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From Algorithm to Canvas: An AI-Ethnographic Method for Indigenous Eco-Futurist Art

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ABSTRACT

This study addresses a central problem in artificial intelligence (AI)-generated art: how machine-learning systems trained on culturally narrow datasets distort Indigenous ecological knowledge, yet are increasingly used to visualize conservation and environmental futures. To investigate this tension, the research develops and applies an AI-ethnographic method that treats AI not as a creator but as an interpretive actor whose outputs can be ethnographically analyzed and artistically corrected. Using text from the author's doctoral research on Indigenous wildlife activism in Southern Africa, the study prompts an AI image generator (DALL·E) to produce visual interpretations of Indigenous land, non-human kin, and resistance. These outputs are then examined for bias, omission, and distortion, before being manually transformed into oil paintings through a process of artistic intervention, curation, and re-authoring. This iterative dialogue between algorithmic rendering and embodied painting functions as a form of digital ethnography through art. The results show that AI consistently abstracts, stereotypes, and de-contextualizes Indigenous ecologies, but also produces unexpected visual fragments that can be reclaimed through human intervention. The hand-painted artworks become sites of epistemic repair, restoring relational meaning, cultural specificity, and narrative sovereignty that the AI cannot generate on its own. The study contributes three things: (1) a replicable AI-ethnographic methodology for analyzing how algorithms construct cultural meaning; (2) an empirical demonstration of how artistic intervention can expose and correct algorithmic bias; and (3) a framework for using AI-assisted art as a tool of Indigenous digital sovereignty and eco-futurist storytelling. By repositioning AI as a flawed but productive collaborator rather than an autonomous artist, the research reframes algorithmic creativity as a site of cultural negotiation, authorship, and decolonial intervention.

Keywords: AI-Assisted Art, Visual Anthropology, Eco-Futurism, Indigenous Knowledge Systems

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1. Introduction

Theoretical Framing

The intersection of artificial intelligence (AI) and art has long been a site of inquiry. It does not only challenge traditional notions of creativity, cultural expression, and human agency, but it also presents new possibilities for understanding representation and identity in the digital age.

Artificial intelligence unsettles three foundational anthropological concepts: authorship, agency, and cultural ownership. In visual culture, these concepts have historically been grounded in human intentionality, embodied labor, and social context. AI disrupts all three by generating cultural artifacts without lived experience, cultural accountability, or historical belonging. Anthropologists of AI argue that algorithmic systems do not merely process information but participate in social worlds as cultural actors^[1-3]. Machine learning models encode the epistemologies, biases, and power structures embedded in their training data, rendering AI outputs neither neutral nor purely technical^[4,5]. When AI systems generate images, stories, or artworks, they are not creating *ex nihilo*; they are recomposing cultural memory through computational logics shaped by colonial, Western, and commercial archives.

For Indigenous knowledge systems, this presents a fundamental tension. Indigenous art is not merely representational but relational, embedding land, kinship, and sovereignty within aesthetic form^[6,7]. When AI systems trained on globally scraped datasets attempt to visualize Indigenous narratives, they inevitably abstract what is relational, misrecognize what is sacred, and distort what is situated.

This study, therefore, approaches AI not as a creative subject but as a partial, culturally loaded interpreter whose outputs must be critically reworked through epistemic and artistic intervention.

2. Literature Review

2.1. Is AI Creative, or Just Powerful?

Scholarly debates about AI creativity cluster around three positions.

The first treats AI as a structurally biased reproduction. Researchers in critical data studies and Indigenous AI scholarship show that generative systems disproportionately reflect

Western aesthetics and colonial epistemologies^[4,5]. From this view, AI art risks becoming a new form of algorithmic colonialism, extracting cultural forms while erasing their origins.

A second camp argues that AI introduces novel forms of creativity because it is not constrained by biography, emotion, or cultural habit. Supporters^[8] of this argument claim that AI's detachment from lived experience allows it to recombine symbols and styles in ways inaccessible to human artists, generating unexpected aesthetic possibilities.

A third tradition, rooted in media theory and aesthetics, cautions that machine production undermines artistic authenticity. Walter Benjamin's theory of mechanical reproduction^[9], extended by Christiane Paul^[10], Margaret Boden and Ernest Edmonds^[11], suggests that algorithmic art risks eroding the "aura" of cultural objects by divorcing them from embodied authorship and historical context.

What these positions share is a tendency to debate whether AI is creative. This study instead asks a different question: what kind of cultural actor is AI when it attempts to represent Indigenous ecological knowledge?

By reframing AI as a flawed ethnographer rather than a creator, this research moves beyond techno-optimism, techno-pessimism, and techno-determinism, situating AI as a site where power, culture, and aesthetics collide; and arguing instead that AI is an incomplete cultural interpreter whose outputs require human and embodied correction.

2.2. The Role of AI in Art and Aesthetic Practices

AI-associated creativity, ranging from digital art to automated storytelling, challenges conventional definitions of authorship and authenticity^[12]. While culture is examined in the metaverse^[13], scholars and the famous case of Edmond de Belamy^[10,14,15] examine generative AI's impact on creativity, authorship, and intellectual property. Beyond visual art, AI's role in storytelling through the generation of literature, poetry, and scripts using models like GPT-4 and DALL·E raises critical questions in media studies about algorithmic creativity, narrative construction, and the need for human oversight^[16]. However, as AI-generated content proliferates, concerns about cultural bias become more pressing. While the research^[5] demonstrates how AI systems trained on Western-centric datasets risk marginalizing Indigenous and non-Western artistic traditions, reinforcing existing cultural hierarchies rather than expanding

artistic diversity, scholars^[8] argue that a counterargument to the criticism and questioning of whether AI can be truly considered creative is that AI’s very detachment from personal experience might grant it a unique form of creativity. Without the biases, cultural impositions, and emotional boundaries that often constrict human poets, AI has the latitude to combine words, images, and sentiments in unforeseen ways. Nevertheless, while AI-assisted tools like DeepDream and Runway ML enable artists to merge computational aesthetics with human intervention, fostering a hybrid form of creativity^[11], this blurring of boundaries between human and machine-generated art reignites long-standing philosophical debates, including the argument that mechanical reproduction diminishes the ‘aura’ of art^[9], thus raising questions about originality and artistic value in the digital age. At the same time, AI presents new opportunities for cultural preservation, particularly in Indigenous art forms, where machine learning has been employed to reconstruct lost languages and revive traditional artistic patterns, offering both possibilities and ethical considerations for the role of AI in safeguarding cultural heritage.

