

*The Effectiveness of Integrating Metal and Textile to Creating Contemporary Artworks
Inspired by Egyptian and Saudi Heritage*

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Abstract

Heritage expresses the link between human beings, their land, and their culture. It correlates the present with the past and promises the future. It means gaining knowledge, experience, and skills and provides the opportunity to create, develop, and innovate. Thus, this study investigated the effectiveness of integrating metal and textile to create contemporary artworks inspired by Egyptian and Saudi architecture heritage. It also addressed a geographical and historical introduction to Saudi Arabia and Egypt and reviewed some traditional folk crafts, code, decoration color, and symbolic meanings. Then the researchers, on the practical side, designed four innovative designs and applied them to the art using some of the decorations, the popularity of Egyptian and Saudi heritage, and the development of a range of modern designs and artworks. The research adopted the descriptive and experimental method and practical procedure by designing, borrowing, and inspiration—analysis of specific traditions and the methods of their ornament. Recommendations are given for practical ways other art and design faculty can build their art from heritage.

Keywords: Metal, Textile, Egyptian and Saudi Heritage

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Introduction

Heritage expresses the connection of man to his land and culture. It connects the present with the past and heralds a bright future. It is a means of acquiring knowledge, experience, and skill and allows innovation, growth, and renewal. Heritage represents individual and group identity, sense of place, and belonging (Smith, 2022). In other words, heritage is the culture that is transmitted from one generation to another. Heritage is based on the results of civilization in all fields of human activity, and the social and economic heritage includes the kind of life that our ancestors lived in their customs and traditions and the clothes they wore.

The Saudi vision (2030) encourages designers to search for new sources full of material folklore & heritage that had not previously been studied. It provides the framework that the Ministry of Culture adopts in support of the Kingdom's cultural sector, which identifies three central objectives: 1) Promoting culture as a way of life, 2) Enabling culture to contribute to economic growth, and 3) Creating opportunities for international cultural exchange (<https://www.moc.gov.sa/ar>).

Heritage has a significant developmental role that many experts have studied and stressed that governments have a considerable role in achieving that developmental role. Research by Aljahani, (2019) express that every society knows its own identity that distinguishes it from other cultures. Heritage has a position in the world and its relations with other communities according to that identity produced by the cultural factor, developed and accumulated for history and the cultural heritage, both moral and material.

Material culture is handicrafts and traditional tangible production of industrial products made from natural raw materials such as clay, wood, leather, fiber, and metal. Traditional culture is considered one of the most important material cultures in societies. (Yang, others el., 2018). However, material culture is the transformation of raw material into a specific form that serves a purpose for Saudi society, such as folk arts, crafts, buildings, clothing, and food (Al-Bassam, 1985).

In general, heritage is a source of inspiration and quotation for designers. Suppose they neglect the value of heritage as a source of inspiration for contemporary designers. In that case, they will thus overlook a treasure with innovative designs that the designer refers to as the architectural heritage. There are many architecture heritage designers can inspire from such as a historic building, a town site, an important archeological site, or a work of monumental sculpture or painting (Aljahani, 2019).

Research by Al-Bassam (1985) emphasizes that we must pay attention to reviving the heritage of these people for fear of losing the features that distinguish society from others and our distinctive identity. Likewise, Egypt and Saudi Arabia are considered one of these Islamic societies. Along with this, the current research aimed to investigate the effectiveness of integrating metal and textile to create contemporary artworks inspired by Egyptian and Saudi architecture heritage. It also addressed a geographical and historical introduction to Saudi Arabia and Egypt and reviewed some traditional folk crafts, which included code, color, and symbolic meanings of architectural heritage. Thus, the researchers designed and applied four innovative designs that developed a range of modern artworks by integrating metal and textiles inspired by Egyptian and Saudi architecture heritage. Thus, this research answered the following question:

1. What is the effectiveness of implementing innovative artistic designs in a textile and metal style from the Saudi and Egyptian architectural heritage sources?

