



# The Aesthetics of Employing Marine Nature in the Kingdom of Saudi Arabia Using Direct Drawing Printing to Enrich the Printing Plate

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## Abstract :

Nature is the source from which each artist was inspired by the value of plastic and spiritual and formulated in his distinctive and diverse style, as well as the mother under which all the arts grew up, the current research is trying to find design solutions to build a balanced design composition and create a new structural structure, and in this research a new vision and mental approach are presented in building contemporary designs by employing the forms of different marine organisms found in nature and formulating them in a new way based on transformation and formal development through deletion processes And addition, simplification and complexity, and accordingly, the current research has studied the seabed and its contents of different systems and structural structures, as it contains different forms, both organic and geometric, which are characterized by the intertwining of their relationships and the diversity of their directions and lines. The research aims to study the different plastic potential of the forms of marine nature and the aesthetics of the seabed and identify their artistic and aesthetic characteristics, and adapt those values and capabilities and employ them in new plastic formulations that combine simplicity and modernity, whether in terms of prepared design or performance methods and then used in printing pendants, as the research is based on the experimental descriptive approach. In light of the results of the study, several recommendations were made, including the intensification of studies with various objectives in the field of printing by taking advantage of the marine nature, and the adaptation of marine raw materials in the production of works of art in all technical fields.

## Keywords:

Aesthetics – employment -Marine nature -Saudi Arabia-Direct Graphic Printing-Printed Painting

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## Introduction:

"Nature is the main source of inspiration for the artist because of the countless forms and variations of lines, spaces, shapes, touches, colors, space, etc., these elements are characterized by diversity and permanent change in their visual appearance according to what happens in nature as a whole of variables" (Fatima Abu Al-Nawarij, 1994, p. 25).

Nature is full of meanings, emotions and formal richness in installation and construction, so it is considered the most important source of inspiration for the artist, because of its high aesthetic values, so it has become the source from which the artist and designer inspired all his laws and structural and formal systems, which are always developing and growing in continuous movement and permanent development, so the current research poses several questions, the most important of which is whether it is possible to benefit from the use of marine organisms in the artistic printing technique to obtain an aesthetic value for the arts of printing, as the research aims to Highlighting the concepts and values of the variety and aesthetic forms of different marine organisms and shedding light on the connection of the seabed with the arts of artistic printing, where the plastic elements and aesthetic values are available. Through these entrances, the concept of aesthetic values of the shape of the fish, its types and the different plastic capabilities of the forms of marine organisms were clarified. One of the most important findings we have reached . Adapting the different plastic capabilities of the different forms of marine organisms and employing them in new plastic formulations that combine simplicity and modernity, and the research is based on the experimental descriptive approach.

### **Search problem:**

The research problem is determined in answering the following questions:

1- What is the possibility of benefiting from the features of marine nature in creating new designs that are employed in paintings printed directly on canvas?

This question includes several questions:

2- To what extent can the aesthetic values of the direct graphic printing method be employed in printing artistic units inspired on fabrics?

3- What is the possibility of making designs that are employed in printed paintings inspired by marine nature?

### **Research Objectives:**

The research aims to:

1- Identify the aesthetic plastic values of marine organisms.

2- Trying to research how to employ the plastic values of the forms of different marine organisms in an artistic manner that highlights the beauty of each form, so that they harmonize in a set of aesthetic and expressive values.

3- Highlighting the aesthetic values of the printing style by drawing directly on fabrics.

### **The importance of research:**

The importance of the research is due to:

1- Detection of aesthetic images in the forms of marine organisms.

2- Opening new horizons in the design of contemporary printed art painting fabrics through the establishment of small projects.

3- Contribute to the establishment of small projects based on the art of direct drawing, which reduces unemployment and raises the national economy.

### **Research hypotheses:**

1- The research assumes that the artistic vision of marine organisms and their analysis in terms of general shape, color and surface texture comes with new formative solutions.

2- The research assumes that the combination of forms of marine organisms and their streamlined in contemporary designs enrich the printing plates in the field of textile printing.

## **Research Methodology:-**

The research follows the experimental descriptive approach to suit the objectives of the research and verify its hypotheses with the applied study.

