



**The depiction of reality in a 360-degree video documentary
versus a conventional 16by9 video documentary: A focus
group comparative study of two independently made video
documentaries of the Kennedy Road Informal Settlement in
Kwa-Zulu Natal.**

Submitted to fulfil the requirements of Master of Journalism (MJourn) in
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To all the participants, thank you for giving your precious time to be part of this study.

I extend to you all my deepest gratitude and utmost respect.

Dedication

Dedicated to the memory of my friend and fellow technologist in the

Faculty of Arts and Design at DUT

Mr Gonasegran Reddy

(1971-2022)

Rest in Peace

“The glory of being an artist, he realised, was that reality should inform
but not constrain.”

A quote by Walter Isaacson from his book on Leonardo da Vinci, 2017

Source: <https://www.goodreads.com/quotes/>

The two videos compared in this study have been uploaded to YouTube as unlisted videos. Watching both videos will provide a more comprehensive understanding of this thesis. To access these videos, please use the links below:

The **16by9** video documentary of the Kennedy Road Informal Settlement in Kwa-Zulu Natal is available here:

<https://youtu.be/xKg7I65Ekgs>

Scan this QR code to watch on your mobile:



The **360-degree** video documentary of the Kennedy Road Informal Settlement in Kwa-Zulu Natal is available here:

<https://youtu.be/0yLvVn7DiA0>

Scan this QR code to watch on your mobile:



On a computer, you can navigate the scene using your mouse; on your cell phone, you can navigate the scene by moving your phone around. However, please note that the 360-degree video is best viewed on a Virtual Reality [VR] headset. The participants of this study viewed the 360-degree video on VR headsets.

Abstract

The popularity of virtual reality technologies [VR] has prompted numerous news organisations and filmmakers to embrace the 360-degree video format for immersive journalism. Consequently, there have been many studies on audience reception in VR and its use in immersive journalism. Nevertheless, research investigating the comparative “reality” depicted in immersive journalism content remains scarce.

This study compares the depiction of reality in two ten minutes independently produced documentaries of the Kennedy Road Informal Settlement in Kwa-Zulu Natal. One shot in the traditional video format and the other in the 360-degree video format. Both videos were screened to two expert focus groups, one a group of academic experts and the other a group of professional television journalists, to discuss the perceived reality depicted in the videos.

The result of this case study suggests that the 360-degree video version is a more accurate depiction of the reality in the settlement. The Exploratory nature of the format, the Extra Information on offer, the Sense of Presence, and the Sense of Place the 360-degree format created enhanced its Depiction of Reality. The intrinsic nature of the 360-degree video format by virtue of the long, deep focus shots it creates, and the way 360-degree videos are put together profoundly reflect the work of the seminal theorists of cinematic realism, namely, Andre Bazin (2004), Siegfried Kracauer (1997) and John Grierson (1998).

According to the findings of this study, when considering 360-degree video within the framework of traditional film theories, it becomes evident that there is no unique concept of realism exclusive to 360-degree video. Rather, the principles that render 360-degree video realistic are the same as those that contribute to realism in traditional film.

While this study is limited to its specific case and employs a relatively small sample size, the results are significant. It provides a direct comparison of the two formats by experts and suggests that the 360-degree format has the potential to depict the reality of a situation more accurately, positioning the technology as a powerful tool for immersive journalism.

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Chapter 1: Introduction

1.1 Introduction

This chapter introduces the researcher and explains the fundamental concepts of this study, namely, 360-degree video, standard high-definition 16:9 [16by9] video, and virtual reality. The paradigm of 16by9 versus 360-degree video is explained. A background to the study is provided, and the investigation is placed in the context of existing knowledge in the field. The research problem and aims of this study are clearly stated. The methodology of this study is briefly explained, and the significance and limitations of this study are explored. The credibility of this study is addressed, as well as its ethical considerations. Finally, in this chapter, the structure of this thesis is outlined.

1.2 The Researcher

The researcher is a technologist with extensive experience in the news broadcasting environment. The researcher has also worked for over a decade as a video journalist at a national television broadcaster. This research was proposed and began in 2018 when 360-degree video and virtual reality were still considered relatively new technology. During the course of this research, the researcher also participated in several initiatives to promote the technology within the university. In 2019, the researcher was part of a team that was responsible for the exhibition *Shared Virtual Monuments* at *Digifest 6* [the university's annual arts and design festival]. This was an international collaboration with a team of researchers from Brazil. The 360-degree projected video display incorporated footage from Brazil and South Africa. The installation won the *Dean's Innovation Award*. In 2021 the researcher was also part of a team that produced a 360-degree dance video project, *Asikhule Sonke - Grow as One: Advancing social integration and harmony through transdisciplinary 360 virtual immersion*. The project was awarded *Creative Output of the Year* at the university's annual research awards function.

1.3 360-degree Video and Virtual Reality

Firstly, the distinction between 360-degree video and Virtual Reality [VR] must be clarified. 360-degree video is a recording of a real-world environment from a single point with a 360-degree view. This recording can then be viewed on a computer screen, mobile device, or head-mounted display [VR headset]. The viewer is placed at the centre of the scene and has a 360-degree view of the surroundings. Notably, in 360-degree video, the viewer cannot move around within the location or interact with elements within the scene. The viewer is simply placed within the recorded video and can look all around [Up, down, back, front, left, right].

Virtual Reality [VR], on the other hand, is usually created using computer-generated imagery. The viewer is immersed in a virtual computer-generated world and can often interact with elements within the scene. The notable distinction is that the viewer can also move around within the location in VR. VR headsets equipped with hand-held controllers that track the user's movements are primarily used for gaming. The player is immersed into the world of the game and can interact with elements of that world in all sorts of exciting and engaging ways.

Van Damme *et al.* (2019:2055-2056) state that. “360° video and VR are two distinct mediums: 360° video provides audiences with a contained perspective to a location and its subjects, whereas VR enables the viewer to explore and/or manipulate a space”. They further state, “...this technological distinction of interactivity is unclear for users and scholars alike as VR is perceived to refer to any content that can be watched with a VR device, including 360° video” (Van Damme *et al.* 2019:2056). The researcher agrees that maintaining such a distinction is difficult, especially when using 360-degree video that is viewed on Virtual Reality headsets. Even the participants of this study referred to the 360-degree video as VR video because they had viewed it on a VR headset. Therefore, for this thesis, the terms VR and 360-degree video are used interchangeably, and a distinction is made when necessary.

1.4 Understanding 360-degree Video Versus 16by9 Video

This thesis refers to the traditional, widescreen video format that we are all used to and watch on our television screens and at the movies as 16by9 video. This refers to

a video format that has a width-to-height aspect ratio of 16 units to 9 units -16:9. The 16:9 aspect ratio was established as the high-definition television (HDTV) standard by the International Telecommunication Union (ITU) and the Society of Motion Picture and Television Engineers (SMPTE), in the early 2000s. Ironically, in the context of this thesis, this format became the format of choice for most video content, television, and film because of its ability to display more visual information and provide a more immersive viewing experience than the previous standard television aspect ratio of 4:3.

As the literature will show, the concept of 360-degree video has been around for decades. The advent of Virtual Reality technology and the capability of digital cameras have now made 360-degree video production both practical and accessible. There now exists affordable 360-degree cameras that consumers can buy off the shelf. Big technology companies like Microsoft, Google, and Meta develop and sell Virtual Reality [VR] and Augmented Reality [AR] headsets. YouTube also has a virtual reality (VR) platform, YouTube VR, allowing users to watch 360-degree videos on their VR headsets.

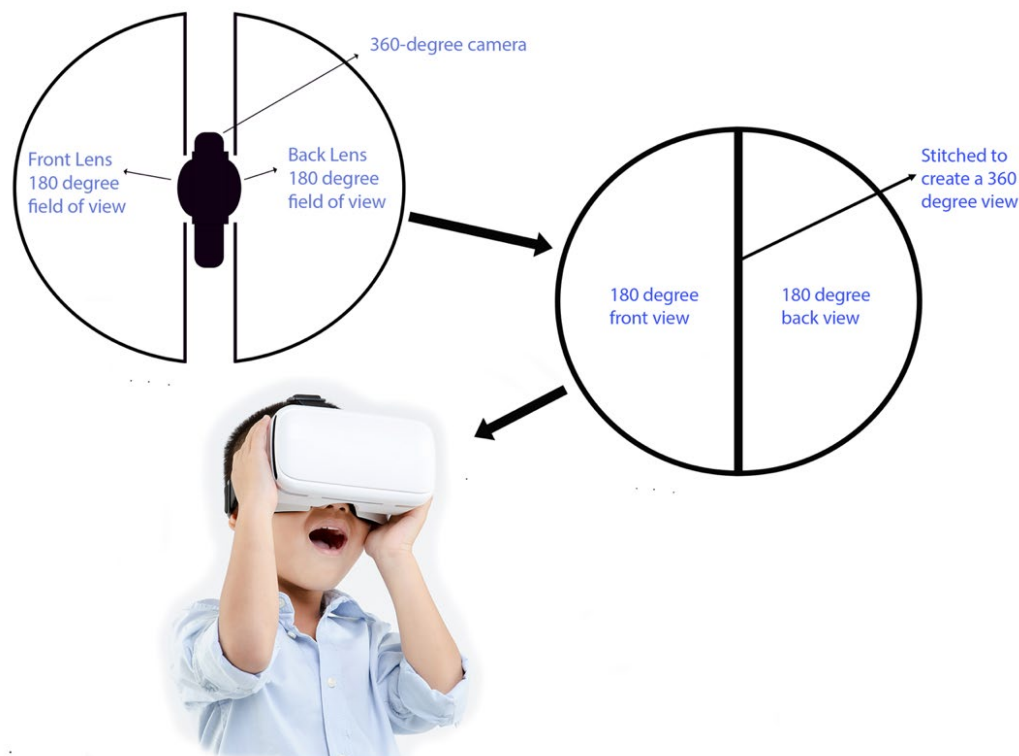
Figure 1: Cameras used to create the videos for this study. 1 Both cameras side by side on their respective tripods, 2 The 360-degree camera suspended from a drone, 3 The Sony NX5 professional video camera.



In October 2021, Facebook changed its name to Meta to reflect its new focus on building the Metaverse, a virtual world where users can interact with each other using their VR headsets. These developments also drive 360-degree video content creation.

“While VR was expected to enter everyday use as a gaming platform, the strategy within the technology companies has been to drive take up into the mainstream. Beyond their commitment to technology development, both Facebook and Google have backed that strategy by investing in nonfiction content creation initiatives that bring VR to mainstream audiences” (Rose 2018:145).

Figure 2: The 360-degree workflow [The image of the boy wearing a VR headset is an edited licensed Adobe Stock image]



The heart of this thesis is a comparison between the 16by9 video format and the 360-degree format in terms of cinematic realism. To better understand this comparison and the arguments put forward henceforth, it is essential to understand some of the technology. A production company independently produced the videos for this study. The 16by9 video was shot using a standard Electronic News Gathering [ENG] camera kit, and the 360-degree video was captured using an off-the-shelf GoPro 360-degree

camera [GoPro Fusion 360]. Figure 1 shows the cameras used to produce both videos. For the aerial shots, two different drones were used. The 16by9 aerial images were captured with a drone with a built-in camera. The 360-degree aerial shots were recorded by attaching the 360-degree camera to a larger drone.

The 360-degree camera used has two lenses. The front lens captures the 180-degree front view, while the back lens simultaneously captures the 180-degree rear view. The front and back views are then stitched together via software to create the full 360-degree view. When this 360-degree footage is viewed on a VR headset, it places the viewer at the same spot that the camera was recording from, and the viewer can now look all around the surrounding scene. Figure 2 illustrates this workflow.

Both videos for this study were edited in Adobe Premiere Pro, and no image enhancement or visual effects were used. Except for being trimmed for editing, the images were mostly kept “raw”. The significance of this will become apparent in later discussions.

Figure 3: A flattened still of a scene from the 360-degree format and still images of the same scene from the 16by9 video.



Figure 3 shows still frames from a scene from both the 360-degree video and the 16by9 video. The 360-degree video is able to capture the entire scene in one shot. On the other hand, the 16by9 video has to use multiple shots to represent the same scene. [Note that for the purposes of illustration that the 360-degree spherical image has been flattened, i.e., converted to two dimensions, this must not be confused with instances when the 16by9 video is referred to as the flat video].

Thus, this thesis investigated the implications on the depiction of reality when footage from these two formats, 16by9 and 360-degree, were put together to form the same documentary, in both formats, that was viewed on a flat-screen [16by9], and VR headset [360-degree]. The use of both formats for the same documentary allowed for a comparison of how the two formats affected the viewer's perception of reality.

1.5 Background and Context of Study

“...journalists have always attempted to present audiences with the most intimate sense of being part of the news event...” (Van Damme et al. 2019:2055). At the heart of journalism is accuracy and objectivity. Journalists strive to report and convey the truth about issues, events, and people to the masses. They aim to present the facts as they are, without distortion or bias, thus providing a truthful and trustworthy account of events. The dictionary defines the truth as “that which is true or in accordance with fact or reality”. Therefore, it is no surprise that journalists are increasingly exploring the potential of Virtual Reality [VR] technology for journalism. VR technology can be a powerful tool for enhancing the impact and credibility of journalistic storytelling.

The first time a 360-degree image was used in modern-day broadcast journalism was during the coverage of the death of Princess Diana. An American-based news channel, Cable News Network (CNN), used still pictures of the accident scene to create a 360-degree panoramic still view of the accident scene for analysis. This picture was used on screen for ten minutes as journalists spoke of the sequence of events (Tickle and Keshvani 1999). Since then, the development of Virtual Reality and 360-degree video technologies have allowed audiences to experience content in a more immersive and interactive way. This has given rise to a new form of journalism known as immersive journalism.

One of the earliest and most well-known 360-degree documentaries, *Clouds over Sidra*, was produced in 2015 by filmmaker Chis Milk for the United Nations. It premiered at the World Economic Forum in Davos, Switzerland in 2015. It was widely praised for its powerful use of Virtual Reality technology to bring attention to the plight of refugees. This multi-award-winning documentary is approximately eight minutes long and follows the story of a 12-year-old girl living in a Syrian refugee camp. The documentary was shot using a 360-degree camera, allowing viewers to experience Sidra's life in the camp from a first-person perspective (Kool 2016).

Such has been the impact of VR technologies in the form of immersive journalism that it has been described as “disrupting industry norms” (VR World NYC 2018). Kukkakorpi and Pantti (2020) studied eight 360-degree videos produced by the New York Times. They concluded that the sense of place created in VR, by placing the viewer within the scene, is crucial to the understanding of the narrative.

“VR journalism has mainly been produced by the large media companies and in the Western part of the world. This opens up possibilities to research how smaller media organisations can employ immersive and interactive techniques to create a sense of place, strengthen trustworthiness and build connections between the user and the character” (Kukkakorpi and Pantti 2020:799-800).

In this age of widespread fake news, trustworthiness seems critical. This relation between the truth, trust, and reality forms the paradigm of this thesis.

Although many studies have been conducted on user experiences in immersive journalism, there is a lack of studies on the comparative depiction of reality. That is, the “reality” in virtual reality has not been appropriately studied in direct comparison to other formats.

Although VR and 360-degree video is considered relatively new technology, the idea of 360-degree imaging was introduced in 1955 by The Walt Disney Company in its park attraction called *Circle Vision 360*. Images for these theatres were filmed with multiple cameras and projected on screens that encircled the audience (Hamus-Vallee 2018). Significantly, most of the films screened in these theatres were non-fiction travelogues. The attraction was very popular, and every Disney Park of that time had at least one *Circle Vision 360* theatre.

Even today, 360-degree video production is used predominantly for non-fiction, travel, and documentary videos. Bevan and Green (2018) state that the production of non-fiction VR has steadily increased as VR headsets become more accessible. Mainstream filmmakers and international broadcasters have adopted the technology for their non-fiction content, and these films are now featured at international film festivals such as *Sundance* and *Tribeca*.

The non-fiction genre is based on reality and aims to represent the world we live in accurately. Non-fiction productions use real-life events, people, and facts to present accurate and unbiased information to the viewer. This pursuit of truth is the heart of journalism. So, if VR technologies have been used to predominantly produce non-fiction content, then studying this content in terms of its depiction of reality becomes necessary. To achieve this, this thesis focused on the work of the seminal theorists of cinematic realism.

John Grierson is widely considered one of the most influential figures in the history of documentary films. He is credited for first coining the term “documentary”. In his essay, *First Principles of the Documentary*, he states that the documentary should capture the story of real people living in their natural environments, “the living scene and the living story” (Grierson 1998:97). He advocated capturing reality in its “purest form” without excessive manipulation by film editing. For Grierson, depicting real people in their environments and maintaining the integrity of movement, space, and time within the scene was vital to documentary realism.

This idea is also reflected in the work of seminal film theorist André Bazin. In his essay, “The Evolution of the Language of Cinema” (2004:35-36), Bazin states that the deep focus long take is “more realistic” as it does not depend on multiple edits, which tend to cut up the integrity of space and time. Bazin was also the first theorist to consider presence in terms of cinematic realism. In his 1967 essay, “The Concept of Presence”, he introduces a thought-provoking philosophical discussion regarding how cinema affects the psychological notions of presence and reality. If Bazin perceived that the cinema of his time blurred the distinction between being present and absent at a scene, it is worth contemplating how much more significant this notion has become today, especially when viewed through the lens of virtual reality.

Siegfried Kracauer is another theorist whose work has had a significant impact on the field and whose ideas continue to be studied and debated by scholars today. In his 1960 book, "Theory of Film: The Redemption of Physical Reality", Kracauer argues that the essence of film lies in its ability to capture the physical reality of the world. Unlike Bazin and Grierson, though, Kracauer believed that film editing leveraged the medium's full potential and provided an opportunity to depict an enhanced realism. He believed that the filmmaker should play an active role in shaping the representation of reality on screen (Kracauer 1997:301).

The first camera to be able to shoot on location was the Cinématographe, which was invented by the Lumière Brothers in 1895. Before this, most films were shot in studios or other controlled environments, using large, cumbersome cameras that were difficult to transport. The Lumière Brothers' invention was revolutionary and made it possible to capture real-life events and scenes outside of the studio. This then led to film editing and montage-style films. The next technological advancement came in 1927 with the introduction of synchronised sound and dialogue in film. The 1930s ushered in an era of colour, with Technicolor widely used in feature films (Thompson and Bordwell 2019:197). Now traditional film has been widely replaced by its digital counterpart. This thesis positions the 360-degree camera as the next evolutionary step in cinema to investigate it in terms of cinematic realism.

The 360-degree camera, by virtue of its technology, is a deep-focus, long-shot camera. Although these inherent capabilities are not always suitable for all narrative purposes, by the context put forth here, it seems logical that the 360-degree camera can be an essential tool for enhancing documentary realism. On the other hand, the 360-degree camera technology offers very little opportunity for manipulation via video editing. This could also impact the narrative process. Therefore, a comprehensive comparative study between the traditional [16by9] format and the relatively new 360-degree format in terms of documentary realism is necessary.

1.6 Research Problem and Aims

The research problem is whether 360-degree video cameras can provide a heightened sense of documentary realism, as experienced by informed viewers, and can thus satisfy more completely the central requirements of the realist philosophical tradition

in film studies. The research objective is, therefore, to compare two documentaries shot on the Kennedy Informal Settlement - one shot with a traditional [16by9] camera and the other with a 360-degree camera – to test whether the shots made with the 360-degree camera generate a more enhanced realism, as defined by the classical scholars in the field – Andre Bazin, Siegfried Kracauer and John Grierson.

This study aims to answer the following research questions:

Main research question: Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

Sub-research question one: What are the attributes of the documentary that is perceived to be the more accurate depiction of reality [from the main research question] that contributes to its realism?

Sub-research question two: How does the 360-degree video camera technology reflect traditional theories of cinematic realism?

1.7 The Method

The research paradigm adopted for this study was interpretivism, while the theoretical approach used mixed methods, incorporating deductive, inductive, and abductive reasoning. The study was a qualitative case study investigating the two different video formats. Data was collected from expert focus group sessions, and the transcripts were thematically analysed.

As its case study, this study used two ten-minute independently made documentaries providing insight into the Kennedy Road Informal Settlement in Durban, Kwa-Zulu Natal. One was shot using conventional news-gathering equipment, and the other was shot using a 360-degree camera. They were both produced by the same independent production company; shot concurrently; depicting the exact same subject matter [an in-depth look at life in Kennedy Road Informal Settlement]; using the same script and journalist; and in two different formats (16:9 high-definition video and 5k 360-degree video). These videos are referred to as the 16by9 video and the 360-degree video in this thesis.

It is important to note that, to avoid bias, the researcher was not involved in the production process of these videos. To reiterate, the videos are not the data for this study. The videos were screened to expert focus groups to collect data. The dataset analysed was the verbatim transcripts of these expert focus group sessions.

The two videos were both screened to two expert focus groups. Purposive sampling was used to recruit participants for the two expert focus group sessions. Focus group one comprised academic experts in the field of arts, design, and video production. Focus group two comprised experienced television journalists. All participants were based in Durban, Kwa-Zulu Natal. Both videos were screened before each focus group session. The Oculus Quest 2 Virtual Reality Headset was used to screen the 360-degree video. The focus group sessions were audio recorded.

Thematic analysis was applied to the verbatim transcripts of both focus group sessions. QDA Miner Lite software from Provalis Research was used to assist with the coding of the data [Access to NVivo software via the university was not available at the time of doing data analysis]. The data was interpreted, and the themes were derived deductively, inductively, and abductively.

1.8 Significance and Limitations

This research provides valuable insight into the reality depicted in a 360-degree video compared to its traditional 16by9 counterpart. The 360-degree format is increasingly being used by mainstream broadcasters and documentary filmmakers. With these videos commonly being viewed on Virtual Reality headsets, an investigation into the 'reality' depicted is necessary. At the heart of journalism lies the need to convey the reality of the situation being reported on. This study's findings provide important information on 360-degree video as a tool for the journalist who seeks to accurately convey the reality of the situation they are reporting on.

This study is limited to the documentary genre and the case of the videos of the Kennedy Road Informal Settlement.

1.9 Credibility and Ethical Considerations

The four design tests of construct validity, internal validity, external validity, and reliability were applied to this research design to ensure its trustworthiness and credibility (Yin 2003:34).

Before participating in the study, all participants were given an information letter detailing the research aims and were asked to sign a consent form indicating their voluntary participation. To ensure confidentiality, all research data is securely stored and will be destroyed after a period of five years.

The ethical considerations of this research are discussed in detail in Chapter 3 of this thesis.

1.10 Structure of this Thesis

Chapter One: This chapter presents an overview of the research. The key concepts are clarified and explained.

Chapter Two: The literature relevant to this thesis is explored, and its significance and contribution to it is highlighted.

Chapter Three: The research methodology is outlined in detail and justified. This chapter provides a clear and comprehensive explanation of how the research was designed, carried out, and analysed.

Chapter Four: The research results are presented and interpreted in this critical chapter. The findings are presented in an easy-to-understand way and related to the research questions and objectives. The researcher's own insight and interpretation of the data are discussed.

Chapter Five: This chapter reflects on the research process and its findings. Recommendations for future research are suggested.

1.11 Summary

This chapter has explained the key concepts essential to understanding this thesis. It has also provided some background and context to this study. The research problem,

the aim of this study, and its significance have been clearly stated. The research design and methodology have been explained. The structure of this thesis has been outlined. The next chapter will examine in detail the existing related literature that is of relevance to this thesis.

Chapter 2: Literature Review

2.1 Introduction

A comprehensive examination of the literature was undertaken, and the relevant literature is presented in this chapter mostly chronologically. Presenting the literature chronologically best illustrates the progress of the argument, the gap in the literature, and the context of this research.

The hypothesis that the new 360-degree camera technology is reflected in early film realism theories prompted a comprehensive study of the early film theorists. An investigation into the contemporary studies on 360-degree video and virtual reality identified a considerable gap that exists in the study of 360-degree video in the context of traditional cinematic realism. The contemporary studies analysed in this chapter all contribute significantly to the research design of this study. Often in more than one way.

The chapter first presents the seminal realism film theorists and the formalist film theories. This is not offered as counterarguments but structured to contextualise the paradigm of early film theories. These theories are the foundation of all modern-day filmmaking.

The context of this study and the gap in the literature is reiterated between the literature of the seminal theorists and the literature of contemporary studies. This seemed apt because this is actually where the gap exists.

The contemporary studies into immersive journalism are then interrogated, and their relevance and contribution to this study are clearly stated. An overview of Film Theory concerning this study is presented. The state of immersive journalism in South Africa is explored. A background of the Kennedy Road Informal Settlement is offered. Although the settlement is not a subject of study, its use as the subject matter of the case study videos is explained and motivated. The chapter concludes with a summary of the literature presented and states how it informed the research questions.

The literature examined in this chapter was also used to formulate the focus group questions to probe and extract data from the participants to answer the research questions. This is explained further in the methodology chapter of this thesis.

2.2 The Literature

2.2.1 The Realism Movement

The realism movement started in the 19th century and gained momentum with the invention of photography. When the Lumière brothers presented the first projected moving images in December 1895 in Paris, France, a new art form and a new industry was birthed. The establishment of the film industry thereafter ignited fresh debates about realism in the arts.

The early seminal film theorists who contributed significantly to the debates of filmic realism were Andre Bazin, Siegfried Kracauer, and John Grierson. The ideas of these giants have defined traditional “realism” in film and documentaries, and their ideas have had far-reaching influences on all other subsequent debates.

2.2.1.1 André Bazin

In his essay “The Ontology of the Photographic Image” (2004), Bazin analyses the evolution of realism in the arts beginning with the Renaissance. Here he states that due to the invention of perspective, painting was now able to “create the illusion of three-dimensional space within which things appeared to exist as our eyes in reality see them” (Bazin 2004:11). The development of still photography and then film in the late 19th century, was described by Bazin as “the mechanical reproduction of reality” (2004:12); he further described it as being so exact that it was more than just the “resemblance” of reality that was previously achieved by painting.

Between the 1920s and 1940s, Bazin found a distinction in cinema which he called “two broad and opposing trends: those directors who put their faith in the image and those who put their faith in reality” (Bazin 2004:24). By and large, he had realised that some directors relied heavily on *mise-en-scène* while others preferred montage storytelling. Regarding montage, Bazin regarded it as what “gave birth to film as an art, setting it apart from mere animated photography, in short, creating a language”

(Bazin 2004). Nonetheless, one can make a good argument that Bazin clearly put more significance on staging and composition than on montage.

“Well used, shooting indepth [sic] is not just a more economical, a simpler, and at the same time a more subtle way of getting the most out of a scene. In addition to affecting the structure of film language, it also affects the relationships of the minds of the spectators to the image, and in consequence, it influences the interpretation of the spectacle” (Bazin 2004:35).

If Bazin favoured *mise-en-scène* over montage, it was because he was more interested in the dramatic relationships within the image [long take shots] rather than the relationships between shots [edited montage].

In his essay, “The Evolution of the Language of Cinema” (2004:35-36), Bazin outlined three key elements to this “composition in depth”:

1. The deep focus long take is “more realistic” as it does not depend on multiple edits, which tend to cut up the integrity of space and time;
2. It allows for a more active, interpreting audience that has more viewing “personal choice” rather than being directed what to see by editing;
3. Very importantly, deep focus long takes enable an “ambiguity of expression” in the image, thus achieving that ontological realism which recognises the “uncertainty”, “mystery”, and polyvocality of reality.

Although it would seem that Bazin favoured one over the other, he was unequivocal that cinema was at its best when both techniques were used. “Through the contents of the image and the resources of montage, the cinema has at its disposal a whole arsenal of means whereby to impose its interpretation of an event on the spectator” (Bazin 2004:26). Of particular significance to this thesis is Bazin’s essay “The concept of Presence” (Bazin 2004:96-98). In this short essay, Bazin presents an intriguing philosophical debate on the effect of cinema on the psychological concepts of presence and reality. Almost all of the ideas presented in his essay are even more relevant today in the context of Virtual Reality.

“Presence, naturally, is defined in terms of time and space. ‘To be in the presence of someone’ is to recognize him as existing contemporaneously with us and to note that he comes within the actual range of our senses-in the case of cinema of our sight and in radio of our hearing ” (Bazin 2004:96).

Virtual Reality has the ability to insert the viewer into the presence of another person and in their virtual environment. The modern Virtual Reality headset can provide the viewer with a full 360-degree panoramic view of the virtual environment, including its sounds. The experience is so real that the disconnect that happens between the brain and the body during the experience can cause disorientation sickness in extreme cases. With regard to Bazin’s concept of cinematic presence, let us consider the following:

“This means that for the man in the street the word ‘presence’, today, can be ambiguous, and thus an apparent redundancy is not out of place in this age of cinema. Hence it is no longer as certain as it was that there is no middle stage between presence and absence. It is likewise at the ontological level that the effectiveness of the cinema has its source ” (Bazin 2004:97).

It is easy to see that replacing the word “cinema” with “virtual reality” in the above quote makes it even more relevant today. Just as Bazin argued that the cinema of the day blurred the lines between being present and absent, the same debate is raging today concerning “presence” in virtual reality [VR]. The “sense of presence” or “being there” has become a key consideration in VR research.

2.2.1.2 Siegfried Kracauer

While many of Bazin’s arguments lead us to believe that he regarded film as dependent on reality yet distinct from it, Siegfried Kracauer, on the other hand, suggests that film is equal to reality and can enhance it.

“This distinguishes the painter or poet from the filmmaker; unlike him, the artist would cease to be one if he incorporated life in the raw as rendered by the camera. However realistically minded he overwhelms rather than records reality” (Kracauer 1997:300).

Kracauer believed that the filmmaker should not just use the camera to capture “life in the raw” but must “bear out a vision of it”. He suggests that simply using the medium of film to capture reality through the camera did not take advantage of the potential that film has over other mediums. He encouraged the creative use of the medium. Kracauer further posits that editing techniques can create significance within a scene and “contribute to the truth or the beauty inherent in the work as a whole” (Kracauer 1997:301).

Kracauer also acknowledges that formative techniques can detract from the truth and physical reality and thereby promote propaganda, especially in newsreels and documentaries. To illustrate his point, he uses an example of a 1928 German propaganda newsreel, wherein the order of the shots was changed by editing to change its meaning. He states, “Only the arrangement of the shots was altered. All of which proves that our confidence in the veracity of documentary films rests on uncertain ground” (Kracauer 1997:162-163). Kracauer was well aware of the dangers of montage to news and documentary realism and truthfulness.

Kracauer credits John Grierson for instilling new life into the documentary genre by “estranging” it from its cinematic roots through his [Grierson] ideas of realism. Quoting Grierson, he states,

“the documentary idea . . . was not basically a film idea at all and the film treatment it inspired only an incidental aspect of it. The medium happened to be the most convenient and most exciting available to us. The idea itself, on the other hand, was a new idea for public education . . .” (Kracauer 1997:210).

This is of profound relevance as this thesis explores the potential of a new medium for documentary production.

2.2.1.3 John Grierson

It was John Grierson, the founder of the pioneering British Documentary Movement, who first used the term “documentary”. He theorised that, whereas the conventional cinema of the time used staged reality and sophisticated production techniques such as editing to sensationalise the narrative, the documentary filmmaker should remain true to the story by capturing reality as it happened. “Documentary, or the creative

treatment of actuality, is a new art with no such background in the story and the stage as the studio product so glibly possesses" (Grierson 1933:8 cited in Kerrigan and McIntyre 2010).

Kerrigan and McIntyre (2010) state that the "creative" in the term "creative treatment of actuality" refers to the filmmaker's ability to interpret and construct meaning. Reality is interpreted and then presented. Pertinent to this research is their interpretation that the "creative treatment of actuality", as coined by Grierson, refers to the filmmaker's ability to manipulate and construct an interpreted reality of the unfolding scene by mastery of the medium. Kerrigan and McIntyre (2010) propose that if Grierson's ideas are considered this way, they become contemporary.

Grierson's First Principles of the Documentary suggest that the camera should be a tool for observing reality and capturing it in its "purest form". He warned against the excessive use of the juxtaposition of images via editing, staging, and the use of actors. Grierson also hinted at the limits of the technology of the time by drawing attention to the relationship between space and time when attempting to capture reality on an "arbitrary rectangle" (Grierson 1998:97).

Grierson's three First Principles of documentary filmmaking are defined in opposition to studio-made fictional film, with the former alone capable of "observing and selecting from life itself".

Principle 1: Documentary films, unlike the artifice of studio-made fictional films, are capable of filming "the living scene and the living story".

Principle 2: the documentary focusing on real people in their "native" environments offers a superior "interpretation of the modern world" in all its complexity and "astonishing happenings".

Principle 3: "The materials and the stories thus taken from the raw can be finer (more real in the philosophic sense) than the acted article", with a particular ability to capture "movement; it gives it maximum pattern in space and time" (Grierson 1998:97).

2.2.2 Reflecting on the Seminal Realism Theories

Edwards (2013) interrogates the work of Bazin and Kracauer by using film examples and concludes “that with bold theoretical prescriptions comes a greater potential for self-contradiction and dogma. It is for this reason that no grand theory such as ‘Cinematic Realism’ should ever be considered as purporting to be definitive and all-encompassing”. Also, it concludes that “Kracauer’s initial thesis is not incorrect, but must be considered in light of its “inherent limitations” (Edwards 2013:6).

Kracauer’s film theories were developed in the 1920s and 1930s, and some of his ideas and concepts may be dated and no longer relevant in today’s context. Many new film styles and genres have emerged since. Kracauer considered cinema as the evolution of photography and maintained that film should reproduce reality as photography does.

Interestingly Edwards (2013:6) also states that “...any theory should be used as an analytical tool for a task which it is best suited. If thought of in this way, any self-contained theoretical framework can contribute to significant enlightenment in a given area of study”. The researcher finds Edwards’ essay significant because the researcher thought that this would have been the obvious approach to traditional theories of cinematic realism in the 21st century. To apply Grierson’s First principles of documentary stringently when producing a documentary in the 21st century would be disastrous. However, it is very obvious to the researcher that understanding the principles and applying them effectively when suited could result in a much better documentary. It is from this paradigm that the researcher approaches the traditional cinematic theories of realism.

Gutierrez (2018) did an in-depth philosophical interrogation of the cinematic theories of Kracauer via a phenomenological study. The methodology involved the research-based production of ten short films reflecting day-to-day life, which was used to investigate Kracauer’s “cinematic realism”. These videos were part of the *Live-world Series* (2017). Gutierrez claims that his study was the first to use filmmaking practice to investigate Kracauer’s realism theories. He acknowledges the limitations of using a theoretical framework to criticise existing work and suggests that the practice-based approach allows for a wider range of possibilities. An outcome of Gutierrez’s study

was a proposed “integrated quadrant model of Kracauerian cinematic realism” (Gutierrez III 2018:173). This included the tropes of Kracauer’s theories and the characteristics of life-world [Lebenswelt- the world of lived experience]. Gutierrez’s study confirms that Kracauer’s “cinematic realism” still remains relevant and significant.

“...as long as we human beings are physical entities who are insatiably curious about the nature of reality, the film medium – which gravitates towards physical reality as Kracauer invariably affirmed – will continue to be a means for us to investigate Nature that forms the very base of our physical existence” (Gutierrez III 2018:186).

Morgan (2006) thoroughly re-visits the work of Bazin in the context of the digital age. He cautions against the idea of considering the classical theories “inadequate and irrelevant” (Morgan 2006:443). His essay posits that judging the reality of a film explicitly by Bazin’s criteria, as stated in “composition in depth”, is the wrong approach to the theory. He concludes that Bazin’s ideas, such as the “long shot”, “deep focus”, and “ambiguity of expression”, should be used as a tool to understand what is being “acknowledged” by the film.

Morgan (2006:48) argues an “alternative understanding of Bazin’s realism”. In addition to Bazin’s ontological approach, he suggests also taking into account what the film holds as its “central facts” and an interrogation of the film’s style. In doing so, he means that we can better understand what is being “acknowledged” by the film. “Realism becomes, in Bazin’s work, an analytical tool, one that can get at the way a film works”(Morgan 2006:481).

The documentary film movement and John Grierson’s principles on documentary (Grierson 1998:97) were tested with the arrival of television. The new medium of television presented a form in contradiction of these principles. Grierson did, however, make a successful transition to television, albeit having to compromise on his documentary principles. Grierson made many statements against television, calling it a “cheap alternative” to film. “Television was ‘predisposed to the amateur’, and, in its ‘cheapness of methods’, failed to capture documentary’s ‘wider and more aesthetically important aspects’ (Grierson 1979:212-214 cited in Fox 2013:517). Grierson’s

documentary television series “*This Wonderful World*” was hugely successful and bore testament to the fact that he could adapt his principles to a new medium and dominate it (Fox 2013).

2.2.3 Formalism Film Theory

Sergei Eisenstein was the foremost proponent of Formalism in film. He believed in the way the individual elements of film, such as the visual composition of the shot, the editing techniques, and the narrative structure, could have a huge emotional impact on the viewer.

2.2.3.1 Sergei Eisenstein

Sergei Eisenstein was the most prominent of the classical Formalist theorists. Eisenstein was fiercely opposed to just considering film as a medium of reproducing reality. He considered film an artistic medium in which reality should be broken down and reassembled to create significance as determined by the director. He was interested in the psychology of creating meaning by breaking a scene down into its various elements. Unlike the realists, “Eisenstein never considered the mere recording of life as cinematic” (Andrew 1976). Eisenstein proposes that the filmmaker must analyse a scene, get a sense of its inherent themes and then take the viewer on a journey of discovery to expose the themes through montage.

“Eisenstein had always held that to attain ‘reality’ one must destroy ‘realism’, break up the appearances of a phenomenon and reconstruct them according to a reality principle” (Andrew 1976:66). Eisenstein did not advocate the use of the montage to distort the truth or reality in a scene; he wanted the essence of the scene to be revealed by “arranging images in the feelings and mind of the spectator” (Andrew, 1976). In his summary of Eisenstein’s Theory of Montage, Andrew boldly concludes, “Eisenstein’s theory will always be instrumental to radical views of cinema, but because of the honesty of its constant self-qualification his theory will outlast every use to which it is put” (Andrew 1976:73).

The following quotation is an excellent way of moving the argument forward.

“In the beginning film was purely iconic—it signified exclusively by means of the resemblance of its imagery to objects in the visible world. But reality does not tell stories. It is only when shots are organised according to repeatable, recognisable codes that they become discourse and are capable of telling a story” (Braudy and Cohen 2009).

Eisenstein’s Montage Theory posits that the interaction between shots in a montage sequence could create new meanings and emotions that were greater than the sum of their parts. He argued that montage was a crucial tool for filmmakers to communicate their ideas and messages to audiences and that the specific choices made in editing could profoundly affect the audience’s understanding and emotional response to a film.

2.2.3.2 Christian Metz

Christian Metz is considered the pioneer of film semiotics. Metz was instrumental in starting the discussions around the language of film. His ideas were adapted from Ferdinand de Saussure, a linguist who pioneered semiotics in language. Metz is widely considered to be one of the first major contemporary film theorists. Metz equated a shot to a sentence rather than a word. “The shot is therefore not comparable to the word in a lexicon; rather, it resembles a complete [sic] statement (of one or more sentences)” (Metz 1991:100). Meaning, according to Metz, is created by the order of individual shots in a sequence. Metz emphasised the importance of shot selection, shot duration, and the order of shots to create meaning. He was aware that this could impact or change a scene’s perceived reality.

Metz argued that film had more potential than just representing reality; it could manipulate it. “Filmic manipulation transforms what might have been a mere visual transfer of reality into discourse” (Metz 1991:105). It is important to note that Metz was theorising narrative films. However, his ideas, which are highlighted here, are crucial to the argument being put forward in this chapter. The documentary film usually has a voice-over that gives meaning to a sequence of shots. The idea is that a sequence of shots, instead of one long-duration shot, can change the viewer’s perception of the scene. Suppose this is indeed the case, as Metz theorises for the narrative film. In that case, we must concede that in a documentary, the order and selection of shots will

directly impact the way the visuals reinforce the voiceover, thereby influencing the viewers' perception.

Metz also clearly states that his ideas apply to documentary films as well.

“The cinema, which could have served a variety of uses, in fact is most often used to tell stories—to the extent that even supposedly nonnarrative films (short documentary films, educational films, etc.) are governed essentially by the same semiological mechanisms that govern the ‘feature films’.” (Metz 1991:144).

Metz evolves the idea of Eisenstein, who considered the montage as “collision” (Andrew, 1976:53), to consider the montage as a sequence of shots deliberately structured to create determined meaning. Metz takes his argument further by stating that a shot has denotative and connotative meanings like verses in literature.

“Esthetic arrangements and constraints-versification, structure, figures of speech in literature and framing, camera movements, lighting effects in film-serve as the connoted instance, which is superimposed on the denoted meaning.” (Baseheart 1979:23). Baseheart (1979), in her essay on Metz's Connotation Theory, admits that Metz's work in this area is vast and requires in-depth study. A shot of an object is a representation of its physical reality (denotation). Yet, that same object shot from different camera angles or in other lighting conditions, or both, will convey different feelings and ideas (connotation). (Baseheart 1979:32)

Most pertinent to this thesis is that Metz theorized that the language of cinema, derived from the “processes of cinema”, that is, the way the camera captures the image (movement, angle, and lighting) and the order and duration of shots, is so powerful that it can create its own narrative.

2.2.3.3 Vsevolod Pudovkin

Vsevolod Pudovkin became a student of film when the Russian government started increasing funding after realising the potential of film as a propaganda tool. Pudovkin's theories on editing have become the foundation of modern film editing. The way stories are broken down into sequences, sequences in scenes, and scenes into shots is an

expression unique to film. (Pudovkin 1958). "The foundation of film art is editing" (Pudovkin 1958:23).

Pudovkin theorised that editing is used as the "psychological guidance" of the spectator. He stated the five main techniques in this regard were: Contrast, Parallelism, Symbolism, Simultaneity and Leit-motif [short, repeating musical phrase]. (Pudovkin 1958:75-78) These techniques are prevalent across all modern-day Hollywood films. What is particularly significant to this thesis is that Pudovkin was a student of Lev Kuleshov. Pudovkin's editing theories were largely developed from the work of Kuleshov.

2.2.4 The "Kuleshov Effect"

Kuleshov was one of the first film theorists. His experimentation with film editing would influence all subsequent work in the area. The "Kuleshov effect" was an experiment that for the first time showed that the way images were cut together directly affected how the audience engaged with the film. The Kuleshov experiment consisted of a close-up shot of a man's expressionless face cut together with three different images.

Expressionless face cut together with a shot of a child in a coffin – Perceived by the audience as sadness.

Expressionless face cut together with a shot of a bowl of soup – Perceived by the audience as hunger.

Expressionless face cut together with a shot of a beautiful lady on a couch – Perceived by the audience as lust. (Kovacs 1976:34)

The "Kuleshov effect" was a simple experiment that placed film firmly as an artistic medium distinct from photography and painting. The ability of film to manipulate its audience was a revelation that has since been developed upon to create the modern language of film as we currently understand it.

2.2.5 Reiterating the Context and The Gap

Central to this thesis, and by the arguments put forward thus far, it is clear that editing can enhance the reality of a scene or distort the reality of a scene. Editing can extract

meaning from a scene and can also impose meaning upon a scene. The core issue concerning cinematic realism is translating the living scene into a sequence of rectangular images that is true to its lived reality.

“Artists with differing world-views each perceive the reality surrounding them differently; they see events differently, discuss them differently, show them, imagine them, and join them one to another differently. Thus, film montage, as the entire work of filmmaking, is inextricably linked to the artist's world-view and his ideological purpose.” (Levaco 1974:191)

The above quote from Kuleshov's essay, *The Principles of Montage*, suggests the processes of traditional filming i.e. shot selections and the way the shots are edited together to create meaning, are directly influenced by the artist's perception of reality. This then also suggests that the reality depicted may not be accurate.

