
| RESEARCH ARTICLE

Changing the Shed: Waste as Art

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| ABSTRACT

The growing accumulation of plastic waste has become one of the most pressing environmental challenges of the contemporary era, prompting artists and researchers to explore innovative approaches to waste reduction and material reuse. This study investigates the transformation of discarded plastic strapping bands into contemporary artworks, examining how artistic practice can reconfigure waste materials into objects of aesthetic, cultural, and environmental significance. Drawing on practice-based, experimental, and descriptive research methodologies, the study employed processes of collection, sorting, weaving, assembly, and installation to explore the creative potential of discarded industrial plastics. Through a series of woven installations, the research demonstrates how materials commonly regarded as rubbish can be reimagined as valuable artistic resources. The experimentation revealed visual and conceptual connections between the woven plastic structures and traditional Ghanaian textile practices, particularly Kente cloth and Adinkra symbolism. These cultural references informed the development of artworks that addressed themes of connectivity, identity, consumerism, sustainability, and environmental responsibility. The installations further engaged audiences in critical discussions about waste, consumption, and the role of art in promoting sustainable ways of thinking. The study is informed by theories of waste and value transformation, particularly Thompson's Rubbish Theory, which proposes that objects can move from states of low or discarded value to states of durability and cultural significance. Findings indicate that the artistic process itself serves as a mechanism of transformation through which waste materials are revalued and repositioned within systems of meaning and appreciation. Rather than viewing waste solely as an environmental burden, the research demonstrates its potential as a medium for artistic expression, cultural preservation, and public engagement. The study concludes that transforming waste into art is not merely an act of recycling or upcycling but an artistic process that challenges perceptions of value, encourages sustainable practices, and contributes to broader conversations surrounding responsible consumption and production.

| KEYWORDS

Plastic waste, upcycling, contemporary art, sustainability, weaving, consumerism, Ghanaian textiles, Rubbish Theory, waste transformation, Sustainable Development Goals

| ARTICLE INFORMATION

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Introduction

The rapid pace of industrialization, urbanization, and modernization has resulted in unprecedented levels of solid waste generation across the globe. While development has improved living standards and stimulated economic growth, it has simultaneously intensified environmental challenges, particularly in developing countries where waste management systems often struggle to keep pace with increasing consumption patterns. As Thomas-Hope (1998) observes, many of the most pressing environmental problems confronting developing nations emerge directly from the processes of development themselves. Consequently, solid waste management has become one of the most significant environmental challenges of the twenty-first century, affecting both developed and developing countries alike (Thomas-Hope, 1998; Kaza et al., 2018).

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The growth of consumer culture has contributed substantially to the production of waste. Modern societies are characterized by patterns of consumption that encourage the continual acquisition, use, and disposal of commodities. The emergence of what Life (1955) famously described as a “throwaway culture” has transformed objects into increasingly disposable goods, shortening their lifespan and accelerating their transition from useful commodities to waste. As Ibarra (2015) notes, despite growing awareness of consumerism and its environmental consequences, the rate at which material goods are acquired and discarded continues to rise. This phenomenon is particularly evident in the widespread use of plastics, which have become indispensable to contemporary life because of their durability, affordability, versatility, and convenience. Ironically, these same qualities have made plastic waste one of the most persistent and problematic forms of environmental pollution worldwide (Rochman, 2020).

Plastic waste has attracted significant scholarly, governmental, and public attention in recent decades. From discarded packaging materials and sachet water wrappers to industrial plastics and consumer products, plastic debris accumulates in landfills, waterways, and urban landscapes, posing serious threats to ecosystems and human well-being (Kumar et al, 2021). Yet plastic waste is not merely an environmental problem; it is also a cultural and social phenomenon that reflects broader patterns of production and consumption. Scholars within waste studies have argued that rubbish serves as a material record of human behaviour, revealing the values, habits, and lifestyles of the societies that produce it (Thompson, 1979; Hawkins, 2005). What is discarded often tells as much about a society as what is preserved.

Several industries contribute significantly to waste generation, including manufacturing, construction, healthcare, and the arts. The manufacturing sector produces large quantities of packaging waste, electronic waste, and industrial by-products. Similarly, the construction industry, while contributing substantially to economic development, has long been recognized as a major source of environmental degradation through the generation of demolition debris and construction waste (Marzouk & Azab, 2014). Healthcare facilities generate hazardous and non-hazardous wastes that require specialized management systems. Less frequently discussed, however, is the contribution of artistic production to waste generation. Artistic processes often involve material experimentation, resulting in leftover plastics, fabrics, papers, packaging materials, and other discarded substances. These remnants are frequently disposed of after production, contributing to the growing volume of waste entering the environment.

In response to these challenges, global sustainability initiatives have emphasized the need for responsible resource use and waste reduction. The United Nations Sustainable Development Goals (SDGs), particularly Goal 6 (Clean Water and Sanitation), Goal 9 (Industry, Innovation and Infrastructure), and Goal 12 (Responsible Consumption and Production), call for innovative approaches to managing waste and promoting sustainable practices (United Nations, 2015). Recycling and upcycling have emerged as important strategies within this framework. Recycling involves processing waste materials into raw materials for the production of new goods, whereas upcycling transforms discarded materials into products of equal or greater value without destroying their original material integrity (Eco-Cycle, 2016; Iberdrola, 2021). Upcycling not only extends the life cycle of materials but also creates opportunities for creative reinterpretation and cultural revaluation.

The artistic transformation of waste occupies a unique position within these sustainability efforts. Since the early twentieth century, artists have challenged conventional understandings of artistic materials by incorporating found objects, discarded commodities, and industrial debris into their work (Banash, 2013; Greenberg, 1984). Through processes of collection, recontextualization, and transformation, waste materials become vehicles for aesthetic expression, social commentary, and environmental awareness. Contemporary artists working with plastic waste demonstrate that materials commonly regarded as worthless can be endowed with new meanings and functions (Ilhan, 2016; Ibarra, 2015). Their practices reveal that waste is not a fixed category but rather a socially constructed condition subject to reinterpretation. As Thompson (1979) argues, objects may move between states of transience, rubbish, and durability, acquiring new forms of value over time.

Indeed, attitudes toward waste vary considerably across cultures and socio-economic contexts. Waste is interacted with by a wide range of individuals for different purposes. Waste collectors gather plastics, metals, papers, and other recyclable materials from landfills and refuse dumps as a means of livelihood. The collection and resale of recyclable materials constitute an important source of income for many individuals and families, particularly within the informal economies of developing countries (Erlick, 2015). Similarly, communities have developed innovative ways of repurposing discarded materials into marketable products. In several Ghanaian communities, used sachet water wrappers are transformed into tapestries, handbags, purses, mats, and other functional objects that generate income while simultaneously reducing environmental pollution (Ilhan, 2016). Such practices demonstrate that waste possesses economic, social, and creative potential beyond its conventional classification as refuse.

