

## Scope and Ethical Implications of Immersive Storytelling and Journalism

Seema Sangra

Department of Media Studies, Amity University, Dubai

### Abstract

In the round the clock news scenario, contemporary journalism is competing with the rapid pace of technology-driven platforms and new ways of content creation. The latest addition is immersive storytelling, where story consumers are part of the narrative. With first-person experiences enabled by VR technologies, viewers are taken to an immersive experience to generate empathy. VR storytellers also claim that immersive journalism has the potential to provide deeper insights into the story. However, on the other hand, there are potential ethical fallouts. The 'reconstructed dramatic imagery' could add 'fictional elements' negating objectivity in journalism. VR content can be manipulative and can be used for 'agenda setting', misinformation, disinformation, and false news creation. The more significant question is: can news consumers expect VR journalists to follow ethical principles and values equipped with enhanced technology-based power? The purpose of this study is to understand the current practices of VR storytellers and the future of immersive storytelling into mainstream journalistic practices. This paper provides background on the evolution of media technologies and aims to understand the scope and ethical implications of immersive storytelling and journalism, using five selected VR stories as the model for analysis. How are these VR stories different in story ideas and formats than mainstream journalistic stories?

---

Human communication through a medium started with carving symbols on cave walls around 4000 years ago, but the structured mass media came into existence with the emergent technologies. The evolution of media is all about the evolutionary development of media technologies. Those born after the 1980s have a limited understanding and experience of non-digital technologies. For them, the new media is the contemporary media. New media and communication technologies from printing technology to data digitalization over the last few years have changed the media industry and media audiences.

Within the new media and social media landscape, new products and its followers are changing with unprecedented speed. Instagram made the younger generation move from Facebook but has since been outpaced by TikTok within six months of its official launch. Tik Tok is now the world's most downloaded app. Constant up-gradation of technology and users moving from one platform to another have in turn impacted the way media content is being produced, disseminated, received, consumed, and responded to.

The changing media technologies have had their impact on journalism too. Newspapers started losing their shine with the emergence of the Internet. In 2006, when the Economist published "Who Killed Newspapers?" (Who Killed the Newspaper? 2006); the question made it official that the Internet posed an existential threat to an industry that only a few decades earlier seemed unassailable. The Economist observes that "of all the old media, newspapers have the most to lose from the Internet." The apprehension remains relevant to the broader world of journalism even today. For its survival, print media needed a timely shift to online media, but not many leading newspapers were eager to change.

From television to digital media, content creation no longer requires big crews. New technology devices offer complete flexibility in shooting, editing, and disseminating information. In the year 2017 Steven Soderberg's "Unsane" became the first feature-length film shot on a smartphone. Many such films have been shot and acknowledged ever since. Another film "High Flying Bird" shot entirely on an iPhone was picked up by Netflix for

international distribution. In the coming years new storytelling methods will be based on convergence of text, sound, images and data.

Unlike earlier analog technologies, journalists are now covering most critical reports as a single unit. Mainstream news channels are using smartphones as a new tool for reporting. Major international events such as the Iraqi invasion in the year 2003, bombing in Madrid and tsunami in 2004, and the London Bombing in 2005 provided impetus to reporting with smartphones. The London bombing took place underground, making it difficult for TV crews to gain access. However, a lot of footage that became available came from common people's phones. "The BBC received a thousand photographs, 4,000 text messages, and 20,000 emails from the public within hours" (How mobile phones are changing journalism practice in the 21st Century, 2014). Soon, mobile reporting was the next new wave in the world of journalism. Today, 'smartphone storytelling' is considered at par with the content created with professional equipment.

The debate about technologies impacting journalism is two-pronged: one is about the standard of journalism, and other is the pattern of audience participation. Though journalists acknowledge the Internet's potential as a tool of information gathering, they still give credit to their interpretation of information and the central role they play as per journalistic values and ethics. According to Singer (1997), "it wasn't the printing press that changed the world, it was good journalism, and the same goes for high tech" (Singer, 2011). On the other hand, technology has also empowered audiences to take control of the content and messages. Hence, the unlimited scope of 'interaction' in the new media led to a unique narrative structure for journalistic storytelling. As media consumption is now private and convenience based, news information no longer comes from the newsrooms through media platforms; news consumers go into the new media outlets to seek information.

