



The Hornbill as an Inspirational Idea for the Creation of Painting Artworks

Lalang Cakra Buana

Master of Arts Program, Faculty of Cultural Science, Universitas Sumatera Utara, 20155, Indonesia

Corresponding Author: lalangcb21@gmail.com

ARTICLE INFO

Article history:

Received 23 September 2025

Revised 27 January 2026

Accepted 25 January 2026

Available online 26 January 2026

E-ISSN: 2962-1208

P-ISSN: 2807-3118

How to cite:

Buana LC. The Hornbill as an Inspirational Idea for the Creation of Painting Artworks. *Tradit Mod Humanit.* 2026;6(1):34–42.

ABSTRACT

The hornbill (family Bucerotidae) is one of the most morphologically distinctive and visually compelling bird species inhabiting the tropical forests of the Indonesian archipelago. Characterized by its large curved beak, prominent casque atop its head, striking contrasting plumage, and deeply resonant presence in indigenous cultural traditions, the hornbill presents an exceptionally rich subject for artistic exploration. Beyond its formidable aesthetic appeal, the hornbill holds a position of profound cultural significance in the traditions of the Dayak communities of Kalimantan and the Batak communities of North Sumatra, where it is revered as a guardian spirit, a messenger of ancestral worlds, and a living symbol of ecological equilibrium. Despite the hornbill's exceptional visual and symbolic richness, no prior research-based art creation study has systematically integrated its morphological, cultural, and ecological dimensions within a unified painting practice, a gap this study directly addresses. This research-based art creation study aims to systematically explore the aesthetic, symbolic, ecological, and cultural potential of the hornbill as the central source of inspiration for the creation of contemporary paintings. The methodology employed follows a three-stage research-based art creation model encompassing exploration, experimentation, and realization, drawing on field observation in Sumatran national parks, structured ethnographic interviews with indigenous community elders, and sustained studio practice spanning fourteen months. Three thematic painting series were developed: the naturalistic-expressive series "Guardians of the Forest", the semi-abstract cultural series "Ancestral Spirits", and the critically oriented mixed-media series "A Deferred Extinction". The results demonstrate that the hornbill's morphological distinctiveness, cultural symbolism, and endangered conservation status collectively generate a powerful conceptual framework capable of producing paintings of profound aesthetic depth, ecological relevance, and cultural resonance. The resulting works function simultaneously as autonomous artworks and as instruments of environmental advocacy.

Keywords: Hornbill; Bucerotidae; Indigenous culture

ABSTRAK

Burung enggang (famili Bucerotidae) merupakan salah satu spesies burung dengan ciri morfologis paling khas dan daya tarik visual yang memikat yang menghuni hutan tropis di kepulauan Indonesia. Dengan karakteristik berupa paruh besar melengkung, *casque* (tonjolan) mencolok di atas kepala, serta bulu dengan kontras warna yang tajam—ditambah perannya yang kuat dalam tradisi budaya masyarakat adat—burung enggang menjadi subjek yang sangat kaya untuk eksplorasi artistik. Di luar daya tarik estetikanya yang luar biasa, burung enggang memiliki posisi yang sangat penting secara budaya dalam tradisi masyarakat Dayak di Kalimantan dan masyarakat Batak di Sumatra Utara; di sana, burung ini dihormati sebagai roh penjaga, pembawa pesan dari dunia leluhur, serta simbol hidup bagi keseimbangan ekologis. Meskipun burung enggang memiliki kekayaan visual dan simbolis yang luar biasa, belum ada studi penciptaan seni berbasis penelitian sebelumnya yang secara sistematis mengintegrasikan dimensi morfologis, budaya, dan ekologisnya ke dalam praktik seni lukis yang utuh—sebuah celah yang coba diatasi secara langsung oleh penelitian ini. Studi penciptaan seni berbasis penelitian ini bertujuan untuk mengeksplorasi secara sistematis potensi estetis, simbolis, ekologis, dan budaya burung enggang sebagai



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International.

