

The Plastic and Aesthetic Simulation of Decorative Iron as an Approach for the Development of Artistic-work to Face Market Challenges

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Abstract:

Several studies emphasized the need to prepare and qualify a student and graduate of arts well, in order to face challenges of the labor market, to be effective in developing society in all aspects, especially economic ones, this can be done through directing small productive projects, especially in the technical fields that contribute significantly to support economy and society.

A new technical entrance to a productive project can be provided to be a maximum of small or large art products with small casualty and valuable values, with cheap cargoes available in local markets as well as ease in dealing and formulation, which has a positive impact on the preposition and attention of members of the community to those products, reflecting the success of its production as a production project facing the challenges of the labor market.

Accordingly, the researcher has moved towards benefiting from the fine dimensions and aesthetic values of the decorative iron as one of the rich arts with its multiple patterns and styles, to make artistic works suitable to be the nucleus of one of the small productive projects, and then the researcher chose the polystyrene material due to its plastic and formal features. It can mimic the appearance and not the function of decorative iron, as many decorative elements and units can be implemented in an easy and fast way, and the production of artifacts works as a small production project for young graduates. The problem of the research lies in shedding light on my potential Dimensional Simulation of plastic and aesthetic values of iron decorative art, through polycarbonate raw polystyrene for the production of artistic artifacts suitable as a small production for young people to the challenges facing the labor market.

Key words:

(simulation - decorative iron - artwork - labor market)

Introduction

Technical works one of the most important areas of technical education aimed at training students in unlimited material thinking, not only skill mastery and modeling techniques, but also fluency and flexibility in thinking. In addition to producing functional works of art, technical works are also considered to be the technical extension to develop the capacity for innovation, research and continuous experimentation, to access up-to-date ways of using quantum, and to innovate in employing them in a transmissive esthetic.

One of the main objectives of the technical education is to instill history and civilization in new generations, learning to convey to civilization and heritage what is appropriate to its nature and their development without damaging its essence.

This ornamental iron is one of the artistic and handicraft fields, where the diversity, richness and originality of this art through different eras and the resulting formative, aesthetic and expressive values that enrich many of the various artistic fields, but can contribute in the educational and aesthetic fields, by theoretical and analytical study as well as practical applications and skill.

The researcher believes that it is necessary to prepare a professional education student and graduate in order to meet the challenges of the labor market, so that it can be effective in developing society in all aspects, especially the economy, through directing small production projects, especially in technical fields that contribute greatly to supporting the economy and society.

And that is by providing a new technical entrance for one of the productive projects to be a starting point for implementing small or large artistic products of formative dimensions and distinctive aesthetic values, with cheap materials available in the local markets in addition to the ease of dealing with them and their formation, which has a positive impact in achieving the satisfaction and interest of members of society for those Products.

The research has also been directed toward building upon the plastic dimensions and esthetic values of decorative iron as a rich art in its various forms and forms of work for the creation of works of art that can be the nucleus of a small production enterprise. The researcher has selected the polystyrene's luxury for its features and its plastic and formal properties, which can simulate the true appearance of decorative iron chips, where many elements and decorative units can be implemented in a quick and easy way, and the production of work that can serve as a small production project for young graduates.

Research Problem:

The current research problem is to highlight the possibility of simulating the plastic dimensions and esthetic values of decorative iron art through the granular polystyrene to produce artistic works that serve as a small productive project for young people to meet the challenges of the labor market.

Research objectives: The study aims at

- Utilize the variety of polystyrene chips through its simulator.
- Producing works of art that can be adapted to a small productive project for young people to meet the challenges of the labor market.

Research hypotheses: The study assumes that it is possible

- Simulating the esthetic and chemical values of polystyrene decorative iron can contribute to the production of artistic works with updated plastic dimensions.
- Production of polystyrene-inspired works of art in decorative iron designs can serve as the nucleus of a small production project that meets the demands of the labor market.

Research Importance

- The application of the plastic dimensions and esthetic values of decorative iron art in the production of modernized artistic works.
- Utilize polystyrene slices to simulate the plastic dimensions and esthetic values of decorative iron.

- Find new tarmsour new test for DARCI and technical alumnia designed as a small production project to fit Sufecal volunteers

Research limits: The study is blind

- Use black polystyrene slices.
- The simulation is of the plastic and esthetic, not the functional of the ornamental iron.
- Applied: A student experience for graduates of the Technical Education Department at the Faculty of Quality Education, Tanta University.
- Use Microsoft Word () - Adobe Photoshop to implement the designs.
- A garnish complementary to our homes (photo frames- mirrors – operaverns).