### **Current Research and Research Questions**

Media professionals, storytellers, news, or entertainment media organizations can certainly ride and harness the power of immersive storytelling to enhance the experience of storytelling. Documentary filmmakers and journalists have started using available immersive technologies to explore different ways to reach out to their viewers. On the other hand, VR stories are gaining acceptance amongst 'story consumers,' and news media organizations are collaborating with new media content creators to create successful VR projects. However, there is a bagful of issues, opportunities, as well as new challenges for the media professionals and the media consumers in using immersive technologies.

As immersive technologies are gaining popularity, this study aims to investigate some pertinent questions: Can immersive storytelling and journalism be used for the larger good of the society, and how can news consumers expect VR journalists to follow ethical principles and values equipped with enhanced technology-based power? Does it change the formatting of news-based stories? This study aims to build an understanding of how popular media platforms have changed with the emergence of the evolution of media technologies, and how much the immersive technologies can impact the future of media content creation and consumption, and what are the ethical implications of immersive news consumption?

### **Methods of Study**

Besides an extensive literature review, this paper seeks to understand the scope and ethical implications of immersive storytelling and journalism through case study analysis. It employs an analytical case study method to investigate the scope and implications of immersive VR stories. Five VR stories are selected from leading VR content creators and the world's leading news and development organizations. The focus of analysis is the message, format, and its impact. These stories are also analyzed for the ethical implications primarily based on the Society of Professional Journalists Code of Ethics and other existing ethical guidelines explicitly applicable in the case of VR stories.

### **Augmented Reality (AR), Virtual Reality Technologies and the advent of Immersive Storytelling**

Immersive technologies refer to a broad spectrum of techniques ranging from VR, AR to MR, 360° video, photogrammetry, and videogrammetry (Cant, 2018). According to Sherman and Craig (2003), “there are four core elements of virtual reality: virtual world (an imaginary space); immersion (the sensation of being in an environment in which physical immersion is a defining feature of virtual reality, and mental immersion is the aim of the VR story creators); sensory feedback (response of the system based on the user's physical position); and interactivity, the answer to the user's action which can be the capacity to affect the virtual world or to change the point of view inside the world” (Sherman & Craig, 2013).

Although virtual reality is a new technology in immersive journalism, it is not a new idea. One of the first examples of 'immersive experience' in traditional journalistic stories is of the Vietnam War. Reporters utilized televised footage of the war to transport and embed Americans' perceptions and show them a different story. The uncensored details of the war changed people's views on the military, foreign policy, and their trust in the government (Kool, 2016). Much before the technology-based experiment of Journalist Nonny De la Peña through her story on 'Hunger in the Golden State', the Vietnam War is historical proof of the effect 'media mediation' can have on real events and demonstrates the importance of the medium in storytelling.

The Four core SPJ's ethical principles which are applied for this study are 1. Seeking truth and report it: verifiable sources and originality of sources, speed or format no excuses for inaccuracy, avoid misrepresentation and oversimplification. 2. Minimize harm: consider the long-term implications; provide complete information as appropriate. 3. Act independently: serve the public, avoid conflicts of interest, uphold credibility; maintain integrity & impartiality, deny favored treatment to advertisers and others, resist internal and external pressure to influence coverage 4. Be accountable and transparent: Take responsibility and respond about accuracy, clarity, and fairness, explain ethical choices and processes to viewers, acknowledge mistakes and correct them, expose unethical conduct in journalism, fairness, and accuracy.

### **Immersive storytelling and journalism: Major Ethical Issues and Concerns**

As VR stories are making in-roads into the mainstream, it is vital to understand the defining elements of immersive storytelling and journalism along with significant ethical implications and current guidelines. Immersive journalism is an emerging practice in which audiences are the interferal part of the narrative, enabling first-person experiences by using Virtual Reality technologies. Storytelling, empathy, the virtual/real duality, and interactivity are the essential defining elements of immersive technologies (Soler-Adillon and Sora 2018)

Immersive journalism is here to stay but not without ethical and legal challenges. There are chances that to engage viewers with reconstructed dramatic imagery along with a sense of presence could lead to the sensationalistic spectacle. While immersive storytelling will have the potential to create powerful, compelling, and engaging journalistic content, viewers may get exposed to traumatizing content and manipulation. Some of the significant ethical issues relating to immersive storytelling and journalism are as follows:

- Much of uniqueness of VR storytelling is in and around a location and a 'sense of being there' which leads to another significant ethical concern and question relating to how the experience is mediated now and will be mediated in the future (Immersive journalism: The future of reporting or an ethical minefield? 2015)
- The 'recreations and reconstructing' approach to storytelling to generate empathy is the primary ethical concern. 'Recreations and reconstructions' can often lead to a deeper understanding of a story but not without leading to a debate of facts versus fiction (Keyser, 2018)

- If creating emotion and empathy is the ultimate goal of immersive storytelling and journalism, "a journalist could be tempted to omit balancing or inconvenient information that could interfere with the desired emotional effect" (Kent, 2015).
- VR representations of sufferings can trivialize victims' experiences, reducing them to just another diversion a viewer can dip into for a few minutes; the notion of 'being there' and 'presence' experiences put viewers in a state of physical and emotional vulnerability. The viewer's body is vulnerable to the actual surroundings while he or she is immersed within the virtual space, causing a cognitive shifting between the two realities. Users are often surprised or shocked when entering the virtual experience, introducing mental and physical vulnerabilities (Kent, 2015).
- Immersive storytelling and journalism signify a new digital divide. Besides, making immersive technology available and affordable; users must have access as well as appropriate tools and skills. It is necessary to have diverse design teams in the industry and full access to the immersive technology ecosystem (Craig & Georgieva, 2018).

### **Immersive Journalism and the empathy debate**

There are two divergent views on the relationship between immersive storytelling and empathy. There is no denying that the relationship between immersive storytelling and empathy is inevitable, but "the meaning of immersion depends on the users' traits and contexts. The users' cognition and intentions determine the function of immersion. VR stories are viewed and accepted based on the manner that users imagine and intend to experience. Research demonstrates that the users' cognitive processes of experiencing quality, value, and satisfaction will ultimately determine how people empathize with and embody VR stories". (Shin & Biocca, 2018).

According to Paul Bloom (2017) "If you want to do good, you should focus on where your money will make the most positive difference, not on whose suffering you are prompted to feel more acutely. You can't tap into that feeling by putting a helmet on your head." Another argument is that people are empathetic towards their people -religion, caste, bloodline, community, and interests. So, can we feel empathetic towards our rivals, people we do not like or people who come between our success and benefits? Can technology make us forget this bias? The immersive storytelling and the empathy debate will continue but "the project of immersive journalism needs to go beyond this goal and into adopting a more forceful role in shaping the future of virtual reality" (Laws, 2017).

### **Agenda Setting and Fake News through Immersive Storytelling**

The origin of immersive experience on media can be traced back to video games. The billion-dollar industry rides its success on the immersive experience. Kuma War is a new dimension to the standard fictional set up in video games to real news-based stories. Kuma War is an episodic game which recreates real-world conflicts in video game format using information culled from news accounts, military experts, Department of Defense records, and original research.

The game claims to put the users in real-life situations from frontline to headlines of the day. The formatting and the use of real-life conflicts and news events supported by interviews with experts creates a make-believe real-life scenario, but with a hidden agenda to make the participants believe in a single story. This element can be well adopted in immersive storytelling on more credible media platforms. If VR News stories can evoke human emotions like empathy and sympathy for the subject matter, they can also be used for media agenda setting (McCombs & Shaw, 1972) perception building and stereotyping (Lippmann, 2017) hate speech, propaganda, and manipulation.

One of the primary ethical principles in journalism is accuracy, which will always be under the reader's critical scrutiny. The scenario' in Hunger in the Golden State used 3D graphics and not a real video, making the story closer to a fiction. Journalism is an authored narrative of the actual social world, which makes journalism a

distinct cultural discourse – Journalism is no fiction. In an age of fake news and misinformation, when mainstream journalism is struggling hard to keep the distinction between facts and fiction intact, the possibilities of creating 'fake immersive scenarios' or recreation of particular sequences can lead to the misrepresentations of facts with a deep-rooted vested interest to mislead people or for propaganda purposes. And with “the advent of Photoshop, the ability to doctor and alter images has become increasingly accessible, and therefore, images themselves are less reliable as sources of truth in journalism. Thus, in the new world of journalism, the fact that 3D graphics VR experiences are not direct representations of reality is a big concern.” (Gillies, 2018).