<https://doi.org/10.32734/tmh.v6i1.26824>

sumber inspirasi utama dalam penciptaan karya seni lukis kontemporer. Metodologi yang digunakan mengikuti model penciptaan seni berbasis penelitian tiga tahap yang mencakup eksplorasi, eksperimentasi, dan realisasi, dengan memanfaatkan observasi lapangan di taman nasional di Sumatra, wawancara etnografis terstruktur dengan para tetua adat, serta praktik studio berkelanjutan selama empat belas bulan. Tiga seri lukisan tematis dikembangkan: seri naturalistik-ekspresif "Guardians of the Forest" (Penjaga Hutan), seri budaya semi-abstrak "Ancestral Spirits" (Roh Leluhur), dan seri media campuran yang berorientasi kritis "A Deferred Extinction" (Kepunahan yang Tertunda). Hasil penelitian menunjukkan bahwa keunikan morfologis, simbolisme budaya, dan status konservasi burung enggang yang terancam punah secara kolektif membentuk kerangka konseptual yang kuat, yang mampu menghasilkan karya lukis dengan kedalaman estetika, relevansi ekologis, dan resonansi budaya yang mendalam. Karya-karya yang dihasilkan berfungsi secara simultan sebagai karya seni otonom sekaligus sebagai sarana advokasi lingkungan.

Kata kunci: Enggang, Bucerotidae, Budaya masyarakat adat

1. Introduction

Indonesia ranks among the world's foremost megadiverse nations, harboring an extraordinary breadth of flora and fauna distributed across its more than seventeen thousand islands. Within this vast biological heritage, the hornbill belonging to the family Bucerotidae stands as one of the most iconic and visually arresting representatives of the archipelago's tropical biodiversity. With its imposing body, dramatically curved beak, and the distinctive casque, a hollow or solid protrusion growing atop the upper mandible, the hornbill commands immediate visual attention, projecting an air of ancient grandeur that has captivated naturalists, anthropologists, cultural historians, and artists alike for centuries. Indonesia is home to thirteen of the approximately sixty hornbill species recognized worldwide, making it one of the most significant centers of hornbill diversity on the planet.

The relationship between Indonesian art and the natural world is longstanding and deeply layered. From Raden Saleh's dramatically charged portrayals of wild animals and volcanic landscapes in the colonial era to Affandi's fiercely expressionistic renderings of coconut palms, roosters, and the textures of ordinary village life, the sustained engagement between the Indonesian visual arts and the nation's natural environment has consistently yielded some of the most significant and enduring works in the country's art historical canon. In the contemporary period, as ecological crises grow increasingly urgent and the consequences of deforestation, wildlife trafficking, and climate disruption become ever more visible in the landscapes of the archipelago, artists across Indonesia have begun reconfiguring this longstanding relationship in more explicitly critical and politically engaged terms, positioning nature not merely as aesthetic subject matter but as a site of urgent political, ethical, and existential discourse.

However, a significant gap exists in the existing scholarship. While the hornbill has been extensively documented in ornithological, ethnographic, and conservation literature, no prior study in the Indonesian context has systematically employed the hornbill as the central subject of a research-based painting creation study that integrates its aesthetic, cultural, and ecological dimensions within a single, methodologically coherent artistic framework. Previous works in Indonesian art that engage with the natural environment have tended to address either aesthetic or ecological concerns in relative isolation, rarely achieving the simultaneous depth of visual, symbolic, and advocacy-oriented engagement that the hornbill's exceptional richness as a subject makes possible.

The author's engagement with the hornbill as an artistic subject originated from direct, embodied encounters with these birds in the forests of North Sumatra, encounters whose impact was immediate, physical, and lasting. The experience of witnessing hornbills in flight through the forest canopy, the deep, resonant percussion of their wingbeats filling the still forest air, their brilliant casques catching shafts of light filtering through the high canopy, produced an impression of overwhelming aesthetic and emotional force. This encounter seeded a creative inquiry that gradually deepened and expanded through systematic research into the bird's biology and ecology, the nature and extent of the threats it faces, and the remarkable depth of its embeddedness in the ritual, symbolic, and cosmological life of multiple indigenous communities throughout the Indonesian archipelago.

Contributing still further urgency to this creative inquiry is the grave and worsening conservation status of several hornbill species. The Helmeted Hornbill (*Rhinoplax vigil*), whose uniquely solid casque known in the

illegal wildlife trade as "red ivory" commands prices on the black market that reportedly exceed those of elephant ivory, faces severe and accelerating population pressures from organized poaching networks and the catastrophic destruction of its old-growth forest habitat. As obligate cavity nesters whose reproductive success depends entirely upon the availability of large, ancient trees with naturally occurring hollow cavities, hornbills are acutely vulnerable to the loss of primary forest that has proceeded at alarming rates across Sumatra and Kalimantan over recent decades.

