



The Artistic and Aesthetic Use of the Art of Origami as an Approach to Enriching Artistic Creativity

¹prof. Nashwa Mohamed Esam abd el aziz, ²Naglaa Muhammad Farouk Ahmed, ³Laila. Mohamed. Elwakeel

¹Associate Professorat at the College of Culture and Performing Arts- King Khalid
University namohmed@kku.edu.sa

²Associate Professor at the College of Culture and Arts, Department of Home Economics - College of
Culture and Arts- Abha - King Khalid University, P.O. Box 3236. Abha,

nalsaid@kku.edu.sa

³Muhayil Asir, Applied College, King Khalid University,
Muhayil Asir 61913, Saudi Arabia

Abstract:

The idea of the research is based on the artistic and aesthetic use of the art of origami in the field of artistic works and its various techniques and the exploitation of its technical and artistic potential in the educational field to produce artistic works with aesthetic artistic values and the introduction of the various decorations of Islamic art with the techniques of the art of origami.

- Therefore, the problem is defined in the following question- :
- How can origami art be used artistically and aesthetically as an entry to enrich the artistic pendant?
- The research assumes the possibility of revealing the artistic and aesthetic aspects of origami art as an entry to enrich the artistic pendant.
- The research aims to discover the aesthetics of origami art and benefit from it to make contemporary artistic crafts and develop creative thinking (fluency, flexibility and originality) as origami art helps enrich the artistic pendant.
- Research problem- :
- The problem is defined in the following question- :
- How can origami art be used artistically and aesthetically as an entry to enrich the artistic pendant?
- Importance of the research :
- Utilizing origami art techniques as an introduction to enriching the artistic pendant
- Emphasizing the use of Islamic art by integrating it with origami art to enrich the artistic pendant

Research hypothesis-:

- The possibility of revealing the artistic and aesthetic aspects of origami art as an introduction to enriching the artistic pendant

Research objective-:

-The research aims to discover the aesthetics of origami art and benefit from it to make contemporary artistic works and develop creative thinking (fluency, flexibility and originality) as origami art helps enrich the artistic pendant

Keywords:Origami Art: Origami Art - Islamic Art – Artwork

Received: 05 July 2024 **Revised:** 25 August 2024 **Accepted:** 07 September 2024

Among the studies that focused on the art of origami:

1 -A study (Ezza Mohamed Abdel Samee and Samar Abdel Fattah Lashin: 2012) aimed to identify the effectiveness of origami in developing productive thinking and academic performance in mathematics among hearing-impaired students in the preparatory stage. The study concluded that origami is effective in improving productive thinking skills such as fluency, flexibility, originality, expansion, and imagination, and improving the level of academic performance of hearing-impaired students in learning geometry. It recommended the necessity of using origami with students with special needs.

2- A study (Madiha Hassan Mohamed: 2012) aimed to identify the effectiveness of a proposed program in origami to develop spatial visualization for sixth grade primary school students. The study concluded that origami plays an effective role in developing spatial visualization and recommended using them with students with special needs .

3 -A study (BOAKESk, 2008) aimed to identify the role of using origami art in improving spatial ability, developing mathematical concepts and attitudes towards mathematics among children. The study concluded that origami art contributed effectively to improving the level of spatial ability, developing geometric concepts and children's attitudes towards studying mathematics. The study also concluded that teachers' level improved in creating activities using origami art in the mathematics classroom.

4- The study (Nasser Al-Sayed Obaida, 2007) aimed to identify the effect of using origami in developing some components and geometric reasoning among primary school students. The study concluded that the experimental group that studied using origami was superior in the level of manual processing over the last two groups, which are the second experimental group that studied using origami in the level of sensory processing in spatial sense in general and its skills separately, and the control group that studied the engineering unit in the usual way, while the experimental group that studied using origami was superior in the level of sensory processing over the last two groups in geometric reasoning in general and its skills separately.

