

# **Transforming Heritage Through Sustainable Craft: Adinkra Symbols with Arctic Materials**

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Abstract

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## **Abstract**

This study explores the integration of African Adinkra symbols into Arctic embroidery practices using sustainable materials, aiming to bridge cultural heritage with contemporary craft innovation. It employs a qualitative, practice-based research design supported by expert interviews and exhibition feedback. The creative process involved material testing with Finnish wool and black woolen fabric, digital mapping of Adinkra symbols, and sustainable embroidery techniques to preserve both technical accuracy and symbolic meaning. An expert interview with Lola Cervantes provided insights into the ethical dimensions of sustainable craft, emphasizing material sensitivity and cultural preservation. Minna Kovero's work reinforced the role of textile art in cultural storytelling and cross-cultural exchange. The research culminated in the Kirjotut kannat / Embroidered Stances exhibition at Valo Gallery, Arktikum, where public engagement offered valuable feedback on how effectively the designs conveyed themes of cultural identity and sustainability. The findings reveal that combining Adinkra symbols with Arctic materials maintains symbolic integrity while fostering creative adaptation. The study underscores the balance between tradition and innovation and highlights the role of art as a tool for cross-cultural dialogue. It advocates for broader community involvement and collaborative material experimentation, offering a replicable model for integrating heritage symbols into modern sustainable craft practices.

### **Keywords:**

Adinkra symbols, Arctic embroidery, sustainable craft, cultural heritage, cross-cultural dialogue, textile art, practice-based research, material experimentation

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# CHAPTER ONE

## 1. Introduction

### 1.1. Background and Context

Hand embroidery, as a form of textile art and cultural expression, has evolved significantly over centuries while maintaining its fundamental importance in craft practice. Historically viewed primarily as domestic craftwork, it has been repositioned in contemporary contexts as a significant medium for artistic expression and cultural preservation (Sawant et al., 2023). The practice of hand embroidery has transcended its traditional boundaries, with practitioners increasingly using it as a means of engaging with contemporary social issues and cultural dialogue (Shercliff, 2015).

In recent years, there has been a notable shift in how hand embroidery is perceived and practiced. The revival of hand embroidery represents more than just a return to traditional craft; it symbolizes a conscious move towards sustainable, mindful-making practices (Swinnerton, 2015; Zhang & Rusli, 2024). This shift aligns with growing interest in slow fashion and sustainable craft practices, where the value lies not just in the final product but in the process of creation itself (Robberstad & Kvellestad, 2023).

The contemporary practice of hand embroidery has been significantly influenced by both technological advancements and cultural preservation efforts. Traditional hand embroidery techniques are being reimaged through the lens of modern technology while maintaining their essential handcrafted nature (Dai, 2021). This intersection of traditional craft and contemporary practice has created new possibilities for artistic expression while preserving the fundamental techniques that have been passed down through generations (Baykaoglu & Akpınarlı, 2020). The resurgence of interest in hand embroidery can be attributed to several factors, including a growing appreciation for handmade items in an increasingly digital world, the desire for sustainable alternatives to mass-produced textiles, the therapeutic benefits of slow, mindful crafting practices, and the potential for cultural expression and preservation through traditional techniques (Shercliff, 2015).

The position of traditional crafts in contemporary society reflects a complex interplay between heritage preservation and modern innovation. Traditional crafts are being reimagined as vehicles for cultural sustainability and contemporary artistic expression (Zhang & Rusli, 2024). This transformation is particularly evident in how traditional techniques are being adapted to address current social and environmental concerns (McGovern & Barnes, 2022). Contemporary craft practices increasingly operate at the intersection of cultural heritage and global markets, creating both opportunities and challenges for practitioners seeking to maintain traditional techniques while adapting to contemporary contexts (Meng, 2023).

### *Introduction to Adinkra Symbols and Their Significance*

Adinkra symbols represent one of Africa's most sophisticated and comprehensive systems of visual communication, originating from the Akan people of Ghana (Dzokoto et al., 2018). These symbols serve as more than decorative elements; they function as a complex visual language that encodes cultural values, philosophical concepts, and historical narratives of the Akan people (Adom et al., 2016). The significance of these symbols extends beyond aesthetic appeal, as they continue to play a vital role in contemporary African cultural expression and global artistic practices (Blount & Brookins, 2021).

Each Adinkra symbol carries specific meanings that reflect deep philosophical thoughts and cultural wisdom. The symbols have evolved from their traditional context to become powerful tools for contemporary cultural expression and education (Adom et al., 2016). Their application has expanded significantly beyond traditional textile printing, finding new relevance in modern art, design, and cultural preservation efforts (Ankyiah et al., 2020). The educational and cultural significance of Adinkra symbols is particularly evident in their role in environmental and cultural sustainability education. These symbols serve as effective tools for transmitting complex cultural concepts and environmental knowledge to younger generations (Blount & Brookins, 2021). The adaptability of Adinkra symbols to contemporary contexts demonstrates their enduring relevance and potential for cross-cultural communication (Mchunu, 2019 ; Ankyiah et al., 2020).

### *Arctic Materials and Sustainable Craft Practices*

In the context of sustainable craft practices, Arctic materials, particularly Finnish wool and natural dyes, represent a significant contribution to environmentally conscious textile production (Cervantes, 2023). The traditional Finnish approaches to textile production and dyeing offer valuable insights into sustainable craft practices that are increasingly relevant in contemporary contexts (Kouhia, 2020).

The use of traditional plant dyes in Finnish textile production exemplifies a sustainable approach to craft that combines cultural heritage with environmental consciousness (Cervantes, 2023; Rawat et al., 2019). These practices not only preserve traditional knowledge but also provide viable alternatives to synthetic dyeing processes in contemporary craft production (Nadeem et al., 2024). The emphasis on sustainable materials and processes in Arctic craft traditions aligns with contemporary environmental concerns and the growing demand for environmentally responsible production methods (Niedderer et al., 2024).

### *The Intersection of African and Arctic Cultural Elements*

The convergence of African symbolic traditions with Arctic materials represents a unique approach to cross-cultural dialogue in contemporary craft practice. This intersection creates opportunities for exploring new dimensions of cultural expression while respecting and preserving the integrity of both traditions (Cervantes, 2023). The combination of Adinkra symbols with Finnish materials and techniques demonstrates how traditional crafts can evolve through cross-cultural exchange while maintaining their cultural significance. This fusion of different cultural elements in contemporary craft practice contributes to a broader dialogue about cultural preservation and innovation in global artistic practice (Kouhia, 2020).

Practice-based research in this context offers unique insights into how traditional craft techniques can be adapted and reimaged through cross-cultural dialogue (Cervantes, 2023). The integration of diverse cultural elements in contemporary craft practice not only preserves traditional knowledge but also creates new possibilities for artistic expression and cultural exchange.

## 1.2. Research Problem and Questions

### *Gap Identification in Current Practice*

While there has been significant research in both traditional craft preservation and sustainable textile practices, several notable gaps exist in current practice and academic literature. Contemporary craft research has largely focused on either cultural preservation or sustainable practices in isolation, with limited exploration of their potential integration (Brown & Vacca, 2022). The intersection of different cultural craft traditions, particularly between African and Nordic contexts, remains largely unexplored in academic literature.

A significant gap exists in the documentation and practical application of traditional hand embroidery techniques for transforming cultural symbols outside their original context. While studies have examined the use of Adinkra symbols in various media, their interpretation through hand embroidery, particularly using materials from different cultural contexts, remains understudied (Yang et al., 2018).

Additionally, while sustainable craft practices have gained increased attention, there is limited research on how traditional crafting techniques can bridge cultural narratives while maintaining environmental consciousness (Viainon, 2025). The potential of cross-cultural craft practices to contribute to both cultural preservation and sustainable production represents a significant area for investigation.

### *Main Research Question*

Based on the identified gaps, this research seeks to address the following primary question:

How can traditional African Adinkra symbols be meaningfully preserved and reinterpreted within another cultural context ?

This question encompasses several key aspects:

*Cultural Preservation:* I will examine how cultural symbols can retain their meaning when translated through different materials and techniques. This involves understanding both the preservation and transformation of cultural significance in cross-cultural craft practice (Asmah & Asinyo, 2014).

*Material Translation:* I will investigate how the visual language of Adinkra symbols can be effectively translated into embroidered forms using specific materials like Finnish wool. This translation must consider both technical feasibility and cultural sensitivity (Mathew & Jacob, 2021).

*Sustainable Practice:* I will explore how sustainable materials and traditional techniques can be integrated into contemporary craft practice while serving cultural preservation goals (Adom, Opoku, Newton, & Yeboah, 2018).

### **1.3. Aims and Objectives**

The primary aim of this research is to preserve and reinterpret African cultural heritage through sustainable Arctic materials and traditional hand embroidery techniques.

Specific objectives include:

1. To create one main piece with 20 Adinkra symbols using traditional hand embroidery techniques
2. To document the process of embroidery using sustainable materials.
3. To demonstrate sustainable craft practices through the use of naturally dyed Finnish wool and environmentally conscious materials
4. To create a visual dialogue between African cultural symbols and Arctic materials

### **1.4. Significance of Research**

This research contributes to multiple fields of study and practice:

*Cultural Preservation:* It documents and preserves African cultural symbols through innovative material interpretation

*Sustainable Craft:* It demonstrates the viability of using locally sourced, naturally dyed materials in contemporary craft practice

*Traditional Crafts Revival:* It champions the relevance and importance of hand embroidery in contemporary art practice

*Cross-Cultural Dialogue:* It creates a unique bridge between African symbolic tradition and Arctic material culture

## **1.5 Brief Methodology Overview**

This research employs a practice-based methodology, where the creation of artistic work serves as both a research method and an outcome. Practice-based research in art and design allows for the generation of new knowledge through the act of making and critical reflection on the creative process (Ross, 2022). This approach is particularly suitable for investigating the intersection of traditional craft techniques with cultural preservation, as it enables direct engagement with materials, processes, and cultural elements (Zabulis et al., 2020). The methodology emphasizes the iterative nature of craft practice, where each step of the making process contributes to the research findings and informs subsequent decisions. This approach allows for the documentation and analysis of both technical and conceptual developments throughout the research process (Chen, 2019; Salvesen & Keitsch, 2021).

### *Overview of Methods and Materials*

The research utilizes specific materials and methods chosen for their cultural, sustainable, and practical significance:

#### Materials:

- 100% Finnish naturally dyed wool in blue (representing Arctic connection)
- Light blue wool for tonal variation
- Cream-colored wool (representing snow elements)

- Black woolen fabric as the base material
- Traditional embroidery tools including sustainable metallic needles
- Yellow, shade of pink and orange wool as colors with african origin.

Methods:

- Technical sampling and documentation of various embroidery stitches:

Chain Stitch

Stem Stitch

Running Stitch

Back Stitch

Additional stitches as required by specific symbols

The selection of materials emphasizes sustainability through the use of naturally dyed wools and environmentally conscious practices. The choice of specific embroidery techniques is informed by both traditional practice and the visual requirements of each Adinkra symbol (Härkönen et al., 2018).