These differing perceptions underscore the fact that the value of materials is neither fixed nor universal. Rather, value is continually negotiated through cultural, economic, and social processes (Appadurai, 1986; Kopytoff, 1986). As industrialization expanded and mass production replaced many local artisanal practices, objects increasingly became commodities designed for rapid consumption and disposal. Materials that were once handmade, repaired, and preserved became mass-produced and easily replaceable, making waste an inevitable by-product of modern consumer society (Strasser, 1999). Yet artists have consistently challenged this trajectory by recovering discarded materials and reintroducing them into cultural circulation.

Plastic waste, in particular, has become a compelling medium for artistic experimentation. Artists have employed plastics in unconventional ways, transforming everyday waste into sculptures, installations, textiles, and mixed-media artworks (Ilhan, 2016; Ilerdrola, 2021). Through innovative techniques and processes, these works often transcend the physical properties of their materials to create entirely new spatial and conceptual experiences. In many cases, the methods used in constructing the artwork influence not only its visual appearance but also the manner in which audiences engage with it. Such works encourage viewers to reconsider their relationships with consumption, disposal, and material culture.

This study emerges from an interest in exploring the artistic possibilities of plastic waste through the concepts of connectivity, linkage, and transformation. Inspired by the interconnected nature of architectural structures, where individual bricks or blocks combine to create cohesive forms, this research investigates how discarded plastic materials can be assembled into unified visual compositions. The study draws upon experimental processes involving weaving, repetition, layering, and accumulation. Weaving has historically functioned as both a practical craft and a metaphor for connection, interdependence, and wholeness (Merrill, 2007; Wahl, 2018). By threading strips of plastic through metal mesh structures, the work seeks to evoke both the interconnectedness of human experiences and the material histories embedded within discarded objects. The effects of weathering, fading, and environmental exposure on plastic materials further inform the visual language of the work, creating parallels between the aging of built environments and the transformation of waste materials over time.

Methodologically, the study adopts an experimental, descriptive, and practice-based approach (Gray & Malins, 1993). Chance, improvisation, and material exploration play significant roles in the creative process (Boundless, n.d.). Through repeated use of similar materials and techniques, individual works become interconnected components of a larger visual narrative. The resulting artworks emphasize unity, continuity, and human participation, demonstrating how waste materials can be transformed into meaningful aesthetic experiences. Ultimately, this research examines plastic waste not only as an environmental concern but also as a medium capable of generating new artistic possibilities, cultural meanings, and sustainable futures.

Literature Review

The use of non-art materials in artistic practice has significantly transformed the language and production of art since the early twentieth century. Traditionally, artworks were created using conventional materials such as paint, clay, stone, wood, and metal. However, the emergence of modern art movements challenged these conventions and expanded the boundaries of artistic expression. Artists began incorporating everyday objects and industrial materials into their work, thereby redefining what could be considered art.

One of the most influential figures in this transformation was Marcel Duchamp. Through his concept of the "readymade," Duchamp introduced ordinary manufactured objects into the art world. His most famous work, *Fountain* (1917), a standard urinal signed with a pseudonym, challenged traditional definitions of artistic skill, originality, and aesthetics (Figure 1a). Duchamp's work demonstrated that the artist's idea and selection of an object could be as important as its physical creation. His approach fundamentally altered the perception of art and opened new possibilities for artistic experimentation (Ilhan, 2016; Lykkyberg, 2013).

Similarly, Pablo Picasso played a pioneering role in introducing non-art objects into fine art. In *Glass of Absinthe* (1914), Picasso incorporated an actual absinthe spoon into a sculptural composition, combining found objects with traditional sculptural techniques (Figure 1b). This innovative practice encouraged artists to explore new relationships between everyday materials and artistic expression. Following Picasso and Duchamp, artists such as Kurt Schwitters and Joseph Cornell further developed collage and assemblage techniques, incorporating discarded and found materials into their artworks. These artists demonstrated that ordinary objects could possess aesthetic, symbolic, and conceptual value when repositioned within an artistic context.

The incorporation of non-art materials became a defining characteristic of contemporary art. Rather than focusing solely on technical mastery or traditional artistic media, contemporary artists increasingly emphasize concepts, social issues, and critical commentary. This shift encouraged artists to experiment with unconventional materials, including industrial products, household items, and waste materials. As a result, discarded objects and refuse gradually became legitimate artistic media, allowing artists to address environmental, social, political, and economic concerns through their work.

In recent decades, waste materials have become increasingly prominent within contemporary art practice. Growing environmental concerns, particularly regarding pollution and waste management, have motivated artists to repurpose discarded materials as both artistic media and vehicles for social commentary. Through recycling and upcycling, artists transform waste into meaningful artworks that challenge perceptions of consumption, value, and sustainability. According to Zulkernain et al. (2021), recycling is one of the most effective and sustainable methods of waste management, reducing environmental impacts while promoting resource conservation. Consequently, many contemporary artists have embraced waste materials as a means of contributing to environmental awareness and sustainable development.

Plastic waste has emerged as one of the most widely used waste materials in contemporary art due to its abundance and environmental significance. Plastic pollution constitutes a global environmental crisis, with only a small percentage of the world's plastic waste being recycled. Plastic has persisted in the environment for centuries, often degrading into microplastics and nanoplastics that threaten ecosystems and human health (Richter, 2023; Donkor et al., 2021). In response, artists have increasingly incorporated plastic waste into their creative practices, transforming discarded materials into artworks that highlight environmental challenges while promoting recycling and reuse.

Among the notable artists working with waste materials is El Anatsui, a Ghanaian sculptor renowned for creating monumental, cloth-like installations from discarded aluminum bottle caps and packaging materials (Figure 1c). Through intricate assemblage techniques that reference traditional African textile practices, El Anatsui transforms waste into visually compelling artworks that explore themes of consumption, transformation, and cultural identity. His work demonstrates the aesthetic and conceptual potential of discarded materials while encouraging viewers to reconsider notions of waste and value. Another significant artist is Serge Attukwei Clottey, a Ghanaian multimedia artist and founder of the concept of Afrogallonism. Clottey works with discarded yellow plastic gallon containers commonly known in Ghana as "Kuffuor gallons" which are originally used for storing vegetable oil and are later reused for water storage (Figure 1 d). Through large-scale installations and performances, he investigates issues of migration, globalization, consumer culture, and the historical relationship between Ghana and the West. By transforming discarded plastic containers into artistic forms, Clottey highlights the environmental consequences of plastic consumption while simultaneously addressing broader social and political concerns (Donkor et al., 2021).

