

The Possibility of Adapting Patchwork Techniques to Achieve Sustainable Development of Artworks Using Traditional Artistic Decorations in the Asir Region and Benefiting from them in the Field of Small Projects

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Abstracts

Small projects are among the most important projects that bring economic benefit to societies, especially developing societies, because of their effective role in training young people, investing in their energies, and urging them to establish their own small production units, which contributes to eliminating the phenomenon of the unemployment problem. The current research aims to design works of art using Asiri art motifs by recycling scraps of fabric, ready-made clothes, and furnishings using a patchwork method. This has led to an interest in teaching industrial designers how to draw inspiration from Asiri art motifs and the different types that this art includes, whether geometric or floral, as a source of innovative and sustainable design in the field of artistic works using leftover factory fabrics. This is done through designs characterized by aesthetic and artistic values. Therefore, we made several designs suitable for use in artwork, inspired by the decorations of Asiri art in an abstract style, using the experimental descriptive approach. The research was based on three main axes: the axis of patchwork art techniques and the axis of sustainable development of the artwork. Focusing on Saudi traditional artistic decorations and combining them to develop small projects. The results of the research showed the possibility of utilizing leftover fabrics using the patchwork method to achieve sustainable development of artistic works derived from the decorations of Saudi Asiri art, benefiting from them in the field of small projects and employing them in innovative plastic compositions. Which combines simplicity and modernity, both in terms of design and performance.

Keywords: The possibility of adapting - patchwork art techniques - sustainable development - artistic work - Saudi Asiri art decorations - the field of small projects.

Introduction

The investment strength of the Kingdom of Saudi Arabia is the key to diversifying the economy and achieving sustainability in the Kingdom of Saudi Arabia. The Kingdom's Vision 2030 depends on three axes: an ambitious nation, a vibrant society, and a prosperous economy. These axes integrate with each other to achieve the Kingdom's vision. Therefore, these axes are based on providing opportunities for all through... Building an educational system linked to the needs of the labor market and developing opportunities for all entrepreneurs, large and small companies, and generating job opportunities. Therefore, the topic of research and manual labor was turned. This is in an effort to apply it at all levels to be an ambitious nation with its production and achievements. Encouraging a culture of performance to empower the Kingdom's human resources and energy, and creating the practical and scientific environment to face challenges and seize the opportunity to achieve success. The elements of this success must be sustained and human resources must be invested in manual labor, achieving the desired goal of the Kingdom and eliminating unemployment. Manual work is considered the future, as it is characterized by free expression and individual performance, which results in aesthetic works and various artistic values. The artistic work is considered one of the distinctive arts of these handicrafts, as it is characterized by free expression in the performative methods of constructing the artistic work. These works emulate the special philosophies of each individual who appears in them. Artistic direction.)1(

Handmade arts in the Kingdom of Saudi Arabia are considered among the works that eliminate unemployment, like artistic crafts. Based on the Kingdom's Vision 2030 to reduce the unemployment rate among citizens and raise the rate of women's participation in the labor market, this research is directed at developing small projects in which women participate through the work of several... Contemporary artworks and artefacts derived from the motifs of southern Asiri art through the exploitation of cloth remnants and the possibility of employing them by manipulating geometric spaces and the relationships between them to come up with innovative forms, an attempt to move out of the scope of traditional artistic work into innovative forms that are in line with contemporary thought. Because these remnants of fabric are distinguished by the richness of texture and color of the diversity of fabrics as a result of the different processes of weaving and printing, they are also distinguished by the malleability of formation, the richness of form and aesthetic value. Environmental materials have been able to fulfill unlimited roles in all fields of scientific and artistic human activities, as they have preceded and distinguished themselves over others.)2(Of raw materials in patchwork style to meet the needs of the labor market. Developing small projects to recycle leftover fabrics for various uses achieves many economic and environmental benefits by recovering quantities of waste that were previously disposed of and exploiting them economically. The clothing and furnishings industry is characterized by the abundance of exhaust and waste from fabrics used directly in production processes, through which the remains of multiple and varied raw materials of value can be obtained and used to provide artistic products of high value to small projects.)3(

The patchwork method is one of the artistic methods that relies on combining fabric scraps. It is one of the technical methods that affects the value and form of the artwork by understanding the

relationship between the aesthetics and properties of the materials. Therefore, using this method requires a trained person who can modify and add In arranging the materials so that each material has an expressive meaning, achieving harmony and cohesion by adhering to the principles of design to achieve complete harmony and consistency between the materials used, which leads to tightening the technical unity of the artwork. (Karama Thabet - 47-2000).Hence the idea of the current research was to create several contemporary designs that would be used in creating artistic artifacts Using leftover fabrics in the patchwork style and making use of them in the field of small projects.

Research Problem:

The research problem is determined in

How can patchwork art techniques be adapted to achieve sustainable development of artistic works using Asiri heritage art decorations and benefit from them in the field of small projects?

Research hypotheses :

- 1- Patchwork techniques can be adapted to enrich the artistic work
- 2- Asiri art decorations can be used to develop the sustainability of the artistic work.
- 3- Patchwork art techniques can be adapted to enrich and sustain the artistic work by using Asiri art decorations and benefit from them in the field of small projects.

Research Objectives:

- 1- Utilizing leftover fabrics in developing small projects.
- 2- Taking advantage of patchwork technology as an experimental approach to enrich and sustain contemporary artistic works.
- 3- Enriching the aesthetic aspect of the artistic work by using leftover factory fabric.
- 4- Spreading national and cultural awareness among consumers about the importance of using leftover fabrics to develop small projects.
- 5- Emphasizing the importance of Asiri folk art decorations and their various shapes and elements, which are implemented by combining leftover fabric and utilizing them in the field of small projects

Research Significance:

- 1- Studying how to optimally use leftover fabrics using the patchwork technique to manufacture contemporary artistic works derived from the decorations of Asiri art.
- 2- Using leftover fabrics and the possibility of transforming and developing them into aesthetic products with aesthetic values for the development of small projects in the Kingdom of Saudi Arabia.
- 3- Reducing unemployment among members of society, raising the rate of women's participation in the labor market, and achieving sustainability.

