EXPLORATION OF APPLIQUÉ USING FUSIBLE TECHNIQUE IN TEXTILE PRODUCTION FOR INTERIOR DECORATION

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Abstract

The paper, "Exploration of appliqué using the fusible technique in textile production for interior decoration," set out to illustrate the high cost of purchasing textile artworks, a factor that consistently discourages aspiring artists and other art enthusiasts from doing so. To fulfil the aim and objectives, the researcher recycled natural and synthetic fabric to create textile appliqué art for interior decoration to get around the challenges of finding textile art. To produce artwork and textile designs. The researcher started the production of the appliqué with natural and synthetic textile fabrics by cutting them into tiny pieces and pasting them on canvas support in order to create textile works for the interior décor using the appliqué fusible technique. Theories of expression and aesthetics served as the foundation for the paper's theoretical framework. The paper discusses an overview of textile, appliqué technique for textile fabric production, method of applying appliqué and types of appliqués. The paper also reviews the procedures for fusible appliqué technique, recycling textile fabric, the environmental benefits of recycling waste materials and the significance of recycling textile fabric. Furthermore, research shows that appliqué textile art can be made from recycled textile materials, which is a way to uplift our environment and the next generation of artists. The paper concludes that they can be used to create appliqué textiles due to the brilliant colours they naturally provide. As a result, the paper recommends that extensive exploration of the use of appliqué textiles should be expanded, especially when it comes to the production of aesthetics for Interior decoration purposes.

Keywords: Appliqué, contemporary arts, fusible technique, textile design.

Introduction

The study "Exploration of Appliqué using the Fusible Technique in Textile Production for Interior Decoration" is designed to use recycled textile materials to produce textile works using the fusible technique to create Appliqué that can be utilized for aesthetic purposes for interior decorations as well as academic purposes in schools, homes, offices, hotels, and others. The need for synergies of textile recycled materials, natural and synthetic fabric as a means to produce appliqué textile works in this research was necessitated by the increase in the recycled readily sourced material in our environment. This fabric should have been recycled but is randomly tossed out by tailors or individuals who litter our environment. They are wasted natural, synthetic fabric, etc. which have been previously used in making dresses for people, or old discarded fabrics that are not used but were tossed out will serve as resource materials in this research.

Often in our neighbourhood, they constitute a public nuisance and even aid environmental degradation. The need to use them as a medium for this research will no doubt encourage the recycling of waste textile materials in the production of textile appliqué décor in Fine and Applied Arts. The norms of the increased cost of textile materials and textile artworks have also contributed to the exploration of textile recycled fabrics to produce the desired appliqué textile artworks in this research. The constant increase in prices of textile art has consistently discouraged prospective artists, and art lovers from patronizing textile artists, due to this reason that's why the researcher intends to use recycled textile fabrics to produce appliqué using the fusible technique approach to produce artworks that communicate our present society and educational discourse of Nigeria today. The researcher also decided to use bright recycled colors

because of the beauty they possess which attracts people and which is possibly why they are often employed for the interiors.

In visual arts, colours are one of the elements of art which affect feelings and emotions. To understand the facts the researcher used colorful textile fabrics to produce appliqué for interior decor. It’s an essential aspect of the aesthetic properties of artwork or clothing. Colour has a significant impact on one's appearance. Our styles communicate about us and reveal our social and economic stand. The authors added that colours create aesthetic comfort when combined with different materials, styles and compatibility. All these elements collectively contribute to satisfying our visual perception. They further explained that colour is one of the primary properties that is noticed when a consumer makes a decision to buy an artwork or dress. The colours are distinctive and distinguishable. Hence, as a decorative element, colour plays a critical part in meeting the necessary standard. Deducing from this facts it’s obvious that colors have a lot to do with our feelings, emotions, and aesthetic desires as humans.