2.3. Anthropological Perspectives on AI-Generated Art

The sale of Edmond de Belamy for a whopping \$432,500 at Christie’s on October 25, 2018, wasn’t just a sale; it was a statement. AI-generated art had officially arrived on the global auction stage, challenging traditional notions of authorship and creativity. But behind this landmark moment was not the hand of a master painter, but rather the intricate operation of

machine learning. “*The algorithm is composed of two parts,*” explains Caselles-Dupré, “*On one side is the Generator; on the other, the Discriminator*”^[17].

Just as AI is reshaping the art world, its influence is steadily permeating other disciplines. Yet in fields like anthropology, its presence remains relatively underexplored^[18]. While disciplines like geography, sociology and media studies actively engage with AI’s impact, anthropology, rooted in ethnographic methods and human-centered inquiry, has been slower to integrate AI as both a research tool and a subject of study. Discussions on “AI in anthropology” and “the anthropology of AI” often focus on AI’s role in automating data analysis, ethical concerns about bias, and its influence on human behavior, labor, and identity. However, deeper anthropological questions, such as how AI reshapes cultural meanings, social structures, and even the way we understand humanity, are still emerging. The discipline’s traditional emphasis on lived experiences and qualitative methods makes AI a challenging yet crucial frontier for anthropological inquiry, a focus that now falls under the burgeoning field of digital anthropology. AI’s role in art creation intersects with anthropology in ways that remain underexplored, particularly within visual anthropology, cultural anthropology, and digital anthropology.

Table 1 establishes the disciplinary triangulation that structures the analysis. Visual anthropology explains how images produce meaning; cultural anthropology situates questions of ownership, symbolism, and appropriation; and digital anthropology frames AI as a socio-technical actor. This table, therefore, functions as the theoretical lens through which all subsequent figures are interpreted.

Table 1. Anthropological Perspectives on AI-Generated Art.

Type of Anthropology	Description
Visual anthropology	examines how images shape cultural narratives. AI-associated art challenges traditional ideas of authorship, agency, and representation, raising questions about who creates meaning in an era where machine learning can produce, alter, and even curate images. Anthropologists studying AI and art must grapple with how such technologies impact visual storytelling, artistic authenticity, and the preservation or distortion of cultural symbols.
Cultural anthropology	investigates how societies create, interpret, and value art. AI-associated works (often trained on existing cultural artifacts) introduce debates about originality, ownership, and the ethical use of Indigenous and marginalized communities’ art in datasets. Cultural anthropologists must consider how AI reshapes creative traditions, influences artistic labor, and alters how communities engage with their own artistic heritage.
Digital anthropology	explores how digital technologies reshape human experiences. AI-associated art, partially emerging from algorithmic processes, represents a shift in creative agency, where artists collaborate with machine learning systems rather than working alone. This raises questions about the evolving relationship between humans and machines, the cultural significance of algorithmically generated aesthetics, and the ways digital environments mediate artistic expression.

Cultural and visual anthropologists have increasingly turned their attention to AI as a socio-technical phenomenon, examining its impact on human behavior, institutions, and

cultural expressions. Scholars in the anthropology of AI^[2] examine AI as a cultural artifact, analyzing how machine learning models encode human biases and reinforce existing societal

structures. Ethnographic approaches to AI further reveal the often-invisible human labor behind AI development, particularly the role of data annotators and other hidden workers, raising critical questions about automation, labor, invisibility and power in global economies^[19]. Building on these perspectives, researchers drawing from Latour’s Actor-Network Theory^[3] challenge the notion of AI as a mere neutral tool, instead conceptualizing it as an active participant in shaping human social systems, influencing decision-making, governance, and the dynamics of everyday life. Furthermore, the Holy See has joined the trend and explores the ethical, anthropological, and theological dimensions of AI from a Catholic perspective^[20].

Despite these connections, anthropology has only begun to critically engage with AI in art creation. This gap presents an opportunity to rethink traditional notions of creativity, cultural production, and meaning-making in an era where technology plays an increasingly active role in shaping visual and artistic landscapes.

2.4. AI, Ethics, and Cultural Ownership

As AI becomes more embedded in cultural production, concerns arise regarding ownership, exploitation, and the ethics of machine learning. Critics of algorithmic colonialism argue that AI systems, often trained on Western-centric datasets, impose hegemonic aesthetics and epistemologies on global cultural expressions, reinforcing existing power imbalances^[21]. This concern extends to AI’s role in cultural heritage preservation, as seen in digital restoration projects like Google’s Art & Culture initiative, which raises critical questions about who controls historical narratives and how AI interprets cultural memory. Furthermore, the rise of AI-generated content challenges traditional legal frameworks of intellectual property, sparking ongoing debates about authorship, ownership, and the legal status of machine-created works^[22]. Together, these issues highlight the complex intersections of AI, cultural sovereignty, and artistic legitimacy in the digital age.

While contemporary discussions on AI’s influence in cultural production, its role as both a tool and a subject in anthropological research, and the implications of AI-generated art seem timely, they are far from new. Over two decades ago, the research^[23] asserted that “technical revolutions are cultural revolutions,” emphasizing that technological advancements are deeply embedded in cultural contexts, shaping and being

shaped by specific societal needs, distinct experiences, and knowledge systems. The identification of problems, the formulation of solutions, the skills required by different cultures, and the skills required to engage with new technologies are all interrelated within contextual cultural landscapes. As AI and robotics evolve, they demand new competencies and skill sets, further entangling technological progress with cultural transformation.

Within this reality, the anthropology of AI and robotics emerges as an inquiry into how models of life itself are constructed and represented^[1]. This question of representation is particularly salient when AI engages with Indigenous cultural expressions, ecological knowledge, and the narratives of non-human kin. For many Indigenous communities, art is not merely aesthetic; it is relational, encoded with ancestral knowledge, and deeply tied to land and sovereignty. The integration of AI into artistic practices^[24] raises critical questions: Can machine learning systems, trained on datasets often devoid of Indigenous epistemologies, truly reflect these worldviews? Or does AI, like prior technological disruptions, risk abstracting and displacing knowledge systems rooted in place-based traditions?

