



Comparison Study for Art Centers in Greater Cairo To Achieve Heritage conservation

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Abstract

Art centers play an important role in building social connections and increasing the artistic sense of community in addition to enhancing peoples' creative skills and developing their analytical and intellectual abilities which lead to success. The vital role of art centers is developing the community traditional culture as well as calling for reviving the spirit of authenticity and preservation of cultural heritage.

In Egypt Art Centers are worked as functional community centers that focus on supporting arts practice and facilities as art galleries act as museums that reflect many aspects of people's lives.

Educational facilities, workshops, a performing arts theatre, a fine arts library, music library, and dance and drawing studios supporting local communities and cover part of the gap between culture needs and available building and facilities in the city.

Cairo's role as the cultural capital of one of oldest civilizations in the world is reflected in the arts and architecture of all periods. Therefore, the art centers role in Greater Cairo varies to preserve and teach the traditional and new arts. Despite the emergence of museums in Egypt in the early nineteenth century, the establishment of art centers in Egypt in its current form began in the late fifties in the twentieth century. It appeared as new buildings or the reuse of heritage buildings. Its function is to revive and teach different types of art different periods, achieve conservation of identity, Cultural heritage and creating a new artistic value.

This study will highlight the complex value of art centers buildings in Cairo with a comparison between its design, roles and methods of development. From Architects, Academicians, designers, and students point views toward sitting up a methodology for the design and development of arts centers in Greater Cairo.

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Keywords

Art; Heritage; Culture; Stakeholders; Conservation.

1. Introduction

The art is one of the most elusive of the traditional debated subject of human culture. it Has been defined as a means of expression and communication of emotions and ideas, the thing about art is that it's so diverse that there are as many ways to understand it as there are people. "Art is the activity by which a person, having experienced an emotion, intentionally transmits it to others" – Leo Tolstoy (1)

Whether or not Tolstoy's definition of art is the best, the point is how people look at art based on how they have experienced it. It's effective on people to live, present their feelings, stories, and conditions. Art is playing as a

presenter of civilizations. It involves, intersects and overlaps with many human values. Since the dawn of history, from drawings on caves' walls in the Ice Age till the end of the digital information age. It will continue with human civilization and will continue to evolve and change as the human evolves and changes.

Art focuses on objects made by human in visual form for aesthetic purposes. Visual art can be classified in diverse ways, such as separating fine arts from applied arts; inclusively focusing on human creativity; or focusing on different media such as architecture, sculpture, painting, film, photography, and graphic arts. In recent years, technological advances have led to video art, computer art, Performance art, animation, television, and video games.

2. Arts in Old Egypt

One of the first great civilizations arose in Egypt, which had elaborate and complex works of art produced by professional artists and craftspeople. Egypt's art was religious and symbolic. Given that the culture had a high structure and hierarchy, a great deal of art was created to honor the Pharaoh, including great monuments. Egyptian art and culture emphasized the religious concept of immortality. Later Egyptian art includes Coptic and Byzantine art.

Applied arts were developed in Egypt, in particular, woodwork and metalwork. There are superb examples such as cedar furniture inlaid with ebony and ivory which can be seen in the tombs at the Egyptian Museum. Other examples include the pieces found in Tutankhamen's tomb, which are of great artistic value.

3. Art Centers Design Elements and Process

It is known from ancient times that the art installations are the most important publisher of science and culture and work on connecting between the past and present and is considered one of the best ways to show the works of artists and their artistic and literary creativity. It also aims at raising the level of society scientifically, creatively, culturally and technically, and encourages creativity in any dimension whatever the level of the individual as it has an important role in expressing the identity of the community and preserving the heritage there are important factors that contribute to the success of the design process.

3.1. Art Centers in Egypt:

In the late 20th century attention has been turned to art centers in Egypt, where it has been revitalized the use of heritage buildings like Asha Fahmy Palace, and newly constructed buildings to perform this role like opera House in Cairo.

Then came the period of popular participation in the establishment of specialized art centers Works to revive the Egyptian arts and crafts to preserve the heritage and It also plays an important and effective role in spreading the spirit of innovation and expression of artistic sense in society.