Therefore, it is assumed that colours give joy to people and lure them into artworks, especially textile works. Knowing the relevance and contribution of the colours listed above, this research will combine natural and synthetic recycled fabric to produce an aesthetic interior décor using the fusible appliqué technique approach. A lot of Nigerian contemporary textile artists like John Odimegwu, Phi- Eze Bibian N, Addey-Dixon, Grace, Joe-Mgbakiri Urekwere and Marcellina Akpojotor among others have explored by combining different textile fabrics and techniques to produce artwork, but this research further improves such productions to a more complex and in-depth level. However, the technique of combining different textile fabrics and techniques to produce artwork is known as appliqué. Textile is a term that incorporates different woven or knitted fibers based on the material made from yarn. Though it is referred to as woven fabric, it

is also applied to fiber, yarn, fabric, and any other product made from this kind of material composed of natural or synthetic fiber, according to Abu, (2015). Though weaving is not the only manufacturing procedure, many other procedures were later formulated to form textile structures based on their intended use. ‘Textile' comes from the Latin adjective textilis, meaning 'woven', which itself stems from textus, the past participle of the verb texere, 'to weave'. Originally applied to woven fabrics, the term "textiles" is now used to encompass a diverse range of materials, including fibers, yarns, and fabrics, as well as other related items. ‘Elsasser, (2005) states that textiles fulfil the material needs for versatile applications, from simple everyday clothing to bulletproof jackets, spacesuits, and doctor's gowns. Textiles are divided into two groups: consumer textiles for domestic purposes and technical textiles.

In consumer textiles, aesthetics, and comfort are the most important factors, while in technical textiles, functional properties are the priority. According to Richard & Subhash, (2002), states that geotextiles, industrial textiles, and many other areas are examples of technical textiles, whereas clothing and furnishings are examples of consumer textiles. Each component of a textile product, including fiber, yarn, fabric, processing, and finishing, affects the final product. Components may vary among various textile products as they are selected based on their fitness for purpose. According to Fleming, (2007) in the context of sewing, an appliqué refers to a needlework technique in which patterns or representational scenes are created by attaching more minor pieces of fabric to a more extensive selection of contrasting colours or textures. Leslie, (2007) common embroidery stitches and glue form multiple materials together, and they can add even more prettifying accents to work. The word appliqué is derived from a French and Latin word “Appliquer” and “Appliquer” respectively meaning “to put on” or attach. The technique is used to strengthen worn areas or items, patch holes that have formed, and for

decorative purposes. It's referred to as a textile craft where one piece of fabric is sewn over another for a prettifying effect. Appliqué is found in many folk art forms, from Gujarati Indian tent fabrics to American colonial quilts. The sewing technique used in patching, mending, and reinforcing cloth fostered the development of sewing techniques, and the decorative possibility of sewing led to the art of embroidery. In the development of embroidery, there are no changes in materials or methods that can be felt or interpreted as primitive, advanced, or more. However, early embroidery is of a high standard. This started in the Benin Republic but is also used in Nigeria. Appliqué is used in many parts of Nigeria and for different purposes. In Anambra, it is used for the costume of the Ijele masquerade, The Yoruba use it for the Egungun masquerade figure, the Annang and Ibibio people use it to make funeral banners, and the Durbar festival held in Kaduna use it for their tunics, and as well as the drawings for their horses.

An Overview of Textile

Textile is a term that incorporates different woven or knitted fibers based on the material made from yarn. Though it is referred to as woven fabric, it is also applied to fiber, yarn, fabric, and any other product made from this kind of material composed of natural or synthetic fiber, in light of Abu, (2015). However, weaving is not the only manufacturing method; other methods were created to form textile structures based on their intended use. Knitting and non-woven are popular fabric manufacturing. In the contemporary world, textiles satisfy simple daily clothing. Fiber is the tiniest component of a fabric; fibers are generally spun into yarn, and yarns are utilized to manufacture fabrics. Fiber has a hair-like appearance that is higher in length than width ratio. The sources of fibers may be natural, synthetic, or both. Felting and bonding are techniques that transform fibers into fabric. In other cases, yarns are used with different fabric manufacturing systems to produce many fabric constructions. The fibers are twisted or laid out to make a long, continuous strand of

yarn. Yarns are then used to make different kinds of fabric by weaving, knitting, crocheting, knotting, tatting, or braiding. After manufacturing, textile materials are processed and finished to add value, such as aesthetics and physical characteristics, and increased value. The manufacturing of textiles is the oldest industrial art. Dyeing, printing, and embroidery are all different decorative arts applied to textile materials. The word 'textile' comes from the Latin adjective textilis, meaning 'woven', which itself stems from textus, the past participle of the verb texere, 'to weave'. Originally applied to woven fabrics, the term "textiles" is now used to encompass a diverse range of materials, including fibers, yarns, and fabrics, as well as other related items.