### **Search limits:**

#### **1- Objective research limits:**

- Microscopic descriptive study of some forms of marine organisms.
- Printing is limited to the direct drawing style.
- The use of opaque, transparent and prominent printing pastes.
- Print on cotton canvas.

### **Search terms:**

#### **Nature:**

Nature is the great truth that surrounds man in all that God Almighty created from mountains, rivers, skies, seas, trees, animals, birds and all the basic structures in the universe, as it is all that was made by the hand of the Creator and did not extend to the hand of man (Fatima Abdul Hamid Abu Al-Nawarij, 1994, p. 24)

#### **Direct Drawing:**

Free drawing or coloring means: using any tool manually to record and transfer dyeing solutions to the fabric and it can be said that the method of free drawing on textiles is the oldest method ever in the decoration of textiles, it was found on a woven piece dating back to the Persian era recorded on it a scene showing the fishing of seahorses. (Mustafa Mahmoud Hussein, Hussein Hajjaj, 1993).

#### **Aesthetic values::**

Values represent the aesthetic foundations of elements and forms, whose interaction achieves an aesthetic vision through which the taste and enjoyment of aesthetic visuals are achieved, and whose existence is controlled by the laws of aesthetic energy, the dynamics of surfaces, diversity, nacelle, homogeneity, value, intensity, and degree, whose existence achieves an aesthetic addition to the connoisseur and practitioner.

#### **Marine nature:**

Nature is all that is not man-made, such as forests, deserts, mountains and various environmental manifestations, including the elements of trees, animals, birds, marine organisms, rocks, coral reefs and various organisms that live in different environments. Hassan, Ashraf Abdel Hakim (2011), p. 45).

#### **Previous studies:**

**1-Study: (Rita Ramzi Wadih Ghattas 1999) entitled: (Linear rhythm systems in the structure of selections of sea snails as an introduction to teaching calligraphic designs)** This study targeted organisms that live in seawater with formal formations of a special nature, which they acquired from the environment in which they live, and examples of these organisms are: Snails Marine, shells, and oysters, most of which share a spiral structure that is a fertile source for the study of the calligraphy element, its rhythmic systems, and a source of imagination and innovation. The study may be useful for current research in identifying marine species species.

**2- Study: (Iman Muhammad Tawfiq Al-Sukkari: 1989) Study Title :(Extracting geometric shapes from nature in printed designs)** In this study, the researcher has been exposed to nature by addressing the plant element, and its rich aesthetic and plastic values commensurate with its biological functions, with the aim of identifying constructive values and laws through vision Microscopic plant, and benefit from it in the innovation, and production of printed designs.

**3- (Dalia Al-Mohammadi Mohamed, 2009): A study entitled (Building Systems for Coral Forms to Create an Artistic Workpiece)** This study aims to use plastic solutions and technical and technical capabilities commensurate with the nature of the material used and the function for which the workpiece was prepared, whether aesthetic or functional. This study is consistent with the current study that it dealt with and was interested in studying the shape of coral and benefiting from it in the artwork. This study differs with the current research that the current study is concerned with the aesthetic values of coral reefs.

**4- (Marwa Ezzat Mohamed, 2011) a study entitled (structural systems of morphogenic design as a source for teaching decorative designs)** "This study aims to deepen the designer with the concept of the morphogenic system and its relationship to decorative designs and also aims to invest the morphogenic system in extracting structural systems as a source of decorative This study is consistent with the current research in that this study was interested in studying structural systems and benefiting from them in enriching decorative designs" and differs with the current research in that the current research was concerned with the aesthetic values of coral reefs to enrich the printing work of students of art education.

#### **Procedural steps of the research:**

##### **First: Theoretical Framework: It includes:**

- 1- Studying the concept of inspiration from nature.
- 2- Studying the role of inspiration from nature in achieving innovation and sustainability in design
- 3- Studying the different formal aesthetic values of the forms of marine organisms.

