The Principles of coordinating the ceramics complements in domestic gardens.

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Research problem:

- What are the most important garden complementary models that the potter designer must be familiar with in order to be able to coordinate his designs within the spatial space of the garden?
- How and where does the designer put the potter his designs from garden supplements inside the garden so that it appears and manifests itself as a complete design work?

Research objective: To learn the basic principles of landscaping so that the potter designer can fully coordinate ceramic garden supplements within the garden.

Hypotheses of the research: The research assumes the importance and effectiveness of the role of the porcelain material because of its mechanical and physical properties that have been previously exposed in many previous studies, as well as the presence of supplements of ceramic gardens. It is of great importance to the potter designer.

Research methodology: the descriptive analytical approach.

Introduction:

The garden's complements are considered a continuation of the external architecture, as it is not separate from it, and therefore the role of the potter designer is no less important than the designer of the site (Landscape) who designed the garden or the architect who designed the building. The designer must be aware of the architectural style of the building so that his designs are in line with his architectural spirit, and he must also be aware of how to place his products in the way that their aesthetics appear in the surrounding environment, in the end the garden with its supplements is a large unified and integrated work with the building to give an aesthetic image greater than just a container for plants or a bench in a garden, and by looking at the National Coordination Council guide Urban, issued according to the New Cities Coordination Law (Article 119) for the year 2008, which obligates new cities now to provide green spaces in residential places. The garden supplement industry can never be considered a marginal industry. Today, the park has become a tangible reality that must be dealt with and fulfill its requirements, whose supplements are a major and important part.

And in view of the important and major role played by the ceramic material in the manufacture of garden supplements due to the suitability of the material to the nature of the product that requires great mechanical durability and resistance to the weather factors that these products are exposed to, as well as its aesthetics with the surrounding environment, the importance of the research has emerged in the necessity of understanding the designer potter, how and where

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to coordinate ceramic garden supplements inside the garden so that they appear and manifest themselves as a work of art complementary to the larger work of art? Therefore, in this paper we are presented with a simple idea of the models of garden supplements and the most appropriate places to place them.

The essence of garden design depends on understanding the relationships that bind shapes to each other, as gardens gain their visual strength from the basic abstract shapes. The first and basic step is to forget the garden as herbal materials or products, and we begin to divide it in the form of relationships, chains of relationships for abstract geometric shapes and beyond. The designer can decide which specific shape these engineering spaces can take and begin to organize these organic and inorganic relationships of the elements that make up the garden together. Both natural (plant) and manufactured (garden complements) elements have an impact on the designer's creativity and ideas, not necessarily that they are translated into a specific design, but they are considered one of the elements that stimulate the designer's awareness and ideas in terms of shape relationships, line, and proportions.

Consequently, the basic research problem appears in the study of the most important garden supplement styles that the potter designer must be familiar with in order to be able to coordinate his designs within the spatial space of the garden, and he will also be exposed to the second problem, which is how and where the designer potter puts his designs from garden supplements inside the garden so that they appear and manifest as a real work as the design is complete?

Consequently, the research aims to identify the basic principles of landscaping so that the potter designer can fully coordinate ceramic garden supplements within the garden by imposing the research with the importance and effectiveness of the role of the porcelain material because of its mechanical and physical properties that have been previously exposed in many previous studies as well as the presence of supplements. Ceramic gardens, the role of the potter designer is no less important than the role of the landscape designer, which makes the study of landscaping so important to the designer of potter .

1- The basics of coordinating home garden supplements

The proportions in the design of garden components are one of the most important design principles, as is the case with any type of design. When arranging the garden components within the space, the designer searches for the balance between the blocks and between the walls and the void and its relationships with the ground line. The harmony between the mass and the space is embodied in the ancient Chinese principles of "Yin and yang".

"Yin and Yang" in a positive and negative way, so the designer thinks about the blocks that make up the garden, whether they are plants or one of the architectural elements that make up the garden as the positive element (Positives), and the resulting space between them is the negative component (Negatives) and it may be the grass or a pavement in the garden, then the designer works on creating a balance between both, which is the key factor in designing garden ceramics and their architectural components.