### *Exhibition Outcome*

The research culminates in a public exhibition as part of "The Embroidery Stances" design group, providing a platform for broader engagement with the work. The exhibition format allows for:

- Public presentation of the completed series of 20 embroidered Adinkra symbols
- Documentation of the research process and technical developments
- Engagement with broader audiences about cultural preservation through craft
- Dialogue about sustainable practices in contemporary textile art

The exhibition serves not only as a presentation of finished work but as an integral part of the research methodology, allowing for public engagement and feedback (Nimkulrat, 2020). This

public presentation component contributes to the broader discourse on cultural preservation through sustainable craft practices (Greru & Kalkreuter, 2020).

## CHAPTER TWO

### 2. Theoretical Framework

#### 2.1 Purpose of the Theoretical Framework

The intersection of traditional African symbolism, sustainable Arctic craft practices, and contemporary hand embroidery represents a complex theoretical landscape that requires careful examination and synthesis. This theoretical framework serves multiple purposes: to establish the foundational concepts and theories that underpin each aspect of this research; to identify the connections between these seemingly disparate theoretical domains; and to position the current research within the broader academic discourse while identifying the theoretical gaps this study aims to address.

By examining cultural symbol preservation theory, sustainable craft practice theory, and cross-cultural artistic translation theory, this framework provides the theoretical foundation necessary for understanding how traditional symbols can be meaningfully preserved and reinterpreted through sustainable craft practices. The synthesis of these theoretical domains creates a unique lens through which to examine the preservation and adaptation of cultural symbols in contemporary craft practice.

#### 2.2 Cultural Symbol Preservation Theory

Preserving cultural symbols has historically focused on maintaining both their physical integrity and intrinsic meaning, often reflecting their roles as carriers of knowledge and cultural values. This traditional approach involves exact replication of visual elements, adherence to authentic materials, and contextual documentation to ensure their preservation for future generations. However, critiques have emerged around the rigidity of such methods, which can limit the evolution of cultural symbols within changing societal contexts (Merta-Staszczak & Wojtkiewicz, 2024). However, these traditional approaches have faced criticism for their potentially rigid nature, which some scholars argue may limit the natural evolution of cultural expressions. The fundamental challenge lies in achieving a delicate balance between preservation and adaptation that allows cultural symbols to maintain relevance while retaining their essential

meaning (Hutson et al., 2024). This tension between preservation and evolution forms a central theoretical consideration for contemporary approaches to symbol preservation. Modern approaches advocate for dynamic adaptation of cultural symbols, recognizing their capacity to evolve while preserving their essential meanings. This perspective has gained prominence as symbols are increasingly explored in digital and cross-cultural contexts. Technologies such as 3D modeling and augmented reality (AR) allow these symbols to maintain cultural relevance while adapting to new environments. For instance, the resilience of African symbols like Adinkra highlights their adaptability across various materials and forms without losing their cultural significance. This supports the idea that the interplay between traditional and contemporary practices fosters both preservation and innovation (Greru & Kalkreuter, 2020; Härkönen et al., 2018).

### *Digital Age Implications*

The digital age offers transformative opportunities for cultural preservation. Technologies such as virtual reality (VR), 3D scanning, and photogrammetry provide tools for interactive preservation and education, making cultural symbols accessible to global audiences. Studies have shown that these tools not only aid in preserving cultural artifacts but also create new pathways for intergenerational engagement (Stoliarchuk et al., 2024).

By leveraging digital platforms, cultural symbols can effectively bridge gaps between generations and cultures. For example, the use of immersive environments has been instrumental in documenting and teaching the significance of intangible heritage, ensuring that these traditions remain vibrant and relevant in the contemporary world (Baniyamin & Shaharom, 2021).

## **2.3 Sustainable Craft Practice Theory**

Nordic sustainable design emphasizes integrating traditional craft knowledge with contemporary environmental considerations. This approach not only preserves cultural heritage but also addresses ecological sustainability. Researchers highlight that understanding local materials and traditional techniques fosters both cultural identity and environmental stewardship (Härkönen et

al., 2018). Recent scholarship underscores the role of educational institutions in culturally sustainable practices. Elina's (2021) work, *Seeking Culturally Sustainable Art Education in Higher Education: A Northern Perspective*, argues that higher education frameworks are pivotal in preserving traditional craft knowledge while fostering ecological stewardship. By embedding Arctic materials and techniques into pedagogy, educational programs can bridge intergenerational gaps and empower communities to maintain cultural identity amid globalization. This aligns with Nordic sustainable design principles, which prioritize local materials and participatory learning (Härkönen et al., 2018), while expanding the discourse to include institutional strategies for sustaining craft traditions. For example, in the Finnish Lapland, crafting traditions are revitalized through contemporary art methods, which connect traditional knowledge with place-specific ecological needs. These practices encourage intergenerational dialogue and decolonization efforts, fostering cultural sustainability in small communities. Material culture theory underscores the cultural significance embedded in materials used in crafts. Materials are seen as active participants in crafting, carrying symbolic and practical value. Sustainable crafting requires careful consideration of both the cultural and environmental implications of materials, particularly in cross-cultural applications (Härkönen, 2021).

The interplay of traditional processing methods and ecological awareness ensures that materials not only fulfill technical requirements but also resonate culturally. This understanding reinforces the importance of aligning material choices with the values of the communities involved (Feiglstorfer, 2022). The slow craft movement promotes mindful engagement with materials and techniques, countering overconsumption and emphasizing sustainability. By focusing on quality and intentionality, slow craft preserves traditional methods while reducing the ecological footprint of craft production (Härkönen et al., 2018). This theory aligns with the principles of sustainability by addressing the entire lifecycle of craft objects. It encourages using durable materials and processes, ensuring that cultural traditions remain relevant and environmentally conscious in modern contexts (Bell & Vachhani, 2020).

## 2.4 Cross-Cultural Artistic Translation Theory

Cultural hybridity theory explores how diverse cultural elements can be combined to produce innovative forms of artistic expression while maintaining their original cultural integrity. Homi Bhabha's concept of the "Third Space" emphasizes the ambivalence of cultural exchanges, where identities and traditions are negotiated to create new, dynamic cultural practices (Hebert, 2018). Hybridity in craft provides a platform for cultural dialogue, enabling artists to reinterpret traditional symbols thoughtfully and inclusively. It acknowledges the importance of maintaining cultural contexts, ensuring that the intersection of traditions does not diminish their distinctiveness but rather enriches them through mutual respect.

Symbolic translation theory prioritizes the preservation of semantic integrity over exact visual reproduction. In cross-cultural craft practices, successful translation involves adapting traditional symbols to new materials and techniques while retaining their cultural meaning. This approach is particularly significant in globalized artistic practices, where symbols often traverse cultural and material boundaries. By focusing on meaning rather than form, symbolic translation allows for greater flexibility in preserving the relevance and significance of traditional symbols in contemporary art (Speaks, 2024).

Theories of embodied knowledge highlight the role of physical craft-making as a means of transmitting cultural heritage. Craft practices involve a bodily engagement that conveys knowledge beyond what can be captured in written or verbal documentation. This concept is vital for understanding how traditional techniques contribute to both cultural preservation and innovation (Robberstad & Kvellestad, 2023).

Embodied knowledge extends beyond technical skills to include cultural and material understanding. It allows practitioners to engage deeply with their heritage while adapting traditional techniques to modern contexts. This integration of physicality and cultural understanding reinforces the connection between maker, material, and tradition, creating opportunities for innovation without losing cultural roots (Robberstad & Kvellestad, 2023).

## 2.5 Critical Analysis and Synthesis

While existing theories address various aspects of cultural preservation, sustainable craft practice, and cross-cultural artistic translation, significant gaps remain in understanding how these elements interact specifically in the context of hand embroidery. The relationship between sustainable materials and cultural preservation, particularly in cross-cultural contexts, remains theoretically underdeveloped (Yan & Li, 2023).

While material and technical adaptations are well-theorized, Elina (2021) identifies a critical gap: the lack of structured educational frameworks to systematize culturally sustainable practices. Her research demonstrates how higher education curricula in Northern contexts can serve as incubators for hybrid craft methodologies, ensuring that both traditional symbols and sustainable materials are transmitted through formal and community-based learning. This complements theories of embodied knowledge by institutionalizing the physical and cultural dimensions of craft preservation.

The intersection of African and Arctic cultural elements in contemporary craft practice represents a particularly notable theoretical gap. While theories of cultural hybridity and cross-cultural translation exist, they have not been extensively applied to the specific context of combining traditional African symbols with Arctic materials and techniques (Zabulis et al., 2020).

Furthermore, existing theoretical frameworks often fail to adequately address the role of technical adaptation in cultural preservation. While theories of embodied knowledge and craft practice provide some insight into how technical knowledge is preserved and transmitted, they rarely consider how these processes might function across cultural boundaries. This limitation becomes particularly relevant when considering how traditional symbols might be translated through different craft techniques while maintaining their essential meaning (Flanagan & Fraietta, 2019).

This research proposes to bridge these theoretical gaps by integrating theories of cultural preservation with sustainable craft practice in novel ways. The physical act of hand embroidery can serve as a form of cultural preservation, combining embodied knowledge with symbolic

meaning in ways that current theoretical frameworks have yet to fully explore. This integration suggests that the careful selection and use of sustainable materials can enhance rather than diminish the cultural significance of traditional symbols (Zhong & Chudasri, 2019).

The proposed theoretical integration also suggests new ways of understanding how cross-cultural craft practices can create meaningful dialogue while maintaining traditional values. By combining theories of cultural hybridity with sustainable craft practice, this research suggests that the thoughtful translation of cultural symbols through different materials and techniques can create new forms of cultural expression while preserving essential meanings (Brown & Vacca, 2022).

This theoretical framework makes several significant contributions to existing theory in the fields of cultural preservation, sustainable craft practice, and cross-cultural artistic translation. First, it proposes a new model for understanding how traditional symbols can be preserved through sustainable craft practices, suggesting that material sustainability and cultural preservation can be mutually reinforcing rather than competing priorities (Sawant et al., 2023).

The framework expands theories of cultural translation to include material and technical considerations in ways that previous theoretical approaches have not fully addressed. This expansion provides new ways of understanding how cultural symbols can be meaningfully translated across different material and technical contexts while maintaining their essential significance (Yang & Yodmalee, 2024).

Finally, the framework develops a theoretical basis for understanding cross-cultural dialogue through craft practice, suggesting that the thoughtful combination of different cultural elements can create new forms of artistic expression while preserving traditional meanings (Zhao et al., 2024). This contribution has particular relevance for projects that seek to bridge different cultural traditions through sustainable craft practices.

This theoretical framework directly informs the current research in several crucial ways. First, it provides a basis for understanding how Adinkra symbols can maintain their cultural significance when translated through hand embroidery, suggesting specific approaches to technical and material adaptation that preserve essential meanings while allowing for creative interpretation.

