

THE ROLE OF MOTION GRAPHICS IN VISUAL COMMUNICATION

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ABSTRACT

Human being has always been looking for having an intellectual connection with other people; and, for this goal, with regard to his need at every time period, he has chosen an appropriate method for communication; once by means of the paintings on cave walls, and once by means of computer. On this path, the magic of motion has always been attractive for human and helped him have a better communication with his environment. Nowadays, the art of animation is considered as a powerful and effective factor in the process of communication; and this art finds a new aspect every day. Regarding the growing development of media in today's world, the necessity of familiarity with a new tool called motion graphics is becoming obvious for more effective communication. This paper aims at considering different techniques, methods, and background of motion graphics so that it will introduce this art and also evaluates its role in increasing the attraction of audiences and effectiveness of the conveyed message in the process of visual communication. Due to the importance of the subject, the analysis of the role of motion graphics as a new branch of graphic design in increasing the effectiveness of visual communication is the aim of this research paper which is accomplished through descriptive-analytical method. The methods of motion graphics in communication, influential factors over motion graphics and visual factors of motion graphics, and the role of motion graphics in communication are some parts of this article.

KEYWORDS: Motion Graphics, Visual communication, Effectiveness, Motion

Gaining knowledge over what is called visual communication is like learning a language; a language which is composed of just pictures. Visual language is more limited than the language by which we speak, but it communicates more directly. A long time has passed from when human being tried to communicate with others in order to refresh his life. The type of humane communication has changed over time and has lost its primitive form. In the primitive era, communication had visual and auditory aspects and was done through gentle or violent touching, or movements and gestures. At this time, individuals had a more effective share in exchange of information. In this regard, different movements were considered as influential factors in the process of communication. Movement is a principal characteristic of human life. Human beings have always tried to animate their pictures to convey their messages to the audience. There are some pictures in Altamira and Lascaux caves remained from the past which confirm this claim. As you enter into Lascaux cave, you feel like you entered into a live environment where you can feel the presence of the creator of the artworks. Endeavoring for achievement of a feeling of motion in art has always been a mental preoccupation for human beings from far past to the present (Majidi, 1389).

Motion graphics or moving graphics is created by video or animation technology and also by making a hallucination of movement or changing the appearance of visual factors. When utilized in multimedia projects, motion graphics is usually accompanied by sound. This type of graphics usually appears in electronic media.

REVIEW OF LITERATURE

The term "motion graphics" was first posed by John Withney, the well-known animator, in 1960. Saul Bass was the first one who outstandingly took advantage of motion graphics in his works (Yu, Li, 2008).

The book "Principles of Visual Knowledge" by Donis Dontis translated by Masoud Sepehr (1372) considers the principles of visual arts and explains the rudiments on which visual communication is formed. In this book, visual factors including dot, line, surface, etc. as well as visual effects like rhythm, contrast, etc. are explained.

In his book "Art in motion: aesthetics of animation", Francis Morris analyzes the visual factors present in an animation work from aesthetic viewpoint. For example, the positions of lighting along with the aesthetic considerations are evaluated.

Communication from viewpoint of frames, figures, pictures, and feedback of pictures are analyzed in the book "Visual Design and Communication" by Bruno Munari. The position of designer and design as creators of the artwork are assessed and analyzed in this regard.

RESEARCH METHODOLOGY

This research considers the lore of motion graphics in visual communications through a descriptive-analytical method. Data collection was

performed through extensive library studies. The theoretical principles with regard to motion graphics were also studied so that their role in visual communication would be considered.

METHODS OF MOTION GRAPHICS IN THE FORMATION OF COMMUNICATIONS

In order to form an appropriate communication with the audience of the work, according to the type of message and its audience, there are different methods for creating motion graphics each of which has their own characteristics, disadvantages, and certainly their attractions.

The other point to mention is about the importance of the designers of the works. Each motion graphic designer has their own taste which is in conformity with their personality; so, each graphic motion designer chooses the method or style which is more in accordance with their taste or they pick up only one method in which they are a professional. For example, Jan Svankmajer can be mentioned who is famous mostly for his Stop Motion works and his works in surreal genre. But, these points are not always the reasons for picking up the method of producing a work, especially when the work is intended for business. It is unlikely to choose a production method in business works for the sake of personal taste because the conditions under which the work is going to be produced will choose the method. When talking about the production method and style, the artistic aspects of the work are outstanding because the production method is directly related to absolute art.

Flash Animation as an Animation Method

The files of this animation method are usually saved with .swf format and need their own special player to be played. Due to simplicity in production and low size of the file, many producers of 2D motion graphics as well as producers of internet advertisements prefer to use this method. Flash animation saves the vector information instead of saving the pictures, and while playing, draws this information according to the time table designed by the animator. For pre-recorded shows, rendered frames are transferred into other formats or media like movie or digital image. Besides, it is possible for frames to be immediately rendered while playing for the final user (Hanafi Zadeh, 1388).

