CONSTRUCTION OF SPECIALLY ADAPTABLE COMPARTMENTS FOR DISPLAY AND STORAGE OF TEXTILES

IN THE DEPARTMENT OF FINE AND APPLIED ARTS,
UNIVERSITY OF BENIN

A PROJECT REPORT
BY

AJEKIGBE JOHN ADELEYE
ART1800688

A PROJECT WORK SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF ARTS (B.A) DEGREE IN THE FINE AND APPLIED ARTS, FACULTY OF ENVIRONMENTAL SCIENCES.

SUPERVISOR

DR. PAUL AIKHIONBARE

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DECLARATION

I declare that this project is based on a study undertaken by me in the Department of Fine and Applied Arts, Faculty of Environmental Sciences, University of Benin, under the supervision of DR. PAUL AIKHIONBARE for the purpose of acquiring a Bachelors of Arts (B.A) degree in Fine and Applied Arts. All ideas and views are products of my personal research; where the views of others have been used and expressed, they were acknowledged.

AJEKIGBE JOHN ADELEYE
ART1800688

CERTIFICATION

We, the undersigned certify that this project work was carried out by AJEKIGBE JOHN ADELEYE, in the Department of Fine and Applied Arts, Faculty of Environmental Sciences University of Benin.

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DR. PAUL AIKHIONBARE — DATE
Project supervisor

DR. KENNEDY EWEKA — DATE
Head of Department

PROF. CLIFF NWANNA — DATE
External Examiner

DEDICATION

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this program and on His wings only have I soared. I also dedicate this work to my parents: MR. ANTHONY AJEKIGBE and MRS. CAROLINE AJEKIGBE who encouraged me and stood by me throughout my academic journey. Their tireless prayers, advice and contributions made me what I am today. To MARY ADEBOLA AJEKIGBE and to all who have been affected in every way possible by this quest. Thank you. My love for you all can never be quantified. God bless you.

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ABSTRACT

Storage and display of textiles are as important as creating the textiles it self. The longitive of textiles depends on how well it has been stored, handled and preserved, also to appreciate properly a good textile produce it has to be displayed in the right manner to be appealing to the human sense of sight.

This research is aimed at tackling the problem of storage and display of textiles in the textile unit, which will help improve the lifespan of textiles produced, protecting them from factors that damage textiles and also help showcase the beautiful textiles done in the university of Benin by the textile unit of the department of fine and applied art. The major aim of this research is to provide specially adapted compartments for the display and storage of textiles through construction. The concept of the compartments are gotten from comparative studies of various display and storage compartments in art museums, galleries and other higher institutions with a textile unit.

It is hoped that the specially adapted compartments for storage and display of textiles will be useful in reducing fabric damage and help display textiles properly for it's beauty to be appreciated

CHAPTER 1

INTRODUCTION

BACKGROUND OF STUDY

Textiles have been stored, preserved and displayed using a variety of methods since the dawn of human civilisation in order to preserve them and keep them for a long time. Just like other forms of art, textiles appreciate in value over the years and are used to teach about the way of life or culture of a group of people.

According to Wikipedia, 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.

Textile materials need to be handled and stored safely. Understanding the importance of textile preservation is so vital. With the right packaging and storage, the material's lifespan can be increased and its quality can be maintained.Among the many factors that might affect textile fabrics include insects, extreme heat or cold, light, humidity, chemicals, and others.
When storing and displaying textiles, it is necessary to use adequate storage and display facilities to ensure the durability and preservation of textile materials.

Unfortunately, due to a lack of adequate textile storage and display facilities, textiles created by students have been destroyed by some of the aforementioned sources of textile damage and those in good condition aren't properly displayed to showcase the works done by students in the textile unit of the department of fine and applied art, university of Benin Edo, state.
Hence the need to create specially adapted compartments for display and storage compartments.

STATEMENT OF PROBLEM

To preserve the longevity of the textiles, it should be displayed appropriately and kept in a clean, dry area.
Unfortunately, the textile section at the university of Benin's department of fine and applied art lacks the means needed to preserve and display textiles. Since there isn't a storage facility, student-produced fabrics and textiles have had to be relocated over time from various locations, necessitating the need
to create a place for storage and display to reduce textile loss and damage.