The framework establishes the theoretical groundwork for using sustainable Arctic materials in cultural preservation, suggesting ways in which material choice can contribute to both environmental sustainability and cultural significance. This understanding becomes particularly relevant when considering how traditional symbols might be meaningfully translated through different materials while maintaining their cultural integrity.

The framework offers a theoretical basis for analyzing the success of cross-cultural artistic translation, providing criteria for evaluating how effectively cultural symbols maintain their significance when interpreted through different materials and techniques. This theoretical foundation will guide both the practical implementation of the research and the analysis of its outcomes.

This theoretical framework provides a comprehensive foundation for understanding the complex interactions between cultural symbol preservation, sustainable craft practice, and cross-cultural artistic translation. By identifying and addressing theoretical gaps while proposing new integrative approaches, this framework supports the current research's aim to preserve and reinterpret Adinkra symbols through sustainable Arctic materials and hand embroidery techniques. The framework demonstrates that successful cultural preservation through craft practice requires careful consideration of multiple theoretical perspectives and their interactions. It suggests that thoughtful integration of traditional knowledge with contemporary sustainable practices can create new possibilities for cultural preservation and expression while maintaining the integrity of cultural symbols. This theoretical understanding will guide both the practical implementation of the research and its contribution to broader academic discourse in the fields of cultural preservation and sustainable craft practice.

Through this theoretical framework, the research positions itself at the intersection of multiple theoretical domains, suggesting new ways of understanding how cultural symbols can be preserved and reinterpreted through sustainable craft practices. This theoretical foundation provides both practical guidance for the research implementation and a basis for evaluating its contribution to existing knowledge in the field.

## CHAPTER THREE

### 3. Methodology

This chapter outlines the research design, philosophical approach, and data collection methods used to explore the integration of African Adinkra symbols with Finnish wool in sustainable craft practices. This study employs a practice-based research approach, supported by qualitative methods, including an expert interview and exhibition analysis, to examine the intersection of cultural preservation and sustainability.

The research follows a structured methodology aligned with the research onion framework, which has been adapted to include only the layers relevant to this study (Figure 1). The methodology begins with an exploration of the research philosophy, followed by the research approach and strategy, which defines how the study integrates theoretical and practical elements. It then details the research design, including practice-based research methods, qualitative interview, and the role of exhibition as part of the research process. Finally, this chapter explains the data analysis techniques used to interpret findings from both creative outputs and expert insights.

By combining hands-on material experimentation with thematic analysis of expert perspectives, this methodology ensures a holistic understanding of how cultural symbols can be sustainably adapted into contemporary craft practices. The inclusion of an exhibition as part of the research further allows for public engagement, reflection, and real-world evaluation of the designs.



Figure 1: Adapted research onion framework including layers relevant to the study (Ekhafe Andrew, 2025)

### 3.1 Research Philosophy, Approach and Strategy

This study is grounded in interpretivism, a research philosophy that prioritizes understanding human experiences, cultural significance, and subjective interpretation. Interpretivism is particularly relevant because it enables an in-depth exploration of how Adinkra symbols, deeply rooted in African traditions, can be meaningfully adapted into sustainable Finnish wool materials. Unlike positivist approaches that seek objective truths, interpretivism embraces context, meaning-making, and the dynamic nature of cultural artifacts.

This perspective aligns with Art-Based Action Research (ABAR), which emphasizes experiential knowledge, artistic exploration, and participatory engagement (Jokela & Huhmarniemi, 2023). ABAR functions within a qualitative research framework that acknowledges tacit knowledge, visual storytelling, and artistic expression as valid forms of inquiry (Leavy, 2018). By embedding this study within ABAR's methodological principles, it acknowledges that art is both a research tool and a medium for cultural preservation. The adaptation of Adinkra symbols into Finnish wool textiles is not merely an aesthetic endeavor but a process of material storytelling and cultural knowledge production (Jokela et al., 2015).

Exhibitions, as used in this research, also function as a reflective research method rather than a simple display of artistic outcomes. ABAR emphasizes the role of exhibitions as spaces where research findings can be tested in real-world settings, allowing for audience interaction, critical engagement, and further reflection (Jokela et al., 2015). This study follows this principle by incorporating the exhibition as a site for observation, interpretation, and potential feedback, reinforcing the idea that art can serve both as a research method and as a vehicle for cross-cultural dialogue.

### *Research Approach*

This study follows an inductive research approach, which aligns with the interpretivist philosophy and practice-based methodology. Inductive research is exploratory in nature, allowing theories and patterns to emerge from observations rather than testing predetermined hypotheses. Since the study involves the creative process of adapting Adinkra symbols into Arctic materials, it requires a flexible, iterative approach where insights are drawn from the process itself rather than imposed beforehand. The inductive approach is particularly suited to practice-based research, where knowledge is generated through experimentation, material exploration, and reflective analysis. In this study, the process of embroidering Adinkra symbols onto Finnish wool was not guided by a fixed theoretical framework but rather evolved through practical engagement with materials, techniques, and cultural considerations. The observations made during material testing, stitching, and exhibition preparation informed the adaptation of symbols, influencing design decisions and methodological refinements.

Additionally, the expert interview with Lola Cervantes contributed to the inductive process by providing insights that shaped the understanding of sustainability and cultural preservation in craft. Instead of testing a pre-existing theory, the interview findings were thematically analyzed to identify recurring patterns and perspectives, which were then integrated into the broader research narrative. By using an inductive approach, the study maintains an openness to discovery, allowing for a deeper understanding of how cultural symbols can be meaningfully reinterpreted in a sustainable craft context. This approach ensures that findings emerge organically from hands-on engagement and critical reflection, reinforcing the study's contribution to both theory and practice.

## *Research Strategy*

This study employs a practice-based research strategy, where knowledge is generated through creative practice, material experimentation, and reflective analysis. Practice-based research is particularly suitable for exploring the integration of African Adinkra symbols into Finnish embroidery using sustainable materials, as it allows for a hands-on, iterative approach to knowledge production. Rather than relying solely on theoretical analysis, this strategy emphasizes creation, experimentation, and critical reflection, ensuring that insights emerge through direct engagement with materials and artistic processes. This approach aligns with Art-Based Action Research (ABAR), which integrates artistic creation, cyclical reflection, and participatory engagement (Jokela & Huhmarniemi, 2023). ABAR operates within cycles of planning, action, reflection, and analysis, making it well-suited for research where art serves both as an intervention and as a research tool (Jokela et al., 2015). In this study, ABAR principles are reflected in:

*Material Experimentation* – Testing Finnish wool and embroidery techniques to generate practical knowledge about sustainability and cultural adaptation.

*Expert Interviews* – Engaging with craft practitioners to validate artistic and material choices, aligning with ABAR’s focus on collaborative knowledge production (Leavy, 2018).

*Exhibition as Research* – Presenting the embroidered works in a public setting, following ABAR’s emphasis on exhibitions as platforms for reflection, feedback, and audience interaction (Jokela et al., 2015).

Unlike traditional qualitative methods that rely solely on text-based data, ABAR embraces visual, experiential, and material-based knowledge, making it particularly relevant for this study. The combination of hands-on craft, expert perspectives, and exhibition-based analysis ensures that this research remains both theoretically grounded and practically impactful, reinforcing the role of sustainable textile art as a medium for cultural preservation and artistic innovation.

### **3.2 Research Design and Layout Process**

The research design of this study follows a qualitative, practice-based approach that integrates material experimentation, expert insights, and exhibition analysis. This design structure allows for a holistic exploration of how Adinkra symbols can be adapted into sustainable Arctic craft practices while ensuring cultural preservation. Since the study is primarily practice-based, the research design is centered on the creative process as a method of inquiry. The act of embroidering Adinkra symbols onto Finnish wool serves as both a practical exploration and a means of generating knowledge. Throughout the design process, observations were documented, adjustments were made to accommodate material constraints, and reflections were recorded to analyze the outcomes. This iterative process aligns with the inductive research approach, allowing themes and insights to emerge naturally rather than being predetermined.

A critical component of this research design was the design and layout process, which involved translating Adinkra symbols from their digital format into embroidered forms. The first step was selecting the symbols, guided by their thematic relevance to the project's aims, particularly their reflection of cultural identity, wisdom, and interconnectedness. To ensure accuracy and consistency, a digital format of the Adinkra symbols (figure 3) was used as a reference point for mapping out the design. Each symbol's dimensions, spacing, and orientation were planned digitally before any stitching began. This method allowed for precise scaling and alignment, minimizing errors during the embroidery phase. The digital layout (see figure 3) not only served as a visual guide but also provided a platform to experiment with symbol placement and balance, ensuring the final design maintained both aesthetic harmony and symbolic coherence. Adjustments were made as needed, particularly to accommodate the properties of the black woolen fabric such as its dense texture and slight elasticity by incorporating stabilizing hoops. Once the layout was finalized, the symbols were transferred onto the fabric through a combination of tracing techniques and light stitching, forming a temporary outline. This marked the transition from digital planning to manual execution, bridging technology and traditional hand embroidery methods.

To complement the practical work, the study incorporates qualitative methods, including an expert interview with Lola Cervantes and exhibition analysis. The expert interview provided an

external perspective on sustainability, craft adaptation, and cultural integration, reinforcing the interpretivist nature of the study. The exhibition served as an additional data source by enabling real-world engagement, where audience reception and feedback contributed to the evaluation of the designs. This multi-method approach strengthens the research design by ensuring that findings are informed by both first-hand creative exploration and external qualitative validation. The research design also acknowledges the challenges and adaptations that arose during the study, such as material limitations, embroidery technique refinements, and the need for design modifications to preserve the integrity of Adinkra symbols.

By structuring the study around creative practice, expert insights, and exhibition evaluation, the research design effectively addresses the objectives of sustainability, cultural preservation, and craft innovation. This approach ensures that knowledge is generated through doing, reflecting, and engaging with different perspectives, making it well-suited for the interdisciplinary nature of the study.

### **3.3 Time Horizon**

This study adopts a cross-sectional time horizon, meaning that data were collected during a specific, defined period rather than over an extended timeline. The creative process encompassing material testing, the adaptation of Adinkra symbols, the embroidery process, and exhibition preparation was conducted within a single phase of the project. Concurrently, the expert interview with Lola Cervantes was carried out, ensuring that both practical and qualitative insights reflect the conditions and practices during that same period. The cross-sectional design provided a focused snapshot of the interplay between sustainable material use, cultural adaptation, and innovative craft techniques. This approach enabled a concentrated analysis of how the selected methods contributed to the integration of African Adinkra symbols with Arctic materials. However, while this design offers valuable insights into the current state of sustainable craft practices, it does not capture long-term evolution or changes over time. Future studies could adopt a longitudinal time horizon to examine the sustainability of these practices and assess their ongoing impact on cultural preservation and craft innovation.