### **Current ethical guidelines**

According to the Guardian's Editorial Code for images “digitally enhanced or altered images, montages, and illustrations should be clearly labeled as such, and details in images should be avoided if they can result in the identification of a location and thereby the intrusion upon the privacy or safety of subjects” (The Guardian's Editorial Code, 2011). The New York Times "Guidelines on Integrity" state that images "must be genuine in every way." Reuters in the document "A brief guide to standards, photoshop and captions," states that “journalists should not alter a still or moving image beyond standard image enhancement” (Guidelines on Integrity, 2008).

AP guidelines state that "(w)e don't stage or re-enact events for the camera or microphone, and we don't use sound effects or substitute video or audio from one event to another. We do not "cheat" sound by adding audio to embellish or fabricate an event (New Values and Principles, 2019). The Washington Post has taken a global approach and states that the newspaper must tell the truth and that what the newspaper prints shall be fit reading for everyone as duty-wase newspaper is obliged to its readers and the public (The Washington Post Policies and Standards, 2016).

No story is fair if it consciously or unconsciously misleads or even deceives the reader. Fairness includes honesty—leveling with the reader. In the same manner, in the Editorial Standards for NYTLive, the New York Times declares that it will seek to treat audiences, as well as interviewees, speakers, and advertisers, fairly and openly (The New York Times Company, 2019). The Institute of Electrical and Electronic Engineers' (IEEE) standards and ethical codes for the use of computers and electronic devices such as virtual reality (VR) stresses on the fair treatment of all and not to indulge in acts of discrimination based on any affiliations ( IEEE Code of Ethics, 2019).

## **Case Study Analyses of Selected VR Stories: Findings and Reflections**

### **Case study 1: Clouds Over Sidra**

'Clouds Over Sidra' is a story of a 12-year old girl who has spent the last 18 months (at the time of production) in Zaatari camp. The voiceover in a nostalgic manner takes you through the journey of a refugee girl, and you enter a house where Sidra is sitting with a school bag. As she introduces herself to you, you can observe the room. On her right, there is a big brown plastic bucket, next to it are four coloured storage boxes, a few clothes are hanging on the wall, and there is a mattress on the other side on the floor. As you move your gaze further; there is the door you have just entered from, and on its right, there is a table with a TV. The girl tells you that the room is in Zaatari Camp in Jordan, and she is there for the last year and a half. Suddenly you are not alone, and there are other family members around you — her three brothers. The little one cries a lot; you can hear him cry. You come out of the room. It's a cloudy day, and you see kids walking to the school; the girl is still talking to you. She takes you to her classroom. On the way back home you visit a bakery with her; you see the bread baking in a traditional oven. Elsewhere in the camp there are teenage in front of a computer, while other youngsters are wrestling out. Then she takes you to play a game of football. They are six girls. Back at the tent, you almost watch the family having meals, and when the mother takes the bread out, you can even hear the crackling sound of the paper bag. It is kind of noisy. 'I will not be here forever', she almost whispers in your ears. 'My teacher says the clouds

moving overhead have come from Syria, and someday, the clouds and I are going to turn around and go back home'. You remove the headset and find yourself in real surroundings, out of the migration camp, and yet there is a feeling that you were there just a few minutes earlier.

### **Case study 2: Seeking Home**

When the Associated Press ventured into using virtual reality as a journalism tool, it collaborated with RYOT, a Los Angeles-based production company that produced 360-degree videos on, for example, a disaster zone (Nepal), an active war zone (Syria), and underwater with wild dolphins (Bahamas). Seeking Home, a 360-degree RYOT produced VR video, is about a camp in northern France, where migrants and refugees aspire to reach the UK for a better life. Seeking Home is a story about every migrant who seeks hope on the other side of the border. It's night. You are next to a fenced border. A man is waiting there; you hear the passing vehicles and almost see them across the fenced wall. You move your gaze towards the right; there is a town over there. As the sun rises, in the morning light, you see makeshift camps. A man comes out of one of the tents, zips it shut, and leaves the place. He is Zeragabr. You hear him talk to you. He mentions his wife. He has not seen her for nearly a year and three months. He is not sure if he will ever meet his family again. You are back with him inside the camp. Unlike Sidra's temporary room in Zaatari Camp, his camp is in shambles. Stuff is lying on the floor and a water bottle next to the open area: no TV or carpet. You can see the garbage scattered outside. It's night time again. People arrive in this camp from Syria, Afghanistan, Sudan, Syria, Iraq and other troubled cities of the world. The camp has a shortage of basic amenities and health care. But it has a place for worship, and a beauty salon too. You go inside the salon, and it is dirty. The film ends with few people crossing the fenced wall. You reach a train track and can rotate your neck and look at the place in all directions. It's a directionless journey for the migrants. The story ends here.

