Abstract:

The theatrical environment is represented in a set of methods in which the performance is not limited to the events of the linear narration for this presentation only, but depends on the collection of images designed to show the emotional responses from the audience, and any element of the scenography must subject the viewer to a sensory or emotional influence, and then it was necessary Preparing theatrical scenes for this performance in areas of unusual proportions that include the exploitation of modern technological developments and means to achieve the final theatrical scene in which the lines between the event and the scenes disappear in order to ensure continuous interaction (instead of the presence of a negative audience) to form environments that represent society on a large scale. As The context in which the individual moves. The design is based on exploiting the inherent capabilities of the human body with the chosen spatial environment (which in turn created a dynamic environment) as a tool to build a reciprocal relationship with the audience by translating spatial and kinetic interactions and audio and visual media to form an engineering matrix to build infinite spatial possibilities through diversity, The vertical and horizontal movement is seemingly endless to achieve an environment that continues to involve the audience in the theatrical events.

1 Introduction:
The theatrical environment must be understood, in which the performance is not limited to written text events, but depends on the collection of images designed to show emotional responses from the audience, so that attraction is the essence of the theatrical event, and any element of the design must cause the viewer to have a sensory or emotional effect, and when preparing the scenes The play in spaces of unusual proportions includes a number of performers based on the exploitation of developments and modern technological means to achieve the final theatrical scene in which the lines between the event and the viewer disappear. This is what ensures the continuous interaction between the entire elements of the performance and the audience (rather than the presence of a passive audience) to form environments that represent society at large, given the context within which the individual moves.

2 Research problem:

How to evaluate and study the psychological, cultural and intellectual factors that, through their interaction, lead to the creation of a specific concept of the theatrical text for the recipient and thus to deal with it as one of the design elements, as well as the mechanisms of artistic work that generate aesthetic values that control the reception process, and how to measure the audience's interaction with This type of performances by exploiting the capabilities inherent in the human body, which in turn created a kinetic environment to show the emotional responses of the audience, so that attraction is the essence of the theatrical event in addition to using technology as a tool to build a reciprocal relation with the audience by translating spatial kinematic interactions to the audio and visual media to form An engineering matrix to create infinite spatial possibilities through the diversity of vertical and horizontal movement in what seems infinite to achieve an environment that continues to evolve, through settings that made it possible to involve the recipients in the events of the theatrical performance to achieve new innovations in the field of scenography.

3 Research Objective:

The experiment aims to motivate the audience of the show to engage in psychological, physical, and emotional reactions to the events of the theatrical performance, in the sense of reconfiguring the main factors of the experience (the form of previous works - the language of practice or performance), In addition to determining the quality of the impact on the audience of the theatrical performance by studying the aesthetic distance within the relation that links it to the literary work and rethinking the expectations awaited from the first moment to watch the theatrical audience of the show and the extent of its change from what was presented for the same theatrical performance in the past.
.4 Research methodology:

An experimental method that depends on experimentation and observation.

.5 Theoretical approach:

The scenes of the theatrical performance take place in three interconnected areas, including the elements that interact with each other and the resulting relations between multiple areas that include the events of the theatrical performance with the aim of creating movements that draw attention not only to aesthetic effects, but to the method of performance, movements and interactions Produced during the show.

.6 Research procedures:

A- Selection of the theater show area:

The first proposed place to hold the show Marsa Matruh:

One of the most important requirements of this show was the existence of a coast with specific advantages for holding a theatrical show (for the design and implementation of the theatrical show). It was one of the distinctive places that have characteristics suitable for the beaches of Marsa Matrouh, as it is located 290 km west of Alexandria and 524 km from Cairo.
Fig 1. It is a small port on the Mediterranean coast, famous for its beach that extends about seven kilometers, and it is one of the most beautiful beaches in the world. An image from Google Earth showing the coast of Marsa Matruh Governorate and (Al-Gharam Beach).

The beaches are characterized by soft white sand and transparent calm waters, as they are protected by a series of natural rocks and in the middle of them is an opening that allows the passage of light ships.