And now, in the current situation, the government is interested in the art centers throughout the republic and it supervised by official organizations such as the ministry of culture, the ministry of information and many other professional organizations.

3.2. Literary Review: Art Center Design Process and Elements:

In this part of the research revolving on theoretical price of Art Center Design elements, with consented on main factors effective on Egyptian case. This factor affects in user performances in Art Centers. Table (1) shows the main Characteristics of sample A.

Table 1. The main Characteristics of sample A

Site Selection	It depends on easy access to the location, totally area of the site, topography, the Geographical value, whether the view points and studying the traffic and navigation.
Functional Relations	It is achieved by studying the possibilities available on the site, suit the type of service specified in each region where the distribution of cars near the entrances and the calculation of areas and Be sufficient for the number of visitors. the main element in the center "galleries." Are distributed according to what is required by the visual study to the urban design.
Lighting	Natural lighting is successful in the case of large display areas that are to be overlapped with the surrounding outer atmosphere. Natural lighting is required for special types of exhibits, for example lighting is coordinated according to the type and color of the exhibits. It is characteristic of artificial lighting that it can be focused on the intensity and the type of exhibits.
Furniture	The furniture of the site is a basic supplement to the visual study and includes plants, fountains, light columns and other functional elements that give a unit of interconnection
Colors	Color plays a prominent role in the magic effect of vacuum design. For example, white, gray and black colors are used for backgrounds and colors are used to connect spaces by relationships between different levels
Materials	The selection of materials may depend on the shape of the building and also the function. Finally, it may depend on the concept thought of the architect. For example, the architect may choose a material with a specific texture to convey a certain idea and meaning.

4. Case studies:

4.1. Case study 1: Palace Of Arts

It is a cultural center and is a huge exhibition of all the works of Fine Arts as well as an annex to the palace art library that is interested mainly in plastic arts and it is located in the vicinity of the Opera and next to the Museum of Modern Egyptian Art in Zamalik island.

It is a palace in the Egyptian Opera House that was formerly known as the "Nile Hall" and was designed by Mustafa Pasha Fahmy and was used in the agricultural industrial exhibition. The palace was established in 1980 and opened in 1984 and was developed after the earthquake in 1992 and reopened back in 1998. It hosts a variety of artistic activities through which it is based. [7] [8]. The palace was built in modern Islamic style (Fig. 1)



Figure 1. Front elevation

Description: The building consists of four floors with multiple showrooms where there are two rooms on the ground floor covered sky light ceiling to bring natural lighting in (Fig. 4). In the first stage, there are many halls and one of them is used for youth performances. There are also on the upper floors halls for seminars and lectures. [1]

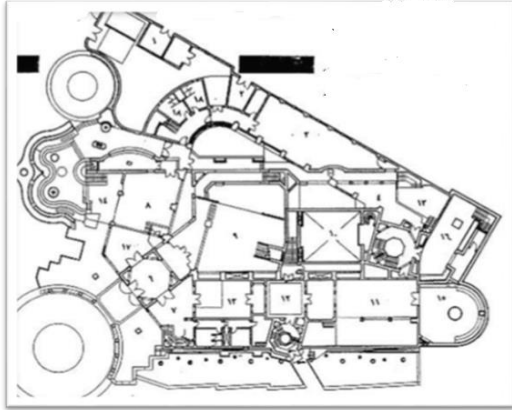


Figure 2. Ground floor plan

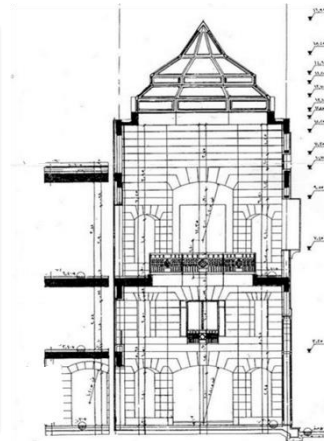


Figure 3. Section



Figure 4. Natural lighting

The designer concept design idea was to link artistic and cultural heritage with the use of building materials such as marble, white stone, wood, glass and iron (Fig. 1). (Fig. 4) [9]

4.2. Case study 2: Ramses Wissa Wassef Art Centre

It is a center for teaching handmade crafts such as carpet, porcelain, and sculpture designed by Architect Ramses WissaWassef located in the village of Hraniya, Egypt. Wassef concept design is based on the development of creative sense in children along with the development of the sense of professionalism, where they start with small lines, few strings, colors and a few types of threads that are easy to deal with, And over the time growing creative sense and increasing the scale of work to the big looms that work more From an individual with a variety of threads and colors that allow creative work to come out more complex.