### **Case study 3: Himalayas: A Trek to School in 360-degree video - BBC News**

Education is not a drive away to school for most students in India. BBC News Himalayas: A Trek to School in 360-degree video – takes you on a daily journey with two sisters on their long and unsafe trip to school in the Himalayas. Every day, they set out on 2-3-hour journey from their remote village in Uttarakhand to reach their school. The daily journey involves a steep trek in the mountains before they cross a flooded river by pulling a trolley over the flowing waters. The story takes you to their house, and you hear the father share his concerns about the cart and his daughters' safety. You reach the girls' school. It is a co-education school, rare in a conservative village. The class teacher takes down the attendance, and both the sisters mark their presence.

### **Case study 4: The Land of Salt and Fire**

The Land of Salt and Fire 360-degree video takes you to Dallol in Ethiopia, where the average temperature is the highest among inhabited places on earth. The narrator Andrea Frazzetta takes you to the hydrothermal field with salt formations, gas geysers, acidic hot springs, and to the white salts. Along with him, you drive across the bottom of an ancient ocean, now a thick bed of salt. The story moves at a slow pace as you learn more about the area and especially how 10,000 years earlier, the sea was evaporated by the sun's heat and turned it into a waste bed of salt that the Afar people have been mining for centuries. Andrea covers the current situation of these miners. Kader, a salt miner for the last 46 years, shares his concerns about the falling price of the salt and his fears about the government opening up mining to outside corporations. The story moves to the issue of tourism in the area. You also see the unusual colorful formation in the area. Salt miners are moving away from mining to become tourist guides. The narrator talks about the color formation and how this natural design, along with traditional way of life of Dallol, is changing. You see the camel Karwa moving towards the sunset. You have just experienced a place that is unique in the entire world.

### **Case study 5: We who remain**

The story is about the conflict in Sudan and allows you to explore the history behind the conflict through the lives of four people. Women are dancing to an upbeat traditional song. Suddenly four men come there with

sticks; Everything stops. You see three women with many children hiding in a pit; you listen to the loud sound of warplanes, flying overhead. Next, you see Hanan Osman Kaju outside a hut with her two naked kids. She mentions that when you see your house burning, you still thank God for your life and that of your children. The child in her lap is malnourished, the one sitting on a rock is scratching the stone with his bare hands. Disappointment sneaks into you. A lot of heartbroken women share their stories to you.

One of them enters a temporary home inside a stone cave. You too enter the cave; it is more significant than how it appears from the outside and houses many families. They all stay put inside the cave the entire day till the planes stop flying over the area. You hear Al Bagir Ibrahim Hamdan; He is the operational commander in the mobile force. He talks about the unrest in the area and how the Nuba people feel like third-class citizens in their own country. Their life has been hard in those mountains for hundreds of years. You see their story on a shattered wall inside the hall. The second person you meet is a cheerful woman, Jordania Jamal Abdul Rehman, awaiting peace in the region. Hanan Osman Kaju talks of the people who face war daily. You also meet Musa John, a journalist who tells you how journalism has been destroyed in the region so that no stories from the Nuba Mountains can reach the outside world. You hear the bombing. The video takes you inside a makeshift hospital to witness people's suffering.

You move on to be with the Nuba fighters and their commander Al Baghir Ibrahim Hamdan and travel with them to the conflict area. They fire motor shells and also later sing songs about the Nuba. Al Bagir Ibrahim Hamdan, Jordania Jamal Abdul Rehman, Musa John, and Hanan Osman Kaju are fighting with the situation in their capacities. They are not ready to give up. Everyone in Nuba awaits peace and social equality. All of them. The film is a collaboration between the New York Times, Arte and AJ+. Arte's 55% of the programs are documentaries, and only 15% of the content comprises news-related programs. On the other end AJ+ is an online news and current events channel run by Al Jazeera Media Network with a tag line as Experience Empower, Engage, and is often blamed for being biased about the subject of the stories.

