

# A Review Paper on Graphic Design

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**ABSTRACT:** *Graphic designs are classified and based on the idea that indoor places may reflect the individual and/or the general population. Graphic design analysis of indoor spaces is studied in this study, and recommendations are offered. The goal is to highlight the relevance of graphic design applications with an expressionist composition in achieving practical and visual comfort as well as perception of invisible features of everyday locations. Based on the impressions obtained during the study, graphic design plays an important part in the specification and identification of the goods in the location. Ordinary locations are transformed into places that carry a message or touch on a critique because of the diverse experience and attitude of graphic designers. Furthermore, the influence of an interior location graphic is explored in connection to the graphic's relationship with the place itself. It is specifically stated that the graphic designer and the architects or interior architects who design the space should have a strong working connection. Finally, with graphic design, a space, which is a product of architecture, conveys an aesthetical and conceptual message; this notion gives rise to the field known as interior graphics or environmental graphic design.*

**KEYWORDS:** *Designing, Dimension, Graphics, Technology, Virtual Reality.*

## 1. INTRODUCTION

What a person feels and sees in terms of a place to be lived in and/or a space to live in a fixed space is crucial. As a result, we may conclude that work or place, which is a manufactured and designed area, is a critical factor in shaping and directing human behaviour[1].

For the pre-industrial revolutionary man, today's product, termed art and design, got meaning and lived with its goal and utility in daily life. However, with the industrial revolution, the quick growth of science and technology, as well as the new possibilities of rapid automation, tradition in society and in the domains of art and design, began to be destroyed. In a scientific and aesthetic sense, several design schools and art centres have begun to develop, and modern forms of expression have been created specifically in the field of design[2]. A modern dimension in the realm of interior design and graphic design has begun to be sought in city architecture. Aesthetic concerns have begun to show themselves in mass communication, most notably through the establishment of a strong relationship between the graphic design phenomena and communication mediums.

Plastic arts disciplines are now widely recognised as being interwoven in contemporary art and design thinking and practise. As a result, many graphic designers/artists explore new approaches and create multidisciplinary works or creations that can be applied to any surface utilising many materials, not only paper. When seen from this perspective, the visual works made by designers or artists on spatial surfaces using various materials might be termed interior graphic designs. In this perspective, graphic designer Jonathan Ellery's comment on "what is graphic design for" is crucial[3].

Interior graphic design seeks to provide a new form to the void and build a shape on the surface, just like interior space design attempts to evaluate and reconstruct volumetric gaps. The graphic design phenomenon, which entails organising texts and images in a creative process in two dimensions or three dimensions in a perceptible and visible plane to convey a message or visualise a thought, plays an important role in defining and functioning components and components of space in this context[4].

The perceptions resulting from the structure of the interior and resulting on the audience are transformed into a direct creation in these spatial graphic designs, which have a narrative composition aiming to make a thought or an emotion striking without-shooting purpose, so that the viewer becomes familiar and ordinary to look at the space with another eye. To perceive the invisible aspects may argue that an interior design's impact is determined by its relationship to space[5]. Interior graphic design projects that seek to make an idea or an emotion spectacular improve the space's aesthetic comfort, identity, and erase the space's everyday style for its users. In this scenario, the designer must carefully study, analyse, and feel the space, as well as accurately assess the inner shell surfaces during the creative process. One of the most distinguishing characteristics of interior space is the restricted distance that separates man on a scale from the space around

him. The awareness of space is ensured by the location of what they look at, what they perceive, and how they connect to each other. The ceiling, floor, walls, and items in the room, for example, determine the space of the room. The room is an enclosed area[6].

Graphic design also differs depending on the visual culture in which the collection is based, and the time factor. These differences combine to form the phenomena known as trend or trend in graphic design. People in society can assess and consume trends based on their emotional accumulation, which includes their taste, culture, political views, and personal routines. As a result, the designer may be required to examine the society's social and emotional aspects as well as the aesthetic values of the people who live there. Using the appropriate language of expression, the designer may also determine or guide the individual's cultural behaviour[7].