This convergence of extraordinary aesthetic fascination, deep cultural reverence, and acute ecological emergency defines the core motivations and animating concerns that drive this research-based art creation study. Accordingly, this study is guided by the following research questions: (1) How can the hornbill's morphological characteristics be systematically translated into a distinctive and expressive visual language in painting? (2) In what ways can ethnographic findings concerning the hornbill's cultural and symbolic significance be productively integrated into a contemporary painting practice? (3) How can painting function as an effective medium of environmental advocacy in relation to the hornbill's endangered conservation status? This study therefore seeks to systematically explore and develop the hornbill's exceptional potential as an inspirational source for contemporary painting practice, integrating aesthetic, cultural, and ecological dimensions within a coherent, rigorous, and methodologically transparent framework. The work aspires to demonstrate how sustained artistic practice, grounded in serious research and genuine creative commitment, can serve simultaneously as aesthetic expression, cultural documentation, and meaningful environmental advocacy.

2. Literature Review

The theoretical foundation of this research draws upon four interconnected and mutually reinforcing bodies of scholarly thought: aesthetic theory, ecocriticism and environmental aesthetics, ethnographic and cultural studies of art, and research-based art creation methodology.

Aesthetic Theory

The primary aesthetic framework informing this study is drawn from Dharsono's (2007) comprehensive and nuanced account of Indonesian aesthetic principles and their relevance to contemporary artistic practice. Dharsono argues that genuine aesthetic value in painting cannot be reduced to formal considerations of compositional balance, color harmony, and technical virtuosity alone, but necessarily encompasses the communicative, expressive, and meaning-generating dimensions of artistic form.

A work of art achieves its fullest aesthetic realization when it succeeds in inducing an aesthetic experience that simultaneously and fully engages the senses, the emotions, and the intellect of the viewer, an experience in which formal beauty and conceptual depth are not merely compatible but mutually reinforcing and inseparable. This foundational principle guides the compositional and conceptual decisions made throughout the development of all three painting series in this study, ensuring that the pursuit of visual impact and the cultivation of conceptual depth proceed in constant dialogue rather than in opposition or at each other's expense.

Ecocriticism and Environmental Art

Ecocriticism, as systematically theorized by Garrard (2004) and further developed by a rich body of subsequent scholarship, provides the study with a critical analytical framework for examining the representational politics of nature in art and culture. Ecocriticism interrogates how natural subjects are selected, framed, valued, and deployed within cultural products, attending with particular care to the power relations embedded in human representations of the nonhuman natural world.

From this perspective, an artwork featuring the hornbill is never simply or innocently a depiction of a bird; it is simultaneously and necessarily a statement about the cultural meanings that have been attached to that bird across different historical and geographical contexts, about the ecological conditions that sustain or threaten its continued existence, and about the ethical responsibilities that attend the positions of the human observer, the human creator, and the human audience.

This critical framework directly underpins the conceptual orientation of the third painting series, which most explicitly addresses the hornbill's endangered status and the social and economic forces that produce it. The broader field of environmental art, represented by internationally significant practitioners such as Andy Goldsworthy and Joseph Beuys, offers important historical and conceptual precedent for the deployment of visual art as a medium of ecological engagement and environmental consciousness-raising. In a directly comparable study, Supriatna and Wahyudi (2020) demonstrate how Indonesian artists engaging with

endangered species subject matter can produce works that function simultaneously as aesthetic objects and conservation instruments, a precedent directly relevant to the present study's ambitions. These artists collectively demonstrate that the most effective environmental art does not simply illustrate ecological facts or advocate for conservation policies in didactic terms, but rather constructs new aesthetic and conceptual frameworks through which audiences can perceive, feel, and value the natural world in transformed and more ethically responsive ways.

Ethnographic and Cultural Dimensions

The ethnographic and cultural dimension of this study draws substantially on Sellato's (1989) foundational and extensively documented scholarship on the material culture, ritual practices, and cosmological significance of the hornbill across the indigenous communities of Borneo. Sellato documents in meticulous and illuminating detail the pervasive use of hornbill feathers, beaks, and casques in ceremonial dress, the construction of ritual objects, and the ornamentation of longhouses and other significant architectural structures among the various Dayak peoples.