In accordance with Collins, (2010) fabric is a thin flexible material or thread by weaving knitting, felting, cotton, nylon, wool, silk, or other threads. Fabrics are used for making things such as clothes, curtains, interiors, and sheets. Conforming to Harper, (2000) the word 'fabric' also derives from Latin, with roots in the Proto-Indo-European language. Stemming most recently from the Middle French fabrique, or "building," and earlier from the Latin fabrica ('workshop; an art, trade; a skillful production, structure, fabric'), the noun fabrics stems from the Latin faber" artisan who works in hard materials', which itself is derived from the Proto-Indo-European dhabh-, meaning 'to fit together'. Based on Merriam-Webster, (2012) cloth is a flexible substance typically created through the processes of weaving, felting, or knitting using natural or synthetic materials. The word 'cloth' derives from the Old English clað, meaning "a cloth, woven, or felted material to wrap around one's body', from the Proto-Germanic kalithaz, similar to the Old Frisian klath, the Middle Dutch fleet, the Middle High German left and the German Kleid, all meaning 'garment'. Although cloth is a type of fabric, not all fabrics can be classified as cloth due to differences in their manufacturing processes, physical properties, and intended uses. Materials that are woven, knitted, tufted, or knotted from yarns are referred to as cloth, while wallpaper, plastic upholstery products,

carpets, and nonwoven materials are examples of fabrics. Textiles are too fragile to withstand millennia; the tools used for spinning and weaving are the most prehistoric evidence for textile work. The earliest tool for spinning was the spindle to which a whorl was finally added.

Appliqué Technique for Textile Fabric Production

Appliqué is described as the application of pieces of fabric cut to the surface of another. Leslie, (2007) states, it is a heavy and unattractive way of constructing the most beautiful and decorative art. In appliqué, areas of fabrics are cut out and stitched onto the background fabrics in various ways depending on the use of the finished work, whether it is to be functional or decorative, Aujiobiz, (2002). In its vast sense, an appliqué is a more miniature ornament or device applied to another surface. An appliqué is usually one piece. In the context of ceramics, for example, an appliqué has detached from a selection of clay and added to the primary work, generally for decoration. Appliqué is a term borrowed from a French word, which means "applied" or "thing that has been applied."

Appliqué was first uncovered when clothes were ripped and needed fixing and was used to sew over the top of the rip patches of different materials, otherwise known as patchwork. In sewing, an appliqué refers to a needlework technique in which pieces of fabric, embroidery, or other materials are sewn onto another piece of fabric to create designs, patterns, or pictures. It is particularly suitable for work to be seen from a distance, such as in banner-making. A famous example of appliqué is Hastings Embroidery, Brandon, (2008). Appliquéd cloth is an important art form in Benin, West Africa, particularly around Abomey, where it has been a tradition since the 18th century and in the kingdom of Danhomè. Appliqué is used dramatically in quilting works. "Dresden Plate" and "Sunbonnet Sue" are two examples of traditional American quilt blocks

designed with patchwork and appliqué. Baltimore album quilts; Broderie perse, Hawaiian quilts, Amish quilts, and the Ralli quilts of India and Pakistan also use appliqué, Godden, 2008). As stated by Phil-Eze, (2013) in modern textiles, appliqué refers to using fabric shapes or designs, usually on the trim of a garment. This can be sewn or glued. Many appliqués are more often imported from China. Since many designers use mass-produced appliqués, one can easily find matching accessories from competitive stores.

Each may carry various items with the same appliqué. From some literary sources, it has been said that appliqué is a simple and productive method of decorating fabric, whether done by hand or by machine. Appliqué does not just use cloth; it can be used with other textile materials such as beads, cowries and combined with different types of needlework such as embroidery to create the desired effect. It is also recognized that appliqué is suitable for small and large works. Nonetheless, not every material is ideal for the technical process of appliqué. There are two methods of designing appliqué. The first approach involves working directly with materials, trimming patterns, arranging, and rearranging the shapes, and sticking them to a background, either by machine or hand, without any planning.