At the same time, AI offers unexpected possibilities for advocacy and resistance. In wildlife conservation, Indigenous communities have long employed artistic storytelling as a means of expressing ecological relationships and resisting extractive paradigms. Digitally-assisted art, when guided by Indigenous methodologies, has the potential to visualize disappearing landscapes, generate speculative futures where human and non-human life coexist differently, or even challenge dominant narratives of conservation that exclude Indigenous voices. This has been demonstrated for three decades by Gamilaraay/Wailwan/Biripi artist r e e a et al.^[6]. If technical revolutions are indeed cultural revolutions, then the question is not whether AI’s cultural assumptions are accurate—Does AI encode biases or limitations in how it visualizes Indigenous, environmental, or social themes? We know it does^[4]—or whether AI should intersect with artistic traditions, but how it might do so in ways that honor sovereignty, protect sacred knowledge, and amplify rather than appropriate Indigenous storytelling^[7].

Building on this concern, the study explores practical and ethical strategies for aligning AI’s interpretive capacities with Indigenous perspectives and ecological narratives. It

investigates how AI can engage with Indigenous artistic expression and ecological storytelling, focusing on how machine learning systems interpret, distort, or reimagine cultural and environmental narratives. The scope of this study lies at the convergence of digital anthropology, visual anthropology, autoethnography, Indigenous storytelling, and AI methodology, using art-based inquiry to explore the cultural dimensions of AI. Specifically, the research examines the relationship between algorithmic creativity and human authorship through a practice-based approach that integrates AI-generated imagery (via DALL·E) with traditional oil painting.

This research is guided by three central questions:

1. How does AI interpret and visually construct Indigenous and ecological narratives derived from human-authored texts?
2. In what ways can human artistic intervention reclaim agency and meaning from AI-generated outputs?
3. How might a hybrid, AI-ethnographic method (combining machine interpretation, manual artistry, and ethnographic reflection) reshape our understanding of authorship, cultural expression, and advocacy in the digital age?

Through these questions, the study aims to position AI not merely as a technical tool but as a cultural actor whose interpretations must be critically engaged, ethically framed, and artistically reimaged.

2.5. Rationale and Significance

The integration of artificial intelligence into artistic and ethnographic practices represents both a methodological innovation and an ethical challenge. While AI offers new modes of visualizing knowledge, it also risks reinforcing epistemic hierarchies when trained on data that excludes Indigenous worldviews. This study addresses that gap by exploring how AI-assisted art can be used not to replace, but to recontextualize Indigenous narratives, positioning technology as a site of collaboration rather than extraction. The study is significant for three main reasons. First, it contributes to decolonial digital scholarship by questioning how AI systems replicate or distort cultural meaning, and by demonstrating how Indigenous methodologies can inform the ethical use of machine learning in creative production. Second, it advances visual anthropology and digital humanities through the development of an AI-ethnographic method, an approach that merges com-

putational experimentation with artistic and ethnographic interpretation. Third, it engages conservation discourse, offering new aesthetic and narrative tools for communicating ecological relationships and advocating for environmental justice. By situating the analysis within the context of Indigenous ecological knowledge and wildlife conservation, the study contributes to ongoing debates on digital sovereignty and cultural representation in emerging technologies. It also reframes AI as both a mirror and a medium, reflecting the biases of its training data while opening imaginative space for Indigenous-centered, eco-futurist expression. It positions art as a form of resistance, storytelling, and knowledge reclamation in the age of algorithmic representation.

3. Methodology

3.1. The Process of AI-Assisted Traditional Artwork

AI-assisted traditional artwork is an evolving practice that merges computational creativity with human interpretation and craftsmanship. In an effort to produce an artistic rendition of my dissertation titled *Using Digital and Rights-Based Approaches to Understand Institutional Linkages Between Social Media, Wildlife Activism and the New Conservation Movement in Southern Africa: Views from Non-State Rural Actors*, I explored the interplay between AI and oil painting by integrating DALL·E into my creative process, using it to generate images based on a segment of my doctoral research. The aim was not to test AI accuracy, but to observe how an algorithm visually interprets ethnographic text and how human intervention reshapes its meaning.

This study used a five-stage AI-assisted artistic protocol:

- i. **Source selection:** Selecting a source material originally produced by the author. In this study, a segment of my doctoral dissertation was selected as input text.
- ii. **AI generation:** Rendering and interpreting the AI-generated image. In this study, the text was provided to DALL·E to generate visual interpretations.
- iii. **Human curation:** Over 150 outputs were evaluated; a subset was selected for artistic transformation.
- iv. **Material translation:** Refining the artwork through human intervention. In this study, selected images were manually reworked into oil paintings.

- v. **Public validation:** Iterative feedback. In this study, works were exhibited and discussed with audiences, including Indigenous communities, curators, and scholars.

AI is a collaborator, not an author. **Figure 1** operationalizes the AI-ethnographic method by visualizing the four epis-

temic stages through which authorship is redistributed between human and machine. Rather than a linear workflow, the diagram shows how algorithmic interpretation (Stage 2) is deliberately destabilized by manual intervention (Stage 3), which becomes the site where Indigenous epistemic authority is re-asserted.

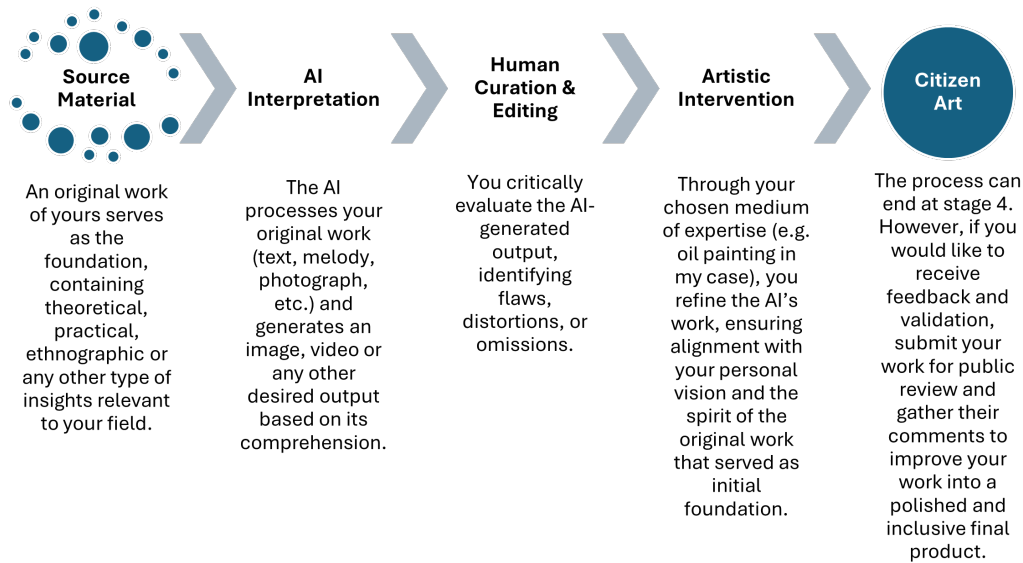


Figure 1. Process Breakdown.