4- Utilizing patchwork techniques in producing contemporary home art objects that achieve economic, functional and aesthetic value.

search limits:

-Spatial boundaries: Asir region - Kingdom of Saudi Arabia

Objective limits: - Remnants of fabrics - Benefiting from sustainable development in the field of artistic works.

- Learn about patchwork techniques.

- Innovative designs inspired by the forms of Saudi Asiri art decoration.

Research Methodology:

The research follows the descriptive analytical method: this is represented by:

- Identifying the remains of different fabrics.

– Identify patchwork techniques and their types.

- Studying the forms and decorations of Asiri art and how to use them in a contemporary abstract manner suitable for the designs of contemporary artistic works.

- Learn how to achieve sustainable development of artistic works.

Experimental (applied technical) curriculum:

The search includes:

1- Studying the different forms of Asiri art decorations.

2- The decorations of Asiri art are transformed into abstract designs in a new style.

3- Collecting leftover fabrics from factories and selecting each piece of fabric suitable for the executed design.

4- Conduct various experiments on fabric materials.

5- Implementing artistic works using patchwork methods, using leftover fabrics and Asiri art decorations, to achieve sustainability for the produced artistic work.

Inductive approach: through previous studies and sources of information.

Search terms:

Fabric leftovers:

These are fabrics left over from clothing, ready-made and furnishings factories that are not useful and include different types of natural and industrial raw materials.

The art of patchwork:

It is the art of patchwork, that is, recycling leftover fabrics and turning them into utilitarian pieces. This art dates back to ancient times, when the need of humans, especially women, was to benefit from leftover fabrics, leather, etc.)4(

It is also the art of fabric scraps, and it depends on combining different types of woven or non-woven fabrics in geometric or irregular shapes and connecting them next to each other until a decorative design is formed.

Definition of patchwork art in the current research: The art of combining and assembling pieces and scraps of different shapes, sizes, and colors from fabrics, and they are sewn together using sewing machines to ultimately become a piece of high aesthetic value to be used in creating useful pieces for contemporary artistic work derived from the motifs of Saudi Asiri art.

Recycling :

It is a method of recovering useful materials from waste by separating these materials, treating them, and then remanufacturing them. Among the most common things that are recycled are plastic, paper, cloth, iron, and aluminum, in addition to organic materials that can be recycled. Recycling achieves many economic and environmental benefits by recovering Quantities of waste were disposed of and exploited economically. It also means recovering useful materials from waste, then remanufacturing them and exploiting them economically.

Small Projects :

It is a project established by a group of individuals with a specific capital or that includes workers whose number does not exceed ten and is equipped with equipment within the limits of the existing investment. The project owner is often the manager responsible for technical and administrative operations)5(.

Literature Review:

1- A study (Najd Ibrahim Madi - 2008) entitled (Utilizing leftover fabrics to create innovative home furnishings) “This study aims to use industrial and household waste to reach an innovative product characterized by beauty and simplicity and to exploit those leftovers to preserve the environment. It has been possible to convert those leftovers into Various products, such as pillowcases and children’s quilts. These models were judged in terms of design principles and elements, the aesthetic aspect, the functional aspect, and the economic aspect of the final product.

2- A study (Helmy et al. - 2008) focused on employing fabric waste in ready-made garment factories to make children’s clothing for the early childhood stage from the age of 2-5 years, which leads to economic benefit from these exhausts. From this standpoint, this current study sought the possibility of recycling leftovers and waste. Fabrics in creating new designs for children's clothing

3- A study (Enas Al-Sayed Al-Daridi - 2010) entitled (Utilizing leftover fabrics to produce children’s toys, a training program). The study aims to design a training program for a sample of samples to produce children’s toys from leftover fabrics to contribute to reducing

unemployment among young graduates, in addition to benefiting from Remnants of fabrics resulting from the textile industry. The results of the study led to the implementation of a number of products, some of which are suitable as educational tools for children aged (4-6) years, and which were made from remnants of fabrics, through a training program on a group of samples.

4- A study (Afaf Kamal Mahmoud - 2000) entitled (The possibility of obtaining new aesthetic and functional effects inspired by modern arts by using leftover fabrics for children's products). The study aims to teach the possibility of obtaining new aesthetic and functional effects inspired by modern arts by using leftover fabrics for children's products, as I proposed designs that suit the age of the child from cradle to 5 years, using raw materials resulting from the mass production of ready-made clothing factories for the purpose of employing leftover fabrics and reaching the lowest economic cost. The most important results were the presence of a statistically significant relationship between the type of material and the type of product, and the equation between low price and value was also achieved. Aesthetic to advance the manufacture of children's supplies.

5- A study (Nahla Abdel Ghani, Hala Othman: 2021 AD) entitled (An engineering design vision for implementing contemporary furnishings using patchwork technology in accordance with the sustainable development strategy, Egypt Vision - 2030 AD) and aimed to integrate female graduates of the Department of Home Economics into the labor market and qualify them in a way that suits market requirements. Work and develop their abilities in employing their ideas and previous experiences and building their new knowledge, as well as achieving compatibility between the requirements of female graduates and the labor market, and identifying the extent of trainees' interest in the training program for implementing contemporary furnishings using patchwork technology in accordance with the sustainable development strategy, Egypt's vision, 2030 The study found that training using the constructivist method is effective in qualifying female graduates in a way that suits the requirements of the labor market. It also found positive opinions of arbitrators and consumers regarding furniture executed using the patchwork technique, and positive opinions of female graduates regarding training.

1- A study (Hind Ahmed, Amna Shaher: 2020 AD) entitled (The possibility of benefiting from hand embroidery methods and leftover fabrics in producing innovative designs for children's bedding as a model for local community development) A group of bedspreads with innovative designs using the hand embroidery method and leftover fabrics and are suitable for children's bedding in the early stage. The cradle helps to support the obstacles in the relationships between local social development centers and scientific research studies. The study reached the appropriateness of innovative designs with what they contain of hand embroidery techniques and fabric remnants. It also achieved the aesthetic aspects of the design as well as the functional performance requirements for the purpose it is used for. It also achieved the possibility of benefiting from the computer. Automation in creating designs executed by hand embroidery and suitable for children's bedding in the cradle stage.