Similarly, South African artist Mbongeni Buthelezi employs plastic waste as his primary artistic medium. Rather than using traditional paint, Buthelezi cuts discarded plastic into small fragments and melts them onto plastic surfaces using a heat gun (Figure 1e). The resulting works resemble paintings while retaining the material qualities of recycled plastic. His artworks address environmental degradation, urban decay, social inequality, and the challenges faced by marginalized communities in South Africa. Through his innovative use of waste plastic, Buthelezi demonstrates how discarded materials can be transformed into powerful visual narratives.

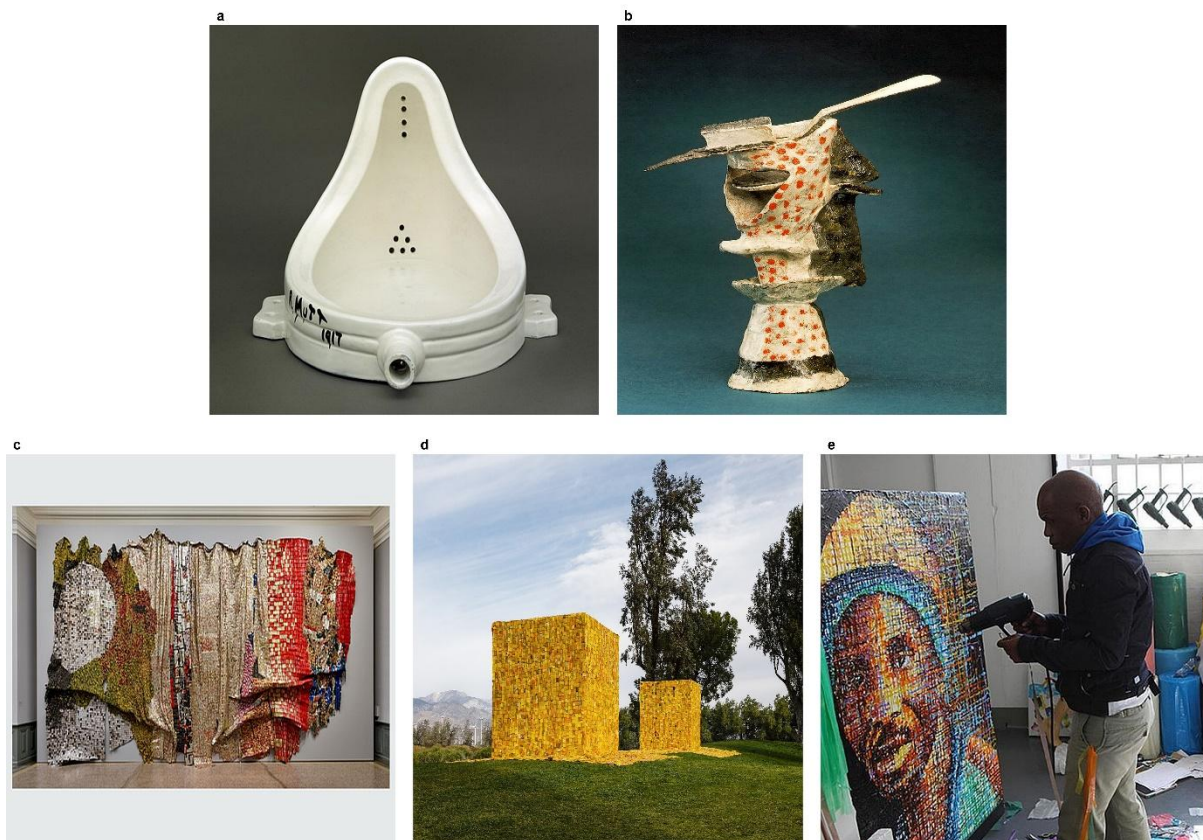


Figure 1. (a) Marcel Duchamp's fountain (b) Pablo Picasso's glass of Absinthe (1914) (c) Installation by El Anatsui (d) Installation by Serge Attukwei Clottey (e) Mbongeni Buthelezi creating an artwork

The increasing volume of plastic waste generated worldwide has prompted researchers to explore innovative ways of utilizing discarded plastics rather than allowing them to accumulate in the environment. Sadiq and Khattak (2015) note that waste plastics

can be repurposed for various applications, reducing the burden on landfills and contributing to more sustainable waste-management practices. Their review highlights the importance of viewing plastic waste as a potential resource rather than merely an environmental nuisance. This perspective has extended beyond scientific and industrial fields into contemporary art, where artists increasingly employ discarded plastic materials as creative media, demonstrating their potential for transformation and renewed purpose.

The emergence of recycled and upcycled art has further strengthened the relationship between artistic practice and environmental sustainability. Upcycling involves transforming discarded materials into products of equal or greater value than the original item (Ecocycle, 2016). Unlike conventional recycling, which often requires industrial processing, upcycling emphasizes creative reuse and material transformation. Artists such as Aurora Robson and Michelle Reader exemplify this approach. Robson creates intricate sculptures from discarded plastic bottles and plastic debris collected from waste streams, while Reader constructs figurative sculptures from a wide variety of recycled materials. Their work illustrates how artistic creativity can extend the lifespan of waste materials while generating new meanings and aesthetic experiences.

The growing use of waste materials in contemporary art aligns closely with the United Nations Sustainable Development Goal 12, which advocates responsible consumption and production through waste reduction, recycling, and reuse (United Nations, 2015). By transforming discarded materials into meaningful artworks, contemporary artists contribute to environmental education, promote sustainable practices, and challenge prevailing attitudes toward waste. Their work demonstrates that materials commonly perceived as useless can possess significant cultural, aesthetic, and environmental value.

Thus, the incorporation of non-art materials, waste products, and plastic waste into contemporary art represents both a continuation of artistic experimentation initiated by early modern artists and a response to contemporary environmental concerns. From Duchamp's readymade and Picasso's assemblages to the environmentally conscious practices of contemporary artists, the use of unconventional materials has expanded the possibilities of artistic expression while fostering critical engagement with issues of sustainability, consumption, and environmental stewardship.

