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## INTERSECTIONS



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# Creating an immersive virtual reality experience as a platform for transmedia education

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## Abstract

Virtual Reality (VR) can provide an immersive aspect of a broader transmedia narrative. The inclusion of multiple modes of technologies and platforms enables viewers to engage in various aspects of the overall narrative through the medium they are most comfortable with. The varying forms in which the content is delivered creates different feelings and degrees of intimacy. By applying transmedia storytelling techniques, the content creators can disperse a preview via several media delivery modes which gives insights into the cinematic VR story world.

This paper argues that by adding other forms of media into the mix, we can reach more viewers through online and hard publications as well as methods and approaches of incorporating live performance, stimulation, and spatial embodiment in the real-world to help solidify audience immersivity into the VR world. And lastly, finding innovative ways for the artist-scholar to integrate VR as a pre-supposition for a multi-modal platform should be a part of film education.

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## Immersion

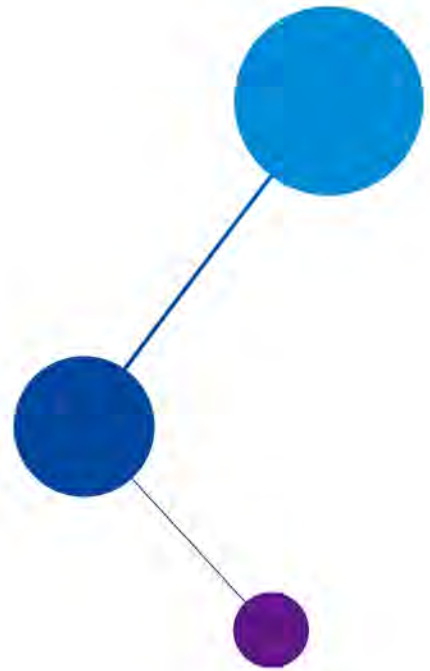
Virtual Reality (VR) is a three-dimensional world experience, which goes beyond the realm of physical reality. It not only produces a simulated version of the world or reality that we know but also provides a sensorial viewer experience in which users are treated to a virtual reality, that stimulates the human senses. VR uses computer technology to create a 360-degree world and is viewed through a Head Mounted Display (HMD). This allows the audience to immerse themselves into a spectacle of visual and aural effects. Depending on the content displayed in the HMD, the viewer may have a tactile experience to add an additional layer of sense of touch in the virtual space. For example, Madison Wells Media company's immersive interactive theatre incorporates performers and objects to interact within the VR, granting viewers embodied experiences of the virtual realm. The blend of live and virtual realities constitutes what is referred to as Mix Modal, Mixed Reality Performances, and Transmedia Storytelling. As specified by Jellar and Serfin (2020): mixed reality performances connect multiple physical and virtual spaces and as such they generate hybrid realities that span physical environments and virtual worlds (p. 7). The combination of media of these pluri-modal experiences can present a strong case for a better immersive VR experience.





One of the key facets of VR creation is the narrative, or the story, in which the audience is invited to immerse themselves in. Viewers have the opportunity to look around the 360-degree space in a VR experience. However, content creators must drive and focus the viewers' attention to a certain part of the viewing zone, and keep them engaged and guided throughout their experiences in the story. This is mainly done using visual and aural cues<sup>1</sup>. Tricart (2017) has described the three fundamental elements – immersion, presence, and embodiment – to engage the viewer into the virtual story environment. Immersion allows viewers to be engrossed in the environment by visuals and sounds. They surround the viewer's senses in a realistic domain that is believable. Presence stimulates the viewers to feel as if they are part of the VR environment and exist within the VR world created. It provides a sense of connection or feeling of familiarity as in reality. Finally, embodiment raises the questions of "where am I in this virtual world?" Or "who am I supposed to be?" It is important that these questions are answered by the VR maker, so that the story experience created can be entirely accomplished.