Procedural steps for research:

First: The theoretical framework: It includes

Patchwork art:

- A form of embroidery that involves stitching pieces of fabric to create a larger design. The larger design is usually based on repeating patterns built with different shapes and colors of fabric.

- The art of sewing pieces of cloth of different types and sizes, such as strips, squares, triangles, hexagons, and other pieces of cloth, and connecting them together using a hand needle and thread or using various sewing machines to ultimately form aesthetic or utilitarian pieces at the same time.

- A work of art consisting of a variety of inconsistent pieces or parts. It is a mixture of pieces of fabric of different colors and shapes surrounded by each other and used as a quilt cover, pillows, etc)6(

It is the art of assembling fabric parts together other than their shapes. If these fabrics are square, triangular, or even hexagonal in shape, they are put together by hand stitching, or they can be stitched using sewing machines. This method, or method of gathering unconnected fabric parts together, is one of the techniques used in constructing and assembling the basics of quilting. It can also be used to sew many furnishings other than quilts, but is most popular for quilting. It is often combined and professionally introduced with the decor that is drawn on the furnishings, whether it is a quilt or other furnishings.

History of patchwork "the art of patchwork":

Patchwork is considered one of the most important ancient and modern handicrafts. Some people used it because of their limited hands. Then art developed and became one of the most important arts whose products the wealthy loved to acquire. The roots of this art go back to the ancient Egyptian era in light of the need of people, especially women, to benefit from the remains of fabrics, leather, etc. There is also in the Egyptian Museum a piece of clothing belonging to King Tutankhamun, made using the patchwork method and dating back to the Eighteenth Dynasty. It consists of three layers inlaid with gold. In the era of the Twenty-First Dynasty, we find this art clearly in the tent located above the mummy of Queen "Abast Umm Moheb," which contains many images of this art. We also notice the red and blue squares in the upper bar that tell the story of the Queen. It is made using the deer skin appliqué method. If we look at the method of attaching squares, we find it similar to the method of attaching patchwork pieces now. We also find clear patching in some parts of it. In the paintings of Egyptian Coptic mummies that were discovered in 1880 and known as the Fayoum faces, I found the "Lodge Cabin" unit, which is the first and most important "Patchwork" unit.)7(.

I also found examples in the Coptic era of clothing styles with the addition of colored cloth around the neck and shoulders in the form of colored strips of cloth used, whether linen or cotton. It was also found in the Islamic era in the art of the "marks" of narok tents that the Sultan chose to distinguish them from his clothes. We also find it expresses the function of the wearer, as patchwork has spread in Iran since the sixteenth century- It was known as "Rasht" as a metaphor for the Rasht region located on the Caspian Sea. In the windows of the last century, a large collection of ancient textiles was discovered in the caves of Buddha Fattah Dunhuang in China. The skill of patchwork was widespread among the poor and the rich. The poor used patches for their needs and the inability to buy new clothes or covers, while the rich used them

to fill their free time and decorate the pieces in a distinctive, aesthetically pleasing way. The art of patchwork is one of the traditional arts and crafts in Western culture, as it was in the South in America when quilting was made from leftover fabrics, where a handmade quilt was customized for each member of the family, starting from the little child's quilt to the grandfather and grandmother⁸. Women spent hours and days sewing a single piece by hand, and every family was proud of what its women made, as these pieces were passed down through successive generations. The art of patchwork with fabric is called crazy patchwork. There are many types of patchwork, and each type has a way of collecting scraps of fabric and has a distinctive name. For example, the hexagonal method, where the fabric scraps are hexagonal in shape. -

- As for (Semonol), they are strips of fabric that are assembled in some way, and the triangles of overlapping fabric are known as the (Wales) method.

The moula method consists of a group of layers of fabric woven in a special way. -

Sirma and khayamiya are also forms of patchwork. -

- Khayyam Art - named after Khayyam; It is currently famous in Egypt, where there are special markets for craftsmen, and their sewing is concentrated in tents, which are pieces of cloth connected with threads, and in different shapes that decorate the tents that are set up for popular and religious celebrations, birthdays, etc. They are distinguished by their bright colors and enormous size, and they also carry floral decorations. Islamic. Or engineering or plant engineering. In the past, mothers used to resort to what is known as "the patch" to solve the problems of tearing children's clothes, by placing a small piece of leftover fabric over the part that should be hidden. Now, patchwork has turned into an art, in which scraps and leftover fabrics are recycled into bedspreads, quilts, curtains, rugs, children's toys, and artistic paintings. An art known as "patchwork".

Dr. Fadia Khoury, visual artist, and founder of the first Egyptian association for fans of the art of "patchwork." This art caught her attention, so she studied its origins in Europe. She says that it teaches accuracy and general taste and changes a person's perception of colors and geometric shapes. It also takes a person on a tour around the world, because his roots are ancient and spread throughout the world. Corey continues: "In the days of the Crusades, the art of patchwork moved from the East to Europe, and each European country began to add to it and began to have different images. In Italy, he added to patchwork the waffles (tropunto), which are squares based on one color of fabric and thread, while France introduced the art of stars to it. The Netherlands was credited with introducing the form of "windmills", while Germany added the art of "Dresden dishes".⁹(

Thus, Europe invented patchwork quilts, where the quilt consists of three layers: the patchwork, the filling, and the lining. In the year 1500, the migration of Europeans to America began, and they took these arts with them. There, this art developed and museums were established for it, giving the impression that it was born in America. The funny thing is that patchwork was used in America to combat bad habits, as Currie says: "At the end of the eighteenth century, the manufacture of wine and alcohol spread in homes, so women attacked this industry, by inventing a new unit of patchwork called (the drunkard's line) and it was manufactured. Quilts and mattresses are offered for sale, and proceeds from the sale are used to combat alcoholism)¹⁰(.

The art of patchwork has also been used recently in the most prestigious fashion houses to create many models, as in Figure (1,2).