Methodology

This study employed a qualitative and practice-based research methodology grounded in experimental and descriptive approaches to artistic inquiry. According to Gray and Malins (1993), methodology in art research encompasses the systematic procedures through which artists investigate, develop, and realize creative ideas. Unlike scientific research, which often seeks objective and measurable truths, artistic research focuses on generating knowledge through creative practice, material exploration, and visual communication. In contemporary art, artists frequently utilize methodological processes to investigate cultural, social, environmental, and conceptual issues through a range of artistic media.

The present study explores the transformation of discarded plastic strapping bands into contemporary artworks, using artistic practice as both a mode of inquiry and a means of knowledge production. The research was informed by concepts of connectivity, linkage, flexibility, transformation, and material revaluation. Through experimentation with waste materials, the study sought to investigate how discarded plastics can be reimaged as aesthetic objects while simultaneously drawing attention to issues of waste, consumerism, and environmental sustainability.

Practice-Based and Experimental Approach

The study adopted a practice-based approach in which knowledge emerged through the process of making. Experimental research methods were employed to explore the physical properties, aesthetic potential, and structural possibilities of discarded plastic strapping bands. The research process was iterative, involving repeated cycles of collection, testing, reflection, modification, and production.

The motivation for the investigation stemmed from observations of the diverse ways in which discarded strapping bands are repurposed within communities. Existing examples revealed that these materials have been transformed into baskets, bags, containers, and even architectural structures. At the same time, many discarded bands are simply burned or disposed of, contributing to environmental degradation. These contrasting outcomes highlighted the material's potential for both destruction and creative transformation.

Chance, improvisation, and spontaneity played significant roles throughout the research process. As Boundless (n.d.) suggests, these elements can function either as tools within artistic production or as conceptual foundations of the artwork itself. Consequently, the creative process remained open to unexpected discoveries and material-led decisions, allowing the characteristics of the strapping bands to influence the direction of the work.

Material Collection and Preparation

Primary materials for the study consisted of discarded plastic strapping bands collected from cold stores, appliance retail outlets, construction sites, and other commercial environments (Figure 2). These materials had originally been used for packaging and transportation purposes but had become obsolete after fulfilling their intended function.

Following collection, the strapping bands were cleaned, sorted, and organized according to colour. The colour categories included red, blue, white, yellow, green, orange, and black. This systematic sorting process facilitated colour coordination during the construction of the artworks and enabled greater control over compositional arrangements.

The process of sorting also encouraged critical reflection on the material's previous life cycle. Examination of printed markings on the bands revealed information about manufacturers, countries of origin, and industrial applications. This stage of the research highlighted the global movement of consumer goods and reinforced the conceptual interest in transformation, displacement, and reuse.



Figure 2 (a-b) Images of materials collected before preparation.

Material Experimentation

Initial experimentation focused on exploring traditional weaving techniques as a means of transforming the plastic bands into textile-like surfaces. Various weaving methods, including plain weave and twill weave structures (Figure 3 (a-d)), were tested through processes of cutting, interlacing, and joining the plastic strips.

While these techniques successfully produced woven surfaces, they presented several limitations. The resulting forms were relatively rigid and lacked the flexibility required to create folds, contours, and sculptural variations. Furthermore, the weaving process was highly time-intensive and required substantial quantities of material before meaningful structural effects could be achieved.

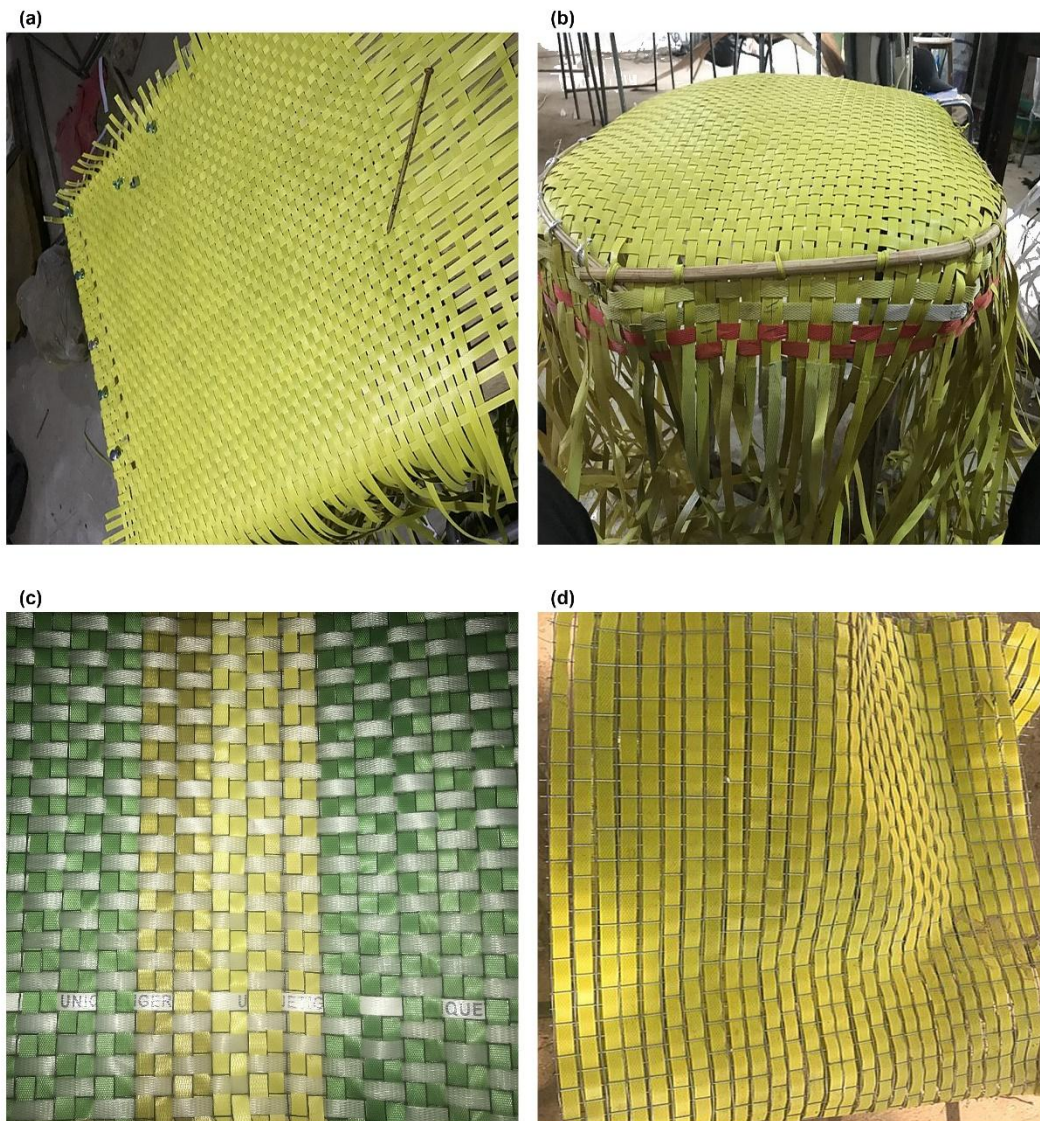


Figure 3. (a-b) Plain weave, yellow strapping bands. (c) Twill Weave (d)first experiment with wire mesh. Photo credit: Dutanya Ladyann Makafui

In response to these challenges, alternative methods of construction were investigated. During studio experimentation, a discarded piece of wire mesh was identified as a potential support structure. Initial attempts involved weaving plastic bands through the openings of the mesh. Although the first results lacked formal cohesion, the experiment revealed significant possibilities for combining the flexibility of plastic bands with the structural integrity of the mesh.