In a VR experience, the elements of immersion, presence, and embodiment are not only used to enhance the narrative being articulated, but also used to convey information to the viewers prior to their embarking on the VR event. For example, having a story taking place at a party, and the audience might be one of the guests, although participating in an invisible, silent observation manner. Providing them with this insight prior to the experience might help increase the viewer's sense of embodiment. Williams et al. (2021) has described an experience where, before donning the headset, viewers were provided a verbal didactic explanation of the character that they will be playing. This information fast-tracked the viewers to quickly embody themselves into the story. The viewers were then provided information of the premise and their role in the story world they will participate in, helping to prepare the viewers for the experience they will partake.



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<sup>1</sup> Visual cues can be derived by characters in the VR story directing the viewer's attention or through aural cues such as sound effects received from a particular direction in the virtual space.

# Transmedia

Another means of enhancing embodiment in a VR story world and increasing viewers' participation level is by introducing viewers to elements of the story content through what is known as transmedia storytelling. Transmedia storytelling is the process of disseminating key story points, As professed by Jenkins (2007)

transmedia storytelling represents a process where integral elements of a fiction get dispersed systematically across multiple delivery channels for the purpose of creating a unified and coordinated entertainment experience. Ideally, each medium makes its unique contribution to the unfolding of the story (p. 1).

Dissemination through different online media platforms help reach a larger audience base. Most common delivery modes are YouTube, Vimeo, and Facebook, available via mobile devices, computers, and HMD. These modes of technology help VR content creators introduce the viewers to the VR world by reaching people through multiple devices. This flexibility facilitates the engagement of more users to whichever platform they are most comfortable with.

Transmedia elements can be used to help acclimatise viewers from the non-virtual to the virtual space. One of the possibilities, and perhaps the one most commonly used, is to create a video trailer of the VR experience beforehand and upload it to online video platforms to get viewers prepared for what they will come in contact with during the VR event. Another possibility is to incorporate the elements of a board game, video game, or mobile game. We can create new games across these different platforms which provide insights into the cinematic VR story, as the audiences will partake in this experience prior to the event. The game content might be an insider's look into the backstory of the characters to better form the viewers' understanding of the immersive piece they will immerse in. As stated by Scolari (2013), we see this form of presentation in television shows such as Fox's series *24*, which is proven to be a great example of incorporating transmedia storytelling. It includes mobisodes, webisodes, video games for consoles, comics, novels, and board games. I believe setting the world for the audience is crucial in getting them to be involved. Beyond functioning as an enhancement of the VR experience and spectacle, the techniques for transmedia storytelling can be applied in educational settings as a teaching tool for cinema narrative VR productions.

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# Educational application

Transmedia techniques can be used to teach emerging filmmakers the pre-production process of filmmaking. This is the initial phase prior to principal photography<sup>2</sup> where concepts for the visual landscape are developed. Transmedia techniques can be used to conceptualise ideas driven from the script to create previsualisations to better grasp the story line and characters involved. Dudacek (2015) has explained how transmedia techniques help educational settings:

*Transmedia through various platforms such as comics, books, short videos, alternative video games and movies or documentaries should increase engagement of the studied topics, simplify process of memorising knowledge and skills and make the teaching process more effective and entertaining (p. 695).*

The use of transmedia techniques can be an effective method to help students' research using various transmedia platforms to collect knowledge on a topic to assist them with the story's character development. Students can gain insight from the different transmedia platforms to make creative content decisions to provide authenticity to the visuals of the story world. By applying these techniques in pre-production, students can reinforce their understanding of the story and will be well equipped to create the content. After creating the cinematic VR content, it will be essential to devise ways to immerse the viewers into the story world by incorporating elements of presence and stimulation to assimilate the audience prior to embarking on the VR journey.

# Performance

The use of performance venue and performative elements are effective ways to create presence and stimulation, as additional media outside the VR headset has been increasingly expanding the cinematic VR experience. Designing the physical venue aurally and visually to replicate the VR world increases audience immersivity. As stated by Jaller and Serfin (2020), different experiences grant the audience the possibility of immersion in the virtual space and its narrative content. The authors have expressed the use of designing additional media such as, scenography, spatial sound, and theatrical performance among others as elements to underpin the main attraction. These elements have been frequently used to transition the audience into the virtual realm. The combination of elements and media within a performance or a VR experience is called Mixed-Reality Performances (MRP). In these events, the content that is shown or performed takes several forms and styles. Jaller and Serfin (2020) have defined MRP as a space that encompasses a range of narrative-driven hybrid experiences which fuse live and interactive VR performances. In these events, the live narrative element is quite intriguing, for example, the performer can guide audiences into the physical space where the performer(s) assists