Figure (1.2) expresses the forms of patchwork in the most prestigious modern fashion houses

The importance of patchwork:

- 1- Establishing an industry that provides income to the state treasury, which supports the local economy
- 2- Ridding the environment of waste in a safe manner.
- 3- Putting the country on the ranks of developed countries in order to preserve the environment.
- 4- Making the most of raw materials and stopping the waste of natural resources.

Tools and materials used in implementing patchwork art:

1- Tools used in patchwork art:

(Needles, pins, scissors of various kinds, circular cutters, cutting boards, a transparent ruler, marking tools, a cloth cutting knife, and cardboard or plastic discussion templates.

2- Materials used in implementing patchwork art:

A-Basic raw materials:

These are the fabrics used in patchwork to produce artistic works

B- Auxiliary raw materials:

Auxiliary materials used in the implementation of patchwork art to produce contemporary artistic works, including (threads - Vaseline - reinforcement material - buttons - fillings zippers). As in Figure (3)



Figure (3) shows the materials and tools used in patchwork

How to install patchwork:

- 1- Machine-attached patchwork: Every two pieces are sewn by machine so that the parts are arranged. This method has some difficulty when sewing curves, corners, or thick fabrics.
- 2- Manually installed patchwork: Each piece is installed after bending its edge with an enchanted stitch and a thin needle (similar to the method of installing Khayamiya).
- 3- Patchwork lined with paper: It is possible to place sticky paper, Vaseline, or plastic paper on it to fix the different pieces according to the desired design. This method is suitable for making pendants or flat pieces and is not suitable for making clothes due to their rigidity. Adjacent pieces can be fixed with a narrow zigzag stitch (padding), especially in Sharp angles and overlapping shapes(11)

Technical methods of patchwork:

1- Single space style

In this method, the decorative design relies on repeating a single shape from fabrics of different colors and types and woven garments, which are sewn together either manually or by machine. This type relies on complete coverage so that these fabrics form the ground. As in Figure (4,5)

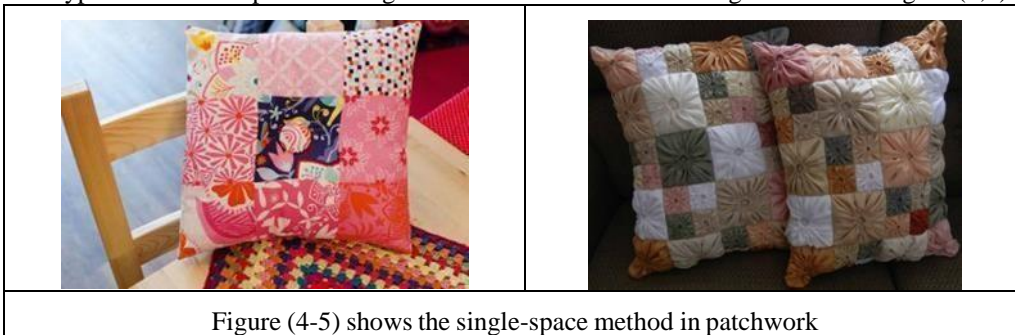


Figure (4-5) shows the single-space method in patchwork

2- Random patch method:

It is called that due to its randomness in colour, shape, design and materials. It is a collection of a number of woven materials in cheerful colors with a combination of other added materials such as (beads, metal units, wood). Manual and machine embroidery can also be used as in Figure (6,7).



Figure (6,7) shows the random patch method in patchwork

3- The cathedral style of reality:

It was given this name due to its frequent use in churches. Church workers used to do this type of method a lot in their spare time, and they excelled at it, as in Figure (8,9,10).



Figure (8,9,10) shows the cathedral reality style in patchwork

4- Block method:

It consists of units of woven materials that are similar or different from each other. The materials are often different in color from each other and from the color of the floor. The units can be installed next to each other or some units can be installed on top of others from their edges. Visible or invisible stitches are used for installation depending on the design. Decorative The fixing thread is usually of a different material and color to create a harmonious contrast between more than one material and more than one color in one design, as in Figure (11,12,13).

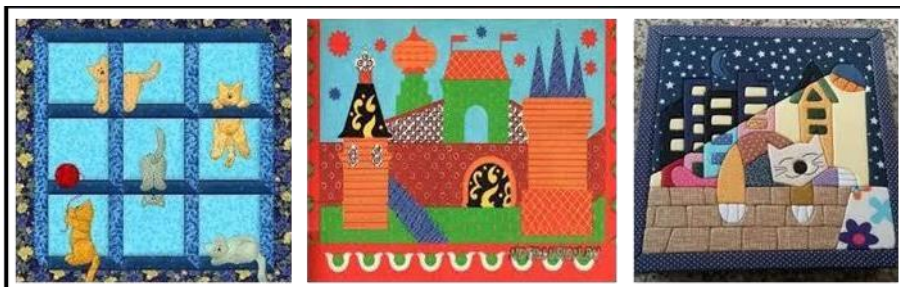


Figure (11,12,13) shows the block method in patchwork

5-Folded stars style:

This method gives a three-dimensional effect, as rectangles or circles of fabric can be folded and turned into triangles and fixed on a back fabric to obtain various models of star shapes. It is best for this method to use thin fabrics, since the folding processes create multiple layers that may lead to the fabric becoming too full. It is preferable to use contrasting colors to obtain better results, as in Figure (14,15, 16).