Subsequent investigations examined various types of wire mesh, including different patterns, scales, and configurations. A square-patterned wire mesh was ultimately selected due to its visual resemblance to the warp-and-weft structure fundamental to textile weaving. The grid system provided a stable framework that allowed the plastic bands to be woven efficiently while maintaining structural coherence.

The wire mesh served both as a weaving substrate and as an armature capable of supporting folds, curves, and three-dimensional forms (Figure 4(a-d) and figure 5). This approach significantly accelerated the construction process while simultaneously enhancing the sculptural qualities of the work.



Figure 4 (a-d) weaving block/ brick forms. Photo credit: Dutanya Ladyann Makafui



Figure 5 Creating folds for man's cloth exhibition

Development of Visual Language

As experimentation progressed, the woven mesh structures began to resemble traditional woven straw mats and textile surfaces. This visual association prompted further investigation into the cultural significance of patternmaking within Ghanaian textile traditions.

Subsequent works incorporated geometric motifs inspired by Kente cloth designs and Adinkra symbolism. The integration of these visual references served multiple purposes. First, it established a dialogue between contemporary waste materials and traditional Ghanaian visual culture. Second, it reinforced the conceptual objective of transforming discarded materials into objects of aesthetic and cultural value. Finally, it encouraged viewers to reconsider conventional perceptions of waste by presenting discarded plastics within familiar and culturally meaningful visual frameworks.

The use of symbolic patterns also enhanced audience engagement by creating points of recognition and interpretation. Through this process, the work sought to demonstrate that waste materials can function not only as physical resources but also as carriers of cultural narratives and collective memory.

Conceptual Framework: Connectivity and Weaving

The concept of connectivity emerged as a central theme throughout the research. Weaving was employed both as a physical technique and as a conceptual metaphor for relationships, interdependence, and social networks. Merrill (2007) argues that weaving provides a powerful framework for understanding the interconnected nature of human existence, while Wahl (2018) describes weaving as a process of restoring relationships and creating shared meaning.

Within this study, the act of weaving plastic strips through mesh structures symbolized the connections that bind individuals, communities, materials, and environments together. The repetitive process of interlacing disparate elements into unified forms reflected broader concerns regarding environmental responsibility, collective action, and sustainable futures.

Data Analysis and Evaluation

Data for the study were generated through studio experimentation, material testing, visual documentation, exhibition outcomes, and audience engagement. Analytical reflection occurred continuously throughout the creative process, with each experiment informing subsequent decisions regarding materials, techniques, and conceptual direction.

Additionally, the study drew upon examples of artists working with waste materials to contextualize the project within contemporary artistic discourse. These precedents provided critical insights into the aesthetic, conceptual, and environmental possibilities of waste-based art practices and informed the development of the final artworks.

The completed works were subsequently presented within an exhibition context, where audience interaction and interpretation formed an important component of the evaluative process. Observations from these engagements contributed to the final analysis, enabling assessment of how effectively the artworks communicated themes of waste transformation, connectivity, sustainability, and cultural value.

RESULTS AND DISCUSSION

The experimentation conducted throughout this study resulted in a series of woven installations that transformed discarded plastic strapping bands into sculptural and textile-inspired artworks. Through processes of collection, sorting, weaving, assembly, and exhibition, the materials underwent both physical and conceptual transformation. The resulting works demonstrate how waste materials can be repositioned from objects of disposal to objects of aesthetic, cultural, and social significance. These findings support the argument that waste is not an inherently fixed category but rather a socially constructed condition whose value can be altered through creative intervention. As Thompson's Rubbish Theory suggests, objects may move between states of transience, rubbish, and durability. The discarded strapping bands used in this study initially occupied a state of near-zero value after fulfilling their industrial purpose. Through artistic practice, however, they acquired new forms of value and permanence, becoming objects of cultural production and public engagement.

One of the most significant observations during the experimental process was the resemblance of the woven structures to Ghanaian traditional woven straw mats and textile surfaces. This visual similarity emerged as the plastic strips were interlaced through the square-patterned wire mesh. The grid-like structure of the mesh created a repetitive arrangement of individual units that resembled both woven textiles and layered brick walls (Figure 6 (a-c)).

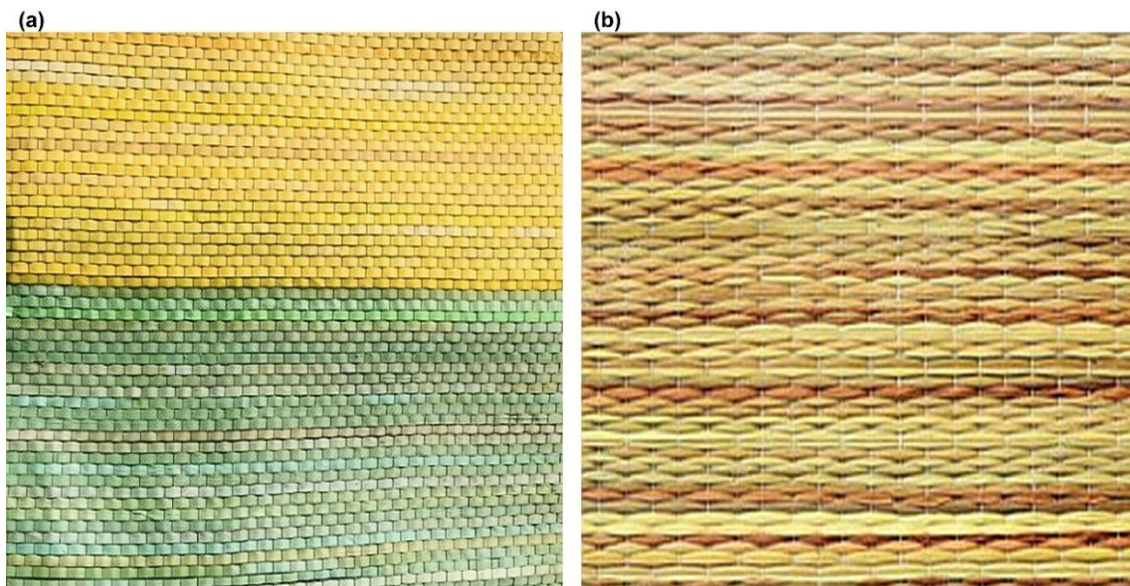


Figure 6 (a) Artworks showing patterns of a woven (b) Woven mat(c)



