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TRADITIONAL DIRECTORIAL TECHNIQUES AND CINEMATIC VIRTUAL REALITY: COMPATIBILITY DRIVE

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Abstract

The popularity of Cinematic Virtually Reality has drastically appreciated in recent years. Obviously, this omnidirectional medium, which gives the viewer the liberty to see a movie from various angles of choice, needs the adaptation of traditional film making techniques, hence, this paper seeks to provide new insight into how existing techniques could be adapted to create effective Cinematic Virtual Reality experiences, as well as develop directing techniques that are exclusively for this new medium. To elucidate on the concept of Notion of Presence and, the idea of viewers' engagement and interaction with film and cinematic storytelling, the Cinematic Virtual Reality medium has been particularly put forward. The work concludes that directors should go beyond the ordinary in designing for productions by exploring the full immersive potentials of the Cinematic Virtual Reality as an evolving technology, in this era of experimentation and sophistication.

Keywords: *directing; cinematic, virtual reality, immersive*

Introduction

Productions, irrespective of the medium – stage or film, anchor on the use of one common element – space. Space is the podium for expression and communication, while using creative imitation and imagination. This simply implies that space, whether natural or artificial, has a great influence on production design. Though, in more recent times, another kind of space has been identified in the performance medium following technological breakthrough. This new-found space is known as Virtual Reality. The submerging medium of Virtual Reality refers to the presentation of first person using a head-mounted display and headphone that enable the user to experience synthetic settings and surroundings yet have great feelings that interpret a physical presence and sense of belonging towards the world he or she sees. The advent of research into Virtual Reality (VR) dates back to over 40 years ago, yet it only began to receive public acceptance in very recent times. According to Schnippers (2014), The Rise and Fall and Rise of Virtual Reality, which includes an expository section by Robertson and Zelenko (2014), only recently, with the emergence of inexpensive high-powered computer processing and

Traditional directorial techniques and cinematic virtual reality: compatibility drive display systems, has VR begun to become commercially viable and to be adopted by the public. Silicon Graphics, Sun Microsystems and Evans & Sutherland were some established manufacturers at this threshold. This also followed the creation of numerous VR start-up companies like VPL, Division and Virtuality. In his article "Directing for Cinematic Virtual Reality: how traditional film director's craft applies to immersive environments and notions of presence", Mateer John William states:

> In the early 1990s computer technologies had advanced to a point where the commercial potential of VR was seriously explored. However, the technology was ultimately not sufficiently mature nor at a low enough price point to enable viable take-up so commercial exploitation stalled Central to this take-up has been the development of so-called Cinematic Virtual Reality (CVR). […] While a formal definition of CVR is still being developed, the emerging consensus is that the term refers to a type of immersive Virtual Reality experience where individual users can look around synthetic worlds in 360¡, often with stereoscopic views, and hear spatialised audio specifically designed to reinforce the veracity of the virtual environment (as a note, there are presently no initiating studies or foundational articles that can be seen as seminal at this point) (Mateer, 2017, p. 2).

Delving into the field of Virtual Reality (VR), which apparently is a current trend in audiovisual design for the entertainment industry, this work is designed to examine the directorial structure used for Virtual Reality. It is of the view that Virtual Reality, as an operational phrase in modern and postmodern film, has become a veritable means of realizing scenes artificially, with the help of the introduction of computer and other technological equipment.

Cinematic Virtual Reality

Formal exploration of Cinematic Virtual Reality, technologically and empirically, is rapidly emerging, with the precise disparities between CVR and VR taken into account. Existing research into Virtual Reality lacks sufficient consideration or understanding of the role of the film director, and the strategies utilized by them in cinematic storytelling. Cinematic Virtual Reality productions arguably represent a new form of filmmaking. Unlike traditional VR in which a virtual world is typically generated through graphics

processing and audio triggers in real-time, CVR applies the use of pre-rendered picture and sound elements exclusively, thereby rounding off at a quality that is comparable to high-end television or film. CVR program began to appear in 2015, partly propelled by major initiatives from Google, Jaunt VR and The New York Times. In 2017, Google launched a major push into VR including the introduction of Cardboard, which enables many mobile phones to be used as a low cost head-mounted display. Jaunt VR is an online CVR distribution portal founded in 2013 and backed by major investment from Google, Disney, the Chinese media conglomerate CMC and others (Spangler, 2015). With reference to Jaunt, The New York Times and L.A. Nior, Mateer states:

> Its stated mission is to, put realism back into the virtual reality experience, lending an uncanny sense of presence never before possible (Jaunt VR, 2017). In late 2016, The New York Times launched The Daily 360 (2017), a free online site that releases CVR programmes on a perpetual basis, making them arguably the largest producer and distributor of CVR content to date. In all three instances there has been direct engagement with Hollywood. Despite the fact that CVR take-up is still relatively low and projects to date are largely experimental, this has also involved the participation of major actors such as Natalie Portman, Don Cheadle and Ruth Negga (in the series Great Performers: LA Noir, 2016) and established film directors (detailed below) to help raise the mediums profile both publicly and within the film industry. (Mateer, 2017, p.3)

Unlike in traditional Virtual Reality, Cinematic Virtual Reality restricts the user's ability to move autonomously within the virtual world, thereby making it only possible to choose a position within the environment from which the scene can be viewed. This inability of users to actually interact with those elements that are contained in the virtual world is the prime difference between the two media. While both media are immersive, CVR experiences are linear presentations with the duration of each experience dictated by the length of the media assets employed. This is exactly what makes the production method for CVR to be seen as representing a new type of filmmaking. Looking at CVR from this perspective also supposes that some long-established filmmaking techniques could be adapted to this new medium. Indeed, it is interesting to note the involvement of established filmmakers in several of these projects — Justin Lin directed Fast & Furious 6 (2013) and Star Trek Beyond (2016), Doug Liman is the director of The Bourne Identity

Traditional directorial techniques and cinematic virtual reality: compatibility drive (2002). Following the ability to experiment and explore new techniques in their primary feature film genres — Liman and Lin now predominantly direct action films with key interest in CVR as a new storytelling vehicle. However, they also recognize that there are fundamental differences between directing for film and for CVR.

> We had to rethink the way we were telling stories, because when you just take a traditional scripted scene out of any TV script or movie script and shoot it in VR, it's going to be less compelling than what was shot in 2D. You'll feel like you're watching a video of a play. VR should be more emotionally involving, but that doesn't happen automatically by just taking a VR camera and sticking it onto what would be a traditionally blocked scene for 2D Research into the application of filmmaking techniques. Robertson (2016).

Directing for Cinematic Virtual Reality

Film directors have over time developed several means to control audience attention and subliminally steer viewer gaze around the frame. Doing this kind of research work, it is only ideal to find a bridge between these two previously disparate media, thereby considering film directors methods – how they might be applied in the VR technology as well as areas for future exploration, following that Cinematic Virtual Reality as a medium is still undergoing its maturity phase. Existing film directing methods can be possibly adapted to immersive presentation, so long as they also consider unique aspects of the CVR platform and are consistent with the needs of supporting presence. In other words, just as CVR can enhance a viewer's experience of a film, the effective use of drama and surprise can likewise help to promote transportation in CVR by minimizing the impact of the issues of presence. As Bouchard et al. (2008, p.384) elucidate, anxiety appears to have a direct impact on the subjective feeling of presence. As a result of this, clever directorial choices in story interpretation and realization are used to raise anxiety and evoke response to dramatic circumstance and possibly help to facilitate transportation by masking potential issues that are unique to the CVR medium. Simply put, the portrayal of risks and jeopardy in the viewer's mentality about a given storyline can enhance empathy for the character in view and thus distract the viewer from the tricks of the CVR medium. The bone of contention here is "audience control", how to manipulate their attention, distract same attention when necessary as well as evoke their empathy. To achieve this,

the director can apply traditional directing techniques involving camera movements and shots, mise en scene construction among other techniques. It however depends on the story line and thematic trust of the production. The technique to be adopted must be analyzed to be sure there is no compatibility crises foreseen during production and or post production.

- **Camera Movement and Shots**

There is hardly a range in film narrative impossible to be accomplished by the efficacy of camera movement, shots inclusive. Gone are the days when facial expression was the only aspect of video that contribute to interpretation. The way the camera moves throughout a scene and the choice of shot used can change the entire feel of the story. Imagine watching a chase scene in which the camera never moves. It will almost certainly lose much of the drama of the situation. Now imagine same chase scene, with a follow shot, obviously, the action in the scene and the way the scene is perceived by the spectator will change automatically. Without getting too scientific, kinetic energy is simply the energy of motion. By adding camera movement to a scene, you can greatly enhance the motion of the characters—thus, adding kinetic energy. Camera movement is capable of taking the viewer deeper into the narrative and improve the effectiveness of the narrative. Emotion is powerful in storytelling because it helps the audience connect and relate to the theme of the story. While static shots can evoke emotions, there are limitations created in the narrative; whereas, a quick push-in or tracking shot can create an unimaginable sense of surprise, as well as a slow act of dollying can create tension and build suspense. Understanding how each camera movement impacts the emotion of the scene can go a long way in improving the narrative. If a scene is taken from different angles, each will convey the narrative with slightly different perspective. Camera movement and multiple angle shots ensure full coverage of the scene, thereby further immersing the audience into the story. This technique is very capable of making an audience feel like they are living out the action.