##### **Second: Practical Framework:**

By benefiting from the results of the study in the theoretical framework

- 1- Experimental practices carried out by researchers, to benefit from combining the forms of different marine organisms and implementing them in contemporary printing designs.
- 2- Adding variables such as the colors of printing fabrics (pigment) transparent, opaque and substantial, and color value variables.
- 3- Implementing and employing these applied experiments in contemporary printing pendants to achieve artistic and aesthetic goals.
- 4- Providing results and recommendations in the light of the results of the research.

##### **First: Theoretical Framework:**

##### **The concept of inspiration from nature:**

The word inspiration from nature (Biomimicry) is etymologically based on a set of Greek roots, where the word bio means life and Mimicry means inspiration. The term first appeared in scientific studies in 1962. Its use increased over time, especially among scientists working in the field of materials science in the eighties, (Pawlyn, 2011), and this term actually appeared three decades after the sixties in the book of Jeanine Benyus (Benyus) in 1997 - an American biologist and pioneer in the specialty of "inspiration from nature - documenting and integrating her findings on inspiration from nature in the book "Innovation inspired by nature", and she knew Nature inspiration is "a new science that studies models of nature and then emulates or draws inspiration from these designs and processes to solve human problems," she said, adding that the main goal of nature inspiration is to achieve sustainability in design.

(Benyus.1997) In another definition, nature inspiration is "the simulation of the functional basis of biological forms, processes and systems to produce sustainable solutions", and therefore nature inspiration is a proposed guideline to be a paradigm shift for creative and problem-based learning necessary for education towards sustainability. (Elmeligy, 2016 )

Inspiration from nature (Ramzy , 2015) is categorized into three levels: organism, behavior and ecosystem. The design may be inspired by the characteristics of an individual organism or may be inspired by the behavior of the organism, or the design may be inspired by the entire ecosystem of the organism.

Inspiration from nature in design can be classified into:

- **Conceptual inspiration (behavior):** in which the behavior of biological organisms is inspired by the foundations or processes found in nature, which help in translating and applying them to building materials, forms and design systems.

- **Visual inspiration (living organism):** in which the shape of living organisms in nature is inspired and thus used in the creation of aesthetic aspects in product design.

**Computer inspiration (ecosystem):** Ecosystem inspiration is one of the most difficult processes of inspiration, but it is characterized by the possibility of revolutionizing design, as the nature mechanisms of biological organisms are inspired by the development of methods by which living organisms are linked to ecosystems.

### **The role of inspiration from nature in achieving innovation and sustainability in design:**

The concept of nature inspiration has a rich potential to help industrial designers solve complex human problems in their educational and professional lives by offering sustainable innovation, as nature continues to inspire design to solve problems through various fields. The concept of sustainability has become increasingly important given the environmental and climate crisis around the world, and has led to sustainable design gaining great importance to solve the sustainability crisis that the world faces today, in addition to innovation that is an important element. In today's rapidly changing economy, thinking about innovative and sustainable ideas to develop products and services is a vital component for companies to stay competitive. Product designers play an important role in the field of environmental design due to their location in the first stage of the product development process where design requirements are the most important decision made. (Gumulya & Andriato, 2020)

The development of artistic visions is related to the behavior of the individual's perception of the world, it is possible that the process of vision will not remain as it is now, but what has changed is the general concepts that guide the ways of perception.

The contemporary artist's handling of nature by tweaking, modifying and switching was not a dimension from nature, but in pursuit of what suggests the reality of those forms, and therefore the modern artistic formation is not an escape from the reality of the natural environment, but contemporary art seeks different artistic methods and schools to link art with life and the environment not in its direct natural forms, but in its essential form and therefore art has never separated from nature. And new visions of nature, especially the seabed, we often see on television some programs that attract our attention, and attract artists and attract them to the greatest extent with their beauty, composition, movement, colors and touching their surfaces, and inspiration from those aesthetics to produce printing works through:

- The possibilities of different aesthetic marine organisms in their structures and colors.
- Its unfamiliar forms and its relationship to the art of printing.
- The forms of their surfaces and textures that dazzle the seer in terms of richness and diversity that serves the subject.

