

# SPECTATORS' EXPERIENCE OF 2D FILM VERSUS VIRTUAL REALITY CINEMATIC FILM

DANA FLORENTINA NICOLAE

University of Bucharest

nicolae\_dana\_f@yahoo.com

## Abstract:

Many agree that the best-known image related to virtual reality (VR) experiences is the head mounted display (HMD). While the history of headset-mediated virtual reality dates back to the sixties with Ivan Sutherland's Sword of Damocles trials, the past two years have seen the release of impressive high definition image rendering HMDs that have also prompted the production of various VR experiences such as movies, games, therapeutic content, documentaries and even simple interactive movies just to name a few. The cinematic films had no prior precedent for this medium. Can we truly name VR films cinematic? What can we say about the difference between 360-degree fictional movies and VR computer-generated ones? What can we say about these new categories of technologically-mediated fiction and their spectators? How are they different from the two-dimensional spectator experience? These are legitimate questions that I will address in my paper.

**Keywords:** *virtual reality, cinema, immersion, spectatorship, comparison*

## Introduction

It is not news that young social media users' experience is mediated through posts, pictures and likes with notable consequences in relation to how they ultimately relate to a potential life partner or friend. So, it should come as no surprise that American Millennials are avid users of smartphones and smartphone apps as the study done by Nielsen in 2016 shows. The many available apps for smartphones coupled with increasingly better internet speed point to a youth that is always on the go, always moving and taking pictures or video, or voicing an opinion through Facebook posts or tweets.

The recent advancement in technology is not only changing the way we perceive intimacy, friendship and entertainment, but it is also starting to redefine the way we can experience reality itself. There is no need for techno-pessimism here, just an acknowledgement of the tendency of today's technology which may isolate users and drag them progressively away from their real community and into as many social media communities as possible – a user that engages everyday with content on their smartphone or tablet or computer is profitable for the companies that make them, create content for them or provide access to the internet. VR content can also be mediated through a smartphone as it can be experienced through dedicated HMDs or through a combination of a smartphone and a headset.

Nowadays VR technology offers access to a wide array of content that ranges from movies, games, therapeutic content,

documentaries and even simple interactive movies just to name a few that engage viewers and "place" them in the midst of a virtual world. The most problematic aspect is the fact that VR cinematic content, be it fictional and artistic or documenting reality, offers a radically different spectatorship experience than people get from viewing a two-dimensional movie which can be acknowledged simply by participating.

The aim of this paper is to look at these various differences between the two movie-going and movie-spectatorship experiences. Many of these differences have already been observed prior to the emergence of VR cinema as a genre by media scholars such as: Lev Manovich (2002) when discussing his "cultural interfaces" term (the interfaces between users and cultural data); Janet H. Murray (1997) in her seminal book on immersive media aesthetics that includes thoughts on the characteristics of a viable VR experience; Michael Heim (1998) when describing the "conflict of attention" inherent when experiencing VR – between the cyberbody and the biobody in the context of Alternate World Syndrome (AWS); and Oliver Grau (2003) when referring to experimenting virtual art. These have not yet been discussed in the context of VR cinematic film, however, as this type of art form did not exist at the time in the form that it exists today. The case studies encountered in these works primarily refer to VR experienced through an HMD used for experimental art productions (Murray, 1997; Grau, 2003; Heim, 1998). More recently, it was cinema scholar and producer John Mateer (2017) who offered a relevant view on how VR cinematic narratives can be approached in comparison to 2D film making and with regard to VR spectatorship perspectives.

### Traditional movie spectatorship versus virtual reality movie spectatorship

The most obvious difference between the movie theatre and the VR cinema theatre is related to spectator experience which can also be broken down into collective commercial experience versus singular commercial experience within a collective which can be seen in the table beneath (Table 1).

In a two-dimensional theatre, spectators find themselves in a dark room which they share with other fellow spectators whom they may or may not know and, as Jill Nelmes (2012) puts it, they are also positioned between the screen and the projector, with their backs towards the projector facing the screen. As such, it is obvious that spectators are aware that the commercial experience is a collective one and not only that, but the simple fact of sharing the viewing of the movie together with the rest of the audience allows for socialising or exchanging ideas which is more likely if the spectator is accompanied by friends or family who share their state of spectatorship, but can still take place even if they do not know

anybody. For example, one viewer could turn to another one and make a comment about a specific actor, or could simply say something unrelated to the viewing process.