Methods of Applying Fusible Appliqué

Luca (2017), states that fusible Appliqué is a technique used to attach appliqué patterns to the quilt top adopting a glue-based product to connect to the back of the fabric shape. The raw edges of the fabric shape can be kept unstitched or completed with ornamental stitches using embellishing thread. Fusible Appliqué can also enable a finished or turned-edge appliqué where the fabric shape is prepared in advance with the raw edges turned under.

Hand Appliqué

Hand appliqué is often employed for quilting projects, perfect for creating dimensional designs on fabrics. There are several ways to do it; one of the established methods is the hand-sewn appliqué, where a needle is used to turn under a seam allowance; also, patterns are sewn onto a background surface with a needle and thread. It can be done primarily or more decoratively, depending on your ideas. This ascertained an extraordinary edge rather than a raw one. Using hand appliqué enables you to enrich a prettifying finishing to your project's work and add a combination of different motifs and patterns depending on the project being worked on. Some added embellishments, such as sequins and beads finishing up some project's work adequately.

Types of Appliqué

Decorative Appliqué

This technique is open to various varieties and arrangements. Decorative appliqué can be attained by using a machine or hand. You can explore the decorative stitches on the fabric by employing different techniques of stitching available on your model to make your piece aesthetically pleasing. It's a practical procedure using hand embroidery, and you can also select to experiment with many stitches available depending on the project at hand.

Reverse Appliqué

This is a popular appliqué procedure in which the design is appliquéd, placed on top of the background fabric, and sewn in place. For reverse appliqué, the material is layered, and the top fabric is trimmed off and stitched to uncover the design. The fabric can be used in many layers to create sophisticated techniques. The leading edges can be finalized by hand or machine.

Procedures for Fusible Appliqué Technique

This paper focuses on producing textile appliqué wall hangings for textile production using a fusible appliqué technique. Hence, the process began by gathering and selecting waste recycled textile fabrics, chopping them into small pieces, and creating various colour schemes. After that, the procedure entails creating thumbnail sketches, which function as visual challenges for solving problems and exploring potential outcomes. The excess fabric is elegantly trimmed at the edges; following finishing, the appliqué artwork produced was framed.