Flat, A 2 Dimension Method

2D motions are a group of images made by computer which include 2D models like 2D geometric figures, text, and digital images. This method is in fact a

definite number of pictures which are played one after each other with a definite speed. The most famous format of flat files is GIF. Due to huge size and capability of unlimited colors and shapes, this format is sometimes used in Reciprocating Short Motion in web pages. 2D animation has many applications in the production of animation. In order to produce 2D animation, separate objects (images) and separate transparent layers are used. Then, hands and feet, eyes, mouth, clothes, and other elements are moved by the animator in the key frames. The differences in the appearance among the key frames are identified by the computer in the process of tweening or morphing. At the end, the animation is rendered. In fact, all of what we see on monitor screens are flat 2D animations. In the production of these animations, key frames as well as intermediate frames play important roles.

Virtual 3D Animation

Due to the brain ability to integrate the two images received from two eyes and to overlap them in order to identify the depth of the environment, it is possible to simulate a 3D environment in the brain by showing two simultaneous images to each eye. For so doing, the producer records the particular 3D image from two view points and plays it. So, by using a special device which is able to show these two pictures separately for each eye, the audience is able to watch the picture in a completely 3D manner (Taylor, 1996).

Photo Montage

Photo montage was changed into a tool for creation of political art in the early years of the twentieth century. Creativity can be the shortcut to the human wishes. The innovative art of photo montage is able to realize many of impossible wishes of human by manually placing a couple of pictures beside each other or by using computer software. Olivier Guru, a visual art expert, mentions in his book "visual arts: hallucination or suspense" that in the creation of a piece of artwork, it is difficult to create an imaginary environment which is inspired from reality. He adds: "whatever introduced in art as a new style or innovation is the extract of the endeavors of all human nations in the centuries which finally flourishes at a particular time." This quote shows the importance of the fact that we must not carelessly pass by artistic styles and techniques (Taylor, 1996).

Collage

Collage is the result of artwork creator's innovative viewpoint and thought in representing an image which has been made from two or more parts for

getting to a totality. Collage is a method in which not only pictures but also other objects like cardboard, pieces of newspaper, cloth, photos, things, etc. are glued on a canvas or any other background in order to form a composition. This method was invented in 1916 and cubism painters used this method.

The creator of a collage work might use pictures of other photographers which was controversial. If some objects and elements are placed beside each other with a particular composition for conveying a unique message and a picture is formed at the end, a photo collage is made. By the advent of digital cameras and software like Photoshop and its plugins, the form and structure of photo montage changed and now works are produced with the same essence but via more modern methods like the application of software (Snyder, 2006).

The Influential Factors and Elements of Motion Graphics in Communication

Motion graphics' area of activity is an area in which audience attraction is the first priority, while this matter is the second priority for the field of brochures, posters, and other printed media. It is not easily possible to estimate the amount of likeness of the audience and the effects of the poster on the audience when they see a poster. Continuous presence and effect, getting used to it, and waiting for it, that is the element of time, are of the important characteristic of motion graphics. As a result, it seems that motion graphics has a notable characteristic.

Motion in Motion Graphics

Naturally, every substance is in motion and struggle in the nature. Motion in picture may be created by dot and line and presented in different shapes. The type of movement might be helical, circular, zigzag, or direct. The direction of motion can also be upward, leftward, rightward, etc. Each visual element or each shape more or less might have the energy for movement. According to the dominance of one side, each surface shows the movement energy toward that side and under influence of the incoming tensions, it will move toward the side which has more length. The concept of motion can be understood via other forms, for example, by the repetition of a visual element in motion which is possible through the repetition of many elements. For instance, the repetitive motion of a circle in the screen which forms a type of rhythm as well can be named (Nave, 2005).

Sound in Motion Graphics

Although flawless, visual effects and graphic environments will not be effective, if they are not accompanied by appropriate sounds. Sounds and their masterful combination will not be successful unless they involve the audience and they are listened to through the right technology. Actually, 70% of the influence of a motion graphic work which is usually showed in the format of a commercial advertisement or the same formats is made by the sound. Music and appropriate sound can help the transfer of influence. Music helps feelings be well expressed; it really enlivens a dead work.

Image and sound are related to the main sensations of human which are vision and hearing. A graphic motion designer tries to make people move by presenting an attractive program and utilizing these two principal elements. How much they will be able to attract the audiences' vision and hearing senses will depend on their art and expertise. In other words, in a motion graphic work in which image is more attractive, the audience will focus on the image; and, in a motion graphic work in which sound is more attractive, the audience will focus on the sound (Woolman, 2004).