Furthermore, spectators are actually free to engage in other activities that require undivided attention such as reading a pamphlet or checking a phone which – although forbidden in a movie theatre – may still be something some spectators occasionally do during a viewing. It represents, of course, a significant break in the attention the viewer offers to the developments in the movie which implies a momentary lack of interest in it, and that, in the case of that particular spectator, the movie was unable to truly immerse him/her in the story, as opposed to socialising and commenting on something about the movie which indicates interest in it that also requires validation from another viewer.

The same can be said about experimenting with a 3D or a 4D movie in a cinema theatre since this is also a film viewing experience which is specifically designed for adding entertainment

value and spectator immersion. While such films do reduce the chance of people socialising, due to the narrowing view of the 3D glasses to the proceedings on the screen, and the constant movement of the audience's chairs (in the case of 4DX films), it does not eliminate it. Moreover, it actually encourages socialisation in terms of the immersive experience itself such as comments on how close a 3D object appeared to be or how much water would be sprayed on the audience at a certain moment (in the case of 4D films). These experiences are, in general, perceived as collective entertainment events where people can find, much like in the two-dimensional movie theatre, their friends, people on dates, families with children or couples.

In the case of the VR spectator, the projector disappears and so does the dark shared room and perceptual occlusion of the visual and auditory senses from the surrounding world occurs, an effect that has been acknowledged by many of the aforementioned media scholars (Manovich, 2002; Heim, 1998; Murray, 1997; Grau, 2003). If anything, the entirety of the traditional cinema theatre room "shrinks" around the head of each spectator who is strapped into a headset with a very small screen that is positioned very close to their eyes – it should be noted that it is very dark in that headset until the film actually starts or in between the end of one film and the beginning of another. What also changes significantly is the manner in which spectators sit in the theatre – on rotating chairs so as to better follow the events in the VR film. However, there are some cases where these films are interactive and designed for people to "walk" inside them. While the headset exclusive experience enables viewers to explore content through head movements, this type of experiment allows them to explore

the VR world by moving around within the computer program designated area and by interacting with virtual objects. All of this is accomplished with the aid of a headset connected to a computer placed in a backpack that each individual viewer is wearing which allows them to move freely around without being inconvenienced by wires. This is the case with the *The Enemy* art installation by Khelifa (2014) in which people can explore several scenes of contemporary soldiers' testimonies belonging to different sides of the same war. Still, there is no information about these experiences as part of a VR cinema experience. No doubt this is the closest media experience that viewers have nowadays to a form of believable immersion in virtual worlds, and it can only get more and more real from this point on.

An example of VR cinema can be found in Amsterdam and another one in Bucharest. Both locations offer short films grouped together on themes such as Fun, Supernatural, Journey or Documentary and viewers can choose their experience, which will always be unique in nature as the headset blocks a good portion of each spectator's perceptual apparatus – their eyes and ears. At the same time, it should be noted that VR cinemas can accommodate several people at once, but it is not obligatory that they experience the same visual content at the same time as is the case with traditional cinema – viewers experience the available content whenever they arrive and finish with the experience when they want to (after a viewing, they can pay for a different viewing or even for the same viewing). Even if people come accompanied, it does not mean that they have to experience similar content – as mentioned previously; there is themed content so it is possible that different people will choose the theme that they find more appealing

Table 1.

Spectator cinematic experience for the duration of the movie	Type of viewing	Enables socialisation, exchange of ideas with other viewers	Can do other tasks that require undistributed attention such as checking phone, reading pamphlet
In the traditional movie theatre	Collective	Yes	Yes
In a 3D or 4DX movie theatre	Collective	Yes	Yes
In the private household on a TV/LCD screen	Singular/Collective	Yes	Yes
In a VR cinema	Singular	No	No
In the private household, through a VR headset	Singular	No	No

and which is related to their interest. There are no studies on VR cinema consumer behaviour at the moment so as to see if viewers' choices are influenced in any way when they happen to be accompanied.