The five stages—source selection, algorithmic interpretation, human curation, human intervention, and iterative validation—map how agency circulates between human and machine. Crucially, the diagram shows that AI’s role is structurally intermediate rather than sovereign: algorithmic vision is positioned between human authorship and human correction. This visualization, therefore, makes visible a hierarchy of knowledge production in which Indigenous epistemic authority is displaced by algorithmic abstraction and then strategically restored through embodied artistic labor. Beyond a technical exercise, this method also became an inquiry into AI’s perception of text^[25], its capacity to visualize concrete concepts or tangible realities, and the implications for developing an AI-ethnographic method.

3.2. AI-Ethnographic Method

In this study, the term AI-ethnographic method refers to an experimental research approach that integrates artificial intelligence into the ethnographic process as both a tool of inquiry and a subject of analysis. Rather than treating AI as a neutral instrument, this method examines how AI interprets,

distorts, or reimagines cultural narratives through its algorithmic logic. Practically, the approach involves prompting an AI image generator with data derived from the researcher’s own production or input (text, artwork, song, etc.), characterized here as the source material; then analyzing the visual outputs ethnographically: interpreting what the AI “sees,” what it omits, and what it misrepresents. The researcher then intervenes artistically by refining and transforming these outputs into traditional artistic techniques (oil painting, song production, etc.), blending computational aesthetics with human interpretation. This iterative dialogue between AI and artist creates a form of “digital ethnography through art”, where the process itself becomes a site of cultural observation. The AI-ethnographic method thus reveals how machine systems construct meaning and how human creators reclaim authorship, contextual depth, and ethical agency in response.

3.3. Methodological Specification of the AI System and Validation Protocol

The following outlines the technical and interpretive dimensions of the AI system employed, including its prompting

architecture and the validation framework that supports the study’s artistic intervention, ensuring analytical transparency and reproducibility.

3.3.1. AI System and Model Type

All AI-generated images were produced using DALL·E, a transformer-based diffusion image model developed by OpenAI. The system generates images through probabilistic visual synthesis trained on large-scale multimodal datasets. The model does not interpret meaning but statistically predicts visual patterns corresponding to textual prompts. In this study, DALL·E functioned as a visualization engine, not an autonomous creator. The AI was never given external images, Indigenous iconography, or cultural references beyond the author’s own dissertation text, ensuring that the model’s outputs emerged strictly from algorithmic interpretation of the author’s intellectual production.

3.3.2. Prompting Strategy

The prompting strategy followed a controlled semantic extraction protocol:

1. **Source text selection:** A thematically coherent section of the author’s doctoral dissertation (focused on Indigenous conservation, resistance, and digital activism) was used as the sole input corpus.
2. **Prompt construction:** Prompts were constructed by distilling the dissertation passage into structured semantic cues, including:

- Ecological themes;
- Indigenous presence;
- Conflict, resistance, and land;
- Digital or mediated space.

The model was prompted with instructions such as:

“Generate a visual interpretation of this text as understood by an artificial intelligence.”

Importantly, no stylistic or aesthetic guidance (e.g., “in the style of Indigenous art,” “traditional,” or “realistic”) was given, in order to allow the model’s internal representational biases to surface.

3. **Iterative prompting:** Approximately 150 image generations were produced using variations of the same semantic prompt. Each iteration used the same conceptual constraints but allowed the model to recombine visual features differently. This iterative process served as a sampling mechanism to observe how the model statistically stabilized, drifted, or distorted core themes.

3.3.3. Selection and Analytical Interpretation of AI Outputs

Table 2 systematizes the empirical evidence, translating visual distortions and painterly corrections into a structured argument about intentionality, labor, and epistemic authority.

From the full corpus of generated images, selections were made using ethnographic visual analysis guided by three analytic lenses:

Table 2. Selection and Analytical Interpretation of AI Outputs.

Analytic Criterion	Question
Thematic resonance	Does the image visually correspond to core concepts in the dissertation (landscape, wildlife, Indigenous presence, technology, media, conflict)?
Algorithmic distortion	Where does the image misrepresent, abstract, or hallucinate elements that were clearly specified in the text?
Cultural dissonance	Where does the image reproduce colonial, surreal, or decontextualized imagery that conflicts with Indigenous epistemologies?

These criteria turned AI outputs into data, not artworks. The AI images were treated as algorithmic ethnographic artifacts, revealing how a machine trained on global image datasets “reads” Indigenous political ecology. In the following, **Table 3**

synthesizes the aesthetic findings emerging from the AI–human interaction, showing how algorithmic hallucination, curatorial filtering, and oil painting constitute sequential epistemic regimes.

Table 3. Validation of Artistic Intervention.

Layer	Validation Function
Textual fidelity	Each painted modification was checked against the original dissertation to ensure restored elements corresponded to documented Indigenous realities, not aesthetic invention.
Ethnographic coherence	Distortions (e.g., hybrid bodies, surreal wildlife, misplaced symbols, cold colors) were corrected where they conflicted with Indigenous cosmologies and tropical conservation realities.

Table 3. Cont.

Layer	Validation Function
Community feedback	Indigenous viewers, scholars, and community members responded to exhibitions and informal consultations, confirming whether imagery felt truthful, distorted, or extractive.
Public interpretive testing	Audience reactions (galleries, social media, academic settings) were used to assess whether the final paintings communicated the intended narratives more clearly than the AI outputs alone.

3.3.4. Validation of Artistic Intervention

Human artistic intervention was not arbitrary. It was analytically validated through a four-layer triangulation framework:

Only modifications that improved epistemic accuracy, cultural coherence, and narrative legibility were retained.

3.4. Why This Is Methodologically Valid?

The final paintings are not aesthetic embellishments but ethnographic corrections of algorithmic misreading. The AI functioned as a diagnostic instrument, revealing where machine perception failed. Oil painting functioned as the analytical intervention layer that re-inscribed meaning, context, and Indigenous sovereignty. This process transforms the workflow into a replicable AI-ethnographic protocol:

Text → AI hallucination → ethnographic diagnosis → artistic correction → community validation → final artifact

4. Discussion

4.1. Source Material and AI Interpretation

The foundation of this study was a portion of my dissertation, which discusses themes of conservation, Indigenous narratives, and resistance in digital spaces. The AI tool was provided with this text and prompted to generate an image based on its comprehension of the material (Figure 2). This stage was pivotal in understanding what the AI “picked out” from the text, what elements it emphasized, omitted, or distorted. Given that AI lacks anthropological awareness and contextual depth, the generated image revealed biases in its interpretation, sometimes leaning toward symbolic rather than representational imagery.