These modern scientific possibilities have helped to realize and understand the effects of nature on the seabed and its wonders and values, and thus this nature has become a rich theater in front of the artist's creations, where he was able to live in that charming environment with its picturesque scenery and living organisms of multiple shapes, sizes, types and colors.

### **Marine organisms:**

A type of living organisms, but they live in water, and they vary in terms of type and cannot be limited or classified all, and marine organisms have their own diverse characteristics in addition to that their lifestyles are diverse, in addition to that marine organisms differ in the ways of mating and reproduction, and some marine organisms gain oxygen through the gills and some marine organisms breathe through the lung and climb to the surface of the water in order to breathe oxygen and then return into the water, as the type of marine organisms that breathe through the lungs can not climb and dive long under water compared to other types of fish that extract oxygen by gills. Examples of marine organisms that breathe through the lung "dolphin". Examples of marine organisms distinctive: blood fish, fish with multiple hearts..... Etc.

#### **Some of the marine organisms available on the seabed:**

Marine biology is divided into three main sections: (vertebrate - invertebrate - marine plankton)

#### **Vertebrates:**

Vertebrates are the most important and thinnest sections of the animal kingdom and include "fish, amphibians, reptiles, birds and lionesses"

#### **Fish:**

Fish is the most important element of our aquatic wealth for a basic reason, which is that it provides us with proteins necessary for the integration of the growth of the body as well as salts and vitamins, and despite the presence of more than 800 species of different fish in the waters of lakes, including (tilapia, sardines, mullet, tobar, mayas, coral, lot, water snakes, as well as some cartilaginous fish such as sharks and some bottom fish such as mousse and crustaceans such as shrimp and crabs. It produces countless forms and types of fish up to 12,000 species, these are the most species that inhabit the seas, oceans and rivers.

The types of fish vary greatly in shape, color and size, and differ in their shape, for example, some fish resemble a rock block and others resemble twisted worms and some with flattened bodies such as pies and some other fish swell their bodies such as balloons, and fish such as the colors of the spectrum all and many of them exquisite colors such as bright bird colors as in Figure (3,2,1).

And form colors red, yellow and blue purple artistic hundreds of beautiful patterns as evidenced in fish as an aesthetic and symbolic element in pharaonic art, indisputable in ancient Egyptian art is the most art influenced by nature, and reflected on what left us from the production of art in various fields and achieved integration in a record of events and linked the ancient Egyptian artist to nature and interact with it and merged into the depths despite its strength.



**Figure (1,2,3) showing some different types, shapes and colors of fish**

# **Invertebrates:**

About 98% of all animal species on Earth are comprised of many aquatic invertebrates and some spend their lives swimming or drifting with the current, while others remain anchored in a single spot.

## **Enterobacteriaceae:**

Gut is the lowest group of invertebrate animals, and the reason they are so called is because they include one main cavity, the intestinal cavity, and they live either individually, in groups, or in static or swimming colonies. It consists of three sects: (the Henriat sect, the Anbolian sect, and the radiators), the most important of which are jellyfish, and the Fengaliyat sect. Including coral.

## **Coral:**

Corals grow individually, but some grow together in colonies and corals include two distinct groups: (mollusk corals and stone corals), and their shapes and colors vary, including (sea fans, sea movies, deer horn, mushrooms, palm, and the blood of brothers and organ), and the beauty of corals is not due to their shapes only, but also to their colors, and corals vary, there are about 400 Type has been registered (black, yellow, blue, green, orange, red, beige, white and purple) form (6,5,4).

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| <p>Figure (4) showing some types, shapes and colors of marine coral</p> <p><a href="https://www.magicworldsy.com/slt-marine/fish-index/triggerfish">https://www.magicworldsy.com/slt-marine/fish-index/triggerfish</a></p> | <p>Figure (5) shows some types, shapes and colors of marine coral</p> <p><a href="https://www.magicworldsy.com/slt-marine/fish-index/triggerfish">https://www.magicworldsy.com/slt-marine/fish-index/triggerfish</a></p> | <p>Figure (6) showing some types, shapes and colors of marine coral</p> <p><a href="https://www.magicworldsy.com/slt-marine/fish-index/triggerfish">https://www.magicworldsy.com/slt-marine/fish-index/triggerfish</a></p> |