This thesis is a comparative study of realism depicted in a 360-degree video documentary versus that of a conventional 16by9 video documentary, and as per the arguments put forward thus far, it is logical that some of the main comparative considerations should be *mise-en-scène* and editing. These are also crucial concepts in Film Theory. *Mise-en-scène* refers to all of the visual elements within a scene that contribute to its meaning while editing refers to the way individual shots are put together in a sequence to convey meaning. Film Theory is essentially about understanding the art and language of film and how it conveys meaning.

To reiterate, the 360-degree video camera captures video with a field of view of 360 degrees. This is achieved by using multiple lenses that capture video simultaneously and software that stitches the various angles together to create a 360-degree video. The filmmaker makes a decision as to where to place the camera and then the entire scene is captured in one long shot.

The maximum field of view a conventional single-lens video camera can capture is 180 degrees. To achieve this the conventional camera would have to be fitted with a special fisheye lens. The images from this super wide lens are usually distorted when played back on a rectangular screen. Hence a conventional camera usually captures images with a much smaller field of view. These range from the extreme close-up to the extreme wide shot. In order to recreate the scene for conventional cinema, the

filmmaker must decide what shots to take and how to edit them together to represent the reality of the scene. This sequence of shots is then presented to the viewer on a flat rectangular screen.

360-degree video is not confined to being viewed on a conventional flat screen. 360 degree-video is often and best viewed on a virtual reality headset. The viewer is immersed in the scene as if present during that time. The viewer can choose which parts of the image to focus on, whether in front or back, to each side of, and below and above the camera.

While both the traditional camera and 360-degree camera capture *mise-en-scène* and use editing techniques, it would seem that the 360-degree camera is weighted towards *mise-en-scène*. In contrast, the conventional camera relies more heavily on editing techniques. Therefore, it is reasonable to conclude that these cameras can create meaning differently.

While there is overwhelming literature on Film Theory related to conventional film production, extensive research has revealed that there exists a gap in the study of 360-degree video in terms of Film Theory and, more especially, in terms of cinematic realism. Academic studies of the deeper philosophical notions of realism with regard to 360-degree video production have only begun recently. The literature highlights a lack of a direct comparison of the 16by9 video and 360-degree video mediums/formats in terms of cinematic realism. In other words, there lacks a direct comparison between these two video formats with regard to their depiction of cinematic reality.

It is essential to review the important technological advancements in the history of cinema to understand where this thesis places the 360-degree video technology in this context.

Early cinema was confined to the studio. Tom Gunning called the cinema of that time the “cinema of attractions”.

“Viewed from this perspective, early cinema did not simply seek to neutrally record previously existing acts or events. Rather, even the seemingly stylistically neutral film consisting of a single shot without camera tricks involved a cinematic gesture of presenting for view, of displaying” (1999:73).

The next advancement came with the Lumiere Brothers' Cinématographe, a film camera that could shoot out on location (Thompson and Bordwell 2019:8-9). This afforded filmmakers the freedom to shoot outside of the confines of a studio.

Then came the introduction of editing and the montage style of filmmaking: "more specific strategies of editing, involving temporal, spatial, and graphic tensions" (Thompson and Bordwell 2019:114). "These differences, or 'intervals,' would be the basis of the film's effect on the audience" (Thompson and Bordwell 2019:113). This technology allowed for greater creativity and the opportunity to manipulate images.

The next massive technological leap was the ability to have synchronised sound (Thompson and Bordwell 2019:172).

The ability to make colour films added a new level of realism to filmmaking: "Today we regard colour as a realistic element in films, but in the 1930s and 1940s, it was often associated with fantasy and spectacle" (Thompson and Bordwell 2019:197).

The recent dominance of digital technologies has inevitably led to the massive decline of photographic film (Thompson and Bordwell 2019:715). Digital cinema has created new opportunities in filmmaking and viewing. It is now common to watch a movie shot in 8K [8000 megapixels] on our 75-inch ultra-high-definition television from the comfort of our homes.

This research places the 360-degree video camera as the latest evolution in digital film production and investigates it in terms of filmic realism.

2.2.6 360-degree Video, Virtual Reality, and Augmented Reality

Van Damme *et al.* (2019) point out that virtual reality [VR] and 360-degree video are often used interchangeably. When any news content is viewed using a head-mounted display, it is often referred to as immersive journalism. Van Damme *et al.* provide a distinction, stating that 360-degree video places the viewer at one point in a recorded scene with the ability to look in every direction, while virtual reality [VR] allows the viewer to navigate in a virtual computer-generated world. Virtual reality and 360-degree video are two different mediums (Van Damme *et al.* 2019:2055).

While the researcher accepts this distinction and believes it to be accurate, for the purposes of this study, the terms are used interchangeably, as they often are; even in some of the forthcoming literature to be examined in this chapter. Also, the participants in this study often referred to the 360-degree video as VR video. This can be attributed to their watching the 360-degree video on VR headsets. Therefore, maintaining and explaining this distinction for this thesis is tedious and often unnecessary. The distinction is clarified and made when necessary.

This thesis focuses strictly on 360-degree video captured with a 360-degree video camera. Virtual reality is explored when the concepts are transferrable. The other related technology, augmented reality (AR), has no bearing on this thesis and is ignored. 360-degree video, in this thesis, is placed as a new medium/format of cinema and television.

The research question underlying this thesis is whether the cinematic theories of documentary realism are transferable from the "arbitrary rectangle" (film and television) to the immersive sphere (360-degree video).

2.2.7 Background to the 360-degree Image

Hamus-Vallee (2018:244) delved into the history of 360-degree images, tracing its roots back to the end of the eighteenth century when the first exhibition of 360-degree images took place in London. This was an exhibition called *Panorama* by Robert Barker. Spectators could walk around circular platforms and be immersed in huge 360-degree paintings.

In 1897 Raoul Grimoin-Sanson patented the Cinéorama. The idea was that the 360-degree movie would be filmed by ten cameras and then be projected onto a circular screen by ten synchronised projectors (Hamus-Vallee 2018:224). There is no evidence that this feat was accomplished. Cinéorama failed because the technology of the time was lacking. According to Hamus-Vallee, the idea of the Cinéorama was used much later, in 1955, by Disneyland as a park attraction called *Circle Vision 360*.

What Hamus-Vallee stresses as important is that the concept of 360-degree imaging has always been anchored in the documentation of reality. Robert Barker painted landscapes and battlefields, while Raoul Grimoin-Sanson tried to capture the

experience of flight in a hot air balloon. This idea is reinforced by the fact that, currently, 360-degree video has been predominantly used in documentary, travel, and destination videos.

Hamus-Vallee then goes on to link his argument back to André Bazin's concept of total cinema. The idea that the progress of cinema will ultimately lead to the complete representation of reality as a reconstruction, the "perfect state", where "characters free themselves from the screen" (Hamus-Vallee 2018:225). Hamus-Vallee's study on the impact of 360-degree video on the documentary genre reveals that it "updates an old genre by bringing it another way of looking at the reality that surrounds us" (Hamus-Vallee 2018:235). Thus, the study of Hamus-Vallee validates this thesis's investigation of 360-degree video within the context of the traditional theories of documentary realism.

2.2.8 Immersive Journalism

One of the first uses of the panoramic image in modern-day broadcast journalism occurred shortly after the death of Princess Diana. An American-based news channel, Cable News Network (CNN), used still pictures of the accident scene to create a 360-degree view of the accident scene. This picture was used as a ten-minute overlay as journalists recalled the sequence of events (Tickle and Keshvani 2000). Tickle and Keshvani describe the technology as exciting, simple to use, and one that empowers journalists to recreate a variety of news events.

In 2010 a comprehensive study into the implications of immersive journalism was conducted by De la Peña *et al.* Subjects were immersed into the computer-generated virtual reality world of Guantanamo Bay. Via virtual reality headsets, they experienced the simulation of being interrogated. This study concluded that "immersive journalism offers a profoundly different way to experience the news, and therefore ultimately to understand it in a way otherwise impossible, without really being there" (De la Peña *et al.* 2010).

2.2.8.1 Reality Equals Truth

In 2014, an important study of significant relevance to the thesis was undertaken. Sirén (2014) interviewed 19 Finnish journalists and editors of various news organisations to

investigate the use of amateur visuals in Finnish newsrooms. The study showed that despite the considerable risk of amateur visuals being false or manipulated, newsrooms could not ignore this crucial first-hand testimony. The responsibility for its truthfulness or the reality depicted therein was diverted via disclaimers or by organisational strategy (Sirén 2014:110).

Sirén's study is important to this thesis because it clearly shows an evolving newsroom with new challenges, where the modern journalist bears the burden to prove the authenticity of visuals to an increasingly demanding audience. "Authenticity, truthfulness, and the authoritative position of journalism" (Sirén 2014:108) is sacrosanct. A hypothesis that this thesis tests is that reality is closely related to truth. If 360-degree video is a more accurate representation of reality, then it may be seen as more truthful. It is also much harder to manipulate 360-degree video footage. While Sirén laments the decrease in journalistic authority, the study highlights the need for innovation in the modern newsroom.

2.2.8.2 360-degree Video Storytelling

Gannett Digital was one of the first companies to test immersive journalism in mass media, making the Des Moines Register one of the first newspapers to launch an interactive virtual reality experience to accompany a series of newspaper articles. The project was about the challenges four generations of the same family faced while operating a farm.

Brustein (2014), in his report, stated that the virtual reality experience was lacking because it did not have a narrative component. The experience was simply a virtual visit to the farm. Another criticism was that the subject matter, in this case, a farm where there was not much activity, was not suitable for a virtual reality experience. Significant to this thesis is that Brustein clearly states that not all stories are suitable for virtual reality storytelling (Brustein 2014).

2.2.8.3 Hyper-Realism

In 2015 the award-winning 360-degree documentary, *Clouds over Sidra*, was produced by filmmaker Chis Milk in collaboration with Samsung and the United Nations. This was the first virtual reality short film made for the United Nations. This

approximately eight minutes long 360-degree documentary about a 12-year-old girl in a Syrian refugee camp became the subject of study at Stanford University.

Kool analysed the documentary and warned that the 360-degree documentary might prove to be too real. “With virtual reality, you’re essentially hacking the visual-audio system of your brain and feeding it a set of stimuli that’s close enough to the stimuli it expects that it sees it as truth” (Chocano 2014, cited in Kool 2016:5). He elaborates that the sense of realism created by the technology may trick the viewer into forgetting that the story is still a construct of the filmmaker.

He further states that the medium is so powerful that one must constantly remind oneself that it is still just a representation of reality that needs to be viewed critically (Kool 2016). He ends by stating that when one puts on a virtual reality headset to experience a story like *Clouds over Sidra* it should be understood as a choice to be transported to someone else’s reality.

Although there are fewer intrusive elements like camera angles and editing, it is still a representation of the lived reality (Kool 2016:9). This is a core concept of this thesis.

2.2.8.4 Exploring in 360-degrees

Jones (2017) conducted one of the first studies into immersive journalism content. This focus group study of twelve 360-degree video documentaries produced in 2015 investigated the impact of immersive storytelling on 18 to 24 year olds. This age group was targeted as they were considered the “future consumers of the medium” (Jones 2017:172). Jones suggests that immersive journalism provides “objectivity through experience” (2017:174).

A key point that emerged from the focus group discussions was that 360-degree video technology had removed the barrier created by the screen in traditional video. Jones’s study contributed two key concepts to this thesis. These are:

1. A comfortable length of a 360-degree video documentary is around 10 minutes.
2. A narrative-led 360-video documentary works better than a reporter-led one.

Another relevant point was that focus group participants were worried about missing out. Unlike traditional video documentaries that guide the viewer's attention, the 360-degree video documentary allows the viewer the freedom to look around.

Jones' study was not a comparative study but a content analysis of existing 360-degree videos. This thesis is a comparative study that can provide significant insight into some of the questions raised by Jones' study and further the debate by a direct comparison of the two mediums. This thesis also explores Jones's concluding statement that 360-degree video is not excluded from the ethical considerations of framing via the narrative and the selection of images and sound bites (Jones 2017:182).

2.2.8.5 Empathy and Emotion

A physiological study by Sundar, Kang, and Oprean (2017) on virtual reality showed that participants considered 360-degree video more credible due to the perceived reality created by the experience. This was a comparative study of newspaper articles and 360-degree videos with the same journalistic content.

Participants had more empathy and trust in the stories the 360-degree video medium told than those described in newspaper articles with photographs. The research also found that the story's emotional intensity also greatly impacted audience reception. This is a crucial idea that influenced the subject matter of the videos examined in this thesis.

Although this thesis primarily compares 360-degree video and traditional video through the lens of Film Theory, Sundar, Kang, and Oprean's study (2017) highlights the importance of considering user experience in the different mediums.

2.2.8.6 360-degree Perception

Donghee (2018) used the Modified Expectation Confirmation Theory framework to understand how users experienced virtual reality (VR) news. This large study with 250 participants postulates that the user experience of immersion is not linked to any technological device but is determined by the user's cognitive processes. "Users actively create their own VR based on their understanding of the story, their personal

traits, and the nature of the medium” (Donghee 2018:2816). As the user experience is based on cognition and perception, the Theory of Social Construction of Reality weighs heavily here.

Although this thesis is a comparative study of two different video formats i.e. 360-degree video versus conventional video, Donghee’s study is still relevant. According to Donghee’s analysis, hypothesising that just the technology of 360-degree video and virtual reality creates a greater sense of realism for the viewer would be wrong. Reality is a cognitive process and not created by technology. Donghee thus cautions against the hypothesis that 360-degree video is more real by the very nature of its technology.

Donghee’s study also highlights the complexities of conducting a comparative study of the two different media formats in this thesis through the lens of audience theories. According to Donghee (2018:2814), “..immersion is not defined by the media; rather it is defined by users’ traits, willingness, and context”. Important to this thesis is that Donghee suggests that audience engagement is not solely determined by the inherent qualities of the media itself. This thesis is fundamentally a study of two media formats. Donghee’s statement to some extent disconnects the user experience from the media.

Audience theories are frameworks mainly used to understand audience responses, interpretation, and engagement with specific media content. While audience theories play a significant role, they may not be well-suited to this thesis’s direct comparison of the two different media formats, namely 360-degree video and 16by9 video. This is because, for this study, they may add an unnecessary level of complexity to the comparison. As a result, this indirectly validates this thesis’s comparative study of 360-degree video versus conventional video primarily through the lens of Film Theory, particularly traditional theories of cinematic realism.

2.2.8.7 A Perfect Illusion

Nash (2018), in a paper that explores virtual reality documentaries, also links her argument back to Bazin’s idea of total cinema. “A perfect illusion of the outside world in sound, colour and relief” (Bazin 1967:20 cited in Nash 2018:98). Nash suggests that a sense of presence, empathy, and removal of the screen as a barrier enhance the illusion of reality. Nash further indicates that as a medium, virtual reality may have more in common with theatre than the history of film practice (Nash 2018:99). This

may be true. Still, as the literature shows, most early film theorists theorised film from the tenets of theatre.

On August 2018, Journalism 360 showcased eleven virtual reality documentaries at the VR World exhibition in New York City. This exhibition which contained fifty experiences was the largest of its kind in North America. The mission of Journalism 360 is to promote the understanding and production of immersive journalism. Tommy Goodkin, Head of Content at VR World, described immersive journalism as “disrupting industry norms” (VR World NYC 2018).

The “hype and hope” around immersive non-fiction storytelling was investigated by Rose (2018). Her article claims that VR has come to dominate the non-fiction storytelling space. The “presence” created by the VR experience is what makes it ideal for immersive journalism and the documentary. The article also revisits Andre Bazin’s work on early cinema and references his ideas on “the myth of total cinema”. As Bazin states, the technology of cinema was driven by the need to create “a faithful copy of nature” and a “complete illusion of life” (Rose 2018:137). Rose goes on to describe VR as an “empathy machine” and quotes Milk from a TED talk in 2017,

“It’s a machine, but inside of it, it feels like real life. It feels like truth. And you feel present with the world you are inside, and you feel present with the people that you are inside of it with. When you are sitting there in...[Sidra’s] room watching her, you are not watching it through a television screen, you are not watching it through a window, you are sitting there with her” (Milk 2017 cited in Rose 2018:141).

Milk was referring to his 2015 360-degree documentary, *Clouds over Sidra*. Rose also notes that film critic, Roger Eberts also described cinema as “a machine that generates empathy” (Rose 2018:142).

Rose claims that VR has the potential to reconfigure documentary ontology. This reinforces the need to revisit old ideas in the context of new technologies. The filmmaker, subject, and audience relationship must now consider the platform as the fourth influencing factor (Rose 2018:146). Rose calls for more critical research on VR and developing frameworks to guide VR storytelling practice (Rose 2018:147). This thesis is based on the hypothesis that 360-degree video modifies the ontology of the

documentary and explores it within the framework of traditional theories of realism to guide practice.

2.2.8.8 360-degree Agency

The role of the filmmaker, subject, audience, and technology was examined by Mabrook and Singer (2019). They explored the questions raised by immersive journalism [IM] and VR when approached through the theories of Actor-Network Theory, Normative Theory, and Sociology of News. They argue that the domination of the internet means that journalists are no longer the gatekeepers of news. Mabrook and Singer see VR as the next significant evolution in the internet age that will further remove journalists from their power over the creation and distribution of news. While news stories are told in a narrative style with a clear “beginning, middle, and end”, VR offers the user the experience of “storyliving” [sic]. Mabrook and Singer argue that while it is the journalist's responsibility to craft traditional news stories that are truthful, objective, and as close to the reality of the situations as possible, the subjective nature of the VR experience allows users to create their own realities. The “presence” and “empathy” created by VR further obscures the user's objectiveness to the story (Mabrook and Singer 2019:6). A traditional news story as constructed by the “truth tellers” [journalists] may be more accurate than a VR experience which offers the illusion of reality. Mabrook and Singer raise the question that the lack of objectivity created by “presence” and “empathy” could lead to immersive journalism being deceptive and manipulative rather than impactful and credible, as other research suggests.

This is intriguing for this thesis when one considers that some of the early theorists of cinematic realism also thought that montage could be manipulative and deceptive. Bazin, for instance, was vehemently opposed to the montage when it was used to manipulate the audience's perception of a scene. Mabrook and Singer's study (2019) also strengthens the argument for the need for this study because, according to them, VR only offers the “illusion of reality”, and traditional news can be more accurate.

2.2.8.9 360-degree Comparisons

An important empirical, qualitative, and comparative study of the 360-degree viewing experience was conducted in Poland in 2019. A convenient sample was used to

compare the viewing experience of a 360-degree video documentary versus an episode of a 360-degree web series. The British Broadcasting Corporation (BBC) produced the documentary, and the Polish web series was available on a Polish video-on-demand website. There was no connection between the BBC documentary and web series from Poland; the videos were selected because of their quality, genre content, and open public access. The study was a comparison across video genres. Therefore, two popular, easily accessible 360-videos from these genres were chosen.

The 360-degree videos were watched on a computer. The study concluded that “360-degree format enhanced viewer experience more strongly for the documentary than for the web series” (Świerczyńska-Kaczor *et al.* 2019). Interestingly, although no traditional video was used in this study, respondents were asked to use traditional video as a baseline. For example, one of their questions to the participants was: “To what extent does the viewer experience differ from viewing the film as a 360-degree video from what the viewer would experience if it were in a traditional film format?” (Świerczyńska-Kaczor *et al.* 2019:110). Świerczyńska-Kaczor *et al.* acknowledge not having a traditional video for comparison as a limit in their study. They go on to recommend a direct comparison for future research.

“We can also evaluate the enhancement of viewer experience by 360-degree video features turning to an experiment based on the comparison of a film with the same plot produced in two different formats – as the traditional and 360-degree format. However, this method would be more costly compared to our study” (Świerczyńska-Kaczor *et al.* 2019:119).

This thesis does precisely that. To reiterate, this is a study of a 360-degree video documentary versus a traditional documentary. As discussed in detail in the next chapter, it is also “the same plot produced in two different formats”. Also significant is that Świerczyńska-Kaczor’s *et al.* study (2019) reinforces the idea that the 360-degree video format is more suitable for documentary filmmaking.

Van Damme *et al.* (2019) undertook a comprehensive audience study on the effect of immersion using an existing 360-degree video of a Syrian oil worker produced by the Belgian public broadcaster. This was a multifaceted study. It investigated the impact various levels of immersion had on the audience in relation to presence, enjoyment,

distant suffering, and subject involvement. Levels of immersion were compared by having the same video of the oil worker being viewed as a flat video [360-degree video flattened – stretched], a 360-degree VR video on a computer [navigable via the mouse], on Google cardboard VR [uses a cell phone as a VR display], and on a dedicated head-mounted VR device [Oculus VR headset].

The Uses and Gratifications Theory was used to investigate enjoyment, and the results showed that participants did find the immersive version more enjoyable than watching the flattened version. However, Van Damme *et al.* (2019) did acknowledge that the video's subject matter was not appropriate to test enjoyment. The Media Richness Theory was used to test subject involvement, and the study found no effect of immersion on subject involvement. Participants did, however, feel a greater sense of presence when viewing the immersive 360-degree video. There was no effect of immersion on distance suffering. As expected, the head-mounted displays created a greater sense of immersion than the computer screens. The flattened video was considered the least immersive.

Van Damme *et al.* (2019) used random sampling, and to achieve internal validity, the participants had to answer a questionnaire on “socio-demographics, level of news interest, level of technology affinity, experience with VR devices, and viewpoints on differences between societal groups”. External validity was supported by the fact that the same video was used in the different viewing conditions. For this thesis, internal validity was upheld by constituting expert focus groups and external validity by comparing videos with the same content in the different formats.

Van Damme *et al.* (2019) notes that their study is not in line with other studies that suggest that VR increases the level of engagement with the story and empathy of the viewer. They argue that the audience's feelings towards the story are influenced more by the subject matter than the technology used. “Empathy, sympathy, and emotion scored high in all conditions, which may indicate that the story did succeed in moving the participants, no matter what device was used” (Van Damme *et al.* 2019:2070). This is significant for this thesis because it can support the idea of approaching the investigation through the lens of Film Theory.

Van Damme *et al.* (2019) discovered that the participants were more influenced by the extra information presented by immersion rather than the sense of presence. “Whereas participants in the video conditions referred to the whole story, participants in a more immersive condition expressed being moved by specific aspects of the scenery, such as the sound of fire or the deserted setting” (Van Damme *et al.* 2019:2070). This is an important finding for this thesis because, as André Bazin so eloquently stated, “Drama on the screen can exist without actors. A banging door, a leaf in the wind, waves beating on the shore can heighten the dramatic effect” (Bazin, 2004:102). Therefore, the study of reality in terms of Film Theory is warranted for this thesis.

2.2.8.10 Place and Presence

Another study that seems to endorse the study of VR in terms of Film Theory was conducted by Kukkakorpi and Pantti in 2020. They argue that the sense of place is more important in VR than the sense of presence. The viewer in VR must first establish a sense of place before the cognitive sense of presence is triggered. They reason that place is crucial to the interpretation of the narrative. In traditional video, a sense of place is created by video editing. In VR, the placement of the camera creates a sense of place. These choices influence the viewer's perception of reality (Kukkakorpi and Pantti 2020:787).

Kukkakorpi and Pantti (2020) studied eight 360-degree videos produced by the New York Times. Their considerations included camera angles, camera distance, video editing, and mise-en-scène. They found that while traditional storytelling allows a “single perspective”, VR “has the ability to accommodate opposing perspectives in a single story” (Kukkakorpi and Pantti 2020:792). Like Bazin, they also point out how the details in a scene can enhance the realism, “a street sign, which is still intact on a wall in the city of Fallujah, functions as a reminder of what the city was before it became a battlefield” and “bullet holes in the journalists’ headquarters in *We Who Remain* tells about a violent attack on the local journalists” (Kukkakorpi and Pantti 2020:795).

Kukkakorpi and Pantti (2020) maintain that VR allows the user to explore the environment to ascertain whether or not there is conflict between the narrative and the reality of the situation. This is not possible with traditional video, where the sense of

space that supports the narrative is created by careful video editing (Kukkakorpi and Pantti 2020:799). Their findings can be seen to support this thesis's idea of revisiting John Grierson's *First Principles* (1998). The long 360-degree panoramic shot of the place, the details within the space, and the characters in their natural environments offer an opportunity for interpretation that may not be available in a traditionally shot and edited story.

2.2.8.11 Mediated Reality

Orange (2020) provides a profound insight with her analysis of the evolution of the documentary in her article titled, *Documentary Then and Now*. At different points in her article, she suggests that with traditional documentaries, the burden of realism and truth lies with the filmmaker. In contrast, with VR documentaries, the audience must share this responsibility. VR offers the audience the unique opportunity to evaluate the narrative. Realism is mediated in VR. This is significant because it advocates that the documentary's medium [360-degree or traditional 16by9] significantly impacts the audience's perceived reality and truth of the situation being depicted.

2.2.8.12 Focusing in 360-degrees

Empirical reception studies on VR have explored the effects of immersion on presence, engagement, enjoyment, credibility, and empathy. It is clear that the psychological impact of VR on the viewer is a complex phenomenon.

Barreda-Ángeles, Aleix-Guillaume and Pereda-Baños (2021) found that the viewers' attention in VR is diverted to exploring rather than information processing. They maintain that immersion causes the viewer to explore rather than pay attention to the story. This psychophysiological study that was framed within the Limited Capacity Model for Motivated Mediated Message Processing concluded that the sense of presence and emotional involvement associated with the VR experience negatively impacts the processing of the story information, (Barreda-Ángeles, Aleix-Guillaume and Pereda-Baños 2021).

The researcher argues that in audio-visual storytelling, the visuals are as important as the narration. As the adage states, "a picture paints a thousand words". The researcher in accordance with the literature reviewed, attributes the split in attention

to the fact that the viewer is trying to establish his own reality rather than go by the narration. The viewer is afforded the opportunity to create their own narrative. This is supported by the idea of a mediated reality (Orange 2020).

Barreda-Ángeles *et al.* (2021:168) also state that understanding the cognitive processes of the viewer is important because “the narrative conventions and audio-visual grammar” of VR have not been developed as yet. This thesis aims to contribute to developing the visual grammar of VR by investigating and understanding VR primarily through the lens of Film Theory. The idea that the viewer instinctively tends to explore the environment in VR is important to the realism debate of this thesis.

Barreda-Ángeles *et al.* (2021:166) suggest that VR will work better for stories in which the environment is significant to the understanding of the story. This seems to corroborate a hypothesis of this thesis that the added details a viewer can see when exploring a 360-degree video could add to the scene's realism. The traditional 16by9 or flat video focuses the viewer's attention, but the 360-degree video allows the viewer to explore the scene. In 360-degree video, a viewer may notice a street sign that is still intact on a battlefield which can add to the meaning and realism of the situation (Kukkakorpi and Pantti 2020). The environment in the videos used for the case study in this thesis can also be considered significant to the understanding of the story.

The concern that immersive video may distract the user from the story was also raised by interviewees in a study of emotional engagement in VR (Goutier *et al.* 2021). The study interviewed established producers of immersive journalism content. While the study found that immersive journalism can arouse emotions and create more empathy for the story, the study raised questions regarding the objectivity of the journalist and the agency of the viewer.

Studies show that immersion leads to presence, presence to emotional arousal and emotional arousal to empathy [depending on the type of story]. While Goutier *et al.* (2021) also considered interactive VR and VR with alternative narratives, this thesis focuses only on 360-degree video. Nonetheless, Goutiers *et al.* findings are still relevant. The study noted that because VR placed the viewer on the scene, the journalist must give due consideration to the emotions that the scene would arouse and how the juxtaposition of scenes would create the desired visual narrative.

“It is about seeking to find the right mix between journalistic research principles, and more artistic and subjective guidelines to make both a good and engaging story” (Goutier *et al.* 2021:1659). This idea can be linked back to Grierson’s “creative treatment of actuality”(1998). The idea that any technique used to engage the audience must still preserve the realism of the lived experience. Goutier *et al.* focused on emotional engagement and highlighted the challenge of “emotion vs objectivity” (2021:1650).

It is evident through the literature that any creative treatment of the raw footage influences the audience’s perception of reality. While producers of immersive journalism try to provide truthful experiences that are verified by the accompanying visuals, the inherent increased subjectivity of the user experience in VR requires extra diligence.

Journalists choose 360 degree-video for immersive journalism rather than interactive VR because they want to maintain some control over the narrative and the user experience (Goutier *et al.* 2021:1658). Journalists working with VR wish to invite the viewer to be on the scene while still being able to guide the narrative. Finding the right balance between journalistic autonomy and user agency is constantly challenging in immersive journalism (Goutier *et al.* 2021).

2.2.8.13 The Embodied and Disembodied Experience

A unique approach to user agency is offered by Kim (2021). He makes a distinction between immersion and the state of presence in VR. Immersion, according to Kim, is achieved via a disembodied experience. The viewer is placed in the scene as a distant observer. In contrast, a state of presence is characterised by an embodied experience. The viewer is placed on the scene as a character. The viewer's presence in the scene is acknowledged, for example, by eye contact or by being spoken to. The embodied experience dictates that the viewer has the point of view of a character within the scene.

Kim uses the Suture Theory of film to understand the viewer's experience in the embodied and disembodied experience. Kim argues through his idea of “synthetic vision” that the viewer is always aware of a “simulated world” and is liable to feel “alienated” in VR. Kim further posits that the inherent restriction of spherical video

[360-degree video] to place the viewer at only one point in the scene contradicts the “living camera” model of the seminal theorists. The VR experience makes the viewer simultaneously feel present and not present at the scene. This causes the viewer to feel constantly aware of a simulated experience rather than create the illusion of realism. Kim argues that this awareness of a “synthetic vision” only further distances the viewer from the story. Kim also boldly states,

“the experience of immersion presupposes a transport from phenomenal reality to another virtual world, one that positions them within the field of vision whose change remains out of control while the body and gaze are controllable. This also demonstrates why the often raised allusion of VR to the Bazinian ideal of total cinema is misleading, an allusion that tends to isolate and overemphasize the iconic illusionism of its imaging” (Kim 2021:328).

While this idea goes directly against much of the literature, it offers an interesting alternative perspective on the subject. Suture film theory is about making the viewer forget that they are experiencing the narrative through a camera. Kim’s argument is that the restricted movement offered by spherical video [360-degree video] and the embodied [an observer within the scene], disembodied [a distant observer] perspective of the viewer in different types of VR documentaries makes the viewer acutely aware that they are viewing the scene from a camera’s viewpoint.

Previous studies show that cognitive processes and Reception Theory also effect viewer experience. The researcher therefore argues against Kim with the notion that a viewer comfortable and accustomed to VR may forego the awareness of “synthesised vision” in the same way that a viewer watching a flat-screen eventually gets drawn into the narrative and becomes oblivious of the screen. Kim approaches VR through specific Film Theory and acknowledges that VR is “not a unified construct of a new film totally distinct from the traditional film” (Kim 2021:343). This-thesis also investigates VR predominantly through Film Theory and posits it as an evolution in cinema.

2.2.8.14 360-degree Make-Believe

The notion that the viewer’s presence in VR can be attributed to their willingness to succumb to being drawn into a virtual environment is also supported in a paper by

Studt (2021). Studt refers to this and other features of VR documentaries as contra-standard features. Documentaries typically present facts, about real people, in real environments and are meant to inform. Studt argues that the ability of VR to use computer-generated environments and digital characters contradicts the standard features of the genre.

Although this is also true for some traditional documentaries, the distinction is clarified when considering that VR requires a “suspension of disbelief” on the viewer's part. He argues that this willingness to be duped is a feature of the fictional genre. Studt refers to a phenomenon he terms “perceptual illusion”. When watching 360-degree video in VR, viewers cannot interact with the virtual environment as they would in the real world. This feeling of being there while knowing that you are, in fact, not there means that you buy into an illusion of reality.

When watching traditional cinema, the viewer can always look away from the screen to confirm his real environment. This is not the case in VR; the viewer will have to remove the headset. Studt (2021) uses a football scene from the 360-degree documentary *Clouds over Sidra* to explain that when the football passes by and behind the viewer, the viewer is aware that they can follow the movement of the ball by moving their body as if they were there. He suggests this “predictive” nature of VR, one that does not exist when watching traditional cinema, contributes to the feeling of presence. The viewer's “perceptual illusion” contributes more to the state of presence in VR than the cognitive processes that relate to emotion and empathy (Studt 2021:180). He concludes that the viewer's willingness to “make-believe” is what makes VR documentaries more “phenomenologically realistic” than traditional documentaries (Studt 2021:184).

Studt's study raises some key comparative differences between VR and traditional documentaries. The “suspension of belief” required to be present in virtual reality is not a consideration for traditional documentaries. Traditional documentaries create realism through the juxtaposition of shots that support the narrative. “Perceptual illusion” is due to the viewer reacting to the VR environment as if they were there. As Studt alludes, this is due to the “illusion of space”. In traditional documentaries, the perception of space is created by shot selection. For example, a convention in traditional cinema is to start a scene with an establishing shot. Studt's idea of

“prediction” is also important. In VR, the viewer predicts that more information in the scene is revealed if they look around. The researcher believes that this fear of missing out on crucial information is what prompts the user to explore each new scene in VR constantly. In traditional documentaries, the viewer predicts that the filmmaker will show them the crucial information in the scene. This links back to the debate on user agency vs journalistic agency.

2.2.8.15 The Medium is the Message

White (2021), a freelance visual journalist, in his article on immersive documentaries states about photography, “...we commonly look for images that can ‘bring a story to life’ or ‘immerse the viewer’. We want to record the facts yes, but also make images that might facilitate an emotional resonance in the viewer” (White 2021:96). It's apparent that whether the medium is photographic, traditional video or 360-degree video the goal is the same. This is to bring the viewer as close to the story as possible so that the viewer can experience its reality and be emotionally engaged.

White learns from his experience using the 360-degree camera in the field that the 360-degree image cannot be framed. Nothing is excluded in a 360-degree image. He states that while the panoramic image of the 360-degree camera captures the entire scene, a degree of bias still exists. This is because a conscious decision is made about where to place the camera and when to start and end the recording. “A degree of agency is transferred, and the perceived bias of the cropped, selected image of a scene is mitigated, to a degree” (White 2021:97).

White's comparison of the photographic image to the 360-degree image echoes the sentiments of Vázquez-Herrero and Sirkkunen (2022) who conducted a reception study to compare an online article with a 360-degree video report of the same story. They maintain that, whatever the medium, the general journalistic conventions and ambitions remain.

Vázquez-Herrero and Sirkkunen (2022:6-8) emphasise this point by exposing how the textual narrative in the online article attempts to create a sense of presence, realism and engagement. They show that the online article can elicit emotion, and the reader can feel “immersed” in the story. While each medium has the same objective, the debate is about how effective the media technology is in achieving that objective. As

hypothesised in their study, they found that the 360-degree video achieved these goals better than the online article. They noted, however, that the participants found the online article more informative. This was attributed to the fact that the online article, due to its nature, was able to display more information and data. Their study also notes a recurring point in the literature, that 360-degree video is best suited to stories where the environment is important to the story. In their case, the Fukushima nuclear disaster of 2011.

It seems appropriate to conclude this section with this quotation from Marshall McLuhan (1967 cited in White 2021:104),

“All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments. All media are extensions of some human faculty – psychic or physical.”

2.3 Film Theory

Much of this chapter has focused on Film Theory. This chapter first examined the work of the classical film theorists and then examined audience responses to immersive journalism content. Film theory is a multidisciplinary framework that seeks to understand and interpret complex representations in cinema, the craft of the production processes in cinema and the way audiences respond to film. The three classical concepts of Film Theory have been examined in detail, namely: realism, formalism, and semiotics. Contemporary Film Theory, regarding VR and 360-degree video, has explored empathy, emotion, viewer agency, place and presence, as well as the embodied and disembodied experience.

The theorising of film is unique because it exists in an ontological form; it's created by humans and subjectively experienced by humans. Additionally, it's constantly evolving technologically and adapting its methods (Colman 2014:91). Colman (2014:100) states that Film Theory is in a constant state of change, linked to the technology and culture of the era in which it is produced. Colman further posits that the potential of

new theories is slow to be realised. Citing Francesco Casetti, Colman (2014:91) suggests that in addition to the three pillars of production, representation, and reception in Film Theory, the spectator does not receive a film but “lives it”. Significantly, Colman finds that in examining the history of film theory, there is a recurring theme, an “obsession”, around the question of reality. Reality in film is viewed as “a ‘problem’ or ‘puzzle’ to be solved, understood, explicated” (Colman 2014:96).

Elsaesser and Hagener (2015:196) postulate that the terms “virtual reality” and “digital cinema” are in themselves revealing. “Cinema” and “reality” are old terms and “digital” and “virtual” are new. They suggest that this bringing together of old and new positions cinema as either a hybrid medium or the apparent contradictions “point to a common denominator, toward which they gesture but which they cannot (yet) name” (Elsaesser and Hagener 2015:196). This suggests that contemporary Film Theory is complex and as Colman (2014:100) suggests it takes a while, even “centuries” before “potentials” are realised. Elsaesser and Hagener (2015:199) also highlight a “dilemma” concerning “reality” in VR and traditional cinematic realism. While traditional cinematic realism was founded on indexical theory [representation of reality], virtual reality relies more on a coherent or contextual “theory of truth” [mediated reality].

This combination of new and old resulting in a unified theory is significant to this thesis as this study examines 360-degree video [new] in terms of classic film theory [old] to investigate its depiction of reality. Moreover, this chapter has effectively demonstrated how contemporary theories specifically associated with VR such as place and presence were also theorised in the context of traditional cinematic realism. This supports the idea of unification of theories.

The ideas presented by Colman (2014), Elsaesser, and Hagener (2015), as examined above, highlight the need to further explore traditional cinematic theories of realism in relation to Virtual Reality [VR]. This thesis aims to investigate 360-degree video [VR] and 16by9 video [digital cinema] in terms of cinematic realism, as defined by classical realism theorists. The objective is to make a direct comparison to determine which medium [360-degree video or 16by9 video] provides a more accurate depiction of reality, based on the perception of a subjective audience. The findings of this study will significantly contribute to an understanding of a possible unified “theory of truth” in VR, specifically 360-degree video.

2.4 Reception theory

This thesis, as in ethnography, is based on active audience studies, recognising that there is a complex and dynamic relationship between media, audiences, and society. Media Reception Theory is an interdisciplinary field that explores how audiences interpret, understand, and make sense of media messages. However, it is important to acknowledge that there exists an inherent limitation to the visual discourse.

“Since the visual discourse translates a three-dimensional world into two-dimensional planes, it cannot, of course, be the referent or concept it signifies. The dog in the film can bark but it cannot bite! Reality exists outside language, but it is constantly mediated by and through language: and what we can know and say has to be produced in and through discourse” (Hall 1980:121).

Reception theory is applied to understand the processes by which people receive and make meaning from media content. It also seeks to understand how experiences and background influence the way people interpret and respond to media. The theory was founded in cultural studies, and it applies to various media, including film, television and new media. Stuart Hall's Reception Theory model suggests that the process of decoding media messages is negotiated. It is an active two-way process involving both the producer and the audience.

Hall (1980) posits that the meaning of a media message is not fixed and is open to multiple interpretations by the audience. Audiences from different backgrounds and with different life experiences receive and interpret media differently. The audience has the agency to accept, modify or reject the intended meaning of the message.

According to Hall (1980), the "dominant or preferred meaning" is when audiences interpret the message as intended by the media producers. The "negotiated version" refers to an audience adopting a position of compromise; that is, they actively engage with the media and negotiate their own meaning within the context provided. The audience may also adopt an "oppositional code" by completely rejecting the intended message (Hall 1980:125-127).

Particularly important to this thesis, which is a focus group study of two media formats, is Hall's statement that,

"A 'raw' historical event cannot, be transmitted by, say, a television newscast. Events can only be signified within the aural-visual forms of the televisual discourse. In the moment when a historical event passes under the sign of discourse, it is subject to all the complex formal 'rules' by which language signifies" (Hall 1980:118).

Hall suggests that the intended message of the media producer is filtered through the processes of television production. This interferes with the audience's understanding and interpretation of the intended message. The television production process includes various elements such as shot composition, shot selection, video editing, framing via narrative, and sound design. Most significant to this thesis is that these are also fundamental concepts in Film Theory.

2.5 Immersive Journalism in South Africa

Cottle and Rai (2008:354) found that 58.7% of television news stories in South Africa were events-driven basic information dissemination reporting. On the other hand, only 2% of news stories offered in-depth behind-the-scenes reporting that offered the viewer the sense of "bearing witness" to the news and providing "first-hand" accounts of human-centered stories.

Although Cottle and Rai's study was conducted a while back and might not reflect the current state of television news in South Africa, it does suggest that a very small proportion of news stories are dedicated to in-depth, immersive reporting that goes beyond basic event coverage. While Cottle and Rai highlight the complexities of news coverage in a multi-populous and diverse society with a "troubled polity", they maintain that news coverage has a crucial bearing on the country's democracy.

Cottle and Rai further state that, "The role of South African television news in enabling and enacting democratic processes, however, remains largely unnoticed and under-theorised" (2008:343). While this thesis does not directly contribute specifically to theorising news coverage in the context of South Africa it does however demonstrate

the value of immersive storytelling in fostering empathy and understanding. This is a cornerstone of nation-building.

VR and 360-degree video offer a new form of immersive storytelling. As the literature examined in this chapter indicates, within a diverse, unequal and fragmented society like South Africa immersive storytelling can be a valuable tool. Jones (2021:39) states that globally, only 21% of newsrooms have adopted VR and 360-degree technologies in their workflows. Jones further suggests that in developing countries like South Africa immersive journalism is almost non-existent due to challenges of technological capabilities and the digital divide (Jones 20021:42).

Mabweazara (2010:1) also states Africa is typically slow to adopt new technology as tools for mainstream journalism and that most of the studies in this area are conducted in the Western world. The researcher laments the fact that in a country like South Africa with so many socio-economic problems and a pressing need for empathy and understanding, immersive journalism in any form is barely practised.

2.6 The Kennedy Road Informal Settlement

This study compares two different video formats, namely 360-degree video and 16by9 video. The case study used for this comparison is two videos of the Kennedy Road Informal Settlement in Kwa-Zulu Natal, one in 360-degree video format and the other in 16by9 video format. Although the videos are not the data set for this study and the focus group interviews form the primary data set of this study, the videos hold significant importance as a key element within this study. These videos form the basis of the discussions around the depiction of reality which is central to this study and forms a consistent thread throughout this thesis.

The subject matter of the Kennedy Road Informal Settlement was chosen for the case study videos because, in addition to fulfilling Grierson's First Principles of the Documentary, they also highlight an important socio-economic problem in South Africa. A staggering 11.7 % of the South African population live in informal settlements (South Africa, Statistics South Africa 2021). The country is struggling to address the growth of these settlements which do not provide dignified living conditions and deprive residents of their basic human rights (Mogano 2014:54). Moreover, Informal

Settlements are often perceived as havens for criminals, leading to calls for them to be relocated away from developed areas (Huchzermeyer 2003:3, cited in Ngcamu 2011:118).

Informal settlements are inherently vulnerable to shack fires, and electrocutions due to illegal electrical connections. The shacks leave their occupants vulnerable to harsh weather conditions (Ngcamu 2011:189). The Kennedy Road Informal Settlement of 14000 residents is formed by shacks built on a hill next to a municipal dump site. It is bordered on one side by a suburban area and a business district on the other (Ngcamu 2011:7).

Ngcamu (2011:115) suggests that journalists and academics amongst others often exploit the settlement for their own benefit. Furthermore, Byrant (2005:52) states he found that most research on Kennedy Road was “detached” from the struggles and experiences of its people.

The researcher aimed to use the videos of the Kennedy Road Informal Settlement as a case study to highlight the plight of the people of this settlement. These videos seek to debunk the misconception that informal settlements are solely a haven for criminals and seek to spotlight the everyday challenges faced by the thousands of men, women and children who live within these settlements. This fulfils a moral and ethical duty that would otherwise not be necessary in this research. The role of these videos and how they fulfilled the requirements of this study are explained in detail in Chapter 3.