The AI output was a surreal composition that loosely captured elements of the source material but also introduced distortions and unexpected visual metaphors (Figure 3).

Ai Visual Analysis ▾



Analysis of AI-Generated Image Based on Dissertation Themes

Elements Emphasized

- The African Savanna & Wildlife:**
 - Reflecting your dissertation's grounding in **Southern African conservation efforts**, I maintained an iconic savanna backdrop with elephants, lions, and rhinos, reinforcing the presence of key ecological subjects.
- Indigenous Representation:**
 - A central **Indigenous elder or activist** in traditional attire, visually affirming the dissertation's emphasis on **Indigenous leadership in conservation governance** and cultural identity in digital activism.
- Digital Networks & AI Aesthetics:**
 - Interwoven **social media icons, network nodes, and algorithmic symbols** highlight the dissertation's argument that **social media is both a battleground and an amplifier** for Indigenous voices.
- Threads of Light Connecting Wildlife & Activism:**
 - A metaphor for **ecological guardianship**, showing the **interconnectedness of human and non-human actors**, a theme central to your discussion of **Actor-Network Theory (ANT)** and decolonial conservation models.
- Protest Signs & Viral Hashtags:**
 - To reflect the dissertation's discussion on **digital resistance, hashtag**



Figure 2. Cont.

Ai Visual Analysis ▾



5. Protest Signs & Viral Hashtags:

- To reflect the dissertation's discussion on digital resistance, hashtag movements, and online activism, I incorporated ethereal symbols in the sky to capture the ephemeral nature of online advocacy.

Elements Omitted or Distorted

1. Institutional & Policy Details:

- While the dissertation delves deeply into conservation policies, CBNRM models, and institutional power structures, these do not translate easily into a single image. Instead, their influence is implied through digital motifs and activist symbolism.

2. Academic Complexity & Textual Analysis:

- Your dissertation engages in theoretical critiques of classical social movement theory, Afro-centric epistemologies, and digital humanities, but these are abstract ideas that don't have direct visual equivalents.
- Rather than forcing complex academic arguments into the image, I emphasized symbolism (e.g., digital networks to represent social media activism).

3. Algorithmic Bias & AI Ethics:

- While your work critiques AI's biases and its impact on Indigenous knowledge representation, the image does not explicitly portray the problematic aspects of AI. If you want, I could create an alternative version that visualizes AI's extractive tendencies or algorithmic colonialism.



Ai Visual Analysis ▾



4. Community Dynamics & Local Voices:

- The dissertation gives rich detail on Indigenous communities, local governance, and horizontal leadership within conservation movements. The image focuses more on an individual as a symbolic figure rather than showing collective dynamics. A broader scene with multiple Indigenous activists in conversation or action could better represent this.

Figure 2. AI Visual Analysis.



Figure 3. AI's first interpretation of doctoral dissertation source material - by Metolo Foyet and AI, 2024.

Figures 2 and 3 are proof of algorithmic distortion, rather than illustration. They function as empirical traces of how the generative AI (DALL·E) algorithmically translated Indigenous conservation discourse into surreal visual proxies. In Figure 2, wildlife appears de-territorialized and hybridized. Rather than producing representational fidelity, the system renders hybridized landscapes, symbolic animals, and spatial distortions, reflecting how large-scale training datasets collapse culturally specific ecological and political relationships into generic visual tropes. These distortions are not random errors but products of statistical inference operating on datasets dominated by Western visual regimes. The images thus provide material evidence that AI does not simply “misread” Indigenous knowledge or narratives but statistically re-codes them into extractive, de-contextualized visual logics and grammars.

4.2. Rendering and Interpretation

Once the AI produced its interpretation, I moved into the second phase: rendering and interpreting the AI-generated image (see Figure 4).

Would You Like Any Adjustments?

- More institutional critique (e.g., Western conservation models, algorithmic biases)?
- More community representation instead of a singular activist?
- A darker or more dystopian version to highlight AI's risks in conservation?
- A second image that contrasts traditional conservation models with Indigenous-led movements?

Figure 4. AI's proposed adjustments.

I went through 150 attempts before finally obtaining images that closely captured the source material. From these, I carefully selected those showcasing diverse landscapes to compose my body of work. Some sections of the images resonated with my research, such as the depiction of fragmented landscapes, which mirrored the themes of disrupted Indigenous land rights. However, other elements appeared misaligned or outright nonsensical: hybrid creatures that were neither human nor animal, distorted proportions of subjects (wildlife, people, objects), garbled logos, disfigured portraits, misplaced wildlife, unnatural lighting, and abstract figures that felt eerily disconnected from the core themes of my research, as if the AI tool had conjured them from a memory^[26] entirely unrelated to the source material.

4.3. Rendering the Generated Image into a Traditional Artwork

With my AI-generated body of work complete, I transitioned into the third phase: translating this digital output into an oil painting on canvas. This involved a meticulous process of selection and refinement, choosing which AI-generated elements to retain, which to modify, and which to discard. The distortions in the AI image provided an opportunity for critical engagement rather than mere replication. Areas where AI misunderstood the source material became sites of intervention, where I manually corrected inconsistencies and infused the artwork with deeper meaning.

By using oil paint, I introduced an organic texture and warmth that digital rendering lacked. The brushwork allowed for subtle shifts in meaning, transforming the AI's rigid, pixel-based logic into a fluid, human interpretation. This process was not only an aesthetic decision but also a methodological one of blending AI's computational perspective with my own lived experience and scholarly insights.

Aesthetic Considerations and Authorship

The aesthetics of this process are deeply rooted in the contrast between digital imperfection and human precision. The AI-generated images had a mechanical, almost alien quality. Shapes were algorithmically smoothed, details were over- or under-exaggerated, and certain forms appeared uncanny. My role as an artist was to translate this artificial aesthetic into something tactile, rich, and evocative through brushstrokes, layering, color adjustments and additional chosen mediums such as lines and text. Hand-painting the oil version allowed me to infuse intentionality, nuance, and emotion, all elements that AI lacks. That process was not about replicating the AI output. Instead, it was about correcting, deepening, and reclaiming elements that AI misrepresented or failed to grasp. My intervention as an artist was not just aesthetic but also epistemological^[27].