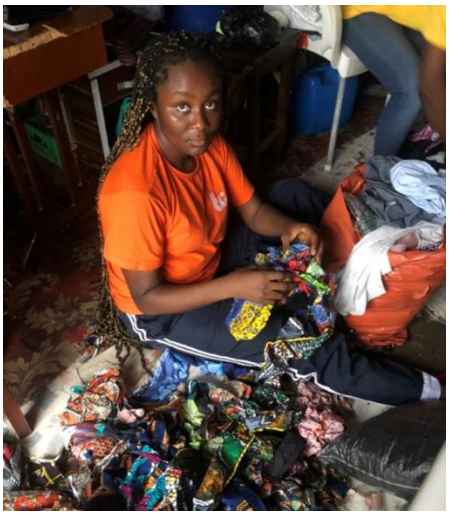


Plate: 1

Title: Sorting of Fabric Materials from the Tailor' Shop

Sources: Researcher

Year: 2023

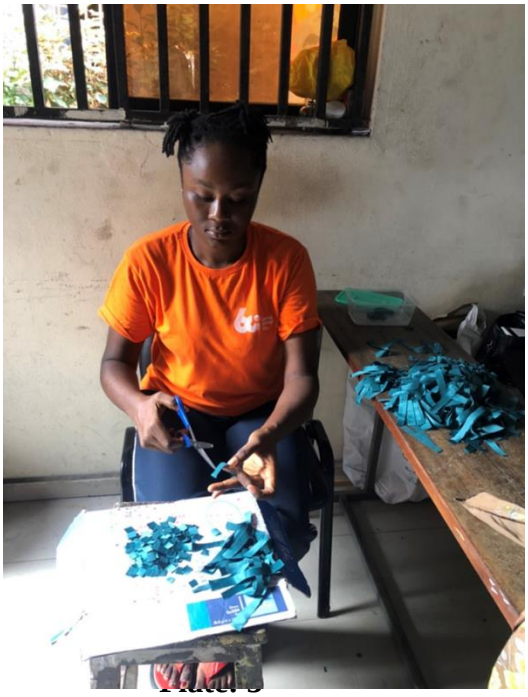


Plate: 2

Title: The Researcher Stretching the Canvas

Sources: Researcher

Year: 2023



Title: The Researcher Cutting the Textile Fabric

Sources: Researcher

Year: 2023

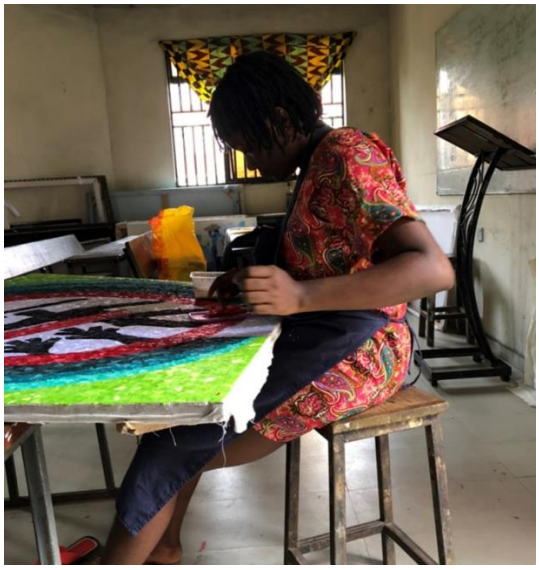


Plate: 4

Title: The Researcher Developing *Onye nche* (Protector)

Sources: Researcher

Year: 2023



Plate: 5

Artist: Onyeocha, Cynthia Akunna

Title: *Onye nche* (Protector)

Medium: Recycled waste synthetic fabric

Size: 33 x 48 Inches

Year: 2023

In order to draw attention to the social problems surrounding police brutality in Nigeria, the *"Onye nche"* appliqué textile shown in plate 1 was made using synthetic textile materials. An ironic exposition of police misconduct in Nigeria is provided by the appliqué, which features the country's flag, lost lives, and selected to symbolize the colors of the Nigerian flag, and the hands in black silhouette stands for the people of Nigeria who demand an end of police misconduct. Using stain and dull face that had been recycled, along with polyvinyl acetate (PVA) glue, the appliqué was created. Also, the studio development made use of frame. Nigerians confront difficulties when police officers turn into predators, and the theme design serves as a satirical reminder of the fallout from police brutality. In Nigeria, a number of issues are linked to police brutality, including poverty, inadequate pay, subpar living conditions, and greed. Unlawful roadblocks, unauthorized without a warrant or trial are just a few examples of the misbehavior that occurs when the government fails to hold negligent officers accountable incentives. This appliqué artwork is significant because it depicts the violence carried out against Nigerians by Nigerian state agents who are perceived as failing to fulfill their duty of protections. The appliqué can be used as a visual aid for activism against a broken system or as a decorative element to enhance workplace, public spaces, and schools.

The paper uses expression theory to explore the use of appliqué techniques and communication, can create strong connections between viewers and the artist. Leo Tolstoy and Rabin George Collingwood both emphasized the importance of expressing emotions through the choice of art material. The researcher successfully communicated her emotions through visual expression in interior decoration using fusible techniques, using recycled natural and synesthetic fabric. However aesthetic theory in this research explores beauty, taste, and its art philosophy in this

paper. It considers the aesthetic values, taste judgments, and the impact of art on beliefs and moods. The term “art” is constantly being “fine art” that expresses the artist creativity and entertain aesthetic sensibilities.

Recycling Textile Fabrics

Waste is obtained from leftover raw materials generated in the textile material and fabric production process. Textile recycling fabric procedures have been increased to survive with this improvement in textile waste and new solutions are still being researched. As explained by Palmé, (2016), not too long ago, particular clothing retailers adopted these recycling measures and publicly traded advertised products that are made of recycled textile material following shifting consumer expectations. Due to a recent movement of overconsumption and waste production in the entire practice, textile recycling has become a centre of awareness worldwide development has led to a “fast fashion” trend where clothes are regarded by many consumers to be disposable due to their increasingly lower prices. This process has allowed the textile industry to produce a huge amount of products that consume natural resources, Hawley, (2016). However, recycling textile fabrics is exceptionally significant to lessen greenhouse gas emissions and cut down on contaminants and waste in our environment.