OBJECTIVE OF THE STUDY

The primary goal of this study is to create a compartment specifically suited for the storage and exhibition of fabrics.
Beautiful fabrics made in the textile unit throughout the years have been lost or damaged due to a lack of storage space. This has prevented the unit from keeping an accurate record of fabrics and from being able to properly display materials and fabrics made in the unit.

SCOPE OF THE STUDY

The study's focus is on constructing multiple storage and display compartments and illuminating a selected room in the textile studio of the university of Benin's department of fine and applied art. Eight textile 400 level students from the department of fine and applied art at the University of Benin are responsible for carrying out the project, which must be finished in two semesters.

SIGNIFICANCE OF THE STUDY

The importance of this project resides in the provision of a adequate area for textiles to be preserved and displayed will be created as part of this project for the textile unit of the department of fine and applied art university of Benin.
Students will have a better understanding of the significance of maintaining, managing and displaying textiles appropriately via this study.

I LIMITATION OF THE STUDY

Lack of expertise in carpentry
Lack of expertise in electrical and electronic fitting.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This chapter deals with the review of related literature. The review was carried out under the following sub-headings:

Meaning of textiles and history of African Textile
Meaning and techniques for textile storage
Meaning and techniques for textile display
Meaning and types of display compartments

2.1 Meaning of textiles and history of African Textile

The term "textile" is derived from the Latin word "texere," which means "to weave."
A textile is any material created by weaving, knitting, crocheting, knotting, or pressing fibers together. It can assume many forms and perform numerous functions. Textiles are almost certainly a part of everyone's environment or situation. Textiles can be found in clothing, furniture, bedding, carpeting, and even some automotive parts (Padhye & Nayak, 2016).

Textile is almost as old as human civilization, and its history has grown richer through time. Africans have a long tradition of creating elaborate textiles, as evidenced by the cloths themselves and depictions on ancient tombs and pyramids.
Ancient Egyptians were known to produce flax for the purpose of weaving linen as early as 5,000 B.C.E. Egyptians were shown in cloth textiles in early hieroglyphics, sculptures, and pyramids, and by 2,000 B.C.E., depictions of early looms were discovered on Egyptian tombs alongside fragments of linen materials. The early looms were ground looms with no heddles. Later, single-heddle looms operated by two persons were discovered in the tombs. Looms in Egypt were vertically placed, had a single heddle, and were tied against a wall or tree during operation by male laborers by the 18th Dynasty
Other African countries have thriving textile industries as well. For example, the Nubians of Meroe (Egypt's southern neighbor) were noted for their sturdy woven fabrics. Cameroon has a long tradition of producing cloth from tree bark. Other African tribes made textiles from animal hides, furs, and even feathers. North Sudan was weaving strong cotton textile by the 5th century C.E.
Only a few fine specimens of old woven cloth have been discovered in Africa due to its severe climate. One of these is a red, green, and blue tunic fabric discovered in Niger in the eighth century C.E. Woven fibers from the 9th century C.E. were discovered in Nigeria, West Africa,

while an 11th century C.E. woven cotton textile was discovered in Mali. The archaeological site of Kissi in northern Burkina Faso has yielded some of the oldest extant African textiles. For integrity, they are constructed of wool or fine "short" animal hair, including dried skin. Some fragments from the thirteenth century Benin City in Nigeria have also survived. (Groomer.k 2016).
Textiles have been used as a form of remuneration in West and Central Africa since the thirteenth century.

2.2 Meaning and techniques for textile storage

According to fibre2fashion.com, textile storage refers to approaches that care for materials by conserving their original state and preserving them for the future. Many people want to save their treasured garments for a lifetime but are unsure of how to accomplish it.

Textile materials require special care and storage since they are susceptible to heat, cold, humidity, fungus, and insects. distinct places of the world have distinct climates. As a result, it is critical to understand the fundamental criteria for how and where to keep textile materials. Proper packing and storage will extend the material's life and protect it from deterioration.