Research Terms:

Simulation: The process of imitation, being similar in form, intonation, or actual character. In the current research, procedural is defined as the tradition of the structural, design and structural dimensions of decorative iron art and the resulting values, and its implementation of polystyrene in works of art that serve as a new small project, which can be marketed in local markets.

Decorative iron: The iron is treated in various forms (such as roads, textures, parts, etc.), with the aim of decoration in the first place in addition to the functional aspect.

Artistic style: A style or artistic character that can be easily recognized with a set of features with clear landmarks.

Research Curriculum:

Research is based on the descriptive approach and analytical approach in the conceptual framework, and on the experimental approach in the applied framework.

Research themes:

Firstly: Decorative iron patterns between design, aesthetics and forming methods.

The art of decorative iron is particularly important in terms of its historical and artistic origins, its esthetic and its forms, which first originated in some European countries such as Germany, France, Italy, England, and later affected many countries of the world, including Egypt.

The decorative iron in Egypt was only visible in the late nineteenth century under Mohammed Ali, where it was used by foreign artists, designers and workers, who built several palaces and buildings on European architecture, and it was noted that the artistic styles of the ornamental iron in the country were similar, overlapping and diverse. It has a character and features of more than one model.

The researcher will study some of the modules and the performance methods of some of these models, which can be used to achieve the current research goal, here we will review some decorative iron models, each based on a range of foundations and vocabulary that distinguish it from other models.

Romanesque style

The Italian Romanesque was characterized by its rotation and curves in the work of the gates and iron barriers of the architecture, as well as the horizontal and vertical repetitions of decorative elements, The Romanesque was well-known for its security role and the strengthening of the doors and windows, and also for its simplicity and the use of geometric structures and abstract elements as characters. The French Romanesque, with its ornate

ornamental, Welsh and recursive ornamental ornaments, the plant ornaments such as leaves, especially grapes, triangular and quintet flowers in geometric arrangements and iterations, occupy and cover all spaces in the design.

Renaissance style:

The dominant esthetic feature of Renaissance decoration is simplicity in straight or curved lines, whether overlapping, intermittent or staggered in repetitions that give the eye moments of rest and mind-thinking in a busy vacuum. The art of decorative iron in Renaissance Italy was distinguished by combining both the plastic and the diagnostic style through the forms of mummy, animal, bird and reptile. The Italian iron then moved to the prosperous Renaissance phase where techniques developed, and artists and designers turned to the methods of occupying spaces inside the glands using modular engineering units based on the C and S letters. The Renaissance style in France was based on simplicity and agility resulting from the use of curves, as well as the employment of the Commission to persons and animals, with often abstract decorative elements. The partial distribution of decorative units in various parts of the design within the general framework is also a configuration that is agile, simple, diverse and harmonious among units at work. The art of decorative iron in Germany is original and distinctive, and the emancipation and development of the other side, where the replication of the units and forms in a professional and familiar manner is a concern, with decorative iron appearing in the doors, windows, barriers, shrines and setter in churches, houses and crosses.

Islamic style:

The ornamental iron in Islam is a decorative iron in mosques and architectural buildings, such as the faculties in doors, windows and architectural buildings, designed to be very decorative and interesting, and the Islamic artist has been particularly imaginative in architectural and organic designs. The art of decorative iron in Islamic times has passed through various periods of power, skill, weakness and neglect, with the decorative iron of the Fatimid era largely showing strength and support for architectural buildings, Low appearance of decorative iron was observed in the EoE era with the use of copper cast in some window openings for the first time.

The production and art of decorative iron flourished in the Mameluke era, where the golden age of many arts is considered, because of the wealth, money and the grudge of the Malian sultans, the metal decorations are many and many materials including iron, copper and bronze, The doors, windows and architectural openings are decorated in Islamic units, and a new style has appeared in the ornamental elements (pottery), a circular or oval ornamental unit with the two sides in the form of triple leaf.

In the Ottoman period, the art of decorative iron continued to advance, and the Ottoman-era motifs were influenced by European motifs, especially baroque, which led to the emergence of various Islamic motifs.

Modern decorative iron:

The mineral industries in general, including iron, have evolved into science and technology-based, as well as changing needs and life requirements, as they have imposed themselves in many areas. It was a high-interest material, with many decorative units and artworks of art, quality and skill. This led the researcher to take advantage of the esthetics and diversity of the

techniques of shaping this art both old and new and to make use of it in the work of artworks bearing the esthetic and plastic values of decorative iron.

Second: Simulation as one of the pillars of developing artwork

The researcher has adopted the idea of simulations as a means of producing new artistic ideas and creative works through reflection on different heritage and civilizations, and with the aim of studying and analyzing to emphasize some of the ingredients for implementing artistic works, the simulation ends in proportion to the changes of the time and the demands of the market.