This documentation demonstrates conclusively that the hornbill occupies a position of absolute centrality at the intersection of the aesthetic, the spiritual, and the political in these cultural traditions, a centrality that has been sustained across many generations of indigenous life in the forests of Borneo. Similarly, Siregar's (2015) ethnographic research documents in careful detail the hornbill's sacred status among the Batak Karo people of North Sumatra, where the bird known locally as *enggang* is understood as the messenger of ancestral spirits and the guardian of the boundaries separating the human world from the spirit world.

Research-Based Art Creation

The methodological foundation of this study is provided by Hawkins' (2003) model of research-based art creation, which articulates a fundamentally cyclical and iterative model of artistic development and knowledge production comprising three interpenetrating stages: exploration, experimentation, and realization. Crucially, unlike models that treat research and creation as strictly sequential activities in which completed research findings are subsequently translated into artistic form, Hawkins' model recognizes that the act of artistic making itself constitutes a distinctive and irreplaceable form of knowledge production, requiring that research and creation activities be conducted in ongoing, mutually transformative dialogue throughout the entirety of the creative process.

3. Method

This study employs the research-based art creation methodology structured according to Hawkins' (2003) three-stage model, comprehensively adapted to incorporate the specific empirical, cultural, and artistic demands of the present subject matter.

Stage 1: Exploration

The exploration stage involved a comprehensive, carefully designed multi-method research process conducted over an eight-month period. Field observation was conducted at Gunung Leuser National Park and Bukit Barisan Selatan National Park, both located in North Sumatra, where the author undertook extended and repeated observational visits specifically designed to document hornbill behavior, movement patterns, foraging and feeding habits, vocalizations, and the specific quality of light, color, atmosphere, and spatial character of hornbill habitats across different times of day and different seasonal conditions. All observations were systematically recorded through high-resolution photography, video documentation, and direct observational sketching undertaken on site.

A total of over two thousand and five hundred photographic references were collected across multiple field visits and catalogued thematically and chronologically for subsequent use in the studio. Cultural research was conducted through structured in-depth interviews and participatory observation sessions with Batak Karo community elders and ritual specialists in the Karo Highlands of North Sumatra. Key informants included Bapak Sitepu (community elder and ritual specialist, Karo Highlands), Ibu Br. Ginting (weaver and oral tradition keeper, Karo Highlands), and Bapak Tarigan (ceremonial practitioner, Karo Highlands), whose testimonies provided the primary ethnographic basis for the cultural dimensions of this study.

These sessions were supplemented by correspondence and documentary material review with Dayak Ngaju community representatives in Central Kalimantan. All interviews were conducted using a semi-structured interview guide comprising open-ended questions organized around three thematic clusters: (1) the hornbill's role in ceremonial and ritual life, (2) oral traditions and cosmological narratives involving the hornbill, and

(3) contemporary perceptions of the hornbill's cultural and ecological significance. This research yielded rich documentation of oral traditions, ceremonial practices, material culture, and cosmological narratives in which the hornbill figures as a central symbolic and spiritual presence.

A systematic and extensive review of scientific literature on hornbill biology, population ecology, reproductive biology, and conservation status was also conducted, drawing on resources including the IUCN Red List of Threatened Species, TRAFFIC's wildlife trade monitoring reports, and peer-reviewed ecological and ornithological research published in international scientific journals. Data gathered through field observation, photographic documentation, and ethnographic interviews were analyzed using a qualitative thematic analysis approach.

Field notes and interview transcripts were systematically coded to identify recurring morphological, symbolic, and ecological themes of relevance to the painting creation process. Visual data, comprising photographs and observational sketches, were analyzed through sustained comparative visual study aimed at identifying the most aesthetically and conceptually productive formal characteristics of the hornbill for translation into painted form. The findings of this thematic analysis directly informed the development of visual strategies in the subsequent experimentation stage.

Stage 2: Experimentation

The experimentation stage was conducted over a six-month period of intensive and sustained studio practice. The primary focus throughout this stage was on the rigorous development of visual strategies genuinely adequate to the exceptional conceptual complexity and thematic richness of the subject. Experimental work was conducted across multiple media including heavy-body acrylic paint, oil paint, drawing media including charcoal and graphite, and mixed media incorporating organic and found materials such as sand, volcanic earth, dried plant fiber, sections of wire mesh, and salvaged printed paper. These experiments were specifically designed to identify and develop which material qualities, textural characteristics, and technical approaches most effectively served the distinct thematic orientations and communicative aims of the three proposed painting series.