Pre-consumer Recycling Waste

As explained by Elise, (2020):

Pre-consumer recycling waste is any material that is disposed off before it reaches the consumer. It might be material adornments, faulty items, overstocked raw materials, excess inventory — basically; anything that doesn’t make it to the consumer that is brought back into the manufacturing process to be given a new life. In the case of the Kayser underwear, the brand’s Kayser Cares

collection uses scrap fabric, rejects, and trimmings from new garments to repurpose into new items rather than discard them also Baggu tote bags are also made entirely from pre-consumer scrap fabric.

Post-consumer Recycling Waste

Post-consumer recycling waste is regulated by second-hand retailers to be resold again. Several wastes are collected by public collection bins, while the majority of waste is found littered in the trash yard, as mentioned by Hawley, (2006). Due to this fact, The North Face introduced a program called “Clothes the Loop” in 2013 that enables consumers to recycle post-consumer waste from any brand at any of their retail locations across the United States. Gunther, (2014). Some charitable service groups such as Goodwill Industries and The Salvation Army in the United States. Throughout the globe, charitable organizations and businesses such as thrift stores have created specially marked collection bins that allow the public to dispose of post-consumer waste so that it can be reused. Material that is discarded after it has been used; maybe a full item or a remnant, and it may be fully functional or not, but one way or another it has served its purpose and is destined to be wasted.

For example, it might be discarded office papers or newspapers that have been read that are turned into items like my gift cards, or more office papers, or it might be used PET soft drink bottles becoming outdoor furniture. No matter what it is or what it becomes, it all helps create a circular economy. Post-consumer waste seems to get more airplay than pre-consumer waste, but they are both important avenues for diverting items from landfills. In the textile industry, while statistics show that around 30 per cent of clothing is discarded after a single wear, it is also estimated that up to 20 per cent of new fabric is wasted. So when companies make a point of using this waste, it

is of huge importance. Eventually, we need both pre- and post-consumer waste to be repurposed into useful items. It is exciting to find artists who are promoting waste materials when we do find ourselves having to acquire something new, these are the artists and companies we need to support in our country today.

Recycling helps protect the environment

Conforming to Simon, (2023) state that if we want to protect the Earth for future eras, recycling is the most significant. Since we are making modern products from abandoned products that are of no use to us, it is good for the economic growth of the environment.

Boosting the Economy growth and Creates Jobs

So many new industries have been established around the existing recycling programs. As a result, many jobs are created when people act responsibly and collect recyclable materials, as well as when they process these materials into new useful raw materials and products. Therefore, recycling waste materials is improving the economic sustainability of businesses as well as benefits the society at large. For example, sustainable development, and sustainable business practices for environmental responsibility, and with these activities it's balancing up the 3 pillars of economic growth.

The Significance of Recycling Textile Fabrics

During the early age of the industrial uprising, the textile industry was recognized as a major polluter of rivers. Due, to our environmental awareness, presently there is rising attention among people regarding ton waste collection and recycling textile fabrics. Creating a potential market for recycled textiles and buying such recycled products will facilitate waste going into landfills. It's

remarkable to know that textile fabrics that are presumed less useful can be creatively used to make something unique.

1. Tossed-out textiles fabrics can be recycled to create great textile artwork for interior decoration;
2. Textile-ripped apparel can be recycled to create a patchwork, rags-rugs, and dusters.
3. colorful and exciting fabrics can be used to produce decorations, trinkets, and jewelry.
4. Textile old clothes can be reused in reacting appliqué swimsuits, coverlets, bags, shoes, pillows, and more.

Conclusion

This paper centers on the creation of appliqué textiles for interior design and shows that leftover textile scraps that were gathered from various tailors can be recycled in place of new materials to create textile wall hangings. The paper also reveals and concludes that they can be used to create appliqué textiles due to the brilliant colours they naturally provide. The paper yielded an aesthetically pleasing, vividly coloured appliqué. In general, the exploration of recycled natural and synthetic fabric was motivated by the fact that it has educated artists to explore diverse methods in textiles creation to generate artworks. It took strength and endurance to cut the textile fabrics together and then apply adhesive to the canvas surface to create appliqué textiles for interior decoration, which made the production of the textile works in the studio exceedingly challenging. Quite amazingly, the paper proved to be a useful substitute for purchasing art works of today, which ostentatiously captures social and educational problems facing contemporary Nigeria, in favor of creating textiles artwork.

