Research Article

360-Degree Video and Social Change: A Comparative Analysis of the Documentary Films Exiled (2019) and Behind the Fence (2016)*

Önder M. Özdem**

Abstract

Advances in image recording, processing and distribution technology bring in new opportunities for documentary filmmakers to encourage action for social causes. Interactive forms of representation in documentary films such as virtual reality practices have particularly drawn strong attention due to their claimed potential for social change through encouraging people to take action. It proves difficult to anticipate particular social effects unless a documentary reaches a huge number of viewers, engage and encourage them to take action. In this context, it is argued that the production, processing, and viewing of 360-degree videos are relatively more affordable and easier compared to more immersive and engaging interactive documentary practices. Thus, 360-degree videos can reach and encourage more viewers who are expected to actively interact with documentary content. In the light of all these arguments, this article analyses two documentary films, *Exiled* (2019) and *Behind the Fence* (2016), through a comparative perspective.

Exiled (2019) and *Behind the Fence* (2016) are documentaries both addressing the genocide of Rohingya people in Myanmar and the mass exodus of Rohingya to Bangladesh. While *Exiled* is a traditional one, *Behind the Fence* is a 360-degree documentary. By analyzing those two documentaries, this article asserts that besides the unique advantages of 360-degree camera technology for non-fiction films, it has also several disadvantages in terms of production and viewing of documentaries. 360-degree cameras might emerge as the proper option for the representation of particular social situations, social movements, conflicts, and actions due to their capacity to record and show from limitless points of view. However, a powerful social effect should not be expected merely due to the usage of 360 video in non-fiction films.

Keywords: Non-fiction film, documentary film, 360-degree cameras, interactive documentary, social change, virtual reality.

** Başkent University Faculty of Fine Arts, Design and Architecture, Program of Film Design and Directing
Orcid no: 0000-0001-6758-5486, ondermozdem@gmail.com

Araştırma Makalesi

360 Derece Video ve Toplumsal Değişim: Exiled (2019) ve Behind the Fence (2016) Belgesel Filmlerin Karşılaştırmalı Analizi*

Önder M. Özdem**

Öz

İmge kayıt, işleme ve dağıtım teknolojisindeki gelişmeler, belgesel film yapımcılarına toplumsal amaçlar için eylemi teşvik edebilecekleri yeni olanaklar sunmaktadır. Özellikle, belgesel filmdeki sanal gerçeklik uygulamaları gibi etkileşimli temsil biçimleri, insanları harekete geçmeye teşvik ederek toplumsal değişim için bir potansiyel yarattıkları iddiası ile çok dikkat çekmiştir. Bir belgeselin, geniş bir izleyici kitlesine ulaşmadıkça ve izleyicinin dikkatini çekip, onları harekete geçmeleri için teşvik etmedikçe toplumsal bir etki yaratması beklenmez. Bu bağlamda, 360 derece videoların daha kapsamlı ve cazip etkileşimli belgesel uygulamalarına kıyasla üretim, işlenme ve izlenmesinin daha ulaşılabilir ve kolay olduğu belirtilmektedir. Dolayısıyla 360 derece videolar, belgeselin içeriği ile aktif olarak etkileşimde bulunabilecek daha fazla izleyiciye ulaşıp onları bu konuda teşvik edebilir. Bütün bu tartışmaların ışında bu makale *Exiled* (2019) ve *Behind the Fence* (2016) adlı iki belgeselin karşılaştırmalı analizine yer verecektir.

Exiled (2019) and *Behind the Fence* (2016) Myanmar'daki Rohingya halkının soykırımı ve Bangladeş'e toplu göçüyle ilgili belgesellerdir. *Exiled* geleneksel anlamda bir belgeselken, *Behind the Fence* 360 derece çekilmiş bir belgeseldir. Yapılan analiz sonucunda, 360 derece kamera teknolojisinin kurmaca olmayan filmlere sağladığı biricik avantajların yanı sıra hem yapım hem de izlenme süreçlerinde bazı dezavantajlarının da olduğu ortaya çıkmıştır. 360 derece kameralar bazı toplumsal durumların, toplumsal hareketlerin, çatışma ve eylemlerin temsili için sınırsız görüş açısıyla kaydetme ve gösterme kabiliyetleri sebebiyle uygun seçenek olarak düşünülebilir. Ancak kurmaca olmayan filmlerde 360 derece videonun kullanılmış olması bu filmlerin güçlü bir toplumsal etkiye sahip olacağı anlamına gelmemektedir.