5-The study (BOAKESk 2006) aimed to identify the effect of using origami art in teaching geometry to middle school students in developing spatial perception and achievement in mathematics. The study concluded that the experimental group students excelled in general mathematical ability and in two-dimensional and three-dimensional spatial perception.

6- The study (MEYER, 1999) aimed to identify the role of origami art in developing mathematical thinking. The study presented a set of strategies to introduce origami art to students, including:

Web search strategy, using a diagram strategy, and self-questioning while making the model. The study concluded that using origami art does not require advanced equipment, only plain paper, especially with students in the early stages, and the possibility of using computer technology to make the diagrams easier to design and more attractive to students and raise their level of mathematical thinking

Introduction: Origami is a synthetic art that is one of the expressive media in the field of artistic works. It is the art of "transforming flat paper through folding techniques into a three-dimensional object with a specific shape that usually resembles an object or a general state. There is a branch of origami called kirigami, which is paper folding, but with the use of glue or scissors to make the desired shape." (<http://web-japan.org>)) This art played a prominent role in the twentieth century as an abstract art. The origins of this art go back to China. One of the main motives for the birth of this art is to emphasize the

suggestion of the third dimension in the painting and emphasize the perspective, which makes the work a window overlooking visual science. With scientific and technological progress, this art has become popular among contemporary artists, and experimentation has produced several works. Origami is how to make a model, and thus helps to activate and develop imagination and creativity .

It is used to develop latent creative abilities as it is useful on the physical level in acquiring manual skills as it works to activate memory, non-verbal thinking, attention, three-dimensional perception and imagination because all of these abilities appear during the formation of origami. Islamic art was merged with origami art because Islamic art is linked to origami art in that it is a formative creativity in which colors take their positions for reasons of constructing the artwork, in an abstract style that is not imitating things in nature. Therefore, it turned to abstraction in drawings that mix human, animal and plant forms on the basis that such elements represent the components of the artwork. Therefore, the artist resorted to modifying and simplifying them in order to achieve aesthetic goals. Also, symbolic aesthetic relationships were combined in the drawings with each other.

"Origami is a Japanese entertaining art for making animals and flowers. This activity requires you to think carefully and move your fingers lightly while focusing on a specific movement while folding a specific part of the paper to reach the desired final results. From this standpoint, it is said that origami has an effect on training the human mind" (<http://web-japan.org>). It is clear that it is not only an enjoyable art, but it is also one of the most valuable ways to develop vital skills. The following are the various educational advantages of origami: First: On the physical level: "(Shimaa Hamouda Al-Haroun (2010) p. 162)

The learner acquires manual skills as his hands become active and then stimuli are given to the brain, which leads to activating the right and left sides of the brain as he uses both hands.

Second: On the mental level:

It works to activate memory, non-verbal thinking, attention, three-dimensional perception and imagination.

Second - Behavioral skills :

Origami is a type of planned learning that is done through repeatable actions. In order for a person to achieve success, it is necessary to monitor and listen carefully to the specific instructions and implement them accurately and perfectly. Researchers confirm that by practicing this activity, a person achieves success, and this success makes him feel self-confident, which is an educational goal.

Third - Cooperative learning:

Origami works to reduce differences resulting from age differences, and often younger children teach their older colleagues. The activity is also very suitable when teaching different classes. Many teachers mention that students who do not excel in other areas learn the art of origami quickly and help their colleagues until they master practical steps.

- Fourth - Cognitive development

- Boakes indicates in his study that teaching the art of origami to students in middle schools gives them skills to perceive the spatial visualization of two- and three-dimensional objects, which confirms the importance of developing in most international documents and related to standards in the fields of curricula, teaching and evaluation "Shaima Hamouda Al-Haroun. 2010 p. 162)

Research Limits:-

- -The research is based on the researcher's personal experience.
- -Using origami techniques.
- -Using the decorations of the art of
- Research Methodology:-

- The research follows the descriptive and experimental approach in practical applications according to the following steps:-
- First:
- The theoretical framework
- Artistic and formative values of Islamic art decorations.
- The formative capabilities of origami art.