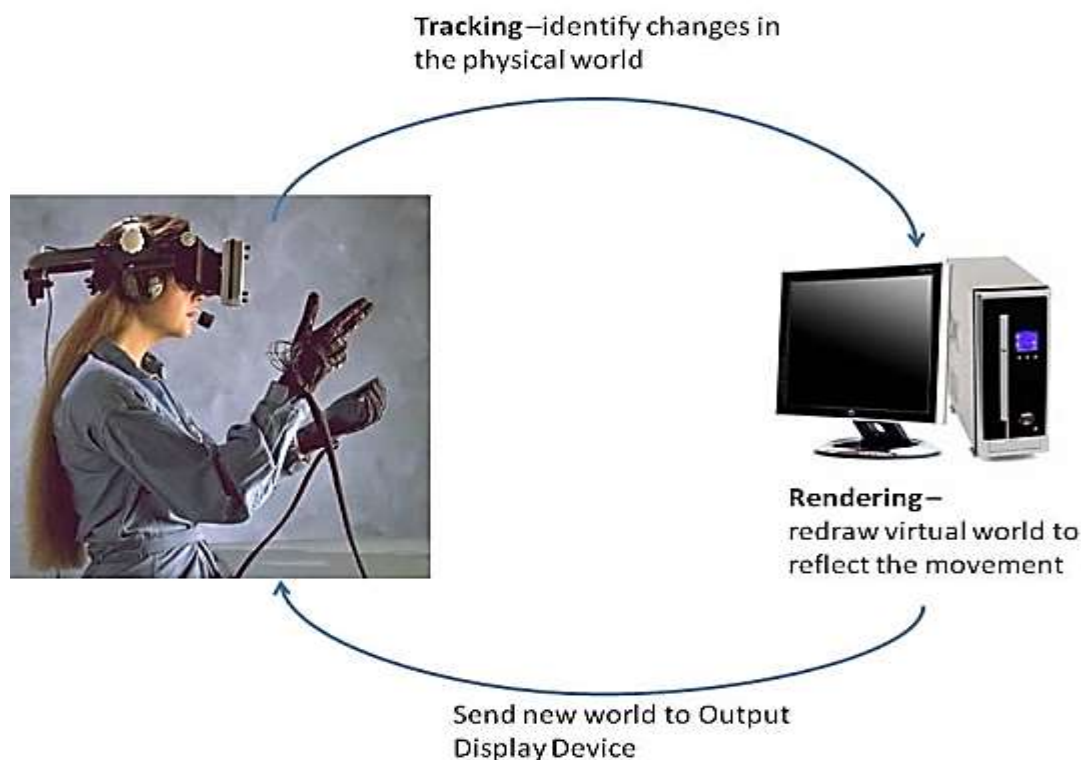
Visual communications design is another term for graphic design. Traditional graphic design is primarily concerned with the development of two-dimensional artwork using print medium. The audience objectives of graphic design are getting more selective as media forms diversify, and they are increasingly dissatisfied with standard material organisation and print media. Traditional graphic design with a drab style of representation is unappealing to the target audience[8].

Traditional design modes and techniques severely constrain the creativity of graphic design students and experts, making it impossible for them to connect with one another. Students can only make appealing and stunning works by using innovative design originality and sophisticated design techniques in graphic design creation, but also putting forth considerable effort to achieve a balanced growth of students' creative achievement and technical competence. A focus of study and research in the discipline of graphic design has been how to use mature technical tools and sophisticated instructional modes to serve the science of graphic design[9].

The introduction of new high-tech methods has given rise to a new concept and approach for resolving difficulties in graphic design education. By integrating modern graphical interfaces and the science of graphic design with a conventional graphic design course and dependence on new media technologies, we can surely break down the limitations of traditional education and maximise the traditional education mode.