Literature Review

Heritage is the cultural elements transmitted from one generation to another. Heritage refers to the results of civilization in all fields of human activity, and social and economic heritage includes the kind of life that our ancestors lived in their customs and traditions, such as building (Alzahrani, 2022). The current research focused on architectural heritage (building) as one of the traditional folk crafts. Then, researchers analyzed the code, decoration color, and symbolic meanings in both Saudi and Egyptian architecture heritage.

Saudi Arabian Architecture Heritage

Location

Saudi Arabia is located in the Middle East. Saudi Arabia is bordered by the Red Sea to the west, Yemen and Oman to the south, the Persian Gulf, Qatar, and United Arab Emirates to the east, and Kuwait, Iraq, and Jordan to the north.

On the other hand, this study includes the three regions of the Kingdom which are central, western, and southern (Ahmed, others el., 2022). The following figure (1) shows the map of Saudi Arabia.



Figure 1. The Map of Saudi Arabia

The architectural heritage

Architectural heritage is unique and has standard features reflecting the Islamic culture. The characteristics include fabric, design, shape, materials, layout, surroundings, and external and internal features. The forms are ideas and feelings of the Saudi artist with values in the social and cultural environment (Alzahrani, 2022). As well as that, the artistic traditions of Islam are apparent in a rich system of ornamentation applied to art and architecture. Islamic ornamentation includes three predominant types of decoration calligraphy, vegetal motifs, and geometric patterns. Figural forms of humans or animals are not typical in response to Qur'anic commandments against idolatry. Instead, abstract shapes of decoration are used to

create visual statements about religious ideas and express the logic in the Islamic vision of the universe. (Jowers, others, 2010).

The Saudi architectural heritage belongs to four regions which are central, western, southern, and eastern. Each region has its unique urban style in addition to the Islamic style (Ghazala, 2021). Thus, the traditional buildings vary according to the geographical and climatic environment diversity. There are flat and mountainous areas, desert, and coastal environments. Thus, this study included the three regions of the Kingdom (central, western, and southern). The researchers analyzed the traditional buildings in the Kingdom of Saudi Arabia with Textile techniques as follows:

- The Najdi style. Najdi style (Najdi Houses) is central to Saudi Arabia. Diriyah includes a distinct heritage architecture, containing many aesthetic values that make it a fertile material for creativity in the art of painting (Almogren, 2020). The wooden doors in the heritage Saudi architecture are overlapping, opposite, symmetrical decorative, and geometric shapes. The decoration in those doors depends on the geometric and plant decoration to a large extent, such as the triangle, the circle, the square, the intersecting lines, the simulation of roses, leaves, palm fronds, and bunches of grapes. The colors used are bright colors such as yellow, blue, red, green, and black (Alsoliman, 2019).
- The Al-Asiri style. Asiri style (Algatah), the southern of Saudi Arabia. The Asir region of Saudi Arabia has a rich heritage that is deeply influenced by the charming nature of the place. Asir is characterized by the art of "Al-Kutt Al-Asiri," A'siri's cat, aesthetic calligraphy, inscription, and composition created by specialized women who have memorized this art from generation to generation. This art is characterized by using natural and bright colors such as blue, orange, green, white, and black (Korban, 2020).
- The Hijazi style. Hijaz style (Hijaz houses) The Western of Saudi Arabia. The Roshan is a boxy or polygonal wooden protrusion extending from the front of the house to overlook the external space and has different shapes (Alitany, 2014). Al-Rawashin was famous in the Hijaz region, especially in the city of Jeddah and Makkah, and it is considered a heritage and historical area (Ghazala, 2021).

Textile (Weaving)

Yarns are made into fabrics or textiles through many different processes. Weaving is the most common method used. There are three basic weaves: plain, twill, and satin. All other weaves are a variation or a combination of these weaves (Marshall, 2000).