2.7 Summary

Although the 360-degree format has predominantly been used by documentary filmmakers and is considered an “update” to the genre (Hamus-Vallee 2018), a comprehensive examination of the literature shows that there has not been any notable investigation into the 360-camera degree format in terms of the traditional realism theories of the documentary genre.

Furthermore, although a direct comparison has been recommended by Świerczyńska-Kaczor et al., there has not been a direct comparison of the traditional 16by9 and 360-degree formats (Świerczyńska-Kaczor et al. 2019:119). The literature also shows that while the seminal realist theorists interrogated cinematic realism in terms of Film

Theory, the 360-degree format has led to significant new debates about presence and emotion. Van Damme et al. (2019) studied empathy and emotion in VR in terms of audience theories and Barreda-Ángeles et al. (2021) conducted a psychophysiological study on presence in VR. This thesis compares the phenomenon of presence, empathy and emotion primarily in the context of Film Theory.

While South Africa is a culturally diverse country grappling with numerous socio-economic challenges, the literature highlights that newsrooms in the region have not yet adopted immersive storytelling techniques as an integral part of their journalistic practice. This research delves into the use of 360-degree video as a potent tool for immersive storytelling and examines its potential impact on shedding light on the plight of the impoverished in the country. This is reflected in the case of the Kennedy Road Informal Settlement videos.

The literature shows that while there was considerable debate about realism in early cinema, contemporary theorists have not followed the same trend. This has left a considerable gap that provides researchers with an excellent opportunity to use the 360-degree format to revisit, revive and revise the traditional realism debates.

This research aims to examine the 360-degree documentary format in the context of the traditional theories of documentary realism and thus contribute to filling the problematic gap identified above.

The objective of this research is to compare two documentaries about the Kennedy Informal Settlement in Durban, Kwa-Zulu Natal [one shot with a traditional camera and the other with a 360-degree camera], to test, primarily through the lens of traditional realism theories, which documentary more accurately depicts reality.

The research questions that this study aims to answer are:

Main research question: Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

To clarify, as examined in the literature, classical film theorists approached reality in distinct ways. Bazin emphasised cinema's ability to faithfully represent the world,

Eisenstein highlighted the role of montage in shaping meaning, Metz argued that cinematic elements like shots, framing, and editing constituted a structured system of communication, similar to language, and Kuleshov's experiment underscored the impact of editing on the perception of reality. These are simplified summaries of how classical film theorists contributed to our understanding of how film engages with and shapes our perception of reality.

A sub-research question was developed to provide clarity, further breakdown, and interrogate the main research question.

Sub-research question one: What are the attributes of the documentary perceived to be the more accurate depiction of reality [from the main research question] that contributes to its realism?

A further sub-research question was developed to investigate the 360-degree camera in the context of the traditional theories of cinematic realism as highlighted in the literature:

Sub-research question two: How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

Chapter 3: Research Methodology

3.1 Introduction

A comprehensive investigation into the literature identified a gap in the study of 360-degree video in the context of Film Theory. The literature identified 360-degree video as a tool for immersive journalism to be a popular area of study. Although the technology of 360-degree video is relatively new, several significant studies of its use in immersive journalism have been conducted. However, the literature showed that there lacked a direct comparison of a 360-degree video documentary versus a traditional 16by9 video documentary in terms of cinematic realism.

Considering that 360-degree videos are often referred to as virtual reality [VR] videos, a comparison of the depiction of reality seems appropriate and necessary. Two independently produced video documentaries were used as a case study for this comparison. One in the 360-degree video format, the other in the traditional 16by9 video format. Both videos were screened to two expert focus groups. Thematic analysis was done on the focus group transcriptions in order to answer the research questions that were informed by the literature.

This chapter will systematically explain this thesis's theoretical and methodological approach and detail its research design.

This chapter begins by introducing the research within the context of cultural studies and providing an overview of the research design. The research questions are restated, and the formulation of the focus group questions [research instrument], informed by the literature, is explained. The case of the Kennedy Road Informal Settlement videos is presented. The recruitment of participants, the rationale behind purposive sampling, and the formation of the focus groups are explained. The theory used in the data collection process is outlined. The screening of the videos during the focus group sessions is described. Furthermore, an overview of the data analysis procedure is provided. The validity and reliability of this study are discussed. Finally, in this chapter, the ethical considerations of this study are addressed.

3.2 The Method in the Context of Culture

Cultural studies is an interdisciplinary approach that examines how media and culture influence each other. Miller (2001:1) states that “Cultural studies is a tendency across disciplines, rather than a discipline itself.”

Relevant to this thesis is that by examining the traditional cinematic theories of film realism through the lens of cultural studies, we can gain a deeper understanding of how audiences perceive representations of reality in film.

The main research question that this thesis aims to answer is:

Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

This question can be broken down into three parts:

1. Which of the two documentaries [16by9 or 360-degree]? This suggests a comparison of video formats.
2. ...is perceived to be a more accurate depiction of reality? This suggests an interpretative and subjective understanding.
3. ...as defined by the classical film theorists? This indicates a modernist objective framework.

The subjective interpretation of modernist theories might appear contradictory. This posed some interesting challenges to the research design of this thesis. Firstly, how can the researcher reliably compare two video formats through the lens of objective modernist film theories via a subjective audience? This chapter attempts to explain this in detail. Secondly, what was the motivation to do so?

The researcher motivates this investigation of modernist theories through postmodern methodologies by the following explanations.

As examined in the literature, the seminal film theories and theorists are still relevant. Seminal film theories are the foundations of how we create, understand, and analyse cinema. The conceptual frameworks established by the seminal film theorists are still used to understand the language of film. For example, Sergei Eisenstein's theory of

montage (Andrew 1976), which emphasises the juxtaposition of shots to create meaning, is still employed today. Traditional film theories form the basis of essential storytelling techniques in cinema. The seminal theorists are still a crucial part of the academic discourse, and the works of André Bazin and Christian Metz, as examined in the literature, are still used extensively to analyse cinema.

The seminal film theorists laid the foundations of film theory during the modern era which was characterised by ideas and innovation. The subsequent postmodern movement challenged the idea of fixed truths and highlighted the multiplicity of representation. As Russo (2022) suggests, modernism and postmodernism are not distinct but related, “Postmodernism, then, if we can distinguish it from modernism at all, is merely a particular enlightenment and modernist reaction to, or normative reflection on, modernity or the experience and lived conditions of modernization” (2022:171). Russo further states that “what we call postmodernism is but one of the most radical strands of enlightenment thought and modernism” (2022:179) and posits that “postmodernists are modernists” (2022:180). The seminal film theories have evolved our understanding of the complex medium of cinema over time, which led postmodernism to recognise the importance of including the perspective of a subjective audience. Postmodernism challenges the notion of an objective representation of reality as prescribed by the traditional film theorists and acknowledges a diversity of interpretations and experiences. Therefore, it highlights the reception of a mediated reality by an active audience.

Thus, for a meaningful comparison of the two video formats [16by9 and 360-degree video] on their depiction of relative reality via the foundations of cinema, the interpretations and subjective experiences of an active audience are necessary.

This study utilises the broader framework of cultural studies to conduct a phenomenological study using postmodern methodology to compare media formats through the lens of a primarily modernist theoretical framework.

“For everything and all that is there said, derives from research which actually reaches up to the things themselves, which orients itself towards their intuitive self-givenness, and which also has that eidetic-phenomenological attitude to

pure consciousness through which alone a fruitful theory of reason becomes possible (Husserl 2001:178).

The researcher understood that for any meaningful comparison of the two video formats [16by9 and 360-degree video], the subjective interpretation of the participants must be accounted for to draw any reasonable conclusions. The objective framework of traditional cinematic theories does not reflect the subjective perceptions that are inherent in human experience.

Therefore, this study aims to approach its main research question from the different perspectives of the media formats' representation of reality and the audience's perception of reality, to gain deeper insights and develop more meaningful explanations on the comparison between the two video formats.

The rest of this chapter further attempts to break down, explain, and justify the methodological choices made in this study.

3.3 An Overview of the Research Design

Figure 4: The methodological framework of this study – adapted from Fig. 4.1 The research 'onion' (Saunders, Lewis, and Thornhill 2012:128). [The background image of an onion is an edited licensed Adobe Stock image]

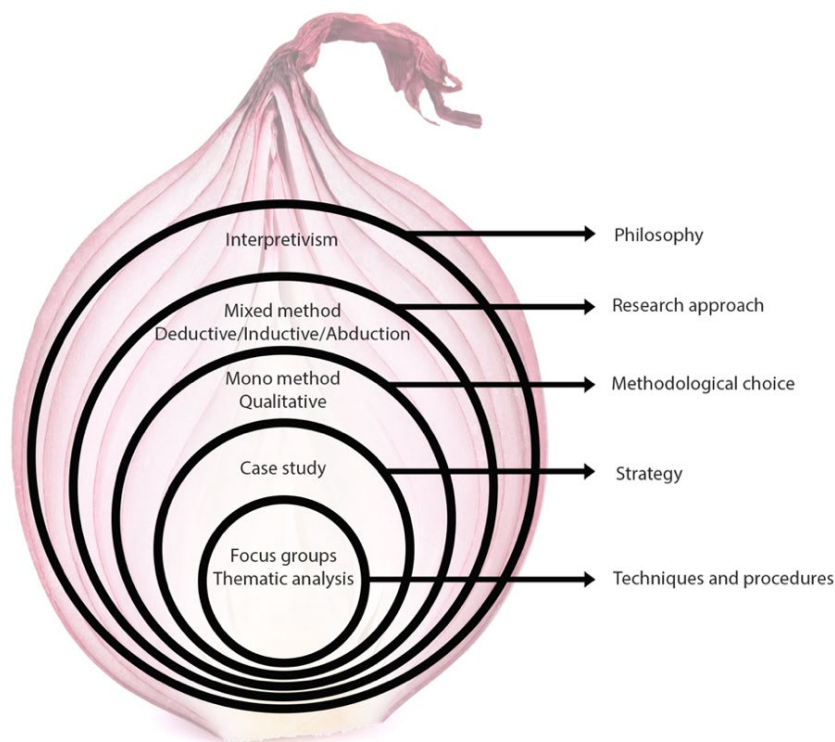


Figure 5 outlines the methodological framework of this study. To reiterate, this qualitative study adopts the interpretivism research philosophy, and the theoretical approach is mixed methods, incorporating deductive, inductive and abductive reasoning. “Instead of moving from theory to data (as in deduction) or data to theory (as in induction), an abductive approach moves back and forth, in effect combining deduction and induction” (Suddaby 2006, cited in Saunders, Lewis, and Thornhill 2012:147). The research strategy was a case study, and the data gathering technique was focus group sessions. The procedure of data analysis was conducted through thematic analysis of the verbatim transcripts of the focus group sessions.

Bryman (2012:36) states that “qualitative research can be construed as a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data”. In line with a typical qualitative approach, the data used for analysis in this study consisted of discussions from two focus group sessions.

Also aligned with this qualitative social science approach is interpretivism. Interpretivism “is predicated upon the view that a strategy is required that respects the differences between people and the objects of the natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action” (Bryman 2012:30). The analysis of the data in this research relied heavily upon the interpretations and subjective meanings derived from the focus group discussions.

Yin (2003:13) defines the case study as “an empirical study that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Conducting such a study allows researchers to gain a comprehensive understanding of the phenomenon, including its complexities and the multiple factors that influence it. This study used focus groups for its empirical investigation into understanding the depiction of reality in a 360-degree video documentary versus a 16by9 video documentary. Specifically, this study used the case of two videos of the Kennedy Road Informal Settlement in Durban, Kwa-Zulu Natal.

This comparative case study used the data from the focus groups and theories from the literature reviewed to guide data collection and analysis. The comprehensive literature reviewed informed the theoretical framework. It provided a good

understanding of the topic and current state of knowledge while also identifying the gaps that were explored by the focus group study.

For this qualitative interpretive case study, the researcher used two ten-minute, independently made documentaries providing insight into the Kennedy Road Informal Settlement in Durban, Kwa-Zulu Natal. One was shot using conventional news-gathering equipment, and the other was shot using a 360-degree camera. They were both produced by the same independent production company; shot concurrently; depicting the exact same subject matter [an in-depth look at life in Kennedy Road Informal Settlement]; using the same script and journalist; and in two different formats [16:9 high-definition video and 5k 360-degree video]. In order not to introduce bias and enhance the credibility of the research, the researcher was not involved in the production of the videos.

Both videos were screened to two expert focus groups. Focus group one consisted of academic experts in the fields of media studies and the arts, while focus group two consisted of journalists from the national television stations based in Kwa-Zulu Natal. The objective of the case study was to compare the two videos with regard to their depiction of reality [as defined by the classical film theorists].

The research questions were informed by the literature reviewed. The literature also guided the formation of the focus group questions, which were engineered to probe and extract data in order to answer the research questions. The focus group sessions were transcribed verbatim and coded according to the themes that emerged from the data. Those findings are presented and discussed in the next chapter.

3.4 Research Instrument

The research strategy dictated the research instrument for this study. Birmingham and Wilkinson (2003:144) state that the research instrument is the “tool you use to obtain your data”. For this research, the tool used to collect the data was the focus group questions. It is important to emphasise that although the videos of the Kennedy Road Informal Settlement play a crucial role in this study, they are not the source of the data for this study. The data for this study are from the two focus group discussions. The role of the videos in this study is discussed in detail on page 74 of this thesis.

The two videos of the Kennedy Road Informal Settlement [16by9 and 360-degree] formed the basis of this case study to answer the main research question. The themes and patterns from the literature allowed the researcher to hypothesise possible themes that may emerge and would need to be interrogated in the focus group discussions. The main research question, the sub-research questions and the focus group questions were based on this hypothesis. The focus group questions needed to be carefully crafted and well-designed so that they could guide the discussions to elicit rich and detailed responses. This ensures that the focus group study effectively answers the main research and sub-research questions to fulfil the aims of this study. To reiterate, the main research question is:

Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

In order to set the scope and focus on interrogating the main research question further, two subsidiary research questions were developed:

Sub-research question one: What are the attributes of the documentary perceived to be the more accurate depiction of reality [from the main research question] that contributes to its realism?

Sub-research question two: How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

It is important to note, at this point, that this thesis heeds the advice of Yin (2003:9) when he states, “Novices may think that the purpose of a literature review is to determine the answers about what is known on a topic; in contrast, experienced investigators review previous research to develop sharper and more insightful questions about the topic.”

In addition to structuring the focus group questions around key themes and subjects, it was crucial to pilot the questions. Before convening the focus group sessions, the videos were screened, and the questions were piloted to experts who were not involved in this study. This addressed possible ambiguity and provided valuable feedback that let the researcher refine the questions. It also allowed the researcher to

structure the questions such that it facilitated a smooth flow of discussions (Wilkinson and Birmingham 2003:52).

3.7.1 Developing the Focus Group Questions

Please note that the research instrument (focus group questions) is attached as Appendix F, and this section refers to that document.

To ensure that this research is rigorous, systematic, and grounded in a well-established body of knowledge, the focus group questions were derived from the literature reviewed as follows:

According to Metz (cited in Baseheart 1979:32), the “processes of cinema” i.e., the order and duration of shots, the camera movement and angles, can create its own narrative. Kukkakorpi and Pantti (2020:798) say that VR enables the user to “determine whether their interpretations of the character and their natural environment conflict”. VR can potentially accentuate any discrepancies between the story or message being conveyed and the surrounding physical context in which it is presented, thereby highlighting any contradictions.

Orange (2020) suggests that the viewer in VR considers both the narrative and environment and establishes their own reality, a “mediated reality”. Taking these ideas into consideration, focus group question one [Appendix F] was formulated.

The four sub-questions in question one were formulated to probe the influence of narrative and visuals on viewers' perception of the depicted reality. The questions inquired about the extent to which each of these factors affects viewers' perception and whether viewers can consider both aspects to form their own judgment.

Bazin (2004:35-36) states that the deep focus long take shot is “more realistic” and maintains the integrity of space and time in a scene. This is an idea also supported by Grierson (1998:97). Bazin also states that the long shot deep focus allows the audience the opportunity to interpret the scene rather than the viewer being led by editing. The long shot also allows the viewer to derive meaning from what is being shown in the scene. Kracauer (1997:301) suggests that editing can highlight the significance of a scene. He states that the truth within a scene can be extracted via

editing and also a dull scene can be transformed through editing. The intrinsic nature of the 360-degree format results in videos that are composed only of long take, deep focus shots. These ideas informed focus group question two [Appendix F].

The three sub-questions within question two were crafted to investigate viewers' preferences between the exploratory shots featured in the 360-degree video and the directed shots present in the 16by9 video. These inquiries aimed to understand why viewers leaned towards one over the other. Additionally, they delved into whether the 360-degree shots enhanced the scene's integrity or introduced a sense of uncertainty. Furthermore, these questions examined whether the edited 16by9 shots distorted viewers' perception of space and time within the video.

Kovacs (1976:34) stated that ever since the “Kuleshov effect” showed that film had the ability to manipulate its audience, it has become an inherent trait of filmmaking. This insight informed the formulation of focus group question three [Appendix F], which was designed to investigate how editing influenced viewers' perception of a scene.

Eisenstein suggests that the filmmaker must interpret the scene and then reconstruct it such that it emphasises the reality within the scene (Andrew 1976:66). Focus group question four [Appendix F] was devised to investigate whether viewers perceived that the camera placements of the 360-degree shot or the sequence of shots in the 16by9 video better conveyed the meaning and story within a scene.

Kim (2021) posits that 360-degree video is contra-realism because the viewer is always aware that they are viewing the world through the lens of a camera [suture film theory]. This idea was tested with focus group question five [Appendix F].

Van Damme et al. (2019) found that participants got extra information from being immersed in a VR scene. Bazin (2004:102) states that simple things like “a banging door” or “a leaf in the wind” can create significance within a scene. This informed the sub-questions that formed focus group question six [Appendix F].

André Bazin in his “Myth of total cinema”, suggested that the evolution of cinema would one day lead to “the perfect illusion of reality”, where characters would free themselves from the screen (Nash 2018) (Hamus-Vallee 2018:225) (Rose 2018:137). Bazin, in

“What is Cinema”, also states that cinema creates a sense of presence for the viewer (Bazin 2004:97). This informed focus group question seven [Appendix F].

The sub-questions that constituted focus group question seven inquired about several aspects. Firstly, they explored the sense of presence experienced by viewers. Secondly, they delved into the constraints and freedoms associated with both the 16by9 and 360-degree screen formats. Lastly, the questions also probed viewers regarding whether any of the videos demonstrated that cinema could achieve the perfect illusion of reality.

The literature shows that VR arouses emotions and creates empathy. This can influence the viewer's perception of the story. (Kool 2016) (Sundar, Kang and Oprean 2017) (Donghee 2018) (Mabrook and Singer 2019:6). Focus group question eight [Appendix F] was designed to test this.

According to Kim (2021), the immersive experience in 360-degree video is of a “distance observer”. Studt (2021:184) suggests that VR requires a “suspension of disbelief” in order to buy into the illusion of reality. These insights informed the design of focus group question nine [Appendix F], which investigated the phenomenon of viewers experiencing disembodiment and distraction within the 360-degree video environment.

Finally, with focus group question ten [Appendix F], participants were prompted to reflect on the discussions. Each participant was presented with the main research question and sub-research question one. Specifically, they were asked to provide a concluding response regarding which documentary they considered to be the more accurate depiction of reality within the Kennedy Road Informal Settlement, along with a brief explanation for their answer.

Interestingly, during the focus group sessions, most of the above questions were not asked directly, but they were all answered implicitly through the flow of discussions. In the role of the focus group moderator, the researcher steered the discussions using these focus group questions as a guide. For the researcher, this validates the literature reviewed and highlights the high quality of discussions. Note that both focus group transcriptions have been attached as Appendix A and Appendix B.

3.5 Case Study

The research design for this study is influenced heavily by the work of social scientist, Robert K. Yin (2003). His book, *Case Study Research: Design and Methods* is considered a seminal text in the field of case study research. According to Yin (2003:13), a case study is defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident." In other words, a case study is about taking an otherwise complex study and breaking it down into something specific that can be intently studied in a real-world context.

Yin (2003:1) states that using case studies in research "remains one of the most challenging of all social science endeavors". Yin states that case studies have been criticised because "sloppy" researchers make their research prone to biases. Furthermore, he points out that case studies are often criticised because there is a view that the findings lack generalisability (Yin 2003:12). Yin argues that most of this criticism is due to poor execution on the part of researchers.

Yin (2003:21) prescribes five components that are "especially important" for a good case study design.

"1. Studies questions": Yin (2003:21) suggests that research questions will inform whether a case study design is suitable for the study. Yin states that the case study strategy is advantageous when addressing "how" and "why" questions related to contemporary events beyond the researcher's control. Yin (2003:9) states that a comprehensive literature review is necessary to formulate precise and insightful questions for the topic. This thesis has demonstrated its fulfilment of this requirement. This study compared how reality is depicted in two different video formats to determine which format better depicts the reality of the situation portrayed. Central to this study are the questions of "how" each format depicts reality and "why" one format may be perceived as better at depicting reality.

"2. Its propositions, if any": Yin (2003:22) suggests formulating hypotheses based on existing theories to guide the researcher in planning the investigation. This study demonstrated this approach by thoroughly exploring both seminal and contemporary

theories of cinematic realism. The literature review for this study identified topics for further exploration and facilitated the development of additional hypotheses by the researcher.

“3. Unit of analysis”: Yin (2003:22) defines this as the specific entity or phenomenon being studied. Yin also states that the propositions [component 2] guide the scope of the study. In this thesis, the “case” or “unit of analysis” is the focus group discussions of the two videos of the Kennedy Road Informal Settlement. The research instrument (focus group questions) was derived from the literature based on propositions that guided the scope of the study to answer the main research questions.

Components four and five are part of the data analysis phase.

“4. Linking data to propositions” (Yin 2003:26): For this study thematic analysis was conducted on the focus group discussion data. The initial propositions set the theoretical framework and context for analysis. The patterns in the data were used to formulate themes; these themes either supported the initial propositions or expanded on the existing theories.

“5. Criteria for interpreting the findings” (Yin 2003:27): In this study, the researcher based the interpretation of the findings on established theory and the propositions derived from an extensive literature review. This theoretical foundation not only guided the formulation of the research questions but also played a crucial role in shaping the research instrument, specifically the focus group questions. Furthermore, the literature review served as the backdrop against which the researcher contextualised new hypotheses and propositions, ensuring that the interpretation criteria were firmly grounded in the existing body of knowledge.

The aim of comparing the depiction of reality in two different video formats is inherently complex. However, adhering to the fundamental principles outlined by Yin (2003) in case study research, the researcher defined a precise “unit of analysis”, focusing on the videos of the Kennedy Road Informal Settlement. By utilizing a “real-life context” approach, specifically through the use of focus group discussions for analysis, the researcher structured this study to effectively address this complexity.

Furthermore, by conforming to Yin's five components of case study design (2003:21), this thesis also demonstrates rigour and validity in its design.

3.6 The Participants

The theoretical focus of this study informed the selection of the focus group participants. Participants had to have expert knowledge of journalism and film production.

Morgan (1997:35) states, "The decision to control the group composition to match carefully chosen categories of participants is known as segmentation. Segmented samples are closely tied to the emphasis on homogeneity in the composition of focus groups".

Although segmenting the groups into a group of journalists and a group of academics did promote homogeneity, this was not the primary motivation. As discussed previously, audience reception was a factor that could not be ignored. The participants in each focus group had to be chosen from a background and level of experience that would allow them to receive the videos similarly so that their collective understanding of the topic would encourage robust discussion and debate. The decision to segment the participants was motivated by Reception Theory.

Morgan (1997:34) also states that although there are "rules of thumb" concerning planning and executing focus group research, these 'rules of thumb' are most helpful as a "point of departure". This means that the overall design of the specific project ultimately dictates the number of participants, the composition of the groups and the number of groups. These decisions, however, must be carefully considered, motivated and justified.

For example, a random or convenient sampling scenario in this study would have greatly impeded the possibility of meaningful discussions and reliable results. According to Reception Theory, the videos would have been received differently by participants from different backgrounds and interests, making discussions confusing and adversely affecting the credibility of the results. The theories used in the data collection process are explained in detail in the data collection section of this thesis.

Furthermore, the literature highlighted crucial discussion points related to Film Theory for comparison. In addition to understanding how they were receiving the videos, participants needed to understand Film Theory and film production processes.

Non-probability purposive sampling was used to select the focus group participants. According to Yin (2011:88), in purposive sampling, samples are chosen that “will yield the most relevant and plentiful data”, including those with views contrary to your hypothesis, to obtain, as Kuzel (1992:37) points out, the “broadest range of information and perspectives on the subject of study” It is important to distinguish this method from convenience sampling, as Marvasti (2004:311) maintains, the selection of participants is “based on their anticipated richness and relevance of information in relation to the study’s research questions”, and not on their “convenience” to be interviewed.

Expert focus groups are a qualitative research method that involves bringing together a group of individuals considered experts in a particular field or on a specific topic. “Focus groups are frequently conducted with purposively selected samples in which the participants are recruited from a limited number of sources” (Morgan 1997:35) In this study, the goal of these expert focus groups was to gather in-depth insights, perspectives, and opinions from individuals with extensive knowledge and experience in the field of Media and Television Journalism.

“I have conducted groups of 3 highly involved participants that would have been unmanageable at size 6, and I have led discussions in naturally occurring groups of 15 to 20 in which the process was quite orderly. Ultimately, both the purposes of the research and the constraints of the field situation must be taken into account” (Morgan 1997:43).

For this study, five experienced television journalists and five experienced academics were recruited for the two expert focus group sessions. This was a manageable number of participants in each group, allowing every participant a chance to discuss and interact. There are also only a limited number of professional television journalists based in Kwa-Zulu Natal. Test screenings were done with a few journalists and academics who were not part of the study before constituting the focus groups. It was evident by these test screenings that there would be much discussion and debate.

This assisted the researcher in determining the size of the groups and planning the focus group sessions.

Participants for this study were recruited in person, through snowballing referrals, and some participants were recruited telephonically. The inclusion criteria were that participants needed to be experts in the field of journalism or media studies and have at least five years of experience in their field. Participants also needed to be available at the scheduled focus group time. This was particularly challenging with the television journalists, as they do not typically work regular hours. Participants who showed little interest in the study or those whom the researcher thought may be overwhelmed by the technology were excluded.

Professional television journalists and academics in the field of arts, design and production studies were approached to participate in the study. Participants were recruited as individuals and not in any official capacity or affiliation with any specific organisation. The participants recruited showed a keen interest in the research and an eagerness to participate. All participants recruited were based in Durban, Kwa-Zulu Natal.

Two separate focus group sessions were conducted. Focus group one consisted of university academics, and focus group two consisted of professional television journalists from national television stations. Separating the groups ensured that each group was from the same background, had similar experiences and would receive the videos in a similar way, prompting engaging discussions.

The two focus groups were constituted with the following participants:

Table 1 Focus Group One Participants: Academics

Participant	Occupation	Experience (In years)	Age	Gender
A1	Lecturer	13	35	Male

A2	Professional academic researcher	10	31	Male
A3	Lecturer	15	46	Female
A4	Lecturer	17	38	Male
A5	Lecturer	30	53	Male

Table 2 Focus Group Two Participants: Journalists

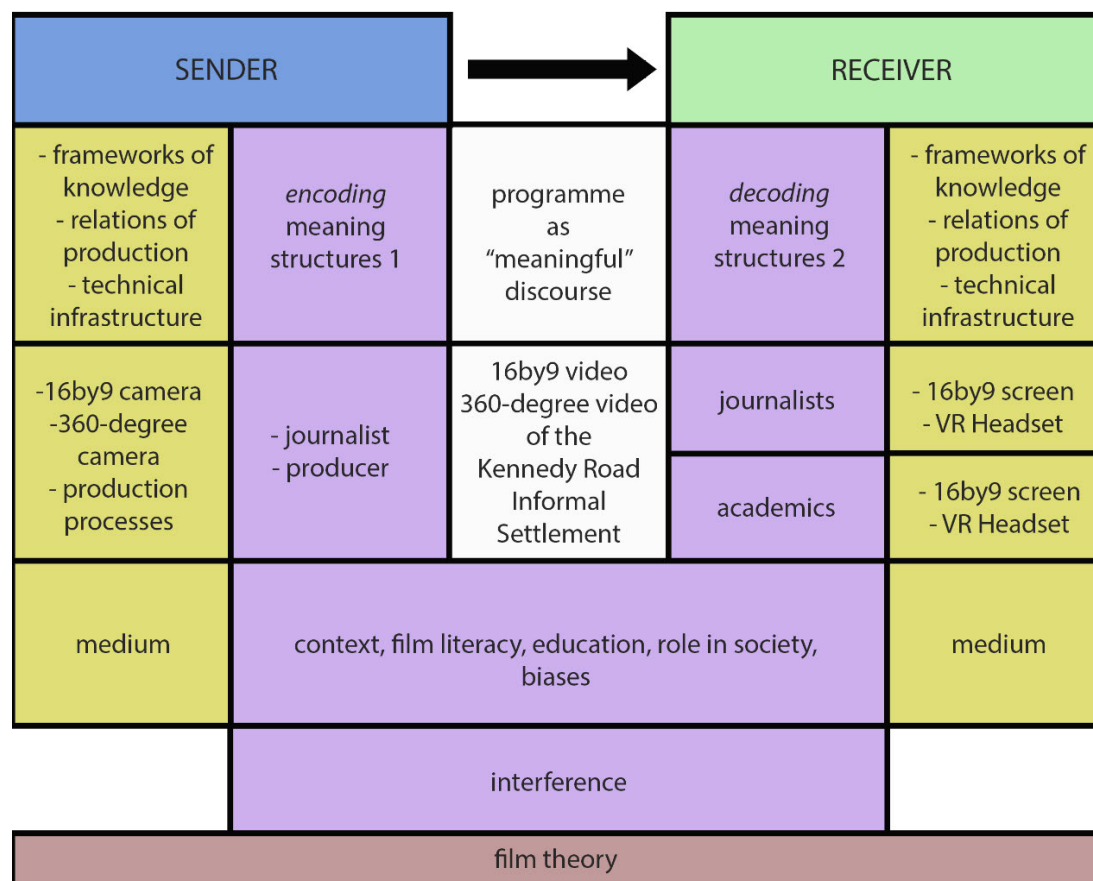
Participant	Occupation	Experience (In years)	Age	Gender
B1	Journalist	21	52	Male
B2	Video Journalist	9	35	Male
B3	Video Journalist	41	68	Male
B4	Journalist	18	40	Female
B5	Journalist	13	34	Male

3.7 Data Collection

This section will first examine the role of theory in the data collection process of this study. It will then provide a detailed explanation of the role and production of the two videos of the Kennedy Road Informal Settlement. Subsequently, the focus group sessions will be described. Finally, the section will outline the screening of the videos and the data capture process.

3.7.1 Theory in Data Gathering

Figure 5: An adaptation of Stuart Hall's encoding/decoding model (Hall 1980:120), showing how the model was utilised in this study.



In this section reception theory and film theory are explained as crucial parts of the data collection process. Reception theory dictates how audiences engage with and interpret media content, revealing how viewers create meaning in different ways. On the other hand, film theory allows for the technical and narrative analysis of the two different video formats being studied. It was essential to integrate both theories to fully explore how the different video formats influenced audience perception and

interpretation. By clarifying these theoretical frameworks, the researcher established a strong foundation for data collection, enabling the collection of reliable data in this complex study.

Stuart Hall's Reception theory (1980) is explained in detail in the literature review section of this thesis. Figure 5 is an adaptation of Hall's encoding/decoding model and attempts to illustrate how this thesis dealt with both the frameworks of audience reception and film theory in its research design. This study involved similar experts at both the encoding and decoding stages of Hall's model. Both the 16by9 and 360-degree videos were produced by the same journalist, and the only difference lay in the way the different video formats were processed. The experts at the decoding end are further segmented to account for biases and their different backgrounds. A significant consideration during the careful purposive sampling recruitment stage was the participants' experience and their knowledge of the film production process and Film Theory. Therefore, Film Theory was purposively threaded into this process.

The primary focus of this study is a comparison of two different media formats, namely 16by9 and 360-degree video, in terms of their depiction of reality; and that is "reality" as defined by the classical film theorists. Therefore, for its comparison of the two different media formats this study relies heavily on the theoretical framework provided by Film Theory.

However, as Stuart Hall's Reception Theory dictates, the participants of the focus groups in this study are likely to receive the videos differently. Another significant point to note is that 360-degree video by its very nature requires active audience participation. Considering that this study is a comparative case study of two different video formats [16by9 and 360-degree video] and the depiction of reality within the videos, it was essential to address this issue of audience reception and minimise reception interference to achieve a reliable comparison.

The themes of presence, empathy and emotion are prominent in the literature reviewed. These are human cognitive processes that are highly susceptible to reception. Thus, the important issue of audience reception was addressed via careful purposive sampling to identify expert focus group participants who would mitigate the effects of reception interference. Also, to this end, the focus groups were segmented.

Two focus group sessions were conducted, one with experienced journalists and the other with experienced academics.

Being experts on the topic and coming from similar backgrounds was crucial. Both groups were experts, but one group had a working journalism background and experience, while the other group had an academic background. The hypothesis is that although these two groups may receive these videos differently, within each group they will receive the videos somewhat similarly.

Figure 6: The role of Reception Theory and Film Theory in the data gathering strategy of this study [manipulated Adobe stock images].

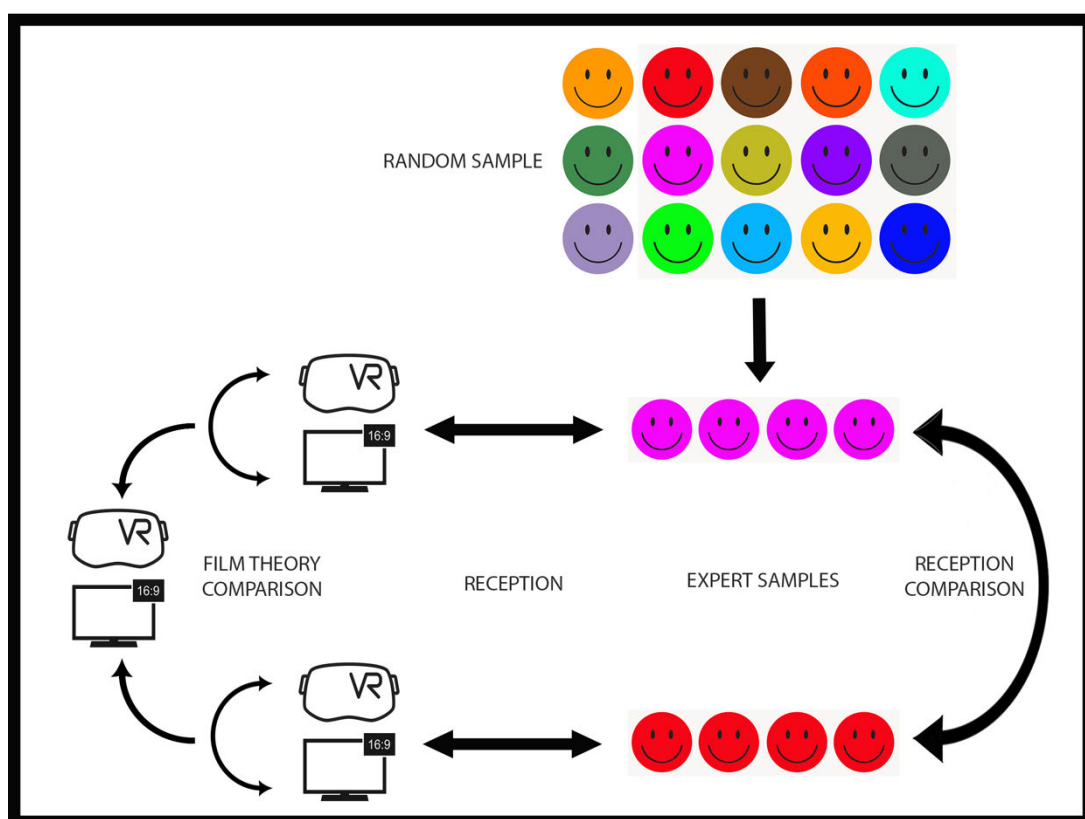


Figure 6 attempts to illustrate the hypothesis used in the data gathering strategy of this study. This thesis hypothesised that using two expert focus groups, each with participants from similar backgrounds [a focus group of journalists and a focus group of academics], to compare the two media formats [16by9 and 360-degree video] within the framework of Film Theory would minimise Reception interference and result in a meaningful comparison of the two formats. Using two expert focus groups rather than random or convenient sampling also enabled the researcher to compare the reception

between the two expert groups as well as achieve a more accurate and complete comparison of the two video formats through the lens of Film Theory.

The transcripts of the two groups were analysed separately, and the results are presented and discussed in the next chapter. A reception comparison was also conducted between the two expert focus groups. For the reasons already mentioned in this section, this was essential to contextualise the results.

Film Theory is a set of academic approaches used to study and analyse cinema. Film Theory aims to understand how film functions as a communication, representation, and cultural expression medium.

“‘Film theory’ is best thought of as a substantive field of inquiry in which are clustered a number of discrete theories of cinema. No one system of propositions governs the entire field - in other words, there is no single, monolithic ‘film theory’ that film scholars unanimously endorse” (Rushton and Bettinson 2010).

Pertinent to this thesis is that Film Theory delves into the examination of a wide range of aspects related to cinema, including how reality is represented, the impact of the filmmaker and spectator on the film, the influence of technology and production processes, and the cultural and social significance of film. Embedded within this diverse field are the perspectives of formalism, realism, and psychoanalytical approaches, which have been thoroughly scrutinised in the existing literature.

Film theory is examined in detail in the literature review section of this thesis. However, it is essential to point out some of the concepts of Film Theory relevant to data gathering in this study. These are:

Narration: How stories are told in films impacts the audience's understanding and interpretation of the film's visual content.

Mise-en-scène: This refers to the visual elements of a film, including scene setups, costumes, and camera blocking. This contributes to the meaning of a film.

Cinematography: Refers to using camera techniques, lighting, and visual effects to create a visual style and convey meaning in a film.

Editing: How shots are assembled in a sequence to create a cohesive narrative.

Suture Theory of film: Suggests that the spectator is "sutured" into the film and becomes a part of the narrative.

Spectatorship: How the audience experiences and interprets films.

Genre: The conventions that shape the content and form of films.

An important point to reiterate is that Bazin (2004:96-98), in his essay "The Concept of Presence", clearly placed the ability of film to create a sense of presence within the realms of Film Theory. This has always been a significant point of discussion in the realism debate of cinema.

Another point worthy of reiteration is that editing [the sequence in which shots are put together] and shot selection [e.g. close-ups] have the ability to elicit emotion and empathy.

The selection of shots, the composition of each shot and how these shots are edited together form the visual language of film that directors use to convey meaning. This also significantly affects the audiences' perception of a film. These were the primary considerations of the participants of this study when comparing the 16by9 video to the 360-degree video. Thus, this thesis used the lens of Film Theory as its primary methodological approach to data gathering.

3.7.2 The Videos

The videos themselves are not the source of data for this study. Instead, the data comes from the focus group discussions comparing the 16by9 video with the 360-degree video. The researcher could have chosen a different subject matter for these videos. The case for comparison would have then been different. The primary concern was that the videos must offer a direct comparison, being of the same subject matter and identical in every way except for the method of image capture. However, the production processes for each format inherently result in differences. This study aimed to investigate how these differences are perceived by the audience in terms of their depiction of reality.

Brustein (2014) clearly states that not all videos are suitable for 360-degree video production. Some types of videos simply do not suit the format. Barreda-Ángeles et al. (2021:166) suggest that VR will work better for stories in which the environment is significant to the understanding of the story.

Grierson (1998:97) in his *First Principles of the Documentary*, refers to “the living scene and the living story” and he further states that the documentary focusing on real people in their “native” environments offers a superior “interpretation of the modern world” in all its complexity and “astonishing happenings”. This is reiterated by Grierson later when while working on the television series *This Wonderful World*, he wanted his team to find “films about people working their crafts, or how they lived, how they did things...to show how other people went about their work and business, with a view to making everybody understand other people...” (Fox 2013:506).

Donghee (2018:2817) also states that “VR should provide both quality content and relevant, socially meaningful stories to users”. Most significantly, the literature showed that immersive storytelling, of any form, is rarely practised in South Africa (Cottle and Rai 2008:354). Furthermore, Africa is also slow to research and use new technology (Mabweazara 2010:1). As a developing country in Africa, South Africa is plagued with many socio-economic challenges, with 11.7% of South Africans residing in informal settlements (South Africa, Statistics South Africa 2021). These settlements are home to poor people struggling to survive.

Given the insights from the literature, it became evident that documenting the experiences of informal dwellers in the Kennedy Road Informal Settlement would be a fitting subject matter for the case study videos. In addition to aligning with Grierson’s *First Principles of the Documentary* (1988:97), these videos tell a uniquely South African story and shed light on the hardships faced by the impoverished in the country. They capture experiences rarely seen on video and fulfil the researcher’s personal moral and ethical obligation to tell a socially conscious and relevant story. These videos have the potential to inspire South African journalists to produce more immersive, people-oriented stories.

These videos document the everyday plight of the shack dwellers in their difficult environment and highlight some of the challenges they face. The informal settlements

in Kwa-Zulu Natal are an immense social concern. This is also an environment that outsiders usually do not have access to. The focus group discussions confirm that the videos generated many pivotal points of discussion, which greatly improved the quality and depth of the gathered data. This emphatically validates their selection as the case study for this research.

Jones (2017:178) suggests that a comfortable length of a 360-degree documentary should be around ten minutes and that a narrative-led documentary works best. The Kennedy Road Informal Settlement videos were produced as ten-minute-long narrative-led documentaries. In order to make a reliable comparison, these two videos, in the two different formats, are exactly the same in every way except for the captured image. The 360-degree video version and the traditional 16by9 video are exactly the same lengths, have exactly the same music, voice-over and use the same interviews. The only difference in these videos is the way each camera captured the image. Each scene was first shot with a traditional news gathering camera, including the cutaways and interviews, and then the same scene was immediately recaptured with a 360-degree video camera, including the interviews, which had to be redone. The production company also used the same crew and journalist for both videos.

The image capture equipment used was as follows:

Traditional 16by9 video capture - Sony NX5 professional-level camcorder and the DJI Spark drone with a built-in camera designed for aerial videography.

360-degree video capture - The GoPro Fusion 360-degree camera. This camera was also attached to a DJI Phantom drone for the 360-degree aerial shots.

Figure 1 on page 3 of this thesis shows the cameras used to produce the videos.

It is important to stress that the videos for this study had to be produced as the researcher is not aware of any other videos that would enable such a direct comparison of video formats [16by9 and 360-degree]. The videos of the Kennedy Road Informal Settlement were produced specifically for this study by an independent production company from a brief by the researcher. To prevent researcher bias, the researcher was not involved in the production processes of the videos. The researcher has the right to use these videos for this study, as evidenced by the attached invoice

for the production of the videos [Appendix J] and a letter of permission from Abahlali baseMjondolo Movement SA [Appendix K], the gatekeepers of the settlement who also facilitated the video production. It is also noteworthy that although these videos are not the source of data for this study [the data for this study are the focus group discussions], these videos remain within the university as a valuable resource for further study across multiple disciplines.

3.7.3 The Focus Groups

For this study, two expert focus group sessions were conducted.

Bryman (2012:502) describes the Focus Group as:

“A form of Group interview in which there are several participants (in addition to the moderator/facilitator); there is an emphasis in the questioning on a particular fairly tightly defined topic; and the accent is upon interaction with the group and joint construction of meaning”.