### **3.4 Techniques and Procedures**

The research process involved material testing, symbol translation, embroidery techniques, and iterative design development, all of which contributed to the final embroidered works. These procedures were carefully documented through sketches, photography, and written reflections to ensure that the research findings could be analyzed both visually and contextually. The material selection phase focused on evaluating Finnish wool (Figure 2) and the black woolen fabric (Figure 3) for their suitability in hand embroidery. The study considered factors such as thread absorption, stitch definition, and overall durability. The choice of Finnish wool aligns with sustainability principles highlighted by Kovero & Kravtsov (2024), who advocate for the use of locally sourced, renewable textiles as a way to minimize environmental impact. Similarly, (Cervantes & Huhmarniemi, 2023) emphasizes the concept of material sensitivity, arguing that textile artists should develop an awareness of how materials are sourced, processed, and used. While Cervantes incorporates natural dyeing techniques to enhance sustainability, this study focuses on ethical material selection and low-waste embroidery techniques to achieve similar environmental goals. By integrating these material considerations into the research process, this study reinforces both arguments that craft-based research can be an ecological and cultural practice.

The symbol adaptation process involved translating Twenty (20) Adinkra symbols into embroidery-friendly designs, ensuring that their cultural significance and aesthetic integrity were preserved. This required iterative sketching, simplification, and testing of stitch techniques to achieve clarity and visual balance. As Kovero & Kravtsov (2024) suggest, embroidery can function as a method of reinterpreting cultural heritage, providing a tactile and symbolic means of storytelling. Cervantes & Huhmarniemi (2023) further expands on this idea, stating that stitching is not just a technical practice but also a reflective process, where artistic decisions emerge through material interaction and cultural awareness. The study follows these principles by re-contextualizing



Figure 2: Finnish wool. (Ekhafe Andrew, 2025)

Adinkra motifs within a Finnish textile tradition, demonstrating how embroidery can act as a vehicle for both cultural preservation and artistic innovation.

In terms of technical execution, a combination of chain stitch, satin stitch, stem stitch, and backstitch was used to ensure that the symbolic details remained distinct and visually impactful. Throughout this process, iterative experimentation was crucial in refining the interaction between fabric, thread, and symbolic form. The embroidery process mirrors the findings of Kovero & Kravtsov (2024), who highlight the value of hybrid textile techniques combining traditional hand-stitching with contemporary artistic narratives to produce craft-based research outcomes that resonate across different cultural contexts. Likewise, Cervantes & Huhmarniemi (2023) emphasizes that textile artists should engage in an iterative, hands-on process where meaning emerges through repeated engagement with materials and techniques. This study reinforces both

perspectives, illustrating how slow, deliberate craft methods contribute to both sustainability and cultural storytelling.

By structuring the research process around sustainable material choices, symbol adaptation, and embroidery experimentation, this study aligns with contemporary discussions on the role of craft in sustainability and cultural preservation. It demonstrates how the careful selection of materials and techniques contributes not only to the aesthetic success of textile-based artwork but also to the ethical and environmental considerations that inform craft-based research.

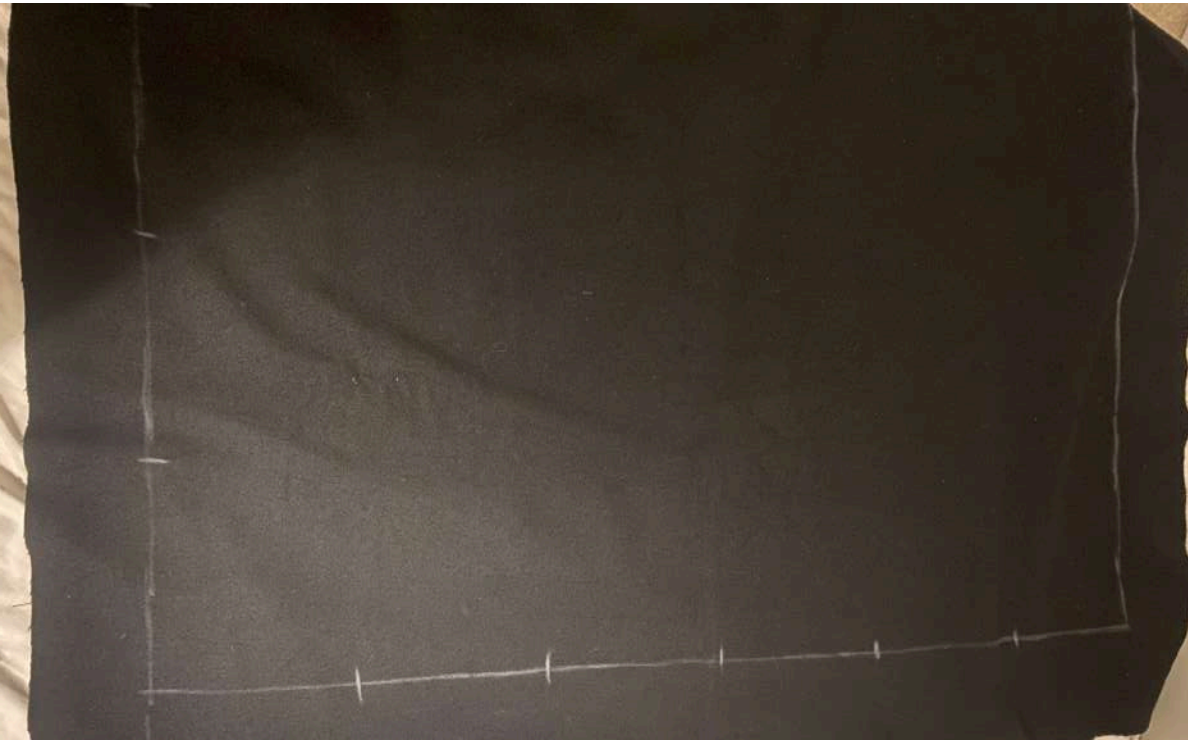


Figure 3: Black woolen fabric (Ekhafe Andrew, 2025)

### **3.5 Ethical Considerations**

This study is committed to upholding the highest ethical standards throughout the research process, particularly given the sensitive nature of cultural heritage and the use of traditional craft techniques. The research was designed with a strong emphasis on cultural sensitivity, ensuring that the adaptation and representation of Adinkra symbols were handled with respect and in consultation with relevant cultural literature and authorities. By doing so, the study acknowledges the profound cultural significance of these symbols and strives to preserve their original meanings, avoiding misrepresentation or cultural appropriation.

Informed consent was rigorously obtained from all participants, including Lola Cervantes, the expert interviewed for this study. Clear communication regarding the purpose, scope, and potential outcomes of the research was maintained to ensure that participants fully understood their role and the use of their insights. Confidentiality measures were implemented to protect the identities and contributions of those involved, unless explicit permission was granted for attribution.

The ethical considerations extend to the sustainability aspects of the research as well. Efforts were made to minimize waste and promote the use of renewable materials throughout the crafting process. By selecting locally sourced, sustainable materials such as Finnish wool and by adopting eco-friendly practices during material testing and exhibition setup, the research reinforces its commitment to environmental responsibility. This sustainable approach is not only an ethical imperative but also an integral part of the research design, reflecting the core values of cultural and environmental preservation.

Additionally, the integration of the exhibition into the research process was conducted with ethical oversight. The exhibition was designed to facilitate public engagement and dialogue without compromising the cultural integrity of the work. It provided a platform for respectful discussion and feedback, ensuring that audience interactions contributed positively to the overall research narrative. In all aspects of the project, careful consideration was given to balancing creative expression with ethical responsibility, ensuring that the research remains both respectful and impactful.

### **3.6 Exhibition as a Research Method**

The Kirjotut Kannat / Embroidered Stances exhibition at Valo Gallery, Arktikum, Rovaniemi, served as an integral component of the research process by presenting and contextualizing the study's outcomes. This exhibition was designed not only to display the final embroidered works but also to demonstrate how the integration of African Adinkra symbols into sustainable Arctic textiles can effectively communicate cultural narratives.

The exhibition was organized by the Kirjotut Kannat embroidery group, a collective comprising about eighteen artists, artisans, activists, and art researchers from diverse regions—including Finland, Russia, Asia, Africa, Eastern and Southern Europe, and Latin America. The group is coordinated by Maria Huhmarniemi, a textile artist and researcher renowned for her contributions to sustainable craft practices and contemporary textile narratives. Under her leadership, the group is committed to revitalizing traditional Nordic wool blanket embroidery as a medium for contemporary artistic inquiry and craft activism.

In Art-Based Action Research (ABAR), exhibitions serve as research spaces rather than mere showcases, allowing researchers to observe audience engagement and interpret responses to artistic interventions (Jokela et al., 2015). This study follows ABAR's principle that exhibitions are interactive platforms where art functions as both a research tool and a medium for knowledge production (Jokela & Huhmarniemi, 2023). Through participation in this exhibition, the research benefited from public engagement as a method of validation and refinement, reinforcing the interdisciplinary nature of the study.

The exhibition setting allowed for close observation of the technical execution and material integration, while also offering a platform for engaging with viewers. Although the primary function of the exhibition in this study was to present research findings, its role in Art-Based Action Research (ABAR) extends beyond presentation to include audience interaction and reflection (Huhmarniemi, 2016). Observing how visitors engaged with the pieces provided qualitative insights into how Adinkra symbols translate into a Nordic textile context. While structured data collection methods such as surveys were not implemented, the audience's informal reactions contributed valuable feedback that complemented the expert interview and material testing components of the study.

This aligns with ABAR's focus on participatory observation and cyclical research, where artistic research is iterative, evolving through public engagement and critical reflection (Leavy, 2018). The inclusion of the exhibition in this research underscores the idea that craft-based inquiry is not only about the act of making but also about the dialogues it generates in public and academic spaces.

### **3.7 Evaluation Criteria**

The evaluation of this study's outcomes is based on a set of comprehensive criteria designed to assess both the technical and thematic success of the project. The primary criteria include cultural integrity, material integration, and audience reception, each of which contributes to a holistic understanding of how well the research objectives have been achieved.

Cultural integrity is assessed by examining the extent to which the embroidered Adinkra symbols retain their traditional meanings and aesthetic qualities. This involves a careful comparison between the original cultural representations of the symbols and their adapted forms in the final work. The evaluation focuses on whether the symbols continue to evoke the intended cultural narratives and if their significance has been preserved throughout the adaptation process.

Material integration is evaluated by analyzing the compatibility and performance of the sustainable Arctic materials, such as Finnish wool and black woolen fabric, within the embroidery process. This includes an assessment of the technical execution such as the effectiveness of chosen stitch techniques, the precision of needlework, and the visual coherence of the final product. Attention is also given to how well these materials support the overall design and contribute to the project's sustainability objectives.

Audience reception forms another crucial dimension of the evaluation. The public exhibition serves as a practical testing ground for the work, providing opportunities to gather qualitative feedback from viewers. This feedback, collected through surveys and informal discussions, helps to determine whether the integration of African Adinkra symbols with Arctic materials

successfully communicates a meaningful narrative and resonates with diverse audiences. In addition, reflections derived from the expert interview with Lola Cervantes and the documentation of the creative process contribute an additional layer of insight, offering a critical perspective on the challenges and innovations encountered during the research.