There are several storage requirements that must be followed in order to keep textiles from deteriorating. Always make sure the textiles are clean before storing them. If a garment must be preserved for an extended period of time, avoid applying starch or any finishing product since it may attract bugs. If the garments are being stored in a cabinet, make sure it is ventilated sufficiently to prevent mold growth. The most common cause of textile deterioration is the environment in which they are stored. Textile deterioration is caused by factors such as light, severe temperatures, humidity, chemicals, bugs, and pollution. Ultraviolet rays inflict extensive damage to textiles. As a result, extended exposure to direct sunlight or fluorescent lights should be avoided. Luminous lights emit a lot of heat, which damages the fibers and sensitive textiles. When not in use, lights should be switched off. Pests are another serious hazard to textiles. High temperatures and humidity can hasten the degradation of fabrics while also allowing insects, mold, and mildew to thrive. As a result, temperature and humidity should be kept constant to ensure the health of the fabrics. The ideal range for temperature and humidity is 65–70°F. Fabrics should be periodically checked for insects or mold and refolded to prevent wrinkles in the same spot. Textiles should not be stored in airtight containers or bags made of plastic, which will trap moisture and encourage the formation of mildew and growth of moles (Jane Hutchings, 2016).

There are three basic types of textile storage. They are stored:

Flat storage technique
Rolled up technique
Hanging technique.

Flat storage is ideal for delicate, painted, and exceptional fabrics as it gives the fabric even support. Metal or wooden drawers, or even acid-free boxes, can be used to store textiles flat. The acid-free tissue paper he should place under and between the two items when stacking the dough

The best way to store textiles of this size such as tapestries, curtains, carpets, and quilts is with rolled storage. Also, when you store a lot of fabric, it's saving space. Embroidered or velvet materials should be rolled with the embroidery on the outer side. Because the textile may fold, stretch or crack in its inner side while it is being rolled

The best way to keep your clothes from wrinkling is to hang them. Some clothing cannot be stored flat as it may cause wrinkles. Textiles suitable for hanging should be hung on plastic hangers with adequate padding at the shoulders. They should also be covered with plastic or cloth with the base open to allow for air circulation. The above storage methods best protect the fibers from light, heat, dust, contamination, pests, and moisture to preserve the fibers for a long time.

2.2 Meaning and techniques for textile display

Textile display refers to various ways in which textiles are being showcased in an appealing manner.
There are many ways to express textiles. Here are some examples of display techniques:

Plain or passive display
Hanging
Framing
Mounting on a mannequin.

Plain or passive display

Two-dimensional textiles can be displayed on a flat surface as long as the environmental conditions and the type of material in contact with the textile are considered. It is important that all materials that come in direct contact with the textile are of archival quality. Textile lining materials should be pre-washed and colored materials checked for authenticity. Display objects flat or at a slight angle for easier viewing.

Hanging

Plain textiles can be hung. Objects such as tapestries, rugs and rugs can be hung using the Velcro system. Sew the soft side of the Velcro onto a strip of fabric, then hand sew it onto the fabric to display it. please give me. Insufficient tension will pull the fabric and sag, damaging the structure. If the tension is too high, the fabric will look "quilted" and may tear.
A staple gun can be used to attach the hook side of the Velcro to a wooden batten sealed with water-based polyurethane. Securely attach the wooden slats to the display wall and align the

two Velcro sides to hang the textile. Multiple pairs of hands are required to get the best score. When removing the textile from the display, carefully pry up the Velcro strips rather than pulling on the textile itself. This will prevent damage to the fabric.

Mounting and framing

Small flat textiles present less presentation problems. You can easily fit it in a showcase or frame it and put it on the wall.
For framing, any lightweight fabric that is in good condition, clean, and chemically resistant (such as a sampler or piece of lace) works well.

To prepare the mount:
Determine the size of background you need to attach the textile to, leaving a suitable border width and a slightly wider border at the bottom of the textile. For heavily embroidered or beaded pieces, the soft padding cushions the fabric and can also give the border a finishing look. .