Holliman (2005:11) echoes this,

“If structured appropriately, focus groups offer a flexible and dynamic approach to data collection and analysis, generating (mainly) qualitative data about specific topics through interaction between participants using their own language and vocabulary, and drawing on their pre-existing knowledge, attitudes and beliefs”.

Due to the nature of the research, the researcher decided that focus group discussions would yield the best data. Expert focus groups were constituted with participants who are experts in the field of media and journalism to generate rich data. These experts in each group were able to experience the videos together and have inspired discussions that led to rigorous interrogation of the research questions.

“What makes the discussion in focus groups more than the sum of separate individual interviews is the fact that the participants both query each other and explain themselves to each other” (Morgan 1996:12). The experts in the focus groups of this study did indeed engage in well informed enthusiastic debates which generated rich and highly relevant data.

3.7.4 The Screening and Focus Group Discussions

Both videos were screened to the focus group participants before each focus group discussion. The traditional 16by9 video was screened to the participants first. After that, each participant viewed the 360-degree video version on an Oculus Quest 2 VR Headset. During the discussions, both videos were displayed on computer screens so that the participants could refer to the parts of the videos being discussed.

The researcher facilitated each focus group discussion. This ensured that the discussion's purpose was achieved, and the research questions were methodically considered. Both focus group discussion sessions were audio recorded and verbatim transcribed.

The full transcriptions of each discussion session are attached to this thesis as Appendix A [Focus group session one transcription: 24/11/2022] and Appendix B [Focus group session two transcription: 25/11/2022]. These focus group transcriptions are integral to the research findings and analysis, including them as appendices provides additional support for the conclusions and can offer a more complete understanding of this study. In addition to providing transparency, the transcriptions of these discussions may be useful to other researchers and further research.

3.8 Data Analysis

Thematic analysis was used to analyse the data from the focus groups.

Braun and Clark (2006:79) describe thematic analysis as “a method for identifying, analysing and reporting patterns (themes) within data”. They further state that “a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set” (2006:82).

The most likely themes to emerge for this thesis were identified from the literature review. A list of focus group questions [research instrument] was devised to encourage discussions around these themes. As the transcripts in Appendix A and Appendix B will show, the moderator did not ask most of these questions because, after a couple of questions, the discussions flowed naturally, examining the pertinent themes as they

related to each other. Morgan (1997:53) describes this as “low-moderator-involvement” where “there typically are a set of key topics, and the moderator can steer the group members toward those topics if they do not spontaneously cover them”. For both focus group sessions in this study, most themes were discussed spontaneously. The moderator guided the discussions to link to relevant themes and brought the discussions back on track when the participants strayed off to irrelevant themes.

Braun and Clark (2006:83) state that coding and identifying the themes can be done in two ways, inductively and deductively. The inductive approach relies solely on the data to identify emerging themes, while the deductive approach identifies themes based on existing literature and theory.

The researcher adopted this hybrid approach when conducting the focus group sessions; the themes that emerged from the data were mostly expected and identified by the literature and theory.

To reiterate, the focus group questions were designed to interrogate the themes identified by the literature. Yet, the researcher, by adopting the hybrid approach, allowed the discussions to flow freely, allowing for the possibility of new themes to emerge. This is in line with Braun and Clark’s recommendation of “ongoing reflexive dialogue” (2006:82). An idea that states that the choices made during the process of data collection and analysis should not be rigid but constantly re-evaluated along the way. This allowed for the incorporation of abductive reasoning when coding and categorising the codes into emergent themes.

Braun and Clark (2006:84) state that you should code for a specific research question when adopting the theoretical approach. The themes that emerged from the focus group discussions were linked to the research question that it was most relevant to, provided insight into and helped answer. Braun and Clark (2006:82) further state that “researcher judgement” is needed when identifying themes and “the ‘keyness’ of a theme is not necessarily dependent on quantifiable measures but rather on whether it captures something important in relation to the overall research question”. This approach was used to analyse and code the data for this thesis. Taking these ideas

of Braun and Clark (2006) into account, the focus group data was coded, the themes identified, and these themes were abductively linked to the research questions.

In addition, the following idea was also considered,

“As well as identifying the ‘story’ that each theme tells, it is important to consider how it fits into the broader overall ‘story’ that you are telling about your data, in relation to the research question or questions, to ensure there is not too much overlap between themes” (Braun and Clark 2006:92)

The themes in this thesis were carefully considered in relation to the data, the literature and the research questions. They were assessed, re-assessed and refined to provide the best possible insight into data and providing the best possible solutions for the research questions.

This is an idea emphasised by Guest, MacQueen and Namey (2012:75), “The goal is to clearly map the path between theory and the way data were collected, between data collection and the resulting evidence, and between the evidence and theories about what it all signifies”.

The research design of this thesis is completely in line with this idea as the literature informed the data collection, the data analysis informed the themes, and the emergent themes are linked back to the theory to draw its conclusions.

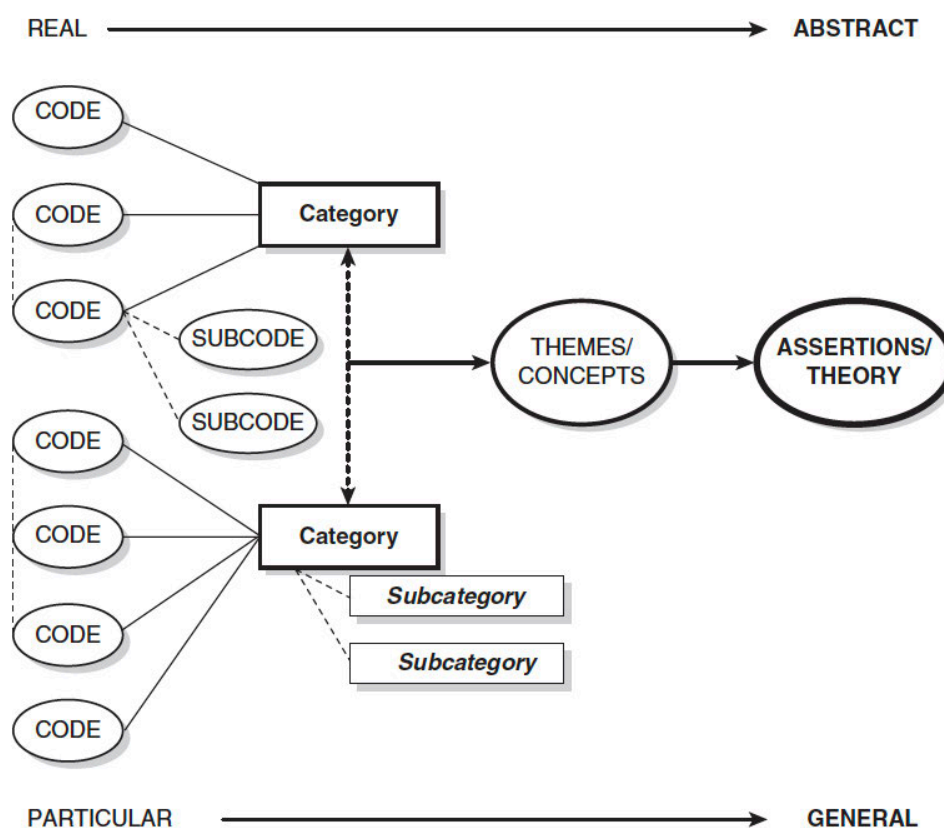
A further point to note is that this research is a case study of the reception of two different video formats, so in addition to coding according to the emergent themes, these themes were associated with the appropriate video formats for comparison between the formats. The comparison was made according to the frequency of the codes. This was based on an idea put forth by Guest, MacQueen and Namey (2012:40) on comparative analyses, that states, “you could count the number of times a code was applied across all transcripts, in which case the unit of analysis is the text segment”.

The transcripts of both focus groups were analysed and coded, these codes were associated with the relevant video formats, and the frequency of the codes determined the level of significance of the theme to that video format. This also borrows from

another idea of Guest, MacQueen and Namey (2012:64), who describe “the basic task” of coding as “to come up with valid and reliable approaches for grouping content at specified levels of meaning and interpretation”.

Braun and Clark (2006) suggest that the researcher needs to use judgment in coding the data in relation to the research questions and identifying themes that help answer these questions. The researcher’s decisions about what to code and how to categorise it into themes are based on the researcher’s understanding of the research questions and the data.

Figure 7: A streamlined codes-to-theory model for qualitative inquiry (Saldaña 2013:13).



Saldaña describes a code as, “A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (Saldaña 2013:3).

After much back-and-forth between the data and the research questions the codes and themes for this study were identified.

Saldaña also offers this advice on themes,

“Several qualitative research texts recommend that you initially “code for themes.” That, to me, is misleading advice because it muddies the terminology waters. A theme is an outcome of coding, categorization, or analytic reflection, not something that is, in itself, coded” (2013:14).

Figure 7 illustrates Saldaña’s (2013) suggested coding model for qualitative research. For this thesis, a combination of the concepts from Braun and Clark (2006) and Saldaña (2013), as examined in this section and in the previous chapter, was used to code and analyse the data.

The researcher’s thorough understanding of the literature, research questions and the data made it possible to identify codes that could be grouped into themes that related to the research questions.

A mixed methods coding approach was applied. Concepts and theories from the literature were used to guide the coding process [deductive coding] while the researcher also remained open to new or unexpected patterns that emerged in the data [inductive coding]. A flexible coding scheme was developed that was consistent with the research questions, data and literature. The coding scheme was then revised and refined to ensure accurate research findings. The codes were then categorised into themes that directly related to the research questions abductively. In epistemology, abductive reasoning is commonly referred to as “inference to the best explanation.”

While inferential reasoning involves drawing conclusions based on established principles, abductive reasoning involves generating plausible explanations based on observed evidence. During the coding process, the researcher examined the data, identified patterns or trends, and subjectively interpreted them to assign the appropriate codes. The researcher also relied on logical or reasonable interpretations of the data to categorise the codes into themes that related to the research questions.

Member review and peer review were used to refine and validate the interpretations to ensure that the codes and themes accurately reflected the meaning and context of the data.

The themes and the coding thereof and the comparative analysis are discussed in detail in the next chapter.

QDA Miner Lite software from Provalis Research was used to assist with the data analysis of this thesis. [Access to NVivo software from QSR International via the university was unavailable during data analysis].

3.9 Validity and Reliability

Figure 8: Case Study Tactics for Four Design Tests (Yin 2003:34)

Tests	Case Study Tactic	Phase of research in which tactic occurs
Construct validity	<ul style="list-style-type: none"> ● Use multiple sources of evidence ● Establish chain of evidence ● Have key informants review draft case study report 	data collection data collection composition
Internal validity	<ul style="list-style-type: none"> ● Do pattern-matching ● Do explanation-building ● Address rival explanations ● Use logic models 	data analysis data analysis data analysis data analysis
External validity	<ul style="list-style-type: none"> ● Use theory in single-case studies ● Use replication logic in multiple-case studies 	research design research design
Reliability	<ul style="list-style-type: none"> ● Use case study protocol ● Develop case study database 	data collection data collection

Yin (2003:10) addresses one of the “traditional prejudices” against the case study research strategy, which is the perception that it lacks rigour. However, Yin states that this perception is mostly unfounded and is often the result of “sloppy” researchers who employ inadequate procedures and allow their biases to influence their research. To address this issue, Yin recommends four design tests.

As in Figure 8, Yin (2003:33-39) describes four tests to determine the quality of “any empirical social research”, including case study research. These are construct validity, internal validity, external validity and reliability. This section will examine each test and show how this thesis preserved its integrity through thoughtful research design.

3.9.1 Construct Validity

Yin (2003:34) describes this as “establishing correct operational measures for the concepts being studied”.

For this study, a thorough examination of the literature established a solid conceptual framework from which the focus group questions were devised to elicit relevant responses to these open-ended questions. Purposive sampling was used to form expert focus groups. Reception Theory determined that these groups be segmented into a group of journalists and a group of academics to form two separate expert focus groups. Before the focus group sessions were conducted, the focus group questions were pilot tested with experts who were not part of the study. The data was analysed using the established method of thematic analysis.

3.9.2 Internal Validity

This is described by Yin (2003:34) as “establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships”.

The videos used for this comparative case study were exactly the same in every way except for the image captured by the camera. This ensured a direct comparison of the 360-degree video format versus the 16by9 format without extraneous variables. Expert focus groups were formed that understood the concepts being studied and had a thorough knowledge of Film Theory. Both focus groups were conducted in a consistent and systematic manner. Internal validity was confirmed when the same patterns emerged in the data analysis of both focus groups. The data could also be linked back to the literature.

3.9.3 External Validity

External validity is described by Yin (2003:34) as “establishing the domain to which a study's finding can be generalised”.

As a comparative case study of a 360-degree video documentary versus a 16:9 video documentary of the Kennedy Road Informal Settlement in Kwa-Zulu Natal, the generalizability of this study's findings is complex. However, the researcher asserts

that if two similar documentaries were produced on a similar subject matter, with the videos being identical except for the way the image was captured, and if these videos were then screened to expert focus groups, the findings would be the same.

3.9.4 Reliability

According to Yin (2003:34), reliability is about “demonstrating that the operations of a study, such as the data collection procedures, can be repeated with the same results”.

To ensure reliability in this study, standardised data collection and analysis methods were used. A thorough examination of the literature informed the development of the conceptual framework, which guided the focus group questions and data analysis processes. Potential sources of error, such as differences in the videos and potential reception biases of the expert focus groups, were identified and addressed in the research design.

In addition, the entire research process was carefully documented and explained, ensuring that the findings are credible and could be replicated by others. This includes details on the selection of participants, the focus group sessions, and the data analysis procedures. Overall, these steps helped ensure the study's findings are reliable and trustworthy.

3.10 Ethical Considerations

Participants were fully informed about the purpose of the study, their involvement and the risks and benefits of the study. This was done via a Letter of Information during the recruitment stage [Appendix C]. Participation was voluntary, and participants were required to sign a Consent Form [Appendix D]. Obtaining participants' signatures on the Consent Form held significant importance in ensuring ethical compliance and respecting participants' rights. Participants were free to withdraw from the study at any time. One participant left the focus group slightly early due to a prior commitment.

The Durban University of Technology's Institutional Research Ethics Committee [IREC] evaluated and cleared this research. The IREC full approval letter is attached as Appendix E.

The participants' identities are confidential, and all data was de-identified before analysis and reporting. For example, participants are referred to as A1, A2 or B1, B2 etc., instead of by their names. All research data is stored securely and only available to the researcher and the researcher's supervisors. This data will be destroyed after a period of five years.

Participants for this study were recruited in their personal capacities and not as representatives of institutions or organisations. However, in-person recruitment from the public broadcaster at a national key point required gatekeeper permission. This is attached as Appendix I.

Although the videos of the Kennedy Road Informal Settlement are not the data for this study [the data for this study are the focus group discussions], the researcher has attached the following to ensure that this research is ethically sound: Appendix J – Invoice from the production company for the production of the videos, and Appendix K – Letter of permission to film at the Kennedy Road Informal Settlement from the gatekeepers of the settlement [Abahlali baseMjondolo Movement SA]. Also noteworthy is that the production of the videos was tabled at a community meeting of the settlement and produced with the blessing of the entire community.

The findings of this thesis were reported accurately and transparently without revealing the identity of any of the participants. Attaching the transcripts of both focus groups as appendices promotes transparency and credibility. [Appendix A and Appendix B]

3.11 Summary

In this chapter, an overview of the research design was provided, encompassing detailed explanations of the research questions and the focus group questions [which served as the research instrument]. The production of the videos and their specific considerations for this case study were also outlined in detail and justified.

Additionally, the theoretical framework of this study was explained, establishing a clear connection between the theory, the composition of the focus groups, and the data collection strategy. Furthermore, the recruitment process of the participants of this study was explained and the participants were listed. This was followed by a comprehensive presentation of the data analysis procedure. Finally, the chapter

delved into a discussion of the Validity, Reliability, and Ethical considerations of the study.

In conclusion, using Film Theory as its primary theoretical framework and Reception Theory as its guiding concept, this study used the case of two videos of the Kennedy Road Informal Settlement in Kwa-Zulu Natal, one shot in the 16by9 format and the other in the 360-degree video format, to compare the depiction of reality in these videos via expert focus groups discussions. Thematic analysis was conducted to explore the emergent themes.

The next chapter will present in detail the analysis of the data and discuss the findings.

Chapter 4: Analysis and Discussion

4.1 Introduction

This chapter explains the codes and the development of the themes. Each code is clearly defined. The reasoning behind grouping the codes into themes and relating them to the research questions is explained and justified. Each theme is discussed individually. The discussions are linked to the theoretical framework and literature, and the research question associated with the theme is answered.

A Reception comparative analysis and discussion of the two expert focus group sessions are also presented, and finally, the limitations of this study are discussed in detail.

4.2 From Codes to Themes

[The Appendices A and B, which are full transcripts of both focus group sessions, are referenced in this thesis as follows: Participant (Appendix: Page number), e.g. A1 (Appendix A: 1)]

In this section, the process used to categorise the codes into themes that are relevant to the research questions is described.

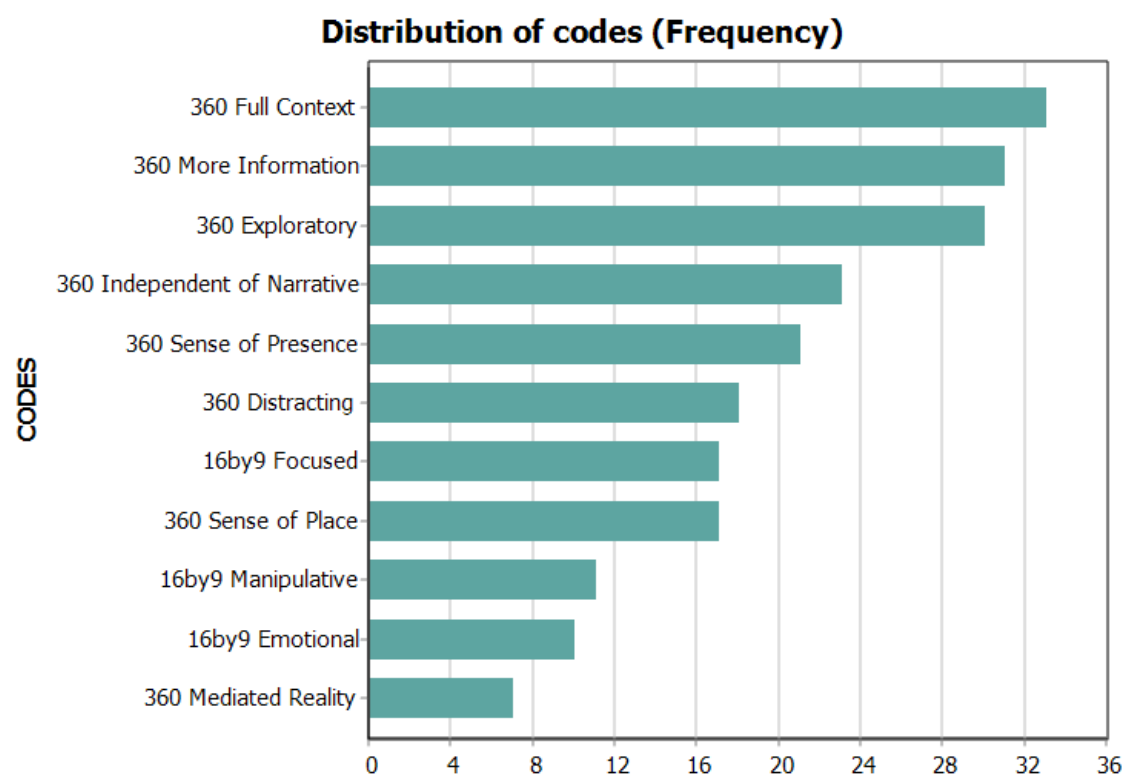
Figure 9 shows the list of codes that were eventually developed from refining and revising codes identified during the open coding process. Each code is prefixed with 360 or 16by9 to identify which format [360-degree or 16by9] it is related to.

It is important to note that this research is a comparison of two different documentary formats [16by9 and 360-degree], so although there is an overlap in some of the codes, it was important not to further collapse the codes to maintain a high level of integrity for the comparison.

For example, the most discussed codes of 360 Full Context, 360 More Information and 360 Exploratory are all related and overlap to an extent; however, as the data will show, it was necessary to maintain these codes as they each reveal important information that helped answer the research questions. Another example is the codes 360 Distracting and 16by9 Focused; while at face value, it may appear that these

codes are just the opposite of each other, in the context of the data, they highlight different ideas. This will become apparent later in the chapter when these codes are defined and discussed.

Figure 9: Code frequency chart for all codes from data of both focus groups (Chart generated by QDA Miner Lite software from Provalis Research).



The analysis of the data was made more complex because the main research question: Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?, had to be answered before sub-research question one could be addressed: What are the attributes of the documentary perceived to be the more accurate depiction of reality [in the main research question] that contributes to its realism?

It was confirmed by an initial analysis of the data that there was unanimous agreement among the participants that the 360-degree video documentary was the more accurate depiction of reality at the Kennedy Road Informal Settlement. The researcher had to identify then the codes that pointed to the attributes of the 360-degree video that contributed to its realism.

Saldaña (2013:202) states, “...code frequency is not always a trustworthy indicator of what may be significant in the data. Use this technique as an exploratory heuristic for qualities, not as an algorithm for mere quantities”. Taking Saldaña’s advice, the researcher did consider not only code frequency but also the attributes that were specific to the 360-degree video format and those identified by the participants in the context of the discussions to be the most significant elements of realism of the 360-degree video format. Hence, the codes for the theme Elements of Realism were derived abductively. Participant review and peer review also reinforced this process.

Themes, according to Saldaña (2013:14) are based on “analytic reflection”. While all the codes listed in Figure 9 and Figure 10 can relate to and address the main research question, the researcher reflected upon the literature, data and research questions to create a coding scheme that could be categorised into themes that effectively addressed each research question listed in Figure 10. Although the theme Elements of Realism could have been categorised as a subtheme, it was categorised as a theme because, in the context of this comparative analysis, it was important not to diminish its significance.

Figure 10: From Codes to Themes

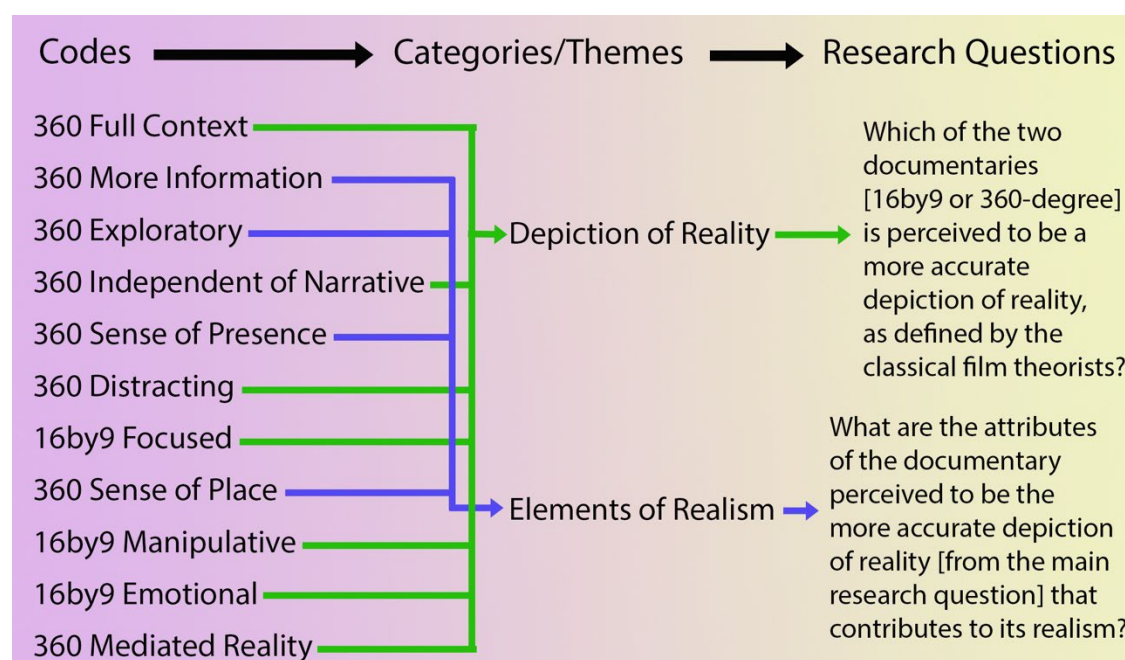


Figure 10 shows how the final codes were categorised into themes that related to the research questions.

It is important to bear in mind that the themes listed in Figure 10 are not exclusive; they overlap and intersect. While these themes are used to identify distinct concepts in the data that are most relevant to the research question they address, they are also related and connected to each other.

4.2.1 Defining the Codes

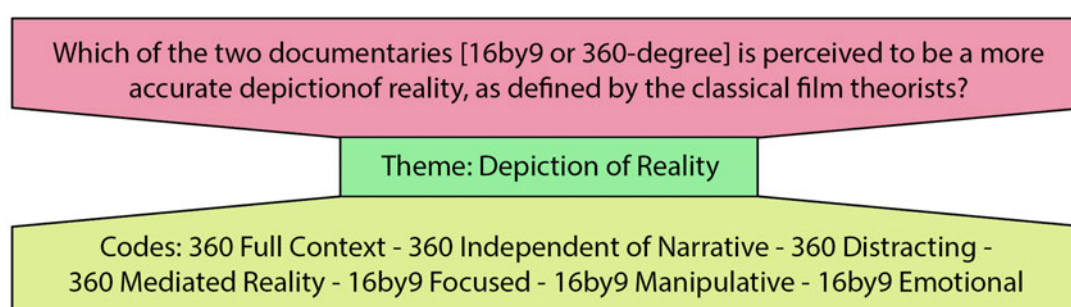
This section provides a detailed explanation of the codes associated with the themes that correspond to the research questions. The three research questions are addressed separately in the following sub-sections.

4.2.1.1 Main Research Question Codes

This section solely focuses on defining the codes associated with the theme: Depiction of Reality. This theme corresponds to the main research question.

The theme, Depiction of Reality is consistent with the main research question that investigates which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality [as defined by the classical film theorists] at the Kennedy Road Informal Settlement. The codes for this theme are: 360 Full Context, 360 Independent of Narrative, 360 Distracting, 360 Mediated Reality, 16by9 Focused, 16by9 Manipulative, 16by9 Emotional.

Figure 11: Illustration of the relation between the main research question, the related theme and codes associated with the theme.



The codes are defined as follows:

360 Full Context: The importance of context was emphasised by participants. They stressed the need to be able to see the “big picture”. Participants found that the 360-degree video provided them with more context of the story and of the place.

An example of this is when B1 (Appendix B: 2) says,

“The good thing about this [VR] is that it gives you the full, complete picture. Yes, it gives you the full story ...So the VR gives you a complete picture. And obviously, if you watch the news, for instance, it's the decision of the cameraperson and the reporter that we're going to put the old lady here. The decision was made to make the old lady sit here. You could have decided to make her sit somewhere else. So, I don't get to see what's around her, but with this one [VR], I can actually see”.

360 Independent of Narrative: Participants discussed that the 360-degree video does not necessarily require narration. Participants found that they could follow the story even if they did not pay attention to what the narrator was saying.

An example of this code is when B4 says,

“And I actually think that probably even without the narration, I would have been able to follow, I would have been able to follow the storyline and what was happening without the narration sort of filling in the gaps” (Appendix B: 4)

360 Distracting: Some participants found the 360-degree video to be distracting from the narrative.

An example of this code is:

Participant A4 (Appendix A: 28) says,

“I don't know what the story was here. Because I remember the child and the mother and the bed, but I can't remember what the story was. I was so focused on the images and moving around, but I can't remember what the story was”.

16by9 Focused: Participants found the 16by9 video to be more focused on the story being told. They found it to be more to the point.

This quote by B5 is an example of this code,

“But watching the documentary here, the flat video, made me focus on what I was seeing here. And I could feel that the stories is of this and this...” (Appendix B: 9).

16by9 Manipulative: Participants discussed how the 360-degree video format allowed for less manipulation of the visual narrative. They pointed out parts of the 16by9 video that could be manipulative.

An example of this code is:

“Even when its cut together, it could have just been two different scenes. Maybe they look similar, maybe one from Zimbabwe or one from South Africa here [in the 16by9]. But now in VR, you know that when you are turning, nothing, there's no manipulation there. It's the same space” A2 (Appendix A: 26).

16by9 Emotional: Participants found the 16by9 video to be more emotionally engaging.

An example of this code is when B5 (Appendix B: 12) says,

“...emotions are involved here... I can't remove myself out of this because it's able to connect with my emotions”.

360 Mediated Reality: Participants found that the 360-degree video allowed them the opportunity to make up their own minds about what they were seeing.

This quote by B1 is an example of this code,

“...we are busy looking at what we want to see, and you get more options than you do here on the flat video; you end up coming up with your own reality” (Appendix B: 14).

The codes listed above are directly related to the main research question. Distraction, manipulation, context, narrative, focus, emotion and perception all relate directly to the depiction of reality.

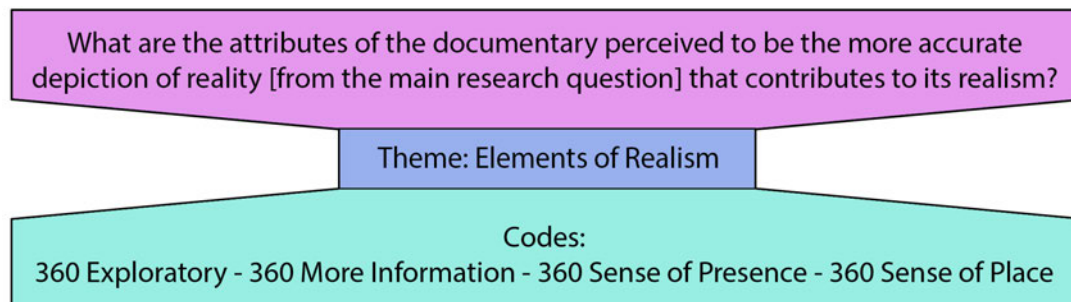
4.2.1.2 Sub-Research Question One Codes

This section solely focuses on defining the codes associated with the theme: Elements of Realism. This theme is associated with sub-research question one.

The theme, Elements of Realism, is related to sub-research question one: What are the attributes of the documentary perceived to be the more accurate depiction of reality [by the main research question] that contributes to its realism? The codes for this

theme are: 360 Exploratory, 360 More Information, 360 Sense of Presence, and Sense of Place.

Figure 12: Illustration of the relation between sub-research question one, the related theme and the associated codes.



The codes are defined as follows:

360 Exploratory: Participants found that the ability to explore the environment greatly enhanced the realism of the situation shown.

An example of this code is B1 saying,

"...you see the children, but what is on the other side of the children, a house or is it a school? And I just moved around, and I saw what it was immediately" (Appendix B: 8)

360 More Information: Participants found that the 360-degree video provided them with more information on the situation.

An example of this code is,

"And while looking at old lady talking about her conditions, she's saying I've been here since 19-whatever, and you need a picture of what this old lady has achieved, you know, over the years. So, you look around the old lady's shack, and you see that there's nothing, there's nothing and the old lady cries because to her these are all wasted years" B1 (Appendix B: 3)

360 Sense of Place: Participants discussed how the 360-degree video gave them a better sense of the place.

An example of this code is when A4 says,

“The one thing I felt the first documentary didn't say and didn't show is the proximity to the city. You almost miss that. Whereas with VR, because you can get a 360 view, you turn around, and you see that a lot of these interviews and shots actually showed the city in the distance, and you realise how close it is to the city” (Appendix A: 12)

360 Sense of Presence: The feeling of being present within the scene in the 360-degree video contributed to the participant's perception of realism.

This is an example of this code,

“Remember the shots with people moving around and doing these things. The fact that you are sitting there and looking at them and looking at this whole vast area, you forget, you feel that you're there. That's what happens unlike here on the flat one. On the flat video you really never forget that you're actually watching through the lens of a camera” B1 (Appendix B: 17)

The focus group discussions emphasised that the exploratory nature of VR, the extra information it offered, and the ability of VR to create a better sense of place and presence, were all key elements that contributed to the realism depicted in the 360-degree video.

4.2.1.3 Sub-Research Question Two

Sub-research question two was not related to a theme and is not associated with any codes.

Sub-research question two: How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

This question was dependent on the analysis and results of the other research questions. These results were linked back to the traditional theories of film realism as examined in the literature review. The findings related to this question are discussed later in this chapter.

4.3 Theme One: Depiction of Reality

In this section, the findings related to the theme Depiction of Reality are discussed. There are connections drawn to the existing literature. Finally, the main research question, Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists? is addressed.

Figure 13: Code frequency chart for theme: Depiction of Reality (Chart generated by QDA Miner Lite software from Provalis Research).

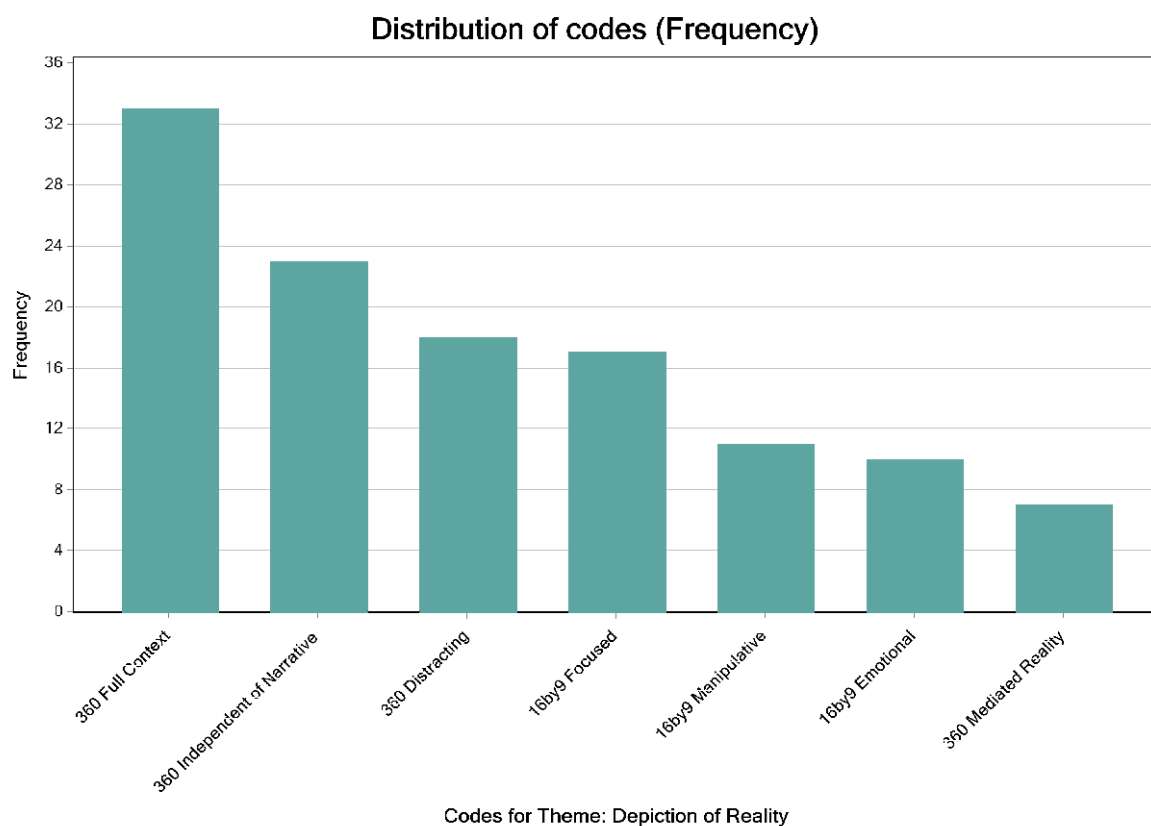


Figure 13 shows the frequency of codes in the transcripts of both focus groups. The chart shows that participants spoke mostly about the fuller context that the 360-degree video offered in comparison to the 16by9 video. The ability of the 360-degree video to be understood regardless of the narrative was also a major point of discussion. It also makes sense that participants discussed, to almost the same extent, how they got distracted in the 360-degree video and how they were more focused on the story in the 16by9 video. As expected, the ability of the 16by9 format to manipulate the audience and create emotional moments were also significant points of discussion.

Significant discussions also occurred around how the participants were able to experience their own versions of reality when watching the 360-degree video.

With regards to the 360-degree video providing a fuller context, participant A4 (Appendix A: 7) states,

“...that was the full experience and like, for example, in the shack where the lady was doing laundry and then when I turned around, and then I saw a child next to the bed, and I would not obviously have seen that in the other format and so that made me get to feel like I have a fuller experience of life in the shack itself”.

Figure 14: A comparison of the 360-degree shot versus the 16by9 shots of the interior of the shack.



Figure 14 attempts to illustrate what participant A4 was discussing regarding the “fuller experience” of being inside the shack. [Note that the flattened 360-degree video image is the entire image the viewer is able to navigate in VR. The 360-degree image is presented as a flat image here to illustrate a point; it must not be confused with the participant's referral to the 16by9 video as the flat video]. The 360-degree video is able

to show the entire interior of the shack in one shot, while the 16by9 video recreates a sense of the interior via a sequence of individual shots.

A4 also points out that the ladies spotted taking selfies next to the toilet were not part of the narrative in either video, yet it suggests that the area around the toilets was the best place to take selfies,

“...it gives a full story of what's going on as opposed to a linear story where the camera's facing and it's all you ever going to get...Like we saw the toilets, but you don't see the ladies next to the toilet because that's part of the story as well”
(Appendix A: 9)

The idea of context can be linked back to the literature in terms of the seminal theorists who promoted the deep focus long-take shots as a critical component of cinematic realism. Bazin (2004:35-36) considered the deep focus long take shot as “more realistic”, preserving the integrity of the space being represented. The deep focus meant that most of the scene was in focus, and this allowed for “composition in depth”. Similarly, Grierson (1998:97) echoed the idea of a long shot's ability to capture reality in its “purest form,” presenting it as a “living scene and the living story.” This concept is central to Grierson's *First Principles of Documentary* (1998:97) which laid the foundation for many key concepts in documentary theory and practice.

Although Bazin and Grierson were referring to traditional video in their essays, the comments from the participants demonstrate how much more relevant these ideas are in relation to the 360-degree video. 360-degree video inherently utilises deep-focus long shots. The viewer is able to look at the “entire composition in depth”. The discussions indicated that participants found that these long deep focus shots of the 360-degree video allowed them to get the “full story”.

In response to B3's comments, B1 provides great insight into the 360-degree video being distracting, the 16by9 video being manipulative, and the context provided by the 360-degree video,

“I just want to echo B3's words, but for me, it's not a distraction really; it distracts in a good way. Take for instance, the way he talks about, I think, a newborn baby found in a dump, and the guy says something along the lines of the place is full

of dumps and all that stuff, and the 360 gives you the opportunity to look around. It gives you that full picture. Whereas in the 16by9, you see the dump that they show you, and it doesn't give you...It could be manipulated. It could be the only dump there; you don't know. But this one [360] gives you the opportunity to look around and see, oh, there are a lot of other dumps in that area" (Appendix B: 2)

A little later in the discussion, B1 goes on to link the full context provided by the 360-degree video with the depiction of reality and makes a direct comparison of the formats,

"Overall, it depicts the reality more than the flat video. When the narrator says poverty, you are able to look around and say, ay this is poverty" (Appendix B: 5)

Regarding context B1 further states,

"Kennedy Road is not necessarily a huge, informal settlement like Khayelitsha, for instance, you know, because it shows you the whole area. So, context is very important in this instance. And I think that the VR does do that. In a very good way" (Appendix B: 6)

A4 makes an important point about the narration not being an essential component of the 360-degree video, "I think it's easier to disconnect from the story in VR and to shut the narrator out and just walk around and look around, almost navigate yourself without the narrator" (Appendix A: 28)

B4, in the other focus group discussion, points out that the 360-degree video "further supports" the narrative,

"...so, I think for me, even if he [narrator] didn't say it, by you observing and looking around, you make up your own mind about what you are seeing. You make up your own mind about the conditions that these people are living in" (Appendix B: 5).

B4 also makes another important comment about the narration in the 360-degree video, "...the VR just opened it up more and also to other interpretations, more than just what the narration is sort of guiding you to" (Appendix B: 6).

Metz (1991:105) theorised that the processes of cinema, such as shot selection and editing, had the ability to create its own narrative. Typically, in a 16by9 documentary, the visuals will support the narrative. However, filmmakers make decisions about which shots are used and how they are sequenced. This may influence the narrative by creating emotions or by being deceitful. Participants emphasised the fact that while they relied heavily on the narration and the visuals shown in the 16by9 video, the 360-degree video enabled them to look around and formulate their own interpretations of the story being told. This is in line with Jones's (2017) argument that while 16by9 videos frame the narrative via the selected visuals, VR provides an “objectivity through experience” (2017:174). Similarly, Mabrook and Singer (2019:6) suggest that VR offers the viewer the experience of “storyliving”.

B4 also highlights a key relationship between the independence of the narrative in the 360-degree video and its impact on storytelling, “I didn't need the narration for me to understand what it was about [referring to the 360-degree video]. But in order for it to hit home and sort of capture me and impact me. This one, the 16by9, was more powerful” (Appendix B: 9)

“VR still gives the viewer more options to decide what story they want to focus on, besides the story that the narrator is trying to tell”, this statement by B2 (Appendix B: 13) suggests that the participant considers reality to be independent of the narrative.

During the same discussion around the narration, B1 made a statement that illustrates how the different attributes of these two formats are related to each other and affect each other,

“You know the fact that we all say when we were watching the VR, we ended up losing what the narrator is saying basically means that the flat video [16by9] is restrictive. The flat one [16by9] is very restrictive. You have no option. You have to listen to what he [narrator] says and you have to see what he wants you to see” (Appendix B: 13).

The above statement emphasises the independence of the narrative and negatively reflects on the ability of 16by9 to focus on the story.

Participants spoke about being distracted from the story mainly because of other things they noticed in the 360-degree video. A4 makes an interesting comment about being distracted by the Che Guevara T-shirt the journalist was wearing during one of the interviews,

“...the Che Guevara T-shirt that the journalist was wearing, because for a second it might take you away from the story and you might think, oh, he's wearing a Che Guevara shirt. At first, you might not realise that that's the journalist. So, you might wonder, oh, who is that person with this T-shirt?” (Appendix A: 18)

There were about an equal amount of discussions on the 360-degree video being distracting and about the ability of the 16by9 video to focus on the story. Regarding the 16by9 video, A2 states, “...you can really focus the story because you have nothing else to focus on” (Appendix A: 36).

Jones (2017) states that, unlike traditional video documentaries that guide the viewer's attention, the 360-degree video documentary allows the viewer the freedom to look around. In VR, then, rather than focusing on the story, the viewer starts looking around. Jones (2017) also suggests that this availability of choice creates a fear of missing out, so the viewer is constantly looking around. The participants' experiences in this study are also in line with the findings of Barreda-Ángeles, Aleix-Guillaume, and Pereda-Baños (2021), who suggest that viewers' attention in VR is diverted to exploring rather than information processing.

The ability of a 16by9 video to focus on the story is an inherent part of the filmmaking process and is the foundation of traditional Film Theory. While participants appreciated the freedom of looking around that the 360-degree video offered, they acknowledged that it could distract from the story. Also, while participants found the 16by9 video more focused on the story, they acknowledged that it was restrictive.

Participants also noted that the ability of the 16by9 video to focus also allowed the format to be manipulatable. A4 says, “...because sometimes the journalist might focus in the corner. Because they were strategic. Yes, because they don't want you to see whatever else is happening. That's for whatever narrative that the journalist might be trying to push” (Appendix A: 9). B2 also states, “With the flat [16by9] one...You see what the cameraperson and the reporter wants you to see” (Appendix B: 7).

