

The 3D software based virtual environments constructed as an art beyond from the technology.

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Abstract

Today the television advertising is not just a marketing factor but also makes itself as combination of techniques, art, as well as effective persuasion element in consumerism era. In this competitive market it is astonishing that the faces of television advertising rapidly moving to capture various experiences of promoting products and persuade the mind of the consumer with the newness of attraction. In the age of digital, advertising moves to “virtual environments” as a new figure. This approach of technology has more access to emerge a perception in consumers mind, through the eye.

Though this 3D software based virtual environments are utilized as an effective high-detail generated tool for advertising in the world, the definition of 3D environments still use as traditional advertising ways as past in Sri Lanka. Therefore the topic, “do the 3D software based virtual environments construct as an art beyond from technology”, is one of the contemporary issues that should be redefined in Sri Lankan society and industry. The main objective covered here is how to use the 3D software techniques within an artistic approach to constructing virtual environment of the advertisement. Three categorized TV advertisement’s environments of Architectural based, Natural Environment based and Liquid based forms of 3D settings were used to analyse the successes of visual output. The analysis consisted with the scientific research methodologies of content analysis and interviews. The success of virtual environment depends on live and realistic nature of the output visual of advertisement. The main purpose reviewed via this article, is a How 3D software based virtual environments construct as art beyond from its” technology that can be added highly detailed eye-pleasing surround inside of the advertisement’s visual performance that real world can do. To fulfil that performance, the requirement of 3D virtual environment needs to come originally from the product and advertising concept with a sensible definition and recognition of product, technology and art.

Key words: *Virtual environment, Television advertisement, Techniques, 3D software*

Introduction

Today the television advertising is not just a marketing factor but also makes itself as a combination of Techniques, Art, and Effective Persuasion element as well as an Ideological apparatus in the consumerism era. Therefore the advertisers and creative writers try to find new ways to introduce the products within new looking and experiences. The creative and technical concepts of the television advertisement got a higher importance because of this.

In the age of digital, advertising moves to “Virtual Environments” as a new figure. As a new approach of technology this has more access to emerge a perception in consumers’ mind through the eye. The virtual environment is not real. It is an illusion generated from computers. Via making two dimensional representations of three dimensional objects, make a Virtual Surround at the television advertisement’s visual output. “3D Computer animation is a subfield of computer graphics and of the more complex Virtual Reality approach.” (Parisi, Bauch, Berssenbrügg, Radkowski, 2007, p.67) This technical element is like a remote control over the brain, because the possibility of truly immense. So in the medium of advertising the virtual environment can be used as an effective unmistakable tool for promoting products. The special figure of perspective vision helps to closer more and more to makes a realistic image in consumers mind.

Consequently the depth perspective to the 3D environment can produce more perfect visual setting which can enhance the product within a highly detailed appearance. “A lot of detail never gets seen by the cameras. To me, fantasy should be as real as possible. I don’t buy into the notion that because it’s fantastic, it should be unrealistic; because I think you have to have a sense of believing the world that you’re going into. The levels of detail in that are very important.” (Jackson, 2012) Though in this era dealing with RED Camera there are some technical limitations and barriers hard to achieve. Also the technology is highly rich in money. Therefore 3D treatment is a great solution for this.

Here the 3D created (software based) environment can be a shadow or an imitation of real world, a fantasized one, futuristic or surrealistic background. That virtual setting of production will be totally software based (2D/3D) or blend live environments. Those backgrounds generated from the software as Maya, Autodesk 3Ds Max, VUE e-on, Real Flow, etc. Anyway every advertiser’s purpose is to provide an environment that helps to enhance the market for the product.

Though there is much technology, it should have a genuine creative concept to build a fertilized advertisement. If it uses just the techniques of software given that never emerge powerful virtual environment that enclosing to the reality. Otherwise it will be an imitation or a distorted copy. “Everything we see in this world is already a copy of the above world. For an artist to make a representation of what is seen would be to make a copy of a copy, in creating the chance of distortion.” (Plato.2008, book 10). Without identifying this problem this it is hard to develop the field of using 3D technology in any place.