### **Analyses and Reflections**

**Clouds Over Sidra** is produced in a fictional style. Unlike a news report, it does not provide information about other stakeholders. For example, there is no mention of organizations that are providing migrants with food, schooling for kids, computers, playgrounds, and even a gym. The story also lacks newness. In the context of measuring empathy for the Syrian refugees, there have been more heartwrenching stories from Syria and Syrian refugees. Aylan Kurdi in a red t-shirt, denim shorts and beige shoes lying lifeless on the shores created more empathy than any other story, including the Sidra's VR story. Nevertheless, Sidra's story does make you feel empathetic towards the migrants, but it does not provide the audiences with a complete picture. It is an act of premeditated sympathy for the migrants, which serves the purpose of raising funds and hence was first premiered at the World Economic Forum in Davos, Switzerland as well as at high-level donor meetings to raise awareness and aid for the Syrian Crisis (Konya Badsa, 2017). Immersive stories and experiences can be a useful tool for the future of philanthropy.

As a human-interest story, **Seeking Home** is another VR story about migrants which does manage to evoke empathy towards them. But as Paul Bloom, author of *Against Empathy: The Case for Rational Compassion*, explains in one of his interviews, that empathy can go both ways. Somebody could develop a machine generating empathy for refugees, but also a machine giving empathy for someone who lost his job because a refugee took his place and we watch him standing hungry in a food line. Stories also do not explain ethical choices and processes to the viewers. Seeking Home, in particular, does not share the exact profile of the migrants. No choice is given to the viewers while other stakeholders are missing from the story. Also the viewer is captive/ VR stories lack alternative perspective/ single source/. Although focusing on just one point of view, VR stories generate a powerful sense of empathy (Sullivan, 2018)

Media observers and critics are of the opinion that Virtual Reality's immersive nature has a heightened power to shape audience opinion and there is an evidence to support this assertion. A research by Stanford University in the year 2011 shows that those participants who cut down a tree in virtual reality are more likely to avoid using paper products than those who only imagine a tree being cut down. With journalism's emphasis on fact-finding, this could move virtual reality beyond reporting and into the realm of advocacy (Mullin, 2019). The focus of the story **Himalayas: A Trek to School in 360-degree video** by BBC News is about two sisters' struggle to reach school. Why is the infrastructure not there; what are the authorities doing about it; how can the situation be improved; These are a few of the news story components which audiences do not to see in the video.

The purpose of storytelling in **The Land of Salt and Fire** is not clear. Though the visual landscape is impressive, the message: 'changing traditional salt mining conditions' does not seem to be the focus of the story. Again, a human-interest story! There is no comparative analysis on how a VR story on the subject is more impactful than a similar story in print form with compelling visuals or a conventional, more comprehensive television story. Some VR documentaries do not qualify as journalism at all. Immersive media has a minimal purpose, certainly in terms of journalism and informing people. You can make people feel specific ways by immersing them in certain kinds of worlds. However, in most of these experiences, you are just watching people who can't see you. Thus in some ways, it exacerbates the sense of power that privileged people can feel over less privileged people (Paura, 2018)

Unlike other stories, **We Who Remain** has some elements of a news story, but the formatting is done in a documentary style. For example, four human stories are used in narrating the situation in the Nuba mountain area; the conflict details are shared on a shattered wall, recreation of the classroom, hospital sequences, and plight of people who live in the area are used for the world to know their story. The story is not much different from the 2012 George Clooney film on Nuba mountains. The film has similar footage, scenes of moving tragedy, and the undying spirit of the people of Nuba. The hospital setting is more authentic under the circumstances in the George Clooney film than in the VR story. How can one measure the impact of a non-immersive film by George Clooney with the immersive experience of 'what we remain'? Both the films had a special screening for advocacy for the cause. Both the films/reports talk about innocent women and children struggling with the ongoing conflict. The purely news-based story from the Nuba Mountains is 'Ambushed in South Sudan,' produced by Vice News production, a non-VR story. The new ethical considerations of virtual reality doesn't end with video shooting. "Some of the ethical issues come on the forefront when journalists try to decide how much of the footage they've gathered is fit for the audiences to see. The most significant upside to virtual reality — its immersive nature — comes with heightened sensitivities about how much traumatic or explicit imagery filmmakers should expose viewers "(Mullin, 2019).

