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Benefitting from Red Sea Elements in Creating Printed Designs for Tourist Furnishings Fabrics

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Abstract:

Red Sea is one of the most fascinating areas in the world. Egypt's Red Sea has abundant tourism infrastructure, which attracts tourists from around the world. A rare coral reef and kinds of multi-colored elements underwater is a testament to the work of Mother Nature that could not be replicated by mankind. The main aim of this work is to innovate new modern designs for fabric printing of touristic products, by selecting the artistic elements of the marine nature and cultural life in the Red Sea, then creating textile designs inspired from them. The researcher used the analytical descriptive method in explaining cultural and natural features of the Red Sea to identify their characteristics and come up with innovative designs using computer programs, analyze the design and evaluate the degree of agreement on each design. Areas near the Red Sea coast provide an opportunity to observe natural marine life earning special tourism position by its aquatic treasures. Egypt's Red Sea aboriginal culture and unique nature, as well as being a tourism destination, offers a great potential for enhancing design value. Design and culture are oddly similar, where both are fundamental results of human existence and activity.

Problems of the study: The problem can be formulated in the following question: How can we benefit from the cultural and natural elements of the Red Sea in Egypt to create printed designs suitable to be used in interior furnishing in touristic institutions to serve tourism in Egypt.

Objectives: The possibility to benefit from the aesthetics of natural and cultural marine environment of the Red Sea to innovate printable designs for curtains and wall-hangings suitable for the purpose of interior furnishing to serve tourism in Egypt. Benefit from specialized computer programs to develop the values of innovative designs to reach the required level of quality and raise the aesthetic and functional values of the products.

Hypothesis of the study: The study assumes that the innovative compositions express the cultural and/ or marine natural elements in the Red Sea with the aesthetic values that inspired from them. The ability of the designer to use computer design programs to show the innovative compositions and visual appearance of the suggested applications. The functional purpose of the innovative designs can serve tourism in Egypt.

Delimitations: objective: A theoretically study for what specializes the Red Sea region touristically, also cultural and natural features of the Red Sea. The use of computer programs to redraw and color the innovative compositions, make repetitions (for curtains), select different color palettes, and visualize suggested applications for the designs. Evaluate the artistic and aesthetic values of the innovative compositions. Spatial limits: Cultural and marine natural elements in the Red Sea region in Arab Republic of Egypt.

Methodology of the study: The study based on: The analytical descriptive method in explaining cultural and natural features of the Red Sea to identify their characteristics and come up with innovative designs and analyzing them. The experimental method in innovating designs inspired from cultural and natural elements of the Red Sea that consist of different stages aiming to make designs suitable for textile printing to furnish tourist institutions.

Tools of the study: A number of diverse sources including books, scientific research, International Information Network (the Internet), Adobe graphic programs (Photoshop & Illustrator), and evaluation sheet (questionnaire).

Methods: 1. Selecting some of artistic elements from natural marine life and cultural elements in the Red Sea. The images of elements were collected through an internet search, references and researches that contain images of marine nature and

cultural life in the Red Sea. 2. Drawing and coloring different decorative designs (compositions) inspired from the selected artistic elements. The selected elements were analyzed, abstracted and some were modified, then nine design compositions, some were relied on the manual techniques of the researcher in drawing lines and shapes of the innovative designs from the selected natural marine life and cultural artistic elements of the Red Sea either in direct or abstracted form. The computer technologies were used in redraw and recolor them. The innovated designs were divided by the researcher into two groups: A group of design compositions was innovated manually using wood, water and gouache colors on papers. Then the compositions were transferred to the computer via the scanner as images which have been redrawn and colored using Adobe Photoshop and Illustrator graphic programs, as indicated in the designs from no.1 to 6. Other group was created by selecting and directly inserting some marine biota photos in the Red Sea to the computer and then stored and retrieved inside the computer to move between Adobe Photoshop and Illustrator graphic programs, the images of elements and units were placed or redrawn for making integrated design, as indicated in the designs from No.7 to 9. 3. Putting some of colored compositions in repetition. The repetition of the innovative design (for curtains) was achieved through the distribution and duplicating the design composition and its ornaments using graphic programs (Adobe Photoshop and Adobe Illustrator). 4. Making different color palettes. First, the final design was flattened by merging all the repeated visible layers together with back ground layer. Then alternative color palettes were selected for each design through the changing of hue and saturation, adjusting the color levels with brightness and contrast. 5. Showing some of suggested applications. The inspired and innovated designs from Red Sea life were placed in textile applications to serve tourism in Egypt. 6. Evaluation the artistic and aesthetic values of the innovative design compositions: The innovative design compositions were presented to a group of specialists in the fields of textile printing design (14 members) through a questionnaire for evaluating the artistic and aesthetic values of the innovative compositions. Then the answers in the questionnaire were collected and the agreement percent of each design was calculated.

Results: The questionnaire results revealed that percent of agreement on the innovative compositions express the cultural and/ or marine natural elements in the Red Sea is 95.56 %, this achieves the hypothesis no.1 of the study. The Compatibility in fundamentals and structural elements of the innovative compositions is 94.76%, and percent of its harmony and compatibility between textural and colorimetric values is 93.65 %. The percent of agreement on the innovative compositions is 93.33% for creating a novel plastic formulation, 93.17 % for achieving rhythm between its lines and spaces, and 93.81 % for achieving fantastically balance and creating a state of dynamic. The role of shadow and light in visual appearance of innovative compositions is 93.02, and the percent of designer success in using the possibilities of computers is 96.35 % and this achieves hypothesis no. 2. The suitability of the design with the functional purpose to serve tourism is 90.63 % achieving hypothesis no. 3, and the degree of achievement of design uniqueness and originality for the total innovative compositions is 92.06 %. It obvious from the questionnaire that the total percent of the innovative compositions success is ranging from 88.43 % to 98.57 %. At the end of the research, the study hypotheses have been achieved and the most important results of the study can be summarized as follows: Benefit from the aesthetics of natural and cultural marine environment of the Red Sea in innovating printable designs for fabrics suitable for the purpose of tourism. The use of computer programs techniques develops the values of innovative designs to reach the degree of required quality and raise the aesthetic and functional values of the products .The researcher took advantage of the questionnaires to evaluate the created designs and the Innovative designs have achieved a high success rate.

Keywords:

Red sea- Textile design- Tourism

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