The predominant design type is found throughout the Arabian Peninsula. Plain weave is the simplest and most used in Saudi Arabia, such as Bedouins, Asir, and Baha. The loom and soft wool yarn are used for the weaving process (Ross, 1994). As shown in Figure (3), each warp yarn passes alternately over one and then under one filling yarn for the whole length of the fabric. Two adjacent warp yarns interlace exactly opposite. One warp yarn goes under the same filling yarn as the first and second. Fabrics require two harnesses to weave the body of fabric because the weave repeats every two ends (Johnson & Sarkar, 2015). Indeed, the current research picked one basic weave, which was a plain weave to create artworks.

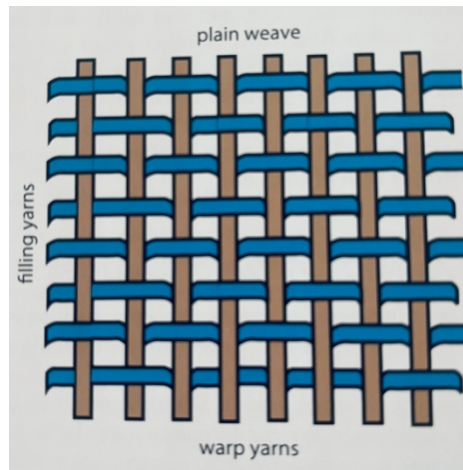


Figure 2. Plain Weave

Egyptian Architecture Heritage

Location

Nubia is the region in southern Egypt along the Nile River to northern Sudan. Most of Nubia is located in Sudan, and about 25% of it is located in Egypt. It is called the country of gold because the name Nubia is derived from the word (Nub), which means gold in the ancient Egyptian language (Fathy, 2010).



Figure 3. The Map of Egypt.

The Architecture Heritage in El Nuba

The researchers analyzed some traditional buildings in El Nuba (Egypt) with metal works. The symbol is one of the most important elements of folklore in general and the Nubian in particular, and the symbol is characterized by flexibility in order to coexist with cultural change and the diversity of concepts (Ibrahim, 2013). The symbols on the heritage buildings in Nubia were different. The decorations in the Nubian heritage were used to fulfill symbolic goals that the artist seeks to confirm through many beliefs that date back to early periods of time; these beliefs appear in many aspects of Nubian life, and the belief in the presence of

people who have the ability to "envy" represents a large In the Nubian culture, where all measures are taken to ward off the harm of the envious eye, such as the use of scorpions, crocodiles, lions, birds, fish, star and crescent, camels, plant and engineering reptiles, and others (Shehata, others., 2013).

Metallurgy

Metallurgy is a process used to extract metals in their pure forms, such as diamonds, gold, iron, bronze, and copper (DebRoy, others. ela, 2021). The ancient Egyptians found minerals 5000 years ago, where the luster contributed to the growth of civilization; even every era was called a typical metal. In 1995, the World Minerals Organization (WMO) developed a definition that says that a mineral is a chemical element or compound that is crystalline, formed as a product of geological processes (Khalil, 2014). However, the most prominent metal art techniques are casting, cutting, engraving, filigree, stamping, and direct forming in metal artworks.



Figure 4. Mineral in Egypt

Based on the literature reviewed, this study focused on the effectiveness of integrating metal and textile to create contemporary artworks inspired by Egyptian and Saudi architecture heritage. In addition, it expressed a geographical and historical introduction to Saudi Arabia and Egypt. Then, it reviewed some traditional folk crafts, including Islam ornamentation, color, and symbolic meanings in architectural heritage. Thus, the researchers designed and applied four innovative designs that developed a range of modern artworks with decorative units to benefit the production of art pieces using textile and metal techniques.

Methodology

The research followed the descriptive analytical method in studying the concept of Egyptian and Saudi Heritage. Although there are different folk heritage, the researchers chose traditional art architecture, including three buildings from Saudi Arabia and three from Egypt. Then, the researchers analyzed the code, decoration color, and symbolic meanings for each building in both countries to integrate metal and textile to create contemporary artworks inspired by Egyptian and Saudi Heritage buildings. In Saudi Arabia, the researchers included three styles of buildings which were: 1) Hijaz style, 2) Najdi style, and 3) Asiri style. In Egypt, the researchers had three styles of buildings from Nubian cultures.