Given that VR cinema viewings are designed as a singular commercial experience but within a collective context (because there can be more viewers at the same time present in the room, experiencing similar or different content), it is clear that spectators can socialise either before or after the viewing – even if they watch the same content, it is debatable that they would both reach the same event at the same time. It is also no guarantee that even if they talk to each other during the experience, they can genuinely engage in a conversation because each is drawn into the experience differently.

Perceptual occlusion and inhibition keep the spectator from undergoing any other attention-related activity as that would imply taking the headset off (or in some cases signaling to the cinema employees that the headset is off, and that can be troublesome) and result in missing the events in the film. While it is possible to resume the story from the moment the headset is put on again, it is very unlikely that VR spectators would interrupt their viewing without a very good reason. There is also the option of rewinding, but in a VR cinema venue this would mean that they would have to pay for another film experience in order to see the part that they've missed; however, this particular new viewing would have less of an aura of unpredictability and mystery than any type of first-time content viewing would have. The manner in which VR film viewings happen prohibits spectators from engaging in any other type of activity or distraction.

Consequently, on the one hand, undivided attention to the movie events in VR cinema is expected from viewers; on the other hand, it is not possible to validate viewers' experiences with another spectator in real time due to the specificities of the singular experience in the case of 2D, 3D and 4DX cinema theatres where people can dedicate their attention wholly to other activities, and ignore the film for a moment or more, but the spectators can also exchange impressions about the movie as a shared collective experience in time.

As to what concerns intimate household movie viewing, one notices similar differences in spectatorship for the two forms of cinematic media, and expanding on the subject, the same limitations. Of course, one can experience movies in the privacy of one's home, either alone or accompanied by friends and/or family and, in the latter case one can socialize or engage in other activities during the viewing. As for the virtual reality home cinema experience, the same situation as the one mentioned above may take place, except that a spectator can experience it without being part of a collective, albeit that they detached from it through the headset.

### **An overview of cinematic virtual reality productions**

In an attempt to offer another difference between 2D and VR cinematic spectatorship, it is important to distinguish the high value virtual reality cinematic productions which immerse spectators into a powerful situation and generate a strong emotional response from the low value ones which do not engage the spectators in the story in the same way, although the "being there" effect that the VR experience has might

occasionally impress regardless of the quality of the production. While a clear distinction can be made between these high-value and low-value productions as far as two-dimensional films are concerned, with so many awards ceremonies around the world that validate the craftsmanship and significant spectator engagement certain films provide, the same cannot be said for VR cinematic ones at the moment.

With such a plethora of VR content production and increasing commercial use, as can be plainly seen from the many VR chairs and booths installed in malls across Europe, North America etc, there is no point in contesting the inherent quality of placing people "there" (wherever that virtual "there" might be) that VR offers, as no investor would finance a venture that might bring revenue; they would naturally invest in something that will surely result in profit.

It is important to mention that journalists Devon Dolan and Michael Perets (2015) describe four types of interaction in a VR medium in their article *Redefining the Axiom of Story: The VR and 360 Video Complex*: active observant, passive observant, active participant, passive participant based on how the viewer's actions have affected the ending of the experience. The same journalists insist on a clear differentiation between VR films and 360-degree films in terms of what dictates the spectator's interaction with the VR world.

According to Dolan and Perets (2015), 360-degree movies are productions filmed with specifically designed 360-degree cameras which, by their nature, restrict interactivity, as opposed to VR films generated by specific software which offer almost limitless possibilities in terms of content design and can make

effective use of interactivity. There are many award-winning or well-received 360-degree films and immersive documentaries which move the audiences in strong and even life-changing ways such as *Clouds over Sidra* (2015) about Syrian refugees or *iAnimal* (2016) which presents harrowing images from an abattoir, but there are also many 360-degree online videos available for free that cannot truly be seen as being productions of artistic value. However, as I already mentioned, under the headset, the latter ones might elicit a certain reaction that might make them appealing in an artistic sense.