As a daily developing industry, the combination of these technologies will be more fruitful for the field of advertising. So this is an advantageous approach than past methods. There are so many researches accomplished in the world on the topic of 3D animation in various sectors. As 3D animation for Education, Interactive 3D Simulations in Measuring Consumer Preferences, 3D practice for Biology are some of them. But at an academic level, it is still in a developing level in Sri Lanka. There were a few researches fulfilled on this subject in Sri Lanka. Though there are many surveys on Advertising area, those are not in deep sense. It is a contemporary issue in Sri Lankan advertising field. Likewise it has become great lack existing on academic surface. It is a difficult draw back in the industry which prevents to gaining high persuasion or to take the expected outcomes of the advertisement. Also make a new change according to growing technologies and concepts of the world.

The topic of “The 3D software based virtual environments construct as an art beyond from the technology”, covers different areas of the advertisement. The success of virtual environment depends on live and realistic and well creative concept maintained of 3D created environment. So it is important to find a creative way of influencing 3D environment at virtual surround at the advertisement.

The basic objectives of this research are to assess the influence of 3D software mediation and the valuation of the artistic formation towards the virtual environment of Television advertisement. By using the three categorized environments of Architectural based, Natural Environment based and Liquid based forms of 3D settings and Interviews provide the proving facts for the topic mainly focused on 3D is an art beyond from technology. As well as this research finds the new face of the 3D software technology. Finally this research provided a creative and technological knowledge and different kinds of environment creating software usages to everyone who likes to study and practice 3D. As a third world country, 3D should be developed as an art more than a technique.

Literature Review.

Advertising is a form of communication. Today it becomes a more powerful communication performance in the world. “Advertising is the non-personal communication of information”. (Bovee, 1992, p. 7) Unlike personal selling, the sales message and its presentation does not have to be created on the spot with the customer watching. “A form of controlled communication that attempts to persuade consumers, through the use of a variety of strategies and appeals, to buy or use a particular product or service” (Defleur & Dennis, 1996, p. 564) Most commonly, the desired result is to drive consumer behaviour with respect to a commercial offering, although political and ideological advertising is also common.

The Latin word advertising was composed as the collection of the words Ad + Venture. According to the French meaning also emphasized below definition that advertising is for taking attention. According the evolution of making adventure, new communication technologies are creating new models for the advertising industry. “Finding more entertainment and media options for audiences; more widely available digital tools that empower audiences to take a more active role in media consumption and changing advertising metrics models.” (Gluck, Sales, 2008, p. 7)

Therefore this practice is not just limited to speech or pictures. “Advertising can be described as the art of creating a demand for articles and serviced.” (Jha, Singh, 1988, p. 549) If there is high creativity, the demand is also elevates. When traditionally advertising has been defined as a form of controlled communication that attempts to persuade consumers through using various strategies to buy or use a particular product or service, today its definitions making changes as a form of persuasive element which combine together with creativity and technology.

On this diversification in digital age, the Virtual Environment advances with advertising as a new technological figure. “The specific characteristics, immersive virtual environments could be more effective persuasion, than classical advertising media”. (Riva, Davide, Jsselsteijn, 2003, p. 13) Therefore this trend has been associated with television advertising.

Virtual Environment

Like most technologies, Virtual Reality (VR) did not suddenly appear. It emerged in the public domain after a considerable period of research and academic activities. J. Presper Eckert and John mauchly’s company built the

first computer designed commercial in 1947. In the mid of 1950s 3D experience was combined with computer graphics and computer systems. In 1962 U.S. entitled Sensorama Simulator¹, was the first invented VR video arcade. On common ground, virtual reality is a computer based simulation of a real world environment represented in a 3D appearance. Terminologically, “VR is an integration of computer based applications and human-computer interface in a way that computer and its devices create sensory environment that senses the participant’s position, action and replaces the feedback to one or more senses which will make the environment appears real to its participants” (Schulz, Wang, 2001). Passing the turning points of telepresence, telerobotics, artificial intelligence, this technique footed into the field of entertainment replacing real environments.

