded as empirically validated. The study also does not establish whether *Ganggong*-derived visual strategies would improve environmental understanding, emotional engagement, or pro-environmental behavior.

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Further research should prioritize developing selected design prototypes based on the proposed visual translation strategies and examining how audiences perceive and interpret them. Initial evaluations could assess visual clarity, cultural interpretation, and recognition of intended environmental messages before investigating broader communication outcomes. Comparative studies involving additional *Ganggong* examples and other documented ornamental traditions could subsequently examine the interpretive consistency and transferability of the framework. Within these boundaries, the present study offers an initial conceptual basis for considering culturally situated ornamental forms as potential resources for environmental communication design.

REFERENCES

Artha, I. G. A. I. B., & Nuriarta, I. W. (2019). Bentuk, Fungsi Dan Makna Ornamen Pada Gamelan Semar Pegulingan Saih Pitu Di Pusat Dokumentasi Seni Institut Seni Indonesia Denpasar. *Segara Widya : Jurnal Penelitian Seni*, *7*(2), 93–103. https://doi.org/10.31091/sw.v7i2.819

Browning, W. D., Ryan, C. O., & Clancy, J. O. (2024). *14 Patterns of Biophilic Design.(10th Anniversary Edition* (10th ed.). Terrapin Bright Green, LLC. https://www.terrapinbrightgreen.com/report/14-patterns/

Duan, R., Takahashi, B., & Zwickle, A. (2021). How Effective Are Concrete and Abstract Climate Change Images? The Moderating Role of Construal Level in Climate Change Visual Communication. *Science Communication*, *43*(3), 358–387. https://doi.org/10.1177/10755470211008192

Forceville, C. (2017). Visual and Multimodal Metaphor in Advertising: Cultural Perspectives. *Styles of Communication*, *9*(2), 26–41.

Forceville, C. (2024). Identifying and Interpreting Visual and Multimodal Metaphor in Commercials and Feature Films. *Metaphor and Symbol*, *39*(1), 40–54. https://doi.org/10.1080/10926488.2023.2271544

Keating, D. M., & Skurka, C. (2024). Meta-Analytic Evidence That Message Fatigue is Associated With Unintended Persuasive Outcomes. *Communication Research*, 00936502241287875. https://doi.org/10.1177/00936502241287875

Mahadi, M., Ngidep Wiyasa, I. N., & Jaya Ck, I. G. N. A. (2022). Pelatihan Menggambar Ornamen Tradisional Bali di Panti Asuhan Yayasan Dharma Jati II Penatih Denpasar. *Segara Widya : Jurnal Penelitian Seni*, *10*(2), 95–105. https://doi.org/10.31091/sw.v10i2.2153

O'Neill, S., & Nicholson-Cole, S. (2009). "Fear Won't Do It": Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication*, *30*(3), 355–379. https://doi.org/10.1177/1075547008329201

Rose, G. (2023). *Visual methodologies: An introduction to researching with visual materials*. City Road, London, England Thousans Oaks, California : SAGE Publications Ltd. ©2023. https://doi.org/https://doi.org/10.4135/9781036231576

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https://ojs.uhnsugriwa.ac.id/index.php/lg

Salazar, G., Monroe, M. C., Ennes, M., Jones, J. A., & Veríssimo, D. (2022). Testing the influence of visual framing on engagement and pro-environmental action. *Conservation Science and Practice*, *4*(10), e12812. https://doi.org/10.1111/csp2.12812

Song, H., & So, J. (2023). Message fatigue beyond the health message context: A replication and further extension of So et al. (2017). *Human Communication Research*, *49*(3), 339–344. https://doi.org/10.1093/hcr/hqad021

Utami, A., & Swari, N. L. G. N. (2021). Ornamen Tradisional Bali Pada Interior Bangunan Gedung Ksirarnawa Taman Budaya Bali. *Jurnal Arsitektur ZONASI*, *4*(2), 167–180. https://doi.org/10.17509/jaz.v4i2.30950

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