## **The arts are influenced by nature, especially by marine organisms:**

### **Ancient Egyptian Art:**

The ancient Egyptian artist recorded hunting scenes, especially fishing, if they worshiped and revered the goddess of fish, all of this was in order to get a bountiful season, and a plentiful year of fishing, in addition to that the ancient Egyptians relied on their food on some different types of fish, including chicks, "catfish, and other fish, where fishing appeared very clearly in a number of drawings and sculptures found in the archaeological Pharaonic temples as in Figure (8,7).

|                                                                                   |                                                                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|  |                 |
| <p>Figure (7) Fishing in the Pharaonic Civilization</p>                           | <p>Figure (8) The fish in the Pharaonic civilization is a symbol of resurrection and revival.</p> |

### The whiting peel fish of the pharaohs:

It is one of the types of Nile fish known in Egypt since ancient times until now, and many of these fish were found mummified in the temple of Esna, where it was sanctified there and named "Ethna" in Greek "Latopolis", which means the city of the fish, as in Figure (9)

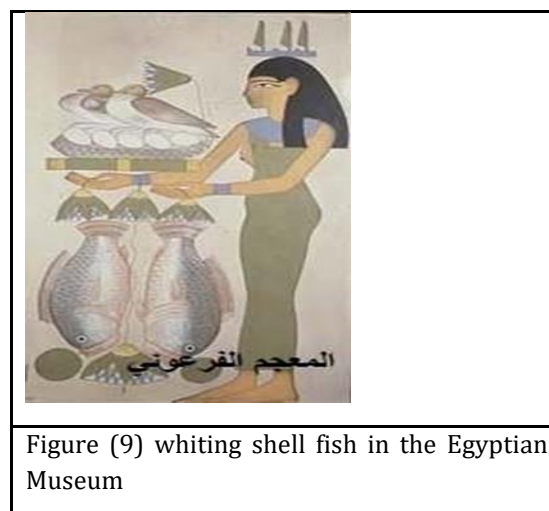
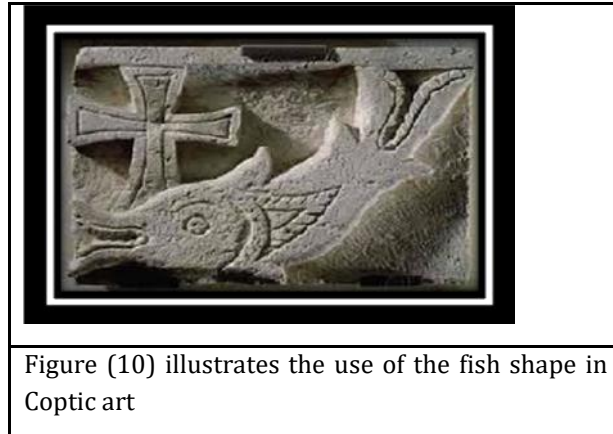


Figure (9) whiting shell fish in the Egyptian Museum

### Coptic Art:

Coptic art expressed a sense of beauty and simplicity and avoided the physical aspects, where the doctrinal rituals embodied meditation, which enriches the cycle of artistic creativity in an attempt to reach the underlying essence in the natural form of the outward, and translated into plastic formulations derived from the systems, rules and laws of nature. For perseverance and activity, and the dove for purity and peace and the souls of martyrs, and the fish is a symbol of Christ, and the fish in the water is an expression of the baptized believers. and used the fish of Christ as a logo of the Christian religion, as in Figure (10) and the emblem is a cross arc extends the two right parties after the point of intersection to resemble the shape of a fish used by the early Christians as a secret emblem to get to know each other without being harassed by the pagans before the adoption of Christianity as a religion of the Greek Empire. The Coptic artist and the extent to which he was influenced by it and its various elements and its reflection on his life and ideas as a result of a contemplative and inquiring view of nature.