The participants in this study are all experts, and they are very much aware of how a 16by9 video can be manipulated. Manipulation is inherent in the filmmaking process; it's part of the art. The ability of the 16by9 format to be manipulative was first highlighted by the “Kuleshov effect” experiment (Kovacs 1976:34), which demonstrated that the meaning of a shot in a film is not inherent but can be shaped by the context and the way shots are edited together. While in a 16by9 video, each scene is represented as a sequence of shots, in a 360-degree video, each scene is a single continuous shot. This inherently makes the 360-degree video less susceptible to manipulation.

A3 provides a great comment that clarifies the argument, “For reality, the VR is unbeatable, for intentionality, I think the 16by9 is the more manipulatable format, you can manipulate those things.” (Appendix A: 35)

Participants recognised that the ability to use close-ups and focus on the story greatly enhanced the emotional impact of the 16by9 video. They also acknowledged that this was manipulative and detracted from the reality of the situation. B5 says, “... I can't remove myself out of this [16by9] because it's able to connect with my emotions. But here [360] you make up your own mind” (Appendix B: 12). B2 also says, “...the VR, as much as it does take a bit of emotion away, but it does not take everything away, it brings you very much closer to reality compared to the flat one [16by9]” (Appendix B: 13).

Figure 15 illustrates the emotional 16by9 shot of the interview with the old lady. Although this emotional shot really drove the point home, the reality of the situation was not lost in the 360-degree video. As B2 (Appendix B:3) states, “There's a shot of the lady in the shack there [360-degree]... you look around...you know, that there's poverty in this house, the moment she gets to the poverty line, you are already aware it's really bad”. While the 16by9 video captured the participants emotionally, the 360-degree video allowed participants to look away and around to still grasp the dire situation of the lady.

Although the literature promotes the ability of VR to engage the viewer emotionally, the discussions suggested that 16by9 is the more emotionally engaging format. The researcher suggests that this study's discussions reflect an accurate account of the

participants' experiences and this deviates from the literature because this study is a direct comparison of the two video formats. Such a direct comparison of the two video formats, by focus group participants, was not conducted previously.

Figure 15: 16by9 interview shot of lady.



On this direct comparison on emotion, B1 (Appendix B:20) states,

“My biggest problem here [360-degree] is that there are no close-ups. That is a major, major problem. You see that shot of uGogo [grandmother] crying was very impactful. You know, each time I think about this documentary, the 16by9, you just see uGogo [grandmother]...You just cannot see that shot here on the VR...So as much as 99.3% is good here on the VR, there are still a few issues...”

The assertion that the 16by9 video is the more emotional format aligns with Eisenstein's Montage Theory (Andrew 1976), which suggests that specific choices made in editing profoundly affect the audience's emotional response to a film. While Van Damme *et al.* (2019:2070) argue that emotion is influenced more by subject matter than by the technology used, the participants in this study were able to make a direct comparison of two different video formats [16by9 and 360-degree video] with the same subject matter. Based on the findings of this study, the researcher believes that technology does significantly influence emotion. Although this perspective does

not contradict the findings of Van Damme *et al.* (2019:2070), it certainly provides context for their argument.

A salient point during the discussions was that participants experienced the 360-degree video differently. They saw different things and stated that they were able to make up their own minds about what they were seeing. In the literature, this was referred to as “mediated reality”, and it was coded as such in this analysis. B1 states, “... you end up getting so much more on VR than here on the flat [16by9] video; you end up getting your own reality. You can come up with a story” (Appendix B:14)

The ability of VR to allow the viewer to establish their own reality is an idea put forth by Orange (2020), an idea she referred to as “mediated reality”. Orange suggests that with traditional documentaries, the burden of truth and realism lies with the filmmaker. However, in VR, the audience shares this responsibility. In VR, the audience is able to evaluate both the narrative and environment and access the situation for themselves. This is reflected in the discussions of this study. Significantly, this is in line with the ideas of Elsaesser and Hagener (2015:196), who posit this phenomenon as a coherent or contextual “theory of truth” in VR.

In this section, the researcher chose key quotes that best represent the discussions that occurred in both focus groups around the codes of the theme: Depiction of Reality.

To re-iterate, the full transcripts of both focus groups are available as appendices to this thesis and can provide a better understanding of the flow of discussions and validate this thesis's findings. These transcripts are rich in data and provide further insights into the thoughts and experiences of the participants.

B1’s statement sums up this section appropriately, “The VR depicts realities that are not necessarily depicted by the flat [16by9] shoot” B1 (Appendix B: 11)

At the end of each focus group discussion, when the researcher asked participants to reflect upon the discussions and answer the question: Which video [16by9 or 360-degree] did they find to be the more accurate depiction of reality at the Kennedy Road Informal Settlement? The participants were unanimous in their decision. They agreed that, although the 360-degree video had inherent limitations, such as being distracting and less focused, it was the more accurate depiction of reality in the settlement by far.

Some of the explanations they provided also informed the next theme, Elements of Realism.

4.4 Answering the Main Research Question

While the frequency of codes is an important aspect of analysing research data, it alone is not sufficient to judge the significance of ideas.

Saldaña (2013:202) also cautions against using code frequency alone to measure the significance of the data. The quality and content of the discussions must be the main considerations.

For this thesis, the researcher did find that the frequency of codes did relate to the significance of the ideas. The most significant ideas were most prevalent during the entire course of both focus group discussions. However, the way these ideas were interrogated during the discussions, as well as the level of consensus among the participants, and the researcher's interpretation of the discussions and outcomes, were the main criteria for assessing the significance of these ideas.

As stated earlier, the codes assigned to the themes are not exclusive; instead, they overlap and have interconnected links to each other. This is important in understanding the conclusions drawn from the analysis and discussions.

While some participants found the 360-degree video distracting, this was primarily due to the exploratory nature of the format. This exploration in VR distracted them from the story and influenced their perception that the 16by9 video was more focused. Moreover, this exploratory nature of the format also allowed them to "see for themselves". Consequently, the idea that the 360-degree video was not tied to the narrative gave participants the freedom to decide for themselves about the reality of the Kennedy Road Informal Settlement. That is, participants could mediate their own reality.

The 16by9 video being more focused also meant that it could be used to manipulate its audience, at times by playing on their emotions [there were significant discussions on the use of close-up shots to elicit emotion in the 16by9 video]. Participants also voiced concerns about how easily shots could be used out of context in the 16by9

format. Participants noted that if they had watched the 16by9 version only, they would likely not fully trust its depiction of reality. The discussions highlighted that the fuller context provided by the 360-degree video was a key factor in the participants perceiving the format to be the more accurate depiction of reality in the settlement.

Despite the rich debates on the strengths and weaknesses of both formats, there was unanimous agreement that, regardless of its shortcomings, the 360-degree format unquestionably provided a more accurate depiction of reality at the Kennedy Road Informal Settlement.

To reiterate, all participants in both focus groups came to the consensus that the 360-degree video version of the documentary on the Kennedy Road Informal Settlement in Kwa-Zulu Natal was the more accurate depiction of reality at the settlement. The analysis of the discussions revealed that this was due to the following:

The 360-degree video offered a fuller context to the story; When watching the 360-degree format, the participants were not restricted by the narration and the selected visuals as in the 16by9 format; Participants considered the manipulative nature and emotionally engaging ability of the 16by9 format to negatively impact their perception of the reality of the situation; The 360-degree video version offered them the opportunity to see for themselves and make up their own mind.

At this juncture, it's crucial to emphasise that this thesis has effectively situated contemporary VR theories and concepts within the framework of classical film theory, as evidenced by the literature and discussions.

To sum up:

Question: Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

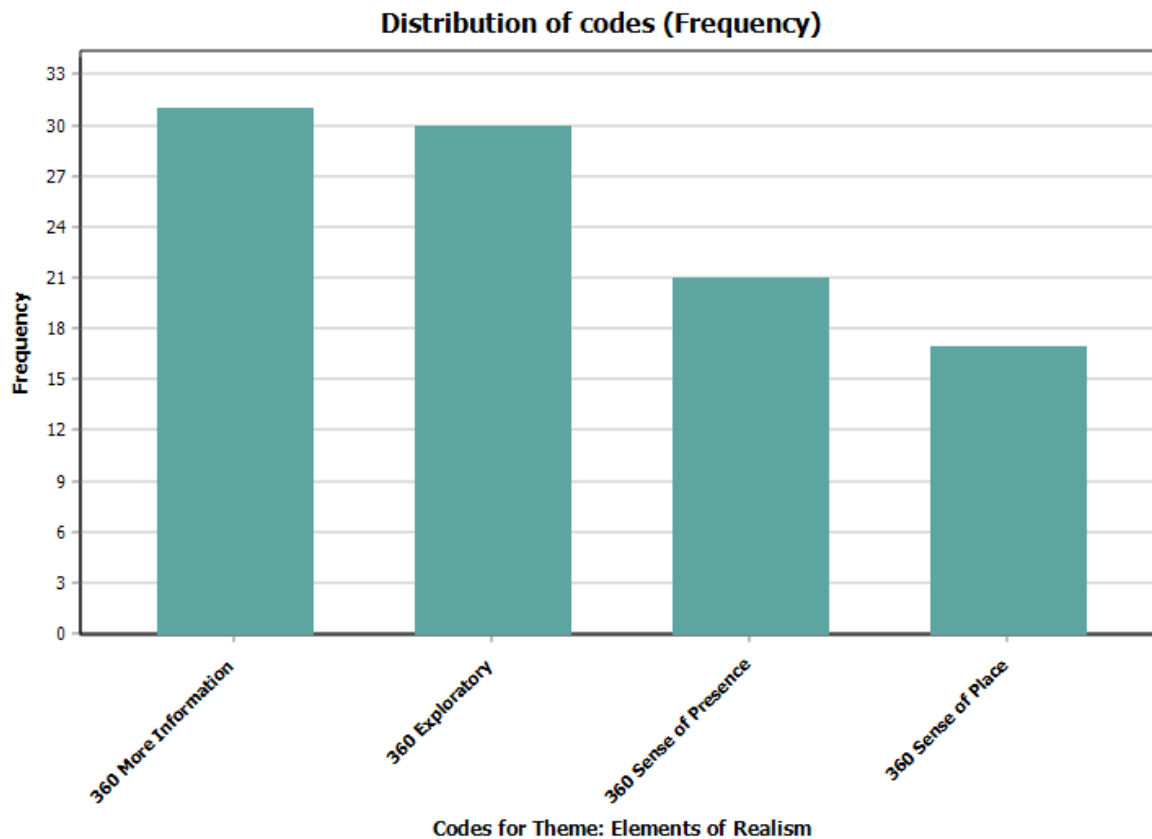
Answer: The 360-degree video. Without dissent.

4.5 Theme two: Elements of Realism

In this section, the findings related to the theme Elements of Realism are discussed. There are connections drawn to the existing literature. Finally, sub-research one

question, What are the attributes of the documentary perceived to be the more accurate depiction of reality [by the main research question] that contributes to its realism? is addressed.

Figure 16: Code frequency chart for theme: Elements of Realism (Chart generated by QDA Miner Lite software from Provalis Research).



As shown in Figure 16, a similar amount of discussions were dedicated to the extra information offered by the 360-degree format, and its ability to allow the viewer to look around the environment. The exploratory nature of the 360-degree video does not necessarily mean that it offers more information. Consider Brustein (2014), as examined in the literature, where viewers thought that the VR experience “fell short” because there was nothing going on in the virtual environment of the farm.

However, in this case of the Kennedy Road Informal Settlement, where a lot was going on in the environment, it’s clear that participants gathered more information by being able to look around.

As discussed earlier, although the frequency of codes does not necessarily point to its significance, in this case, it was clear that being able to look around and gather extra

information was important to the participants. The ability of the 360-degree video to make participants feel as if they were experiencing the story as if they were present at the scene was also a major point of discussion.

The idea of “being there” and being able to look around made participants feel that they were better orientated within the environment. It was also clear from the discussions that the 360-degree video allowed participants to understand where the informal settlement was situated in relation to the city and where they were placed within the informal settlement.

A good example of how the discussions flowed and how the codes related to each other is that while some participants thought that the T-shirts the journalist was using were distracting, others felt that the shirts offered more information or insight into who was telling the story. A4 says,

“... and again, he's wearing a Biko T-Shirt, he was wearing a Che Guevara T-Shirt in the other one [interview]. Because those are also making statements...it also then makes you draw certain conclusions about why the story is being told, by who's telling the story. The fact that you can see who is telling the story in the 360, whereas you'd never be able to see the journalist of the other one. And the fact that it's someone who would wear Biko T-shirts and Che Guevara T-shirts...who Biko was and who Che Guevara was...” (Appendix A: 25).

A3 responded immediately, “...it was quite interesting to see the journalist... I mean because, as you say, you now know something about him and his views...” (Appendix A: 25).

This aligns with Van Damme *et al.* (2019:2070) who suggest that viewers in VR notice specific aspects of the scenery that contribute to their understanding of the story. Bazin (2004:102) also suggests that certain elements of the scene, besides the characters, also influence the dramatic effect of a scene.

The discussions around the T-shirts are interesting because it demonstrates the ability of the 360-degree video to allow the viewer to explore the environment, which allowed them to notice the T-shirts. While some participants agreed it was distracting, others pointed out that it offered more information and insight into the psyche of the journalist.

Participant B3 (Appendix B:19) observed that "the birds" symbolise the continuity of life, irrespective of the terrible conditions in the settlement. B3 aptly noted, "It's just like a little detail that you didn't get here in the 16by9 format". A3 (Appendix A:33) astutely noticed a desktop fan that was attached to the roof of a shack, "I also noticed the ceiling fan; I was like that's clever...every time you watch [the 360-degree video] it's a different experience".

In a discussion about the depicted realism, B1 also interconnected the topics of narration, exploring, the way the 360-degree video offered more information and the sense of place it created,

"The narrator never spoke about the distance between toilets and houses, in both cases... But *B2* strayed. He said I don't want to listen to you. He looked around and said, you know, those toilets are too close to the houses" (Appendix B: 14)

B3 also inter-relates the extra information on offer with reality, "...now with this VR, you've got so much more to go on... so on some things, you can make up your own mind. Oh, this is actually worse than what this person is saying"(Appendix B: 4).

Throughout the discussions, there was a prevalent connection between exploring and acquiring additional information. However, it's important to note that simply exploring or looking around in VR does not always guarantee the acquisition of more information. For example, consider an empty room; exploring it would not yield any additional information. In the case of the videos depicting the Kennedy Road Informal Settlement, participants demonstrated that within the 360-degree video format, the more they explored or looked around the environment, the more information and insight they gleaned about the residents and their living conditions. Furthermore, it is important to note that participants gained different information even when they explored the same scene. As participant A3 (Appendix A:33) mentioned, " ...every time you watch it's a different experience".

A5 spoke of the exploratory nature of the 360-degree video as "democratic cinema"; A5 enjoyed the freedom of being able to look around in the scene as opposed to being shown specific shots in the 16by9 version,

“...democratic cinema allows you freedom as a viewer to interpret the signals and all the elements that are within that frame. And that freedom is liberating and more real, I feel, than watching a film that is edited, where even if I'm following the narrative very closely, the shots are different. I don't have a choice in that decision” (Appendix A: 14).

B2 links the exploratory nature of the 360-degree video directly to reality, “It's actually very close to reality because you can look in the direction that your eye is facing, I'm seeing all the way from this side to that. But the flat video is only showing me a portion” (Appendix B: 13). This idea is also reiterated by B1, “I want to see the way I want to see. If I want to look up, I will look up. If I want to look down, I will look down... you actually forget that you're looking through the lens [of a camera]” (Appendix B :17)

This statement from B2 affirms why Kim's (2021:328) idea of “synthetic vision” stands in contrast to much of the literature. Kim argues that 360-degree video, by restricting the way the viewer explores a scene, makes the viewer acutely aware that they are viewing a scene through the lens of a camera. Note that in 360-degree video, the viewer cannot move around a scene but can only look around the scene from the camera's point of view. According to Kim, 360-degree video does not bring cinema closer to Bazin's ideal of total cinema (2004), which represents the ultimate depiction of reality. Instead, it moves cinema further away from this objective. However, the participants in this study suggest a different perspective, one that aligns more with the literature, as B2 states, “you actually forget” (Appendix B:17) that you are seeing from a camera's viewpoint and become fully immersed in the environment. This finding is consistent with Rose (2018) and Nash (2018), who assert that 360-degree video brings cinema closer to representing a 'complete illusion of life' (Rose 2018:137) and “a perfect illusion of the outside world” (Bazin 1967:20, cited in Nash 2018:98).

As Jones (2017), points out, the exploratory nature of VR removes the restrictions created by the screen in the 16by9 format. Participants in this study found this freedom liberating. Van Damme et al. (2019) in their study, found that the extra information offered by VR had more influence on participants than the sense of being present. This is also collaborated by the discussions.

With regards to the sense of presence created in the 360-degree video, B3 perceived, “It felt to me like you're in it, it puts you more in the place, you know like it's more in it. It's not so separated and distance. You definitely feel more in the story than gazing upon it” (Appendix A: 7). B2's statement also illustrates the strength of the feeling of being present, “...you feel like greeting some people at some point” (Appendix B: 5). B2 later also states that transporting the audience to the scene is, in essence, the aim of visual storytelling, “the fact that you are there, and that's what the camera is meant to do, make you feel like you are there, closer and where things are happening” (Appendix B: 23).

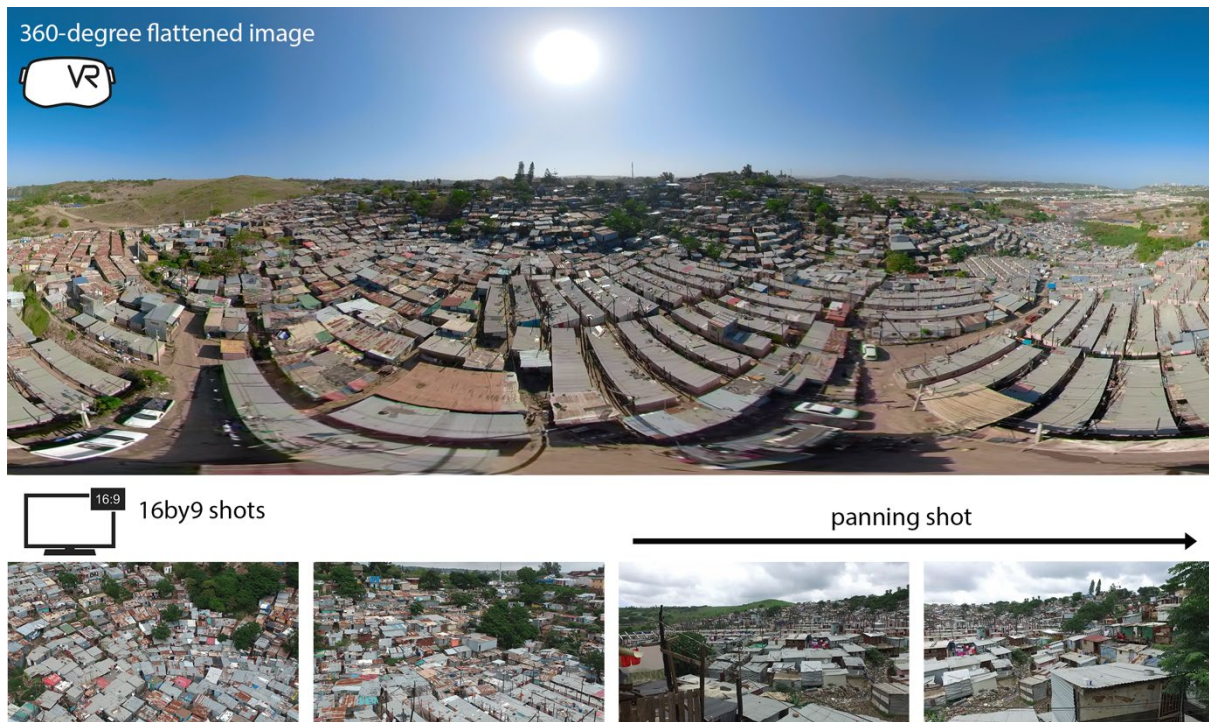
This study shows that the Sense of Place and Sense of Presence are related but are also created differently in the two different video formats. As the work of Bazin (2004:96-98) in his essay “The Concept of Presence” shows, the sense of presence is not new or exclusive to the 360-degree video format but has been a subject of debate for the early film theorists.

A4 thought that the 16by9 version failed to show where the informal settlement was situated in relation to the city and industries in the area. Establishing the place as being close to a developed area was an important opportunity missed in the 16by9 version,

“...one thing I felt the first documentary [16by9] didn't say and didn't show is the proximity to the city. You almost miss that. Whereas with VR, because you can get it 360 view, you turn around, and you see that in a lot of the interviews and the shots actually showed the city in the distance and you realise how close it is to the city” (Appendix A: 12)

Figure 17 attempts to illustrate an example of what A4 discussed in relation to the 360-degree video being able to establish a better sense of place. In the 360-degree image, the size of the settlement and its proximity to the city and nearby industrial area are well established. The 16by9 shots fail to convey this effectively. [Note that the flattened 360-degree video image is the entire image the viewer is able to navigate in VR. The 360-degree image is presented as a flat image here to illustrate a point; it must not be confused with the participant's referral to the 16by9 video as the flat video].

Figure 17: A comparison of the 360-degree aerial shot of the settlement versus the 16by9 drone shots.



Kukkakorpi and Pantti (2020:793) stress the significance of sense of place, “Place can become one of the subjects...”, it contributes significantly to the understanding of the story. Donghee (2018) argues that reality is a cognitive process based on perceptions. In traditional Film Theory, a sense of place is created by a sequence of shots, for example, an establishing wide shot followed by closer shots that draw the viewer into the action. This perceived sense of place is what influences the viewer's sense of presence. It is, therefore, not surprising that participants in this study considered the sense of presence they felt in the 360-degree video more influential on their experience of realism than the sense of place. The 360-degree video places the viewer directly on the scene, creating a strong sense of presence that directly influences their perception of reality.

A5 Appendix A:13), “I really think the way you feel present, we feel like we are somehow in a reality much more than just watching the screen. I think it's also related to the movement; your moves articulate what you see”.

Also noteworthy is that Kukkakorpi and Pantti (2020) assign greater importance to the sense of place that VR creates than the sense of presence. They suggest that viewers must first establish themselves within the VR environment [place] before their cognitive

processes of presence [being there] initiate. This could be considered as being in slight contradiction to this study. Participants in this study put more emphasis on the feeling of being present in VR than the sense of place. The researcher ascribes this slight discrepancy to the different contexts and focus of the studies. This study is a direct comparison of the two different formats [360-degree and 16by9], while Kukkakorpi and Pantti (2020) studied the Reception of a number of 360-degree videos only.

B2's statement appropriately sums up the discussion over place and presence,

"When I watched through the VR, I felt that I was in there. If you tell me to drive to that informal settlement where you are filming, I will be able to go there. Because I now feel that I have been there...it gives you that sense, you feel like you've been there only by watching. Whereas on the 16by9, on the flat one, you still do not feel like you were there. If you tell me to go find some of these houses on this street, I will have no idea where to start looking" (Appendix B:22).

The researcher's interpretation of the data and understanding of it in the context of existing knowledge and theory reveals that the extra information offered by 360-degree video, its exploratory nature, and the sense of presence and place it creates are the main elements that contribute to its realism.

As mentioned previously, the full transcripts of both focus groups are available as appendices to this thesis and can provide a better understanding of the flow of discussions and validate this thesis's findings. These transcripts are rich in data and provide further insights into the thoughts and experiences of the participants.

4.6 Answering Sub-Research Question One

As explained earlier the codes and themes were derived abductively. The researcher's interpretation of the data and knowledge of the existing literature and theory enabled the researcher to subjectively draw conclusions from the discussions.

The discussions showed that the intrinsic nature of the 360-degree video, allowed it to convey more information. Participants found that it allowed them "to interpret the signals and all the elements that are within that frame" (A5 Appendix A: 14). Participants discussed how the 360-degree video allowed them to notice the T-shirts

that the journalist was wearing and how it gave them an insight into the person telling them the story.

Participants found the exploratory nature of the 360-degree video “liberating” and stated that it allowed them the freedom to focus on whatever they wanted to within the scene, as opposed to being directed by the 16by9 video. The ability to look around as you would in the real world greatly enhanced the realism of the 360-degree video.

The 360-degree video allowed the participants to feel present within the scene. Participants said that when watching the 360-degree video they felt like they were actually there rather than looking at a scene. One participant mentioned that they actually felt like greeting some characters within the scene.

Participants said that after watching the 360-degree video they felt like they had visited the place. The 360-degree video provided participants with a mental map of the area and allowed them to understand their orientation within the environment in each scene. This experience was so strong that a participant mentioned that they felt that they could drive there and find their way around.

It is crucial to emphasise that these elements mentioned above, namely more information, exploratory nature, presence, and place, are, in this section, referring exclusively to the 360-degree format. The researchers' subjective interpretation of the discussions found that these elements were the main contributing factors to the 360-degree video being perceived as the more accurate depiction of reality in the Kennedy Road Informal Settlement. There is no evidence or viewpoint from the participants that dissent from this conclusion.

To reiterate, this research found that the 360-degree video format provided a more accurate depiction of the reality [as defined by the classical film theorists] in the Kennedy Road Informal Settlement compared to the 16by9 version of the same documentary. An analysis of the data from two expert focus group sessions revealed that the 360-degree video format's ability to offer additional information, enable viewers to explore the scene and create a sense of presence and place were the primary factors contributing to its realism.

To sum up:

Question: What are the attributes of the documentary perceived to be the more accurate depiction of reality [by the main research question] that contributes to its realism?

Answer: The 360-degree format offers more Information [by inference], it is Exploratory [enables the viewer to look around], and it creates a heightened Sense of Presence and a better Sense of Place. There was no evidence that indicated dissent to this answer.

4.7 Sub-Research Question Two

This section presents the findings pertaining to sub-research question two and their relationship with the existing literature. Furthermore, it addresses sub-research question two directly.

Sub-research question two:

How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

There were no codes and themes associated with this question. The researcher's understanding of the literature and data led to the conclusion that the best approach to answering this question was to base it on the answers to the main research question and sub-research question one. To recap, the answers to these two questions were: The 360-degree version of the documentary is perceived to be the more accurate depiction of the reality in the Kennedy Road Informal Settlement, and this is primarily because the 360-degree video offers more information, is exploratory in nature, it creates a sense of presence for the viewer, and better represents the place in terms of space. These conclusions were unanimous and there was no dissent to these views.

The answers to these questions are important because they inform the researcher's approach to answering the question at hand. The 360-degree version of the video of the Kennedy Road Informal Settlement was unanimously found to be the more accurate depiction of the reality within the Settlement. This is significant because it profoundly reflects the ideas of the seminal realism theorists, namely André Bazin,

Siegfried Kracauer and John Grierson. Their ideas were examined in detail in the literature review section.

To reiterate, some of the most profound ideas were that of Bazin (2004:35-36), from his essay “The Evolution of the Language of Cinema”, where he outlined the three key elements of “composition in depth”.

1. The deep focus long take is “more realistic” as it does not depend on multiple edits, which tend to cut up the integrity of space and time.

With regards to “deep focus long take” shots, the 360-degree camera, by the very nature of its technology, is able to achieve this. The scene in a 360-degree video is represented by a single 360-degree field of view shot, as opposed to the 16by9 format, where a sequence of edited shots represents a scene. The 360-degree camera also has a deep depth of field, which means that most of the scene is always in focus.

2. It allows for a more active, interpreting audience that has more viewing “personal choice” rather than being directed what to see by editing.

The ability of the 360-degree technology to allow the viewer to explore the scene was referred to by participants as “democratic cinema”; it allows the viewer the freedom of choice, rather than “watching a film that is edited” (A5 Appendix A: 14)

3. Very importantly, deep focus long takes enable an “ambiguity of expression” in the image, thus achieving that ontological realism which recognises the “uncertainty”, “mystery”, and polyvocality of reality.

Participants experienced the 360-degree video version differently, “you end up getting your own reality” (B1 Appendix B:14). Participants were also able to mediate a reality of the situation by making up their own minds about what they were seeing and hearing. Participant B1 also suggested that the 360-degree video offered multiple realities, “The VR depicts realities that are not necessarily depicted by the flat shoot” (Appendix B: 11).

Bazin’s essay “The Concept of Presence” (2004:96-98) suggests that early cinema blurred the lines between being present and absent. Bazin suggested that cinema had the unique ability to make the viewer “present” at the scene, “...it is no longer as certain

as it was that there is no middle stage between presence and absence". The findings of this thesis show that the heightened sense of presence created by the 360-degree camera weighs heavily on the audience's perception of the reality of the situation.

Bazin's idea of "the myth of total cinema" posits that the technology of cinema strives to achieve "...a recreation of the world in its own image, an image unburdened by the freedom of interpretation of the artist or the irreversibility of time" (2004:21). The findings of this thesis suggests that the technology of the 360-degree camera has achieved this to a great extent. The viewer has the freedom of interpretation in the 360-degree format. By its very nature, the format does not require image sequences to be edited together to represent a scene. The 360-degree image can be considered "a recreation of the world in its own image".

Bazin further states in the same essay, "Every new development added to the cinema must, paradoxically, take it nearer and nearer to its origins. In short, cinema has not yet been invented!" (2004:21).

This statement is profound when we consider that André Bazin was a film theorist who lived from 1918 to 1958. He would have had no idea that a technology such as the 360-degree camera would ever exist. A VR headset at that time would have been an incomprehensible invention. Yet, his ideas on cinematic realism are so relevant to the 360-degree video format that it is easy to forget that he was referring to the cinema of the previous century.

Notably, Siegfried Kracauer also stressed the importance of capturing reality in cinema and emphasising the need for a truthful representation of the external world. Kracauer promoted a documentary-like approach to filmmaking, wherein the camera would objectively observe and record everyday life, without excessive manipulation through editing.

John Grierson, in his essay "First Principles of Documentary", written in 1932, states that the documentary film should capture "the living scene and the living story" and that "materials and the stories thus taken from the raw" are more real (1998:97).

As stated previously, in the 16by9 format, a sequence of shots typically represents each scene. The technology of the 360-degree video format represents the entire

scene in a single 360-degree field-of-view shot. This can be considered as capturing “the living scene and the living story” and being “taken from the raw”.

A key point that must be mentioned to contextualise the argument further is that the “Kuleshov effect” (Kovacs 1976:34) revealed the ability of the edited sequence to manipulate the meaning and thus the interpretation of a 16by9 sequence. The findings of this thesis suggest that this manipulation was a significant consideration against the faithful reproduction of reality using the 16by9 format. The intrinsic nature of the 360-degree format makes it impervious to this type of manipulation.

Participant A5 made a meaningful observation with regard to the 360-degree video in comparison to the 16by9 video and in the context of Bazin’s idea of cinematic realism,

“...I notice this in a lot of contemporary films. I watch they cut for pace and it's a blur of images and you actually not conceptualizing anything in a lot of it, it's just your eye is constantly being stimulated and filled with imagery, but you can't engage with it. And I think that's the idea of the realism that Bazin talks about you can actually contemplate the reality in the frame by it being unedited” (Appendix A: 14).

4.8 Answering Sub-Research Question Two

As discussed in the previous section, the technology of the 360-degree camera does rejuvenate the traditional theories of cinematic realism. This is especially true for the ideas of André Bazin and John Grierson. Grierson is often considered the father of the documentary film genre, and the literature shows that the 360-degree video format has been widely used for documentary filmmaking.

To sum up:

Question: How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

Answer: The 360-degree video camera reinvigorates the debates around the traditional theories of cinematic realism. The direct comparison of the 360-degree video format versus the 16by9 video format in terms of depiction of reality resurrected the ideas of the seminal realism theorists. The long take, deep focus shot, the effects

of film editing, and the sense of presence were all ideas of the early cinematic realism theorists. Yet, these ideas were major discussion points in the focus group sessions of this study, especially when discussing the 360-degree video format. It is the intrinsic nature of the 360-degree video camera technology to create long deep-focus shots.

4.9 Reception Comparison

Stuart Hall is widely considered the pioneer of Media Reception Theory. He argued that an audience does not just passively receive media messages but actively interprets and understands them based on their personal and social backgrounds. (Hall 1980:120).

As discussed earlier in this thesis, this was a factor that caused the researcher to segment the focus groups into a group of journalists and a separate group of academic experts. The composition of the focus groups was also discussed in detail in the previous chapter.

This section compares the two focus group findings. While this does not affect the overall findings, as the discussions in both focus group sessions followed a similar flow, examined the same ideas, and drew the same conclusions, it is nonetheless interesting to note the differences because Reception Theory was a significant consideration in the research design of this study.

Figure 19 shows that the focus group of journalists emphasised and discussed the narrative in the videos more than the academics in focus group one.

When asked about which video depicted the reality better, B3, a video journalist with 41 years of working experience, responded, “I think the VR, obviously, because of more information, more angles, more views, it's more everything, really you know. You become more immersed in the story, as it were. I mean, look at this, you know [pointing to the 360-degree image displayed on the screen]” (Appendix B: 22)

B2, also a video journalist said of the audience, “...they don't have to see only what you see. They don't only have to hear what you hear. But they also need to be there in order for them to understand the story fully” (Appendix B: 23)

Telling the story was the main concern for the journalists.

Figure 18: Focus Group One - Academic Experts - Code Frequency (Chart generated by QDA Miner Lite software from Provalis Research)

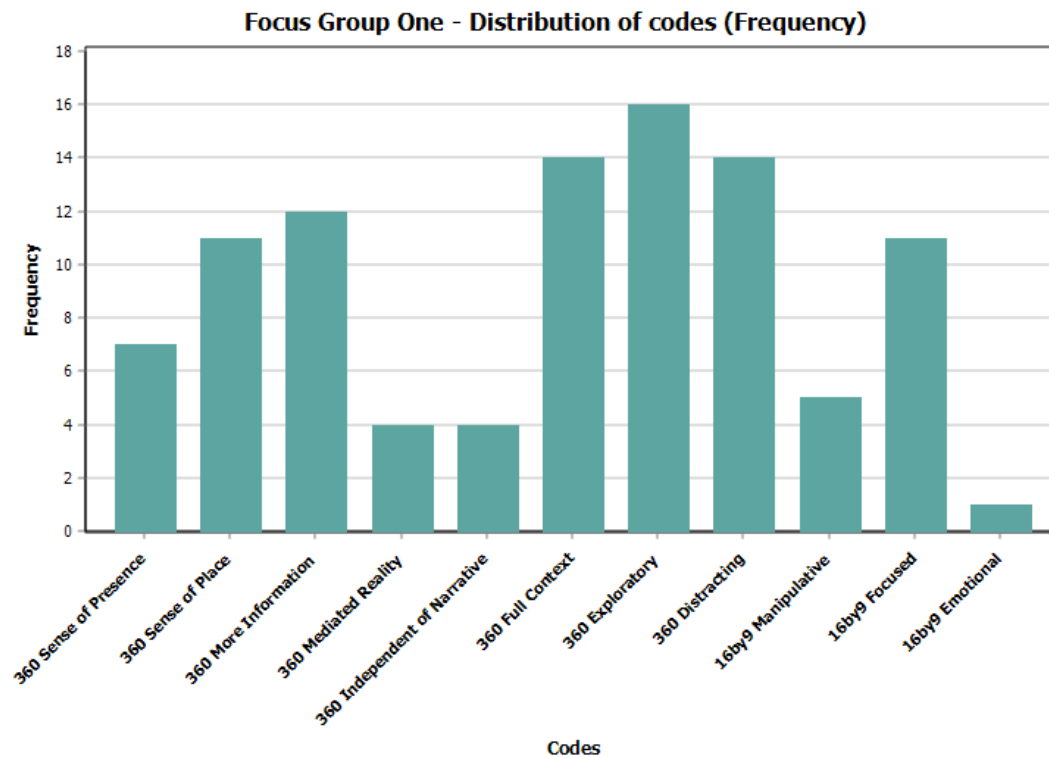
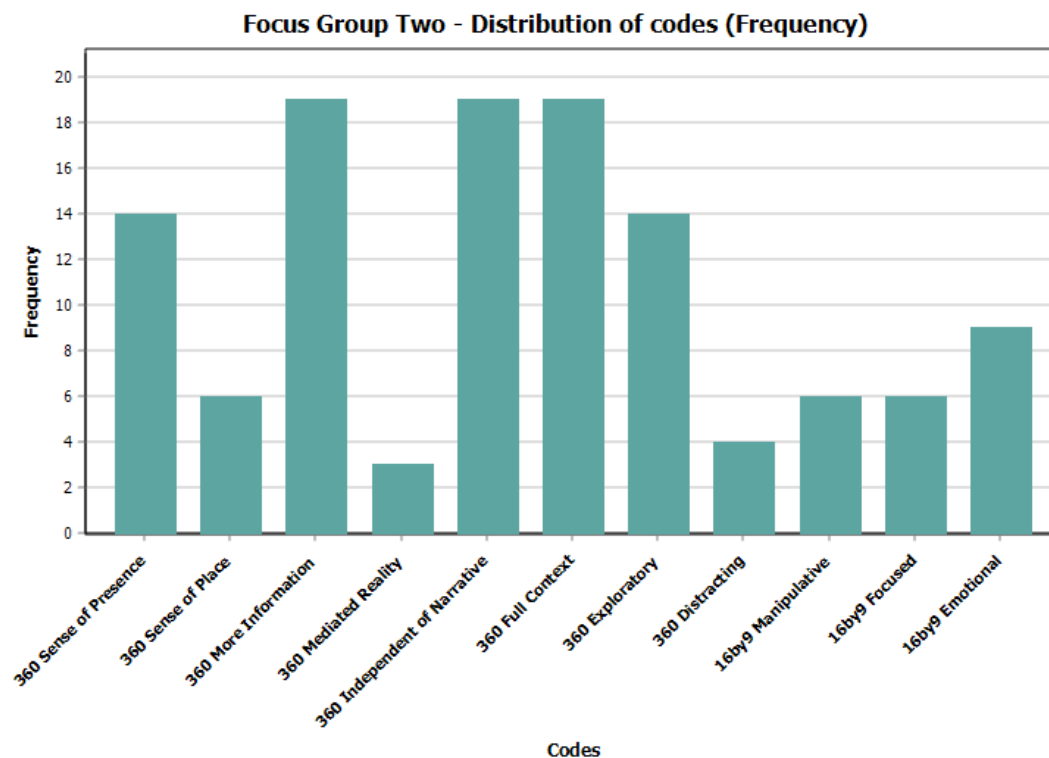


Figure 19: Focus Group Two - Journalists - Code Frequency (Chart generated by QDA Miner Lite software from Provalis Research)



On the other hand, compared to the journalists and as shown in Figure 18, the academics discussed much more about how the 360-degree video could be distracting and how the 16by9 format was more focused. Although the academics also unanimously agreed that the 360-degree video was the more accurate depiction of reality, they also voiced their personal biases.

A5 stated,

“Mediums are fantastic. I mean, I love painting pictures that emulate reality. Yes. I can engage with them for ages. I mean, I love photography, you know, I love film. You know, they each offer something completely different. So, it’s strange. But I do have this love for 16by9. And I think I am resistant to change...”
(Appendix A: 22)

A3 also weighs in,

“You’re actually resistant to these technological advances, for me also, you know, and I think the more embedded we are on those processes and those mediums, the more difficult it is in a way to move forward. I mean, I still just love to watch film movies. `look at the grain, look at the bleed on the edge of the blacks...” (Appendix A: 23)

The academics, although they provided a fair assessment and discussion on the comparison of the different formats, made it clear that they were deeply devoted to the traditional formats.

To clarify, although there were rich debates and discussions on the 16by9 and 360-degree formats in both focus groups, the discussions ultimately led to a unanimous agreement that the 360-degree video format was overall superior in its depiction of reality. There was no dissent regarding the conclusions drawn in this thesis.

The reception biases of both groups, although evident, were not disruptive. Thus, the decision to or not to divide the focus groups into academic experts and journalists would not have affected the findings of this thesis.

However, it was evident that dividing the focus groups into academic experts and professional journalists led to more insightful and free-flowing open-ended

discussions, resulting in richer data. The common background of the participants within each focus group ultimately led to more rigorous debates on the points that were important to them.

4.10 Summary

This chapter described in detail and justified the analysis procedure. The research questions were answered through the rigorous interrogation of the themes. The Reception differences between the two focus groups were discussed, and the limitations of this study were explained.

In this chapter, it was concluded that the 360-degree video version of the documentary on the Kennedy Road Informal Settlement in Kwa-Zulu Natal was the more accurate depiction of the reality [as defined by the classical film theorists] at the Settlement when compared to the 16by9 version of the same documentary. The 360-degree version of the documentary offered more information, allowed the viewer to explore the environment by looking around, and created a heightened sense of presence and a better sense of place.

The 360-degree video camera technology was found to profoundly reflect the traditional theories of cinematic realism mainly due to its intrinsic nature of recording long deep-focus shots.

The next chapter will conclude this thesis by providing an overall summary of this study with recommendations for further research.

Chapter 5: Conclusion and Recommendations

5.1 Introduction

This thesis successfully tested the reality depicted in the case of two independently produced videos of the Kennedy Road Informal Settlement in Kwa-Zulu Natal. One video was produced in the 360-degree video format, and the other in the traditional 16by9 video format. This was achieved via a robust research design and rigorous validity and reliability checks. A summary of the results is presented in this chapter, and its significance is highlighted. The overall limitations and shortcomings of this study are also stated and explained. Recommendations for further research are also made.

5.2 Addressing the Problem

A comprehensive examination of the literature showed there was no direct comparison between a 360-degree video documentary and a 16by9 video documentary in terms of cinematic realism. Considering that 360-degree video documentaries are commonly referred to as VR documentaries, a comparison in terms of the depiction of reality seemed apt. Although other studies investigated the reality and audience reception of 360-degree videos, a direct comparison in terms of cinematic realism was lacking. In addressing this problem, this study also resurrected and rejuvenated the debates of the seminal realism film theorists from the previous century.

5.3 Summary of Findings

This study found, via expert focus groups analysis, that in the case of the 360-degree video documentary versus the 16by9 video documentary of the Kennedy Road Informal Settlement, that the 360-degree video was perceived to be the more accurate depiction of the reality [as defined by the classical film theorists] in the settlement. This was due to the 360-degree video format of this documentary being more exploratory, offering more information, creating a sense of presence and creating a more accurate sense of place for the viewer. Furthermore, the inherent nature of the 360-degree camera technology, in terms of the long, deep focus shots it creates, supports the

debates of the classical scholars in the field of cinematic realism, especially the ideas of André Bazin and John Grierson.

The videos were interrogated primarily in terms of Film Theory, and the audience Reception interference was addressed to an extent by dividing the focus groups into a group of academic experts and a separate group of professional journalists. Although there were some inconsequential reception biases detected when comparing the two focus group discussions, both groups' discussions followed a similar pattern and arrived at the same conclusions.

The concepts of a sense of presence, sense of place, and emotional engagement, which are considered contemporary ideas associated particularly with VR, were successfully incorporated into the framework of classical film theories based on the literature reviewed and the discussions conducted in this study.

To reiterate, the research questions were answered as follows:

Main research question: Which of the two documentaries [16by9 or 360-degree] is perceived to be a more accurate depiction of reality, as defined by the classical film theorists?

Answer: The participants in both expert focus groups of this study were unanimous in their agreement that the 360-degree video documentary of the Kennedy Road Informal Settlement in Kwa-Zulu Natal was the more accurate depiction of the reality within the settlement. There was no dissent to this view.

Sub-research question one: What are the attributes of the documentary perceived to be the more accurate depiction of reality [by the main research question] that contributes to its realism?

Answer: The 360-degree format provides a richer source of information through implicit cues, encourages exploration by allowing viewers to freely examine their surroundings, and enhances the feeling of being present in the environment while also improving the sense of location. No evidence was found that contradicted this assertion.

Sub-research question two: How does the new 360-degree video camera technology reflect traditional theories of cinematic realism?