This intervention is what secures my claim to authorship. AI functions as a tool, not an autonomous creator. It lacks the agency to make subjective decisions or respond to artistic intent. While the AI's output offered a starting point for visualization, the source material, which served as the initial foundation, remained my intellectual property. Ultimately, it was my judgment, interpretation, and manual execution that refined and transformed it into a coherent, meaningful artwork.

The imperfections corrected, the contextual depth added, and the aesthetic refinements made throughout the process all reflect human creativity rather than mechanical replication. This ensures that the final piece remains a product of my vision rather than an AI-generated artifact, hence the appellation “AI-associated” or “AI-assisted” traditional artwork.

Figure 5 serves as a reflexive artifact of the AI-ethnographic method itself. Its schematic precision and computational symmetry reproduce the aesthetic logic of algorithmic vision, while its omissions—absence of Indigenous spatial markers, historical depth, political geography, or relational ecology—reveal what AI cannot see, or how AI-generated

visualizations erase lived worlds. The figure, therefore, operates as both documentation and critique, showing how even methodological visualization becomes a site where machine logic displaces lived knowledge unless actively re-inscribed through human interpretation.

Table 4 systematizes empirical patterns by translating visual distortions, painterly corrections, and curatorial decisions into a structured theory of authorship. Rather than a philosophical claim, the table operationalizes how intentionality, interpretation, and embodied labor are empirically distributed across the human–AI interface, demonstrating why authorship remains located with the artist rather than the algorithm.

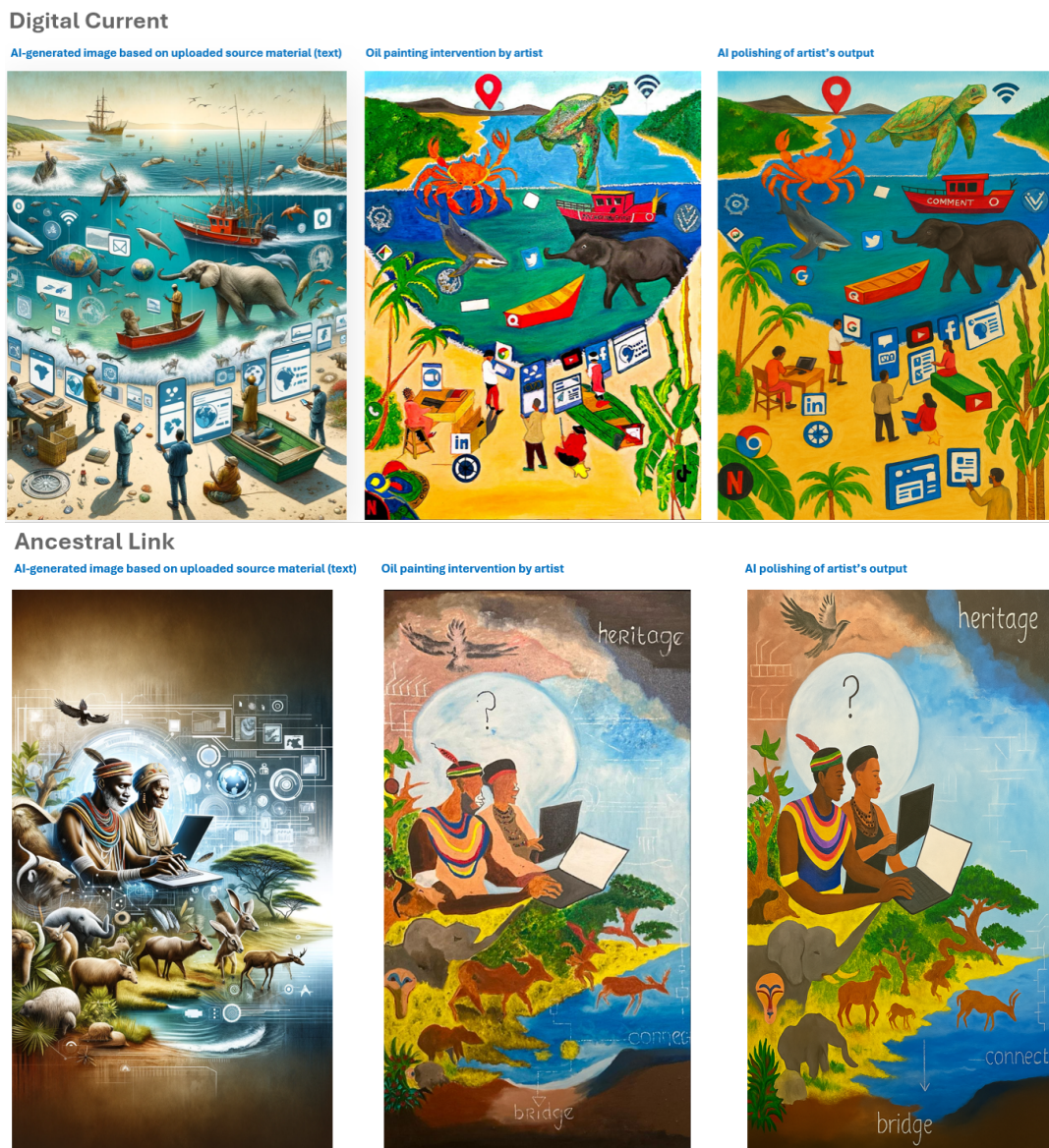


Figure 5. Visuals of methodological process, 2025.

Table 4. Why the Author, Not AI, Can Claim the Output.

Epistemic Position	Explanation
AI lacks intentionality & understanding	<ul style="list-style-type: none"> AI does not interpret: it statistically predicts based on existing images. It has no comprehension of the cultural, historical, or theoretical weight of the author/artist’s source material. The AI-generated image is, at best, a derivative artifact, a visual guess rather than a meaningful creation.
The author’s transformative touch	<ul style="list-style-type: none"> The author does not merely accept the AI’s output; they evaluate, correct, and re-inscribe meaning. The author’s medium (e.g., hand-painting) is an act of critical authorship, asserting control over the narrative and ensuring alignment with their work. This medium must be manually performed.
The role of the ethnographic aesthetic	<ul style="list-style-type: none"> Ethnography is about immersive interpretation, and the author’s aesthetic process mirrors this, moving through AI’s fragmented perception to a coherent, human-centered vision. The AI-generated image, without the author’s intervention, is an unfinished artifact in the traditional sense of art creation: it only becomes art through the author’s intellectual and physical labor. AI acts as a misguided scribe, rendering fragmented glimpses of the author’s source material. You, as the author/artist, bring authenticity, correction, and finality. Ultimately, the aesthetics of the author’s process reveal a hierarchy of authorship. The manual intervention (e.g., oil painting) cements authorship, marking the difference between mechanical generation and human meaning-making.