(c) artwork showing the nature of a brick wall. Photo credit Dutenya Ladyann Makafui

The individual cubes formed by the mesh and woven plastic strips generated a visual effect similar to the arrangement of bricks within architectural structures, producing a sense of order, continuity, and connectivity. This recurring characteristic became evident across all of the completed works and reinforced the conceptual framework of the study, which was grounded in notions of interdependence, relationships, and networks.

The process of weaving became more than a construction technique; it evolved into a conceptual metaphor. Weaving has historically been associated with connection, repair, and the bringing together of separate elements into a unified whole. Merrill (2007) argues that weaving serves as a powerful metaphor for understanding the interconnected nature of existence, while Wahl (2018) describes weavers as creators of shared meaning who restore relationships through acts of connection. Within this study, the repetitive act of threading discarded plastic strips through the mesh symbolized the interconnected relationships between consumption, waste production, environmental degradation, and human responsibility. The transformation of individual waste fragments into cohesive structures mirrored the broader societal need to reconnect fragmented relationships between people, materials, and the environment.

As experimentation progressed, the woven surfaces began to resemble motifs commonly associated with Ghanaian textiles, particularly Kente cloth and Adinkra symbolism (Figure 7 (a-d)).

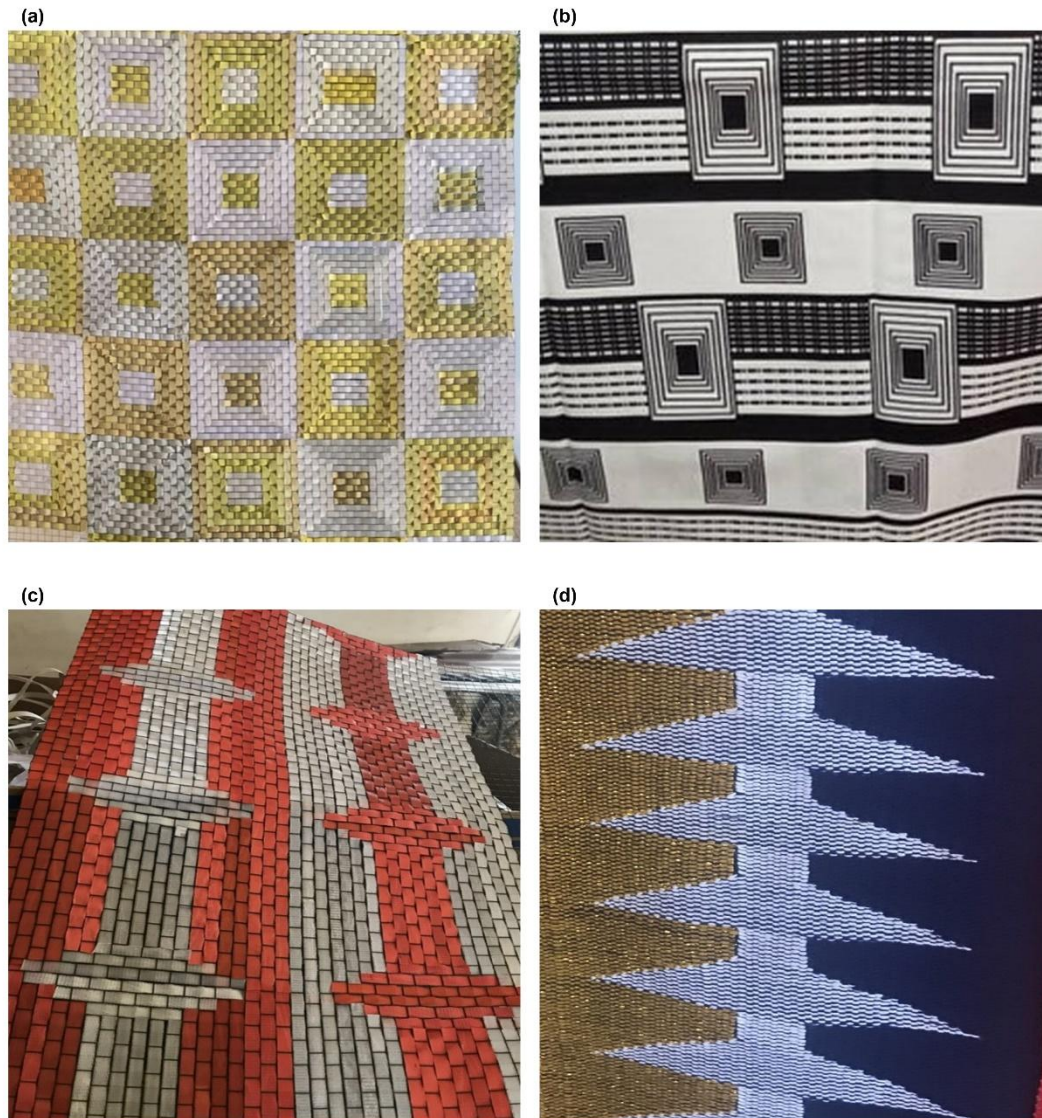


Figure 7. Artworks showing patterns of textiles. Photo credit Dutanya Ladyann Makafui

This observation informed the development of subsequent works and introduced a cultural dimension to the project. Historically, patterns and symbols within Ghanaian textile traditions communicate social values, historical narratives, and philosophical ideas. By incorporating these visual references into materials commonly regarded as waste, the artworks created a dialogue between cultural heritage and contemporary environmental concerns. The resulting compositions challenged conventional assumptions about value and beauty by demonstrating that discarded materials can function as carriers of cultural meaning.