### Islamic Art:

The Islamic art, including the content of the systems pushes us to analyze and delve into the secrets to identify his philosophy, the Islamic artist has borrowed elements of plant shapes and systems rationally and accurately in addition to spontaneity and flow, the Muslim artist has attracted meditation and absorption in nature and make sure the value of the artwork of subjectivity achieve the thought, feelings and philosophy of the artist. Drawings of fish in abundance on Mamluk ceramics and may have been one of the topics beloved by the artist in the Mamluk era and we find diversity in the way depicted, they were painted individually in the center of the pot or painted in pairs or painted in a circular view wrapped around each other or painted has pounced on them a bird of prey, and we have reached some models of fish drawings on Mamluk ceramics, such as drawing two fish in a circular design in the middle of a dish of Mamluk celadon ceramics and drawing with accuracy and strength in expression form No. (11) also drew four fish in a circular design of celadon porcelain plate No. (12) and also drew a group of fish plate (13) in a circular design and drawing a modification of nature.

Islamic art dives into the concept of nature and turns it into new components based on the idea in innovative formulations and penetrated the barriers of vision to access the essence of the form, and the Muslim artist has dropped his ideas on the objects of nature and out of them to a new thought aimed at showing the aesthetic potentials of the elements of nature and translating these potentials according to his instinct and transparency.



Figure (13,12,11) illustrates the use of different fish shapes in Islamic art

### Shells and snails:

Of marine or non-lake animals that are characterized by a solid body, which is an exoskeleton of mollusks such as clams, tower oysters, zalfiyat and mussels, they have bones, which are invertebrates and oysters are their protective shield and the structure that supports the body, and contain the oyster in the organism a large part of the body of the mollusk animal, but the head and foot ventral protrude when the animal wants to move. Psoriasis that live in fresh water, as in forms (14) .



Figure (14) shows the shape of shells and sea snails

### **Aesthetic elements of shell organisms:**

The study of aesthetic elements in shell organisms can allow structural systems as aesthetic data for the various forms of shell services, which contributes to a new vision as an input to a number of innovative solutions. The shell becomes wider the higher it gets." This diversity enriches the artistic field.

As a result of the different environments between the different types of molluscs differed in their shapes and colors, some of them live in fresh water and others live in salt water, which leads to the existence of apparent differences in the internal biological composition of freshwater oysters and sea oysters, where the difference between them is due to the characteristic and components of the place where the oysters are located, where we find that Nile oysters have few spectrum colors on the outer surface of the oysters, and this is due to the stagnation of water in some areas and the presence of mud deposits Which consists in the depths of the Nile waters, resulting in the presence of two holes or Fattah inhale and exhale to enter and exit the currents of water loaded with food, either saltwater oysters take the character of strong fixed colors, whether oysters or snails, and this is due to the fact that the seas are characterized by the purity of their environment, the water of the seas is variable speeds and currents.

### **The most famous mortalists who derived in their artworks from the forms of sea creatures:**

#### **Artist Salah Abdel Karim (Egyptian sculptor):**

The artist Salah was collecting scrap iron such as pipes, nuts and wear and invented forms of animals, human and abstract, and also the artist Salah was influenced by the forms of different marine creatures as in **Figure (16,15)**.



Figure (16,15) shows the influence of the artist Salah on the different forms of marine creatures

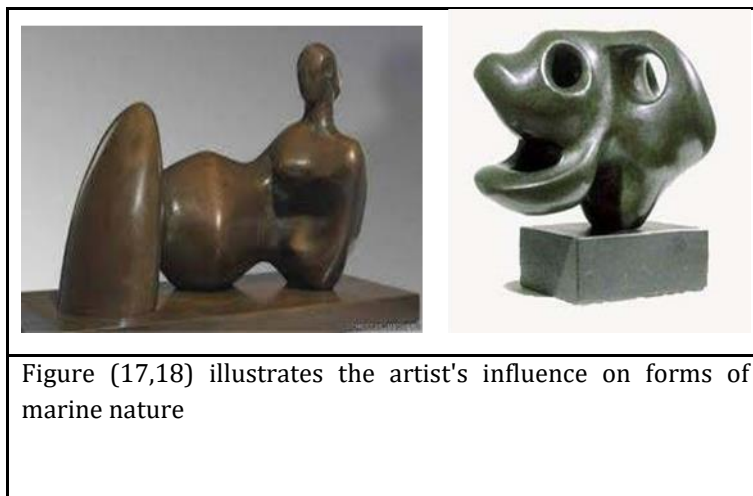
### Artist Henry Moore:

The artist Henry Moore was interested in the elements of nature in his works, he always went to the seashore, and every time he drew the look of a form of gravel, Moore began his hobby in 1929 in the collection of pebbles, shells and bones, where the preparatory drawing included many studies of these elements (Jilan Abdul Wahab Mohammed, 2002, p. 54).