Anahtar sözcükler: Kurmaca olmayan film, belgesel film, 360 derece kameralar, etkileşimli belgesel, toplumsal değişim, sanal gerçeklik.

360-Degree Video and Social Change: A Comparative Analysis of the Documentary Films Exiled (2019) and Behind the Fence (2016)[1]

Introduction

Documentary cinema has usually been assigned a role in encouraging action for social and political causes. As early as the 1920s, John Grierson, the founder of the British Documentary Movement, has considered documentary films as a means to inform people and societal change (Barsam, 1992: 79). Over the course of the 20th century, advances in image recording technologies have been used effectively by individuals, institutions and governments in various ways. While the introduction of new cameras such as 16 mm, 8mm and video camera fulfilled the specific needs of professional filmmakers, their usages have also led to the emergence of new film styles such as Cinema Verité, Direct Cinema and video art. As cameras have become more available and easier to use, not only professionals but also consumers and amateurs could use them depending on their particular needs, which has consequently appeared as an important factor to hear alternative and marginal voices.

An infographic showing the prevalence of film genre between 1910 and 2018 clearly indicates that popularity of documentary films has risen dramatically after 2000 (Aldredge, 2019). In this respect, it can be said that for the potential of non-fiction films in encouraging action for social and political causes, the accessibility of image recording technologies and the presence of effective distribution channels are crucial. Here the advent of digital technology deserves special consideration since, besides the introduction of digital cameras, digitality has also brought tremendous advantages especially in the field of image processing and distribution technology. Today not only the production but also the processing and more importantly distribution of any non-fiction film content is much easier and effective. Consequently, the advances in image recording, processing, and distribution technology, especially in the 21st century, bring

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in new opportunities for documentary filmmakers to encourage action for social and or political causes.

It is possible to come across documentary films dealing with the same subject with entirely different, even conflicting arguments. In other words, different filmmakers may elaborate on the same film subject and make completely different documentaries on the basis of their different opinions and experiences. Just as the one who tells the story is critical, from which point of view we look at is also important in forming our opinions, causal attributions, and evaluations. In this regard, 360-degree cameras and 360-degree documentaries, providing not only the director's but also all possible points of view are definitely worth analyzing.

Especially interactive forms of representation in documentary films such as virtual reality practices have drawn strong attention due to their claimed potential for social change. These documentary forms are claimed to encourage people to take action by providing emotional engagement and especially by causing empathy (Archer & Finger, 2018: 3). In this respect, in the first place, this article analyzes the divergent arguments about potential of interactive formats to make audiences empathetic and engaging. After focusing on the particular advantages of using 360-degree cameras in non-fiction films, this article questions whether a strong socio-political impact due to the usage of 360-degree video can be anticipated. Concerning that interrogation, the article makes a comparative analysis of two documentary films dealing with the same socio-political conflict through employing distinct visual and narrative styles.

Exiled (2019) and *Behind the Fence* (2016) are two documentary films on the genocide of Rohingya people in Myanmar and the mass exodus of Rohingya to Bangladesh. Both try to represent the opposing sides of the conflict. However, while *Exiled* is a traditional one, *Behind the Fence* is a 360-degree documentary. The comparative analysis of these films reveals that in addition to the unique advantages of 360-degree camera technology for non-fiction films, there are also certain disadvantages for both the production and screening of documentaries. 360- degree cameras appear as the proper option for the representation of particular social situations, social movements, conflicts and actions. However, using 360-degree video does not necessarily mean it would be a strong social effect.