For the naturalistic-expressive series, impasto techniques employing heavy-body acrylic were extensively explored, with sustained particular attention devoted to the significant challenge of rendering the hornbill's remarkable plumage, superficially and uniformly black to the casual observer, but possessed of a remarkable structural iridescence that produces vivid blue and green metallic highlights of considerable intensity and beauty under direct and angled lighting conditions. For the cultural series, the author experimented intensively with multi-layer glazing techniques in oil paint, systematically building up translucent and semi-translucent layers of warm and cool tones to create a depth and luminosity of color specifically suggestive of the inner glow characteristic of traditional Dayak beadwork and Batak ulos ceremonial weaving. For the critical mixed-media series, experimental work focused on the integration of found and salvaged materials with painted and drawn surfaces to create works whose very material constitution, the physical stuff from which they are made, carries and communicates independent conceptual weight.

Stage 3: Realization

The realization stage involved the production of twelve completed paintings distributed across the three thematic series, each measuring between 100 x 80 cm and 150 x 120 cm on stretched linen canvas. Each completed work underwent a rigorous and multi-perspectival critical evaluation process involving formal studio critiques conducted with academic supervisors from the Faculty of Arts at Universitas Sumatera Utara, peer review sessions with fellow practicing artists from the Medan and wider North Sumatran arts community, and structured audience response sessions with participants drawn from both the professional art community and environmental advocacy and conservation organizations active in the Sumatra region. Feedback gathered through these evaluation processes was carefully considered and systematically integrated into ongoing revisions of individual works and into the broader conceptual framing of each series as it developed toward its final form.

4. Result and Discussion

The Visual Language of the Hornbill: Morphology as Aesthetic Resource

The systematic and sustained visual study of the hornbill undertaken throughout the exploration stage of this research revealed with compelling clarity the extraordinary richness and complexity of this bird as an aesthetic subject for painting. Among the thirteen hornbill species present in Indonesia, each presents its own highly distinctive visual identity, offering a remarkably diverse palette of morphological forms, color

relationships, and textural qualities for artistic exploration and development. The Helmeted Hornbill (*Rhinoplax vigil*) presents the most dramatically architectural profile of any Indonesian species, with its remarkable flat-topped solid casque and deep blood-red casque coloration creating a powerful contrast with the creamy ivory yellow of the beak below and the brilliant white of the tail feathers tipped in bold black. The Rhinoceros Hornbill (*Buceros rhinoceros*) presents a dramatically different and dynamically charged visual profile, with its great casque sweeping upward and dramatically forward over the beak in brilliant orange, red, and yellow, a form of breath-taking visual exuberance. The Wreathed Hornbill (*Rhyticeros undulatus*) introduces yet another visual register, the rich rufous and glossy black of its body anchored by the complex corrugated ridges of its beak and the luminously glowing yellow gular pouch of the male.

What emerges most powerfully and productively from sustained visual study of these remarkable birds is that the hornbill body is fundamentally organized around a series of powerful and generative visual contrasts: the massive, weighty darkness of the body against the vivid concentrated coloration of the casque and beak; the rough, corrugated, almost geological texture of the casque against the smooth, hard, almost ceramic quality of the beak surface below it; the dense, light-absorbing black of the plumage against the structural, light-refracting iridescence of that very same plumage observed under direct and raking light. These organizing contrasts between mass and delicacy, between opacity and luminosity, between gravitational stillness and explosive movement in flight provide the foundational visual tensions that animate and energize all three painting series developed through this study.

This finding responds directly to the first research question posed in this study. The hornbill's morphology is not merely visually spectacular in a passive sense; it is, in formal terms, compositionally generative, organized around polarities of weight and lightness, opacity and transparency, stasis and movement that translate directly into the fundamental tensions that animate all dynamic painting. This resonates with findings from comparable studies of animal morphology in painting practice: Sucitra (2019), in his research-based study of Javan wildlife as a source for painting, similarly identifies the productive translation of biological visual contrasts into compositional tensions as a key mechanism through which natural subjects become artistically productive rather than merely illustratively serviceable.