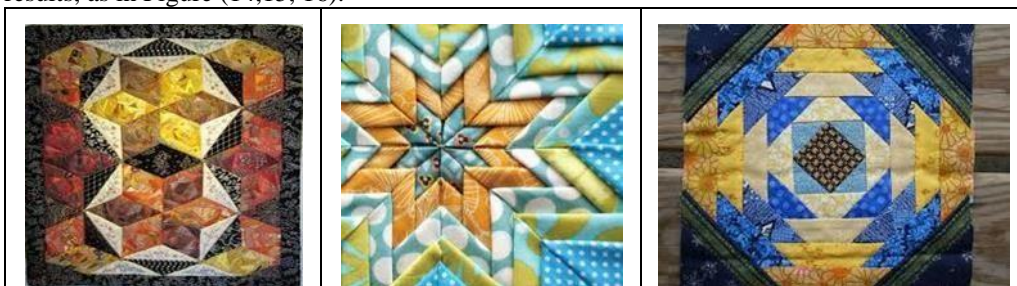


Figure (14,15,16) shows the folded stars method in patchwork

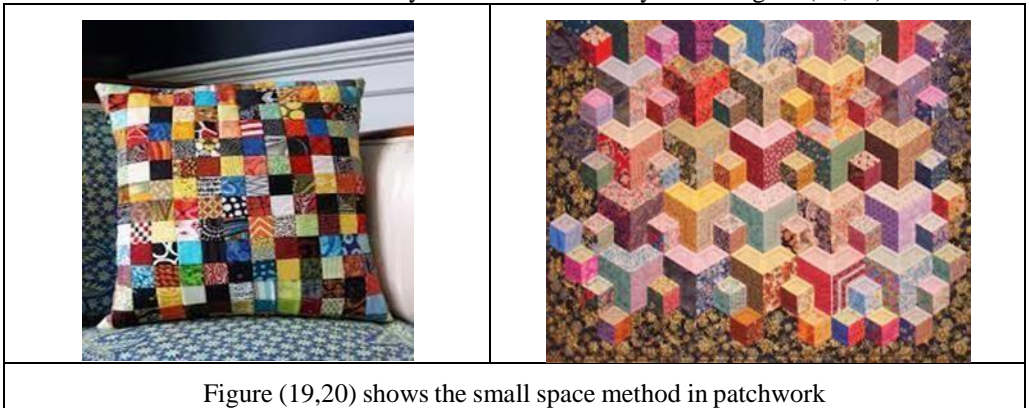
6- Cinminole style:

This method is named after the Seminole Indians in the state of Florida, America, where they used to decorate their clothes with brightly colored ribbons. Plain fabrics or combinations of plain and patterned fabrics are used for this method. To obtain excellent results, it is preferable for the plain fabric to be brightly colored because this technique relies A variation in colors occurs, as in Figure (17,18).



7- Small space style (mosaic):

The size of the pieces of cloth is completely different from each other in area and color, so that they are many in number and appear like a mosaic when assembled on a flat floor. This method is often used to transform any natural shape into a geometric shape and is filled with small pieces of cloth next to each other and sewn by machine or manually. As in Figure (19,20).



8- The fixed strip method:

The fabric is cut into longitudinal strips that are fastened on top of each other. These strips can be woven into squares according to the desired design, as in Figure (21,22).

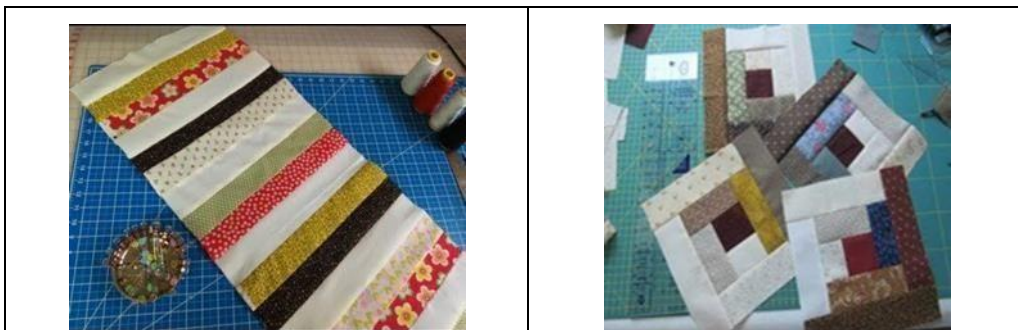


Figure (21,22) shows the method of strips installed in the patchwork

9- Geometric patches style:

The cut pieces are geometric and regular in shape, so they are either in the form of squares, rhombuses, hexagonal shapes, or triangles that are fixed to the floor with hand stitches or by machine, as in Figure (23,24,25).



Figure (23,24,25) shows the geometric patch method in patchwork

Steps to implement patchwork:

- 1- Choose the design to be implemented
- 2- Make a paper pattern for the piece: on square paper with the required and final sizes. The parts are divided according to the design to be executed and numbered to make it easy to arrange them in place after cutting and sewing.
- 3- Cut the required pieces.
- 4- Applying strengthening materials (Vaseline) on the cut parts to strengthen them, in some light materials.
- 5- Stitching adjacent parts in the form of strips, blocks, or geometric shapes.
- 6- Assemble the parts together and finish the piece after lining or stuffing it.

How to implement patchwork:

Parts of different pieces of cloth are collected, whether they are of the same type of cloth or of different types. Many times, these parts of the cloth have the same shape, so that those parts of the cloth can be sewn and assembled together. These blocks and pieces of fabric are cut and not connected together, meaning that each piece of fabric is completely separate from other pieces, but all parts of the fabric are brought together by stitching. These pieces of fabric are sewn alternately and interchangeably together, meaning that a piece of fabric can be placed and another piece sewn to it completely separate from it, meaning that it is of another type and shape of fabric. It is sewn with blocks cut from other types of fabric, or pieces of fabric of one type can be assembled. When these pieces of cloth are sewn and the piece of art is formed, all the pieces of cloth can be linked and sewn together without any separation between them, or they can also be separated from each other. This is done by placing long strips between the pieces of fabric that are being sewn in order to create an aesthetic shape for the shape of the artwork in the end.

Sustainability concept:

There are many concepts of sustainability, including: an environmental term that describes how biological systems remain diverse and productive over time. Sustainability for humans is the ability to preserve the quality of life we live in the long term, and this in turn depends on preserving the natural world and the responsible use of natural resources. This term has been used since the 1980s, the United Nations Commission on Environment and Development has defined the concept of sustainable development as: development that meets the needs of the present without compromising the ability of future generations to meet their own needs. At the 2005 World Summit, it was noted that achieving this requires reconciliation between social and economic demands. And the environment

They are “the three pillars of sustainability” and expressing this opinion using three overlapping areas, indicating that the three pillars of sustainability do not exclude each other, but rather reinforce each other. The origin of the word “sustainability” goes back to “Latin origins from a term that means attribution from below. Society builds from below by Residential at the present time and the future according to the Greek concept, sustainability is considered one of the modern disciplines that attempts to bridge and bridge the gap between social sciences, civil engineering and environmental sciences and integrate them with technology in the future and is linked to renewable energy sources, reducing pollution rates, protecting the environment and maintaining its balance on the planet Earth)12(.