Interactivity and Non-fiction Film

One of the significant consequences of the advances in image recording and processing technology is the emergence of interactive formats. 360-degree documentaries can also be considered among the various types of interactive documentary formats. The traditional documentary watching experience is confronted by these relatively new interactive ways that surely attract interest. These formats require people to actively interact with the documentary content. That is why the term "user" is preferred instead of "viewer" concerning interactive documentaries.

Interactive formats are assumed to give a sense of presence to the viewers. For instance, immersive journalism practices such as 360-degree video journalism is claimed to provide a higher level of enjoyment and engagement with the news story (Van Damme, All, Marez & Thomson, 2019: 2054). In 2015, *The New York Times* distributed more than one million VR (virtual reality) headsets to its subscribers when it began to launch news through 360-degree videos. Other news organizations such as RYOT and ABC News (USA) also followed a similar strategy (Jones, 2017: 171,172). While these steps can be evaluated as a threat to traditional modes of reporting, they also underline confidence in the power of interactive formats.

The immersive forms of documentary film, aside from immersive journalism, demand viewers to be active participants in the same way as game players while the stories are told. According to Mandy Rose (2018: 3), the first signs of this trend can be traced in the documentaries such as *Prison Valley* (2010), *Offshore* (2013), and *Door into the Dark* (2015) which apply game mechanics to their documentary contents. At this point, Jones (2017: 172) underlines that the VR market has relied mainly on the gaming community and in 2015 it also became accessible to non-gaming communities. At this juncture, particular attention should be given to the relationship between digital games and immersive documentary forms while evaluating the potential of interactive non-fiction formats to take action on social and political causes since the digital game world indirectly refers to an entertainment industry.

The presence of many different interactive non-fiction formats, such as virtual reality documentaries, 360-degree video journalism, documentary games, web-documentaries, immersive journalism, transmedia documentaries, indicate that

interactivity is a broad concept for the documentary film. Each format involves a specific degree of interactivity and it is not easy to precisely identify the limits of these formats. In this regard, Aston and Gaudenzi's (2012: 125-126) definition is helpful: "Any project that starts with an intention to document the 'real' and that uses digital interactive technology to realize this intention can be considered an interactive documentary".

VR and 360-Degree Video

Both VR and 360-degree video non-fiction practices use digital interactive technology to represent the real world. They are obviously the diverse forms of digital interactive technology that can be effectively used to create immersive non-fiction formats. VR is described as "a computer-generated digital environment that can be experienced and interacted with as if that environment were real" (Jerald, 2015: 9). The *Sword of Damocles*, the "head-mounted tree dimensional display" system created in 1968, is considered to be the first VR practice (cited in Rose, 2018: 4). However, it should be noted that an ambiguity prevails in the meaning of VR and there is also a tendency to refer to VR in singular. Uricchio (2016) underlines that there are forms of image capture in virtual reality. A digital environment can be created for 360-degree videos or real-world footage can be used in 360-degree videos. Using real-world footage in the 360-degree video is the first, the most common, and the most accessible one and it is not the same as computer-generated VR.

Many of these 360-degree videos are wrongly referred to as VR (Ward, 2017). Although 360-degree videos and VR can be viewed with the same headset technology (Head Mounted Display, HMD), there is a clear difference between them. In 360-degree videos, users can change their viewing angle inside the scene. If the viewer wears an HMD, she moves her head rather than clicking or moving her finger on the screen, but her actions have no effect (Archer & Finger, 2018: 13). In other words, in a 360-degree video, the viewer's level of interaction is set to looking in various directions.

While 360-degree and VR are not the same, these terms are often used interchangeably; therefore, we should be careful about referring and discussing both theoretical works and documentary films. Here, Mateer's (2017: 14) concept of

Cinematic Virtual Reality (CVR) is helpful when referring to 360-degree video where the level of control that the users have is less than VR. Even though the viewer does not interact with the simulated world, Ward (2017) points out that 360-degree has expanded the limits of conventional photography. To put it differently, filmmakers are now creatively adapting their stories into multiple angles, and as a result, viewers are absorbed in a story.