Answer: The 360-degree video camera reinvigorates debates surrounding the foundational theories of cinematic realism. By directly comparing the 360-degree format with the traditional 16by9 video format in terms of reality depiction, classical theories of realism in cinema are brought back into consideration. Concepts such as the long take, deep focus shots, the impact of film editing, and the sense of presence were central to early realism theorists. These concepts became focal points in the focus group discussions of this study, particularly in the context of the 360-degree video format. The inherent characteristic of the 360-degree video camera technology is that it captures long deep-focus shots. This type of shot, with everything in the frame in focus, allowing the camera to capture reality as it unfolds, was pivotal in the arguments of seminal cinematic realism theorists.

5.4 Theoretical Implications

This study profoundly revitalised traditional theories of cinematic realism in the context of new technology, specifically the 360-degree camera technology. It demonstrated that the traditional theories of cinema remain relevant in the digital age. Significantly, this study tested modernist theories using postmodernist methodology. In other words, it assessed traditional cinematic theories through subjective audience perspectives. Under such scrutiny, the traditional theories still proved relevant, valid and highlighted why they form the foundation of our understanding of cinema. Despite a century of technological advancements, this study revealed that the fundamental functioning of a film and the way audiences experience it have remained essentially unchanged.

The 360-degree format comfortably aligns with traditional film theories. Concepts such as presence, sense of place, and empathy are not novel. Cinema has aimed for immersion since its inception. Classical film theorists have deliberated on these matters concerning traditional cinema for decades. This study, through its direct comparison of traditional and new media formats, has underscored this and blurred the lines between what has been considered traditional and contemporary theories. It demonstrates that contemporary theories, particularly those related to immersive 360-degree video content, can still be traced back to foundational film theories.

Profoundly, this study found that the 360-degree video, inherently a long deep focus shot camera, offers a more accurate depiction of reality. This is a concept advocated by seminal realism theorists in early cinema. This study also revealed that John Grierson's *First Principles of Documentary* (Grierson 1998:97) can be effectively applied using the 360-degree camera to create a compelling and engaging documentary. Moreover, it demonstrated that the 360-degree camera, in the context of Grierson's *First Principles of the Documentary*, is a very capable tool for documentary filmmaking.

Participants of this study found that in the case of the two videos of the Kennedy Road Informal Settlement, the 360-degree video version was the more accurate depiction of reality. This was because it offered more information, enabled them to explore the scene, created a sense of presence and provided an accurate sense of place [location]. These elements of realism [as they were themed in this study] are very revealing in terms of film theory.

More Information – The 360-degree video offered more information by inference, from elements within the scene. In traditional film theory and in the context of 16by9 video, this would be referred to as *mise-en-scène*, encompassing all elements within a scene. The 360-degree view in the 360-degree video always displays all elements in a scene.

Exploratory – The participants found the ability to look around and explore the scene in the 360-degree video liberating rather than being restricted to what the director wanted to show in the 16by9 video. In traditional film theory, this could be related to shot selection and shot size, determining which parts of the scene are shown and to what extent. The concept remains the same in 360-degree video except that the agency shifts from the director to the viewer. The 360-degree video always encompasses the entire scene.

Sense of Presence – The 360-degree video made participants feel as if they were present in the environment. In traditional video, this sense of presence is created through camera placement, movement, and camera angles. For instance, a typical point of view shot, in a 16by9 video, imparts a sense of presence to the viewer. The 360-degree video always offers a point-of-view experience.

Scene of Place: The 360-degree video provided participants with a more accurate representation of the location. In traditional video, this is achieved through careful shot selection and editing, such as a wide establishing shot followed by a sequence of closer shots. The 360-degree video always provides a 360-degree panoramic view representing the location.

Consequently, these key elements that contribute to the realism of 360-degree video are also crucial elements that contribute to realism in traditional film. The difference is that the inherent technology of 360-degree video allows for a more accurate depiction of these elements. In summary, the 360-degree video always shows all elements in a scene [information], always shows you the entire scene [explore], always provides a point of view experience [presence] and always provides an accurate panoramic representation of the location [place].

Hence, the researcher proposes that when considering 360-degree video within the framework of traditional film theories, it becomes evident that there is no unique concept of perceived realism exclusive to 360-degree video. Rather, the concepts that contribute to the perceived realism in 360-degree video are the same as those that contribute to realism in traditional film.

Elsaesser and Hagener (2015:199) suggest that it is challenging to define VR in terms of traditional theories of realism.

“...‘reality’ in virtual reality is no longer understood as index, trace, and reference of an elsewhere, but as a total environment: it thus is a function of a coherence theory (of truth), rather than a correspondence theory (of the sign)”.

According to the findings of this study and the discussions in this section, the researcher introduces a different perspective to Elsaesser and Hagener’s argument. Specifically, in the case of 360-degree video, the researcher proposes that the ‘indexical’ representations of traditional cinematic realism and the ‘illusionary’ realism of VR are not considered distinct, but rather, that the illusionism in VR is viewed as an extension of traditional realism theories. The researcher suggests that it is not the theory that differs but that is the technology that has elevated the perceived realism in traditional cinema to the level of illusionism in VR.

This study through a direct comparison of 360-degree video and 16by9 video has demonstrated clearly how both formats function within the same theoretical framework of traditional cinematic realism. The understanding that the relationship between cinematic realism and truth is influenced by the intentions of the filmmakers and the viewer's interpretation, highlights the opportunity to understand VR, specifically 360-degree video in the context of truth.

This thesis has successfully demonstrated that the 360-degree video is perceived to be the more accurate depiction of reality in the case of the videos of the Kennedy Road Informal Settlement. If perceived realism equates to perceived truth, then it may be possible to conceive a “coherence theory of truth” from a transposition of traditional realism theories. The four elements of realism in 360-degree video, namely more information by inference, the exploratory nature of the format, the sense of presence by immersion, and the sense of place could be considered the first steps towards this new “coherence theory of truth” in cinema.

5.5 Limitations

As the title of this study suggests, the findings are limited to the documentary genre and the case of the videos of the Kennedy Road Informal Settlement. Although the purposively sampled expert focus groups in this study found the 360-degree video version of the documentary on the Kennedy Road Informal Settlement to be the more accurate depiction of reality, this has limited transferability to all 360-degree video documentaries. The literature suggests that VR works best only when the environment is an important element in the story (Barreda-Ángeles et al. 2021), so it may be reasonable to assert that transferability is limited to documentaries that conform to John Grierson's “First Principles of the Documentary” (1998). Grierson's ideas were explored in detail in previous sections of this thesis.

Another limitation of this study is the subjectivity of the analysis process. The focus group data was complex and difficult to analyse. This was a comparative study of two different video formats by two groups of experts from different backgrounds. The researcher had to transcribe, understand and interpret the data, then code and recode until consensus was reached on how to categorise the data from both focus groups into the themes that effectively addressed the research questions. The researcher

engaged in reflexivity throughout this process through peer review and participant feedback to minimise subjectivity.

While the small sample size of the focus groups could also be considered a further limitation, it's important to note that the participants' expertise may have mitigated this potential limitation to some extent. The discussions were enthusiastic, and rich and involved all participants in robust discussions, providing valuable insights and perspectives. However, it's still important to keep in mind that the small sample size and number of groups limit the generalisability of this thesis's findings.

An overarching limitation to note here is that this study did not explore the cognitive processes of the reception of the videos. This was due to the videos being analysed primarily through the lens of Film Theory to directly compare the two different video formats. The researcher concedes that Reception is crucial to understanding the sense of presence in VR. The differences in Reception were addressed to some extent by separating the expert participants into groups with similar backgrounds. The sense of presence was then discussed in the context of Film Theory, as the viewer being a passive observer placed within the scene. So, the psychology of VR Reception was not explored as it did not fit this study's theoretical framework nor align with its aims and objectives. However, it is worth mentioning that Walsh and Oakley (2022:1) propose the term "edited reality" to refer to information technology techniques such as VR that "result in altered subjective experiences."

The term "verisimilitude," derived from Latin roots meaning "truth" and "likeness," was not employed in this thesis. It refers to how closely a work of art reflects reality. In this study, the researcher deliberately chose to focus on foundational concepts from film theory, including narrative, editing, and mise-en-scene. This decision was made to enable a more precise comparison between the two video formats.

5.6 Empowerment

Although this study is limited to the case of the videos of the Kennedy Road Informal Settlement in Kwa-Zulu Natal, the results suggest that the 360-degree video technology can be a powerful tool for documentary filmmakers who aspire to capture and accurately convey the reality of a situation. By suggesting that the 360-degree

video is a more accurate depiction of reality [as defined by the classical film theorists], this study further justifies and supports the use of 360-degree video technology as a valuable tool for immersive journalism.

Van Damme *et al.* (2019:2057) suggest that using 360-degree video for immersive journalism can be both enjoyable for the viewer and beneficial to the news organisation,

“... in a highly competitive news environment, where many legacy news providers are desperately looking for ways to better connect with fragmented audiences. News organisations need to distinguish themselves by investing in valuable and unique news content that cannot be found elsewhere on the web”.

Specifically, in the context of South Africa, the videos of the Kennedy Road Informal Settlement demonstrated the effectiveness of immersive journalism content. The researcher hopes that this will encourage journalists to use the medium to tell South African people-orientated stories that contribute towards a caring and understanding society. Immersive people-orientated storytelling, of any form, is severely lacking in South Africa (Cottle and Rai 2008:354). The researcher hopes that the videos of Kennedy Road Informal Settlement will stand as a testament to the power of immersive people-orientated narratives.

Informal settlements in South Africa are generally frowned upon, and are labelled as crime havens, and as a nuisance to the areas surrounding them (Huchzermeyer 2003:3, cited in Ngcamu 2011:118). The researcher hopes that by using the case of the videos of the Kennedy Road Informal Settlement for this study it raises awareness of the struggles of the 11.7 % of the South Africans that live in informal settlements around the country (South Africa, Statistics South Africa 2021). Unfortunately, these settlements only seem to get news coverage when they are ravaged by fires or swept away by floods.

The videos of the Kennedy Road Informal Settlement in Kwa-Zulu Natal serve as a poignant testament to the human experience within the thousands of informal settlements within South Africa.

5.7 Recommendations

360-degree video is used predominantly for travel videos and documentary videos. On the other hand, virtual reality with computer-generated environments offers interactivity and is popular as a gaming platform. Interactive documentaries, that is a combination of 360-degree video and interactive virtual reality elements, can offer many interesting opportunities for immersive journalism. For example, consider an interactive 360-degree video where you can choose which areas to visit and interact with icons placed within the scene to get more information on the elements they represent. Could this provide an even better depiction of reality?

This study recruited experts who debated and agreed unanimously that the case of the 360-degree video of the Kennedy Road Informal settlement was perceived to be the more accurate depiction of the reality [as defined by the classical film theorists] within the settlement. However, the agency of the filmmaker and viewer was not sufficiently explored. Future studies could investigate the viewer agency and journalistic agency of the 360-degree format versus the 16by9 format in the context of immersive journalism.

Although participants in this study did allude to which format they would prefer to watch or produce documentaries in, this was not explored as it was not within the scope of this study. Further studies using the Uses and Gratifications Theory could be conducted to test viewers and filmmakers' preferences.

Most importantly, the researcher strongly believes that the theoretical implication of this study, as detailed in section 5.4, particularly the rationale behind a “coherence theory of truth” in cinema, warrants further investigation. This is especially relevant in light of the recent advances in VR technology and imaging capabilities.

5.8 Final Remarks

This study commenced in 2018 and stalled due to the Covid-19 pandemic. This study could not have been undertaken effectively under the circumstances of the pandemic.

Two very insightful documentaries were produced for this study and bear testament to the social challenges faced daily by the poor of this country.

Academic experts and professional journalists sacrificed their personal time to come together in person to have meaningful discussions about faithfully representing the reality of a situation to viewers. The verbatim transcriptions of those discussions are available as appendices for future researchers to utilise.

The researcher has made every effort to produce a study that empowers and contributes meaningfully to the existing body of knowledge in the field.

The researcher hopes this study honours the people of the Kennedy Road Informal Settlement and the academics and journalists who participated so enthusiastically to make it possible.

“Journalists can help people by telling the truth, or by as much truth as they can find, and acting not as agents of governments, of power, but of people. That is real journalism. The rest is specious and false” - John Pilger

Source: <https://quotepark.com/authors/john-pilger/?page=2>

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Appendices

Appendix A - Focus Group One Transcription

Appendix B – Focus Group Two Transcription

Appendix C - Letter of Information

Appendix D – Consent Form

Appendix E – IREC Final Clearance

Appendix F – Research Instrument

Appendix G – Focus Group One Schedule

Appendix H – Focus Group Two Schedule

Appendix I – Gatekeeper Letter

Appendix J – Invoice for Video Production

Appendix K – Permission Letter from Abahlali baseMjondolo Movement SA

Appendix L – Turnitin Report

APPENDIX A

FOCUS GROUP ONE Transcription

THESIS: The depiction of reality in a 360-degree video documentary versus a conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in Kwa-Zulu Natal.

RESEARCHER and MODERATOR: NIRESH SINGH

DATE: 24 November 2022

TIME: 12h00

VENUE: Durban University of Technology, City Campus, Department of Video Technology, Seminar Room

PARTICIPANTS	Occupation	Years of Experience	Age	Gender
A1	Lecturer	13	35	Male
A2	Professional researcher	10	31	Male
A3	Lecturer	15	46	Female
A4	Lecturer	17	38	Male
A5	Lecturer	30	53	Male

A2

The beauty of this. Because it's not big. It's not. So, you don't think you're under any surveillance. So, I'm not under pressure to act in some way. You're just natural because it's so small. And if you're walking on the street, usually those kinds of spaces, you have less potential confrontations from people because you are attracting less attention to yourself.

00:00:36:04 - 00:00:46:02

A2

Because once people see cameras in some spaces, they see it as moneymaking. I mean, you just come and meet you and tell you have to pay royalties for coming to take a photo.

00:00:46:03 - 00:00:48:16

A3

Of that and a lot of staring as well. Yeah.

00:00:49:00 - 00:01:12:12

A1

When it comes to audio do you take the tracks from the normal one. How does it work for VR because I can see it's exactly the same audio as this one.

00:01:12:21 - 00:01:16:01

MODERATOR

Yeah that's the first question.

00:01:18:24 - 00:01:43:24

MODERATOR

What I'm trying to do is orientate you now because it's pointless me asking questions if you don't understand the technology. So, I want you to understand how it all works so that the questions makes sense...

00:01:44:04 - 00:02:06:06

MODERATOR

So, the decisions we make with VR is where to place the camera to take the shot. So, if you're doing it with the normal camera, you got to look at your cutaways. The cutaways you can have leading into the interview and the cutaways you need during the interview.

00:02:06:07 - 00:02:10:00

MODERATOR

With 360 you just looking at camera placement, where you going to place the camera.

00:02:11:01 - 00:02:17:09

A3

All the rest is actually defunct. The eye does the work for you now, because the viewer becomes the cutaway machine.

00:02:17:15 - 00:02:17:23

A4

Yeah.

00:02:18:19 - 00:02:20:22

MODERATOR

So any questions about technology?

00:02:21:03 - 00:02:24:24

A2

Yeah. Okay. I think it's pretty big.

00:02:25:11 - 00:02:31:02

MODERATOR

And the question I must answer is why the Kennedy Road Informal settlement?

A1

Okay, maybe before we move on.

00:02:32:09 - 00:02:36:09

You were recording the two concurrently?

00:02:36:19 - 00:03:04:13

MODERATOR

Oh, that's a good question. What we tried to do, because we knew it was going to be a comparison, and it was actually done for the purposes of comparing, is have the same subject, the same locations and the same content. So, the brief was to make two documentaries on exactly the same places, the same people, that was the brief.

00:03:04:20 - 00:03:18:14

MODERATOR

So, it's a proper comparison and there's actually no video that exists, like this. It's done not shot for shot, but it's a scene-for-scene comparison.

00:03:18:14 - 00:03:21:09

A2

So, two different cameras produced this?

00:03:21:09 - 00:03:30:18

MODERATOR

Yes, The VR was produced with a 360-degree GoPro it's called GoPro Fusion and the other one was produced with the Sony NX5.

00:03:31:05 - 00:03:37:23

A2

Is there a possibility of getting a flat footage with the 360?

00:03:37:23 - 00:03:48:06

MODERATOR

You can but we did not want that. What people can do is they take this 360 and extract the flat video from it. But it defeats the comparison.

00:03:48:15 - 00:03:52:06

A2

Yeah, I know, I know. I know. For the case here, you need to have this. But then I'm just asking.

00:03:52:06 - 00:03:59:15

MODERATOR

You will see, I mean, when we talk about it, you will see why that doesn't work... Anything else? A5?

00:04:00:12 - 00:04:00:20

A5

No.

00:04:02:07 - 00:04:22:16

MODERATOR

So, you understand the technology. So, so it's just the placement. And then when you go with the normal camera you decide which shots to take. Right. So, I've done these questions, but last night I was thinking that if I ask questions, I must be able to answer them myself.

00:04:23:10 - 00:04:54:17

MODERATOR

So, I wanted you to know that I was not asking random questions; I have answered these myself. This is a study of documentary realism. And what I was going to explain to you is why the Kennedy Road Informal settlement. It's because one of the early theorists, John Grierson said when you do a documentary, it needs to be about real people, in real places telling their life story.

00:04:55:09 - 00:05:17:17

MODERATOR

And that's the true form of a documentary. So that's why we chose the Kennedy settlement. That was reason number one. Reason number two is not a lot of people get to see that. You know, I'm sure that in this room nobody's actually gone there. But to go right into Kennedy Road informal settlement and film...

00:05:17:17 - 00:05:40:23

MODERATOR

So all you have to compare is what you see now. So that doesn't set any bias in your mind. We're not showing a documentary about the city hall because you've been there, you know it, you all you've been there. Another reason is that it's also a social story that needs to be told.

00:05:41:01 - 00:06:03:15

MODERATOR

So, it's not a pointless thing. You know, it's a good story. No matter what you think of the old lady's plight, it's a significant social issue in the area. So that's the reason for choosing the Kennedy Road informal settlement. Just not doing it because it's topical or because we want to like, exploit the poverty that's in the area. No.

00:06:03:15 - 00:06:35:05

MODERATOR

We're going there because it makes a good documentary. And the early theorists of documentaries said go into the place film the people in the environment and let them tell you their stories. Right. So that's the reason for choosing the Kennedy Road informal settlement. Cool. All right... So was it noticeable that the narrative, the voiceover, the audio, and the timing was identical in both videos?

00:06:44:00 - 00:07:07:08

A1

That the audio definitely was. Oh, yes, I'm not quite sure what scene, but yeah, it was quite obvious there were some number of scenes, especially those drone shots, and the interviews. And so that's why I was asking if you were shooting the two concurrently or something. But yeah, I did notice.

00:07:13:01 - 00:07:43:05

MODERATOR

Because the reason I'm asking this question is, some studies show that, you know, the visuals tell their own story and then the narrative is telling some other story. So, what I'm trying to establish is when you look at VR, are you listening to what the voiceover is saying, and you see the environment and then you're making up your mind about what you see?

00:07:43:05 - 00:08:01:14

A1

But I could see different people. Yeah, I can see that it was the same, you know, it was sequentially the same. I recognise the sequence or recognise the video. Even when I was in the scenes, I could recognise elements of the scenes that were from previous shots. Yeah, I think it was.

00:08:02:23 - 00:08:35:07

A5

You know, quite a lot of moments where it didn't feel the same. The narrative certainly felt the same, but not the visuals. I felt like there was other stuff I was seeing, and I think that's because I was looking around and seeing different angles and different perspectives. So, it felt slightly different to me.

00:08:35:19 - 00:08:55:10

A1

But I noticed something when it comes to the VR; I don't know if it was some kind of shots that were out of focus on those drones over the shacks.

00:08:55:16 - 00:08:56:00

MODERATOR

Yes.

00:08:56:06 - 00:09:05:08

A1

Shots with the flat video was hundreds and then the quality was compromised on the VR, especially those long shots.

00:09:05:08 - 00:09:26:19

MODERATOR

I'm trying to keep this conversation around reality because that's the study. But that's just a technical issue. You know, it's because we use stitching. VR stitches two pictures together to create a scene. So, if you're looking at the scene where it is stitched, it's going to be distorted. So, it's that. And that's what you saw.

00:09:28:01 - 00:09:56:10

MODERATOR

So, my answer to that question was that I didn't know. I watched, and it wasn't as noticeable. I couldn't know for sure that that was exactly the same narrative as the other. You know, because the visuals changed.

00:09:56:17 - 00:10:08:07

MODERATOR

But within the voiceover, it's exactly the same. There was no way for me to tell because I didn't know for sure that I was watching the same video. It could be different. So that's what I felt.

00:10:08:16 - 00:10:26:19

A2

And I think at some point I felt like I was seeing something different when they showed the new newly constructed houses. So, in the flat video, it felt like it was a shot from afar; with the VR one, I saw workers walking by the house, which I didn't see in the first one. Perhaps I wasn't paying attention.

00:10:26:19 - 00:10:28:24

A1

I think in the first one, it was taken by choice.

00:10:28:24 - 00:10:50:15

A2

You could see the blocks and everything. But now the VR one, you could see workers walking by, like maybe planting or doing flooring, and you can see the houses of this new structure. That's what I think was the major difference I saw. But ultimately, while I was following the sequence, it felt like I was listening to the same story.

00:10:50:19 - 00:10:52:05

A2

It seems to me.

00:10:52:14 - 00:10:54:18

MODERATOR

It felt to me like the VR video was shorter.

00:10:55:17 - 00:10:56:21

A2

What?

00:10:57:05 - 00:10:58:14

MODERATOR

I felt like the VR video was over quicker. Did you feel that?

00:10:58:20 - 00:11:06:02

A3

Yeah, I did feel that it was definitely over quicker, you know, I did feel that.

00:11:06:15 - 00:11:09:16

A4

Yeah. Is this in the apartments? (*referring to displayed videos*)

00:11:09:16 - 00:11:10:15

MODERATOR

Syncs both displayed videos

00:11:10:19 - 00:11:22:06

A4

Right. Yeah. Definitely, the VR video did feel shorter. Because you know it's also about looking around and trying to experience everything. So, it definitely felt shorter.

00:11:22:18 - 00:11:31:08

A4

You are trying to experience everything that's going on. Right. So maybe that's why but it did feel shorter.

00:11:31:10 - 00:11:53:21

Delayed introductions

00:11:58:14 - 00:12:21:17

MODERATOR

So, let's follow up on that. So, we're saying that some of you felt that the voiceover was the same. I felt it was a bit different. And other people also felt it was a bit different. But did you feel that that changed your feeling towards the story, your perception towards the story? In these two different formats?

00:12:22:03 - 00:12:30:21

MODERATOR

Did you perceive it to be different? Although The Voice was telling you something, did you think differently?

00:12:30:24 - 00:12:49:23

A5

I No, no, no. It's also much more engaging in the VR, and I don't know, it's probably because I watch a lot of documentaries and am kind of used to the format and that sort of presentation.

00:12:49:23 - 00:12:52:17

A5

Yes, engaging in the VR is something different.

00:12:53:06 - 00:13:13:09

A3

It felt to me like you're in it; it puts you more in the place, you know, like it's more in it. It's not so separated and distant. You definitely feel more in the story than gazing upon it. You know, it's good it does have a kind of positionality, you know, and it feels different.

00:13:14:20 - 00:13:40:11

A4

Yeah, we're almost that was the full experience and like, for example, in the shack where that's where the lady was doing laundry and then when I turned around and then I saw a child next to the bed, and I would not obviously have seen that in the other format and so that made me get a feel like I have a fuller experience of life in the shack itself.

00:13:40:23 - 00:14:04:13

A2

But for me, I think while that is very sweet and cool, I tend to feel like I was missing something when I was in the VR. I feel like, yes, focusing on something, but then there's a lot happening, and I'm selfish like that. I want to have everything. So, if on the flat one, I know this is all that there is to see, this is what you're offering.

00:14:04:13 - 00:14:23:10

A2

So, there's nothing I'm missing behind the camera. But now this one I feel

like I have to turn here or something is happening here. At the end of the day, if I'm listening to this story for the first time, I get distracted from what the narrator is saying. But then I get so engrossed in trying to realise all the trees are moving; the leaves are moving.

00:14:23:20 - 00:14:25:13

A4

Yeah, I actually wanted to know what's happening.

00:14:25:13 - 00:14:53:20

A2

At the end of the day, it becomes an experience.

Yeah, well, at the end of the day, it doesn't really achieve the aim of a documentary which is to actually give you information, that informative aim itself. It doesn't nail it. But it gives you an experience where yes you are in this space; you are enjoying this space where you might just get carried away from the message that is being passed across.

00:14:54:11 - 00:15:06:09

A2

So, it's different for you when you go to the park. You are enjoying what is happening, the circles and everything? Yes, that's fine. Nobody is really telling you about, okay, this is what's suffering and all that. There's no message to really take home with you.

00:15:07:04 - 00:15:09:16

A3

But yeah, I hear you.

00:15:09:16 - 00:15:34:24

A3

Also, for me, I enjoyed some of the moments, like seeing the child next to the bed. Yes. It struck me. Yes. Look, there's a child. Yeah, that's right next to the bed; it did bring home the environment for me. And then that thing I mentioned earlier that, you know, I didn't see it when they showed the toilets in the documentary, I didn't see these women standing up there taking selfies.

00:15:34:24 - 00:15:50:21

A3

Yeah. And then like..., And that's really the main thing I was thinking about that people take selfies in front of toilets, and yeah, you know, it actually brings home the message, that the toilet is the best space there to take a photograph.

00:15:50:21 - 00:15:55:14

A4

Yeah.

00:15:57:13 - 00:16:04:08

A3

I have been to a lot of townships, more than most.

00:16:04:18 - 00:16:05:09

MODERATOR

I can see that a lot is going on in A4's head.

00:16:05:10 - 00:16:36:19

A4

Well, you know, there is. There is. But it's also from, I suppose, a practising journalist. I think that's why a lot is going on because the thing is like I'm thinking about some of the stuff like, for example, when you see something and you turnaround and you see rubbish on the floor and the water running on the ground rather than the water running down the road because it has to be used as overlay visuals under ordinary circumstances.

00:16:37:00 - 00:17:15:08

A4

Whereas here you, you don't have to, you don't have to do that. And for me, I slightly disagree with you on that because I think the fact that you can turn around and see something else, it gets a full story of what's going on as opposed to a linear story where the camera's facing and it's all you ever going to get that what she's saying as well Like we saw the toilets, but you don't see the ladies next to the toilet because that's part of the story as well, that it's not just the toilets, but there's lots going on around the toilet.

00:17:15:16 - 00:17:43:04

A4

It's not just the children playing, a lot is going around the children playing. I think with one of the interviews, I think it was the men that you interviewed. And then, when I turned around, I saw someone coming up the stairs. Yes. And so all of that gives a fuller understanding because the thing is, it's not the one story that the journalist would want you to see; you can't avoid everything else.

00:17:43:04 - 00:18:06:18

A4

That's because sometimes the journalist might focus in the corner. Because they were strategic. Yes, because they don't want you to see whatever else is happening. That's for whatever narrative that the journalist might be trying to push. But here, you can't avoid that. There's something else that's going on. You can't hide in the corner and just show us the corner.

00:18:06:23 - 00:18:07:14

A2

It's either you telling the story or not.

00:18:07:14 - 00:18:10:23

A4

Yes. You see it in full whether you like it or not.

00:18:11:04 - 00:18:28:17

A2

Well, I really want to agree with what you're saying, and I do agree with what you are saying, but I think I'm looking at it from a very different perspective. I'm looking at it from the perspective of someone that's never experienced a PR before. So, I've seen 3D, but then I've never used this before.

00:18:28:24 - 00:18:31:23

MODERATOR

Well. But the points you are making are in the literature.

00:18:35:01 - 00:18:36:13

MODERATOR

That's collaborating what you are saying.

00:18:36:15 - 00:19:00:17

A2

Yes. Well, again, what I'm saying is if I'm using VR for the first time and it's for documentary, then I probably would not be focusing on what is being said, but then I'm focused on it. So, it becomes an experience for me. You know, It becomes a fascinating experience for me.

00:19:00:17 - 00:19:04:24

A3

Pluralistic. Yeah, it's more pluralistic. Like uncontrollable intentions.

00:19:05:01 - 00:19:08:13

A2

I like the transparency. That you can turn and see everything.

00:19:11:04 - 00:19:18:01

A2

Now for someone that is using it for the first time...

00:19:21:15 - 00:19:38:22

A2

Or, like journalists, you've used it several times. So, you're not really worried about the technology. Oh, you haven't, okay. You're not worried about the technology, but you're just focused on looking at what's being said. You've used it before. And just all I'm saying, I think that's the angle from which I am coming.

00:19:38:24 - 00:19:54:18

MODERATOR

But do you think, okay, you're saying you feel that way because this is the first time you're watching on this new technology. Yeah, but don't you think that it would be the same with you if you were watching another documentary, every documentary you see, it's going to be a new experience.

00:19:55:19 - 00:20:09:00

A2

I guess that's what I'm saying. Yes. It seems that way because it's a documentary and it's the first time you're using a VR with documentary. It's a bit distracting, maybe, if I used it some other time then I'll just focus on what is being said.

00:20:09:06 - 00:20:28:02

A3

Maybe also like it's a bit uncanny, you know, like those sorts of things come to mind, like a bit uncanny. Like, you know. Yeah. I mean, I saw this guy that was being interviewed. Here I am on this guy and his intentions, but actually, when he started talking, I was looking at this guy in a red t-shirt with the Che Guevara art.

00:20:41:04 - 00:20:48:10

A2

The problem is the choice. Because when you have choices, it's harder to make a choice. It's harder to focus.

00:20:48:10 - 00:20:49:04

MODERATOR

What choices?

00:20:49:11 - 00:20:59:07

A2

You know where to look. Yes, where to look for you and the view to choose. Instead of doing the work for me and saying this is what to look at.

00:21:00:10 - 00:21:10:23

A2

I'm giving it to you. This is where the information is. Now, you've given me the responsibility to choose. Perhaps I'm a very selfish person now. I want to take everything all at the same time.

00:21:11:06 - 00:21:30:10

MODERATOR

So, the voiceover that's going on, this omnipresent voice, that's telling you what's going on, then are you making up your own mind? So when he says that there is a sewage spill going on, are you looking around to verify?

00:21:30:10 - 00:21:32:01

A2

Obviously, there is.

00:21:32:01 - 00:21:34:18

A3

One is guided by him.

00:21:34:23 - 00:21:57:21

A5

That's important what you're saying. Yeah. Because I find myself in terms of looking at the image even in this 360, say, even when he was talking about the dump, I sorted out and kind of focused in on it. I actually started picking my own visuals to articulate the kind of VR. I enjoyed that freedom. It was like an editor being able to edit their own visuals.

00:21:58:11 - 00:21:59:21

A3

There are choices, as you said.

00:22:00:14 - 00:22:02:13

A4

Making tweaks, whatever is interesting.

00:22:03:12 - 00:22:04:20

A1

What if we started with the VR and then come back to the normal one? Watch the normal one first.

00:22:13:09 - 00:22:26:14

A1

It is a comparison of some sort. But we ended up focusing on the dynamics of the VR itself.

00:22:26:16 - 00:22:51:01

MODERATOR

I watched these videos after a long while because I want you to answer these questions like you. Yeah. But I don't know, these videos off by heart. I wanted to experience it like you all are experiencing it. Yeah.

So, what was the question again?

00:22:51:15 - 00:22:56:11

A1

No, it wasn't a question. I was saying it would have been interesting if we had started with the VR.

00:22:56:11 - 00:23:09:00

MODERATOR

Oh, so what I was thinking is when I was sitting here watching the normal flat documentary, it was very long for me. Because I watched it two or three times before

00:23:09:00 - 00:23:10:09

A4

Was it also 10 minutes, by the way?

00:23:10:13 - 00:23:11:03

MODERATOR

It was exactly.

00:23:11:07 - 00:23:16:01

A4

It felt longer than 10 minutes.

00:23:16:01 - 00:23:17:00

A2

Only your eyes are working.

00:23:18:03 - 00:23:25:19

A3

It's like that thing when you go driving somewhere, and it takes a long time to get there. But then when you come back the other way, it's like a slap, you know.

00:23:30:04 - 00:23:31:15

A3

It's a weird thing. It's perception, you know.

00:23:32:14 - 00:23:59:16

A4

Yeah. The one thing I felt the first documentary didn't say and didn't show is the proximity to the city. You almost miss that. Whereas with VR, because you can get it 360 view, you turn around and you see that a lot of these interviews and shots actually showed the city in the distance and you realize how close it is to the city.

00:23:59:22 - 00:24:23:20

A4

Whereas here, with the first one, you almost tend to forget that the city is, in fact a place that's close by. In fact, you don't know. That's also what really struck me with the VR, the fact that when I turned around, I was like, the city is there and it's almost, well, not always, but in a lot of shots, it's almost constantly there.

00:24:24:02 - 00:24:27:09

A4

It's like it's so close. It's so close to a much more developed space.

00:24:27:13 - 00:24:28:11

Ann

It's fascinating.

00:24:28:14 - 00:24:37:07

A4

Whereas you yeah, with the other one, you may think you are very far away from development in fact.

00:24:38:00 - 00:24:44:00

Ann

Exactly what you say, it's so true because when I was watching it there, I became aware of the Springfields malls and stuff.

00:24:44:05 - 00:24:44:15

A4

Yeah.

00:24:44:15 - 00:25:20:07

A3

And I thought, Oh, you know, I often have been driving there recently to go and do this and that. There was like a geographic kind of positionality that happened. Otherwise, you wouldn't know where it is really, if you weren't thinking about it. There's actually a theorist; I've got the book on my shelf; she talks about these maps, these kind of emotive maps or imaginative mappings. She links film to that geographic mapping. It could be something to look at.

00:25:20:18 - 00:25:26:13

MODERATOR

Yeah. That was one of the questions, but you've answered it nicely. Does anyone else want to comment on that?

00:25:26:13 - 00:26:08:14

A5

It's interesting that geographical placement you were talking about, which I really think the way you feel present, we feel like we are somehow in a reality much more than just watching the screen. I think it's also related to the movement; your moves articulate what you see. And for me, my movement, of course, was about what I felt about things etc.

00:26:09:00 - 00:26:12:11

A5

So, it's interesting, presence.

00:26:13:08 - 00:26:22:12

A3

Presence, somatic in other words, somatic like bodily. It's so weird when you start realizing that where you look there's something to look at, you know. Immersive.

00:26:23:16 - 00:26:48:16

MODERATOR

So, which shots do you prefer, those long exploratory shots or your attention being directed? Because that's the key difference. Yeah. Yeah, yeah. And it goes back to the early theorists who said just put down the

camera and let it record life, don't interfere with reality by taking out little bits of it.

00:26:48:22 - 00:26:52:03

A3

Well, that's a bit like Truffaut too, just let the camera roll.

00:26:53:07 - 00:26:56:03

A5

The French New Wave cinema.

00:26:56:03 - 00:26:59:04

A5

I just like point it at the building and watch the people come and go.

00:26:59:22 - 00:27:04:00

MODERATOR

A5, you are the expert, Bazin, how does that relate?

00:27:04:10 - 00:27:30:21

A5

Well, in terms of looking at film, it really is the idea that an unedited piece, something that you can look at, is democratic cinema because you've got free choice to look at whatever you want, wherever you want in that particular frame. You know, in our jobs, we try and learn, in terms of mise-en-scene, to direct attention etc.

00:27:30:21 - 00:28:04:24

A5

But democratic cinema allows you freedom as a viewer to interpret the signals and all the elements that are within that frame. And that freedom is liberated and more real, I feel, than watching a film that is edited, where even if I'm following the narrative very closely, the shots are different. I don't have a choice in that decision.

00:28:06:10 - 00:28:36:00

A5

And I notice this in a lot of contemporary films. I watch them cut for pace and it's a blur of images and you actually not conceptualising anything in a lot of it, it's just your eye is constantly being stimulated and filled with imagery, but you can't engage with it. And I think that's the idea of the realism that Bazin talks about you can actually contemplate the reality in the frame by it being unedited.

00:28:36:10 - 00:28:37:09

MODERATOR

But yeah.

00:28:38:00 - 00:28:40:07

A3

Yeah, also just to be in it.

00:28:40:13 - 00:29:12:02

MODERATOR

So basically, what you're saying is to shoot the scene in a wide shot and let people take it in, but what if they missed something? What if there's something particular like, in that 16by9, there was this shot of that trophy and it was significant. There were a few close-ups that you wouldn't

have got in the wide shot there.

00:29:13:22 - 00:29:29:22

A3

Yeah, I wondered about that. That moment with the trophy, you know, that close up there. It felt it was like quite interesting and obviously important, something important about family, an aspiration.

00:29:30:12 - 00:29:53:05

A5

I think it's a dance, you know, that's where the challenge comes. This is when you say shooting in 16by9 is cheating, to block your scene or whatever you're doing. The movements you like, etc. So that attention is directed to the elements that you would like to privilege in your narrative...

00:29:53:10 - 00:29:53:20

MODERATOR

Yes.

00:29:54:12 - 00:30:00:19

A5

But, without, like, slam bam, showing a close-up of the trophy.

00:30:01:11 - 00:30:40:19

MODERATOR

So, A4, you make a lot of these movies. So, when you go there, and you look around and, then, you decide what you want to show. I want to show this or that etc. Because that's the thing that will take your story forward. So, you see, there's a balance because he's taking the reality, and he's deconstructing it. So, he can reconstruct it during the edit to show it on a flat screen, and you, A5, are just showing the wide shot like in the 360. Which is then a better representation of that reality?

00:30:41:08 - 00:31:09:01

A3

Well, I think my answer would have to be, and it's obviously unstudied, but I think it depends on the scenario. So, I think it depends on where it's going. Both have great value. I mean, I think everything about the fact that I like the democracy of looking all around, you know, you are getting a more democratic view, you have more choices, although you are guided in the choices by the narrative.

00:31:09:12 - 00:31:37:23

A3

So, there is still guidance, but it is more democratic. And then in the other, it's more packaged, more deconstructed, reconstructed, focused, directed. And I think it would depend on where it's going. Like, I don't you know, it's like, for instance, that one would fit more an insert into a news program, you know. I'm still unsure, this would be more film festival or, you know, experimental viewing.

00:31:37:23 - 00:32:04:05

A3

You know it depends, I think, on where it's going. I think both still have value. And I also think it's got to do with time, you know, so if I was making a decision purely based on time, I wanted to get the information, I would probably forgo the experience of viewing it. And I'll cut straight to the to the chase of watching, you know, and I think we are all like

absorbing visual stimuli now at a pace.

00:32:04:07 - 00:32:20:10

A3

I was just saying to A5

00:32:20:10 - 00:32:25:21

A4

I like the choice of words.....

00:32:25:21 - 00:32:49:11

A3

This takes a little time to get into; it takes time to engage with. And also, often when I'm watching things like this, my mind is in all sorts of other places; I'm watching, but I'm also doing something else. And, you know, it's I think it will be about what the viewer privileges.

00:32:50:00 - 00:33:03:00

MODERATOR

And I agree with you because I don't think for a moment that the VR documentary style suits every story. Stories are different.

00:33:03:00 - 00:33:29:09

A1

I was thinking in terms of the realistic side of things when it comes to VR; it just strikes in front of your face because it's way out of proportion. When you look at the movie, and it is so difficult to connect to that kind of a visual.

00:33:29:13 - 00:34:00:17

A1

So, what I'm saying is that with VR, it's more like you exploring the technology. So, if you look at the content, it's very difficult to connect with the VR, were as with the normal one, it's easier to connect with because everything is in normal proportion in terms of the size and so on. I was looking at the washing line and all the cables, but it appeared way out of proportion.

00:34:00:17 - 00:34:09:15

A1

I didn't even realise I had to think, is this really a washing line or something else? Because the proportion is way too big even that.

00:34:11:11 - 00:34:22:07

A1

I ended up having to compare the height of the washing line to the man before I could realize.

00:34:23:00 - 00:34:32:17

MODERATOR

But that man was standing right next to you. It's not for every scene. It's just for certain scenes.

00:34:32:17 - 00:34:33:23

A1

Yes, yes.

00:34:35:20 - 00:34:40:15

A3

That you have to take into consideration quite a lot when you're shooting, the distance from the subject.

00:34:40:16 - 00:35:03:10

MODERATOR

So, I think what happened was that the camera was placed and then left alone, and this guy came out of the room to hang his clothes.

00:34:42:00 - 00:34:42:09

A3

It showed.

00:34:53:15 - 00:34:54:12

A2

Yeah.

00:34:54:19 - 00:35:28:04

A5

I was just thinking, and A3 and A1 sort of triggered that idea about the wide angle. That accentuation of distance. I mean, you use it in comedies when you got that first-up, close-up or whatever, but I think getting back to your question, the idea of reality. What was more real, not the medium that we are most comfortable with. Yeah. Kind of telling the story.

00:35:28:04 - 00:35:43:14

MODERATOR

But it affects; what A1 was saying. Would you say you were there, yet were not there?

00:35:43:23 - 00:36:13:06

A1

I was able to connect with the story and it appeared real, but when you start thinking about it you realise that maybe this may be some kind of cartoon or animation. Because this man just appeared in front of my face, so tall and out of proportion.

00:36:13:19 - 00:36:25:05

MODERATOR

There's some literature that says that VR although it puts you there. You know, your mind knows that you are not really there.

00:36:25:14 - 00:36:26:08

A2

Yeah, true.

00:36:26:21 - 00:36:47:03

A3

Yeah. Yeah. This is I think that's a really interesting point because I think the suspension is more difficult. That suspension of disbelief. It is actually more real in a way that you are more experiencing the reality of filmmaking as well. At one stage I looked down and I saw my foot was a tripod. Yeah.

00:36:47:22 - 00:37:16:15

A3

Like, like I had become camera, and there was this weird thing inside the camera perspective. And I think that it is the more real if you're talking

about reality. But if we're talking about perceived reality and filmic suspension of disbelief, I think it's actually more difficult to suspend disbelief. And that for me, because I was constantly aware of the position of the camera, the legs, thinking it must have a lens.

00:37:16:15 - 00:37:25:16

A3

It's, oh God, look at the optics on this thing. My mind was like, now crunching how does this work?

00:37:28:17 - 00:37:32:24

A2

I was busy thinking about it too. I was thinking there would be five cameras around a pole.

00:37:32:24 - 00:37:33:06

A4

Well.

00:37:34:15 - 00:37:35:06

A3

Yeah.

00:37:35:06 - 00:38:01:10

A4

I suppose your thinking is of people who work in film, right? Yeah. Yeah. So, because I don't think someone who is, let's say, outside this focus group, an ordinary person would be wondering where the cameras are and whether there are 5 or 10 cameras around a pole trying to capture all of this. But I also do think that with the 360, there's a lot that can be distracting.

00:38:01:10 - 00:38:18:24

A4

Like the mention of the Che Guevara T-shirt that the journalist was wearing, because for a second it might take you away from the story and you might think, oh, he's wearing a Che Guevara shirt. At first you might not realize that that's the journalist. So, you might wonder, Oh, who is that person with this T-shirt?

00:38:20:19 - 00:38:37:03

MODERATOR

Well, you also said something that's different to what you're saying, Because you also said that you noticed the trees moving and, you know, so somethings are distracting, but other things draw you in. Doesn't it?

00:38:37:11 - 00:38:51:23

A4

Yes. Yes. There are things that could be distracting in there. And also, because the thing is, the distraction, though, might be what the story is about and whether that element fits into what the story is actually about that's being told.

00:38:51:23 - 00:39:11:04

A2

Earlier, you were talking about comparing it in terms of which is better. I would like to look at that from the angle of the aim for the footage itself. So, if the aim was to tell a certain, you know, every story is told

from the point of view of the storyteller.

00:39:11:04 - 00:39:46:08

A2

And so, if the aim was to tell the story of social poverty, and you show me the VR, now the receiver of the story has a different identity, different appetite, different interests. And in the VR, you obviously have so many things, so many elements and potential stories. In the VR, for instance, the architecture of these people is a story on its own. The fact that a big rat eats up a baby. That's another story.