Second: - The practical framework

First: The art of origami and kirigami:

Origami is a creative art that depends on folding paper to produce shapes and figures that represent reality through flat shapes and through empty shapes. Origami is considered one of the fine arts that help to benefit from paper scraps and refold them instead of burning them and polluting the environment and preserving them. Thus, it can be greatly benefited from in the manufacture of artistic crafts of great moral and material value. It is an ancient Japanese art, based primarily on the use of scissors after folding the paper. The first part of the word (kri) means cut and the second part (gami) means paper. Origami Art: Origami Art

is the art of paper folding and is "an ancient Japanese art and the word is derived from the Japanese word ori-tie, while gami or gami means paper. The folding process is done by taking a square-shaped paper and folding it several times, producing various natural and geometric shapes in wonderful positions characterized by simplicity, strangeness and beauty" (<https://www.egyres.com>) There are many types of paper folds, as shown in Figure (1).



Paper folds shapes (Laila Allam 1979.p. 269(

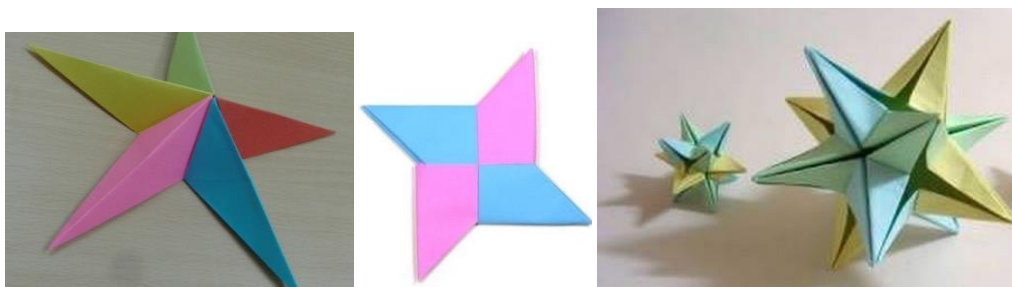


Figure (2) Types of shapes implemented using origami technology (<http://www.alwasatnews.com/news/972565.htm>)



Figure (3) Models of shapes implemented using the kirigami technique

(<https://www.google.com.sa>)

" Helmy believes that although there are some origami practitioners in Egypt, they do not use it to teach children. Learning methods that rely on participation are faster than those that use memorization, but they provide children in developing societies with many qualities that this society lacks, such as mixing, cooperation, and the ability to innovate" (<https://alarab.co.uk>)

He did not stop there, but rather invented the Arabic alphabet and numbers with this art, which, if used, would help eradicate illiteracy. He says, "Teaching teachers these arts enables them to explain lessons better, because students will then be ready to listen in order to enjoy this beloved game. He also believes that this art can be used to communicate with other groups, such as the disabled, the mentally retarded, and the blind" (<https://alarab.co.uk>). He summarizes his dreams of establishing an art center for origami that works to graduate a group of people working in this art.

Types of origami art: (Badriya Mohsen Rashid, 2008, p. 199(.

-1Representational origami: It is one or more sheets folded in the shape of an animal, flowers, or real or imaginary characters.

2-Geometric origami:

A- Unit origami is individual pieces and is assembled into a more complex structure. It is a structure created using mathematical operations.

B- Mosaic origami is a pattern without changes or overlaps and is created using folding to connect the elements, such as repetition in folding.