Filming the real world in 360-degree provides the viewers freedom to look where they want. This characteristic provides viewers a more realistic visual experience (Nunes & Lee, 2019: 311) and immediately reminds the Bazin's notion of "myth of total cinema" as a total and complete representation of the world free from interpretation. André Bazin (1971) surmises that all technological advancements have pursued this basic goal: creating a complete illusion of life and a faithful copy of nature. In this context, the introduction of 16 mm cameras with synchronized sound recording can be given as an example. In the 1950s, Direct Cinema pioneers in the US thought that they could capture the real world without interference by using 16mm cameras. They could film life as it really is. Therefore, new 16 mm camera technology was considered as a tool that enhanced the truth claim of documentary filmmaking (Winston, 1995). As in the case of the introduction of 16mm cameras, today's VR technology can be considered within the context of Bazin's "myth of total cinema" (Rose, 2018: 6).

In this context, Sasha Crawford-Holland (2018) criticizes the celebration of VR as a medium that realizes the myth of total cinema. He finds this interpretation "romantic" and points out that it "overlooks the medium's mediacy." In his analysis, "VR restores a sense of totality to the image" by showing the whole place and also it "affords a more realistic perceptual experience." For him, this does not mean that it "indexes a more complete historical reality." In Crawford-Holland's (2018: 22) words, "VR approaches total cinema not by capturing more reality, but by situating viewers in an experience that feels more real."

Being able to watch a specific scene from all possible points of view via 360-degree camera brings several theoretical discussions to mind. First of all, in comparison to Bazin's myth of total cinema and his realist approach, Rudolf Arnheim's emphasis on the use of unexpected and unconventional camera angles can be

mentioned. According to Arnheim, showing things in different visual angles shall be functional and also it encourages the viewers to think more deeply about what they see (1957: 39). Many of the 360-videos are shot generally at the eye level and in large scales. They do not let the viewers see the things in close ups and/or from unusual angles. Therefore, it can be argued that while 360-degree video may provide a more realistic experience for the viewers, it lacks the thought-provoking camera scales and angles.

Referring to camera scales also reminds the theoretical discussions around framing and the out-of-field. Pascal Bonitzer explores the role of the frame (and framing) in both painting and cinema by referring to the concept of "deframing" (2006). In his well-known works on cinema, Deleuze reflects on framing and its related concept "out-of-field" which is described as everything not visually present in a given frame (1989: 16). Although 360-degree video may offer a visual experience as if there is no "out-of-field", it should not be forgotten that while watching 360-degree videos, it is the viewers choose where to look. In other words, the viewers are given more space to gaze around. Deleuze underlines that "the more the image is spatially closed, even reduced to two dimensions, the greater its capacity to open itself on to a fourth dimension which is time, and on to a fifth which is Spirit" (1989: 17). In this regard, it may be claimed that while 360-degree videos offer viewers a larger visual space, the directors lose all the potentials of framing.

Second, the 360-degree camera seems to be free from ideological effects due to its ability to provide unrestricted and unlimited points of view. With respect to the ideological effects of the basic cinematographic apparatus, Baudry and Williams question if the camera generates particular ideological effects determined by the dominant ideology. They argue that a camera has a limited fixed position therefore it is ideological. Even if a movie camera can neutralize the above-mentioned fixed position by moving, it takes instants of time from the reality, and this reality is always elaborated and selected. Additionally, montage process also may play a significant role in generating particular ideological effects (Baudry & Williams, 1974: 41, 42). In respect to their claims, can it be claimed that 360-degree camera is free from ideological effects? Although 360-degree cameras provide viewers unlimited points of

view; the main decisions such as where to position the camera, what to shoot and when to record actions are made by the director and these decisions clearly cannot be free from ideological effects. In this respect, almost any step in the production of non-fiction cinema may indicate the strong connection between ideology and the produced documentary films.