Design Stages

The artist-designers can see something around them those others do not see, so they derived their ideas and designs from many sources that they considered to be sources of inspiration and provide them with innovative designs .Heritage architecture is one source of citation for

designers in their artworks. Before designing from Heritage, researchers were following sixth design stages:

First stage

It was the first identification stage, where designers stood in front of the heritage and dealt by studying and analyzing so that the process of merging between the designers and heritage was taking place to adapt it to serve design goals.

Second stage

It was the next stage in which the artistic heritage was assimilated and understood by the designers, which made them begin to formulate a new contemporary art form in line with the era's requirements, which required some addition to reformulating these elements and units.

Third stage

Absorbing the heritage, in which the designers stood on the best technical formulas for the design elements and methods of implementation. The designers started with the artwork after choosing and determining their final image. Thus, the final composition carries with it the spirit of the age and past fragrance.

Fourth stage

Objective inspiration meant taking inspiration from the heritage, which was not to transfer the heritage in a literal way or as it was, but rather the designer chose objectively from the heritage.

Fifth stage

Aesthetic inspiration in form and subject, as heritage has two sides of the form or the outer frame. The other side expresses the artwork's content, subject, and main idea. The basic components were the main elements, such as lines, colors, symbols, and meanings.

Sixth stage

Applying, which was the final state that the designers reached for the desired image of the artwork affected by heritage, in which the artwork reached climax to combine originality and contemporary.

Results and Discussion

The result answers the research question, which was “What is the effectiveness of implementing innovative artistic designs in a textile and metal style from the Saudi and Egyptian architectural heritage sources?” During the study, researchers created artworks inspired by Saudi and Egyptian architectural heritage by integrating metal and textile. After designing, researchers applied some of the traditional decorations' symbols, colors, shapes, lines, and motifs. The result showed four innovative designs that created a range of modern artworks with decorative units to benefit the production of art pieces using textile and metal techniques which were: a necklace, a bag, a hat, and a portrait. Each design includes three

demonstrates which describe the process. The following demonstrates how each design is applied:

Design 1

Techniques name:

- Textile (plain weave beads), Table (1).
- Metal silver, (crocodile forming), Table (2).

Tools & materials: Bead (green, brown, silver, purple), Loom, needle, Plastic threads.

The name of design piece: A necklace, Table (3).


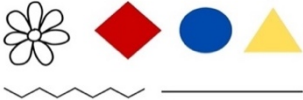
| Country | Saudi Arabia |
|------------------------------|--|
| Description | Najdi style (Najdi Houses) The central of Saudi Arabia (Woody door) |
| Architecture heritage source |  |
| Unity |  |
| Analysis unity | <ul style="list-style-type: none"> - Vegetal motifs: Flowers and roses. - Shape: Triangle, circle, square, diamond, and dots, - Lines: Straight and zigzag. - Color symbol: <ul style="list-style-type: none"> Red: Strength, courage, and work. Blue: Calm and patience. Sand and brown: Natural from desert and color of sand. Yellow: Wisdom, optimism, hope, memory, and intelligence |

Table 1: Source for Textile



| | |
|------------------------------|---|
| Country | Egypt (Nuba) |
| Architecture heritage source |  |
| Unity |  |
| Analysis unity | -Figural form of animal: Crocodile -Symbol of crocodile: Strength and protection -Symbol of green color: Giving, growth, and goodness |