The trend of Islamic art towards aesthetics and decoration:

The function of art is to create beauty, and decoration is one of the important means that create beauty. The elements that make up Islamic decoration stem from the belief in the oneness of God Almighty. Therefore, the shapes and elements that Islamic decoration creates are a material that has in its artistic reality units floating towards self-annihilation to be replaced by others, even the line itself is not a line as the eye sees

But in reality, it is a point floating in infinity, as if Islamic decoration achieves in a spiritual reality the words of God Almighty: (And the Face of your Lord, Owner of Majesty and Honor, will remain. So which of the favors of your Lord would you deny Me? He is asked by those in the heavens and the earth every day concerning a matter. So which of the favors of your Lord would you deny Me?) (The Holy Quran, Surah Ar-Rahman, verses 27-30). With this Islamic faith-based certainty, the Muslim artist seeks to divide geometric shapes and natural shapes to transform them into particles floating in the world of infinity, radiating with meanings that never end, tempting to watch without the eye becoming tired or the soul becoming bored. This infinite diversity of Islamic decoration is achieved by various elements, the most

important of which are: geometric units, elements inspired by plants and animals, and Arabic calligraphy in which the artist mixes all of these formations. Among the decorative architectural elements are columns and muqarnas, which are an Islamic innovation that has not appeared in any civilization before. From what was previously mentioned, we can conclude the characteristics of Islamic decoration:

The first of these characteristics: Any point in Islamic decoration gives the automatic feeling that there is an absolute movement free from all restrictions within the framework of the decorative system. The second of these characteristics: The universe is not in a vacuum, and it is not a place that can be devoid of any kind of life, for nothingness is not in the universe at all, but rather it is life within life because it is originally the creation of the Living, the Self-Sustaining, the Creator of the heavens and the earth, and then comes this characteristic, which is filling the void with decorative formations by modifying the natural plant forms, so that it is easy to integrate them into the repetitive logic of the mathematical network (Muhammad Abdul Aziz Marzouq, pp. 168-169)

The third of these characteristics: It is repetition, and repetition in this decoration is the repetition that enriches the feeling and enriches the sensation, and it is an ideal embodiment of the idea of eternal return, and repetition is basically an authentic and specific principle in the Islamic religion in itself, for in the Holy Quran many meanings and verses are repeated in different places and sometimes in the same subject as in Surat Al-Rahman for example, and also the successive repetition of the two duties of prayer and fasting, Repetition is found in Islamic decoration to achieve the principle of symmetry.

The fifth characteristic: It is diversity. If repetition in Islamic decoration does not cause monotony or boredom, then repetition here does not mean a single image in all the scenes on the surfaces, but it is diverse. Diversity occurs between the decorative units. The decorative unit of the dome of the mosque differs from the decorative unit of the minaret and differs from the decoration of the mihrab, and differs from the decoration of the walls and differs from the decoration of the capitals of the columns, ceilings and arches. Here there is tremendous diversity between the different units, which is met by continuous repetition.

The sixth characteristic: It is represented in unity. If the repetition we mentioned means repeating the decoration in a special style in each unit, so that each unit has its original nucleus and decorative radiations.

These different units do not mean dispersion and discord, as they are brought together by an artistic unity that suggests a human unity that suggests the oneness of God Almighty. The seventh characteristic: It is abstraction. The lack of embodiment, the lack of representation, or the departure from the rule of artistic imitation, or the adoption of the rule of artistic flatness, do not constitute unique characteristics known only to Islamic painting, but rather most of these characteristics were absent from the arts of Eastern civilizations that preceded Islamic art. It was known to ancient Egyptian art, Sumerian art, Babylonian art, and Shura art, and it was also known to the art of Central Asia and the art of the Far East, as well as Byzantine art, which accompanied the emergence of Islamic art. (Muhammad Abd al-Aziz Marzouq, pp. 168-172)