Four out of five case studies analyzed in this paper are produced in a fictional style or have recreated sequences. Himalayas: a Trek to School in 360- degree video – has elements of over simplification and has reconstructed sequences. Seeking Home and Clouds over Sidra are also not complete stories, they are about migrants and their journey, but do not say anything about organizations that are playing a significant role for them to take up the journey. There is no mention of the organizations that are providing migrants with food and infrastructure. The case study analysis also reaffirms the immersive technology's present compulsion to stick to soft and human interest stories in a style that is close to fiction style of content creation.

On the other hand, the fundamental element of Hunger in the Golden State story can be considered unethical, considering the AP guidelines. Though one can debate the good intentions of Nonny de la Peña into supporting



the cause, the instructions are clear about the scope of creating a deceiving story in case the news story is restaged or recreated. Substituting audio on a video or substituting video on sound can communicate entirely different messages to the audiences. If the ethical guidelines are altered, and the format is accepted in journalistic stories, sequences can be recreated for the desired impact. Mainstream news can then be as close to the Kuma War games as our intentions are. As Virtual Reality is here to stay, journalists must critically consider how they can engage users with virtual reality (VR) technologies. News organizations for maintaining the credibility will have to adhere to the journalistic guidelines that preserve credibility, integrity, and accuracy.

## Conclusion

VR stories are relatively a new form of storytelling. The empathy debate will continue till we develop a comparative mechanism of measuring empathy in VR stories versus conventional media practices. So far, VR stories have managed to raise funds for the 'subject' by way of evoking empathy amongst the donors in a closed environment. This also applies that the same can be done for raising funds for cults, and political and corporation driven agendas through make-believe content creation. The scope to question the authenticity of the content is sleek as an active participant of the story. What you see you believe in, and what you experience can make you convert to the idea. This takes away the scope to avoid conflict of interests and maintain fairness and accuracy.

Like other digital technologies, VR in due course of time will be cheaper, user-friendly. The popular 360-degree video will emerge as another format that consumers will come to expect for media consumption. Social media giants such as Facebook and YouTube are already supporting 360-degree videos. Within the space, the pace of innovation is going to speed up. Phones will be better armed to handle AR and VR capabilities. "Beyond that, VR supporting devices, starting with the head mounted display will become cheaper and smaller (Cant, 2018)." VR storytelling could be used as an advocacy tool with the definite purpose of raising funds and sensitizing specific individuals and stakeholders. How successful it can be for the news and mass media is something that will depend upon ethical implications and the simplification of the content consuming process. From ancient cave wall paintings to new media, media has always accommodated its target audiences, and VR media needs to follow the same without compromising on media ethics.

## References:

- 7.8 IEEE Code of Ethics. (2019). Retrieved May 23, 2019, from IEEE: <https://www.ieee.org/about/corporate/governance/p7-8.html>
- Bloom, P. (2017, February 3). It's Ridiculous to Use Virtual Reality to Empathize With Refugees. Retrieved from The Atlantic: <https://www.theatlantic.com/technology/archive/2017/02/virtual-reality-wont-make-you-more-empathetic/515511/>
- Cant, P. (2018, March 19). #SXSW: The State of Immersive Journalism. Retrieved from The State of Immersive Journalism: <https://medium.com/up-in-the-air-by-oxygen/sxsw-the-state-of-immersive-journalism-9509d1382884>
- Craig, E., & Georgieva, M. (2018, April 10). VR and AR: The Ethical Challenges Ahead. Retrieved May 5, 2019, from Educause Review: <https://er.educause.edu/blogs/2018/4/vr-and-ar-the-ethical-challenges-ahead>
- Gillies, M., (2018, July 10). Immersive Journalism. Retrieved April 25, 2019, from Medium: <https://medium.com/virtual-reality-virtual-people/immersive-journalism-30b7cf204c1c>
- Guidelines on Integrity. (2008, September 25). Retrieved May 22, 2019, from The New York Times: <https://www.nytimes.com/editorial-standards/guidelines-on-integrity.html>