Together, these evaluation criteria ensure that the study not only meets its technical and aesthetic objectives but also achieves its broader goals of cultural preservation and sustainable practice. This multifaceted approach allows for a comprehensive assessment of the research, integrating both quantitative observations and qualitative insights into the overall success of the project.

Overall, the methodology presented in this chapter provides a robust and coherent framework that supports both the theoretical and practical aspects of the study. It lays the groundwork for generating meaningful insights into how sustainable practices can be harmoniously blended with cultural preservation in contemporary craft. This methodological foundation not only guides the research process but also contributes significantly to the broader discourse on sustainable design and cross-cultural artistic innovation.

## CHAPTER FOUR

### 4. Results and Analysis

This chapter presents the outcomes of the study by synthesizing findings from both the practice-based research and the expert interview. It explores how African Adinkra symbols were adapted into sustainable craft practices using Finnish naturally dyed wool, and it examines the resulting implications for cultural preservation and sustainability. The chapter is organized into three main sections. The first and primary section addresses the research question—How can traditional African Adinkra symbols be meaningfully preserved and reinterpreted within another cultural context?—by presenting findings from the practice-based research, including material testing, the integration of Adinkra symbols, the embroidery process, and design development. The second section provides insights from expert perspectives and comparative analysis, drawing from the interview with Lola Cervantes and examining related research on sustainable textile practices. The final section synthesizes these diverse data sources, highlighting key findings, exhibition feedback, and the broader contribution of this study to sustainable craft and cultural preservation. Visual elements such as photographs, diagrams, tables, and conceptual charts are incorporated throughout the chapter to enhance understanding and provide a clear representation of the results.

#### 4.1 Practice-Based Research Findings

The material testing phase revealed that Finnish wool exhibited excellent adaptability for traditional embroidery techniques. Its soft yet durable texture allowed for detailed stitching and precise execution of complex patterns. High-quality close-up photographs (Figure 4) capture the texture of the Finnish wool and demonstrate its suitability for intricate designs. The black woolen fabric, used as the base material, provided a dense, supportive surface that enhanced the contrast and visual clarity of the embroidered Adinkra symbols. A comparative table (Table 1) summarizes the key properties of Finnish wool and the black woolen fabric, noting strengths such as local sourcing and sustainability, along with challenges such as occasional elasticity issues that required the use of stabilizing hoops. The decision to use Finnish naturally dyed wool was primarily driven by sustainability considerations. In the past, I had worked with cotton wool for embroidery in Nigeria during my previous studies and exploration, but Finnish wool provided

a locally sourced, eco-friendly alternative. While I had the option of dyeing the Finnish wool myself at the textile dyeing room of the University of Lapland, this would have significantly extended the project timeline. To maintain efficiency, I opted to purchase the wool online and also sourced additional material from the Embroidery Staces group, Kirjotut Kannat in collaboration with the VillaInno project, which focuses on renewing traditional wool craft practices and supporting the sustainable use of wool in creative applications. My exposure to Finnish wool also has a significant root in the TB GOBRA workshop held at the University of Lapland last year, where I worked with naturally dyed wool for embroidery (Figure 5) . This workshop introduced me to the material's properties and its potential for sustainable textile applications, shaping my decision to integrate it into this project.

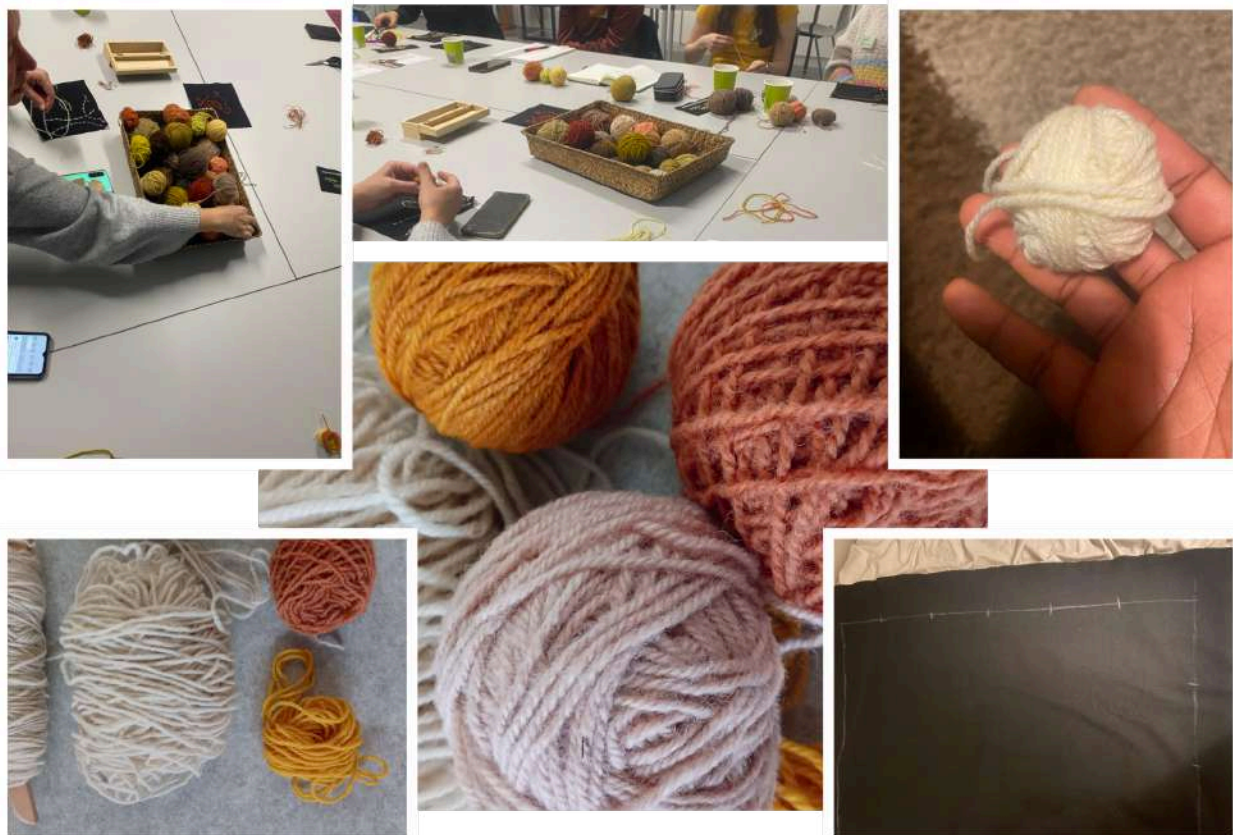


Figure 4: Close-up Textures of Finnish Wool and Black Woolen Fabric for Embroidery (Ekhafe Andrew, 2025)



Figure 5: Group photo taken during the TB GOBRA workshop (TB GOBRA team, 2024)

Beyond embroidery, I explored the versatility of Finnish wool through an innovative project in which I created seat pads using weaving and felting techniques. This project, conducted in collaboration with the VillaInno team and the Tonttula Elves' Village, aimed to develop sustainable wool-based products for tourism. The seat pads combined traditional weaving techniques with modern felting processes to enhance durability and functionality, demonstrating the adaptability of Finnish wool in both artistic and functional design contexts. Both the TB GOBRA workshop and my previous project with Finnish wool prompted me to use naturally dyed Finnish wool for this project.



Figure 6: Pictures of the woolen Seat Pads Project (Fangchen Dai, 2024)

Additionally, the selection and performance of specialized embroidery needles were critical to overcoming challenges posed by the dense fabric and ensuring the integrity of the final embroidered designs. Given the structure of the black woolen fabric, which provided a dense and supportive base for the embroidery, it was essential to choose needles that would allow for smooth stitching without *excessive* friction or fiber damage. Through material testing, I found that blunt embroidery needles significantly reduced thread fraying, preserving the delicate quality of the naturally dyed Finnish wool threads. This was particularly important when working with intricate Adinkra symbols, where precision and clarity were key to maintaining their visual and cultural significance. The experience gained from my previous work with Finnish wool, particularly during the TB GOBRA workshop, helped refine my approach, as I had already observed how different embroidery techniques responded to woolen textiles. Similarly, my involvement with the Kirjotut Kannat group and the VillaInno project allowed me to explore the interplay between embroidery techniques and wool-based textiles, reinforcing the need for the right needle selection. The knowledge gained from my seat pad project, which combined weaving and felting techniques, further informed my understanding of wool's adaptability and durability, solidifying my approach to embroidery on dense fabrics. By carefully selecting the appropriate tools and methods, I was able to achieve consistent stitch quality, ensuring that the embroidered pieces remained structurally sound and aesthetically refined.

Figure 7: Comparative Properties of Finnish Wool and the Black Woolen Fabric (Ekhafe Andrew, 2025)

Property	Finnish Wool	Black Woolen Fabric
<b>Sourcing</b>	Locally sourced, supports sustainable production	Commercially available, Varies in origin
<b>Sustainability</b>	Renewable, biodegradable, low carbon footprint	May include synthetic blends, reducing sustainability
<b>Texture</b>	Soft, slightly elastic	Dense, firm texture
<b>Absorption</b>	High moisture absorption, good dye retention	Moderate absorption, may resist some dyes
<b>Durability</b>	Strong but prone to stretching without stabilization	Less elastic, holds structure well
<b>Suitability for Embroidery</b>	Requires stabilizing hoop to prevent distortion	Provides a stable base for detailed stitching
<b>Aesthetic Outcome</b>	Organic, textured finish	Crisp, defined stitch work

The above table (figure 7) provides crucial insights into the performance of these materials during the embroidery process. The black woolen fabric, which was provided for the project, played a significant role in evaluating stitch precision and durability. Its dense and firm texture provided a stable base for embroidery, ensuring that stitches remained well-defined without requiring additional stabilization techniques. This contrasted with Finnish wool, which, despite its sustainable and biodegradable qualities, exhibited softness and slight elasticity that made embroidery more challenging. The Finnish wool required the use of a stabilizing hoop to prevent fabric distortion, while the black woolen fabric maintained its structure independently. Additionally, the moderate absorption properties of the black woolen fabric affected dye retention, occasionally causing inconsistencies in color application. However, its ability to hold stitches without warping made it an effective material for achieving intricate embroidered designs with crisp, detailed outcomes.

One of the key aspects of the material testing phase was evaluating how different embroidery tools interacted with these fabrics. The selection and performance of blunt embroidery needles were particularly important in overcoming the challenges posed by the density of the black woolen fabric. These needles helped to reduce thread fraying and ensured consistent stitch quality, which was crucial for maintaining the integrity of the designs, especially when working with intricate motifs. The Finnish wool, due to its softer and stretchier nature, required careful handling to avoid thread breakage and uneven stitch tension. These findings highlighted how fabric properties directly influenced the embroidery process, reinforcing the need for material-specific techniques to optimize the final artistic outcome. The structured stability of the black woolen fabric ultimately proved beneficial for detailed embroidery work, while the Finnish wool required more adjustments to achieve comparable results. This comparative study not only informed the embroidery process but also provided deeper insights into how material characteristics shape textile-based artistic expression.