VR is not only based on science and technology but also a colligation of human perceptual circumstances. Someone called this as Perceptual Realism. At the time person standing in this space the technology feels as a part of a person’s perception with illusion that s/he is in real world space and it makes as a feeling “I am here!”

According to Burdea’s analysis there are 3 I’s of Virtual Reality. “Virtual reality is a computer based simulation of a real world environment represented in 3D form which has a real time Interaction, a sense of Immersion and Imagination.”

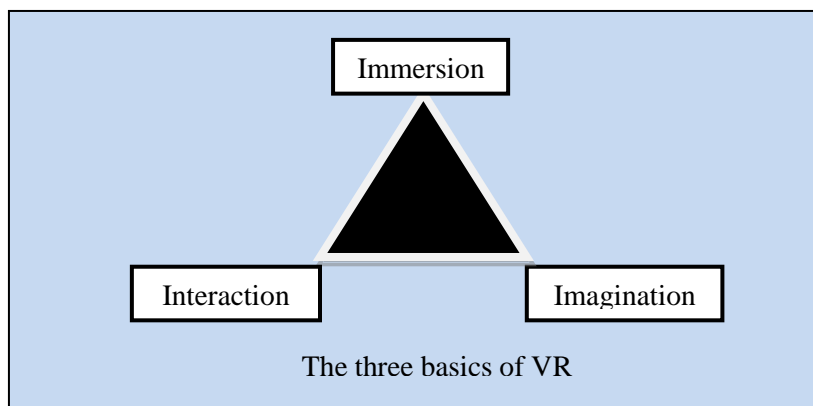


Figure 1: (Burdea, 1993)

The above definition mentions about one I of VR as Interaction. Interactivity and its captivating power contributes to the feeling of Immersion, of being part of the action on the screen, that the user experiences. Final I imagination is part

of VR refers also to the mind's capacity to perceive non-existent things. That depends on his or her imagine.

Those computer-simulated environments can simulate physical presence in places in the real world, as well as in imaginary world. This world seen as different from physical 'reality' but with its parallels with reality is 'Virtual world'. (Lanier)

The triangle of VR engaged with a graphical process. "Visualization can be said to represent complex or abstract data that exist via computer graphic model which enable user to experience a sense of immersion as the environment exudes the characteristic of a real life model"(Klain, 2003). "Computer software creates Virtual Environment (VE) which ranges from 3D object to abstract database" (Vince, 1995). Furthermore, most of the present virtual environments are based on 3D software based polygonal data as model transformations, lighting consumptions, scene projection, clipping, and mapping are consisting making the environment of VR surrounding. "Computer software creates virtual environment (VE) which ranges from 3D object to abstract database" (Vince, 1995).

This provides large, high resolution, three-dimensional images and high fidelity, dimensional sound, a 3D presentation can cause the viewer to perceive that s/he is in an environment that looks and sounds as the viewer believes it does or would in the physical world; the user may comment, "It seemed so real!" The component parts of virtual environment in way that makes the user believe that they are actually immersed in a real environment". (Lombard, Snyder, 2001. P. 59-60)

These technological and conceptual possibilities changes to provide a new kind of advertising experience.

3D Software Technology.

The special figure of perspective vision on three dimensional approaches helps to closer more and more to makes a realistic image in human mind. VEs are consisting from various geometric modeling within three dimensional manner of X, Y and Z axes. 3D computer graphics are mainly using this purpose of making 3D approach. Via this process viewer receiving 3D stereoscopic image from VE.

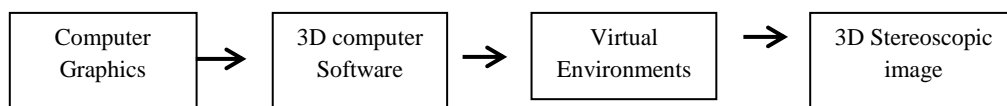


Figure 2: Viewer Receiving Process.