Cultural Integration and Symbolic Depth

The second painting series, titled *Ancestral Spirits*, demonstrates with particular richness and persuasiveness the productive artistic possibilities that open up when ethnographic research findings are thoughtfully and rigorously integrated into a visual language simultaneously legible as serious contemporary art and genuinely resonant with its deep cultural sources. Drawing directly from documented Dayak Ngaju ceremonial objects and practices, particularly the elaborate hornbill-shaped carved wooden effigies used in the solemn Tiwah ceremony performed for the secondary burial of the deceased, through which the soul of the departed is finally guided to its resting place in the spirit world, the author developed over the course of many months of studio experimentation a rich compositional vocabulary that layers and interweaves the hornbill form over and within abstract visual fields derived from and inspired by the geometric patterning of traditional Dayak beadwork and Batak Karo textile weaving.

Engagement with Batak Karo community elders during the ethnographic research process opened dimensions of meaning not initially anticipated in the design of the study. Several community elders described the *enggang*, the Karo name for the hornbill, as a bird whose distinctive call marks and maintains the boundary between the human world of the living and the spirit world of the ancestors, and whose unexpected appearance near a village or family dwelling is understood simultaneously as an omen requiring careful interpretation and as a potential blessing carrying protective significance. This profound cultural understanding of the hornbill as a fundamentally liminal creature, one that occupies and actively mediates the charged threshold between orders of being, became one of the most generative and productive conceptual discoveries of the entire research process, directly informing a range of important compositional choices that position the hornbill figures in these paintings consistently at the edges of visual fields, emerging from or dissolving back into areas of deep shadow, abstraction, and indeterminate space.

This finding responds directly to the second research question. The integration of ethnographic data into painting practice does not operate as a simple transfer of iconographic content; rather, as this series demonstrates, it operates at the level of compositional logic, reorganizing the fundamental spatial grammar of the paintings in response to cultural concepts of liminality and threshold. This finding is consistent with Yuliman's (1981) foundational observation that the most productive integrations of Indonesian cultural material into contemporary visual art occur when cultural content informs formal and compositional decisions rather than merely appearing as surface decoration or thematic reference.

Environmental Advocacy Through Visual Art

The third and most explicitly critical series of paintings, titled *A Deferred Extinction*, represents the most directly political dimension of this research-based art creation study. Developed in direct response to the disturbing data gathered on hornbill population decline across Indonesia and the specific dynamics of the illegal casque trade, a trade in which a single intact solid casque harvested from a Helmeted Hornbill can reportedly command prices of several thousand US dollars on international black markets, creating powerful economic incentives for poachers operating in even the most remote and theoretically protected forest areas, the works in this series aim to make viscerally present and emotionally immediate the violence of extinction through visual strategies of fragmentation, displacement, material rupture, and deliberate incompleteness. Mixed media is employed intensively and purposefully throughout this series.

Works incorporate fragments of Indonesian-language newspaper coverage of wildlife trafficking prosecutions, sections of industrial wire mesh evoking the cages and snares used in illegal wildlife capture operations, and lengths of rope and cordage that traverse and cross the painted surface in ways that simultaneously invoke traditional rope-making crafts of Indonesian indigenous communities and suggest the constriction, entrapment, and binding that the hornbill faces through the operations of the illegal wildlife trade and the progressive contraction of its forest habitat. The hornbill figures in these works are rendered consistently partially and fragmentarily, a wing detached from its body here, an isolated beak there, a single eye suspended in undefined and ungrounded space, suggesting a subject in the active process of disappearing even as the artist attempts to depict it, resisting complete and unified representation because its living wholeness is itself in the process of being destroyed.

This series responds directly to the third research question, demonstrating that painting can function as an effective medium of environmental advocacy not through didactic illustration of ecological facts, but through the construction of aesthetic experiences of loss, fragmentation, and urgency that engage viewers emotionally and ethically rather than merely informationally. This finding aligns with Garrard's (2004) argument that ecocritically engaged art achieves its greatest advocacy effect not through the representation of conservation data but through the construction of new perceptual frameworks for experiencing the nonhuman world. It also extends the findings of Prasetyo and Indrawati (2021), whose study of environmental art practice in Java concludes that material heterogeneity, the inclusion of non-art materials carrying their own social and environmental associations, significantly amplifies the ethical force of advocacy-oriented artworks.