Fig 2 Live shot of the temple of Revelation of the god Amun-Ra in Siwa, what remains of the Temple of Amun in Siwa , The history of this beautiful place dates back to the era of Alexander the Macedonian at that time «Pratium» and they also called it «Ammonia» and it is said that Alexander the Great had stopped in this place during his historical trip to present the obligations of loyalty to the god Amun in Siwa- that Temple of the who was visited by Alexander the Great in order to gain his support and establish him in the rule of Egypt and declared himself the son of the god Amun.
Figure 3. Marsa Matruh is located in northwestern Egypt, Marsa Matruh, inside a large circular bay, protected by a series of rocks that form a natural barrier that protects it from the high sea waves, so it is one of the isolated areas on the Mediterranean coast. The capital of Matrouh Governorate extends over 61 km from the Alexandria-Matrouh highway to the Egyptian-Libyan border (450 km from the coast), from east to west, and is 350 km from the coast within the western desert of Egypt, including the Siwa Oasis. Matrouh has the most beautiful coastal landscapes. The picturesque world thanks to its crystal clear waters and white sandy beaches such as Wonder Beach and Love Beach. Al-Gharam Beach, the largest beach of Marsa Matruh, is located only 17 km from the city. This charming site is a perfect romantic beach gateway, the seabed in Matrouh
contains an amazing world of compact underwater plateaus and valleys in addition to multiple species of colorful fish. The color of the seawater fluctuates between blue and green with different depth. Public Authority for Tourism Promotion.

The second proposal is the new city of Rashid: where its distinguished location from the beginning of Rashid branch is what prompted me to choose it, and it extends westward to the sites of natural gas projects north of Idku city, and it has a beach front with a length of approximately 10 km, and it is about 5 km from the international coastal road. For the city to accommodate all types of housing (tourism - medium - social), in addition to various service and development projects, and it will be a tourist outlet for residents of the governorates of Buhaira and Kafr El Sheikh, and it will provide job opportunities and various investment opportunities for the residents of Buhaira Governorate, where 20% of the surplus sales of development projects have been allocated within New Rashid City for the benefit of the Beheira Governorate, to increase the governorate's resources, and to contribute to the implementation of various projects to serve its residents.

Why the new city of Rashid?
The privileged location of the new city is what encouraged me to make it the second choice for a theatrical show, because it combines coastal nature with natural plants, which is a prerequisite for the establishment of the proposed project.
2- Study the design in terms of:
A - The subject of the presentation.
B - The movement of design elements.
C - The design stages.

A- Subject of the presentation:

Legend events:

According to the version of Tarzan the Monkeys, Tarzan, whose real name is (John Clayton), is the son of a British noble, and his parents were on board a ship near the coast of Africa, and the sailors revolted against the captain of that ship and riots and chaos broke out that ended with the shipwreck and the stability of the ship on the African coast. Then John Clayton's parents die when he is an infant, and a huge monkey of the Mangani type takes care of him, and the name Tarzan is given to him, which means white-skinned in the language of monkeys, and the monkeys who care for Tarzan are a special fictional species that does not exist in the scientific classifications.

When Tarzan reaches the youth stage, he falls in love with an American girl named Jane, and when Jane leaves the island, Tarzan searches for her, and the search ends with a happy ending in Tarzan's marriage to Jane. They have a son named Korak and they live for a while in London but decide to return to the purity of nature away from the duplicity and hypocrisy of the city and their return to the island, the novel ends with their transformation into two immortal people who are still alive, according to Tarzan the Monkeys. Retrieved from Wikipedia.

B- Movement of Design Elements: -

First theater area:

The design was built on two areas, the first on land and the second on the water, the roller coaster that moves between the trees and in it the audience is directed to ride the coaster carriages, which set off on their path towards the beginning of the journey, in which the audience wanders through the forest, the place of the follow-up events for the beginning of the show where Tarzan sets off
Between the trees calling for his distinctive shout and moving around the roller coaster back and forth and the events of the show move with him so that the audience feels the movement and excitement as if they were turned into Tarzan, moving between the trees with light movements, the events of the theatrical performance interact and the first zone ends and the second zone begins.

Second theater stage:

The audience going down from the roller coaster for the second stage by walking through a path set up to reach an island that contains heights to settle there a little until a large boat appears, moving slowly around the place and carrying on board some performers who act on the deck of the boat, the audience moves to follow the events that take place on the boat as if it were leads them to walk to a specific place, to reach them to another path around a mountain hill that includes other members of the actors, who push the audience to the movement to follow the events that change and change to reach the third area, which is the end of events in the forest.