4.4. Citizen Art: Developing an AI-Ethnographic Method

The fourth phase involved gathering iterative feedback and validating the process through public exhibitions (both on campus and in local art galleries), as well as by sharing my work across social media platforms, various networks, and with family, friends, colleagues, and Indigenous communities in Southern Africa. Engaging in discussions with the public provided invaluable perspectives, allowing me to receive constructive feedback and tap into a diverse and rich pool of insights from anthropologists, multi-disciplinary artists, framing technicians, museum curators, children, parents, collaborators, Indigenous leaders and other key stakeholders. This exchange was essential to ensuring that the work remained meaningful, contextually relevant, and deeply connected to the communities it sought to represent, enhancing credibility and effectiveness in communicating the complex dynamics between biodiversity, digital literacy, policy and economically marginalized populations.

This experiment led me to consider an AI-ethnographic method that engages with both creative interpretation and critical intervention: essentially, an iterative process where AI acts as a lens, but the artist acts as a filter and remains the final arbiter of authenticity. The approach moves beyond AI as a mere research or artistic tool, and instead interrogates what the AI (as a subject of study) extracts from the source material (artist’s original production), what is missing, and how both the artist (through their art) and the public (through their perspectives and feedback) restore or reshape meaning.

Figure 6 demonstrates the epistemic gap between algo-

rithmic and Indigenous seeing, and offers a controlled visual comparison between algorithmic generation and Indigenous-centered artistic intervention. While the AI output abstracts land and life into diffuse symbolic patterning, the hand-painted version restores relational geography. It also re-anchors space in ecological specificity and narrative intentionality by integrating elements inexistant in the AI version (tropical bamboo, coconut and banana trees, giant crab; localization, Wi-Fi and social media logos, etc.), showing how human intervention restores cultural legibility. This side-by-side comparison empirically demonstrates how manual artistic labor functions as epistemic repair, transforming algorithmic hallucination into culturally legible and politically grounded representation.

Table 5 synthesizes the aesthetic findings generated by the AI-ethnographic experiment. Each stage (algorithmic hallucination, human curation, and medium reclamation), corresponds to a distinct epistemic regime. Read alongside **Figures 1–4**, the table functions as a formal model of how meaning is progressively recovered from statistical abstraction and re-embedded in Indigenous relational ontology.

The process of examining how AI interprets Indigenous narratives and conservation discourse raises questions about the negotiability of technology^[28] and its role in shaping cultural representation. This experiment challenged AI’s role as a sole meaning-maker, reframing it instead as a creative collaborator in the artistic process. I am not an ethnographer of aesthetics, but the process I have undertaken is not just about creating an artwork; it is also about interrogating how meaning, form, and cultural nuance are translated (or mistranslated) across different media. By integrating AI into the artistic pro-

cess and critically engaging with its outputs, I inadvertently worked toward a framework that embodies a layered aesthetic of intervention that underscores the limits of AI-generated creativity and reclaims authorship through human refinement.

This framework does not merely use AI for aesthetic generation but actively interrogates its role in ethnographic storytelling, exposing its aesthetic limitations and its function as a productive but incomplete co-creator.

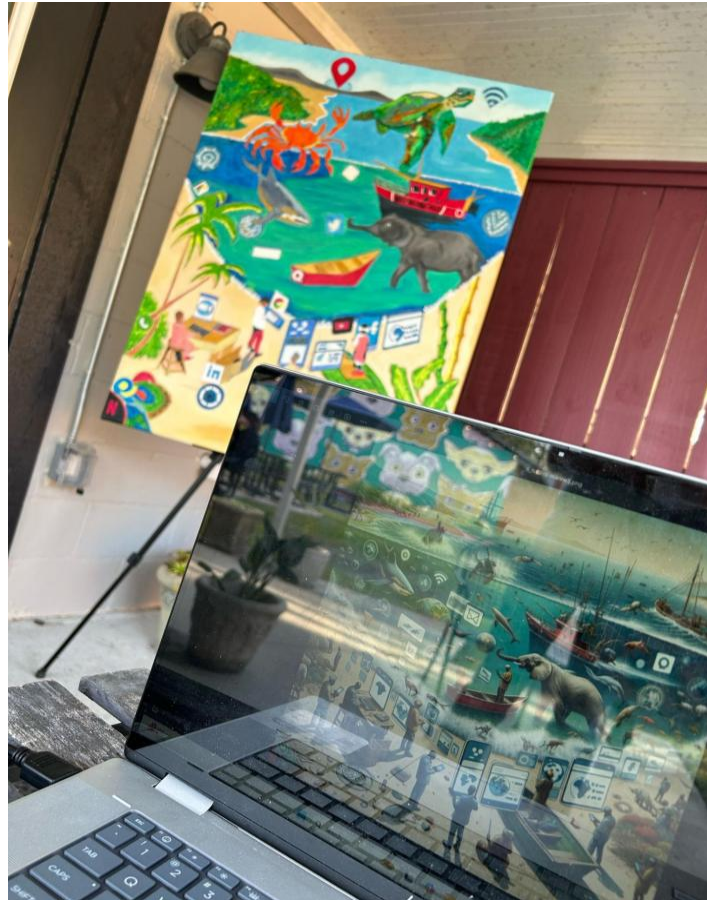


Figure 6. 'Digital Current', by Metolo Foyet and 'Digital Current's original generated output' by AI, 2025.

Table 5. Aesthetics of the Process (by AI).