This exploration culminated in the installation *ASAASA*, a title derived from a traditional Ghanaian patchwork textile composed of multiple pieces of cloth joined together to create a new garment. Historically, *asaasa* cloth emerged from practices of repair, reuse, and resourcefulness, making it a particularly relevant reference for a project concerned with waste transformation. The installation consisted of four woven blocks suspended together while remaining physically independent. The blocks incorporated Kente-inspired colour arrangements and Adinkra motifs including *Dono Ntoaso*, a symbol associated with unity and agreement, and *Duafe*, a symbol representing beauty, cleanliness, and feminine values (Figure 8 (a-b) and figure 9). The decision not to permanently stitch the blocks together reflected the project's broader interest in flexibility and transformation, allowing the work to be rearranged and reconfigured. In this way, the installation emphasized that value is not static but continually negotiated through changing relationships and contexts.

(a)



(b)

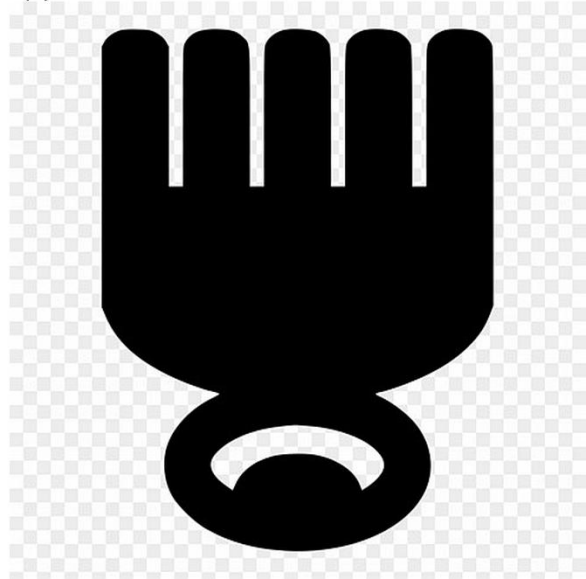


Figure 8. (a) Adinkra symbol of Dono Ntoaso (b) Adinkra symbol of Duafe



Figure 9. Artworks exhibiting Adinkra symbols(Dua Afe, Dono Ntoaso, 2d image of a stool) and Asaasa. Photo credit Dutenna Ladyann Makafui

The visual and conceptual investigations developed further through the production of larger installation works that expanded the scale of the research while maintaining its central concerns. The woven plastic surfaces evolved into suspended textile-like environments that occupied architectural space and encouraged audience interaction. These installations examined the relationships between consumption, waste generation, environmental responsibility, and cultural production. Constructed from interconnected woven panels illuminated with fluorescent lighting, the works transformed exhibition ceilings into immersive environments that invited viewers to engage physically and intellectually with the materials. The lighting accentuated the woven patterns while simultaneously drawing attention to the origins of the materials as discarded industrial waste.

Audience engagement formed an important component of the findings. Many viewers initially interpreted the installations as textile-based artworks before discovering that they had been constructed entirely from discarded plastic strapping bands. This moment of recognition often prompted discussions concerning consumerism, waste management, sustainability, and artistic value. The audience's responses demonstrated that the artworks were successful in disrupting conventional expectations regarding waste materials. Rather than perceiving the plastic strips as refuse, viewers began to recognize their aesthetic and conceptual potential. These interactions support the argument that artistic practice can function as a tool for altering public perceptions of waste and encouraging more sustainable attitudes toward consumption and disposal.

The installations also generated critical discussions surrounding artistic medium and contemporary art practice. Several viewers drew connections between aspects of the work and traditions of Abstract Expressionism and Geometric Abstraction (Stiles and Selz, 1996; Pollock, 1996), particularly through the use of repeated colour fields, geometric arrangements, and formal pattern structures (Figure 10 (a-e)). Such observations introduced questions regarding modernist theories of artistic purity, particularly those advanced by Clement Greenberg (Greenberg, 1960). Greenberg argued that artistic media should emphasize their unique characteristics and avoid borrowing from other disciplines. In contrast, the present work deliberately embraces hybridity by combining elements of sculpture, weaving, installation, craft traditions, industrial materials, environmental discourse, and cultural symbolism. The use of discarded plastic bands challenges conventional distinctions between fine art, craft, design, and waste, reflecting broader tendencies within contemporary art to blur disciplinary boundaries and question established hierarchies of value.