The Symbol Integration Phase involved the incorporation of twenty (20) Adinkra symbols onto the black woolen fabric, each carefully chosen for its cultural significance and thematic relevance. The adaptation process included simplifying and stylizing traditional motifs to suit the constraints of hand embroidery while maintaining each symbol's original meaning and integrating it with the sustainable materials. For example, central motifs such as Gye Nyame

(divine supremacy), Denkyem (Crocodile), Kramo Bone (Warning against deception and hypocrisy), and Asase Ye Duru (Earth's richness and dependability) were strategically placed as visual anchors, while peripheral symbols like Adwera (purity) and Ananse Ntontan (creativity and wisdom) introduced dynamic elements to the composition (Figure 8).

The process began with creating a border around the fabric, 7.5 cm from the outer edge, which served as a foundation for organizing the symbols' placement. Using fabric chalk, a marker, and a tape measure, I meticulously divided the fabric into 20 evenly sized boxes—each box to accommodate one symbol. This methodical division allowed for an organized layout and ensured that all symbols were distributed evenly across the fabric. The next step involved sketching each symbol into its respective box, ensuring that all symbols were proportionate to one another in size. Careful attention was given to make sure that no symbol appeared too large or too small compared to the others. This process, guided by a digital layout I had previously created (Figure 9), ensured that each symbol was placed thoughtfully to maintain balance and symmetry within the overall design. Once all the sketches were in place, I took further care in adjusting their proportions and positioning to ensure uniformity and cohesion across the entire piece. This preparatory work laid the foundation for the subsequent hand-embroidery phase, making sure each symbol would be stitched precisely according to the pre-planned layout. High-resolution sketches and progress photographs (Figure 8) document the evolution of the symbols from initial sketches to their final embroidered forms, capturing the care and effort that went into making the design both culturally meaningful and visually harmonious.



Figure 9: Evolution of Adinkra Symbols From Sketches to Embroidered Forms (Ekhafe Andrew, 2025)














Figure 8: Digital format of the Adinkra symbols (Ekhafe Andrew, 2024)








The table below (Figure 10) presents a structured overview of the Adinkra symbols chosen for this embroidery project, highlighting their placement in the final design, the stitching techniques used, the challenges encountered, and their symbolic roles as documented in previous research. The selection and positioning of these symbols were intentional, ensuring that the final composition balanced both aesthetic and cultural significance. Symbols positioned along the edges, such as Adwera, Ananse Ntonsan, and Gye Nyame, serve to frame the design while introducing movement, symmetry, and spiritual anchoring. Those placed in the upper and middle sections, like Adinkrabene Dua, Akoko Nan, and Denkym, emphasize themes of leadership, nurturing, and adaptability, while core and base symbols, including Akoma Ntoaso, Asase Ye Duru, and Nyame Akuma, reinforce ideas of connection, stability, and divine influence. Additionally, surrounding motifs and flowing edge symbols such as Nea Onnim No Sua A Ohu, Fawohodie, and Odo Atwede enhance the sense of continuity, security, and flexibility within the embroidery's visual narrative.



The embroidery techniques used—chain stitch, back stitch, running stitch, and stem stitch—were selected based on their ability to render intricate details and create smooth curves. However, challenges such as maintaining uniform tension, achieving precise symmetry, and managing small yet complex details arose throughout the process. The symbolic meanings of these Adinkra motifs align with Jecty's (2022) discussion on their cultural and psychological impact in Ghanaian society. For example, Osram represents radiance and unity, Fihankra embodies community and protection, and Eban symbolizes stability at the core. By incorporating these symbols into an embroidery piece using Finnish naturally dyed wool, this project bridges traditional Ghanaian heritage with sustainable textile practices, demonstrating how Adinkra symbolism can be adapted into contemporary fiber art. This table, therefore, serves as both a practical design reference and an analytical record of the creative and technical decisions involved in the embroidery process.

Figure 10: Summary of Adinkra Symbols, Meanings, Techniques, and Placement (Ekhafe Andrew, 2025)

Symbol	Placement	Technique Used	Challenges Encountered	Narrative Role (Jecty, 2022).	
Adwera	Edge		Chain Stitch	Maintaining uniform tension	Represents inner peace and purity
Ananse Ntontan	Edge		Chain Stitch	Intricate pattern reproduction	Adds dynamic movement to edges
Adinkrahene Dua	Upper center area		Chain Stitch and running stitch	Achieving smooth curves	Symbolizes leadership and guidance
Akoko Nan	Upper center area		Chain Stitch and running stitch	Adjusting for small details	Highlights nurturing aspects
Gye Nyame	Edge		Chain Stitch	Ensuring symmetry	Spiritual anchor of the design

Akoma	Middle center area		Running Stitch	Uniformity in repetitive patterns	Reflects stability and perseverance
Denkyem	Middle center area		Running Stitch and Satin Stitch	Maintaining pattern continuity	Represents adaptability to change
Osram	Middle edge area		Chain Stitch and running stitch	Smoothness in overlapping lines	Adds radiance and unity
Akoma Ntoaso	Inner circle		Chain Stitch	Maintaining circle symmetry	Reinforces harmony and connection
Asase Ye Duru	Base area		Chain Stitch and running stitch	Dense stitching required	Symbolizes groundedness
Nserewa	lower center area		Chain Stitch	Precision in small spaces	Adds elements of prosperity
Symbol	Placement		Technique Used	Challenges Encountered	Narrative Role (Jecty, 2022).

Kramo Bone	Middle edge area		Stem Stitch	Alternating patterns cleanly	Highlights contrasts and balance
Nea Onnim No Sua A Ohu	Surrounding borders		Stem Stitch	Repeating motifs symmetrically	Encourages continuous growth
Fawohodie	Flowing edges		Chain Stitch	Maintaining flowing lines	Reflects freedom and flexibility
Wuo Atwedee	Upper edges		Stem Stitch	Capturing intricate details	Represents spirituality and life's journey
Osidan	Surrounding motifs		Stem Stitch and running stitch	Smoothness in protective layers	Emphasizes safety and security
Fihankra	Outer circle		Chain Stitch and running stitch	Maintaining circular patterns	Symbolizes community and protection
Eban	Core center		Chain Stitch	Achieving prominence in the core	Central pillar of stability

Adwo	Subtle background		Chain Stitch	Ensuring subtlety in execution	Adds a calming undertone
Nyame Akuma	Prominent center		Chain Stitch	Ensuring prominence	Highlights divine influence

The embroidery phase itself was a critical phase that brought the designs to life. The various stitching Techniques that were chosen and applied in various combinations rendered the Adinkra symbols with clarity and aesthetic coherence. Chain stitch was predominantly used to outline bold shapes of the symbols, the border of the entire piece was made using stem stitch because it a versatile technique used for creating smooth lines both straight and curved (Royal School of Needlework, 2018), while satin stitch provided smooth, solid fills for symbols like Nyame Akuma (Tao-tao, 2009). Detailed progress photos (Figure 11) illustrate the meticulous execution of these techniques and the adjustments made to accommodate material properties.



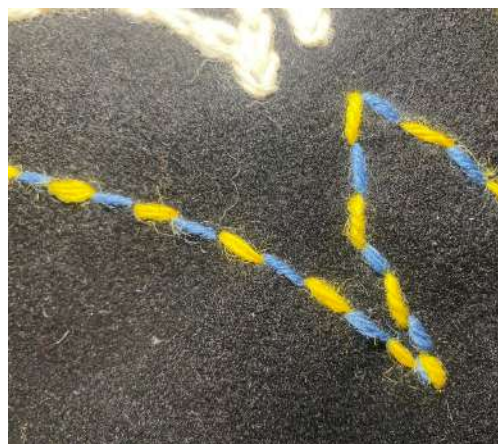
Close-up photo of Satin Stitch



Close-up photo of Stem Stitch



Close-up photo of Chain Stitch



Close-up photo of Back Stitch

*Figure 11: Close-ups of Stitches used in the embroidery process (Ekhafe Andrew, 2025)*

The design development phase was a deeply involved and iterative process that demanded continuous refinement of the initial concepts into a cohesive, balanced composition. At the heart of this creative journey was the careful selection of a color palette, consisting of cream, blue, and yellow embroidery threads set against a bold black fabric background. This combination was not merely aesthetic but deeply symbolic, representing the fusion of African heritage and Arctic material aesthetics, blending rich cultural histories into a visually captivating design. I began the embroidery from one edge of the fabric, carefully stitching the Ananse ntontan symbol in the top left corner. The use of cream-colored wool and chain stitch with consistent, evenly spaced stitches created a sense of order and precision. This methodical start allowed me to lay the foundation for the rest of the design, which required careful planning due to the large size of the woolen fabric. I initially focused on the symbols along the edges of the fabric to gain control over the design's structure, knowing that it would allow me to work more precisely on the central elements later. By progressing in this way, I ensured that the intricate details of the Adinkra symbols in the middle would align harmoniously with the surrounding motifs. The entire design process took approximately four months, with each phase of the embroidery contributing to the overall refinement of the piece. The iterative revisions significantly enhanced the visual appeal of the design, but perhaps more importantly, they ensured that the cultural relevance of each symbol was preserved, reinforcing the dual objectives of cultural preservation and sustainable practice that underpinned this project.

Throughout this process, I encountered several challenges that tested my technical abilities and problem-solving skills. One of the main obstacles was maintaining consistent stitch tension, which was crucial for achieving a smooth and even surface across the entire fabric. Additionally, the large size of the woolen fabric made it prone to puckering, which could have disrupted the overall appearance of the design. To combat these issues, I employed stabilizing hoops to maintain the fabric's tautness and adjusted the length of the stitches to ensure that each one was perfectly executed. The iterative nature of the process meant that I could continuously assess and adjust these technical aspects, improving the work with every revision. The progress images (Figure 9) serve as a valuable record, capturing the evolution of the design from its rough drafts to the final, polished composition. These images not only document the artistic process but also reveal how each revision contributed to the refinement of the overall composition. The experience gained from overcoming these challenges significantly deepened my understanding

of the medium, as well as my technical expertise. By the end of the process, I had refined my embroidery technique to a point where I could execute each Adinkra symbol with both precision and cultural sensitivity. The final piece was not just a visual artwork but also a reflection of the rich traditions embedded in the Adinkra symbols. It demonstrated how embroidery, as a sustainable and time-honored practice, can effectively preserve and convey cultural narratives, while also allowing for creative innovation that bridges diverse cultural aesthetics. This project, which began with a simple idea, ultimately became a testament to the enduring power of embroidery as a means of storytelling and cultural preservation.



