

TRANSFORMATION OF FLEXIBLE ART IMAGE USING SOFTWARE APPLICATION

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Abstract: The report examines the 5-way method as a process with clearly defined intellectual relations – idea, point object, sketch, digital image and implementation. In the first experiment the idea is to create a design product based on photography. In the second experiment the idea is suggesting certain feelings and thoughts through artwork. This initial stage is the accomplished design product transformed into an artwork by traditional painting techniques, collage and assemblage.

Keywords: art, design product, software, digital image, photography, sketch, artwork, traditional painting techniques

1. Introduction

Define the term flexible art image.

The flexible art image is part of the terminology of the visual arts.

The term visual art is any art form as graphics, painting, sculpture, photography, video, film and architecture. Within this concept including all the traditional techniques in drawing, industrial design, graphic design, fashion design, interior design and decorative art.

Art in its general terms is visualizing the ideas of the author followed by knowledge and skills related to the aesthetic rules of representation.

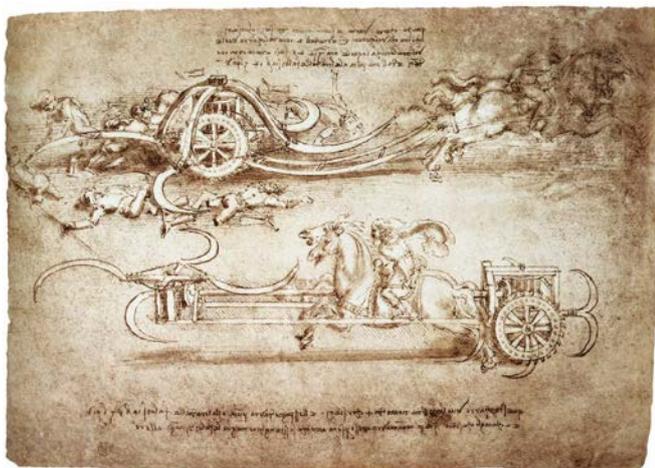
Each artwork in the flexible arts is representing its idea, expressed by the corresponding language. By its means of expression creates a specific image that is artistically recreated.

That is why the concept of flexible art image represents:

- Express language of the arts;
- The idea of the author;
- Visually transmitted image of a particular theme;
- In individual works or series, we track specific storyline.

One of the biggest names in the art world, but also in architecture and design from a modern viewpoint is Leonardo Da Vinci. His sketches are then one-of-a-kind, showing in detail each part and its function. We can trace the origin of certain ideas.

The following sketch is a model of a chariot in which the creative implementation of artistic interpretation is on drawing level only. (Fig.1) But accompanying notes help the identification of the



painting with the modern version of the design-sketch.

Fig. 1 Model of Scythed chariot (Royal Library in Turin.1485). 20sm/28sm

Another representative of the Renaissance in Italy is Michelangelo Buonarroti - one of the biggest names in the history of the visual arts.

His knowledge and skills in the field of painting and sculpture are studied and analyzed in many schools today. Very typical for him is the appearance of the plastic volume and shape both in the sculpture and in the painting. Every detail has been previously studied and presented as an idea in a particular drawing, which is then implemented in a particular work.

The Sistine Chapel painted ceiling in Rome is a peculiar example of "breaking" the architectural plane of the ceiling with the help of perspective and picturesque flexible art image.(Fig. 2) The storyline is presented through scenes and portrait images of various prophets.



Fig. 2 The painted ceiling of the Sistine Chapel in Rome

In sculpture authors work with volume that develops in space. The air is additional element to establish the composition of the sculpture group. The idea of motherhood recreated in Pieta by Michelangelo (Basilica 'Saint Peter', Rome) is an example of a visual representation of the volume in space. (Fig. 3)

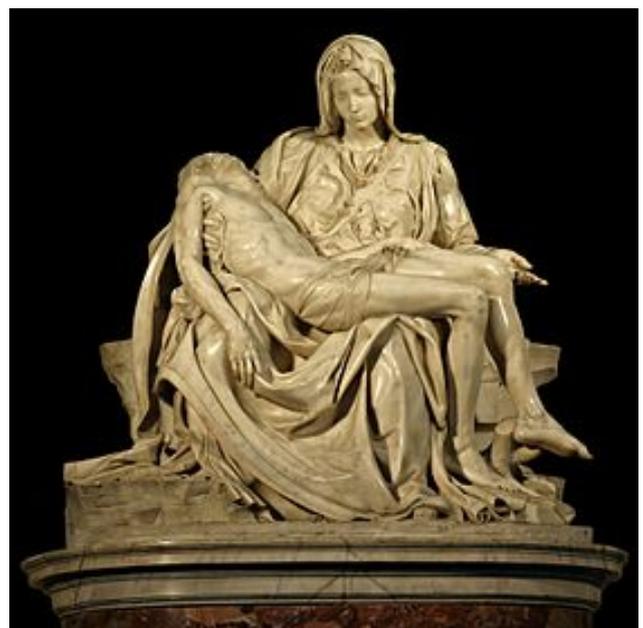


Fig. 3 "Pieta", 1498-1499, the Basilica 'Saint Peter', Rome

The above authors are primarily active in the field of fine arts, but their appearances as designers and architects is part of the history of art. Their knowledge in the fields of science and arts ranks them next to the biggest names in the field and in the design from present-day perspective.