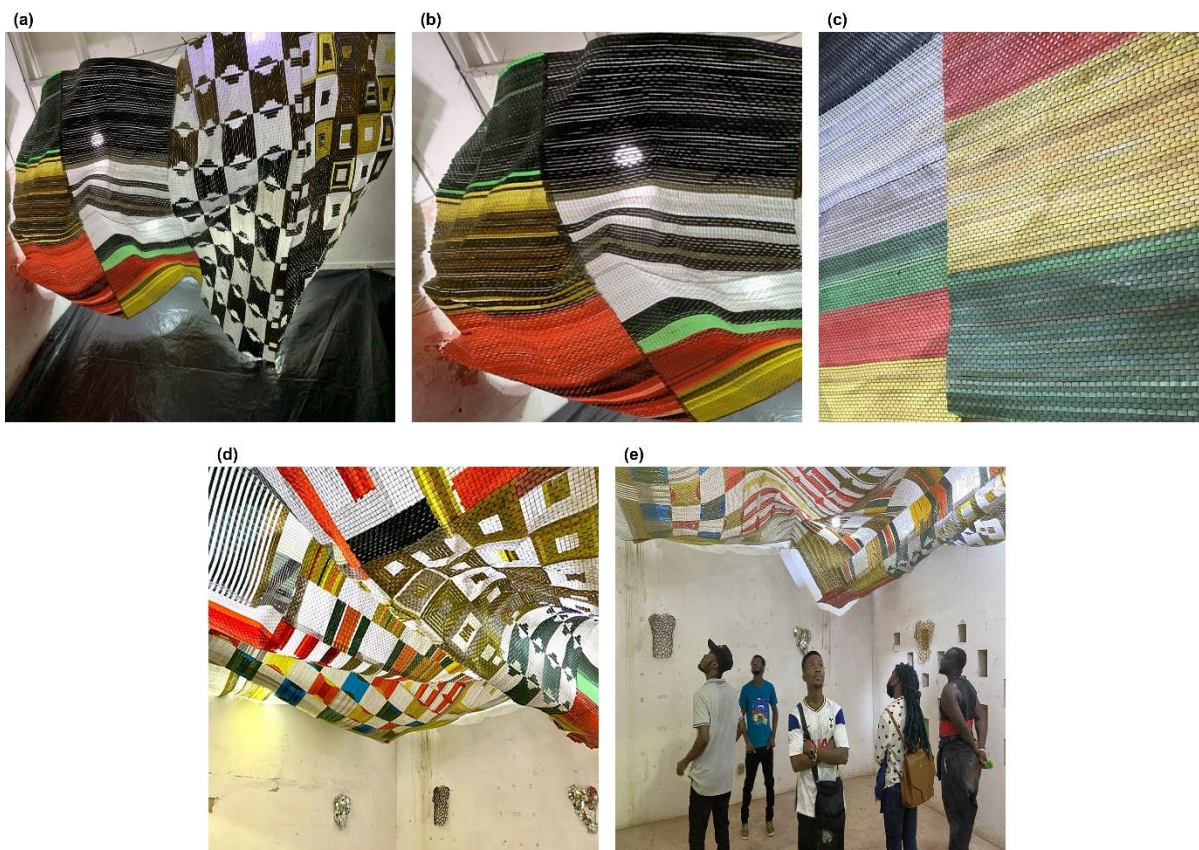


Figure 10 (a-e) Installation of artwork at Men's cloth and Unwoven light exhibitions respectively. Photo credit: Micheal Sarfo Ansong and Dutinya Ladyann Makafui

The findings also demonstrate the relevance of the project to contemporary sustainability discourse. The artworks embody principles associated with the United Nations Sustainable Development Goals, particularly Goal 12 (Responsible Consumption and Production) and Goal 9 (Industry, Innovation and Infrastructure). By transforming discarded industrial materials into artworks, the project illustrates alternative approaches to material reuse and highlights the creative potential of upcycling. Rather than viewing waste solely as an environmental burden, the study presents it as a resource capable of generating cultural, social, and economic value. This perspective aligns with contemporary approaches to sustainability that emphasize circular systems of production and consumption.

Most significantly, the study demonstrates that the artistic process itself serves as a mechanism of transformation. The movement from waste to artwork did not occur solely through the completion of the final installations but through every stage of the creative process. Collecting, sorting, cleaning, weaving, assembling, exhibiting, and discussing the materials each contributed to their revaluation. In this sense, the artistic act functioned as a process of cultural recovery through which discarded objects were reintroduced into systems of meaning and appreciation. Thompson's notion of rubbish as a transitional category becomes particularly relevant here (Thompson, 1979). The strapping bands moved from a state of abandonment and perceived worthlessness to a state of increasing permanence and significance through artistic intervention. The artworks therefore illustrate how art can operate as a mechanism for moving objects from the category of rubbish into the category of durability.

Ultimately, the results of this study demonstrate that discarded plastic strapping bands possess considerable artistic, cultural, and conceptual potential. Through processes of experimentation, weaving, cultural referencing, and installation, materials once regarded as waste were transformed into artworks capable of generating environmental awareness, cultural reflection, and public dialogue. The project confirms that artistic practice can challenge dominant narratives of consumption and disposal while creating new possibilities for sustainability, cultural preservation, and material reimagination. More importantly, it establishes that the process of making itself is an artistic act of transformation, one through which waste is not merely recycled but revalued, repositioned, and granted renewed cultural life.

Conclusion

This study set out to investigate the artistic potential of waste materials, particularly discarded plastic strapping bands, and to examine how artistic practice can transform objects commonly regarded as rubbish into works of cultural, aesthetic, and environmental significance. Motivated by a desire to understand the role of waste within contemporary artistic practice, the research explored the processes through which discarded materials acquire new meanings and values through creative intervention. The study demonstrated that waste is not a static or universally defined category; rather, its meaning and value are continually negotiated through social, cultural, and artistic processes.

Through practice-based experimentation involving collection, sorting, weaving, assembly, and installation, the research revealed the transformative possibilities embedded within discarded plastic materials. The use of wire mesh and weaving techniques enabled the creation of artworks that drew conceptual and visual connections between waste, architecture, textile traditions, and human interconnectedness. The resulting installations demonstrated how materials that had completed their original industrial function could be reimagined as meaningful artistic forms capable of generating dialogue about consumption, sustainability, and environmental responsibility.

The findings affirm that the artistic process itself constitutes an act of transformation. The movement of plastic strapping bands from discarded industrial waste to exhibited artwork reflects a broader shift from perceived worthlessness to cultural significance. In this sense, the study supports the view that transforming waste is not merely an act of recycling or upcycling but an artistic endeavour through which materials are revalued and repositioned within systems of meaning. The creative process comprising experimentation, improvisation, weaving, and installation, became a mechanism through which objects moved from a state of near-zero value to one of increasing permanence, visibility, and appreciation.

The study further highlighted the diverse ways in which artists engage with waste materials. The works of artists such as Aurora Robson, Mbongeni Buthelezi, and El Anatsui demonstrate that discarded materials can serve not only as artistic media but also as powerful tools for social commentary, environmental advocacy, and cultural reflection. Their practices reveal that waste possesses the capacity to communicate complex narratives concerning consumerism, inequality, environmental degradation, and human resilience. Similarly, the artworks developed in this research sought to create new possibilities for understanding waste by encouraging viewers to reconsider the materials, histories, and values embedded within discarded objects.

By incorporating references to Ghanaian textile traditions, including Kente and Adinkra symbolism, the study established a dialogue between cultural heritage and contemporary environmental concerns. This fusion of traditional visual languages with discarded industrial materials demonstrated that waste can function as a medium for preserving cultural memory while simultaneously

addressing pressing ecological issues. The installations emphasized themes of connectivity, unity, and transformation, reinforcing the notion that environmental challenges require collective responses and interconnected ways of thinking.

The research also contributes to broader discussions surrounding sustainability and the circular economy. As global concerns about waste management and plastic pollution continue to intensify, artists have an important role to play in promoting alternative approaches to material use and disposal. By transforming plastic waste into artworks, creative practitioners can reduce landfill burdens, extend material lifecycles, and foster environmental awareness among audiences. Such practices align closely with the United Nations Sustainable Development Goals, particularly Goal 9 (Industry, Innovation and Infrastructure) and Goal 12 (Responsible Consumption and Production), which advocate innovative solutions for sustainable resource management.

Ultimately, this study concludes that waste should not be viewed solely as an environmental burden or the inevitable by-product of consumer culture. Rather, it should be recognized as a resource rich with artistic, cultural, and social possibilities. The transformation of waste into art demonstrates the power of creativity to challenge established perceptions of value, inspire sustainable practices, and generate new forms of knowledge and engagement. In an era increasingly defined by environmental uncertainty and excessive consumption, waste emerges not as an endpoint but as a beginning—a material through which artists can envision alternative futures and contribute meaningfully to contemporary conversations about sustainability, identity, and human responsibility.

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