Display on mannequin (3-D display)

Both exposure and support issues need to be addressed when presenting three-dimensional textiles. The use of high-quality archival materials to match the textiles. If additional bulk is required to support the shape of the costume, add padded silk pillows to the mannequin instead of loose padding on the mannequin.The latter adds weight to the artifact. Textiles that are not shaped will be damaged over time if dropped on an improperly shaped base. Just as people come in different shapes and sizes, so do costumes. When choosing mannequins, emphasize the variety of shapes promoted by different styles of dress and the shapes of costumes of a particular era. Consider developing a specific corset.

2.3 Meaning and types of display compartments

According to Collinsdictionary.com a display compartment is an enclosed structure for the display of goods, usually high value goods such as jewelry.

A display compartment (also known as a display cabinet, glossy box) according to Wikipedia is a cabinet with one or more surfaces made of clear tempered glass (or plastic, usually acrylic for bearing). , used to display items for viewing. Display cabinets can appear in exhibitions, museums, retail stores, restaurants or private homes.

Types of display compartments

Glass in-floor display case:

Glass in-floors are made with transparent glass when it is useful to view something from above or below. It is usually made of a toughened glass which is also laminated for structural strength, a glass in-floor is most commonly used as a tourist attraction.

Wall mounted display case:

This type of display compartment is mounted to the wall and can be viewed through the from and sides. This is the proposed display case to be constructed during this research aimed at solving the problem of storage and display of textiles in the textile unit of the department of fine and applied art University of Benin, Nigeria.

Free-standing display case:

This type of display compartment is usually found in museums and galleries. It's usually positioned in the centre of the display room, where the object on disy can be viewed from all sides. It is usually constructed with toughened glass and laminated for strength to prevent breakage and theft.

Table top display cases

This display compartment according to Wikipedia is designed to display objects through one side (the "customer side") and have them accessible through the other (the "clerk side"). For this reason, the counter displays are most relevant for retail stores.

CHAPTER THREE
RESEARCH MATERIALS AND METHODS

DATA COLLECTION

The researcher gathered information by looking up similar compartments online that are utilized in art galleries, museums, and other educational facilities where textile design is taught. Additionally, information was gathered through a market study that was conducted more than three times in order to locate real and durable materials at reasonable cost for the construction of the storage compartments that could be adjusted as needed.
Furthermore, information was gathered from the professionals who would be building the compartments as well as from previous projects that were similar to the one that would be undertaken.

The construction process was stratified into the following stages:

i. Assessment of available space
ii. Creating designs with appropriate size for the available space.
iii. Obtaining the materials required for the construction of the specifically adapted compartments.
iv. The Hdf boards were cut to the desired sizes using the drawings as a guide.
v. Structure construction.

Tools

Electrical Cutting machine
Hand drilling machine
Screwing machine
Hammer
Saw
Tape rule
Rollers
Paint Brushes
File
Scraper
Scissors

Materials

1½ inch screw nail
1¼ inch screw nail
½ inch screw nail
Edge tape
Full length HDF boards
Full length MDF board
Full length Quarter light board
Filler
Full length Perspect Glass
Sliding rollers
Paint
1 inch nail
1½ inch nail
2 inch nails
Adhesive glue

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

This chapter reviews the results of the qualitative analysis, representation of data, results and findings of this study.
During the conceptual phase of this study, a survey was conducted to explore the various means, materials, and procedures required for the project's success.

STAGE ONE: Preparatory stage.

Prelude to the commencement of the structural construction and purchase of materials, the designated space for the storage and display compartments, was assessed to accurately determine the length, breath and height of the compartments to be made. This helped to create accurate sketches for the proposed construction. The level of repairs needed to be done on the walls, fan and other electrical repairs were also assessed and the quantity of paints to be used to repaint the room was also ascertained through this assessment.
The holes and cracks on the walls were filled using cement and the room was painted using a bright and vibrant color.

Plate 1: Mixing of cement to fill up holes and cracks before painting the walls.

Plate 2: Painter cleaning the wall before painting begins.

STAGE 2: CREATION OF DESIGN

After the available space has been assessed and measurements have been taken, sketches of the proposed compartments showing its appropriate dimensions and placement was made. The sketch was then given to the professionals contracted to create the display and storage compartments.