1- Pebbles and rocks, showing the method of nature in the formation of stones, where it is clear from the contemplation of gravel the effect of corrosive factors in their material.

2 - The snails and shells as an element of the solid nature emptied from the inside have the finest integration of a single form in itself, and has been influenced by Henry Moore forms to a large extent in the formulation of works that contained external and internal forms.

3- Henry Moore has benefited from the Zaltian forms in his artwork in more than one of its characteristics in nature, there are works that took the polished form of the Zaltian works and there are other works that were affected by the Zaltian elements lying down, as shown in Figure (18,17).



From the above, it is clear the extent of the formal richness that characterizes these marine elements, represented in the different forms of fish, coral reefs and shells, with their different shapes, buildings and different types, which can be relied upon to develop innovative building values, which contribute to the formal richness of the contemporary printing painting.

### Second: Practical Framework:

From the above, the study found in the theoretical framework that there are different plastic values for the forms of different marine organisms found in the seas of the Kingdom of Saudi Arabia, and the study will conduct several different experiments on the students of the fifth level of the textile printing course to achieve this in contemporary printing plates with the use of basic technology printing by direct drawing and techniques added stencil printing.

### Experimentation Controls:

The controls of experimentation are determined as follows:

First – Printing materials:

Transparent and opaque pigment printing colors, pigments, brushes, plastic pipes, pestles for printing stencils – a previously prepared stencil that has been cut with the desired design.

Second: - Printing surfaces:

The research experiment is based on the material of cotton cloth.

Third: - Methods and methods of performance typography:

1- Printing by direct drawing (basic technology)

2- Stencil printing (sub-technique added to the design)

3- The application aspect of research and technical analysis of printing works:

#### **Printing work (1))**



Printing work No. (1) executed in direct drawing and stencil printing, dimensions: 40×60 cm

#### **Analytical Description:**

- **Printing work (1) represented in:** printed wall hanger dimensions 40×60 cm

- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.

- **Printing methods and methods:** printing by direct drawing is a basic technique - the added technique is the stencil method.

#### **The second artistic work:**





Printing work No. (2) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (2) represented in:** printed wall hanger dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Third artwork:**



Printing work No. (3) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (3) represented in:** Printed wall hanger dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Fourth printing work:**



Printing work No. (4) executed in direct drawing style, dimensions: 40×60 cm.

**Analytical Description:**

- **Printing work (4) represented in:** printed wall hanger dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Fifth printing work**

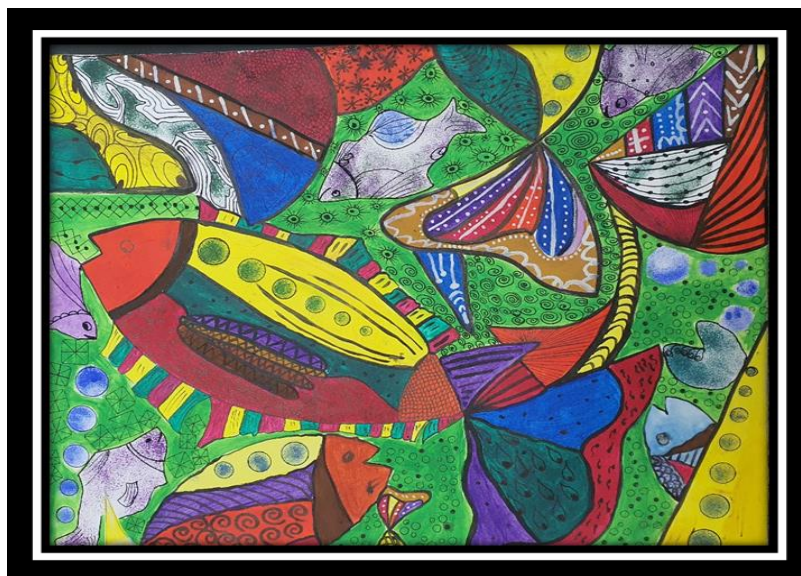


Printing work No. (5) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (5) represented in:** printed wall hanger dimensions 40×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Sixth printing work:**