Abstraction in Islamic art occurred in one of two meanings: A- It means that the subject is free of personification, i.e. the people in it are not embodied, and thus the word abstraction is the opposite of personification. It means avoiding the distinction between individuals of the same type and moving from multiplicity to the model, so a tree leaf is drawn, so that it does not represent a specific plant leaf, but rather indicates its shape without embodying it (Samir Al-Sayegh, 1988, pp. 32-67). As for Samir Al-Sayegh, he says (that abstraction is a modern artistic term that began to crystallize with the trends and artistic works that followed it in the middle of the twentieth century, and it is a possible and appropriate description to describe Arab Islamic art with it, and it remains a description that can be considered a characteristic of the characteristics of this art, the synonym for the term artistic abstraction (monotheism) " (Saleh Ahmed Al-Shami, 1990, pp. 18-20) As for Muhammad Abdul Aziz Marzouq, he says that abstraction in Islamic art is an absolute, infinite abstraction that is not restricted by the

dimensions of visual vision of natural subjects, and it is not an absurd abstraction, but rather an abstraction governed by laws Mathematical rhythm, abstraction and symbolism are the two main pillars on which Islamic art depends through its representation of Islamic thought and through a long and deep contemplation of nature, the universe and life... (Samir Al-Sayegh, previous reference, p. 104) After Islamic art adopted this approach, it became characterized by a special artistic style that can be summarized as follows:

- Neglecting the sensory aspects in the artwork, ignoring the details of the drawn elements, abstracting the natural elements into simple geometric lines and surrounding the elements with lines.

- Avoiding visual deception and perspective and the tendency towards flatness.

- Not using shadows and lights while covering the spaces with a single color so as to achieve aesthetic value and visual language.

Types of Islamic decorations and their elements:

- Plant decorations:

The world of plants was a source of inspiration for the Muslim artist, so the use of this type spread on various artifacts, whether they were made of wood, metal or glass, and the most important elements of them are grape clusters and their leaves and different types of shrubs, leaves and flowers (Abu Saleh Al-Alfi, p. 113.)

Plant decorations are among the clearest manifestations that show the Muslim artist's distance from imitating nature and transferring it literally, as they are in most cases completely abstract decorative elements, as we can hardly see from the branches and leaves anything but curved or intersecting lines, and plant decorations were distinguished by the repetition of their various elements in harmony and proportion, and the character of the renewed plant decorations began to emerge from the ninth century and the Abbasid era (Abu Saleh Al-Alfi, p. 113)

These abstract decorations spread in Egypt in the Tulunid era, and in other times they play a major role in decoration, whether animal drawings or writings, so that the decoration appears in two dimensions, one of which completes the other and increases its splendor (Mahmoud Al-Basyouni: Opinions on Modern Art, p. 17)

- Decorations with writings:

Linear decorations flourished in Islam, and archaeologists were able to adopt them as a way to date artifacts with writings, as each era and each region had its own style in decorating the line and distinguishing it. This is because the greatest miracle of Islam is the Holy Quran, and Muslim artists excelled in adapting Arabic calligraphy by making it a decorative element, and sometimes the line was used purely decoratively without paying attention to the content (Abu Saleh Al-Alfi, p. 119)

- Birds:

The most important birds that the Muslim artist dealt with were ducks, peacocks, and fish, and these birds and fish took the lead in the design, complemented by some branches of plants and leaves Trees in a decorative style with interconnected elements.

Practical framework:

Some of the principles that must be taken into account when teaching using origami and kirigami:

- 1Good choice of paper and its correct size and shape, so it is better to prepare origami papers before work.

- 2Fold and cut the paper carefully and with special care at the corner points.

- 3Work on a hard surface so that he can get all the folds in the correct way and cut correctly.

-4Use the thumb of the hand to move along the edge of the paper after each fold to make it accurate, then all the following folds will be easy.

-5The more accurate the layers and cutting, the closer the final product will look to accuracy.

-6Carefully follow each step in the right direction.

-7The creator should not skip any step before the next step and should always keep in mind remembering the previous step and when he finishes the step he is doing, he should think about the next step.

-8And make sure to clean the paper you are working on.