(a) Early Layout Sketches and embroidery (Ekhafe Andrew, 2025)



(b) Mid stage (Ekhafe Andrew, 2025)



(c) Final Layout

Figure 12: Early Layout Sketches, Mid-Process Photos, Final Layout (Ekhafe Andrew, 2025)

## 4.2 Interview Results: Thematic Analysis

Here I present a thematic analysis of the semi-structured interview conducted with Lola Cervantes, alongside insights from Minna Kovero's work. The interview was designed to explore sustainability in textile art, the role of cultural preservation, and the integration of Adinkra symbols into Arctic embroidery practices. It was conducted in a semi-structured format to allow for in-depth discussions while maintaining flexibility for spontaneous insights. Lola was selected as an interviewee due to her extensive experience in sustainable craft practices and her emphasis on ethical material use. Questions used in the interview can be found in the appendix. Her perspective was particularly relevant to this study, as she works at the intersection of sustainability and cultural storytelling, two critical aspects of this research. Minna Kovero's contributions, particularly her work on textile narratives and cultural identity, further reinforced the study's objectives by situating embroidery as a medium for dialogue and preservation.

The discussion with Lola Cervantes revealed several key themes, the most prominent being the role of sustainability in craft practices. She emphasized the importance of using locally sourced materials, stating, "I ensure minimal wastage by reusing wool scraps and transforming them into complementary elements of new pieces." This aligns with the study's approach to material selection, where Finnish wool and black woolen fabric were chosen based on their sustainability and cultural adaptability. The research aimed to balance aesthetic integrity with environmental responsibility, and Lola's insights validated the practical application of this approach. Minna Kovero's work similarly underscores the necessity of sustainable approaches in contemporary textile art, as she advocates for the use of natural fibers and minimizing textile waste. These perspectives align with the theoretical discussions in Chapter 2, particularly those on eco-craft and sustainable materialism, which argue that sustainability extends beyond material choices to encompass broader ecological and socio-cultural considerations.

Material constraints emerged as another key theme in the interview. Lola highlighted challenges related to seasonal material availability and market constraints, noting that variations in material quality require adaptive design strategies. The research encountered similar difficulties during the practice-based phase, particularly with the elasticity of black woolen fabric, which necessitated innovative embroidery techniques for stability. Her suggestions on resource

substitution and early planning provided practical strategies to navigate these constraints, reinforcing the need for adaptability in sustainable craft practices. This discussion ties into the theoretical foundations laid out in Chapter 2, where sustainability is not just an environmental concern but also a design challenge requiring creative problem-solving.

Another significant insight from the interview was the role of cultural preservation in embroidery. Lola emphasized that symbols are powerful storytelling tools that connect past and present, a sentiment that was foundational to this research. The study's integration of Adinkra symbols into Arctic embroidery was predicated on the belief that these symbols retain their narrative significance even when transposed onto new materials and contexts. Minna Kovero's work similarly illustrates how embroidery serves as a medium for cultural storytelling, reinforcing the idea that textile art is not just decorative but communicative. The research process was deeply informed by semiotics, as discussed in Chapter 2, particularly in the way the spatial integrity of Adinkra symbols was preserved through digital mapping before embroidery.

The findings are further substantiated by Figure 13, which provides a comparative framework for understanding the role of Adinkra symbols in Finnish textiles alongside Kovero and Kravtsov's (2024) approach to collaborative textile art. This study employs ethically sourced Finnish wool to ensure sustainability, aligning with Cervantes' emphasis on responsible material use, whereas Kovero and Kravtsov's approach prioritizes recycled and repurposed textiles within a circular design model. In terms of cultural preservation, this research interprets Adinkra symbols within Nordic textile traditions, demonstrating how embroidery can serve as a medium for cross-cultural adaptation. In contrast, Kovero and Kravtsov focus on collaborative projects that integrate diverse cultural narratives through shared artistic practices. The study also emphasizes traditional hand embroidery techniques such as chain stitch, satin stitch, and stem stitch, maintaining a direct link to historical textile craftsmanship, while Kovero and Kravtsov explore more experimental methods that layer and mix different stitching styles. Additionally, this research is primarily an individual exploration of cultural adaptation through embroidery, whereas Kovero and Kravtsov's work is deeply rooted in collaborative artistic experiences. Finally, the presentation of findings through an exhibition underscores how embroidery functions as both a research method and artistic output, whereas Kovero and Kravtsov's practice actively

involves audience participation and community engagement, highlighting different approaches to public interaction in textile art.

The synthesis of the interview data with the practice-based research findings directly addresses the research question by demonstrating that Adinkra symbols can be successfully adapted into Arctic embroidery while maintaining their cultural significance. This research reinforces the argument that textile art can function as a bridge between cultures, supporting theories discussed in Chapter 2 on material culture and symbolic representation. The study also highlights how sustainability and cultural preservation intersect, suggesting that ethical craft practices do not merely focus on materials but also on the narratives embedded within them. The interview with Lola Cervantes and insights from Minna Kovero provide strong validation for this approach, situating the research within contemporary discussions on sustainable textile design.

Ultimately, this chapter demonstrates that integrating Adinkra symbols into Arctic embroidery is a viable and meaningful practice that supports both sustainability and cultural continuity. The findings confirm that embroidery can serve as a tool for environmental consciousness and cultural preservation, reinforcing the study's contribution to the broader discourse on textile art and sustainable craft. By grounding these insights within the theoretical framework established in Chapter 2, this research advances a model for cross-cultural artistic collaboration that is both innovative and ethically responsible.

Figure 13: Table showing the key similarities and differences between this study and Kovero & Kravtsov’s work (Ekhafe Andrew, 2025)

<b>Key Aspect</b>	<b>This Study (Adinkra Symbols in Finnish Textiles)</b>	<b>Kovero &amp; Kravtsov (2024) (Collaborative Textile Art)</b>
<b>Sustainability Approach</b>	Uses new, ethically sourced materials (Finnish wool) for longevity and eco-conscious crafting.	Focuses on recycled, repurposed textiles and circular design.
<b>Cultural Preservation</b>	Adapts African Adinkra symbols into Nordic textile traditions as a personal creative interpretation.	Engages in collaborative projects that integrate diverse cultural narratives.
<b>Textile Techniques</b>	Uses traditional hand embroidery techniques (chain stitch, satin stitch, Stem stitch).	Explores mixed-media textile methods, including layering and stitch experimentation.
<b>Artistic vs. Collaborative</b>	Primarily an individual research project exploring cultural adaptation through embroidery.	Involves direct collaboration with artists and communities, emphasizing shared creative experiences.
<b>Public Engagement</b>	Findings are presented through an exhibition as a research output.	Work involves active engagement with audiences and community participation.

### 4.3 Synthesis of Findings

The synthesis of practice-based research, expert interviews, and exhibition analysis reveals a multidimensional narrative supporting the study's research objectives. These data sources collectively emphasize sustainable material use, cultural preservation, and creative adaptation, while also illuminating distinct challenges and perspectives.

The practice-based research highlights the technical feasibility of integrating Adinkra symbols into sustainable Arctic craft practices, as demonstrated through material testing, iterative design processes, and embroidery refinements. The use of Finnish wool and black woolen fabric not only explored material compatibility but also maintained cultural integrity, as guided by the symbolic meanings of Adinkra motifs.

Expert insights added critical layers to the study's findings. Lola Cervantes provided valuable perspectives on the ethical considerations of sustainable design and the importance of preserving cultural narratives through material choices and craftsmanship. Additionally, Kovero's work in sustainable textile art offered practical examples of material innovation and thoughtful design adaptation, reinforcing the need for creative solutions that balance tradition and sustainability.

The exhibition analysis further enriched the study by offering real-world engagement with the designs. Audience feedback during the exhibition provided qualitative validation of the study's approach, revealing how viewers interpreted the fusion of Arctic and Ghanaian craft traditions. The exhibition not only served as a platform for public interaction but also aligned with the Exhibition Group's mission of using artistic expression as a communication tool for broader societal conversations.

A Venn diagram (Figure 15) illustrates these overlapping insights. The intersection of practice-based research, expert perspectives, and exhibition feedback highlights shared themes such as sustainability, cultural preservation, and cross-cultural dialogue. While practice-based research emphasized technical execution, expert interviews stressed ethical and innovative design principles, and exhibition feedback reflected public perception and cultural resonance.

## SYNTHESIS OF FINDINGS: Overlapping Themes



Figure 15: Venn Diagram showing the intersection of practice-based research and the expert insights.

## CHAPTER FIVE

### 5. Discussion and Conclusion

This chapter synthesizes and interprets the findings from the study, discussing how the integration of African Adinkra symbols into sustainable Arctic textile practices contributes to both cultural preservation and environmental sustainability. The discussion is organized to address the following aspects: an interpretation of the research findings, contributions to theory and practice, implications for future research and practice, and an acknowledgment of the study's limitations. The chapter concludes by reflecting on the overall significance of the research and its potential impact on contemporary craft practices.

#### 5.1 Interpretation of Findings

The research findings reveal a multidimensional narrative where the integration of traditional Adinkra symbols with sustainable materials is both technically feasible and culturally significant. The practice-based research demonstrated that careful material testing, iterative design development, and refined embroidery techniques can successfully adapt these symbols to a new cultural context. Observations during the creative process such as the successful use of Finnish wool and the challenges posed by black woolen fabric highlight the importance of local, renewable materials for sustainable textile art. The expert interview with Lola Cervantes reinforced the ethical considerations of material selection and cultural preservation, while the exhibition analysis confirmed that the final embroidered works effectively communicated their intended symbolic and aesthetic narratives.

The concept of material sensitivity, as explored by Cervantes and Huhmarniemi (2023), is particularly relevant to these findings. Their study highlights how embroidery functions not just as an artistic practice but as an activist tool that fosters cultural continuity and ethical crafting. This study aligns with their argument by demonstrating how the selection of Finnish wool—considering factors such as texture, dye absorption, and sustainability—enhanced the responsible adaptation of Adinkra symbols. By prioritizing environmentally conscious material choices, this research contributes to ongoing discussions on the ethical implications of textile art in cross-cultural contexts.

Furthermore, the study's approach resonates with Huhmarniemi and Jokela's (2020) discussion on cultural resilience and material culture in Arctic art. They emphasize that sustainable craft practices serve as a means of preserving and evolving cultural identities, particularly in Northern regions. Similarly, this research illustrates how Adinkra symbols can be meaningfully reinterpreted in Finnish embroidery without losing their historical and cultural significance. By bridging sustainability and heritage preservation, the findings reinforce the role of textile art in fostering cross-cultural dialogue while promoting environmentally responsible design practices.

## **5.2 Contributions of the Research**

This study advances current understanding in several key areas by extending theories on sustainable craft practices. It demonstrates that traditional techniques, such as hand embroidery, can be effectively combined with local materials to promote environmental responsibility. The research builds on Kovero and Kravtsov's (2024) perspectives by illustrating how textile art serves as a medium for cross-cultural exchange and ethical design. Furthermore, Cervantes and Huhmarniemi (2023) emphasize the concept of material sensitivity, underscoring the importance of responsible material selection in preserving cultural heritage. Their discussion on embroidery as an activist and preservation tool reinforces the findings of this study, which show that adapting Adinkra symbols within a Finnish textile context can be done ethically and sustainably. Additionally, Huhmarniemi and Jokela (2020) highlight the role of Arctic material culture in cultural resilience, supporting the argument that heritage symbols can be adapted in sustainable practices without compromising their historical significance.