In short, sustainability aims to protect our natural environment, human health, and nature, and at the same time create innovations that do not affect our way of living and our environment. Thus, sustainability is defined as “the study of how natural systems work, diversify, and produce everything that the natural environment needs in order to remain balanced.” Sustainability recognizes that civilization Humanity provides resources to sustain our contemporary way of life

Sustainability and sustainable development focus on the balance between calculating needs, our need to use technology economically, and the need to protect the environments in which we live. It is not only related to the environment, but rather it is related to the health of communities and ensuring that people are not exposed to suffering due to environmental legislation, with the

necessity of choosing long-term impacts. The long term for actions carried out by humans, and asking questions about: How can the situation be improved? Thus, the concept of sustainability is: the optimal exploitation of available resources and potentials, whether human, material or natural, in an effective and balanced manner, environmentally and architecturally, to ensure continuity of sustainability without wasting the gains of future generations. It is also It promises to be "(13)

"Meeting the needs of people in the present without influencing future generations to meet their needs in the future. And development that suits the requirements of the present without diminishing the ability of future generations to meet their requirements. This development includes two basic ideas through which it is achieved. The first idea: the need to prepare the situation in order to preserve At a better level for all people, and the second idea: the maximum limits for meeting the needs of the present and the future according to the level of technology. Four goals for sustainable eternity were identified at the World Conference on Development and the Environment under the Economic Cooperation Organization, which are (source efficiency, energy efficiency, compatibility with the environment, integration and organization of curricula). , including the organization of environmental management).

Main goals of sustainability:

Sustainability aims to

- 1- Achieving quality of life through the best education, health, water quality, and sanitary cleaning
- 2- Achieving gender equality.
- 3- Ending suffering from poverty and hunger.
- 4- Achieving sustainable economic development, while at the same time providing job opportunities and creating strong economies.
- 5- Achieving sustainability that includes the health of the land, air and sea.
- 6- Overcoming the effects of climate change, pollution and other environmental factors that harm human health.

Employing sustainability in art gives the environment a special beauty:

Artists described the concept of sustainability and the use of recycling technology in art as art that protects the environment from danger and gives it a special beauty, pointing out that this concept has become an important part of modern and contemporary arts, but it is still in its infancy in the Arab world.

Artists through "Vision" called on their counterparts who are passionate about working on environmental sustainability, to present artworks that are easy to understand, so that the audience can interact with them directly, criticizing some creators for deliberately presenting sustainable works that are difficult to understand. They pointed out that these arts, which are based on recycling objects, have their own audience who is interested in the stories conveyed by the artwork and its moral and aesthetic value.

When did the Asiri cat appear?

The Asiri are Bedouins who wandered across the Arabian Peninsula, eventually settling in the northern part of the country. They are also known as the Qahtanis, after their ancestor Qahtan. Their numbers were small until they began to settle, and many of their customs remained unchanged for thousands of years. These decorations have been used for centuries to beautify the homes of the people of the Asiri region. They were also used as a way to express their love for nature and religion. Today, these decorations can be found on interior walls across the country.

History of Asiri art:

The history of Asiri decoration dates back to ancient times. The first known works of this type are found in tombs and temples, but it was not until the 17th century that works of art began to be made solely for decorative purposes. These days, it is mostly men who make Asiri decorations as a form of art. However, women continue to use them in their homes and are very proud of their ability to create such beautiful designs. The origin of Asiri decoration goes back to the Bedouin tribes living in the desert. They would decorate their tents with intricate patterns made of goat hair, which were then sold to other tribesmen.)¹⁴(

Works of art began to take on a more personal meaning when they were used to decorate homes and other buildings. The decorations became an expression of unity between members of different tribes who would come together for celebrations such as weddings and funerals. They were not considered artists but were called “Asir” women who would decorate their homes with these decorations.

Asiri motifs can be found in the Saudi Arabia region. These patterns have been part of the culture and lifestyles of the people living in the area for centuries.

Women played an integral role in creating these designs. The women are given specific instructions on how to draw each pattern and then color it in different colours. Asiri ornaments are a type of Islamic art developed by Saudi women over the past few decades. The motifs are inspired by nature and everyday life. Asiri decorations are usually made of clay and painted with acrylic. They can be seen on walls, ceilings, windows, doors, furniture and even clothing.

Asiri decoration is believed to be one of the oldest art forms in Saudi Arabia, dating back to ancient times when people first created images representing themselves. These decorations were always geometric shapes with no color at all, but eventually artists began adding color to their works as well. There are several different types of Asiri motifs: flowers, animals, mandalas (a type of geometric pattern that represents a spiritual experience), human figures, geometric shapes and others.)¹⁵(

The Asiri cat:

This type of engraving is called Qat, or Zayan, as it decorates the walls of houses with overlapping geometric colors. Each part in this engraving has a name, purpose and colour. Among them is the builder, which symbolizes the female, and comes at the top of the cat. Among them is Al-Hadhiyya, which is an inscription that resembles a tree resting on a triangular base.

It also resembles compact mountains. Among the art of qatti is the engraving of ariyat, which is in the shape of a plant, and the net, which is geometric shapes overlapping rhombuses or squares of one color. It also includes the mihrabs, which is the shape of the mihrab, and the rakun, which is a large triangle shape that contains multiple inscriptions inside it. It also includes Balsannah, They are small, dotted circles that come at the end of the foot in the forearm. There is also an engraving of combs that resemble the teeth of a comb, which are parallel lines pointing up or down at the end of the comb. The inscription on the stalk is three dots resembling ears of corn. There is an inscription in the cat called “Sankar Wali” in the form of adjacent parallel niches, but it comes towards the right. There are also parallel lines at the bottom of the inscription, and they are called triangles if there are three, or pentagons, and these sometimes come alone in specific places in the house, and resemble a palm, which is a group of parallel lines that are at the bottom of the wall or on the stairs. The art of the Asiri cat entered the world after UNESCO included it in 2017 on the list of intangible cultural heritage. It is considered one of the important arts in southern Saudi Arabia. It has been known for hundreds of years in the country of Tihama, and its colors and shapes have evolved over time. Colors were not an obstacle, rather they were used within the simple environment. The black is from stove charcoal with wax added to stabilize the color. In front of the red color is beauty powder, which women used to decorate hair partings, and something was added to it to lighten the intensity of its color. As for the green color, it was taken in the past from green arsenic and white acacia.