Currently, there are film festivals that are making efforts to recognise virtual reality cinematography. One of the best examples in this respect is the 2017 Academy Award winner Alejandro González Iñárritu's virtual reality work titled *Flesh and Sand: Virtually present, physically invisible* (2017) about South American refugees. His production was so impressive and compelling for the viewers that the Academy Awards gave it a Special Achievement Award because they had no category for this type of cinematic experience.

One year prior, *Pearl* (2016), a virtual reality animation directed by Patrick Osborne about a single father raising his daughter, was nominated for the Oscars in the Best Animated Short Film category, thus making it the first VR film to be nominated in the history of the Academy Awards; it did not win.

Moreover, the Sundance Film Festival premiered the *Dear Angelica* (2017) VR animation made by Saschka Unseld, starring famous Hollywood actress Geena Davis. Her participation further suggests the willingness of Hollywood actors and directors to add to this emerging genre of cinematic experience.

It should be noted that all of the aforementioned productions are films made by using VR software (not just simple 360-degree footage) and while *Dear Angelica* and *Pearl* only require the use of a headset, *Flesh and Sand* has been described by reviewers as an experience that requires spectators to “walk” around the scene (which is similar to the *Enemy* experiment) and is complemented by an environmental installation.

### Will VR cinema replace traditional cinema?

The award offered to Iñárritu paired with the introduction of VR films at the Cannes and Venice film festivals in 2017 have led to an ongoing debate among film critics about the ultimate replacement of traditional cinema with VR. This is not a new debate however, as the subject has been tackled marginally by Lev Manovich (2002) when he mentioned a view that had surfaced at a 1996 Hollywood symposium on VR (with the developments that existed at the time) as the next step in traditional cinema’s evolution and even put forward a derogatory term for 2D cinema – flatties (in reference to the flat and obsolete screen employed in traditional cinema viewing).

Interestingly enough, it was Alejandro González Iñárritu who stated at the Cannes Film Festival (2017) that VR would never replace cinema, because “Cinema is frame, cinema is length of the lens, cinema is editing, the position of images that create time and space. Virtual reality, even when it’s visual, is exactly all what cinema is not.” The fact that VR cinema is a drastically different experience from traditional cinema is seen as an argument in favour of VR running alongside traditional cinema but it suggests that it will never really replace it.

However, there are many other issues related to VR cinematic experiences that do not make them a viable candidate for replacing traditional cinematography, at least not under the current circumstances, such as movement nausea that some people feel when using the headset or simply pressure on their nose after prolonged use, which is why the ideal duration for a VR film pack is 30 minutes, according to the practices enlisted by the two aforementioned VR cinemas.

Furthermore, VR cinematic films are also becoming common categories both in well-established and less visible local film festivals across Europe, North America and the Indian sub-continent as far as I know.

It should also be noted that there are a few VR experiences available as teasers for either existing or upcoming two-dimensional films which feature a place relevant for the films available for exploration. In the case of *IT* (2017) there is a VR experience that takes users into the scary sewers and there is another one that recreates a zero-gravity dance club from *Ready Player One* (2018) with many other similar experiences related to it underway. All of these show not only that these two cinematic experiences are running side by side at the moment, but that they can even complement each other.

### Conclusions

Marshall McLuhan’s *The medium is the message* (1967) fits the emergence of VR cinema perfectly as the medium itself comes with characteristics that set it apart from all previously known cinematic experiences. It is about the isolation of

the spectator which simply follows in the footsteps of social media usage. This is a fairly singular experience coupled with people’s obsession with their smartphones and it is not so hard to see all of these elements combined and widely used in the future in the form of AR (Augmented Reality) glasses – which already exist but, much like virtual reality, they need momentum – but it is the added interactivity feature that gamifies the cinematic experiences in VR.

VR has already been proven to be an impressively versatile medium that also comes in the form of VR games or spaces where people can socialise with each other. An example of this is Facebook Spaces where users can interact with each other in a VR environment. Another example of how this might look like in the future appears in the novel and film *Ready Player One* that touts a world where VR can be shared by everybody – the Oasis – a sort of transposition of a community into a gamified virtual world where anybody can take on whatever avatar fits their perception of themselves – but which is also used as an escape from the harshness of life.

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