- How mobile phones are changing journalism practice in the 21st Century. (2014, March 4). Retrieved May 10, 2019, from Reuters Institute: <https://reutersinstitute.politics.ox.ac.uk/risj-review/how-mobile-phones-are-changing-journalism-practice-21st-century>
- Immersive journalism: The future of reporting or an ethical minefield? (2015, June 22). Retrieved May 7, 2019, from Alphr: <https://www.alphr.com/virtual-reality/1001008/immersive-journalism-the-future-of-reporting-or-an-ethical-minefield>
- Kent, T. (2015, August 31). An ethical reality check for virtual reality journalism. Retrieved May 7, 2019, from Medium: <https://medium.com/@tjrkent/an-ethical-reality-check-for-virtual-reality-journalism-8e5230673507>
- Keyser, H., (2018, June 12). The Progress of Immersive Journalism. Retrieved April 25, 2019, from Journalism360: <https://medium.com/journalism360/the-progress-of-immersive-journalism-past-present-new-tools-and-future-expectations-be3d30e369e5>
- Kool, H., (2016). The Ethics of Immersive Journalism: A rhetorical analysis of news storytelling with virtual technology. *Intersect*, 9(3), 1-11.
- Lippmann, W., (2017). *Public Opinion*. New York: Taylor and Francis Group.
- McCombs, M. E., & Shaw, D. L. (1972). The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly*, 36(2), 176-187.
- Mullin, B. (2019, May 5). Virtual reality: A new frontier in journalism ethics. Retrieved from Poynter: <https://www.poynter.org/ethics-trust/2016/virtual-reality-the-next-frontier-in-journalism-ethics/>
- New Values and Principles. (2019). Retrieved May 22, 2019, from AP: <https://www.ap.org/about/news-values-and-principles/>
- Paura, A., (2018, February 28). The Ethical Challenges of Immersive Journalism. Retrieved May 8, 2019, from MediaShift : <http://mediashift.org/2018/02/the-ethical-challenges-of-immersive-journalism/>
- Pérez-Montoro, M., (2019). Interaction in Digital News Media. In J. Soler-Adillon, & C. Sora, *Immersive Journalism and Virtual Reality*. Palgrave Mcmillan (Springer).
- Sanchez Laws, L. (2017, October 20). Can Immersive Journalism Enhance Empathy? *Digital Journalism*. doi:<https://doi.org/10.1080/21670811.2017.1389286>
- Sherman, W., & Craig, A. (2013). *Understanding Virtual Reality: Interface, Application, and Design*. Amsterdam: Elsevier.
- Shin, D., & Biocca, F., (2018). Exploring immersive experience in journalism. *Sage*, 20(8), 2800-2823.
- Singer, J. B., (2011). Journalism and Digital Technologies. In J. B. Singer, W. Lowrey, & P. Gade (Eds.), *Changing the News: The Forces Shaping Journalism in Uncertain Times* (pp. 213-229). New York: Routledge.
- Sullivan, T. (2018, February 5). VR Gives Journalism a New Dimension. Retrieved April 25, 2019, from PCMag: <https://www.pcmag.com/article/358864/vr-gives-journalism-a-new-dimension>
- The Guardian's Editorial Code. (2011, August). Retrieved May 22, 2019, from The Guardian: <https://www.theguardian.com/info/2015/aug/05/the-guardians-editorial-code>
- The New York Times Company. (2019). Retrieved May 22, 2019, from Standards and Ethics: <https://www.nytc.com/company/standards-ethics/>
- The Washington Post Policies and Standards. (2016, January 1). Retrieved May 22, 2019, from Washington Post: [https://www.washingtonpost.com/news/ask-the-post/wp/2016/01/01/policies-and-standards/?noredirect=on&utm\\_term=.60cb56291108](https://www.washingtonpost.com/news/ask-the-post/wp/2016/01/01/policies-and-standards/?noredirect=on&utm_term=.60cb56291108)
- Who Killed the Newspaper? (2006, August 24). Retrieved from The Economist: <https://www.economist.com/leaders/2006/08/24/who-killed-the-newspaper>