Their experience gives us foundation for the possibilities of science and art to be presented as a synergistic model of knowledge. That is exactly why new technologies allow one plastic art image to be transformed and presented as a graphic equivalent of an idea.

With the advancement of new technologies and after digitization of data, more computer graphics are created.

The term computer graphics in its general sense means any image created with the help of hardware and software that is not sound or text. Manipulation of images (photography) with the help of software, creation and finishing details of images.

The role of photography is to preserve the digital idea of the photographer. The photograph (photo) itself can serve as a way of documenting, with the intention to keep visual materials. It can also serve as sealing of certain moments and emotions that subsequently be used to create flexible art image, performance or design product.

The flexible art image in the photography can be achieved with achromatic (black, white and grey) or chroma colors. Themes ranging from landscapes to portraits. Its types are:

- Black-white photography;
- Portraite photography;
- Landscape photography;
- Macro photography;
- Micro photography.

The flexible art image is used in the learning process. It can be achieved by the expressive language of painting, graphics, sculpture and photography. Its final execution in the design process must be done with the help of a software. That is why it requires a certain method through which its transformation is not simply a mechanical transfer, but a process where the flexible art image is expressing more of its own characteristics after a necessary image processing.

2. Introduction in the 5-way method

The necessity of knowing how to create an image with various drawing and painting techniques gives the foundation for a method to use these skills while creating the computer graphic image.

Utilization and application of this knowledge is the first step in the creation of an aesthetically pleasing artwork - design product.

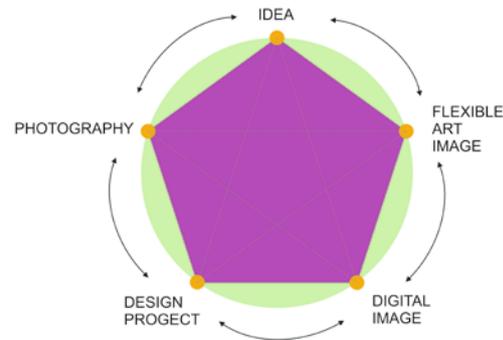
The 5-way method is introduced, with the help of which the relationship between art, design and digital synthesis and manipulation of the visual content is showed.

The birth of an idea, transforming it into a specific theme, the creation of the story is a mental process. Mental links - idea - object - sketch - digital image - implementation are part of the creative act. (Table 1) For the implementation it is necessary to create a specific sketch, with the help of which a digital image becomes reality.

The created prototype can be implemented in a particular material.

The method is based on a specific scheme combining the following divisions: an idea, object, sketch, digital image and implementation.

Table 1. Two ways, mental links (idea – object – sketch – digital image - implementation).



At the start of a project related to a particular implementation, various directly or indirectly ideas related to a specific theme are analyzed. Collecting ideas can be effected by different means of techniques and technologies. This leads to a synthesis and development of a particular object.

Next step in the analysis of ideas is the creation of sketches that illustrate important moments in the final implementation. Sketches could be made using conventional painting techniques, such as use of pencil and paper or description.

Defining the term *analytical sketch* (expressing the idea of creating an object with the help of words (speech, writing)

Analytical sketch is the expression of an idea by means of speech. A series of precise moments, colors, shapes, specifying the final product is built.

Sketching can be a mix of illustration and analytical sketch describing important moments concerning the object (as in the sketch of Leonardo Da Vinci). In the analytical sketch, the role of the teacher is leading. He uses the words to help the student to analyze and objectify in details his idea until its final clarification. The notes or amendments that the student adds or removes in the drawing are specific to the current verbal analysis of the idea. That's exactly when the analytical sketch becomes the basis for its further development and implementation using a software product.

3. First and second experiments

In 2014 an experiment was conducted with students of 2-nd course classes in History of Art and Design, majoring in Engineering Design at the Technical University - Sofia, which aims to implement this method to quickly absorb, analyze and improve the options for the implementation of a design product.

The theme was Ancient Egypt.