3D computer graphics software refers to programs used to create 3D computer-generated imagery. 3D modelers allow users to create and alter models via their 3D mesh. Commonly the 3D computer graphics creation falls into three basic phases: 3D modelling, Layout and animation, 3D rendering. The integration of those elements in 3D computer software, produce a real detailed VE. (Giambruno, 2003)

Today it uses hundreds of software to create VR in entertainment and advertising field. Autodesk 3ds Max - Powerful designing software integrated on 3D modeling, animation, and rendering tools. Maya - Integrated with 3D modeling, animation, visual effects, rendering, and compositing software. Vue (E-on Software) is a tool for creating, animating and rendering natural 3D environments. It was most recently used to create the background jungle environments. Real Flow (RF) software simulates and renders particle systems of rigid bodies and fluids which creating high-end digital visual effects. That main software are leading on creating VEs for feature film, advertising, music and television industries.

Visual Treatment inside of the Advertisement.

Today the television advertisement is a very good eye catcher and it can create the consumer based society by using this eye (sight). This marketing system has shifted into the ‘touch’ from the ‘sight’. Therefore human needs to aware about these infected motivations of Visual Consciousness. “If the picture is an advertisement, the viewer may be persuaded to purchase a product.” (Block, 2008, P.2)

The visual treatment of advertisement often is overlooked, yet it’s as important as the message of the product. The characteristic behaviors of visual components are important to controlling environment which finally allows well communicating for the product. In fact it should be fresh because which demonstrates how a picture can communicate information faster than words.

The basic visual components are space, line, shape, tone, colour, movement, and rhythm (Block, 2008, p. 3). These visual components are found in every

moving or the still picture we see. A visual component communicates moods, emotions, ideas, and most importantly, gives visual structure to the pictures. Though the creation will be television, cinema, poster, bill board or advertisement, trailer, or promotional video, these components are used in creating any picture. In 3D software, in the base environment the following elements are most important to attract or grasp viewer's eye towards itself.

Methodologies

The main purpose of this research is aiming to review the effectiveness of a proper Artistic approach when creating VE using 3D software. Here it used sociological data analysis of Content analysis and Interviews to prove the research topic of “The 3D software based virtual environments construct as an art beyond from the technology”. Three (3) TV advertisements telecasted in Sri Lanka which contained clear aspects of 3D software crated VEs with Architectural, Natural and Liquid formation based were selected. Those are,

1. Architectural based - Dulux Stick Figure Advertisement
2. Natural Environmental based - Nolimit advertisement
3. Liquid based - Ritzbury Expressions advertisement

The successes and efficiency of the ads were reviewed by Interviews of 3D creators, Creative Directors, Critical thinkers and of computer animation experts. The content analysis consisted with 3D created environment, Visual treatment, and Final compositing with editing.

Findings.

The qualitative data of interviews emphasised how much the artistic appearance effect elevated the perfect reliable output of the advertisement.

Architectural based - Dulux Stick Figure Advertisement

The main reason appears to creating software environment is, the set may be an unrealistic one or incident in real world. That is why 3D software strategy is used as a great tool in world cinema and commercial industry in the world. If someone creating a model or environment in fantasized manner is an excellent technique in 3D works ground. The films of Walt Disney become more popular because of this reason. And it is a fine technique to build Futuristic environments.

When creating an architectural set up it must be shown as its own appearance with the above mentioned 3D software techniques. The entire ad shows visual treatment, final compositing and editing as a good combination for introducing the product. So this Architecture based VE made a real solution for exceeding the limitations of the real world with its genuine appearance. Not only that but also the highly detailed interior background provides a better introduction for the ad.

Natural Environment based - Nolimit advertisement

The main challenging point depended on religious ideology for the ad. The Muslim ideology there is no ability to open human figure especially skin to camera, influence directly the creative concept. Here the 3D natural VE involvement is used as a solution for this. Sri Lanka is not a rich country in technological equipment as Indian or European industry. The main way to achieve this barrier is to use 3D in a creative and smooth manner.