Technical Innovations in Material Practice

Across all three painting series, the sustained studio practice undertaken in this study generated several technical innovations of potential broader relevance to contemporary painting practice. The particular challenge of rendering the hornbill's structural iridescence with conviction and accuracy led to the development of a distinctive layering technique that combines warm-toned acrylic underpainting with multiple carefully controlled thin glazes of oil paint in complementary cool blues, blue-greens, and greens, deliberately exploiting the optical color mixing phenomenon that occurs when multiple transparent and semi-transparent layers of different hues interact with the reflected light bouncing back from the white gesso ground below. The resulting painted surface changes its chromatic character perceptibly and dramatically under different lighting conditions and from different viewing angles, approximating the actual dynamic optical behavior of structurally iridescent plumage far more convincingly and truthfully than any amount of conventional black or dark brown paint could achieve.

Implications

This study carries implications across three interconnected domains.

Methodologically, the study confirms the considerable value of Hawkins' (2003) research-based art creation model as a framework for addressing artistic subjects of high complexity and cultural sensitivity. The cyclical integration of field research, ethnographic documentation, theoretical reflection, and studio practice that this model enables generates forms of knowledge, particularly knowledge about the relationship between cultural meaning and painterly form, that neither purely scientific nor purely artistic approaches could produce in isolation. This has direct implications for the design of art creation research curricula in Indonesian higher education, suggesting that research-based creation methodologies deserve a more central place in graduate arts education.

Culturally, the study demonstrates that the systematic integration of indigenous ethnographic knowledge into contemporary painting practice, when conducted with appropriate care, community engagement, and intellectual rigor, can produce works that function simultaneously as contributions to the contemporary art discourse and as meaningful acts of cultural documentation and preservation. At a time when many of the oral traditions, ceremonial practices, and cosmological narratives documented in this study face significant pressures from rapid social change, this cultural implication carries considerable urgency. Ecologically, the study contributes to a growing body of evidence that visual art can serve as a meaningful and distinctive complement to scientific and policy-based approaches to conservation advocacy. By constructing aesthetic experiences of the hornbill's beauty, cultural depth, and endangered status that engage audiences emotionally and ethically rather than purely informationally, painting practice can reach audiences and cultivate forms of environmental concern that lie beyond the reach of conventional conservation communication.

5. Conclusion

This research-based art creation study has demonstrated with sustained and systematic evidence that the hornbill constitutes a subject of quite extraordinary richness, complexity, and generative potential for serious contemporary painting practice. Its remarkable morphological distinctiveness provides visual material of immediate dramatic force and sustained aesthetic interest; its profound and well-documented embeddedness in the indigenous cultural traditions of multiple Indonesian communities supplies layers of symbolic depth and historical resonance that greatly enrich the conceptual register available to the artist; and its precarious and deteriorating conservation status lends a dimension of urgent ethical stakes to every act of artistic representation, transforming the studio into a site of moral as well as aesthetic deliberation. The three thematic series developed through this study, *Guardians of the Forest*, *Ancestral Spirits*, and *A Deferred Extinction*, collectively demonstrate that a single carefully chosen subject, approached with sufficient intellectual rigor, sustained creative openness, and genuine artistic commitment, can sustain a remarkably wide range of different visual and conceptual strategies across multiple works without exhaustion or redundancy. Each series develops a visual language distinctively appropriate to its specific thematic aims and communicative intentions, while all three together contribute to a coherent and compelling larger argument about the cultural centrality, ecological significance, and urgent need for protection of the hornbill.

The study equally confirms the considerable methodological value of the research-based art creation model as a framework for addressing artistic subjects of this level of complexity, cultural sensitivity, and ecological urgency. The cyclical and iterative integration of field research, cultural documentation, theoretical reflection, and sustained studio practice that this methodology enables generated insights, discoveries, and creative solutions that no single disciplinary approach, whether purely scientific, purely ethnographic, or purely artistic in its orientation, could have produced in isolation. This study is not without its limitations. The geographic scope of the ethnographic research, while encompassing both North Sumatran and Central Kalimantan cultural traditions, necessarily excludes other Indonesian communities for whom the hornbill carries significant cultural meaning, including various Dayak subgroups in East and West Kalimantan and indigenous communities in Papua. Additionally, the absence of formal quantitative audience reception data limits the capacity to make systematic claims about the advocacy effectiveness of the resulting works beyond the qualitative responses gathered in structured evaluation sessions. Future research would benefit from: (1) expanding the ethnographic scope to include a wider range of Indonesian hornbill-related cultural traditions; (2) incorporating systematic audience reception studies to assess the actual advocacy impact of environmentally engaged painting practice; and (3) exploring the productive possibilities of collaborative creation processes involving artists working in direct and sustained partnership with indigenous community members and conservation scientists.