The requirement is a cardboard or watercolor paper in the following paper size formats: A4, 35/25 or 35/50. The techniques to use are tempera and / or watercolor. An implementation is chosen i.e. a patterned fabric or a curtain, with a limit of up to 5 colors. The main task is to select a single element associated with Egyptian Art (figure, shape, ornament, capital, architectural object, etc.) and to make different version with different styles. The variants of the stylizations can be penciled with the help of a black pencil or fine-tipped pen in the form of graphics. A mandatory condition is to create a frieze composition with tempera if the implementation is a curtain.(Fig. 4 and Fig. 5)



Fig. 4 Patterned fabric and a curtain, student work



Fig. 5 Implementation of a curtain, student work

The theme for the second experiment was Ancient Greece.

The requirement is a cardboard or watercolor paper in the following paper size formats: A4, 35/25 or 35/50. The techniques to use are tempera and / or watercolor. Students are given the opportunity to select compositions suitable for accessories and jewelry. On the selected paper format and with the selected technique, the author should draw a set of at least three accessories or jewelry items. Ornaments or use of specific works of art from the period of Ancient Greece are applied in the final works. It is mandatory to properly scale each object considering the size of the other objects.

After drawing the sketches with the traditional techniques, a design project of two pages of a catalog must be created with the help of the following image editing tools: Adobe Photoshop, Corel's CorelDraw, Adobe Illustrator or Adobe InDesign (the student is allowed to use one or more of these tools to complete the task). Symbols, text, illustrations, etc. necessary for the design of the catalog could be used as well.(Fig. 6 and Fig. 7)

The traditionally made final works can be photographed, scanned or created within the selected software.

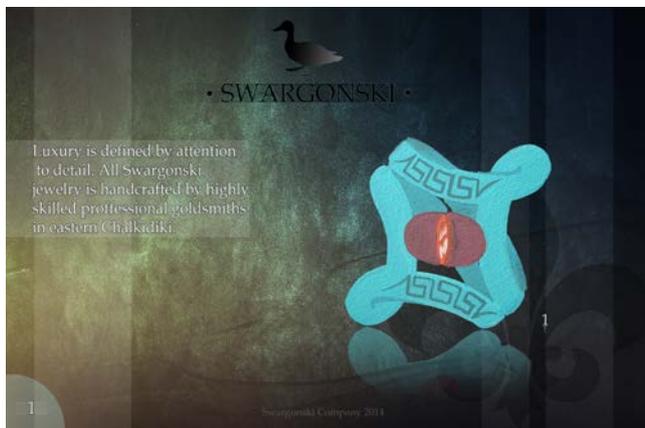


Fig. 6 Jewelry, final project, first page, student work



Fig. 7 Jewelry, final project, second page, student work

4. Creating a design product using readymade graphics

The method could be implemented in other sequence. The initial step is to use previously taken portrait photography.(Fig. 8) The implementation is as follows:

After taking the portrait photography, the digital image is then edited with the tools provided by the software. The new digital image is consequently manipulated in Adobe Photoshop to a moment, when the idea does not differ from the original flexible art image, making it ideal for a design project.(Fig. 9)

With the help of the digital image and the tools available in the software, a vector image is then created, allowing lossless image manipulation.



Fig. 8 Self taken photography



Fig. 9 After manipulation in Adobe Photoshop

The implementation is then formatted to the final print size, required for printing the design project - business card.(Fig. 10)

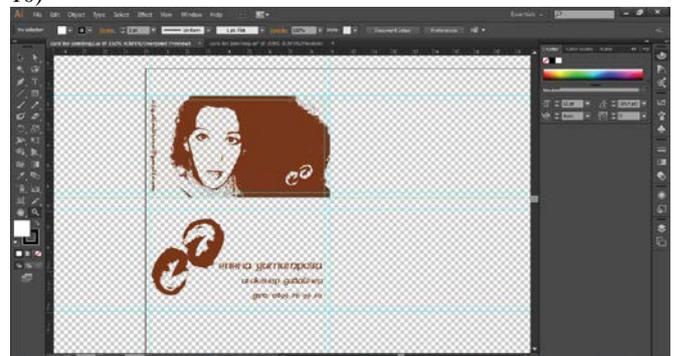


Fig. 10 Preparing the business card for printing, Adobe Illustrator

5. Conclusion

This method is preferred when working with students, because each stage is part of the above mentioned circuit.

The 5-way method is not limited to the curriculum of specialized schools, but can also be used in companies which deal with advertising.

The essence of the method is to create a digital image, that can therefore be used in the graphic, interior, industrial, fashion and automotive design. Developing a special system to analyze the studies made, by using a composed conceptual scheme.

The method allows making both design products and the flexible art images.

6. References

- [1] <http://www.visual-arts-cork.com/definitions/visual-art.htm>
- [2] McWade J., "Before&After: Graphics for Business", Softpres 2006
- [3] Krause J., "Type idea index, How book" 2007
- [4] Krause J., "Color index, How book" 2007
- [5] Stancheva M., "Anonimniat Izvesten", Janet 45 (album)
- [6] Kacev, V., Art photography, Technica, Sofia 1978