Even the first institutional step in non-fiction films, the British Documentary Movement, was established for political and cultural reform. The founder of the movement John Grierson thought that documentary film could be characterized as reformist and progressive on social change (Aitken, 1990: 61). Nevertheless, World War I also shows the effective usages of non-fiction films as propaganda. Regarding the issue, Kracauer's work on the psychological history of German film offers valuable insights to the socio-political potentials of films. Focusing on Nazi propaganda films such as *Triumph of the Will* (1935) by Leni Riefenstahl, he highlights the particular uses of editing techniques, camera movements, and camera scales to manipulate people and influence the masses (Kracauer, 2004: 278, 279).

Although the socio-political consequences of these films are stated, Wilson (1948) argues that the efficacy of documentary broadcasts is negatively affected by the lack of indication of the stability of attitudinal changes and also by the lack of knowledge about how people's thoughts and behavior are affected. Many works cited regarding the social potential of VR cameras discuss the quantitative data taken from experimental research done with individual subjects. VR technology and its claimed empathy lead to variety of arguments about their assumed socio-political effects. This study mainly focuses on the possible socio-political effects of 360-degree cameras. While many of VR non-fiction film practices offer a visual experience that can be accomplished by a small number of viewers, it is more plausible to underline the individual effects rather than socio-political effects. In order to discuss the socio-political effects of this recording technology, however, it is important to concentrate first on its effects at individual level. Secondly, this study places a particular focus on 360-degree video in non-fiction filming. As mentioned above, 360-degree video provides less immersive experience compared to other VR practices. However, it is difficult to anticipate its particular social impact unless a documentary reaches large number of

viewers. Today 360-degree filming makes it much easier to reach a huge number of viewers without the need for HMD or any other devices.

Documentaries shot by 360-degree cameras may provide a more realistic experience. However, as Manovich (2014) notes, the introduction of every new modern media technology is claimed to represent reality in a new and better way. In this sense, I agree with Crawford-Holland (2018: 20), who claims that threating VR in a technologically deterministic way misrepresents VR's political potential and even fetishizes its alleged empathy. The following section discusses the socio-political capacity of VR especially by referring to its claimed empathy in order to provide a comprehensive theoretical background on this topic.

VR's Socio-political Potential and Its Claimed Empathy

According to Schutte & Stilinović (2017: 708), virtual reality has the potential to influence interpersonal emotions such as empathy, and socio-political potential of VR is usually related to the claimed empathy that it may offer. It is assumed that the users will be powerfully immersed in while watching VR films and 'standing in the shoes of another' will encourage action to help achieve social change. In attributing empathy to VR, Chris Milk's film *Clouds over Sidra* (2015) possibly plays an important role. The film is about the daily life of a Syrian girl in a refugee camp in Jordan. It was shown at the World Economic Forum in Davos and it influenced the fund-raising effort for refugees (Rose, 2018: 10). In his TED talk given in 2015, Milk asserts that,

> It is 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. …VR is a machine, but through this machine, we become more compassionate, we become more empathetic, we become more connected, and ultimately we become more human.

In order to find out whether VR facilitates empathy, research has been conducted by showing documentaries and/or news media in 360-degree vs. in two-dimension format to the participants. Some results indicate that seeing the documentary in VR format results in greater engagement and a higher level of empathy (Schutte & Stilinović, 2017: 708). The users experiencing the VR treatment report higher levels of immersion and they are more likely to take political or social actions after viewing (Archer & Finger,

2018: 3). However according to Rose, by seeing VR as an agent for human advancement, betterment, and life enhancement; the techno-utopianist view falsely assigns VR a unique power, believing that it makes people more empathetic. Rose questions the research finding by asking whether these responses will be sustained once the novelty of VR wears off and mentions Jill Godmillow's (2018: 7,12) questioning of the function of affective documentary. Godmillow asserts the following:

> We and they are not linked other than by feelings, like caring, concern, sometimes outrage. But the connections or links are momentary. We leave the theatre filled up with our best feelings about ourselves, and the next day go about the same business as the day before, in the same way. This produces not useful knowledge, but desire -- for a better and fairer world -- but not the useful self-knowledge to begin to change anything. It offers no structural analysis of the problems described, and rarely proposes solutions… (Godmillow 1999 as cited in Rose, 2018).