Printing work No. (6) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (6) represented in:** printed wall hangings dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Seventh printing work:**

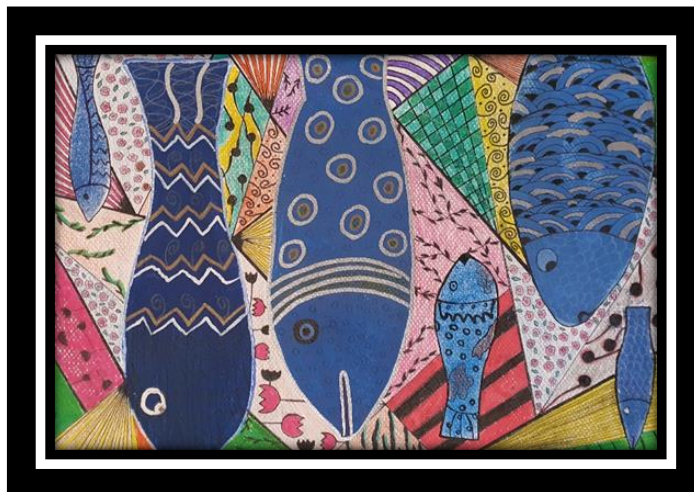


Printing work No. (7) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (7) represented in:** printed wall hanger dimensions 40×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Eighth printing work:**



Printing work No. (8) executed in direct drawing style, dimensions: 40×60 cm

**Analytical Description:**

- **Printing work (8) represented in:** printed wall hanger dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.



**Ninth printing work:**

Printing work (9) direct drawing port, dimensions: 40×60 x

**Analytical Description:**

- **Printing work (9) represented in:** printed wall hanger dimensions 40 ×60 cm
- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.
- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

**Tenth printing work:**





Printing work No. (10) executed in direct drawing style, dimensions: 40×60 cm.

#### **Analytical Description:**

- **Printing work (10) represented in:** Printed wall hanger dimensions 40 ×60 cm

- **Materials:** colors of printing fabrics (pigment) transparent, opaque, dyes, brushes, plastic pipes, pestles for printing stencils - a previously prepared stencil that has been cut with the required design.

- **Printing methods and methods:** printing by direct drawing is a basic technique - the technique is added stencil method.

#### **Findings and recommendations:**

##### **First: Results**

- 1- The study contributes to opening new horizons for inspiration from marine biology in all areas of artistic work and in the field of textile printing.
- 2- The artistic vision of the shape of the different marine organisms and their analysis in terms of the general shape, color and surface texture comes with new plastic solutions.
- 3- Identify the nature and aesthetics of the different forms of fish, and benefit from them in artworks.
- 4- Achieving plastic and aesthetic values for the aesthetics of the forms of marine organisms and formulated in an artistic manner that combines spontaneity and intention in the field of printing handmade textiles in the art of printing by direct drawing in printing colors.
- 5- The validity of the hypotheses has been verified and it has been proven that it is possible to experiment in the aesthetics of employing marine nature in the Kingdom of Saudi Arabia using direct drawing printing to enrich the printing painting to achieve various plastic and tangible artistic values that enrich the printing work of students of home economics.

##### **Second: Recommendations:**

- 1- Directing attention towards the aesthetics of marine organisms in contemporary research artworks.
- 2- Research and access to more studies from natural sources that help enrich and enhance printing works.

3- Practicing experimentation in new techniques, topics and raw materials and benefiting from them in the field of textile printing, as it provides the opportunity for intellectual fluency and flexibility in addressing technical problems using new technical methods.

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