00:39:47:18 - 00:40:08:13

A2

Because I was looking out for rats, that's a potential story. The fact that HIV is a social problem, or something is another story. But for the 16by9, if you are going to tell me a story of the social problem or social poverty, then I would prefer the 16by9.

00:40:08:20 - 00:40:29:05

A2

Because now, it tells me, because I'm listening to you and I want to hear your story. And so, with your story, you've been able to use this footage of the different elements in this piece. You've put them together in such a way that it accentuates your story, it backs up your story, you use it as your basis of evidence for what you're telling me.

00:40:29:10 - 00:40:52:10

A2

So, I'd like to listen to your story. What if I was just sticking to a space and I've been given the free range to pick anything that I find interest in? Then the VR becomes the point so I can go there and just focus on the architecture and say, Yes, I'm very interested, or focus on the children and how they're playing around and it becomes a story for me, and then I'll shut myself off the architecture or shut myself off the rats eating.

00:40:52:11 - 00:41:08:00

A2

Maybe rats will be part of it because they are eating children, but then you see, VR gives you plenty of options. If you are in a space where you can choose, you have the freedom of choice. But if you are in the space where you have to listen to a story, a certain story, I would go for 16by9.

00:41:08:07 - 00:41:11:14

A3

It's more delimiting. Yeah. It delimits the content.

00:41:14:05 - 00:41:29:00

MODERATOR

You see, what we're trying to do is say which is a better depiction of the reality in the Kennedy Road informal settlement. So, what you say is that you want to be told what the reality is?

00:41:29:01 - 00:41:30:21

A2

That there are multiple realities in Kennedy.

00:41:30:21 - 00:41:33:10

MODERATOR

And yes, there are multiple realities.

00:41:33:10 - 00:41:54:16

A2

Yeah. I actually agree, though, as well. That's yes; there are multiple realities. And so, when you say which is the best depict depiction of reality in Kennedy Road informal settlement. Outside the story that the documentary tells, there could be many other stories that could be told that were not part of that story.

00:41:54:16 - 00:41:56:10

MODERATOR

According to that story, that was being told?

00:41:57:13 - 00:42:28:23

A4

I. Yeah. I'm torn on that as well. I'm with him. If you drop me on the road and then you say walk, then 360 and if you then say this is the story I as the filmmaker wants you to see, then the 16by9.

00:42:29:13 - 00:42:46:11

A2

You see the problem is, let's say Kennedy space is from here to here. Take three people. Tell them to walk through, at the end of the day tell them to tell you what they saw in Kennedy. The stories would be different because there are multiple realities. What you would find fascinating would be different from what I find fascinating.

00:42:46:19 - 00:43:03:05

A2

So, I might be taken by the children. I might come back and say who made that; there are so many children there. You would come back and say there are so many shacks there. Or I can say that there are so many dumps there. So, the reality in Kennedy itself, I think the topic for this documentary is too wide.

00:43:03:09 - 00:43:03:21

A4

Yeah, it is.

00:43:03:21 - 00:43:13:14

A2

So, if you want to say the prevalence of HIV in Kennedy then that's a story.

00:43:13:19 - 00:43:15:21

A4

Or the grandmother that has 36 children.

00:43:15:21 - 00:43:26:01

A2

Or you want to talk about the story of Anna in Kennedy then we know we are dealing with Anna now. But to say Kennedy, wow, it's so much stuff.

00:43:26:08 - 00:43:53:22

A3

Now I think that the delimiting comes if you're talking about a research

study or something particularly like journalistic kind of thing, it is easier to control or to delimit the content or to kind of focus the attention, I think the virtual reality. It works. It is reality. I think it's maybe controlling that or managing that, scoping it, you know, like because there's so much in that story and then even in one room just sitting in that room.

00:43:53:23 - 00:43:54:12

A2

Yeah.

00:43:55:05 - 00:44:12:14

MODERATOR

Because there's this idea that the shots are selected, and it changes your perception like that close-up on that lady when she's crying. Now it's playing into your empathy. It's trying...

00:44:12:14 - 00:44:13:07

A3

It is playing you.

00:44:13:20 - 00:44:38:00

MODERATOR

So that's the danger. What you're saying is that you want to be shown Right. But then there's a danger to that because then I'm using all these close-ups, this close-ups of the kids, you know, a close-up of the lady or. Yeah, the close-up on all the sewage that's running.

Break

00:47:31:00 - 00:47:53:18

MODERATOR

So, going back to that. Yeah. So, you said that you prefer the 16by9 because it takes you on a journey, but there's a school of thought or these scholars say, that the way you put the images together influences your perception.

00:47:53:18 - 00:47:54:03

A2

Definitely

00:47:54:21 - 00:48:07:23

MODERATOR

Do you think the way the shots were put together, the close-up of the lady, the close-up of the garbage, the close-up of the sewage, was it trying to influence your perception?

00:48:07:23 - 00:48:16:04

A2

That's why I said the question of aim itself. So, what's the aim of telling the story? Was there a story behind the story itself? What are you trying to achieve by telling the story?

00:48:16:18 - 00:48:25:11

MODERATOR

But remember, we're talking about the formats; we're not dissecting the

story.

00:48:26:04 - 00:48:27:00

A4

And reality.

00:48:27:01 - 00:48:28:03

A2

And reality...

00:48:29:07 - 00:48:39:12

A2

But, you know, again, I'm not sure if I would be talking about the same thing you are talking about, but even where you place the camera on VR is based on choice as well.

00:48:39:12 - 00:48:40:18

MODERATOR

That's true. Yes.

00:48:41:10 - 00:49:05:16

A2

You have to make some choices, whether it's in 16by9 or the virtual reality. You said it earlier, but you have to really think of where to place the camera. You could have just taken it somewhere else. Yeah. So, what we saw as virtual reality is not the reality of Kennedy. It is actually not the total reality. It's out of choice, your choice.

00:49:05:21 - 00:49:15:20

A3

It's almost impossible to escape choice. Yes. You know, although virtual reality does allow for a little bit more, a lot more experimental democracy in view.

00:49:15:20 - 00:49:16:03

A2

Yes

00:49:16:03 - 00:49:19:24

A3

It's you know, and I think it depends, again, on the context.

00:49:20:08 - 00:49:20:22

A4

The context, yes

00:49:21:20 - 00:49:22:13

Kenny

Important.

00:49:22:13 - 00:49:50:16

A5

Mediums are fantastic. I mean, I love painting pictures that emulate reality. Yes. I can engage with them for ages. I mean, I love photography, you know, I love film. You know, they each offer something completely different. So, it's strange. But I do have this love for 16by9. And I think I am resistant to change...

00:49:50:16 - 00:49:51:09

A3

I think you nailed it.

00:49:51:18 - 00:49:52:19

A2

Yeah, I do too.

00:49:53:06 - 00:50:20:20

A3

You're actually resistant to these technological advances, for me also, you know, and I think the more embedded we are in those processes and those mediums, the more difficult it is in a way to move forward. I mean, I still just love to watch film movies. `look at the grain, look at the bleed on the edge of the blacks...

00:50:21:00 - 00:50:52:02

A3

It does build one's resistance to the technology and I think we also are format fetishists, like we are born and raised on these screens, these boxes with the flat directed, deconstructed and reconstructed. That's fed to us. And I think it is it's a medium, I mean, arguably it's definitely more real, but it's about whether that reality is desired or how each individual will experience or enjoy it.

00:50:52:02 - 00:50:53:01

A3

Maybe it's to ...

00:50:53:09 - 00:50:56:02

A5

You actually want to escape reality. A lot of the time.

00:50:56:11 - 00:51:02:01

A3

Yes, yes. We want to be there with The Witcher, you know, jumping.

00:51:02:01 - 00:51:15:20

MODERATOR

So, if you watch these two videos, let's say you didn't watch the 360 and only watched the VR. Would you be inclined to think that maybe there's something they are not telling you?

00:51:16:11 - 00:51:17:23

A4

Oh, yeah. Oh, yeah.

00:51:18:16 - 00:51:20:23

A2

There's always that potential for every story.

00:51:20:23 - 00:51:27:01

MODERATOR

And does that perception change now that you watched both videos?

00:51:27:01 - 00:51:41:23

A3

I still feel they are directing my thoughts just by virtue of the choice

of subjects, places, sites, etc. But I do feel that there is more freedom or there is more room for the viewer to be the king. You know, the viewer is more making decisions. It's definitely about those potentials.

00:51:42:14 - 00:52:21:09

A4

Yeah. Like, I don't know, like I still think because when I talk about choices, right, so it's still directed, where you place the lady, where you placed the camera and what you choose the different cameras to show us, that's still yes, you might see the full shack, but it's a full shack depending on or based on where the camera is, where the lady is, where the couch is and everything else in the picture.

00:52:21:15 - 00:52:36:09

A4

So, yes, it might not be a close-up. It might be a 360 view of the room. But at the same time, there's still direction and thoughts that went into that and the choice of the director that went into that.

00:52:36:21 - 00:52:38:17

A2

And then not forgetting the voiceover.

00:52:39:06 - 00:52:39:24

MODERATOR

But which format is..

00:52:39:24 - 00:52:47:03

A2

Voiceover is directing you indirectly. So, you're looking at everything, but then there's something that tells you about the couch. So, you look at the couch.

00:52:47:10 - 00:52:49:21

A5

No voice over; that would be interesting.

00:52:49:23 - 00:52:53:12

A2

Yeah. Again, now you have total freedom.

00:52:54:06 - 00:53:29:21

A4

With a close-up right, like that close-up, you get to, for example, the set of the lady, there are certain images that you would miss as well, because for example like the clothes on the chair, you might miss them on the wide shots. The fact that there's wood connecting the different... it might mean anything. Maybe it doesn't mean anything; maybe it means something.

But there's a lot of that you can get from close-ups of faces as opposed to a wide shot of a room.

00:53:30:12 - 00:53:37:20

MODERATOR

So, one word, integrity, which one upholds the integrity?

00:53:38:08 - 00:53:45:15

A2

The VR gives me the integrity, I think so, more integrity. Not total.

00:53:45:16 - 00:53:47:00

A4

Okay.

00:53:47:07 - 00:53:47:18

A2

Not absolutely.

00:53:47:19 - 00:53:52:22

A3

Agree.

A1

What do you mean by integrity?

00:53:53:04 - 00:54:00:03

A3

Transparency. Sort of post-modern control, kind of like more democratic viewership.

00:54:00:12 - 00:54:48:24

A4

You would say VR. And yeah, the thing is for me, as for the journalist being there because, and again he's wearing a Biko T-shirt, he was wearing a Che Guevara T-Shirt in the other one. Because those are also making statements, right? The T-shirts are making statements because you, then it's sort of like, it also then makes you draw certain conclusions about why the story is being told, by who's telling the story. The fact that you can see who is telling the story in the 360, whereas you'd never be able to see the journalist of the other one. And the fact that it's someone who would wear Biko T-shirts and Che Guevara T-shirts. And then who Biko was and who Che Guevara was...

00:54:48:24 - 00:54:56:05

A3

But it was quite interesting to see the journalist. Yeah yeah. I mean because as you say, you know something about him now and his views.

00:54:58:01 - 00:55:00:24

A3

It's interesting.

00:55:03:09 - 00:55:32:10

MODERATOR

You said that the VR gives you a better sense of space. Yes, but you spoke mostly about the drone shots. Yeah, right. So, which one gives you a better sense of the place? I'm not talking about the drone shots, geographically. I am talking about the individual scenes if you take the drone shots out of the picture. Which one gives you a better sense of the place?

00:55:32:19 - 00:55:33:05

A3

VR

00:55:33:08 - 00:55:34:18

A1

VR definitely

00:55:36:07 - 00:55:36:23

A3

You experience the rooms.

00:55:36:23 - 00:55:42:23

A2

Yeah. So, yeah, because you can see everything and really enjoy the whole space.

00:55:43:16 - 00:55:50:09

MODERATOR

So, because even when it's cut together, I mean it still doesn't position you properly.

00:55:50:09 - 00:56:03:09

A2

Yes. Even when it's cut together, I could have just been to different scenes. Maybe they look similar, maybe one from Zimbabwe or one from South Africa here. But now in VR, you know that when you are turning, nothing, there's no manipulation there. It's the same space.

00:56:03:19 - 00:56:12:09

A4

It's an important point; you think about the old keyhole shot. Yeah. You have someone looking at whatever they want.

00:56:12:09 - 00:56:12:18

A1

Yeah.

00:56:12:22 - 00:56:18:08

A3

The control is taken away from the director.

00:56:18:21 - 00:56:38:16

MODERATOR

Yeah. It is also goes back to the agency of the journalist. How much control do you have over the narrative in VR? You can't influence unduly. Is that statement true in your opinion?

00:56:38:16 - 00:56:48:06

A4

Yeah, it is true. I mean, there's only so much you can control. So, with the VR, yeah, there's only so much you can control.

00:56:49:17 - 00:57:38:09

A2

But I wouldn't say absolutely. It's not so absolute, because at some point you have to give control to the viewer, but you have some choices, reserved for yourself. Yeah. By going there in the day and not in the night, by choosing when to go, what story to focus on or what streets. Which of the streets you want to... Yeah, because I believe there's something beautiful happening in Kennedy. It's not just all dark and gloom, they have some social practice and some carnival festival once in a while to keep themselves happy. But then the journalist didn't show that, he chose to show this.

00:57:38:09 - 00:57:43:00

A2

So, this means that you give some control to the viewer but choose what you are showing.

00:57:43:11 - 00:57:56:01

MODERATOR

So yeah, I'm just trying to look at the questions, and you've answered most of the questions, I'm trying to summarize your answers...

00:57:56:01 - 00:58:04:24

A3

This is going to be rather inconclusive... And we like this one and... Yeah, yeah.

00:58:05:17 - 00:58:15:17

A2

But I think the bottom line is in both formats, for me, there's an element of choice there; it's just that one has more choice than the other.

00:58:16:14 - 00:58:17:22

A2

Choice for the journalist and choice for the viewers.

00:58:17:22 - 00:58:21:09

A3

What I would love to think is what the French New Wave would have done with this thing.

00:58:24:04 - 00:58:29:03

A3

Can you even imagine...

00:58:35:06 - 00:58:36:07

MODERATOR

We're almost done, we have gone through most of the questions already.

00:58:36:07 - 00:58:37:20

A4

Okay. Cool.

00:58:38:07 - 00:58:56:21

MODERATOR

So, I'm just trying to look at the question and see because I structured the question in such a way that we would go through it and try and reach a conclusion...

00:58:56:21 - 00:59:11:04

A3

I think there's also this word, simulacrum, I think it belongs to this medium. It's like being in sims or something. And I think, there's a sense even though it's so real, but it's not real. And so...

00:59:12:16 - 00:59:13:17

A4

Yeah, yeah.

00:59:14:08 - 00:59:14:16

A5

Yeah.

00:59:16:19 - 00:59:17:16

A3

Simulated reality.

00:59:24:17 - 00:59:34:13

A5

It's like when you walk around you have that feeling, we know from internally that we connected to this space, but in there it simulates that space for you.

00:59:35:06 - 00:59:56:18

A3

It's like a dead finger, you know, when you like, touch someone else's finger, like, you know, and that's because it's not connected to your nervous system. And that feels a little weird. It's like the dead finger thing when you watch this thing, like floating away... I think it's disorientating.

00:59:57:00 - 01:00:20:05

A4

Also, there's something that you mentioned, which I actually thought earlier even when I was watching it, it's easier to disconnect from the story... I think it's easier to disconnect from the story in VR and to shut the narrator out and just walk around and look around, almost navigate yourself without the narrator. Whereas with the 16by9, it's not as easy.

01:00:20:16 - 01:00:21:06

A2

Tied to the story, you are tied to the narrator.

01:00:21:06 - 01:00:35:15

A4

With 16by9 you're constantly connected to what's on screen.

A5

In cinema, you have to go into a dark room and physically sit...

01:00:36:05 - 01:00:41:01

A3

In the VR, we were there between the sand.

01:00:41:11 - 01:00:46:14

A2

Yeah, between the sand, there were workers working, there was a door open. Yes.

01:00:46:14 - 01:01:06:12

A4

Actually, now that's we're saying that, I don't know what the story was here. Because I remember the child and the mother and the bed, but I can't remember what the story was. I was so focused on the images and moving around but I can't remember what the story was.

01:01:06:12 - 01:01:07:02

A3

I was like, Oh.

01:01:07:23 - 01:01:13:17

A2

So yeah, so you're enjoying everything; it's so experimental for you. And yeah...

01:01:14:00 - 01:01:18:17

A3

Because that exhibition, we did as part of the conference.....

01:01:18:20 - 01:01:19:17

A4

Yes, yes, yes.

01:01:19:22 - 01:01:25:12

A3

She constructed that sort of kitchen environment. She rolled out the linoleum on the floor, we were all commenting...

01:01:30:19 - 01:01:37:20

A3

And I was like, Oh, they've been to that same shop...

01:01:37:20 - 01:01:57:08

A2

And because perhaps what's portrayed here is not a familiar life to anybody. Yeah, I'm not sure. So, you are there more like as a guest, more like you're, you're fascinated with it. Yes. With this virtual reality, you're not really following the story that's been told...

01:02:04:20 - 01:02:05:23

A3

I see what you saying...

01:02:07:02 - 01:02:08:22

A2

It's like you've been taken to a gallery exhibit...

01:02:09:13 - 01:02:34:04

A3

It reminded me of a diorama. It's such an amazing comparison that you've made. It's almost dioramic. Yeah, it's like in a museum, and you're like, you know, like in a sort of surround diorama or, you know, there is something of like being in a fishbowl. Like being in there looking around you. I think it's got to do with the nervous system connection and the training. It's very new.

01:02:34:04 - 01:02:36:05

A4

Yeah, yeah, yeah, yeah.

01:02:36:14 - 01:02:50:16

A3

It's jarring. It's, there's something in you that is suspicious of the

experience. Yeah, like you're like, I feel sick. This is. It's emotional. It's emotional. This is more emotional.

01:02:53:04 - 01:02:56:24

A3

I felt more emotionally destabilised by this...

01:02:56:24 - 01:02:57:09

MODERATOR

The VR?

01:02:57:24 - 01:02:58:07

A4

Yeah.

01:02:58:13 - 01:03:19:01

A3

I think I didn't like that because in a way, like, I like the distance, you know, like when I watch a documentary. But it's not to say that I'm right. It's just like I'm just saying my gut thing is like when I watch a documentary, I want to watch it only with my head. Like in it with my head.

01:03:19:08 - 01:03:22:02

A4

It's someone else's experience that, yeah, they're far away.

01:03:22:02 - 01:03:25:02

A3

And I'm like, Yeah, this is terrible. They are rats eating children.

01:03:25:02 - 01:03:25:19

A4

Yes.

01:03:28:14 - 01:03:30:08

MODERATOR

So, you saying this 16by9.....

01:03:31:07 - 01:03:34:17

A3

No, I'm saying that the VR is more emotional.

01:03:34:17 - 01:03:35:10

MODERATOR

Is more emotional?

01:03:35:13 - 01:03:47:11

A3

You're disorientated, you're like in this strange simulated space, you feel more vulnerable in the space...

01:03:47:22 - 01:03:54:12

MODERATOR

I'm not making the distinction; are you making the distinction between emotion and empathy?

01:03:55:00 - 01:04:12:24

A3

No, I mean emotion and empathy. I think everything, you're more tenderised by the experience. Like I'm more like, oh, well, the poor old lady, her stove, you know, the stove is about to break.

01:04:18:13 - 01:04:22:04

A2

Empathy is the emotion it evokes in you because it makes you...

01:04:22:12 - 01:04:33:15

MODERATOR

You know, Is that real? Because you see, if you look at the close-up of the lady crying, you can't get more emotional than that, and it's in the 16by9.

01:04:33:15 - 01:04:34:17

A4

yeah

01:04:34:21 - 01:04:35:15

MODERATOR

So, I am trying to understand...

01:04:35:18 - 01:04:40:16

A3

Then I think I had more empathy here and I was more emotional there.

01:04:40:22 - 01:04:41:20

MODERATOR

So, are you making that distinction?

01:04:41:20 - 01:05:11:13

A3

So here, when I was hearing about, I could see like I felt the empathy, this poor woman, you know, like her whole life, you know, it's devastating actually. Like the story about the baby. And that took me back to this other place I didn't know, this other similar documentary. And the empathy here, I was more vulnerable. I felt more vulnerable in the spaces. I was laid bare more. Here, I was more in control.

01:05:11:13 - 01:05:18:21

MODERATOR

So, when we talk about the documentary itself. So, are you saying that the 16by9 got you more emotionally engaged?

01:05:19:01 - 01:05:22:24

A3

Yes, more emotionally engaged, more empathetically engaged with the story.

01:05:23:05 - 01:05:30:11

MODERATOR

And this is something that A1 said about the VR as well, that he felt distant. He was observing it.

01:05:30:16 - 01:05:33:02

A3

Yeah, but I felt vulnerable as well.

01:05:33:02 - 01:05:34:09

MODERATOR

Vulnerable as in disorientated?

01:05:34:11 - 01:05:48:07

A3

Disorientated. But also somehow, like, you know, on guard. Somehow, like, it's so close, it's so around you, you are disorientated by it. And I think it does make you more vulnerable and not necessarily to the story.

01:05:48:15 - 01:05:49:08

MODERATOR

Like inward?

01:05:49:08 - 01:05:50:14

A3

Inwardly vulnerable.

01:05:51:00 - 01:06:14:22

A5

There was something for me, it wasn't the darker sides of the story. But it's just a feeling I had. I love those kids singing the national anthem. Because it reminds me of when I taught in Junior School and having the kids up close. Yeah, yeah. It's like TV, the distance, watch the shots. It's always the same...

01:06:14:22 - 01:06:15:12

A3

Right in your face...

01:06:15:12 - 01:06:19:08

A4

Guys I need to go. Yes.

01:06:19:12 - 01:06:21:04

MODERATOR

Thank you so much. All right. Thank you.

A4 departs. Goodbyes.

01:06:54:24 - 01:07:21:24

MODERATOR

So, I am just going to go through some of the things that we discussed. And then I am going to ask the main question. Just to put everything into perspective. Yeah. So, some of the things we discussed was place. Yeah, right. We said VR gives you a better sense of place. Yeah, right. It puts everything into perspective, where you are. It was quite clear that VR maintained the integrity of the scenes.

01:07:22:05 - 01:07:24:16

A3

Yes.

01:07:24:16 - 01:07:37:23

MODERATOR

And then everybody agreed that VR gives you a kind of a distance. Were you are away from the story and you looking into somebody's world? So, it's the observer thing.

01:07:39:18 - 01:07:41:01

A3

Much more separated somehow.

01:07:41:19 - 01:08:08:18

MODERATOR

And I think we all agreed, emotionally engaging, it was a bit of ... we found that the 16by9 was more emotionally engaging. It had a sense of pulling you in and pulling out the empathy. If I'm not correct in any of my analysis of what we discussed, please tell me.

01:08:09:22 - 01:08:18:24

A5

I was in collaboration with that, you will probably pick it up on there. When I was chatting about the kids...

01:08:20:11 - 01:08:37:07

MODERATOR

We also spoke about, how VR makes you conscious that there's a camera and it's quite clear that there is a camera there, and that you can get lost in the 16by9 because you don't worry about where the camera is placed.

01:08:39:18 - 01:08:39:22

A3

Yeah

01:08:40:09 - 01:09:02:21

MODERATOR

You also said that VR makes you notice things that you would not have noticed. Some of those things have meaning. Yeah. What was most significant about those things, like this shot..., I was quite blown away by this.

01:09:04:05 - 01:09:05:13

A2

The fan. Yeah.

01:09:05:13 - 01:09:10:20

A3

The fan, the child, also that when I suddenly turned around, the child was there.

01:09:11:09 - 01:09:12:18

A2

yeah.

01:09:13:10 - 01:09:19:12

A3

I also noticed the ceiling fan; I was like that's clever. I must do that.

01:09:21:19 - 01:09:22:19

MODERATOR

But every time you watch it's a different experience.

01:09:23:05 - 01:09:23:08

A5

Yeah, that's what's nice...

01:09:23:24 - 01:09:34:01

A3

I was immediately thinking I could use it. I've got this room under the house, and it's about the height, it gets very hot there..

01:09:34:07 - 01:09:35:11

A2

You can do something like that.

01:09:35:12 - 01:09:40:14

A3

But that's exactly also how it distracts.

01:09:40:22 - 01:10:10:23

MODERATOR

Yes. And that was the last thing that we discussed. How it distracted. So, then the question is, as a format and I'm not talking about the story, I'm talking as a format, which depicts the reality in your opinion? And it could be for different reasons?...

01:10:21:08 - 01:10:24:13

A1

So, you asking which one depicts the reality better? Besides the story?

01:10:25:04 - 01:10:26:16

MODERATOR

Yeah. You see the story is exactly the same.

01:10:26:16 - 01:10:28:18

A2

It could have been just any story.

01:10:29:08 - 01:10:58:23

MODERATOR

The story is exactly the same. But what we are trying to do is, if somebody comes in here with a camera, they might make certain choices and that might not be the reality we want. And in this case, this is a case study of these two videos, and we are looking at these two videos because there was no intention to mislead.

01:10:59:04 - 01:11:15:24

MODERATOR

It was a straightforward thing. And I'm saying if you only watched one of those videos, which would give you more information and representation...

01:11:16:06 - 01:11:19:13

A2

I think I can go first, now.

01:11:20:02 - 01:11:43:24

A2

I think it's obvious that it's the VR. Although your question was which gives you a better depiction of reality. Now the keyword there for me is a better depiction because the person that is trying to tell the story or whomever the storyteller is, is depicting reality. Not giving us reality. So, a better depiction now is the VR.

01:11:44:08 - 01:12:05:09

A3

Yeah, I agree with you. It is a better depiction, and I think it's more real being in the story, and that's why it's a bit jarring at times as well. Maybe it's good to be jarred. I mean, we are too comfortable behind our screens. Yeah, I feel like it is. Yeah.

01:12:06:16 - 01:12:08:09

A3

I'd say the VR, yah.

01:12:13:00 - 01:13:05:10

A1

I think it's the VR as well. Because it gives you all these different details. Even the details that are in the setup, they also reflect on the reality of the story in a way. So as much as we may try and ignore it, we are not all interested in what this lady is saying. This old lady is saying I have 32 grandchildren, you start trying to picture, at the back of your mind, what is the setup of the house. How do they get to live in this house? Where do they sleep?

01:12:48:08 - 01:12:49:12

A3

You know, where do they sleep?

01:12:49:20 - 01:13:05:10

A1

So, with the VR, you start looking around to see the space, you start looking all around in VR.

01:13:05:21 - 01:13:18:17

A1

And you start realising, how is this even possible? So, in that way, I think the VR is more real in terms of giving us the reality. It's more legitimate.

01:13:25:08 - 01:13:49:20

A5

I think you're 100% right. Depiction of reality, It's somebody's reality. Reality, yes. I just felt like I was more in that particular space when I watched with the headset on, and it felt like I was more there. So, I would definitely go with the VR.

01:13:50:00 - 01:14:02:17

MODERATOR

Because for a while we went the other. It's like A2 was saying. If you want to tell a certain story, then you choose 16by9.

01:14:03:03 - 01:14:30:09

A3

I think that is still true. For reality, the VR is unbeatable; for intentionality, I think the 16by9 is the more manipulatable format, you can manipulate those things. But then it has that whole caveat of integrity and transparency and, you know, these things are becoming more and more important in our world today.

01:14:30:09 - 01:14:39:20

A3

Not all of the Russia reporting. You know, it would be amazing if they had to VR all of that... imagine what you would see.

01:14:43:22 - 01:14:48:00

MODERATOR

I think it's unanimous.

01:14:48:00 - 01:14:49:15

A3

Yeah yeah.

01:14:50:02 - 01:14:53:24

MODERATOR

It has its problems. It's not reality but it's a better depiction of it.

01:14:54:03 - 01:15:11:08

A3

Yeah. I also think there's another caveat, that is I don't feel comfortable with it because I'm not used to using it. Like, I think if we were all like more picking up those headsets and doing that, then it would become less jarring. It would become like you would get used to it.

01:15:11:12 - 01:15:27:06

A2

Yes, Yes. We seem to be talking about it as if you have a rule that says you can do this twice or three more times. And by the time you do the first time, the second time and the third time, perhaps you get less fascinated about looking around.

01:15:27:06 - 01:15:28:04

A3

Yeah, you get much more casual.

01:15:28:05 - 01:15:47:17

A2

So, if you do it repeatedly, then you get less and less distracted, which is because you're not really looking around anymore. Now you focus in on the story. Yeah, but for the 16by9 on the first take, you can really focus on the story because you have nothing else to focus on.

01:15:48:09 - 01:15:51:01

A3

And you're trained. We're trained. Trained to watch that way.

01:15:51:01 - 01:15:53:04

A2

Yes, that's right. Yeah. Actually.

01:16:05:19 - 01:16:14:13

MODERATOR

The last question is, you know Basin's total cinema, It's the ultimate experience. Yeah. Were you're not bound by the confines of a rectangular screen.

01:16:14:13 - 01:16:16:14

A3

Or by narrative.

01:16:18:10 - 01:16:25:11

MODERATOR

How close do you think VR comes to total cinema?

01:16:26:09 - 01:16:26:19

A3

Very.

01:16:27:04 - 01:16:28:11

A2

Very, very close

01:16:28:17 - 01:16:48:00

A3

I mean, imagine if Truffaut got hold of this in "Hospital". Who made "hospital"... there was also that one "the traffic jam"

01:16:48:04 - 01:16:49:23

A5

Oh, that was Jean-Luc Godard

01:16:50:07 - 01:16:55:23

A3

That was Godard, That's what I was saying. So if Godard got hold of this for "traffic jam", What would he have done?....

End.

APPENDIX B

FOCUS GROUP TWO Transcription

THESIS: The depiction of reality in a 360-degree video documentary versus a conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in Kwa-Zulu Natal.

RESEARCHER and MODERATOR: NIRESH SINGH

DATE: 25 November 2022

TIME: 18h00

VENUE: Durban University of Technology, City Campus, Department of Video Technology, Boardroom.

PARTICIPANTS	Occupation	Years of experience	Age	Gender
B1	Journalist	21	52	Male
B2	Video Journalist	9	35	Male
B3	Video Journalist	41	68	Male
B4	Journalist	18	40	Female
B5	Journalist	13	34	Male

00:00:00:02 - 00:00:34:23

Introductions

00:00:37:04 - 00:01:12:22

Moderator

So, there's is this idea that when watch 360 as opposed to 16by9, you're making up your own mind? You don't listen to what the voiceover is saying. You're mediating your own reality, so you're listening to the voiceover, but you are looking around and then you say well does that make sense or not. So according to your experience, did you have anything similar, or did you have any other experience?

00:01:14:08 - 00:01:49:24

B3

There's so much more to see. Okay. That one can be distracted, exactly that, from the narration. Okay. Especially if the narration is continuous, maybe if there's gaps. So, you could even say, well, take a look around you and look at the squalor or poverty. Then the narration can continue. But I saw a lot more detail in the 360. I saw bird's, little birds that I never saw in the 16by9. So because of all that extra information. You've got to be careful that you don't get distracted from the content of the narration.

00:01:49:24 - 00:02:20:05

B1

Yeah, I just want to echo B3's words, but for me, it's not a distraction really, it distracts in a good way. Take for instance, the way he talks about, I think, a newborn baby found in a dump, and the guy says something along the lines of the place is full of dumps and all that stuff and the 360 gives you the opportunity to look around.

00:02:20:06 - 00:02:41:21

B1

It gives you that full picture. Whereas in the 16by9 you see the dump that they show you and it doesn't give you...It could be manipulated. It could be the only damn there, you know, and you don't know. But this one gives you the opportunity to look around and see, oh, there are a lot of other dumps in that area.

00:02:42:03 - 00:02:58:10

B1

So, it does distract but in a way for me and not necessarily in a bad way. But the good thing about this is that it gives you the full, complete picture. Yes, it gives you the full story. You don't.

00:02:58:17 - 00:03:00:13

Moderator

The VR?

00:03:00:24 - 00:03:28:04

B1

Yes, the VR. So, the VR gives you a complete picture. And obviously, if you watch news, for instance, it's the decision of the cameraperson and the reporter that we're going to put the old lady here. The decision was made to make the old lady sit here. You could have decided to make her sit somewhere else. So, I don't get to see what's around her, but with this one, I can actually see.

00:03:28:04 - 00:03:53:22

B1

And while looking at old lady talking about her conditions, She's saying I've been here since 19-whatever, and you need a picture of what this old lady has achieved, you know, over the years. So, you look around the old lady's shack and you see that there's nothing, there's nothing and the old lady cries because to her these are all wasted years.

00:03:54:16 - 00:04:23:24

B1

So, the reality is so depicted it is, you know, with and with, with the VR, it just gives you the complete picture.

B2

So yeah. You know, for me, the narration is not distractive. I think because there's a lot of things to see in the frame. So, it assisted me to pan back to what the camera is trying to show me because if it was not for the voiceover, I would still be looking elsewhere.

00:04:23:24 - 00:04:43:11

B2

But the voiceover then helped me in a certain way to come back. But I think what he wanted to say too, that maybe if there are small gaps in between the narration so that you have enough time to pan and see everything, but otherwise, it really gives you, as he was also saying, it gives you way more than you can just see.

00:04:43:11 - 00:05:06:24

B2

There's a shot of the lady in the shack there. I think she also spoke of poverty and even before she could get to that line of poverty where you look around seeing the fan hanging and the leather couch that's cracked, already you know, that there's poverty in this house, the moment she gets to the poverty line, you are already aware it's really bad.

00:05:07:08 - 00:05:18:01

B2

So, I think that it's not distractive at all. It kind of leads you towards what's happening.

00:05:19:13 - 00:05:38:07

Narrator

You notice that everything is identical in the videos, the audio, narration and interviews? Did it strike you that way or did you feel you were experiencing a different video? Because remember everything was identical except the pictures.

00:05:39:14 - 00:06:16:22

B5

For me, Mr Singh, the one thing I noticed, and I think B3 mentioned it, you get to see more detail in the VR, in terms of what you can see on the screen as opposed to seeing it on the flat footage. But over and above that, I think also the fact that you are able to, as this guy is speaking, to look around and see whatever it is that he's probably talking about, which forms part of the discussion.

00:06:17:11 - 00:06:38:00

Moderator

Are you at any time trying to think that maybe this guy is misleading you? I need to see for myself, you know, when we watch it, we have to take the voiceover as it is, in what it is saying. You presume it's true, but with VR, are you saying, okay, he's talking about garbage let me see for myself if what he is saying is true. Did you feel that way?

00:06:41:09 - 00:07:28:17

B4

I did. I want to go back to, or also echo what B3 said. I forgot about the narration when I was watching the VR, you know, I was absorbed into, if that's the right word, into what was happening. You know, I kept on sort of moving around as soon as I realised, oh, I can turn left and, you know, turn extreme right, that sort of started..

And I actually think that probably even without the narration, I would have been able to follow, I would have been able to follow the storyline and what was happening without the narration sort of filling in the gaps. Yeah, I forgot about the narration, in the VR, I got lost in the picture and what I was seeing.

00:07:29:15 - 00:07:35:07

Moderator

So, what you saying is that the VR is distracting, but it doesn't distract from the essence of the story.

00:07:35:10 - 00:07:36:18

B4

Yes, yes.

00:07:38:06 - 00:08:14:14

B3

Yeah. There's the old adage of the narration. They call it the voice of God, you can't argue with the narrator but you can argue with the person on screen. Yeah. So, when there is this voice that you don't see who it is, the narrator, so people tend to believe that. Yes. You believe what the narration is saying because you can't see this person.

Okay, But now with this VR, you've got so much more to go on. Yeah, so on some things, you can make up your own mind. Oh, this is actually worse than what this person is saying.

00:08:14:14 - 00:08:51:17

B1

Yeah, Maybe to add to that and the question you've just asked, whether the voiceover is misleading you. No, I don't think that they are necessarily misleading you, but when he says, for instance, um, this area is full of dumps, you automatically want to see the dumps. So, you look around, um, not necessarily because you think he's misleading you, not because you think he's lying, it's because he said it and you have the means to verify.

00:09:01:01 - 00:09:27:07

B4

Not to verify, though, because you don't trust what he's saying. You're not verifying it because you don't trust what he is saying; because it's there. The picture that you're seeing further supports in a way what the

guy is saying, you know, so I think for me, even if he didn't say it, by you observing and looking around, you make up your own mind now that you would have seen it.
You make up your own mind about the conditions that these people are living in.

00:09:27:07 - 00:09:35:22

B2

It's like you also want to see it. You also want to see what the narrator is saying, also want to see for yourself.

00:09:36:04 - 00:09:55:24

B4

We didn't see the rats, but I believed. I believed that they were rats. I didn't see that rat, but I believed, having seen the dump, that there were rats.

00:09:58:04 - 00:10:08:00

B5

Obviously, also, it's like you are physically there, not like I'm watching on the screen.

00:10:08:06 - 00:10:10:15

B2

And you feel like greeting some people at some point.

00:10:10:15 - 00:10:26:17

B4

There was this gentleman who walks past, he's wearing the shorts. Yeah. And I was watching from above. This guy walking. And I felt like God, as I saw him walk.

00:10:30:06 - 00:10:43:19

B1

Overall, it depicts the reality more than the flat video. When the narrator says poverty, you are able to look around and say, ay, this is poverty.

00:10:45:00 - 00:10:54:21

Moderator

There's also this thing about geographic positioning, you know, that drone shot that you see in the beginning of the VR, you are able to look around and see where everything is.

00:10:55:06 - 00:10:57:22

B4

Yeah, yeah, yeah.

00:10:57:22 - 00:11:02:12

Moderator

So, do you agree with that concept that it really positions you geographically?

00:11:02:12 - 00:11:43:23

B1

It does. I need to say, I actually wrote it down. It gives context. Yeah. You know, where the place is situated and because looking at the 16by9 are left wondering, you know how big is this place? Where is it? you

know, is it in rural areas? you know, with that shot, you get the full context.

Oh, Kennedy Road is not necessarily a huge, um, informal settlement like Khayelitsha, for instance, you know, because it shows you the whole area. So, context is very important in this instance. And I think that the VR does do that. In a very good way.

00:11:55:05 - 00:12:27:05

Moderator

So, there are these seminal theorists or these people who made theories about early film. These theorists said, of what documentary realism is, that it's the long shot, deep focus. We should just place the camera on a wide shot and let it roll, and let people make up their own minds about what they see.

00:12:27:24 - 00:12:59:01

Moderator

So, the other thing is, when as a cameraperson, when you go to shoot, to a location, you look at the place and you think how can I represent this with a camera? So, you take that reality, you deconstruct it, and reconstruct it again. So, what I'm asking you is, which is the better option, that wide, deep focus shot or deconstructing it like with the flat video?

00:12:59:01 - 00:13:46:07

B1

I think the problem with you deconstructing and putting it together again is that it all depends on what you want people to see. If you don't want people to see the dumps, that this one is talking about, you can easily manipulate the shot to exclude that, this on the other hand, whether you told me about the dumps or not, I would have seen them anyway. Whether you told me about those toilets in the beginning, I would have seen them anyway.

But with this one, you can say those toilets are not good, so I won't put them in because I don't want anyone to see them. You can easily exclude them from the shot. So, the VR always for me.

00:13:46:20 - 00:14:14:20

B4

What are you hoping to achieve, I think, from this doc.

You know because the story could have been completely different and then you would have to doctor it, so to speak. So, I guess the VR just opened it up more and also to other interpretations, more than just what the narration is sort of guiding you to. You can think outside of the box, so what else are the issues there.

00:14:15:00 - 00:14:30:20

B4

But here on the 16by9, you sort of want to rein in the story, you know, sort of to say, this is the focus of the story and this, as the viewer or as the person is watching it, this is all that I'm giving you. You get more control here in the 16by9 than you do in the VR, in my view.

00:14:30:24 - 00:14:55:21

Moderator

So, it's an argument that been brought up about journalistic agency, the

power of the journalists to tell the story is on the 16by9, were you can focus the attention; the VR decreases that power of the journalist to tell the story. Because the opposite argument to that is that in VR you are not focusing your viewer onto what you want them to see.

00:14:56:22 - 00:14:59:10

Moderator

So, any other thoughts on that?

00:15:00:17 - 00:15:26:12

B5

For me, I think, what works is the `VR because I mean, if you are saying you want me to focus on a specific subject, then I don't have an option. But if you are saying here is a holistic view of what the environment looks like, then it's up to me to make the call.

00:15:27:09 - 00:15:58:17

Moderator

But, you know, there are choices being made because there are choices of where to place these cameras. When you go to the location, what shots are you going to take? Are you going to place the camera inside the house or outside? So, in either format there are still choices being made as to where to position the camera and what shots to take.

00:16:00:03 - 00:17:06:22

B1

Choices true. But remember, in a way, let's say you wanted to speak to the old lady; whether you spoke to her outside the house or inside the house, it doesn't really matter. Gogo is there. And you are giving me the option to also see whatever is happening around, it doesn't matter where you place her.

If she is there, I'll be able to see the whole environment and what surrounds it. Whereas with this one? With the flat one. You see what you see, You see what the cameraperson and the reporter wants you to see. So as much as it is choices, but the VR gives you a better view of the surroundings and by extension, you understand the realism more than a person who's actually watching the other one.

00:17:08:08 - 00:17:36:18

B3

It's almost like you need to watch the VR a few times because if you turn into one side, you could miss something interesting over there.

Then it's gone because it's in time. But if you watch it again, the next time you might see something different, or up or down or whatever. Whereas with 16by9, you got no choices, you just see what's there... you could miss something.

00:17:38:00 - 00:18:30:06

B2

I think just to go back a bit to the point of the power of the reporter, the cameraperson, as much as this, the VR takes away the power of the reporter. But I think from the viewer's perspective, it gives you more because when you watch, when you see anything, when you see this room, you see the colour of this room, only to find that my mind is not even on the colours, my mind is on the height of the ceiling, so that's what the VR does. So when the narrator is telling us about the toilets and the

municipality not maintaining these toilets, my mind is about how far is these toilets from their houses. And then while the narrator is talking about the municipality, I got a chance to look at the distance between the toilets and the houses and say, how far do they have to walk to access these toilets? etc..

00:18:30:06 - 00:18:52:20

B2

So, this gives you way more than the 16by9. As a viewer now, not as the reporter. It gives you way more than a reporter could cover. Let me give you an example, when we were covering the July unrest, some people were not really interested in the looting.

00:18:52:20 - 00:19:20:10

B2

They've seen the looting so much, so they wanted to see the damage now, how many warehouses were damaged, how many houses were damaged? and roads are closed; how many protests are there? So, with the VR you let the viewer see what they want to watch, as opposed to the flat one; if you only show Makro the whole day, then they might change to another channel for more.

00:19:21:04 - 00:19:46:11

Moderator

That's an issue as well; how do you show the scope of the damage? You go to a disaster. What you trying to do is capture the scope of the damage; you can't capture the scope within that one shot. You have to try and figure out how many shots you need to capture that scope. And VR can do that, one shot gives you the entire scope within that one shot.

00:19:50:08 - 00:21:15:21

B1

Yes, I think he makes a very good example. The flood damages, for instance, you know, with the VR will show you the full monty, you will see everything. And I just want to go back to what B3 spoke about earlier, missing out in VR, the narrator is talking about this and you probably watching this side but you're missing by choice.

Imagine what you miss out here on the on the flat video, you miss everything. You see what the person wants you to see, the rest of the stuff... You see those children, the sentence that you used, what is it? Shackles of poverty... so you see the children, but what is on the other side of the children, a house or is it a school? And I just moved around and I saw what it was immediately. So, you miss stuff because you want to miss it. Here on the flat video, you have no choice. You don't know what's going on here and there's no way to know, unfortunately.