It is the author's sincere hope that this study will make a meaningful contribution to the developing body of Indonesian art scholarship and practice that takes seriously both the ecological emergency confronting the extraordinary biodiversity of the archipelago and the irreplaceable and distinctive capacities of visual art, with all its sensory immediacy, emotional directness, and symbolic depth, to respond to that emergency with the imagination, rigor, and moral force that the moment demands. The hornbill deserves not only urgent and effective protection within the forests it inhabits, but a sustained, serious, and committed presence in the cultural and artistic life of the nation whose natural heritage it so magnificently represents.

References

- Dharsono, S. K. (2007). *Estetika [Aesthetics]*. Rekayasa Sains.
- Garrard, G. (2004). *Ecocriticism: The New Critical Idiom*. Routledge.
- Goldsworthy, A. (1990). *Andy Goldsworthy: A Collaboration with Nature*. Harry N. Abrams.

- Hawkins, A. M. (2003). *Creating Through Dance* (Revised Ed.). Princeton Book Company.
- IUCN. (2023). *The IUCN Red List of Threatened Species*. Version 2023-1.
<https://www.iucnredlist.org>
- Kemp, A. C., & Woodcock, M. (1995). *The Hornbills: Bucerotiformes*. Oxford University Press.
- Kinnaird, M. F., & O'Brien, T. G. (2007). *The Ecology and Conservation of Asian Hornbills: Farmers of the Forest*. University of Chicago Press.
- Poonswad, P. (Ed.). (1998). *The Asian Hornbills: Ecology and Conservation*. National Center for Genetic Engineering and Biotechnology.
- Prasetyo, B., & Indrawati, R. (2021). Material heterogeneity and ethical force in Indonesian environmental art. *Jurnal Seni Rupa dan Desain*, 18(1), 33–49.
- Sellato, B. (1989). *Hornbill and Dragon: Arts and Culture of Borneo*. Sun Tree Publishing.
- Siregar, I. (2015). Enggang dalam tradisi dan kepercayaan masyarakat Batak Karo [The hornbill in the tradition and belief of the Batak Karo community]. *Jurnal Antropologi Indonesia*, 36(2), 112–127.
- Sobir, M., & Kurniawan, A. (2018). Hornbill conservation in Sumatran forests: Challenges and opportunities. *Jurnal Konservasi Hayati*, 14(2), 45–58.
- Sucitra, I. G. A. (2019). Satwa liar Jawa sebagai sumber inspirasi penciptaan lukisan berbasis penelitian [Javanese wildlife as an inspirational source for research-based painting creation]. *Jurnal Pendidikan Seni*, 7(2), 88–104.
- Sudarmadji, S. (1988). *From Saleh to Aming: Paintings in the collection of the Presidential Palace of the Republic of Indonesia*. Presidential Palace Committee.
- Supangkat, J. (2005). *Outlet: Contemporary Indonesian Art*. Yayasan Seni Cemeti.
- Supriatna, J., & Wahyudi, T. (2020). Endangered species as subjects of visual art: Between aesthetics and conservation advocacy in contemporary Indonesian practice. *Jurnal Seni dan Budaya Nusantara*, 5(1), 12–28.
- TRAFFIC. (2015). *An overview of hornbill trade in Viet Nam*. TRAFFIC Southeast Asia Regional Office.
- Widodo, W. (2013). The role of hornbills as seed dispersers in tropical forest ecosystems. *Jurnal Biologi Indonesia*, 9(1), 77–89.
- WWF Indonesia. (2019). *Helmeted hornbill conservation report in Sumatra*. WWF Indonesia.
- Yudoseputro, W. (2008). *Pengantar seni rupa Islam di Indonesia* [Introduction to Islamic visual arts in Indonesia]. Angkasa.
- Yuliman, S. (1981). *Seni lukis Indonesia baru: Sebuah pengantar* [New Indonesian painting: An introduction]. Dewan Kesenian Jakarta.