Robert Hassan echoes that critique of Godmillow. He (2019: 10) strongly opposes the claim that VR is capable of creating empathy through which social and political change is possible. First, he points out that today, the costs of VR are correspondingly lower; thus, news organizations such as The New York Times have started broadcasting 360-degree news reports and/or documentary videos to stanch declining print sales. By mentioning immersivity as the essential selling-point of VR, Hassan continues his analysis by questioning whether we are analogue or digital. According to him, digitality enables information to cross time and space but people are analogue beings and analogue processes constitute people's real world. In this regard "a VR camera cannot bridge that gap between near and far…" (Hassan, 2019: 15). Hassan concludes that immersion can only be a state of objective experience and people cannot experience their immersions. In other words, the analogue reality cannot be rendered into digital. In this regard, Hassan makes the following argument:

> the subjective 'atmosphere' of a Street demonstration, for example, remains stubbornly localized for the VR user in his or her actual physical environment … And the more objective features of the 'mass intimacy' of a protest, such as pushing, the pungency of tear gas, the eye-sting of the smoke from burning paper or tyres, are not amenable to digital replication through VR immersion…how to render the smells, the extremes of temperature, the dust and the puddles of Zaatari Camp; even more challengingly, perhaps, how to digitally replicate the fear and

paranoia and hopes and aspirations of people in an Ebola-traumatized region? (Hassan, 2019: 12).

Zhang, Perkis, and Arndt's (2017) study vindicates Hassan's claim. They define and measure two types of immersion: spatial and emotional. Spatial immersion is maintained by the spatial qualities of the virtual environment. By spatial immersion the users may feel "as if they can physically enter into the story." However, in order to emphasize and to be cognitively identified with the characters of the story, there should be emotional immersion for users. Their research proves that "emotional immersion is more immersive" and also in many VR applications, tremendous emphases are placed on enhancing spatial immersion, whereas narrative elements, which are surely effective for emotional immersion, are significantly missing (Zhang et. al., 2017).

Concerning spatial immersion and its impact on emotional immersion, today it is possible to come across many 360-degree video news showing various disasters and people suffering in distant places. When we talk about the possibility of creating a strong connection between viewers and distant others, it is relevant to refer to the concepts of "distance suffering" and "call for action." Distance suffering means "the feeling of suffering for someone that is far away from oneself" (Nunes & Lee, 2019: 310). Kristin Van Damme et. al. (2019: 2054) test their assumption that 360-degree videos may create a strong connection between audience and distant others; therefore, higher levels of immersion may result in increased engagement with distant suffering. In their research, they showed 360-degree video news about a Syrian oil worker to their subjects. They found that a higher level of immersion leads to a higher sense of presence, and this, in turn, increased the level of enjoyment while watching the video. However, this does not result in audience intentions to take action. "In other words, virtual reality cannot bridge the gap between the viewer and the distant suffering other in disaster news" (Van Damme et. al., 2019: 2069-2070).

Along the same line, Thatiany Andrade Nunes and Hyunseok Lee's (2019) work on humanitarian documentary unfolds the differences and similarities between the visual and narrative storytelling characteristics in VR and non-VR productions. Humanitarian documentary generally focuses on non-fictional stories of people who are in harsh living conditions and searches to generate an empathetic response on viewers. They conclude that although humanitarian documentaries attempt to be very

persuasive by relying on the use of powerful imagery; there are no data supporting the assertion that VR can create sympathy for distance suffering and/or call for action (Nunes & Lee, 2019: 309-312).