FIG 1 : Freehand sketch of the left and right compartments of the proposed display / storage compartments

FIG 2 : Freehand sketch of the top and middle compartments of the proposed display / storage compartments

FIG 3 : Graphical illustration of the proposed and its dimensions

STAGE 3: OBTAINING MATERIALS REQUIRED FOR CONSTRUCTION

After the sketch was studied and a physical viewing of the proposed space, the quantity and types of materials needed was spelt out by the contractor. Several market surveys were carried out and genuine materials were bought at reasonable cost. The materials were then moved to the textile studio for the commencement of the construction process.

Plate 4 : Arrival of hdf wood from the market

Plate 5 : Moving of the hdf boards into the textile studio.

Plate 6: Stacking of the Hdf wooden boards ahead of the commencement of the construction process

STAGE 4: Construction process

Using the dimensions stated on the sketch, the HDF (high density fiber) boards were cut according to the dimension and design using an electrical cutting machine for a smooth and precise cut.

Plate 7: Preparation of the cutting table to accurately cut the HDF boards to size.

Plate 8: Cutting of the HDF boards to be used for the construction of the compartments.

STAGE 5: STRUCTURE CONSTRUCTION

After the HDF (High density fiber) board have been cut to size according to the dimensions on the sketch, the cut parts were then coupled together using a hand screwing machine to join them together using one and a half crew nail or one and a quarter screw nail (fig 1). After joining the different cut pieces together, the edges of the HDF board were then covered using the edge tape and adhesive to prevent breakage and wearing out of the edges (fig 2 & 3).

With the edges secured, the back of the compartment was covered using the quarter light board and attached using a one-inch nail and a hammer (fig 4)

The compartments were then raised and placed against the wall in its appropriate order (fig 5).

The Perspex was then boardened using the HDF wood to create a sliding door and rollers where then attached to the base (fig 6). Wooden rods were also placed in the compartment for draping of fabrics to aid display (fig 7)

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Plate 9: Joining of the already cut wooden parts using a hand screwing machine

Plate 10: Wooden parts joined together to create the compartment.

Plate 11: Application of adhesive to the edges of the wooden board to cover it up with edge tape to prevent breakage and wearing out of the edges

Plate 12: Covering the back of the storage/ display compartment using a quarter light board

Plate 13 : The already covered compartment standing in the proposed storage / display room.

Plate 14 : Attaching the perspex glass to a wooden border to create a sliding door.

Plate 15 : attachment of wooden rods to allow draping of fabrics

CHAPTER 5
SUMMARY AND CONCLUSION

5.1 SUMMARY

The fabrics and related textiles we develop as textile design students demonstrate our high level of creativity, artistic nature, and God-given skill.
Just as essential as the creation of the textiles themselves is, how they are stored and displayed is also vital.
The longevity of textiles depends on how well they have been treated, stored, and preserved. In addition, to be properly appreciated, a good textile product needs to be displayed in a way that appeals to the human sense of sight.
This study addresses the issue of textile storage and display in the textile unit, which will ensure the longevity of the produced textiles by shielding them from factors that shorten their lifespan. It will also help highlight the stunning textiles produced by the textile unit of the Department of Fine and Applied Arts at the University of Benin.
The main objective of this research is to develop specially designed compartments for the exhibition and storage of textiles. The idea for the compartments came from a comparative study of different display and storage compartments in art museums, galleries, and other higher educational institutions with a textile unit.
High quality materials were sourced locally and were employed in this construction.
Compartments were created by professional hands that were hired.

5.2 CONCLUSION

To address the issue of textile loss and destruction owing to inadequate storage facilities, specially adaptable compartments were built in the textile design studio of the Department of Fine and Applied art.
The newly built, specially adaptable compartments are expected to help prevent textile loss and damage brought on by a variety of factors as well as properly display the artwork produced in the textile unit to visitors and fellow faculty members from the University of Benin community.

5.3 RECOMMENDATION

For improved textile production, the researcher advises additional improvement across the Textile studio.
A textile oriented exhibition is advised to be hosted by the Department in the nearest future to showcase the amazing textile works done over the years in the textile unit, This will encourage continuous production of quality textiles by the students of the textile unit and englighten the public on the versatility of textiles.

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