Ramses WissaWassef was Born in 1911 and has been interested in creativity and the ability of human to blend architecture by nature. [13].The center is located in the village of Al-Hranieh, the province of Giza, near the Marioute Canal and surrounded by residential areas [9] (Fig 5).

The effect of traditional architectural art on Wasef is that the domes were used in the two buildings of the center, and the builders of Nuba were invited to build it and also influenced the architecture resulted from the combination of the earlier civilizations (Pharaonic - Coptic - Islamic) [11] [12]

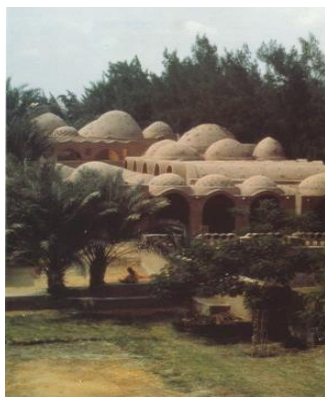


Figure 5. Wissa Wassef Center



Figure 6. Wissa Wassef Center

Wassef used methods of multiple constructions, including thick walls made of stone or brick. He also used the props to reinforce the walls. The materials used in the construction were from the surrounding environment such as silt and sand. [10] (Figure 6)

The center consists of a number of workshops, as well as exhibition halls and sculpture museum for a Georgian lover, houses for family members (Wasef), houses for weavers and some other agricultural structures. [12]

The workshop was designed as a separate area combining workshops for spinning on small looms and rooms for display. They were covered by domes and workshops for ceramics and drafting. The main access of workshops is from east to west and on the sides, Similar to traditional Egyptian houses. [10] (Figure 7:Figure11)

The Museum of Habib Georgi consists of an open courtyard and a long gallery that was used to display the sculptural works of the pupils of a Georgian lover and was designed in order to benefit from the lighting of the poster. The sculptures were displayed in gaps in the wall and all so the light reaches it from wall openings.

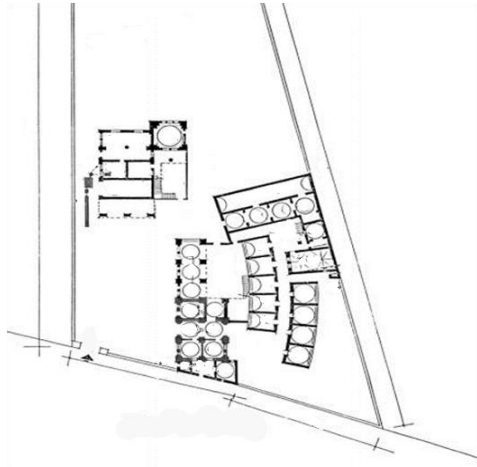


Figure 7. Workshops plan

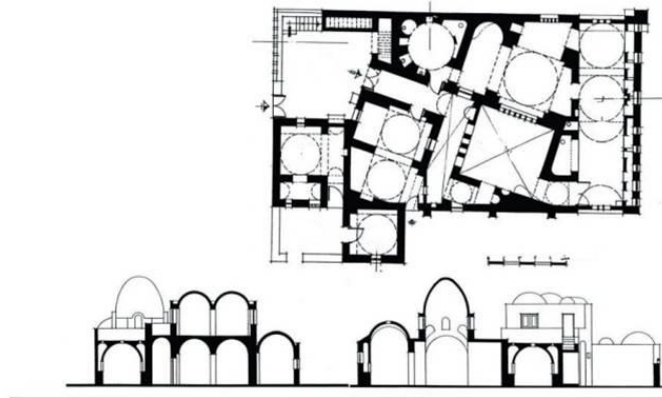


Figure 8. The Museum of Habib Georgi



Figure 9. Fabric workshops



Figure 10. Display halls for sculptures



Figure 11. Halls

4.3. Case study 3: “15Th May Art Center” in Helwan city, Cairo

The Center for Contemporary Arts was opened in 2002 and since is playing a major role in the dissemination and development of the arts. It combines different arts and crafts and is considered as an intellectual and cultural center for the surrounding areas. It works to develop artistic and craftsmanship for the people of the region. [17] [16] (Figure 12)