The field of art works is an important focus of creative practices in various ways that allow the application of simulation thinking from diverse perspectives, both through the simulation of materials, techniques and the compositions.

The researcher believes that the field of artistic works is one of the most important areas in which a great development can occur through modern and many simulations. The current research has been based on this application by considering reaching the values in decorative iron with easier and less expensive rubbish that are suitable for use in the educational process and dealing with them in easy and safe ways for students and graduates of technical education colleges.

Third: Small projects and the labor market in art education.

The researcher believes that the orientation of small projects related to the fields of plastic arts and studying the needs of the labor market is of great importance in guiding both students and graduates as individuals as well as the educational institutions related to art, and anyone interested in art has to contribute to the development and strengthening of society's competitiveness, which the research seeks by linking the student product to the demands of the labor market and use the student and graduate diverse skills to be able to produce some works of art that are of esthetic and economic value. This may contribute to Egypt's vision of 2030m in terms of local, community and economic development.

This can be done through continuous empirical thinking and the changing use of technical media, tools, materials and techniques, which are particularly characteristic of technical areas and technical works. The new technology is designed to provide a wide range of technical expertise and ideas with both esthetic and functional values, which can be implemented productively as the core of a small production plant.

The project's idea is to produce works and artistic products with many design foundations, plastic dimensions, and esthetic values similar to decorative iron esthetics, this is achieved using one of the industrial plastics raw materials, polystyrene, which is cost-effective without the need for expensive machines and equipment in simple and easy ways, and high safety standards, it can be the core of many small projects for students and graduates of art colleges.

Fourth: The applied framework (the research experiment).

The applied framework in the current search is divided into:

First: The power of polystyrene to simulate decorative iron and produce artistic works

The polystyrene material is one of the newly developed industrial raw materials, and it is considered one of the important raw materials in the field of plastic arts because of its formative properties and various formative capabilities commensurate with many technical, educational, applied and aesthetic uses, so the researcher chose it to achieve the current research goal.

Second: The design and construction foundations of the decorative iron

Decorative iron was based on many design and construction foundations, relying on simplicity in straight and bent lines in the formation of various elements and units, and considering the gaps between these units when combined into one configuration, this gives emphasis to the module and the interconnectedness of the artwork, in some work, it relied on regular bilateral and quadruple symmetric arrangements, but there were some work in which the concept of design freedom and access to liberal creative aspects had been realized. This ensures that equilibrium values of different types appear, whether symmetric, asymmetric, central-axial, and so on.

Repetitive relationships, whether regular or irregular, have emerged in many horizontal, vertical, tilted, erratic, spiral, and free directions, and the result of these repetitions from multiple rhythms, which is one of the important foundations in iron designs

The art of decorative ironwork also depended on the abstraction and simplification of units derived from nature in addition to the multiple plastic values of simple elements such as the letter C, S.

Third: The plastic elements of decorative iron art (ornaments, carbons and decorative units)

The art of iron decoration depended on a set of vocabulary and assortment units, which are called ornaments and clams that are accurate, simple and well-designed in creating a whole unit with their own design and location. These units are assembled by a band or by one of the appropriate welds and then connected with additional pieces, which is the foundation on which most of the decorative iron works are built. The number of faculties and units in the iron ornaments is not limited to (engineering faculties, organic or natural ornaments, model ornaments, free or simple ornaments).

Fourth: The applied framework (research experiment)**Goal of the experiment**

The aim of the experiment is to create new experimental entries for the graduates of the Technical Education Department of the qualitative Education Schools, which can be considered a small productive project by producing artistic works of polystyrene, which have many esthetic and decorative values.

The research sample

A sample of graduates of the Faculty of Quality Education, Department of Technical Education, Tanta University, was conducted for the following reasons:

- According to the Department's list, the updated materials and their potential are examined in the Technical Works course for the Second Division.
- Study of the computer course in the arts in the Third Division that contains learning of the skills of image coordination for each program of Adobe Photoshop and Word.

The sample of the study was made up of 20 students and graduates of the Department of Technical Education at the Faculty of Specific Education, Tanta University.

The application of the research experiment

The experience relied on two key factors for working with students

First: Direct communication (interviews)

It was identified in three interviews of 3 hours each.

Second: Electronic communication

The second stage was based on electronic communication with students.

Research results

- The work of artworks carried out with polystyrene slices was done by simulating the plastic dimensions and esthetic values of decorative iron art.
- Works of art were produced to serve as a micro production project for young people to meet the challenges of the labor market.

Recommendations:

- Confirmation the development and utilization of different materials in non-traditional ways to achieve innovative formative solutions.
- Adopting the philosophy of simulation in all its aspects in order to reach new visions of works of art.
- Attention to college graduates, especially technical ones, and support and direct them to set up small production projects.

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