Products:



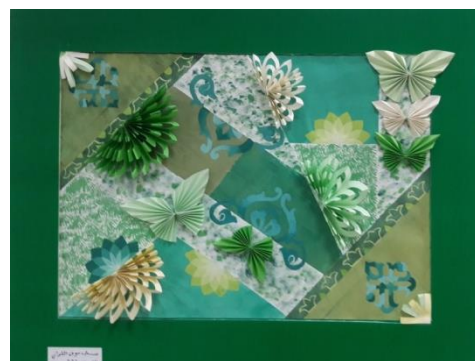
The first busy



The second busy



The third busy



The fourth busy

Materials used: colored Canson paper - pigment colors - stencil paper - scissors - adhesive

Techniques used: origami - stencil - silk screen.

Formal description: The work No. (1) is a group of Islamic decorations (plant and geometric) executed using the coloring technique. Some units were executed using the karjami technique with color rhythms compatible with the use of the white color in the centers of the decorative units, which gave color lighting within the work. The work No. (2) was divided into two large areas of two compatible colors. The areas were cut into large-sized plant decorative units. The color areas were cut in a noticeable way. The karjami techniques were executed on papers of the same color group as the background of the artwork. Their sizes varied and they were scattered within the artwork. The work No. (3) used the yellow color in the background of the artwork. Stencil decorations were distributed on it in the color complementary to the yellow color (violet). Also, shapes were distributed using the karjami technique in the violet color compatible with the shape of the Islamic decorations distributed on the background. As for the work No. (4), the background was divided into colored areas with a silk screen into squares and rectangles on

which Islamic decorations were printed using the technique. The silk screen distributed the shapes of the karjami in the form of complex layers taking the form of a three-dimensional rose. Aesthetic analysis: The rhythm was achieved through the use of the karjami technique and by dividing all the floors of the works into simple geometric spaces of various sizes, which gave various spaces with a rhythm of color and texture



The fifth busy



The sixth busy



The seventh busy



The eighth busy

Artworks No. (5-6-7-8)

Materials used: colored Canson paper - pigment colors - stencil paper - scissors - adhesive

Techniques used: origami - stencil - silk screen.

Formal description: The two works (5), (6) are a group of Islamic plant and geometric decorations executed using stencil and silk screen techniques with harmonious plus color shades executed in the shapes of some Islamic decorations using stencil printing technique with the distribution of karjami and arjami in compatible color rhythms. As for the two works (7), (8), the plant and geometric decorations were intensified on the background of the artistic work in contrasting dark color shades and the karjami and arjami units were distributed in light colors, which resulted in color harmony.

Aesthetic analysis: The diversity of the sizes of the karjami and arjami with the diversity of the size of the Islamic decorations led to the creation of harmony and rhythm in the work.

-The color and texture richness was achieved by intensifying the decorations on the background of the work.



Busy 9th



Busy 10th



The eleventh busy



The twelfth busy

Artworks No. (9- 10-11-12)

Materials used: colored Canson paper - pigment colors - stencil paper - scissors - adhesive

Techniques used: origami - stencil - silk screen.

Formal description: The works contained a group of distributed flowers executed using the karjami technique, as well as some ogami sticks executed on the shawl of a dress and hearts in the same shades of green, which gave the works a kind of privacy while being consistent with the Islamic decorations executed using the stencil and silk screen techniques. We find in works (9, 10) the pyramidal shape taking the center of the artwork, which created balance in the design of the works. As for works (11, 12), the square geometric shape took the center of the general composition of the works with a variety of spaces.

Aesthetic analysis: The work contained tactile rhythms through the variety of shapes executed using kirigami and origami techniques, with the variety of color shades of a single color, which made the artwork appear as if it were both prominent and sunken.





The thirteenth busy

The fourteenth busy



The fifteenth busy



The sixteenth busy

Artworks No. (13-14-15-16)

Materials used: Canson colored paper - Pigment colors - Stencil paper - Scissors - Adhesive

Techniques used: Karagami - Stencil - Silk screen.