Figure 12. 15th May Art Center

The center is located in the south of Cairo on Mount Helwan near the Higher Institute of Engineering in Ahloun [9] (Figure 13) .The building is in modern style with the use of environmental materials and colors to suit the nature of the surrounding desert with a simple design. [16] (Figure 13) it consists of a museum for the exhibiting ceramics and a museum displaying sculptures, painting and drawing, and canvas workshops [17]



Figure 13. Center halls

4.4. Case study 4: “El-Amir Omar Ibrahim palace”

It was Built by Prince Omar Ibrahim, one of the grandsons of Khedive Ismail in 1923 and is about 774 square meters it was military seized after 1952revolution, and then acquired by the Ministry of Culture and Arts and was called the center of the island arts and it is considered the first museum of Islamic ceramics in the Middle East, the museum contains 371 pieces of ceramics from multiple countries.it is located in Al-Jazira district in Zamalek. [9]



Figure 14. El-Amir Omar Ibrahim palace

The palace was built in an Islamic style mix of Andalusian, Moroccan and Turkish styles with the classical European style [19] [20] Al Jazeera Art Center



Figure 15. The Turkish Style Hall ,plan of the ground floor ,plan 1rt floor,the main hall

The palace consists of three floors and a pyramid, where the museum of Islamic ceramics occupies the first floor and contains a huge number of rooms with a rectangular hall (Fig. 14). To view the collection of the Fatimid era - the Turkish style room is dedicated to displaying Turkish-style artifacts The Basement was dedicated to the plastic displays and was named the Peace Hall. [18] In addition, (Fig. 15). The palace is surrounded by a large garden of 3559 square meters with an open theater. [19]



Figure 16. The exhibition hall ,The entrance hall of the museum ,One of the museum halls

4.5. Case study 5: Traditional Art Center Al Fustat

The establishment of the center by Sheikh Al-Khazafin (Said Sadr) in 1958 commissioned by the Ministry of Culture and became the center of creative craftsmanship and the manufacture of beautiful ceramic pieces reviving the spirit of crafts that almost disappeared and presented to the world again and then re-developed the center and provided it with machinery and modern devices ,It was reopened in 2001 [20] (Figure 17)



Figure 17. Traditional Art Center El Fustat

The center is located in the Fustat in the ancient district of Egypt [3] the building is in traditional architecture style similar to the Nubian style, with the use of some elements of the Islamic style. . [21] (Fig. 18)



Figure 18. The courtyard of the building

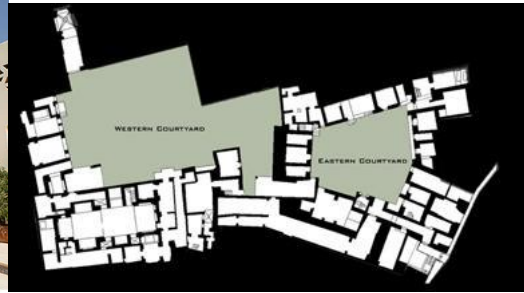


Figure 19. The plan

It consists of two main buildings including the first building, the ceramic industries, because of the many stages of its production, a museum for display (Figure 19), a sales outlet and the second part, which includes the rest of the industries of Knoll, carpentry, and silver and copper works, for they need only small rooms compared to ceramics. (Figure 20)



Figure 20. A ceramic display hall



Figure 21. An elevation with the use of mashrabiyya



Figure 22. The small museum hall.