Recommendations

Following the findings obtained in the paper, the consequent recommendations are made.

1. The paper recommends more exploration of the use of waste textile fabrics as a means to produce textile artwork should be encouraged by the artists so that people will know more about the educational aspects of it.
2. Textile artists should at all times be motivated to visit the tailoring shops or other areas where these fabrics can be picked and recycled to produce appliqué textiles, through this process they will also be counted in helping to clean up or sensitize our environment which is usually littered with waste materials.
3. The paper also recommends that people should explore more appliqué techniques for visibility and wealth.
4. Extensive exploration of the use of appliqué textiles should be expanded, especially when it comes to the production of aesthetics for Interior decoration purposes.

References

Abu, S. (2015*). Textile Apex*. Guide to Textile & Clothing

Addey-Dixon, G. N. (2021). *The adaptation of Ekpeye chieftaincy motif on fabric for cultural identification: A mixed media approach of batik and appliqué technique*. An unpolished MA project Department of Fine Arts.

Agujiobiz, E. (2002). *Ekwe making tradition in Nsukka.* An unpublished MFA Project report, Department of Fine and Applied Arts.

Amadi, U. (1998). *Appliqué application to Ikwerre Folktale.* A project submitted to the Department of Fine Applied Arts, Faculty of Technical and Vocational Education, Rivers State Collage of Education Port Harcourt.

Applico-Wiktionary, (2018). En wiktionary.org. 16th April 2018.

Brandon, T. (2008). *Urban walls; generation of appliqué in Europe and America: Burhan doganoy with Francois Dufrene, Raymond Hams, Rebert Rauschen berg, Wolf Vostell.*

Collins, (2010). *Definition of Fabric in Collins English dictionary (4th Edition).* www.collinsdictionary.com

Elise, C. (2020). *The difference between pre-and post-consumer waste*. Planet Art

Elsasser, V. H. (2005). *Textile: Concept and principles*. Fairchild publications.

Fleming, J. H. (2007). *The penguin dictionary of decorative art*s: Gallup Press.

Godden, H. (2008). *Unique applique patterns, aussie applique,* Catalogue of applique pattern.

Gunther, M. (2014). *Clothing bin-wars.* The Guardian.

Harper, D. (2000). "*Fabric*". www.onlineetymologydictionary.com

Hawley, J. M. (2006). *Textile recycling*: A system perspective in wang, youjiang (ed).2- Textile

Luca, (2017). *What is Appliqué, and types of appliqué*?

John, O. (2023). *Exploration on waste Fabrics. The Beauty of Red.* https://m,facebook.com/story.php?

Leslie, C. A. (2007). *Needlework: through history*. An encyclopedia. Pp.7.

Mazharul, I. K. (2021). *Uses and Importance of Textile in Interior Design* https://textilelearner.net/

Merriam-Webster, (2012). *Archived from original*.

Palme, A. (2016). *"Recycling of cotton textiles: Characterization, pretreatment, and purification. Recycling: A system perspective. Recycling in textiles.* Woodhead publishing. Pp. 7-24.

Phi-Eze, B. N. (2013). *Textile, mixed media: Exploring appliqué and collage technique.* An MFA project of University of Nigeria Nuskka.

Richard, A. H. & Subbash, C. A. (2002). Handbook of Technical Textiles. www.elesevieramazon.com

Sara, B. (2018). *Home crafts embroidery*. Learn how people are creating college like fabric Art using Appliqué.

Shahid, U., & Butola, B. S. (2018). *Advanced Textile Engineering Materials.* www.wiley.com

Simon, (2023). *Important benefits of recycling.*

Wikipedia, (2018). *Reader's digest complete guide to needlework. The reader's digest association.* Inc.x

Wikipedia, (2008). *Creativity in the textile industries: A Story from Pre-History to the 21st century.* www.textileinstitutebooks.com