<sup>2</sup> Principal photography is the part of the filmmaking process where the film shooting takes place.



and prepares them to enter the VR world. This preparation may help to set the psychological state of the participants' mind to orient themselves to what they are about to experience. Grounding audiences in the real-world first can be beneficial as an additional layer to ease audiences into the VR world. Jaller and Serfin (2020) described this procedure

as an audience, one is led into an enclosed room and greeted by a female performer dressed in white. A female voice-over is heard, supposedly by the character whom the performer is supposed to embody, through a Bluetooth speaker worn around the neck. The performer continuously keeps eye contact with the audience, showing around the room and then placing the Head Mounted Display (HMD) on the head (p. 1).

A complex orchestration of mixed reality is required to arrange and guide audience members from the ticket window to the immersive space. Jaller and Serfin (2020) explained that these MRP include four key aspects: space, time, interaction, and performance. The four criteria divide the experiment of virtual reality into several types of reality, from being in an actual physical space or environment which you can touch and feel, to moving viewers into interacting with performers before the actual performance on HMD.

The creative design of the physical environment can help set the tone, the feel, and possibly the emotional dimension required for a particular experience. If we immerse the audience members into the physical space first, we can get them comfortable enough to enjoy the virtual space. This virtual space can be a replica of the current physical space for the viewer to reduce anticipation of entering the VR experience unknowingly. They have an understanding and familiarity before being exposed to the virtual performance. The content creators should take into consideration the design of the physical surroundings as it is an opportunity for them to contribute a piece of the story to enchant audiences but leaving the full story experience to entice audience to transition from "spectators to participants" (Jaller & Serfin, 2020, p. 216). Engaging visitors is the key to a successful mixed modal presentation. For this reason, we have to make sure that the orchestration is set up well as they are guided throughout the physical space. The appropriate creation of trajectories and design of transitions can help spur inquisitiveness and captivate audience members. As explained by Yu (2019):

It's this combination of a built installation; live performers; tracked props; sensory tricks like heat, wind, vibration, and smell; plus use of your voice, hands, and feet all combined with cutting-edge technology which allows participants to feel as if what they're seeing and feeling is real – ideally even forgetting they have a headset on in the first place (p. 3).

The incorporation of the five senses mentioned by Yu is a key interactive element to augment the virtual reality experience. This inclusion will help the audience feel that they are more involved in the story as they acquire a participatory role in the VR story world. The physical mapping of movements, touch and speech within the virtual world might be an ideal consideration to keep with the real world tactility. In addition, it is necessary to convince the participant by delivering an effective and intricately crafted virtual content, as the integration of each sensory element has to reflect reality.



# Conclusion

To conclude, applying immersion, presence and embodiment are significant elements to VR storytelling. VR requires the setup of a proper prologue in the non-virtual world to prepare audiences for what they are about to encounter in the VR world. The immediate leap into VR will not be so comfortable for audiences. The pre-cursory events that are the "reality" element needs to be strong and well organised for our viewers to be gently immersed into the concept of a virtual space. Utilizing different mixed-modal forms such as scenography, spatial sound and live performance can help engross the audience into the story world prior to the virtual experience. In addition, preceding the event, we can consider engaging the audience by providing a preview of the VR content via social media platforms viewed through mobile and computer devices to reach a mass audience. These storytelling devices provide several possibilities to assist in creating a well-executed immersive VR event. We can see that creating a strong virtual world is crucial and reinforcing it with the integration of the real world can help audience members be immersed, have presence, and be embodied into the virtual space. The addition of other forms of media into the mix, may help the artist-scholar integrate VR as a pre-supposition for a multi-modal platform for teaching filmmaking. These mixed-modal elements can help VR storytellers grasp preparation techniques and devise the content for a full comprehensive narrative story in the virtual space. The end goal is to provide a complete integrated and consolidated VR entertainment experience in which each medium applied in both reality and non-reality expresses to create its sole offering to the unfolding of the story.





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