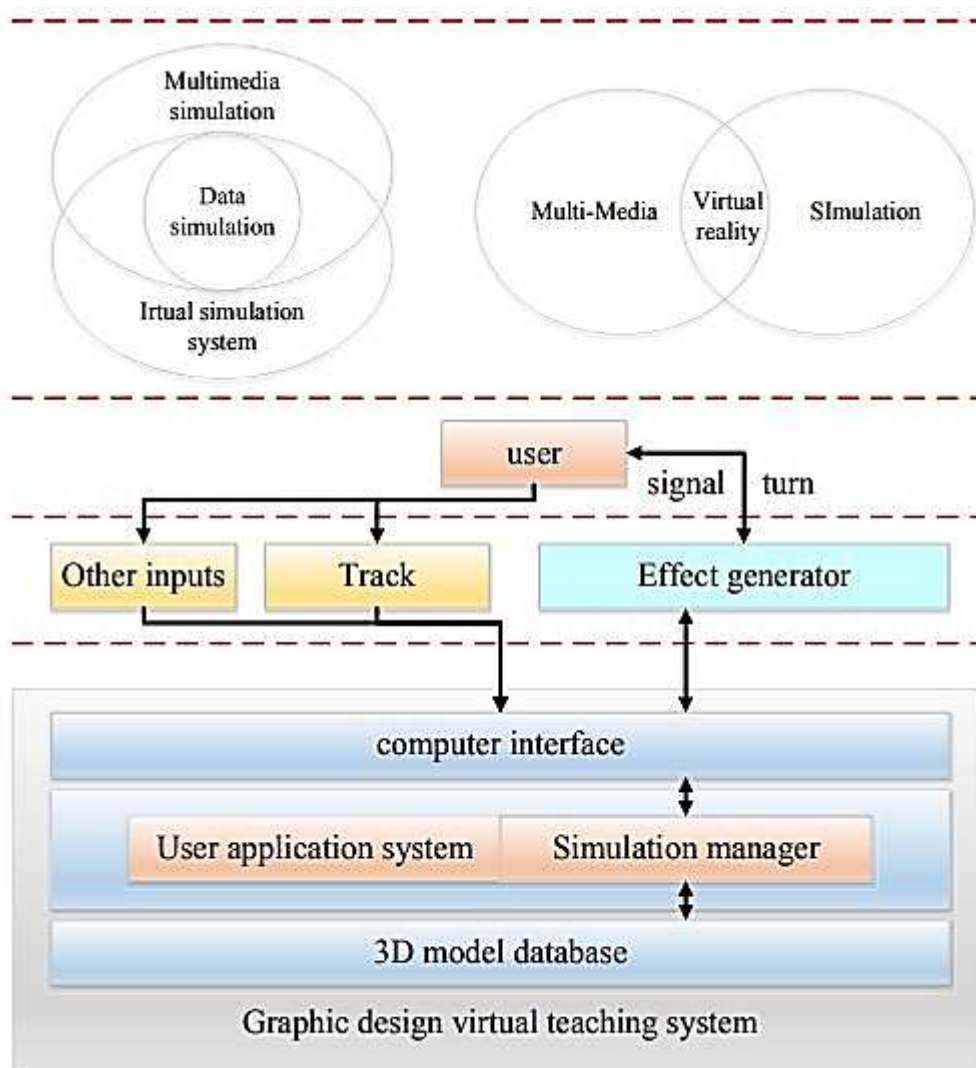
### *1.1 Virtual reality technology:*

Figure 1 shows the Virtual reality technology; Interaction, immersion, and imagination are three characteristics of virtual reality technology. Immersive refers to the ability for a user to feel intimately immersed in a three-dimensional environment through the display of a virtual model, transforming the user from a passive receiver to a participant. Interaction means that by altering and configuring parameters, real-time reaction to and feedback of the created model may be provided, reducing the design cycle and the personnel and financial resources necessary for frequent change of conventional design. For reasons of technology or expense, things that cannot be realised and experienced in the actual world can be envisioned using virtual reality technology, and a model for simulation can be developed on this basis[10].



**Figure 1: The above figure shows the Virtual Reality Technology Principle [durofy].**

Figure 2 shows the composition of virtual reality system. A virtual reality system is made up of five basic components: the user, the computer, the software system, the database, and the input and output devices. The user is the virtual content's audience, who responds intuitively to the virtual material generated by the virtual reality system. The computer module is the most important part of the system, as it is responsible for producing virtual content and converting instructions sent through the computer's input and output devices, but also digital signals. The software system is used to model virtual content, alter and change the model when parameters are changed, and integrate movies, audios, and models. The system is used to store parameter information for modelling and resources for creating virtual content, such as images, speech, and video. The input and output devices are the interactive link between the user and the virtual content; the input device converts the user's intention into instructions and sends them to the computer, while the output device displays the formed virtual content to the user in some way, resulting in a visual response.



**Figure 2: The above figure shows the composition of virtual reality system[5].**

### 1.2 Development of virtual reality teaching system:

A virtual reality modelling language is VRML. Many scene-creation tools have been developed using the modelling language. The following is a tutorial on how to make a VRML scene in 3DStudio Max. A case study of the design of a wall was created for the purposes of this article. The wall was created to be beautiful with certain designs that were harmonic with the colour and style of the entire space to enhance the wall. A three-dimensional modelling modification approach was used for the design. First, a simple model was created, which was then continually optimised by changing the parameters in response to orders before being exported. It may be identified and executed using the VRML programming language. Figure 3 shows the original wall design with virtual reality technology. Figure 4 shows the wall design process with virtual reality technology. Figure 5 shows the texture and the change of colour of wall design with virtual reality technology

#### 1.2.1 Basic Modelling:

The steps are as follows: Create a node *d* in the scene, and then add appropriate buttons to the menu and dialogue box for managing the node images (the value of the button object includes run time, location, height, status, and other information). Cite the picture Field String pic, and then use parameter assignment to change the state of the node. Consider the event of a button being clicked. There are two values for the SFBool state. TRUE indicates that the button has been pitched on, whereas FALSE indicates that the button has not been pitched on. Place the defined images on the empty wall.