Figure 23. Workshops for the teaching of sculpture and ceramics

5. Method:

In this study, survey analysis and investigations with stakeholders by mixed-methods between structured online questionnaire with architects, academics and undergraduate students from ten architecture schools in Egypt, and face to face casual interviews used with an aid of visitors, users, and working for staff at five art centers in Greater Cairo. This method is considered to be the method of collecting the data required for this research to include a random group of public, both user and non-user of art centers. This is to get the responses and feedbacks of architects and their ideas of the art centers' design and aspects in Egypt and the extent of the impact of heritage on it.

5.1. Questionnaire Design

A structured online questionnaire was used in surveying architects and Students of architecture responses to gather the primary data. It contains seven sections with a series of both open and closed-ended questions.

The first section is to measure a respondent’s attitude on the importance of the art centers in Egypt and its relation with heritage. From the second section to the 6th one, questions are about five different art centers in Greater Cairo and their location, orientation, circulation, Exteriors and the Interior Design. Respondents were asked about their opinion of the current situation, activities and a number of design factors. The questionnaire was conducted between October 2018 and January 2019.

Answers ranging from ‘Very weak’ to ‘very strong’ were present to know their level of awareness on the matter. To evaluate the visits made by respondents to art centers, Art centers are regularly visited or not, and what was their feedback, Questions supported by photos and architectural drawings for each building. A questionnaire designed for the understanding of professional architects' and students' perception of art centers design, environmental and cultural aspects of the case studies. The last section investigated the respondent’s architect's ideas and suggestions for the future development process of art centers architectural design in Egypt.

5.2. Results:

This questionnaire was sent to 250 architects and students in more than 10 universities and there were 45 respondents representing 18% of the total number .59.1% females and 40.9% males .90% lived or worked in the Greater Cairo Region and the rest were from different Provinces. Table (1) shows the Characteristics of sample A.

Table 2.The compatibility of each character with the function of the art center building from the point of view of participants.

Gender	%	Age	%	Educational attainment	%
Male	40.9	18 -25 y	44.4	Undergraduates students	26.6
Female	59.1	26 -35 y	51.1	Bachelor degree	44.4
		36 – 45 y	0	Master degree	17.8
		Above 45 y	4.4	PhD Degree	11.1

They were then asked about their Opinion of the impact of heritage context in the design of art centers, their answers are ranged from "weak" to ‘strong’ as a Figure (24) shows, and the unsure respondents could select the option "Neutral".

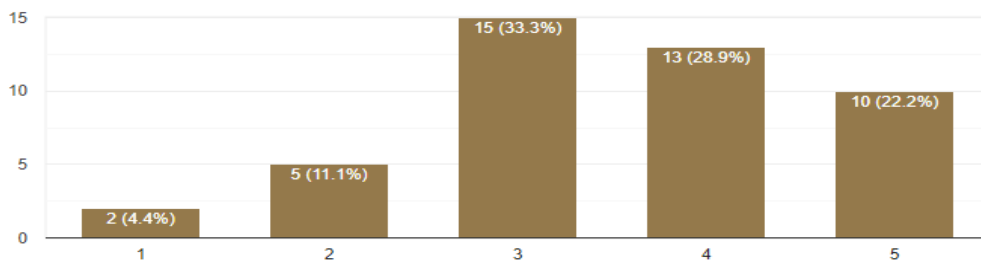


Figure 24. Answers ranged from "weak" to ‘strong’.

In a question about the participation in art centers' architectural design process before, results showed that 55.6% already have participated and 44.4% haven't. Figure (25) shows How many times they have design art centers and whether it was during work or study.



Figure 25. Shows Participation in the art center design process.

There were various responses when the examples of buildings were presented to the participants regarding the architecture design compatibility with overall function. Table (3) shows the compatibility of each character with the function of the art center building from the point of view of participants. That presents different values and perceptions of architects who were involved in with art center architectural design process.

Table 3.The main concept of this questions.


Photo	%	Photo	%
 Heritage building	30.4	 Building with traditional elements in a modern way.	37
 Reuse Traditional architectural building	52.2	 A postmodern building	37
 Modern design building	23.9		

Table 4.Mean, SE and Mode of answers.