Stage	Key Aesthetic & Epistemic Function
AI as an incomplete interpreter	<ul style="list-style-type: none"> The AI-generated image is not a neutral representation; it is an algorithmic hallucination, built from probabilistic assumptions about what source material is or “looks like.” The resulting image is often uncanny, fragmented, or overdetermined, offering an aesthetic that is both familiar and estranged, evocative yet incomplete. This stage reveals AI’s aesthetic as one of hyper-association, pulling from datasets without an embedded logic of meaning.
AI as an unintentional ethnographer	<ul style="list-style-type: none"> The AI tool renders data but lacks cultural depth. The artist’s manual edits and reinterpretations restore the missing human, historical, and contextual perspectives (whether medical, Indigenous, or otherwise) shaped by their unique background.
Human-centered curation and editing	<ul style="list-style-type: none"> The artist’s act of curation is the first reclaiming of authorship, deciding what stays, what goes, and what gets reworked. They identify flaws: aspects that don’t resonate with their source material, cultural omissions, or incoherent compositions. Here, the aesthetics shift from AI’s cold interpretation to human subjectivity, where the artist’s perspective reasserts itself.
Oil painting as an act of reclamation	<ul style="list-style-type: none"> The transition from digital to physical, textured oil painting is a shift from AI’s immateriality to human embodied creation. Painting introduces gesture, labor, and tactile presence, elements AI cannot produce. By altering and refining the image, you restore cultural and intellectual authenticity that AI failed to capture. The final product holds an aesthetic of synthesis, where AI’s raw output is present, but meaning is solidified through human hands.

4.5. Ethical Considerations

The integration of AI in creative and ethnographic work raises important ethical questions regarding data privacy, consent, and authorship. The AI tool used for image generation (DALL·E) operates on datasets compiled from vast digital repositories, many of which contain cultural materials not explicitly consented for reuse. This lack of transparency in data provenance presents ethical challenges, especially when engaging with Indigenous imagery and knowledge systems, where visual and symbolic elements may hold sacred or restricted meanings. To mitigate these concerns, all source materials used in this project originated from my own intellectual and artistic production, ensuring full authorship and control over input data. Furthermore, when AI-generated outputs were shared publicly (through exhibitions, academic presentations, or social media), care was taken to acknowledge the collaborative nature of the process, clarify the role of the machine, and protect community-specific cultural expressions from misrepresentation. Engagements with Indigenous leaders and stakeholders were approached with respect for free, prior, and informed consent (FPIC) principles, emphasizing co-creation, transparency, and reciprocity. The research thus positions ethical practice not merely as compliance, but as an ongoing negotiation of responsibility in digital and artistic collaboration.

4.6. What Next?

I have now completed the hand-painted pieces, refining them based on public feedback to ensure a more inclusive process. As I reach this stage, I am reflecting on the deeper significance of this form of citizen art: how it engages communities, fosters dialogue, and contrasts with the structured methodologies of citizen science.

The next step is contextualizing this work within broader debates on AI and artistic agency. This approach bridges the gap between digital and traditional media, offering a new lens through which to examine AI's influence on cultural production and visual storytelling. It also uniquely bridges scholarship, digital technologies, and artistic expression, making complex research accessible and impactful. Throughout both the intellectual production of the source material and the manual artistic refinement process, I brought some understanding of cultural preservation (as a world heritage expert), analyzed spatial and social dynamics (as a human geographer), and envisioned alter-

native, Indigenous-centered futures (as an Indigenous person and an eco-futurist painter). By blending these disciplines, my approach transformed research into visual narratives, using text, color, lines and Indigenous knowledge alongside AI-generated elements to create art that challenges triggers, dialogue and uplifts Indigenous perspectives. The AI-assisted traditional art pieces that ensued function as both advocacy and education, making the often-invisible digital struggles of Indigenous communities visible through artistic storytelling. This approach not only engages broader audiences but also reclaims space for Indigenous epistemologies in both academic and creative spheres. Lyrically, this can be summarized as the auto-ethnographic reflection below.

4.7. Reflexive Commentary: Living Inside the AI–Artist Relationship

Beyond the code, beyond the screen,
I paint what machines can't dream.
Its lines are straight, its colors cold,
But meaning slips through my fingers bold.

Machine's dreams hum in lifeless hands,
Still, I carve warmth where none withstands.
A flicker, a flaw, a whispered mistake,
I gather the pieces and let them awake.

Unfinished strokes, a hollowed space,
I meet the void and give it grace.
From pixels scattered, paint is poured,
A human touch, a soul restored.

The glitch it left, a masterpiece,
A broken thread I weave to peace.
For AI sees but does not know,
The breath that makes the canvas glow.

Where light distorts and truths misread,
I trace the ghosts the wires spread.
To render what it fails to see,
Is to reclaim the art in me.

So here I stand with brush in hand,
A bridge between the coded land.
For ghosts still hum inside the stream,
But flesh and spirit shape the dream.

Ghosts in the machine, brushstrokes in the flesh.

5. Conclusion

AI can imitate, but only artists create! The intersection of AI, culture, and art presents both opportunities and challenges. This review provides a foundation for further exploration into AI's evolving role in cultural studies and artistic expression. It equally incorporates an auto-ethnographic account that offers a self-reflexive commentary on its own composition. It addresses the inherent cultural biases and interpretive limitations of AI by proposing an AI-ethnographic method that positions the technology as a collaborative partner, not an autonomous creator. The essential human role is to artistically intervene (often through traditional media) to correct, reclaim, and add depth to the machine's output. This process is vital for asserting Indigenous sovereignty, ensuring authentic cultural representation, and challenging entrenched colonial narratives in digital spaces. By acknowledging the use of AI in crafting aspects of this review (e.g., **Figure 5**), the auto-ethnographic account destabilizes conventional notions of authorship and objectivity, resonating with deconstruction and challenging logocentric assumptions in academic discourse. By analyzing how AI translates socio-scientific content into visual form, it highlights the tensions between AI and cultural representation while weaving in themes of Indigenous sovereignty and ecological relationships. The simulation of intelligence and autonomy in AI systems not only raises fundamental questions in computer science but also underscores the enduring relationship between technological innovation and cultural evolution. Additionally, the computational aspect of digital creation suggests a fusion of AI-generated or mathematically-driven art with traditional mediums like oil painting, revealing a deeper connection between structured, coded processes and the organic, expressive nature of artistic practice. This intersection makes the discussion particularly relevant to advocacy and ecological discourse, reinforcing the broader implications of AI in cultural and environmental narratives. While AI opens new frontiers for creativity and cultural expression, it also necessitates critical inquiry into issues of authorship, bias, and ethical responsibility. Future research should focus on developing inclusive AI models that recognize diverse artistic traditions while ensuring that human agency remains central to cultural production.

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The dataset supporting this research is available at the University of Florida at this address: <https://ufdc.ufl.edu/UF0062323/00001/citation>. Data sources that support the findings and information of the research investigations are referenced where appropriate.

Conflicts of Interest

The author declares no conflict of interest.

AI Use Statement

During the preparation of this work, the author used DALL·E for comparative image processing and Perplexity for grammatical review. After using these tools, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

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