As for the blue color, it is taken from blue arsenic and added to white acacia. Women referred to as cats have excelled in this art, such as Fatima Abu Qahs, may God have mercy on her, and she is one of the most famous and distinguished women in the art of cat art in Rijal Alma'. Her last work was in 2001, at her son's house in Rijal Almaa.

The cat today:

The cat is a Tihami motif closer to abstract art. It appeared in the south of the Kingdom of Saudi Arabia at the hands of the Asir woman, who excelled in it. Today, the walls of the Abha Palace Hotel are decorated with an artistic painting of the cat Lady of the Cat, Fatima bint Ali Abu Qahs, and she receives significant admiring glances at this artistic inscription that used to decorate the Asiriya homes with the fingertips of its women. The beauty of this art contributed to its survival, with the availability of safe colors and dyes that became accessible to everyone, so many girls decided to learn it. Among them, many names emerged who were skilled at cats as skilled as the first Asir ladies, such as: certified trainer Fatima Al-Almai, Zahra Faye, Sharifa Mahdi, and Fawzia Barzeeq. The cat didn't just stop at the walls. Rather, it has gone beyond it to include collectibles, printing on furniture, and even fashion. But its presence on the walls, its first place is authenticity and the title of beautiful art in the Asir region. Tourist attractions were not devoid of his murals. In 2015, an 18-meter-long mural of the Asiri cat was displayed

in the United Nations building in New York, in which a number of skilled female artists participated in this art. It was called “Our Mothers’ Home.” It received remarkable admiration. This mural was the material proof that this art must be registered within the human cultural heritage.

Characteristics of the Asiri cat art:

They are part of the artistic tradition of the region and can be seen in museums and galleries around the world today. The art form first appeared when women created these designs from glass or metal, using beads and gold thread as well as silk embroidery to create intricate designs resembling traditional tribal art from Yemen. The motifs were then passed down from generation to generation until they were eventually recorded by historians.

This style has been passed down for generations, and remains popular today. They can be seen on the walls and ceilings of buildings, as well as in hand-carved wooden furniture. Motifs are often made with geometric shapes such as squares, circles, or triangles. They may also contain animals representing fertility or good luck.

The use of colors is very important for this style, as the colors used should be bright and vibrant so that everything looks colorful when viewed from a distance. It is also important that the colors chosen do not clash with each other too much because they will blend together when viewed from a distance

Asiri heritage:

The Asiri House is a piece of ancient Saudi heritage and is considered the most important thing unique to the southern region. It is distinguished by many features that differ from the rest of the regions. The house is distinguished by its exquisite design and saturated colors from the inside. What draws attention in local architecture is the difficulty of matching the blocks and the distribution of small windows. On the external facades, which shows us the builders' serious attempt to spread harmony and harmony between the interior and the exterior, and also reflects to us their success in choosing geometric units that suit the external building space, which were abstract geometric units that arouse in the same viewer the desire and curiosity to enter. This building and wandering inside it to learn a lot about it, and enjoy the decorative drawings and engravings it contains, and the many colors inside.

Architecture in Asir has diverse styles due to the diversity of climatic conditions and the availability of building materials in the region. These buildings were built together around each other, or individually, or apart, but most of them were together, adjacent, and adjacent, and the close proximity of the dwellings was a result of the security conditions in the past, as I found. Narrow roads and corridors lead outside these residential neighborhoods, the characteristic of which is to protect passers-by from the sun's rays, rain and wind. These dwellings may consist of one floor or several floors, and these buildings narrow as the building rises, providing the building with a broad base. For stability and resistance.

Walls:

The lady of the house was responsible for the interior appearance of the building. She began her work in interior decoration after the man had finished his role in building, installing the windows and doors, and making very small openings in the walls for ventilation. She would then smooth the walls, decorate them, and color them, because the house was It is the focus of women's attention. The woman did not accept that her house should have an ordinary shape, so she used to decorate it with the help of the women of the village. They covered the interior walls with a

layer of plaster, and after it dried, they beautified it with various types of drawings and decorations. The drawings were symbols with specific connotations called cats. They linked the general composition and the surrounding environment, but in the form of symbols that move the viewer from the state of visual representation to the state of abstraction, using simplicity in linking the idea and color. The floors may be colored with color or beautified with the fingers of the hand, so after covering the floors with a layer of clay, the women create regular decorative effects. With the fingers, she combines the sunken and the protruding, and in this way the woman took advantage of the materials available in the environment, such as colors, clay, and stones, for decoration, and she used them in the optimal organic way, thus combining the aesthetic form with the utilitarian function.

Flooring:

The floors inside Asir homes may be colored green, resulting in clover sticks on the ground, or the floors of dwellings may be beautified with their fingers. After covering the floors with a layer of clay, women create regular decorative effects that combine between the sunken and the prominent. The floors may be plastic paintings, as in the walls and These paintings are evident on the surfaces of the stairs or ladders, which women decorate with abstract geometric decorations.

Bishop:

Due to the abundance of plants and trees that characterize the Asir region, the use of wood has spread in construction operations, especially in ceilings for all architectural styles, due to the ability of these woods to insulate heat, as the wood maintains the temperature of the room, and the wood in its natural color is not used, but must To add the aesthetic touch that characterizes the people of the region, they color these woods in bright popular colors so that they match the colors of the room and the interior of the house. The ceilings are also painted in some patterns, especially nest patterns, in an abstract, geometric, botanical style.