	Palace of Art			Ramses Wassef			Traditional Art Center El			15th May Art Center			Al Jazeera Art Center		
	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3	Q1	Q2	Q3
Mean	2.9	3.3	3.2	2.8	3.6	3.4	3.1	3.5	3.4	3.1	3.5	3.4	2.9	3.7	3.0
Standard Deviation	1.0	0.7	0.6	1.2	0.9	0.8	1.0	0.8	0.8	0.6	0.8	0.8	1.1	0.8	1.0
Standard Error	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
Mode	3.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0

Numbers show how important is the visual harmony, familiarity, pleasant, compatibility, simplify, meaningful and complexity aspects in achieving the optimum design. Figure (26) shows the result of that question.

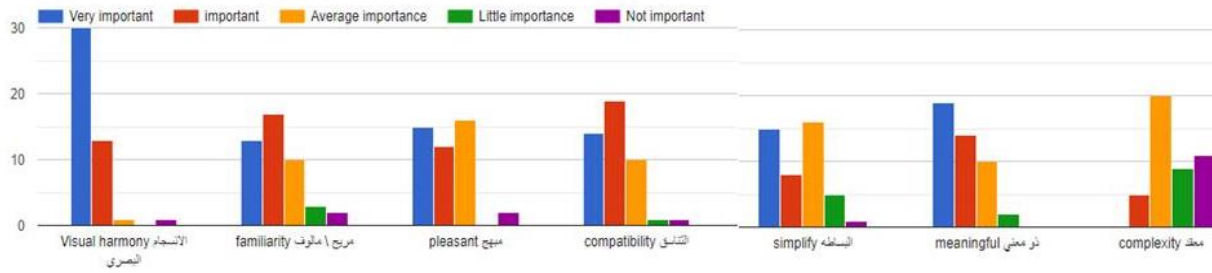


Figure26. Results of how important is the visual harmony, familiarity, pleasant, compatibility, simplify, meaningful and complexity aspects in achieving the optimum design.

Comparison between architects perception to five art centers in Greater Cairo shows that the main challenge in understanding the role of the art center in Egypt, lies in Three design factors; Building Orientation, Spaces Design& Functions and the lighting factor. Table (3) shows the main concept of this questions .table (4) shows Mean, SE and Mode of answers:

With comparing 6 design elements and in one main matrix of building design characteristics related to the context

Case study 1: Palace of Arts

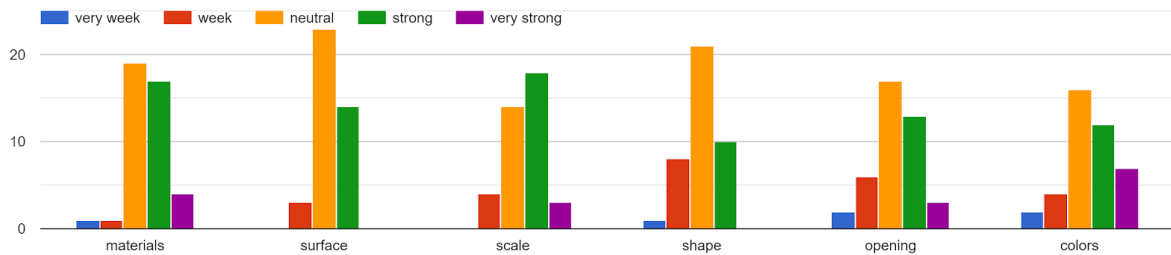


Figure27. Case of Palace of Arts

The chart shows that in this case the interest in colors and composition was very weak but they were interested in choosing building materials and coordinating spaces