00:21:16:13 - 00:21:40:05

B5

But in addition to that, for me, I think this flat video, sort of requires you to focus. You know, more on what you see as opposed to this, , you know, you could move around all you can, you know, you could do all sort of things in terms of what you can see visually, which will in a way distract you.

00:21:40:11 - 00:21:42:12

B5

You know, I am not sure if it's a good or bad thing.

00:21:42:12 - 00:21:42:20

B4

You get lost

00:21:42:20 - 00:21:59:17

B5

But watching the documentary here, the flat video, made me focus on what I was seeing here. And I could feel that the stories is of this and this, but this VR, I feel that I was thrown in the shacks there and said, look around.

00:22:00:16 - 00:22:25:04

B4

Yeah, this one is more impactful. Yeah. In terms of what was supposed to be achieved by it, this one became more wow, you know, it's sort of the experience of also not often having the opportunity to view an area or to watch any footage like that.

00:22:25:05 - 00:22:42:22

B4

So, the VR brought a different experience, it was exciting but I think if there's a message and if we try to drive the story home, this for me is what I will remember. I know, I forgot the narration, lost the narration.

00:22:42:24 - 00:22:46:18

Moderator

Before you said you got the essence of the story, although you were distracted.

00:22:48:01 - 00:23:04:22

B4

Yes. I didn't need the narration for me to understand what it was about. But in order for it to hit home and sort of capture me and impact me. This one, the 16by9 was more powerful.

00:23:04:22 - 00:24:03:20

Moderator

Yeah, so let's talk about these closeups. They were very emotional, they played on your empathy but that can also be used for manipulation. So, when we're talking about reality, when emotions and empathy get involved, it's distorting reality.

Then you're no longer objective. You become emotionally attached to the story. So, I want to take the conversation that way because this is the essence of what we are discussing about reality. You know, where you can focus and then play on people's emotions.

00:24:04:15 - 00:24:05:21

B4

The lady crying. Yeah.

00:24:16:00 - 00:25:06:10

Moderator

We just wanted to have an honest discussion. We're not going either way. Because if we try and go either way, then we lose what it is we are here to do. But it's also being used to manipulate, like the shot of the kids.

I don't know how you feel about it, but the lady that's crying has been given a house, a flat.

But she doesn't want to go, but it still touches your heart. But at the end of the day, you're also thinking, well, she's been given a flat. So, I want to talk about that for a bit. The 16by9 draws you in on the emotions, and the VR keeps you at a distance.

00:25:06:19 - 00:25:34:11

Moderator

We call it the embodied and disembodied experience. Remember, what you said is very important because, as a journalist, you can get the story you want to write, but as a viewer, it also allows another journalist to manipulate you. So, let's discuss it because that's the crux, the essence of the discussion.

00:25:35:13 - 00:25:39:03

B1

So, these two shots, Are they the same?

00:25:40:01 - 00:25:47:01

Moderator

Yes

00:25:47:01 - 00:25:49:05

B1

You say this is the close-up.

00:25:49:20 - 00:25:51:11

Moderator

That's the close-up.

00:25:51:24 - 00:26:04:20

B1

Yeah. Look this, the close-up is more impactful obviously, you know, this is what you lose, unfortunately, I think there are advantages and disadvantages, you know.

00:26:09:03 - 00:26:34:05

Moderator

Emotions touches your heart. It really makes you connect with the story. The VR doesn't do that, it keeps you at a distance. But is it bringing out the reality of the situation? And that's more important because that's what the discussion is about.

00:26:34:05 - 00:26:56:18

B4

Well, I mean, we are seeing the reality of the situation in that one. We can see the filthy streets and, you know, the cluster of shacks and all of that. But again, it comes to what is the purpose of telling the story.

00:26:56:22 - 00:27:22:14

B4

Is it not to get a reaction from the viewer, is it not to get a reaction from the viewer? Is it not there to show that these people have been living in squalor for what... she spoke about 36 years? Is it not to say let's change? Particularly for me, the image that struck out is the

little boy sitting in the middle of the road with a red t-shirt that was more impactful to me.

00:27:22:14 - 00:27:46:10

B4

And I saw in this one, I must say, I don't know, the lady crying not so much. But it was the picture of the child and the narration which spoke about this next generation and the cycle of poverty. So, what I'm saying is, is that not what the purpose was? to get a reaction from us?

00:27:46:11 - 00:28:18:18

Moderator

Remember, we comparing these two videos of the Kennedy Road informal settlement. It's a case study comparing the reality in these two videos. Otherwise, if we had to do that analysis, we'd have to watch ten more videos. So, it is important to keep that in mind.

00:28:19:08 - 00:28:31:20

Moderator

You know, There are 100 more stories in Kennedy Road Informal settlement, but we are comparing this story in the two different formats. That's why the voiceover and everything else is the same.

00:28:33:00 - 00:29:23:13

B1

Yeah. I think, again, the fact is there's not one reality. Yes. You know, there are many realities, and those realities are depicted differently by both shots. The VR depicts realities that are not necessarily depicted by the flat shoot.

For instance, Gogo crying tells you what Gogo feels.

The reality is that Gogo is not happy, Gogo is sad, that fact that Gogo feels that she has been hard done by. The fact that Gogo does not want to leave the house that she built in 1980 something, tells you that for Gogo her whole life is invested in there. That's the reality Gogo is facing.

00:29:24:03 - 00:30:18:15

B1

But again, here, the reality is, as much as we do not see the emotional parts that this one shows, the VR shows you the other reality, the surroundings, you know, which, again, I don't know, it leads you to question yourself. Why doesn't Gogo want to move from a shack like that one? Because you can see most of the whole environment. Why does she not want to leave a shack that could be swept away by floods at any time and into a stable house? So I think realities are depicted differently by both shots, the VR one and the flat one I think, and you get realities depicted differently. And in this instance, the emotion in this one is much, much better than it is here.

00:30:18:15 - 00:30:49:22

Moderator

I just used these shots to illustrate. But it goes back to agency, you know, the power of the viewer vs the power of the journalist to tell the story. Because you can argue that this allows the journalist to tell whatever story you want to do.

00:30:50:02 - 00:30:55:04

Moderator

And that story could be manipulated.

00:30:55:11 - 00:30:56:06

B1

Yeah

00:30:56:06 - 00:31:03:04

Moderator

Does VR offer less of that opportunity to manipulate or not?

00:31:03:24 - 00:31:08:05

Ayanda

I think less, in my view.

00:31:08:07 - 00:31:17:12

Moderator

Yeah, so open and honest discussion. I mean, I don't want to be leading the conversation, but I'm trying to bring up the points that we can discuss.

00:31:18:02 - 00:31:28:05

B5

So, for me, I think with this, you are given a choice to make up your own mind. But here, the flat video, emotions are involved here.

00:31:29:16 - 00:31:32:13

B4

Yeah, your mind is made up for you.

00:31:35:01 - 00:31:58:12

B5

It's like follow this path, on the flat video. This is the way that the story must go and this is the path you must follow. There's nothing much that I can sort of... I can't remove myself out of this because it's able to connect with my emotions. But here you make up your own mind. So I think.

00:31:59:03 - 00:32:25:17

B4

But also, how we looked at the VR, for example, what stood out to B3, he was looking for rats. Yeah, I got stuck seeing the house with the two fans; there was the girl with the two fans. So for quite some time, I've tried to figure out she has a fan on top of that... you know what I mean...

B3

I was looking somewhere else.

00:32:25:23 - 00:33:26:07

B4

So, we could have all come up with different stories around the VR, because we saw different things and so we could have all come up with different stories. One person might have focused too much on the area itself.

You know, let's say you like geography and that's what you focus on. I, maybe as a mother, you know, I'm looking out more for the kids. I think the VR opened it up for different people to interpret it in different ways and look out for what interests them.

So there in the VR, if you are trying to drive a message, it could have been lost, B2 was measuring the distance, B2 became an engineer. Haha, more interested in measuring the distance between the houses and the toilets.

00:33:27:24 - 00:33:31:08

Moderator

But that matters.

00:33:31:08 - 00:33:50:18

B4

Yes. But then that's what he was focused on. That's not what I was focused on. So, what the story meant to us will be different compared to this flat video. It would be interesting had we watched these without the narration.

00:33:50:18 - 00:33:57:22

Moderator

But just before you go on, I just want to say if you watch the VR ten times, you see different things. If you watch the flat video ten times you see the same things.

00:33:58:09 - 00:33:59:23

B4

Yes, you see different things.

00:34:03:15 - 00:34:27:07

B2

I think that the VR does not take away. It's actually very close to reality because you can look in the direction that your eye is facing, I'm seeing all the way from this side to that. But the flat video is only showing me a portion. That is all.

00:34:28:02 - 00:35:01:10

B2

So, then VR, it really gives you more. When it comes to emotion, sometimes, the voice, the old lady's voice is not the one that is used in the overlay, So if you had her voice on the VR, you would definitely hear from the voice that there's something more; she probably breaking down or something, So the VR, as much as it does take a bit of emotion away, but it does not take everything away, it brings you very much closer to reality compared to the flat one.

00:35:02:00 - 00:35:36:22

B2

So, I still think for the viewer, or from the viewers perspective, that the VR still gives the viewer more options to decide what story they want to focus on, besides the story that the narrator is trying to tell, So you can draw many stories from one package.

00:35:36:22 - 00:35:52:19

B1

You know the fact that we all say when we were watching the VR, we ended up losing what the narrator is saying basically means that the flat video is restrictive. The flat one is very restrictive. You have no option. You have to listen to what he says, and you have to see what he wants you to see. And so the reality, according to who?

00:35:57:02 - 00:36:24:05

B1

It's the reality according to him, the narrator. Some of the stuff he was saying, I could not even hear because I was busy looking at something else, you know, and I was looking at my own reality. If you were, for instance, to send a crew from CBS and a crew from Fox News to go film here, they'll come up with two totally different stories on this.

00:36:24:19 - 00:37:03:17

B1

On this very same doc. You say to them go to Kennedy Road settlement, get us a documentary. They'll come up with totally different realities. Realities. They'll call it realities. Reality according to who? Reality is also relative. It's very relative. You know, that is why when we watch the VR, irrespective of what the narrator is saying, we are busy looking at what we want to see, and you get more options than you do here on the flat video; you end up coming up with your own reality.

00:37:03:23 - 00:37:24:19

B1

The narrator never spoke about the distance between toilets and houses; in both cases, he never spoke about the distance between the toilets and the houses. But B2 strayed. He said I don't want to listen to you. He looked around and said, you know, those toilets are too close to the houses.

00:37:25:03 - 00:37:54:12

B1

There is one thing that this person probably did not want you to see or probably did not like, not include, because there's not enough time or for any other reason. It was left out; it was excluded. So, you end up getting so much more on VR than here on the flat video, you end up getting your own reality. You can come up with a story that's totally different from what is being narrated by the person, what is being narrated on the flat shoot.

00:37:55:14 - 00:38:20:05

B3

So, the question is, at the end of the day, as a storyteller, news person, you want to tell a story, but you want to tell a story; it's your vision, or do you want the viewer just to make up their own mind. So, I'm not really sure if it achieves the object of breaking the story in the first place, if someone else is going to come up with their own different thing

00:38:21:10 - 00:38:47:19

Moderator

But this is a study on reality, it's a case study of these two videos. And we trying to discuss this story of Kennedy Road, and which video conveys a better reality of that place.

00:38:48:17 - 00:39:15:11

B3

You know, I saw a documentary this year on Al-Jazeera, it's about chopping down trees in the rainforest. Yeah, and I was watching this documentary right, I was waiting for the narration to start, right. Well, there was no narration in the entire documentary at all.

00:39:15:14 - 00:39:15:21

B1

Yes

00:39:16:08 - 00:39:32:12

B3

It was just sound effects. And we saw these animals, they were taken to the vet and all that kind of stuff. And I said I haven't seen anything like this before. Everything I'm used to seeing has a voice somewhere or an interview or something, nothing at all. And you could figure it all out. It was interesting.

00:39:32:21 - 00:39:37:07

B1

Yeh, that's how Al-Jazeera do them these days. It was...

00:39:37:17 - 00:39:40:14

B3

It was made by a school teacher who never did a video before..

00:39:41:01 - 00:40:21:03

B1

But you see a lot of those. They actually use of nat sound. I remember they did one, about this old man, you know, in the occupied west bank, they plant olives a lot. So, this family had had this olive tree for four generations. Four. Every year they harvested so much. The Israeli soldiers, the Israeli government said this area belongs to us. And so, it became an occupied area and they chopped that tree, which was something like 500 years old.

00:40:24:11 - 00:40:26:00

B3

Was there narration in this.

00:40:26:10 - 00:40:50:05

B1

No, no, I'm just saying, there was nothing. So, they would have this man talking, saying, not narrating. Basically, just telling you, he would walk away and, you know, the camera would just follow him. You go to the house and all that stuff. But in your mind, already you narrating, you know, it's structured in such a way that you come up with your own narration.

00:40:50:05 - 00:40:56:04

B3

But this other one was just extreme. There was no voice at all. No people talking whatsoever.

00:40:56:04 - 00:41:24:14

B4

Just to come back to this one, *Moderator*, it's the same as reality TV. I always say, how real is reality. And is there not even an ounce, a little bit of control, here, on the flat video, we are being manipulated, we're being directed to focus on the visuals and on the narration.

00:41:24:22 - 00:42:17:20

B4

There on the VR, you mentioned one thing when you started. You said you also picked or chose where you positioned the camera, right. So, and then where you positioned the camera, all we got was a 360, but just of that position. So is that not in a way or not as tightly controlled as this flat one, although it gives the viewer a lot more to see in terms of the 360, but it's the 360 again of only what you, as the filmmaker, wanted us to see. And what if there was another side? You know, what if there was another side to this? For example, the homes, why Gogo did not want the home, we didn't see much of that, you know.

00:42:18:03 - 00:42:42:22

Moderator

B4, I think we did come to that conclusion, that although the power or agency of the journalist is stronger here in the 16by9, it still exists in the VR, but not to that degree. I think we did come to that conclusion.

00:42:42:22 - 00:42:43:04

B5

Because eventually someone has to tell the story.

00:42:43:11 - 00:42:56:16

Moderator

So, I just want to know. It's 20h45 now and I don't want to keep everybody too late. There are a few more questions. Uh, can you go to 21h00 or 21h15?

00:42:56:16 - 00:43:00:17

B1

It's okay with me...

Everyone is okay for time.

00:43:02:13 - 00:43:54:21

Moderator

So, from what we discussed, the integrity of the scene is maintained in the 360. Do you agree? As discussed, we seeing more integrity in the scene shot in VR than in the sequence of shots in the 16by9. Yeah. We discussed that comprehensively. And we also discuss that 16by9 gives you more opportunity to manipulate, we discussed it.

00:43:54:24 - 00:43:55:10

B1

It does.

B3

It focuses you and you forced to, yeah.

00:43:56:10 - 00:44:49:22

Moderator

So, there's this other idea. It's called suture theory, it says that when you watching the normal 16by9 documentary, that you forget that you're looking at the scene through the lens of the camera.

So, what do you think? Because there's a thought that says with 360, you always know that you looking at the scene through the lens of the camera.

I just want to discuss that because it's a key point.

00:44:49:22 - 00:44:51:18

B1

I don't know. I don't.

00:44:53:18 - 00:45:06:13

Moderator

Somebody that looked at the video said that when they looked down at their legs, it was a tripod, and then they thought, well, then I'm a camera.

00:45:06:15 - 00:45:14:16

B1

No, not really. I mean an ordinary person would not know, we know what tripods are because we work in newsrooms, but someone else would not know what a tripod is.

00:45:20:00 - 00:45:29:04

Moderator

Because, you see, it goes back to another idea. The idea that you there but not really there.

00:45:31:02 - 00:45:55:24

B3

I would not really say it puts you in the lens of the camera, I would say it puts you there.

Because that's what it is, it's virtual reality. You virtually there

Moderator

So, the fact that you standing in the centre of the scene and you can't move around but you can only look around, does it bother you? Because remember, in reality, you would be able to walk around. Yes. You would be able to interact.

00:45:56:16 - 00:47:16:14

B1

Yeah. But actually, you forget, you know. Remember the shots with people moving around and doing these things? The fact that you sitting there and looking at them and looking at this whole vast area, you forget, you feel you feel that you're there. That's what happens, unlike here on the flat one. On the flat video, you really never forget that you're actually watching through the lens of a camera. But here, on the VR, you actually feel that you have total control. You have total control. Here on the flat screen, you don't. You just don't. You will see what the camera person wants you to see it. Here on the VR you are very defiant. I can hear you talking and everything, but I want to see what I want to see. And I want to see the way I want to see. If I want to look up, I will look up. If I want to look down, I will look, look down. If I want to look to the right and that kind of stuff. So, you actually forget that you're looking at it through the lens and with the VR this is my experience.

00:47:17:00 - 00:47:40:20

B4

At some point, I felt out of it, I don't know. There was this shot as you walk in.

B3
Disorientated.

00:47:41:04 - 00:48:04:01

B4

Yeah, There were some shots that I didn't feel I was there. There was the first shot, the one with the gentleman in the reflector jacket as you walked in and then it was a shot towards the end, where I actually went right down, wanted to see my feet and then the shot with the houses. I just felt I wasn't, I don't know; it just felt weird. Yeah.

00:48:04:06 - 00:48:25:08

Moderator

Yes. They call it the embodied, disembodied experience. You are there but you really not there. But then that raises the question, does that make you the objective observer in that scene?

00:48:26:08 - 00:48:58:20

B3

I don't think I could have handled more than 10 minutes of it. I am the worsted when it comes to seasickness you know. It's okay if you just kept it steady. But when I started to have a good look around, oh, oh , I started to feel a little queasy. Others don't react that way, of course as well...Others love it. I have seen these kids, you know, go crazy... But that's the idea, virtual reality, it puts you there, it immerses you.

00:48:59:23 - 00:49:07:09

Moderator

So, it doesn't bother you that you there but not really there, it doesn't play on your mind. Is it not something that clicks in your head immediately?

B3

No

00:49:07:20 - 00:49:50:17

B4

No. I think you get taken by what you see, you know, I don't know whether it's because I was holding it this time around. You remember when you showed us this at work. When I was walking in London, I felt I was there. You know, for some reason, I actually felt that I was in the streets of London where you took me, took us. So, I think I don't know what it was this time around. Maybe because I was holding it. I got a little bit woozy here and there in this movie.

00:49:52:10 - 00:49:57:06

Moderator

No. You're right this one moves a bit because it was filmed with the camera above the head while walking.

00:49:57:06 - 00:50:04:17

B4

But it doesn't take away from the feeling of being there and the surroundings. I don't think it took away from that. Yeah.

00:50:05:19 - 00:51:03:03

B2

I think somehow, both the VR and the flat video always remind you that

you're watching this through the lens because, obviously, of the way, you see people and you're looking at them from above. B4 was even saying that she felt like she was a god. So that reminds you that, you know, this is not reality. And also, again, I just saw a shot here. I was just trying to find an example, a shot of three ladies as they were walking past. In my mind, I wanted to see more, but before I could see the entire picture, the shot changed. And then suddenly, I remembered that this is through the lens. I don't have the power or control to see the whole shot.

00:51:03:14 - 00:51:09:06

B2

So, with both, they always have a way of reminding you that this is through the lens.

00:51:10:08 - 00:51:22:22

Moderator

But when it comes to VR, does it, is it really a major consideration or not?

00:51:24:12 - 00:51:40:20

Moderator

In both, you know, You're watching through the lens. Yes. But is it more of an issue in VR than 16by9, or is it the same? The fact that you know you are looking through the lens.

00:51:41:09 - 00:52:25:17

B1

You know, more for me in both instances, now and then, you get reminded. Yeah. But with 16.9, it is always there. It is always there. And the fact that it doesn't give you the choice, you know, the fact that I don't feel like watching uGogo cry, you know, it's sad, and you just look away. It is more here on the flat 16by9 than it is on the VR. But now and then both do remind you, but if I were to choose the one that reminds me less I would choose the VR.

00:52:26:14 - 00:52:53:24

Moderator

And, and we touched upon this earlier about the little things that you pick up on the scene that gives you extra information. Did you notice anything that in the VR was significant that you didn't see in the 16by9. The big thing for me was the ceiling fan. The fan tied to the ceiling. Anyone else see anything significant?

00:52:54:09 - 00:53:22:06

B3

It was the birds. Life carries on and the animals are still there, you know, amongst all this squalor and filth and all the rest of it, you know. It's just like a little detail that you didn't get here in the 16by9.

00:53:22:06 - 00:53:53:17

B1

For me, it was the industries around the informal settlement. Because the first thing you normally ask yourself when you're watching documentaries of this nature is, you see that very limited area, and you ask yourself, where do these people work? What do they buy? Where do they get this? Where do they get that? And for me, that contextualised everything it said, not far from them, the shops not far from them, their industries,

probably some of them live here because they work in these areas nearby.

00:53:54:04 - 00:54:07:06

B1

So, it did give some context for me. There the very wide shot would show the industries in the shops and all those places that are more organised than the informal settlement.

00:54:11:00 - 00:54:28:05

Moderator

From what we discussed, would you say that the VR documentary is a progression of the process of 16by9 documentary filmmaking?

00:54:29:05 - 00:54:30:16

B2

Yes, definitely.

00:54:30:16 - 00:54:31:04

B4

100 percent.

00:54:32:07 - 00:54:37:14

B2

And I would like to watch all documentaries on VR compared to the flat one.

00:54:39:14 - 00:54:44:23

Moderator

I think everything we discussed leads up to that point. So, I don't think we need to elaborate.

00:54:45:10 - 00:55:25:24

B1

Yeah. Even though there are limitations, even though you, you know, you love to see emotions. My biggest problem here is that there are no close ups. That is a major, major problem. You see that shot of uGogo crying was very impactful. You know, each time I think about this documentary, the 16by9, you just see uGogo. Yes. You just cannot see that shot here on the VR. That's right. Yeah. So as much as 99.3% is good here on the VR, there are still a few issues that they need to work on. I think, you know.

00:55:26:12 - 00:55:30:09

B5

And also in terms of the.. how long were the documentaries again?

00:55:30:13 - 00:55:34:16

Moderator

Both are exactly 10 minutes. They are exactly the same.

00:55:35:00 - 00:55:54:20

B5

I could still watch another 10 minutes on the flat one and pay attention to it. But on the VR, I think will struggle..

00:55:56:06 - 00:56:31:01

B3

Just on the resolution. I mean, It looks fine here on the computer

screens but on the headsets, the resolution was not as good.

00:56:32:06 - 00:56:56:08

Moderator

So, you know, here we are looking at the entire VR shot on the screen in the headset you only watch a portion of the picture at a time. That is why the resolution drops. However, you can simulate the VR experience on a computer screen, but I chose that you view the VR video on the headset because that is a better experience according to other research...

Gives a demo of watching VR on a computer screen.

00:56:57:19 - 00:57:23:23

B3

Storage wise, is it just a big picture that you scroll around?

Moderator

Well, let's just wrap up here then we can discuss..

00:57:24:00 - 00:59:15:11

Technical discussions about the camera used.

00:59:15:13 - 00:59:47:14

Moderator

So, one of the first theorists called it the 'Myth of total cinema'. He said that one day technology will progress to such an extent that we will be able to experience the ultimate reality through film.

00:59:48:00 - 00:59:57:06

Moderator

So, in your opinion, how close do you think VR comes to an ultimate reality?

00:59:57:06 - 01:00:47:07

B2

I think it comes very close. It gives you the view of your eye, as in your human eye. On the other hand, the 16by9, you know, sometimes we go to the cinema to watch movies on the big screen. It's a psychology thing, you think you see more, only to find it's just the same thing, only bigger. So, what you have been longing for by going to the cinema and the big screen, you get on the VR. You get the feeling of the big screen, so I think that this VR is very close to reality.

01:00:47:07 - 01:01:30:18

B2

So, we are I think it's very close to reality, you know, it's only those few things. You know with my eye, I can zoom into something, I can, and see what's written, so if they can have those features on the VR, were you can actually zoom into someone and see that emotion, stuff like that. Maybe you're looking for rats, can so try to find the rats as well by zooming in. Besides the minor stuff that are not there, but by far the VR brings you closer to reality than the 16by9.

01:01:34:11 - 01:01:49:16

B3

You know, look, it's a major step up from 16by9, and the next step is 3D

01:01:52:17 - 01:02:26:04

Moderator

You can make this documentary in VR 3D if you have a higher-end camera. And watch it on the same headset.

01:02:26:22 - 01:03:00:02

Moderator

So, in your opinion, which of these videos is a better depiction of reality in the Kennedy Road Informal Settlement? The key word here is depiction. What do you think are the major things that make it that? What are the main considerations, we spoke about this at length. For example, let's say if I had to answer the question, I would say, okay, the better depiction of reality is this video because to me, this is the most important point.

01:03:00:03 - 01:03:15:18

B3

Yeah, I think the VR, obviously, because of more information, more angles, more views, it's more everything, really, you know. You become more immersed in the story, as it were. I mean, look at this, you know.

01:03:18:03 - 01:03:21:03

B1

Definitely, the VR gives you the context.

01:03:22:03 - 01:03:26:21

B3

Context, information, context, immersion.

01:03:27:13 - 01:04:05:02

B2

Yeah, I also think it's the VR. When I watched through the VR, I felt that I was in there. If you tell me to drive to that informal settlement where you are filming, I will be able to go there. Because I now feel that I have been there. So, it gives you that sort of, I don't know what to call it, but it gives you that sense, you feel like you've been there only by watching. Whereas on the 16by9, on the flat one, you still do not feel like you were there. If you tell me to go find some of these houses on this street, I will have no idea where to start looking.

01:04:07:11 - 01:04:11:23

B4

Yeah

01:04:15:00 - 01:04:19:00

B5

Yeah, I agree. I agree with B2 and B3.

01:04:19:04 - 01:04:35:06

Moderator

Again, B2 brought up a really good point of being there but not really there.

01:04:36:09 - 01:04:58:17

B5

I don't know. Yeah. Do, do want to be there physically because we want to know what it looks like or do want to be there because we want to feel the pain and the suffering of these people? You know, I don't know if I'm trying to prove the reality; yes, it's the VR but what was the objective of the whole...

01:04:58:17 - 01:05:17:13

Moderator

Yeah, I don't want to go back to that point of agency and the journalist's power to tell a certain story because we discussed that already. I think that's the way you are going..

01:05:18:07 - 01:06:11:07

B2

Yeah, I think from a camera person's point of view, when you film anything, when you film something in London, you actually trying to take the viewer to London, you know, you actually trying to show them what you see. In fact, when they watch TV, they must feel like they are also really there. They don't have to feel, you know, they don't have to feel what you feeling. They don't have to see only what you see. They don't only have to hear what you hear. But they also need to be there in order for them to understand the story fully. If you were to send me to some country to write a story on whenever I would definitely come back with what was attractive to my eye and my brain or whatever.

01:06:11:23 - 01:06:48:07

B2

But if you were to go as well, you'll probably come back with a different story than the one that they came with. So, this feeling like you are part of this, it really gives you more freedom to find your own story, to find more than one story. I think it just takes you there, the emotions can be different. The way people feel when they are there, it will differ from one person to another. But the fact that you are there, and that's what the camera is meant to do, makes you feel like you are there, closer and where things are happening.

01:06:49:00 - 01:07:05:16

B4

If you look at it that way, then yes. The VR, we were there; it felt real. It felt that you were up there with the community, you know. So yeah, I would agree that that is more powerful, I think. It took you there.

01:07:05:16 - 01:07:21:18

Moderator

B4, I cut you off earlier, and I regret that. I assumed you were going to go back to the discussion that we had earlier about the different stories and different realities. `Is that where you were headed or not?

01:07:23:01 - 01:07:42:08

B4

No, no. I was moving towards depicting what is real about the area, you know, the area, the people, what they go through. Um, yeah.

01:07:43:20 - 01:08:16:07

B1

So maybe another issue, before you end, control, VR gives you control.

I'm comparing the two. Yes, VR gives the viewer control, and I used the word stray earlier; the narrator will be talking about that and you just watch whatever you want to watch. So, it's a bit limited that control, but it is control nevertheless, compared to this 16by9.

01:08:17:02 - 01:08:57:09

Moderator

So when we say which is a better depiction of reality, is it unanimous, do you say, which is a better depiction of reality?

01:08:57:09 - 01:09:01:19

B1

Definitely the VR.

01:09:04:21 - 01:09:07:05

B2

VR

01:09:10:02 - 01:09:14:14

B5

VR

01:09:14:15 - 01:09:22:06

B4

VR

B3

VR, it unanimous ,yeah

Moderator

That wraps it up.

Appendix C



LETTER OF INFORMATION

Title of the Research Study:

The depiction of reality in a 360-degree video documentary versus conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in KwaZulu Natal.

Principal Investigator/s/researcher:

Niresh Singh (BTech – Video Technology)

Co-Investigator/s/supervisor/s:

Prof Jean Philippe Wade (BA Hons MA PhD) ; Tarryn Frankish (Msoc Sc)

Brief Introduction and Purpose of the Study:

This study is prompted by the recent emergence of the 360 degree video camera, which has two lenses enabling it to film a 360 degree panoramic shot, which has the effect of immersing the viewer in the reality represented, particularly when wearing a Virtual Reality headset. The viewer can choose which parts of the image to focus on, whether in front or back of, to each side of, and below and above the camera. When working with this new technology as a news and documentary videographer, the question soon arises: does the 360 degree camera offer the viewer a heightened sense of realism compared to traditional cameras? This is the hypothesis the study will explore.

Outline of the Procedures:

You will be one of the voluntary participants in a focus group discussion. All participants will be experts in their respective fields and based in KwaZulu Natal. Two ten minute documentaries will be screened of the Kennedy Road Informal Settlement in KwaZulu Natal. One in 16by9 format and the other in 360 degree video format. A group discussion of the videos will follow. The duration of the discussion session is expected to be approximately one to two hours. The discussion will be audio recorded. The recording will allow the researcher to revisit the discussion for the purposes of developing a research paper and presentations. As experts in your field, your contribution to this study very important. The researcher requires an open discussion where participants are free to express themselves. The identities of all participants will remain confidential and will not even be included in the final report.

Risks or Discomforts to the Participant:

Participants will be required to view the 360 video on a virtual reality headset.

Benefits:

This research will empower journalists with the knowledge of the technology of 360-degree video. It may also assist journalists in the decision of whether or not the 360-degree camera can be a valuable tool for the video journalism. A research article for publication will be written once the thesis is completed and made available to the participants.

Reason/s why the Participant May Be Withdrawn from the Study:

Participants may be withdrawn from the study at the discretion of the researcher/s.

Remuneration:

There will be no remuneration for participation in this study.

Costs of the Study:

There will be no cost for participating in this study.

Confidentiality:

The Ethical issues most pertinent to this study are that (a) the participants in the focus group – all adults with no vulnerability problems - are assured of anonymity, with their identity particulars kept rigorously confidential; and (b) that all research materials gathered from the focus group discussions will be strictly preserved in a locked cupboard, and destroyed after five years.

Research-related Injury:

There is no risk to participating in this study.

Persons to Contact in the Event of Any Problems or Queries:

Please contact the researcher:

Niresh Singh

nireshs@dut.ac.za

Cell: 082 9674391

Or supervisor:

Prof Jean Philippe Wade

jeanw@dut.ac.za

Tel: 031 3733610

Or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the DVC: Research, Innovation and Engagement Prof S Moyo on 031 373 2577 or moyos@dut.ac.za.

General:

Participation is voluntary and participants are free to withdraw at any time. All discussions will occur in English.



CONSENT

Full Title of the Study:

The depiction of reality in a 360-degree video documentary versus conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in KwaZulu Natal.

Names of Researcher: NIRESH SINGH

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, NIRESH SINGH, about the nature, conduct, benefits and risks of this study - Research Ethic Clearance Number: IREC 218/21
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth and initials will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant : _____

Occupation: _____

Number of years of experience: _____

Age: _____

Gender: _____

Date: _____ Time: _____

Signature: _____ Contact number _____

I, NIRESH SINGH herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher: _____ Date: _____

Signature: _____



Institutional Research Ethics Committee
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate 1, Steve Biko Campus
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375
Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics

www.dut.ac.za

30 May 2022

Mr N Singh
210 Davenport Square
89 Helen Joseph Road
Durban
4001

Dear Mr Singh

The depiction of reality in a 360 degree video documentary versus conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in KwaZulu Natal.

Ethical Clearance number IREC 218/21

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letter.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely

Professor J K Adam
Chairperson: IREC

Appendix F

Research Instrument

Discussion questions for focus group one and focus group two

Question one:

1.1 Was it noticeable that the narrative, audio and timing of both videos were exactly the same?

1.2 Do you think that the different video formats influenced your interpretation of the narrative?

1.3 Did you at any time feel that there was any conflict between the narrative and what you were seeing?

1.4 Did you think that the 360-degree video [360DV] gave you the opportunity to make up your own mind about what you were hearing and seeing?

Question two:

2.1 Do you prefer the long exploratory shots of the 360DV or the edited shots of the 16by9 video that directs your attention? Why?

2.2 Do you think the long takes of the 360DV were more realistic and added to the scene's integrity? Or did it make you uncertain as to how you should interpret the scene?

2.3 Editing cuts up space and time. There are a lot more edits in the 16by9 video than the 360DV. Do you think the editing in the 16by9 video enhanced or distorted your sense of the space and/or time within Kennedy Road Informal Settlement?

Question three:

3. The order of shots and shot selection can influence your perception of a scene. Did you think that you were being unduly influenced by any of the shots in either of the formats?

Question four:

4. In the 360DV a conscious decision was made about where to place the camera. In the 16by9 video a selection of shots was used to represent the scene. In the Kennedy Road Informal Settlement videos, which were more effective in communicating the meaning and reality of a scene: The panoramic shot created by camera placement or the sequence of shots created by editing?

Question five:

5. In which format were you more conscious of the camera placement and/or movements?

Question Six:

6.1 The 360DV positions you at the center of the scene with the ability to look all around you. Did this allow you to gain any extra information?

6.2 Did you notice anything significant in the 360DV video that you did not see in the 16by9 video?

Question seven:

7.1 Which of the two videos gave you a stronger sense of presence in the Kennedy Road Informal Settlement or a sense that you had actually visited the settlement?

7.2 Having watched both videos. In reflection, would you consider the 16by9 screen version restrictive? Would you deem the 360DV version viewed on the VR headset as liberating you from the confines of the screen?

7.3 Do you consider the 360DV a progress in documentary filmmaking? If so, how close does it come to capturing absolute documentary reality?

Question 8:

8. Which documentary format did you find more emotionally engaging, and how did it influence your perception of the story? Has that increased your empathy with the story?

Question nine:

9. In the 360DV, you are an observer, and although you may feel as if you were present on the scene, you know that you were not actually there. Does this distract from the reality of the situation? As opposed to the 16by9 video, where this is not a consideration.

Question ten:

10 Which video, in your opinion, better depicts the reality in Kennedy Road Informal Settlement? What, in your opinion, makes it so?

Appendix G

Focus Group One Schedule

Date: 24 November 2022

Time: 12h00

Venue: Durban University of Technology, City Campus, Department of Video Technology, Seminar Room.

Participants: Professional Academics - A1,A2,A3,A4, A5

Moderator: Niresh Singh (Researcher)

Duration: 2 ½ Hours

Schedule:

12h00 to 12h15

Welcome.

Overview of the research, explaining the purpose and objectives.

The signing of the Consent forms.

12h15 to 12h45

Lunch and screening of both videos.

12h45 to 14h15

Discussions begin.

Discussion questions:

1.1 Was it noticeable that the narrative, audio and timing of both videos were exactly the same?

1.2 Do you think that the different video formats influenced your interpretation of the narrative?

1.3 Did you at any time feel that there was any conflict between the narrative and what you were seeing?

1.4 Did you think that the 360-degree video [360DV] gave you the opportunity to make up your own mind about what you were hearing and seeing?

2.1 Do you prefer the long exploratory shots of the 360DV or the edited shots of the 16by9 video that directs your attention? Why?

2.2 Do you think the long takes of the 360DV were more realistic and added to the scene's integrity? Or did it make you uncertain as to how you should interpret the scene?

2.3 Editing cuts up space and time. There are a lot more edits in the 16by9 video than the 360DV. Do you think the editing in the 16by9 video enhanced or distorted your sense of the space and/or time within Kennedy Road Informal Settlement [KRIS]?

3.1 The order of shots and shot selection can influence your perception of a scene. Did you think that you were being unduly influenced by any of the shots in either of the formats?

4. In the 360DV a conscious decision was made about where to place the camera. In the 16by9 video a selection of shots was used to represent the scene. In the KRIS videos, which were more effective in communicating the meaning and reality of a scene: The panoramic shot created by camera placement or the sequence of shots created by editing?

5. In which format were you more conscious of the camera placement and/or movements?

6.1 The 360DV positions you at the center of the scene with the ability to look all around you. Did this allow you to gain any extra information?

6.2 Did you notice anything significant in the 360DV video that you did not see in the 16by9 video?

7.1 Which of the two videos gave you a stronger sense of presence in KRIS or a sense that you had actually visited KRIS?

7.2 Having watched both videos. In reflection, would you consider the 16by9 screen version restrictive? Would you deem the 360DV version viewed on the VR headset as liberating you from the confines of the screen?

7.3 Do you consider the 360DV a progress in documentary filmmaking? If so, how close does it come to capturing absolute documentary reality?

8.1 Which documentary format did you find more emotionally engaging, and how did it influence your perception of the story? Has that increased your empathy with the story?

9 In the 360DV, you are an observer, and although you may feel as if you were present on the scene, you know that you were not actually there. Does this distract from the reality of the situation? As opposed to the 16by9 video, where this is not a consideration.

10 Which video, in your opinion, better depicts the reality in Kennedy Road Informal Settlement? What, in your opinion, makes it so?

14h15 to 14h30

Closing of the discussion session.

Summary of key points discussed.

Thanking the participants for their participation.

14h30

Session ends.

Appendix H

Focus Group Two Schedule

Date: 25 November 2022

Time: 18h00

Venue: Durban University of Technology, City Campus, Department of Video Technology, Board Room.

Participants: Professional Television Journalists - B1,B2,B3,B4,B5

Moderator: Nireesh Singh (Researcher)

Duration: 2 ½ Hours

Schedule:

18h00 to 18h15

Welcome.

Overview of the research, explaining the purpose and objectives.

The signing of the Consent forms.

18h15 to 18h45

Supper and screening of both videos.

18h45 to 20h15

Discussions begin.

Discussion questions:

1.1 Was it noticeable that the narrative, audio and timing of both videos were exactly the same?

1.2 Do you think that the different video formats influenced your interpretation of the narrative?

1.3 Did you at any time feel that there was any conflict between the narrative and what you were seeing?

1.4 Did you think that the 360-degree video [360DV] gave you the opportunity to make up your own mind about what you were hearing and seeing?

2.1 Do you prefer the long exploratory shots of the 360DV or the edited shots of the 16by9 video that directs your attention? Why?

2.2 Do you think the long takes of the 360DV were more realistic and added to the scene's integrity? Or did it make you uncertain as to how you should interpret the scene?

2.3 Editing cuts up space and time. There are a lot more edits in the 16by9 video than the 360DV. Do you think the editing in the 16by9 video enhanced or distorted your sense of the space and/or time within Kennedy Road Informal Settlement [KRIS]?

3.1 The order of shots and shot selection can influence your perception of a scene. Did you think that you were being unduly influenced by any of the shots in either of the formats?

4. In the 360DV a conscious decision was made about where to place the camera. In the 16by9 video a selection of shots was used to represent the scene. In the KRIS videos, which were more effective in communicating the meaning and reality of a scene: The panoramic shot created by camera placement or the sequence of shots created by editing?

5. In which format were you more conscious of the camera placement and/or movements?

6.1 The 360DV positions you at the center of the scene with the ability to look all around you. Did this allow you to gain any extra information?

6.2 Did you notice anything significant in the 360DV video that you did not see in the 16by9 video?

7.1 Which of the two videos gave you a stronger sense of presence in KRIS or a sense that you had actually visited KRIS?

7.2 Having watched both videos. In reflection, would you consider the 16by9 screen version restrictive? Would you deem the 360DV version viewed on the VR headset as liberating you from the confines of the screen?

7.3 Do you consider the 360DV a progress in documentary filmmaking? If so, how close does it come to capturing absolute documentary reality?

8.1 Which documentary format did you find more emotionally engaging, and how did it influence your perception of the story? Has that increased your empathy with the story?

9 In the 360DV, you are an observer, and although you may feel as if you were present on the scene, you know that you were not actually there. Does this distract from the reality of the situation? As opposed to the 16by9 video, where this is not a consideration.

10 Which video, in your opinion, better depicts the reality in Kennedy Road Informal Settlement? What, in your opinion, makes it so?

20h15 to 20h30

Closing of the discussion session.

Summary of key points discussed.

Thanking the participants for their participation.

20h30

Session ends.

Date: ___ 20 May 2020 _____

To: The Regional Head of News KZN – SABC / ENCA / Newzroom Africa

Dear Sir/ Madam

My name is Niresh Singh , I am a MJourn student at the Durban University of Technology. The research I wish to conduct for my Masters dissertation involves conducting a focus group in order to compare the reality depicted in a 360 degree video documentary to a 16by9 video documentary.

The title of my study is:

“The depiction of reality in a 360 degree video documentary versus conventional 16by9 video documentary: A focus group comparative study of two independently made video documentaries of the Kennedy Road Informal Settlement in KwaZulu Natal.”

I am hereby seeking consent to invite individuals from your newsroom in KZN to participate in a focus group discussion. The venue and date are still to be finalized. Participation is purely voluntary, and participants can withdraw at any time. You, your organization and the participants will not be named in the study. The discussion data collected will be stored securely and destroyed after five years.

I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/ or assent forms to be used in the research process, as well as a copy of the provisional approval letter (full approval is pending your permission) which I received from the Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me:

Niresh Singh, nireshs@dut.ac.za, Cell: 082 9674391

Thank you for your time and kind consideration.

Yours sincerely, Niresh Singh

Student, _____
Durban University of Technology

PERMISSION

I _____

Designation _____

hereby grant permission to Mr Niresh Singh, to recruit participants from my organisation,

_____, in order to conduct the research as detailed above.

Signed _____ Date _____

Contact details : _____



Date : 10/04/2019

Invoice : 19649

CK Reg No : 2004/081753/23

From: Guy Crosbie

[REDACTED]

www.gcv.co.zaemail: guy@gcv.co.za

To : Niresh Singh
Masters Student DUT KZN

Quotation for production of Kennedy Rd Informal Settlement Documentary

Description	Amount
Production of 2 seven minute videos 1 x HD Documentary 1 x 360 degree video Production planning / filming / editing / overseeing of production	R 30000.00
GCV will assign Mr Mlungisi Khumalo as production manager on the shoot as well as translator and script supervisor. Mlungisi is a very experienced journalist and has good knowledge and experience working at the Kennedy Road Informal settlement.	R 20000.00
Total	R 50000.00

Please make payment into the following bank account:

Name	-	GCV Productions
Bank	-	[REDACTED]
Branch	-	[REDACTED]
Branch Code	-	[REDACTED]
Account No.	-	[REDACTED]

Abahlali baseMjondolo Movement SA



P.O Box 26

Umgeni Park

4098

Phone:(031)304 6420

Fax: : (031) 304 6436

E-mail: abahlalibasemjondolo@telkomsa.net

Website: <http://www.abahlali.org>.

25 May 2020

To whom it may concern.

Please noted that Mr. Mlungisi Khumalo and GCV video productions were given unconditional access and permission to film at the Kennedy Road Informal settlement in Durban,

Yours sincerely,

S'bu. Zikode

President: Abahlali baseMjondolo Movement S.A

20 Dikonia Avenue

Dikonia Confrence Centre

Durban

4001

TEL: 0313046420

Fax: 0313046436

CELL: [REDACTED]

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