- **Mise En Scene Construction**

In Cinematic terms, mise-en-scene can be referred to as all the elements of a film that we see in front of the camera and the way it is arranged (Bordewell and Thompson, 2003). These elements include décor, space, lighting, and costumes, and by extension acting.

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These mise en scene elements have an important role in imparting a mood to the story and conveying meaning to the visuals, thus playing an essential role suggestive of the director's narrative mastery. Mise en scene construction involves visual composition, the movement and position of on-screen actors and the properties set as part of stage design (Barsam and Monahan, 2010). The set and the way it is designed play a crucial role in creating a mood, interpreting the visuals, and providing an aesthetic appeal to the shots. There are several instances where the set designers had control over all the visual aspects of the particular film. An example of this is Victor Fleming's 'Gone with the Wind', where production designer William Cameron Menzies played an important role in the overall look of the film (Ward, 1994). The props, which are a part of the set design, also have a specific role to play in terms of lending meaning to the visuals and making the viewers find themselves in the virtual environment.

Notions of Presence

Presence is the term often used to appraise the level of transportation within Virtual Reality. Biocca (2002) defines it as a state where our awareness of the medium disappears and we are pushed through the medium to sensations that approach direct experience. A more useful definition in the comparison of transportation across media as it addresses the different means of immersion possible in VR, is Heeter's definition of three distinct types of presence. According to him:

- Social presence refers to the extent to which other beings (living or synthetic) also exist in the world and appear to react to you […] Social presence may derive from conversing with other human beings, or from interacting with animated characters.
- Environmental presence refers to the extent to which the environment itself appears to know that you are there [e.g., via interaction with or modification of physical objects or setting] and to react to you[…] If the environment knows you are there, that may contribute to you believing that you are there.
- Personal presence is based in part on simulating real world perceptions. You know you are there" because sounds and images in the virtual world respond like the real world to your head movements (1992, 263-4).

Only the last out of these three definitions above seem relevant to Cinematic Virtual Reality, based on the lack of true interaction with the environment and the linear presentation used within the medium. Slater and Wilbur (1997) state three general agreement on key considerations in the design of virtual experiences to maximize

presence and consequently transportation, which are directly relevant to Cinematic Virtual Reality:

> (1) The rules of interaction must be clear — how, where and when the viewer can move or change viewpoint
>
> (2) Navigation must be simple and intuitive — enabling movement without distracting from visual or aural elements that facilitate transportation
>
> (3) Movement within the environment must be smooth — with consistent increases or decreases in speed and no apparent visual artefacts when perspective is changed (e.g., ridges between cameras used in creating 360¡ video)

Transportation in Film and Suspension of Disbelief'
Suspension of disbelief is basically known as the primary phrase referring to viewer engagement and interaction with film and cinematic storytelling. Ferri (2007) gives a detailed study of the concept from its evolution. According to him, the concept emanated from a literary term by Coleridge) through to how audiences presently view (and become immersed) in film. The choices made by the film director are key to communicating different styles that can directly affect how viewers engage with narratives and interpret stories, thereby increasing transportation. As discussed by Weston (2003), Proferes (2013) and others, this begins with the director ensuring that an analysis has been done about the script in order to:

- Formulate a specific interpretation of the story
- Define the overall theme and message based on the interpretation
- Define how information will be revealed
- Define the overall objectives of core characters/subjects and the dynamics between them
- Extract story elements to inform realization and creative production choices, which is the director's vision

Mood and tone creating are best accomplished using strategic choice-making in production design, setting, lighting, sound and other elements. It is also possible through blocking, pacing and general performance delivery. Also, film directors often take advantage of the knowledge of existing audience about genre conventions, stereotypes and archetypes to support audience expectations, thereby helping to enhance transportation. In the majority of film grammars, directorial choices have the specific objective of ensuring audiences engage strongly with story yet not distracted by technical means of presentation thus achieving suspension of disbelief.

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Conclusion

Having examined the relationship between film directing techniques and Cinematic Virtual Reality production, this work has used transportation theory to better understand how one medium can be applied to another. This work has made its findings in the fact that CVR lacks the elements of realism and has not justified its technological programming to give viewers a strong sense of presence, as it is with other traditional visual media. To throw a light on the applicability of existing film directing techniques and how they might be applied where necessary, it recommends the application of camera movement and multiple angle shots as well as the mise en scene technique used by traditional film makers. However, for CVR directing techniques to become more advanced and established, inept and continues studies must be made in view of knowing how fixed screen, CVR and immersive VR versions of a story can be compared, to gain insight into the applicability of film techniques on CVR as well as VR experience and development. It is also important to know what techniques from other media, such as traditional stage-based or participatory theatre, are applicable to CVR and how they can be used effectively.

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