Table 2: Source for Metal


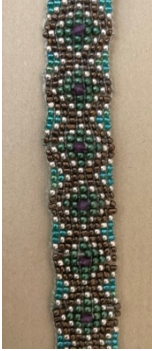




| Country | Saudi Arabia | Egypt |
|---|---|--|
| <p>Techniques:</p> <ul style="list-style-type: none"> -Textile (plain weave beads) -Metal silver, (crocodile forming). <p>Tools & Materials:</p> <ul style="list-style-type: none"> - Bead (green, brown, silver, purple), loom, needle, plastic threads. - Metal silver. |   |    |
| Final project of the necklace |  | |

Table 3: Apply Source (1), (2)

Design 2

Techniques name:

- Textile (Threads plain weave), Table (4).
- Metal work (silver), Table (5)

Tools & materials: Loom, woolen threads (black, beige, white), blue beads.

The name of design piece: Bag, Table (6)


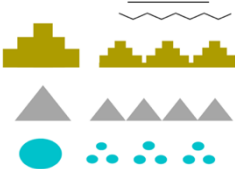
| | |
|------------------------------|--|
| Country | Saudi Arabia |
| Description | Najdi style (Najdi Houses) The central of Saudi Arabia. |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis unity | <p>-Islamic ornamentation (reptation)</p> <p>-Shape: Triangle, circle, square, and dots</p> <p>-Lines: Straight and zigzag.</p> <p>- Sambal of sand color: Natural from desert, earth, and sand.</p> |

Table 4: Source for Textile


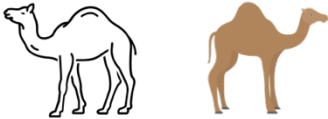
| | |
|------------------------------|--|
| Country | Egypt (Nuba) |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis Unity | <ul style="list-style-type: none"> -Figural form of animal: Camel. -Sambal of camel: Endurance and patience. -Sambal of sand color: Natural from desert, earth, and sand. |

Table 5: Source for Metal




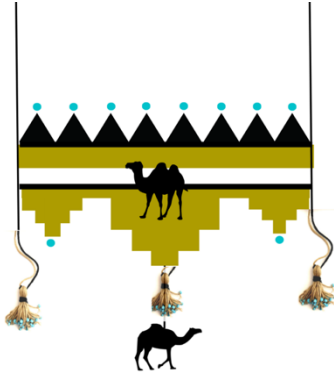

| Country | Saudi Arabia | Egypt |
|---|--|--|
| <p>Techniques Name:</p> <ul style="list-style-type: none"> -Textile (Threads plain weave). -Metal work (silver). <p>Tools & Materials:</p> <p>Loom, woolen threads (black, beige, white), blue beads.</p> |   |  |
| Design |  | |
| Final Project of the Bag |  | |

Table 6: Apply Source 1, 2

Design 3

Techniques name:

- Textile (Threads plain weave & Crochet), Table (7).
- Metal brass (Crocodile forming), Table (8).

Tools & materials: loom, woolen threads (black, beige, white, red), brown bead.

The name of design Piece: A hat, Table (9)



| | |
|------------------------------|--|
| Country | Saudi Arabia |
| Description | Alqatah style (Asiri Houses) The Southern of Saudi Arabia. |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis unity | <p>Vegetal motifs: Leaves and plant.</p> <p>-Shape: Triangle, circle, square, and dots.</p> <p>-Line: Straight and zigzag.</p> <p>Symbols:</p> <p>-Leaves: Goodness and fertility</p> <p>-Line: Flowing water</p> <p>-Colors: Red, yellow, green, wait, blue</p> |

Table 7: Source for Textile



| | |
|------------------------------|--|
| Country | Egypt (Nuba) |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis unity | <p>Figural form of animal: Crocodile. Shape: Triangle, circle, square, and dots. Lines: Straight and zigzag. Symbols: Leaves: natural, crocodile: strength and protection. Green color: Giving, growth and goodness.</p> |

Table 8: Source for Metal





| | | |
|---|--|--|
| Country | Saudi Arabia | Egypt |
| Techniques Name: -Textile (Threads plain weave & Crochet). - Metal brass (Crocodile forming). Tools & Materials: Loom, woolen threads (black, beige, white, red), brown bead. |  |  |
| Design |  | |
| Final project of the hat |  | |

Table 9: Apply Source 1, 2

Design 4

Techniques name:

- Textile (ribbon plain weave), Table (10).
- Metal silver (Fish & plant forming), Table (11).