Case study 2: Ramses Wissa Wassef Art Centre

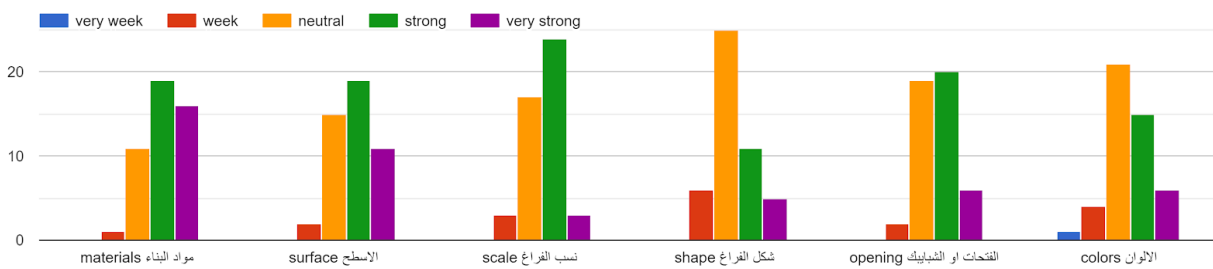


Figure28. Case of Ramses Wissa Wassef Art Centre

The chart shows that in this case, the architect was interested in the percentage of spaces and the shape of the openings and distributed, but the interest in using the knife was weak

Case study 3 "15Th May Art Center' in Helwan city, Cairo

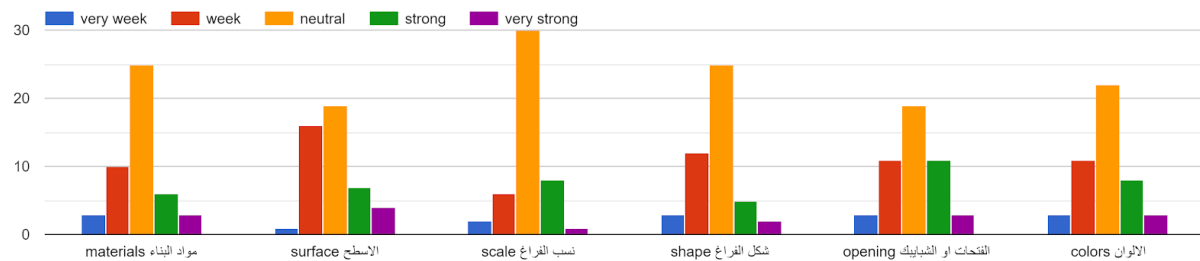


Figure29. Case of "15Th May Art Center' in Helwan city, Cairo

The chart shows that paying attention to design elements was average and weak.

Case study 5: Traditional Art Center Al Fustat

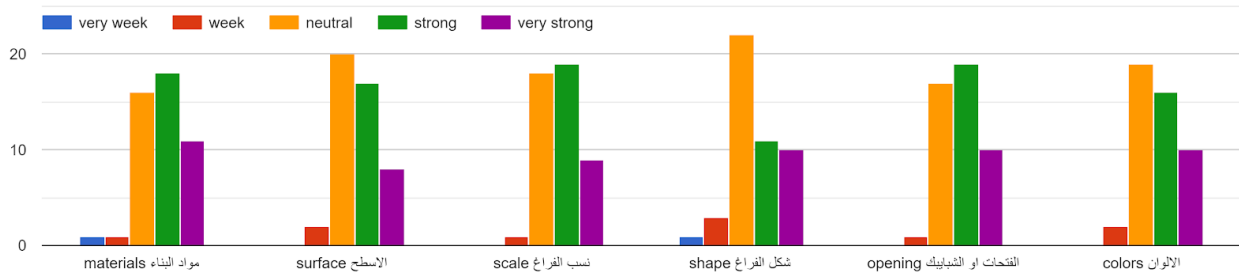


Figure30. Case of Traditional Art Center Al Fustat

The chart shows that in this case, interest in the vacuum was weak, but he was interested in the percentage of spaces and the choice of building materials and colors

6. Conclusion and Recommendations

In a conclusion, this research has led to the result that, the art centers in Egypt play an important and effective role in heritage conservation It also has a Featured sign in the Egyptian community. Many people's saw that Cairo needs to increase the number of art centers and also the current centers need to develop and that is achieved by using Advanced display and education techniques, adding new activities and spaces, Attention to landscape's design development, Providing parking spaces and Taking into consideration disable people.

As well Increasing promotions, accessibility and community activities can raise people's awareness In addition to think about the sound effects, the color lightness effect, the effect of natural material (since the emotions and art is a natural internal human universe) or mix of material / structure ...according to what you want to focused on (the simplicity of art or its magnificent complexity)The building must speak about emotions and culture also from its external shape, form, and External & internal beauty.

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