Alphabetical Characters in Motion Graphics

In the realm of motion graphics, alphabetical characters are considered as images. These characters are more seeable than readable. For instance, a Japanese graphic expert who does know about Persian can comment on a sample of Persian handwriting about its graphical psychology expression by looking at Persian alphabetical characters. For example, Nastaliq calligraphy has such characteristics as gentleness and passionate impressive tranquility which are the characteristics of curves in graphics. Representation and readability aspects are considered to be the secondary priority, while aesthetic aspects are considered as the primary priority. Nastaliq calligraphy is magical and its curves are strong while flexible, that is why it cannot be used for describing a tragic event or an accident; it cannot be used for news, either. On the other hand, Naskh calligraphy is exciting and venturesome. It is like a vigorous voice which orders and has a predicative statement (Woolman, 2004).

Color in Motion Graphics

In the context of motion graphics, color and paying attention to color are important. When focusing on the nature of human mind, the importance of the matter becomes clear. In the procedures related to vision, the stimulators enter into sensing memory and

are saved there for about one second. The capacity of this storage space is about 16 objects. In this condition, the objects and stuff enter the sensing memory and immediately disappear (Kaufman, et al., 2001).

Visual Elements of Motion Graphics and Their Role in Communication

Graphics, pictures, and the collection of images which are present in each motion graphic can help improve the quality of the works and increase its popularity to the audience, or vice versa, decrease its worth. The more comfortably the audience deals with the work and the more quickly they find a relationship with the work, the sooner the designer will reach to their goal. These images and visual attractions must be designed in accordance with audiences' ideas, desires, and criteria so that they will be able to convey the visual messages in the best manner. Many designers are not aware of these important factors and their influence on the attraction of the audience, so they do not consider images, graphics, and their visual messages as they should while designing a motion graphic work.

The important points which can be called main points in visual language grammar and be used in motion graphics are listed below:

1- The primary visual elements (dot, line, shape, color, direction, etc.); 2- Composition; 3- The methods of creating visual language (simulation, code, abstraction, etc.); 4- visual techniques and recognition of different styles (Dadgaran, 1384).

In the next part, the most influential visual elements will be considered:

Dot in motion graphics

Lighting in Motion Graphics

Light is certainly a determinative element in human life. Beside applied uses, light has always had symbolic values as well. Light is a part of the essence of life and in many cultures, light or sun is considered as a divine element and is eulogized. Using different lighting tricks for reinforcing imagination has also become usual (Fransis, 1391). In motion design, innovative and influential phenomena are created, using special forms and appropriate lighting.

Space in Motion Graphics

Space defines the position and circumstance of each objective or any other phenomenon. The space defines the existence of any object in relation with other objects and makes internal, external, and intermediate space understandable. There are different concepts

Wherever it is, the dot seriously attracts eye's attention. As a result, the dot can be used as a strong visual element in motion graphics for showing the concept of emphasis. By the repetition of dots in different and numerous combinations, it is possible to identify the concept of rhythm. By the concentration and disunion of dots in a new combination, the concepts of expansion and contraction can be presented. This phenomenon, that is the combination of dots, simulates the vision system in human (Dadgaran, 1382).

Line in motion graphics

Line has active and mobile energy. Lines in a motion image can appear as broken, arc, flat, ragged, wavy, wide, thick, etc.; each of them has their own visual inspirations and meanings. The vision sensation in human being is sensitive to the psychological impacts and artistic values of lines in a frame. That is why gaining knowledge over the characteristics of lines is essential in order to appropriately use them. It might also be said that lines are the most influential and the mostly used elements in motion graphics which are used in different forms and with different meanings (Braha, 2011).

Surfaces in Motion Graphics

It is the third visual element which has length and width. Different geometric figures are surfaces; a 2D space which is created due to the movement of line on screen. Among flat geometric figures, triangle, circle, and foursquare are mostly used in motion graphics. Other geometric figures are somehow derived from these three figures or a combination of them. Each of these figures in different positions and circumstances find a new visual expression (Dadgaran, 1382).

Defined for the space such as hollow space, free space, green space, live or dead space, etc. The space is not definable by itself; however, by positioning a 3D mass in the space, the location of the mass is specified and space defines its existence (Dadgaran, 1382).

CONCLUSION

Motion graphics as a method of expression and communication with the audience has unique themes and domains in utilizing innovation, imagination and graphic effects. In fact, motion graphics is a context for displaying where performance and image are considered as expression elements in the creation of the work.

Visual communication plays an influential role in taking advantage of informative concepts for people

and many of informative contents are exchanged through positive and effective interactions. Nowadays, this useful method professionally helps communication media by taking advantage of new techniques which are the results of the development of new communication technologies. This approach can be objectively seen in graphic domain.

Generally in motion graphics, visual elements like line, dot, surface, and mass are mixed with visual ideas such as rhythm, emphasis, and contrast, then combined with sound and motion, and finally, by passing through the creative mind of the designer, they will be presented to the audience and create an influential performance. The important point for motion graphics compared to other graphic works is the presence of motion and sound as the effective elements in the process of influencing the audiences' minds. This is a point that most of graphic works lack. That is why motion graphics which has the possibility of movement and narrative foundations is able to show a totally different artistic expression than other fixed visual arts, which ends in better communication of the audience with the work and conveys more complex concepts and meanings in a simpler format.

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