If someone models an ordinary environment or incident that should have be an imputation of fabulous or unreal situation. If it is just an imitation of the real environment, it will be an alteration or immaterial work. If there is a copy of a copy, there would be a chance to appear as a distortion. The main thing here it found 3D shouldn't use as an option for budget or lack of technology. The creation will be more fertile if creative idea arises as a requirement of product. It will be the same reason of enhancing more reliability on viewer's mind on VE.

Finally it provides a different view of cloths and fashions which require from eyes. It is a fashionable environment which makes highly integration on mind with newness of attraction via creativity.

Liquid based environment - Ritzbury Expressions advertisement

The concept really combines with the name of 'EXPRESSIONS'. Ritzbury Expressions Chocolate is the best way of expressing love and feelings according to semiological methodology within chocolate created chocolate hearts, flowers as various expressing ways that pass over the traditional way of chocolate ads. Narration and music track also highlighted feelings around the product.

This is a fantastic strategy which is used for showing ingredients of the chocolate in eye catching attribute. The real way of flowing chocolate construct under the nourishing of pre research level of liquid mixture of natural elements. The 3D treatment, music track, narration and editing process lead to make a complete ad in every hand. Here the software used Real Flow as the best

technical way to achieve the product name requirement with the combination of artistic manner and perfect researching points.

Conclusion.

The results of this research study clearly indicate that perfect 3D software VE is not only a result of technology, but it should be genuinely coming from the requirement of creative concept. The social definition of using 3D virtual environments as cost-efficiency, easy to modeling and no more time it need, should be changed for Sri Lanka, as a developing country. It must be developed as an Art rather than technique with regular previous research step.

Therefore it should be established through a newer social and academic definition. “3D Virtual Environment means a natural or imaginary environment that builds up on the genuine requirement of creative work, causing viewer’s interactions with planed unification of artistic approach and CG technology.”

References

Block, Bruce. (2008). *The Visual Story. Creating the Visual Structure of Film, TV and Digital Media* (Second edition). Elsevier Inc.

Giambruno, Mark. (2003). *3D GRAPHICS AND ANIMATIONS* (2nd edition). New Delhi: Pearson Education (Singapore) Pte.Ltd.

Gluck, Marissa., Sales, M. Roca. (September, 2008). *The Future of Television? Advertising, technology and the pursuit of audiences.* Norman Lear Center: California.

Klein, R.L. (2003). *Journal of Interactive Marketing*, Vol 17, Issue 1, pp 41-55.

Lombard, Matthew., & Snyder, Jennifer. (2010). *INTERACTIVE ADVERTISING AND PRESENCE: A FRAMEWORK* (Vol. 1, No. 2) American Academy of Advertising.

Lombard, Matthew., Reich, Robert. D., Grabe, Maria. Elizabeth., Bracken, Cheryl. Campanella., & Ditton, Theresa. Bolmarcich. (2000). *Presence and Television. The Role of Screen Size*, Human Communication Research (Vol. 26 No 1). International Communication Association.

Parisi, Salvatore., Bauch, Jochen., Berssenbrügge, Jan. & Radkowski, Rafael. (2007). Using Ontology to create 3D Animations for Training Purposes: International Journal of Software Engineering and Its Applications.

Plato, Jovett, B. (2008). The Republic, Online Publications Ebook #1497, Book X.

Riva, G., Davide, F., & IJsselsteijn, W.A. (2003). Persuasive Effects of Presence in Immersive Virtual Environments: Concepts, effects and measurement of user presence in synthetic environments, Amsterdam, Ios Press.

Taflinger, Richard, F. (1996). *A Definition of Advertising*. Retrieved from <http://public.wsu.edu/~taflinge/addefine.html>. Viewed by 19/10/2012, 9:41: PM.

Vince, J. (1995). Virtual Reality Systems, Pearson Education Ltd and Dorling Kindersley Publishing, pp 17-31.