Formal description: Artworks (13-14-16) The variety of Karagami and Origami formation around the pyramid shape executed as a background using silk screen and stencil techniques and the variety of shades of one color, which suggested the third dimension in the work. As for Artwork (15), circles were used as a basic element for the design universe and the circles were surrounded by Karagami shapes that took the form of a fan.

Aesthetic analysis: The work contained diverse and different rhythms in terms of the areas of the shapes as well as the colors and their color gradations. The geometric shapes used also varied, which gave different kinetic rhythms, these rhythms intertwined with the linear rhythms of the Islamic plant and geometric shapes

Research results:

- The researchers were able to reach innovative experimental processes to discover the aesthetics of origami art and benefit from it to make contemporary artistic works

- Producing artistic works inspired by Islamic art decorations by integrating hand printing techniques and origami art techniques

- The study hypotheses were achieved through the production of artistic works based on the integration of hand printing techniques and origami and crochet art techniques.

Recommendations:

- Encouraging interest in various manual techniques such as (hand printing, origami and crochet.
- Encouraging inspiration from Islamic heritage to enrich research.
- Diversity in integrating different techniques enriches the artistic works
- The importance of creating artistic works that integrate heritage arts and modern arts

Acknowledgement:

"The authors extend their appreciation to the Deanship of Research and Graduate Studies at King Khalid University for funding this work through Large Research Project under grant number RGP2/258/45

References:

- 1-Mary Girgis Mikhail (2006) A program to develop innovative ability through paper crafts for a sample of students in the second cycle of basic education, Master's thesis, Faculty of Art Education, Helwan University.
- 2 -Nasser Al-Sayed Obaida (2007) Developing some components of spatial sense and geometric reasoning using origami among primary school students, the Seventh Scientific Conference of the Egyptian Society for Mathematics Education, held at Dar Al-Difa, Ain Shams University, during the period (17-18) July 2007, Cairo.
- 3-Shaimaa Hamouda Al-Haroun (2010). Building models based on the art of origami folding in developing the learned intelligence and academic achievement of first-year preparatory school students in the unit of matter and its composition, Journal of International Education, Volume 13, Issue July.
- 4 -Laila Allam (1979) The innovative process in forming paper models and benefiting from them in preparing the art education teacher, PhD thesis, Faculty of Art Education, Helwan University.
- 5 -Mr. Ibrahim, Sherif Rabie (2008). An analytical study of paper crafts in light of contemporary concepts of design basics, the eighth conference of the Faculty of Fine Arts, Faculty of Fine Arts, Minia University.
- 6 -Shaimaa Hamouda Al-Haroun (2010). Building models based on the art of origami in developing the learned intelligence and academic achievement of first-year preparatory school students in the unit of matter and its composition, Journal of International Education, Volume 13, Issue July.
- 7-Laila Allam, The innovative process in forming paper models and benefiting from them in preparing the art education teacher, PhD thesis, Faculty of Art Education, Helwan University. 1979
- 8-Badria Mohsen Rashid, Benefiting from the art of origami as an innovative approach to making contemporary metal crafts, published research, Arab Journal of Social Sciences, 2008.
- 9 -Muhammad Abdul Aziz Marzouq, Islamic decorative arts in Morocco and Andalusia, Dar Al-Thaqafa, Beirut, Lebanon.
- 10 -Samir Al-Sayegh, Art and Islam, a contemplative reading of its philosophy and aesthetic characteristics, 1st ed., Dar Al-Maghrib, Beirut, Lebanon, 1988.
- 11 -Saleh Ahmed Al-Shami, Art and Islam, Commitment and Creativity, Dar Al-Qalam, 1st ed., Damascus, 1990.
- 12 -Abu Saleh Al-Alfi: Islamic Art. Principles of Philosophy. Studies, Dar Al-Maaref.
- 13- Mahmoud Al-Basyouni: Opinions on Modern Art, Egyptian General 14-Book Authority.-
<https://alarab.co.uk>
- 15-<http://web-japan.org>