#### 1.2.2 Texture Color:

The UVW (Ultra Violet Wavelength) chartlet was used to create the system scene model. The chartlet modes vary due to the varied forms of the items. Plane, surface, cube, cylinder, sphere, and other chartlet modes are common. Each UVW chartlet has its own set of coordinates. To exhibit the texture features of the model

surface clearly, the mode and dimension of manifesting UVW chartlet on the surface of objects must be compatible with the model's surface distribution. Furthermore, objects should always be connected together following texture processing of image objects to avoid model pictures from fracturing or slipping up and to produce a natural and satisfying look. If the parameter value is 0, it implies that no change occurs in this direction, according to the description above. The original texture chartlet coordinates are replaced with the new chartlet coordinates to achieve texture transformation.



Figure 3: The above figure shows the original wall design with virtual reality technology[5].

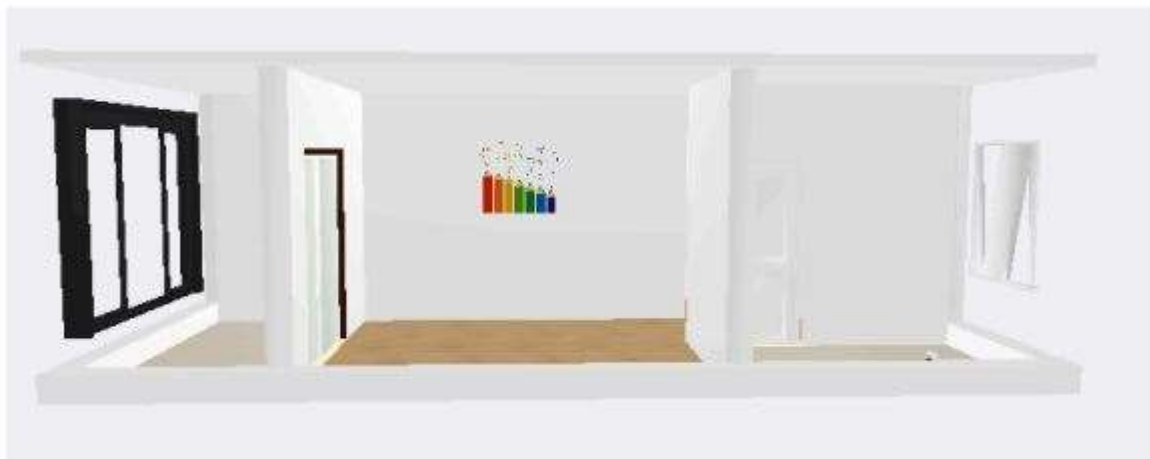


Figure 4: The above figure shows the wall design process with virtual reality technology[5].



Figure 5: The above figure shows the texture and the change of colour of wall design with virtual reality technology[5].

## 2. DISCUSSION

The author has discussed about the graphics designing, in the actual teaching process, a mix of painting-imitating teaching methods and virtual reality technology was used, and the results were compared to standard teaching methods. The findings of the experiment were analysed using a questionnaire that suggesting the combination has increased students' active engagement and piqued their interest in learning. To summarise, the effect of the research's combination of painting-imitating teaching technique and virtual reality technology can only be evaluated via social practise. To lay a solid foundation for future study and work, suggest appointing designers to deliver lessons, who can explain the skills of design and drawing of effect pictures with virtual reality technology, and show students in design factories and construction sites to feel effect pictures and site construction in short distance, and comprehend the connotations of design, idea, and technologies.

### 3. CONCLUSION

The author has concluded about the graphic designing. Graphic design also differs depending on the visual culture in which the collection is based, and the time factor. These differences combine to form the phenomena known as trend or trend in graphic design. People in society can assess and consume trends based on their emotional accumulation, which includes their taste, culture, political views, and personal routines. However, with the industrial revolution, the quick growth of science and technology, as well as the new possibilities of rapid automation, tradition in society and in the domains of art and design, began to be destroyed. In a scientific and aesthetic sense, several design schools and art centres have begun to develop, and modern forms of expression have been created specifically in the field of design. As a result, the designer may be required to examine the society's social and emotional aspects as well as the aesthetic values of the people who live there. Using the appropriate language of expression, the designer may also determine or guide the individual's cultural behaviour.

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