From a practical standpoint, this study provides a replicable model for integrating cultural motifs into sustainable craft practices. The detailed documentation of material testing, symbol adaptation, and iterative embroidery techniques offers concrete guidelines for artisans and designers aiming to merge tradition with innovation. Cervantes and Huhmarniemi (2023) emphasize the role of embroidery in ethical crafting, reinforcing the idea that responsible material choices contribute to both sustainability and cultural preservation. Furthermore, the exhibition component illustrates how creative research can be publicly presented to generate dialogue around environmental and cultural issues. The importance of public engagement in craft-based sustainability is also reflected in Huhmarniemi's (2021) discussion on Arctic

craftivism, which highlights how textile art can be used as a tool for awareness and activism. These practical insights are valuable for educators, craft practitioners, and cultural organizations seeking to promote ethical and sustainable textile art.

### **5.3 Implications for Future Research and Practice**

While this study has provided significant insights into the intersection of cultural preservation and sustainable craft, several avenues for future research remain. Expanding community engagement to include direct participation from cultural custodians could further enrich the interpretive depth of the findings, ensuring that adaptations of Adinkra symbols remain culturally sensitive and contextually relevant. Huhmarniemi and Jokela (2020) emphasize the role of Arctic material culture in fostering cultural resilience, suggesting that participatory approaches strengthen both knowledge transmission and sustainability efforts. Additionally, further research could explore alternative sustainable materials and natural dyeing techniques, broadening the scope of textile experimentation in response to ecological concerns. Longitudinal studies would also be valuable in assessing the enduring impact of interdisciplinary approaches, particularly in evaluating how sustainable craft practices evolve within different cultural and environmental contexts.

For practitioners, this study underscores the importance of adopting locally sourced, renewable materials as a cornerstone of sustainable craft practices. Cervantes and Huhmarniemi (2023) highlight material sensitivity as a critical component of ethical crafting, reinforcing the need for responsible material selection that balances sustainability with cultural preservation. The findings also demonstrate that iterative design processes, where material testing and adaptive techniques play a central role, are essential for maintaining both aesthetic quality and cultural integrity in textile art. These insights align with Huhmarniemi's (2021) discussion on Arctic craftivism, which advocates for sustainable design approaches that incorporate traditional techniques while addressing contemporary environmental challenges.

Additionally, integrating public exhibitions into the research process offers a valuable method for validating and refining artistic work. The exhibition of the embroidered Adinkra designs facilitated a broader dialogue on sustainability and cultural exchange, demonstrating how creative research can be effectively communicated beyond academic circles. This aligns with Jokela et al. (2021), who explore how Arctic art fosters new genres of artistic engagement that connect cultural heritage with contemporary environmental and social issues. By embracing these strategies—community collaboration, responsible material selection, and public engagement—designers and craft practitioners can enhance the sustainability and cultural relevance of their work while contributing to broader discussions on ethical craft practices.

#### **5.4 Limitations of the Study**

Despite its contributions, the study has several limitations. The reliance on a single expert interview may have restricted the diversity of perspectives, suggesting that future research should incorporate a broader range of voices, including multiple practitioners, cultural historians, and sustainability experts. Expanding the range of expert insights would provide a more comprehensive understanding of the interplay between cultural symbolism and sustainable textile practices. Jokela et al. (2021) emphasize the value of interdisciplinary and community-driven research in Arctic art, highlighting how collaborative methodologies enrich artistic and theoretical discourse.

Material constraints also posed challenges, particularly the seasonal variability in Finnish wool quality, which influenced design decisions and the feasibility of certain embroidery techniques. This aligns with Huhmarniemi and Jokela (2020), who discuss how Arctic material culture is shaped by environmental fluctuations and resource availability. Future studies could explore alternative sustainable textiles or hybrid material approaches to mitigate such limitations while maintaining ecological responsibility. Additionally, variations in material sourcing conditions may necessitate adaptive crafting techniques to ensure consistency in artistic output and cultural symbolism.

Moreover, while the exhibition component served as an effective medium for public engagement and knowledge dissemination, its primary function was as a display rather than a systematic data collection method. Although audience interactions provided qualitative insights, the lack of structured evaluation mechanisms limited the ability to measure the reception and impact of the works in a rigorous manner. Cervantes and Huhmarniemi (2023) emphasize that exhibitions can serve as research spaces, but they require embedded methodologies—such as surveys or observational studies—to generate structured feedback. Addressing these limitations in future studies will help refine the research framework and enhance the overall validity of the findings, particularly by integrating participatory evaluation strategies into creative practice.

## **5.5 Conclusion**

This study demonstrates that sustainable craft practices can serve as a powerful medium for cultural preservation when traditional symbols are thoughtfully adapted to contemporary contexts. By integrating African Adinkra symbols into Finnish embroidery, the research successfully showcases how heritage can be maintained and reinterpreted through environmentally responsible techniques. The interdisciplinary approach—combining practice-based research, expert insights, and exhibition analysis—reinforces the importance of ethical crafting as a method of both preservation and innovation.

Ultimately, the findings highlight the potential for textile art to bridge cultural and environmental concerns, offering practical insights for future research and craft-based practices. By focusing on material sensitivity, responsible design, and cultural storytelling, this research underscores the broader relevance of sustainability in contemporary craft. The role of exhibitions and public engagement in validating and refining artistic work also suggests a growing need for interdisciplinary collaborations that connect artists, cultural custodians, and sustainability advocates.

This research contributes to a broader understanding of craft as more than just a decorative medium but as a dynamic and transformative tool for cultural and ecological engagement. The integration of traditional symbols into new artistic contexts fosters dialogue, innovation, and ethical practice, paving the way for future explorations in sustainable and cross-cultural textile art.

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## **Appendix - Notes from the Embroidery Process**

19th September 2024: I attended the TB-GOBRA seminar organized by the European Union, which focused on sustainability knowledge and enhancing team skills. On this day, there was a wool embroidery workshop where participants were introduced to the craft. Prior to this, I had some knowledge of embroidery from my time in Nigeria, but I had only worked with cotton thread and cotton fabric, making this experience somewhat new to me. This workshop sparked the idea for my thesis, and from that day, I knew I wanted to work with Finnish naturally dyed wool for embroidery.

25th September 2024: I began exploring potential areas where I could merge embroidery with Finnish wool. This led me to research African history both the aspects I was familiar with and those I was not.

7th October 2024: My ideas began to take shape, and I sent an email to Maria, my supervisor, outlining my plan to use Finnish naturally dyed wool to create Adinkra symbols. In the email, I detailed my aims, objectives, and the methodology I intended to implement. I also scheduled a meeting with her for October 9th to discuss my proposal further.

9th October 2024: My meeting with Maria went well, and she approved my idea. She expressed great interest in my work and informed me about an embroidery group called "Embroidered Stances," where artists create pieces based on various themes. She suggested that I could benefit from joining the group, learning from its members, and participating in their upcoming exhibition in February 2025, which would also support my thesis. I agreed to join the group and take part in their activities.

22nd October 2024: I officially joined the "Embroidered Stances" group and received some materials to help with my work. I needed to source naturally dyed blue wool and was advised to contact Elina Luiro, who had previously used this material in her work. Elina explained that naturally dyed blue wool is somewhat rare because it is dyed using Natural Indigo Finland's dye extract made from Morsinga, a plant grown in Finland. She recommended that I purchase the wool from a website called Filona.fi. I placed an order the following day, and the wool arrived in Rovaniemi about four days later.

With all the necessary materials gathered, I began my embroidery work. The group held regular meetings at the University Sauna building, where members would gather to embroider. These sessions were enjoyable and educational. I had the opportunity to connect with other artists, learn from their techniques, and discuss the progress of our projects while sharing coffee and cookies. We also used these meetings to plan for the upcoming exhibition.

February 2025: I completed my embroidery after several iterations, modifications, and additional research. The plan was to exhibit my work at the Arktikum, with the opening scheduled for Wednesday, 12th February 2025, at 6 pm.

12th February 2025: The exhibition was successfully mounted at Gallery Valo in the Arktikum, featuring approximately 18 art pieces showcasing diverse themes created by different artists. Guests arrived at the gallery, and the opening ceremony began with a speech by Maria. Each artist had the opportunity to introduce themselves and discuss their work. The event featured refreshments, fostering an inviting atmosphere where attendees could explore the artworks, engage in meaningful conversations about art, and build new connections.

The exhibition will remain on display at Gallery Valo until 23rd March 2025, after which the artworks will be taken down.

## Interview Questions

1. Can you tell me about your background in sustainable craft practices and Arctic materials?
2. What inspired you to work with these materials and techniques?
3. What strategies do you use to integrate sustainability into your craft processes?
4. How do you approach adapting traditional cultural symbols into new material contexts?
5. What challenges have you faced when working with Arctic materials in craft practices?
6. How do you ensure the cultural authenticity of traditional symbols in cross-cultural projects?
7. Can you describe a specific project where you successfully balanced sustainability and cultural preservation?
8. How Do You View the role of Craft in bridging different cultural traditions?
9. What advice would you give to someone merging cultural preservation with sustainable practices?
10. Are there any additional insights or experiences you'd like to share that are relevant to this project

## Consent Form

### Information sheet and informed consent to participate in research

**Title of Research Study:** Preserving Heritage Through Sustainable Craft: Adinkra Symbols with Arctic Materials

**Researcher:** Ekhafe Osharumaga Andrew

**Institution:** University of Lapland, Faculty of Art and Design

**Contact Information:** aekhafe@ulapland.fi

**Purpose of the Research:** This research aims to explore the intersection of African Adinkra symbols and sustainable Arctic materials through traditional hand embroidery techniques. Your participation will provide valuable insights into sustainable craft practices and cultural preservation.

### Nature of Participation:

- You are invited to participate in a semi-structured interview that will take approximately 30-45 minutes.
- The interview will be audio-recorded to ensure accuracy during transcription and analysis.

### Data Usage and Confidentiality:

- The recordings and transcripts will be used solely for academic purposes.
- Your identity will remain confidential unless you provide explicit permission to be identified.
- All data will be securely stored and deleted after the research is completed.

**Voluntary Participation:** Participation in this research is voluntary. You may decline to answer any question or withdraw from the interview at any time without penalty.

**Consent Agreement:** I, Fabiola Hernández Cervantes , agree to participate in this research study.

I have read and understood the purpose, nature, and conditions of participation.

- I agree to have my interview recorded: **Yes / No**
- I agree to be identified in the research: **Yes / No**

**Participant Signature:**

*Lola Cervant*

**Date:** 18.12.2024

**Researcher Signature:**



**Date:** 18.12.2024