- Proportion
- Abstracted Shapes
- Arranging Shapes
- Altered Impression
- Central Impact

- مارس ۲۰۲۳
- Boundary Impact
- Shapes in a Setting
- Visual Devices
- Manipulating the eye

2- Special style civil garden supplement design:

It is easy to analyze the national style that characterizes each country. It is a matter of looking beyond the garden fence and thinking of the designer. Private gardens are essential for new city homes, the most suitable models for them are the most difficult to imagine, but in fact they are easier in terms of where the designer can design what suits him, while a developer is gradually planning the garden and then modeling it in a way that reflects the structure of the house, i.e. its basic architectural features. Some design schools for garden supplements are considered an extension of the interior home furniture as an external room for the house. This is reflected through the use of materials and motifs that were used inside the house, but the principle must be preserved. The design of garden complements should reflect the external architectural characteristics of the building, and we find that it is easy to make a decision regarding placing the furniture inside the house, but we find this confidence vibrating in terms of garden complements even though both of them have the same conditions in terms of appropriate type, center, in addition to desires and personal preferences, all these factors lead us to the style of the garden house:

- Country Style
- Modern Style
- Formal Style
- Colonial Style
- Mediterranean Style

3- Garden models:

In order for the garden to be coordinated in an integrated manner, the designer must be aware of the elements and study the style of the garden that has to coordinate its complements, as gardens are divided in terms of models used in planning into four styles or patterns, namely:

- **Geometric pattern** geometric lines and axial symmetry, represented in the Pharaonic, Persian, Islamic and European styles.
- Natural Layout tends in its design to nature and curved lines, and is represented by the Chinese and Japanese styles.
- **Mixed mode** combines the geometric and natural styles, represented by the European model.
- **Modern style** a mixture of geometric and natural styles, but with fewer spaces than the mixed style, represented by the European and American styles.

4- Researcher designs



(Figure 1) a proposal to design units in the form of a rectangular parallelepiped, and a geometric-style building was chosen to match the design spirit. The units were multifunctional, including the plant container and including the seat, the symmetrical geometric pattern was used in the stacking of the units to suit them with the style of the building, the design has a white color and a smooth surface, and plants have bright clear colors.



(Figure 2) In this design proposal, we find that the chosen place is where the walking path was designed organically in line with the spirit of the design. Functional aspect is in one of the containers as it is used as a source of lighting, and when placing the light in this place, we use diffused lighting, as it fits with the design spirit and even though it is included in the seating unit, the walkway tiles were also invented on both sides of the corridor, which is the same basic unit.



Figure (3) An integrated design of multiple-use units. The site (the villa) has geometric openings, and therefore the design was linked from the spirit of the building architectural design, so the researcher chose an engineering design, which is a square unit with openings that were divided as follows:

The larger unit that is placed on the ground has holes in the ground so that the plant grows through. As for the units that are placed above it, it is closed slightly in a ratio of 3: 1 so that it is suitable for the plant to be grown in it. The design, in addition to the walkway leading to the entrance to the villa which is

designed in white and bright colors are used.

Results:

The purpose of the garden should be the first consideration to be taken into account, and from the functional purpose of the garden structure, the appropriate measurements and considerations must be taken into account when designing the design, so the corridors must take the appropriate amount of breadth according to the actual function, as well as the seating areas, pergolas, seats and the materials of their implementation in proportion to the nature of the place and the presumed number of park-goers.

And that the designer always works on a comparison between the designs and what he sees in reality, and the designer will not be able to fully practice his speech in expressing his creativity in design unless there is what has been put on his designs to represent an addition to a function in the garden or to a substance that is involved in its construction, and even so, the garden will not transmit joy inside the souls if they are devoid of artistic and imaginative touches.

The garden, like all other types of art, must fully understand the aesthetic form that gives the real concept to the designer's ideas.

Recommendations:

With the importance of the role of the porcelain material in the implementation of garden porcelain supplements because of its properties that make it the most suitable raw material for this type of product, the researcher recommends the following:

- Raise an interest when designing ceramic garden to keep pace with the new architectural movement that are spread in cities in all countries, not only in Egypt, in terms of establishing residential cities that provide green spaces around every home, and therefore it is necessary to keep pace with this new architectural movement and provide the necessary supplements that raise the general taste of the beholders. Do not leave this role to the craftsmen and advertising companies.
- The necessity of the designer, the potter, with the most important formal considerations for coordinating ceramic garden, which lead to achieving the values of balance, rhythm, proportionality, and unity in the garden, which give it a beauty.
- The master designer, the potter, based on the scientific foundations and rules established by landscape scientists and architects, who consider that the potter is a part that completes their work and is not separate from them, so taking into account the foundations of garden coordination is one of the most important design factors.

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