Origin of cat art colors and motifs:

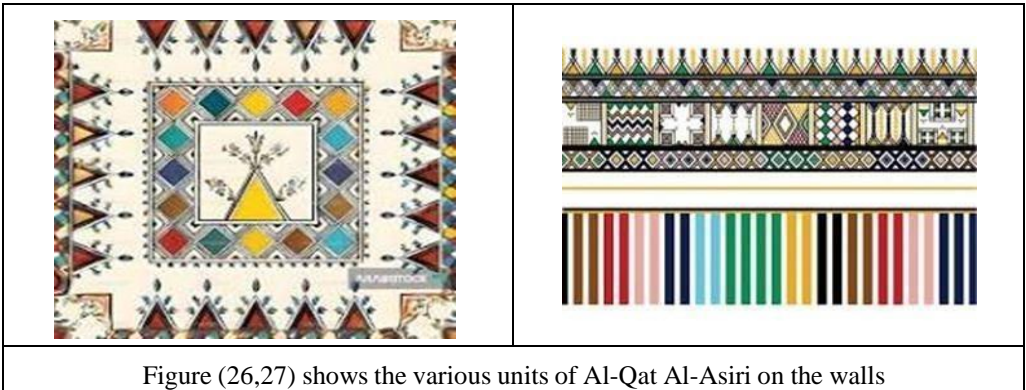
Plastering begins with preparing the wall by making a powder from the layers of gypsum and adding glue to it, to form a mixture that gives the walls a shiny appearance and makes it easy to color this layer. To prepare the colors, women grind the colored materials extracted from nature until they become a fine powder on a stone mill. The powder dissolves and is then mixed with glue, which gives it viscosity so that it becomes more cohesive and the color is easily fixed. The colors used vary and include red (hardship stone), yellow (turmeric), black (charcoal), and green (clover), and blue was added later after merchants brought it to the region. Women draw shapes using a feather made from a goat's tail.(16)

As for decorations and engravings, they have taken on several connotations and meanings. Horizontal lines indicate stillness and stability, and curved lines indicate vitality and flexibility. The inscriptions reflect certain connotations, including the “feathers,” which indicate the relationship between the female and the plant, and the “mihrebs,” which symbolize the religious aspect that Asiri society cherishes. Studies also indicate that decorative patterns differ according to the villages and geographical locations of the Asir region. The art of “cat” is still preserved in

the memory of Asiri society through the murals that moved from Asiri homes to the most important hotels and tourist places. This art also symbolizes social cohesion and solidarity in ancient times, as when men finished building and maintaining homes, the neighborhood ladies would gather to finish decorating the house from the inside by drawing and engraving cat murals, as in Figure (26,27).

One of the cats who became famous for this art is the late popular artist Fatima Abu Qahs, who was considered a teacher in the art of cats and continued to practice it professionally for 70 years. Abu Qahs worked on decorating many tourist places, such as Razih Fort and Al Alwan Fort, and she also designed a large mural hanging in the luxurious Abha Hotel.

Abu Qahs was chosen as the most famous heritage figure at the Janadriyah Festival in 2007. Because creativity is born from the womb of suffering, the artist Fatima mastered this art due to her difficult living conditions, as it was her only source of livelihood after the death of her husband and her support for her three children. It is worth noting that Abu Qahs inherited this talent from her mother and excelled at it since childhood without obtaining any educational certificate.



Second: Practical framework:

Multiple experiments were carried out, taking advantage of the results of the study in the theoretical framework, and after that, several contemporary designs were made, derived from the decorations of the Asiri art of the Kingdom of Saudi Arabia, and they were used in several artistic crafts by exploiting the remains of fabrics. Each material has unique qualities that can be exploited with success. With other materials to create various designs for the sustainable development of the artistic work, and in order for this process to be completed, its nature and design standards must be recognized, in addition to the presence of a strong contradiction and discrepancy between the patchwork methods used that helped achieve the objectives of the research and its hypothesis, and that is through the implementation of several designs that have been implemented As follows (17)

First: the raw materials used:

Remnants of fabric - tracing paper - ruler - pencil - needle pins - scissors - carbon - roulette wheel - marker - white glue - nail file - cork - scalpel -.

Second: Techniques used: Various patchwork techniques

Third: Source of quotation: From the Asiri art decorations of the Kingdom of Saudi Arabia.

Fourth: Steps to implement the research experiment:

- 1- Collecting leftover fabrics from workshops and factories in the area.
- 2- Determine the type of design to be implemented.
- 3- Sorting leftover fabrics and assembling pieces suitable for the chosen design in terms of material, color and texture.
- 4- Choose the appropriate patchwork style for the design and selected fabrics
- 5- Implementing the design by drawing on the flat pattern, until the final product.

Implemented design group:

A group of different designs have been implemented and various types have been used

Various types of patchwork were used in implementing these designs, with the use of various types of used clothing fabrics. Some tools were used in implementing the designs using patchwork, including a special ruler, scissors, cutter, cutting board, iron, templates, pin holder, and white glue. These designs were evaluated and analyzed technically.



The first artistic work



The second artistic work



The third artistic work



The fourth artistic work

Analyze and interpret results:

- 1- Patchwork art can be used to enrich the aesthetic aspect of the artistic work
- 2- The materials used in implementing the artwork using the patchwork method enrich the functional aspect of the artwork.
- 3- Achieving sustainable development is the world's goal and the goal is to benefit from positive energy in various aspects of life.
- 4- The research idea can be used to establish a small, low-cost project.

Recommendations:

- 1- The research recommends directing research in the field of artistic works to draw inspiration from the decorations of Asiri art and benefit from its diverse approaches to enrich the artistic field.
- 2- Paying attention to creating training programs that contribute to the development of creative thinking to support the idea of recycling and benefit from it in opening fields of work for young people.
- 3- The research recommends the necessity of emphasizing the strengthening of the relationship between heritage and art, which is done through studying it, revealing its aesthetics, Asiri art, and investing it in the artistic field in general and the field of artistic works in particular.
- 4- Encouraging small projects, such as exploiting leftover fabrics, to reduce unemployment.
- 5- Increase research on leftover fabrics, while clarifying their three dimensions, which are reducing unemployment, optimal exploitation of leftover fabrics, and rationalizing consumption.

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