Tools & materials: loom, stain ribbon (green, brown, pink), green & brown beads.

The name of design piece: The portrait, Table (12)

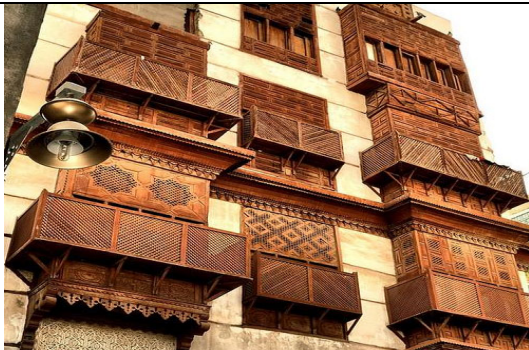
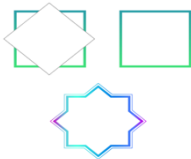
| | |
|------------------------------|--|
| Country | Saudi Arabia |
| Description | Hijaz style :The western of Saudi Arabia. Al-Rawashin is woody window in Hijaz houses. |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis Unity | Ornamentation: Islamic geometric patterns. Symbol color: Brown: natural from desert, earth, and sand. |

Table 10: Source for Textile


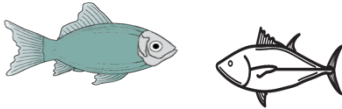
| | |
|------------------------------|--|
| Country | Egypt (Nuba) |
| Architecture Heritage Source |  |
| Unity |  |
| Analysis Unity | Figural form of animal: Fish. Symbols: Fish: Goodness, hope, and reproduction. Blue color: Cold. |

Table 11: Source for Metal


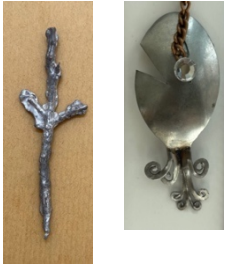


| Country | Saudi Arabia | Egypt |
|--|---|---|
| <p>Techniques Name: -Textile (ribbon plain weave). - Metal silver (Fish and plant forming). Tools & Materials: Loom, stain ribbon (green, brown, pink), green and brown beads.</p> |  |  |
| Design |  | |
| Final project of the portrait |  | |

Table 12: Apply Source 1, 2

Conclusion

The study investigated the effectiveness of integrating metal and textile to create contemporary artworks inspired by Egyptian and Saudi architectural heritage. It also addressed a geographical and historical introduction to Saudi Arabia and Egypt and reviewed some traditional folk crafts (architectural), code, decoration color, and symbolic meanings. The researchers designed four artworks applied to the art and used some of the decorations and development of various modern designs and artworks inspired by Egyptian and Saudi architectural heritage. The result showed four innovative designs that developed a range of modern artworks with decorative units to benefit the production of art pieces using textile and metal techniques. There were three architectural heritage ornamentation in art and design which include:

- Islamic geometric patterns which included principles, symmetry, repetition, balance. The patterns could be seen to be composed of simple polygons such as squares, triangles and stars.
- Vegetal motifs such as flower, rose, plant, and leaves.
- Figural forms of humans or animals such as crocodile, camel, and fish.
- Elements of design such as line, shape, color.

- Symbol or meaning ornamentation such as color, vegetal motif, and figural form of animals.

Recommendations

- Explore heritage for more sources in Art & Design.
- Integrate Heritage into teaching and learning.
- Include architectural heritage in curriculum higher education.
- Build community among students and faculty in learning types of heritage in different countries.
- Consider a lifestyle that achieves the distinctive personality of the heritage, which helps raise the status of the Kingdom of Saudi Arabia and Egypt internationally.

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