Design steps:

The design was based on analyzing the formations on a tree under the microscope (BIOMIMICRY Design) (birch leaf, which has amazing healing properties for many diseases).
The design elements were inspired by the detail of the tree leaf, which is characterized by the containment of geometric formations that are the basic structure of the design:
Fig 6 the initial lines of the design, inspired by the geometric formations inside the leaf.
Second theater stage:

By completing the design based on the engineering analysis of the tree leaves for the design of the second area for the theatrical presentation, which is prepared by using a bridge to connect to an area containing an (artificial) elevation to complete the atmosphere of the theatrical performance.
Figure 8. By completing the design lines inspired by the tree leaves, three shapes were chosen to express the second area of the design stages.
Figure 9. Figure 8. Sketch in pencil the final shape of the second area, which contains three platforms around which there is a path for movement.

Figure 10. After that, a few modifications were made to the final design of the two theatrical display areas, the first area on the land and the second area on the water surface to show the final shape shown in the image - as then appears the boat that contains part of the theatrical performance

The beginning of the theatrical performance:

The theatrical show begins with the audience entering the starting area, which is the forest that contains the roller coaster, the show begins with the audience riding on it and hearing the sound of Tarzan through the trees and everywhere, and the various monkey sounds rise, followed by the sounds of the rest of the forest animals
Figure 11. A detailed image of the hut for the starting area and the start of the roller coaster ride - a 3D MAX image for the starting area
Fig 12. Pictures showing the path of the roller coaster between the plants (trees and plant units that were used as part of the design) to make the audience move between the trees like the movement of Tarzan as it moves between the trees and the rest of the animals.
Fig 13 Roller coaster track Image made by 3DMAX
Fig 14 A- Roller coaster track Image made by 3DMAX

B- A horizontal projection showing the path of the roller coaster and its relation with the gate
- Image made by 3DMAX
The audience of the theatrical performance begins by going down into the forest area and wandering inside it with the performers, reaching the gate of the next area, which is located on the water surface - a bridge extends from the gate to pass around one of the areas that resemble the island which contains two Heights linked from the top by a wooden bridge, In this area, the events take place by the audience to move and sometimes to sit, rest, and watch the events taking place in this area.
Fig 15 A large boat passes after the presence of the audience in this area to complete some parts of the performance on - the audience watch the performance on land while the performers are on the boat.
Fig 16: An image designed with 3D MAX program showing the highland area that designed as the audience path.
Fig 17 this scene was designed completely with 3DMAX software showing the boat path on the water surface during the show to complete the scenes of the theatrical show
Fig 18 to reach the last area of the theatrical event, which ends with the audience crossing the wooden bridge - it rotates around another hill to reach the end point of the theatrical performance on land again.
Conclusion:
Many designers throughout history have resorted to nature as a source of design - and this has appeared in many areas, and the relations between the development of design thinking and the nature of exploited places is what has allowed a revolution in the use of natural resources to achieve a new environment using vital forms as a source of design.

Therefore, the choice of the spatial environment for theatrical performances is an essential element for the audience's interaction with the components of the show, and therefore the connection of the design of theatrical performances to the place is responsible for a good understanding of the elements of theatrical performance beyond the traditional limits of theatrical performance, so that the interaction between the audience and the performers occurs to present a new perspective on the dramatic event. A living space or environment in the display area, the display turns from a static to a moving, capable of change throughout the performances, and even responds and interacts with its components to appear alive.

Recommendations:
It must be analyzed how to take advantage of modern capabilities in improving theatrical performances and exploiting the development of theatrical designs in the modern age, and advanced interactive shows that canceled the boundaries between the various arts to move towards a new turn of merging between picture and video technologies, and the capabilities of computers and software and many other technologies that enabled the appearance of high-quality works of art.

Results:
Modern technology has provided more development and capabilities that serve the methods of theatrical design, enabling theater designers to link design thinking to the nature and place of theatrical performance and to provide a complete vision and understanding of the topics of theatrical performances and became enabling them to create a visual relation between the components of the theatrical performance and the environment surrounding the show, with the aim of developing the methods of theatrical communication by exploiting theatrical media and their interaction with the space, so that it is changed according to the change of the relation of the elements of the presentation with the audience to understand the idea of the show.

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