Archer and Finger's (2018) work on VR treatments and their effect on possible behavior change, underlines three types of empathetic responses. Cognitive empathy, called as perception, is the perception of another person's emotional state. Affective empathy, called as emotion, is sharing another person's emotional state. The last one, the empathetic responding, is named as motivation, where there is a motivation to act with a subject. Their study shows that none of the VR treatments could motivate audience to change their behavior. In other words, there is no statistically significant rise in participants' desire to volunteer or donate money to a cause (Archer & Finger, 2018: 16, 39).

VR entered the mainstream as a game platform, but it has attracted nonfiction producers due to its claimed empathy, and consequently its pro-social potential. Even though VR documentary of course benefits from the power of its technological novelty (Nunes & Lee, 2019: 313), the adaptation of VR by non-fiction film makers produces a mix of commercial excitement (hype) and techno-utopianism (hope) (Rose, 2018: 1). Regarding the issue, 360-degree cameras provide all possible images from a given visual space. At this point, Rose's emphasis on hype as commercial excitement reminds also Suzan Sontag's ideas about the consumption images. She argues that the consumption of a plurality of images equates with freedom.

> A capitalist society requires a culture based on images… Social change is replaced by a change in images. The freedom to consume a plurality of images and goods is equated with freedom itself. The narrowing of free political choice to free economic consumption requires the unlimited production and consumption of images (Sontag, 1973: 140).

To sum up, VR technology may create a more immersive experience for the viewers. 360-degree films may take the viewers to different parts of the world and enable them to feel as if they are in the story. However, since the beginning of the cinema, by using camera angles, movements, shoots, and editing, a strong cinematic language has already been formed in order to create empathy and engagement. Therefore, it would be more appropriate to consider 360-degrees cameras and their potential among the

countless possibilities of recording and narration. To show the potential effects of using different visual and narrational styles, the following section makes a comparative analysis of two documentary films referring to the same socio-political conflict.

Analysis of the Documentary Films *Exiled* (2019) and *Behind the Fence* (2016)

Myanmar (Burma) is a country located in Southeastern Asia which has a predominantly Buddhist population; but there are more than one hundred ethnic minority groups, one of which is Rohingya people. Rakhine State (formerly known as Arakan) in Myanmar has witnessed the conflicts between Rohingya Muslim and radical Rakhine Buddhist communities. In 2017, due to the ongoing violence in the Rakhine state, more than 700,000 Rohingya people were forced to flee their homes and take refuge in neighboring Bangladesh (www.unhcr.org, 2020).

     Exiled (2019) and *Behind the Fence* (2016) are films focusing on the genocide of Rohingya people and the mass exodus of those people to Bangladesh. *Exiled* (2019) is a 1 hour 15 minutes long traditional documentary directed by veteran war reporter Shahida Tulaganova. It tells the story of the Rohingya by providing a historical overview of the situation. In addition to using archival footages, the film comprehensively explores the roots of increasing violence in Rakhine State especially by giving the conflicting perspectives of Burmese officials, Rohingya refugees, radical Buddhists among others. Unlike *Exiled*, *Behind the Fence* (2016), directed by Lindsay Branham and Jonathan Olinger, is entirely shot with 360-degree camera. It is a 9-minute-long documentary that takes the viewers inside an open-air concentration camp where Rohingya Muslims were held. *Behind the Fence* profiles Abul, who tries to help his sick wife and a twelve-year-old Rohingya boy. The film also includes an interview with a Buddhist leader U Wiratu, who argues the Rohingya "cannot" be given the same human rights as indigenous peoples.

     It is possible to find many reviews admiring *Behind the Fence* due to its usage of 360-degree camera and underlining its advantages over traditional documentaries. For instance, Charara (2018) claims that "it feels like it can help foster empathy far more effectively than traditional movies or TV. That is used to heartbreaking effect in docs like *Behind the Fence*… it makes it all more real than any news article could." At

this point, a comparative analysis of the cinematographic and narrational (editing) styles of these two documentary films is made to help us understand the potential of 360-degree cameras in engaging viewers and encouraging them to take action for socio-political causes.

Cinematographic Styles

360-degree cameras attract both viewers and producers of audio-visual materials due to their ability to create a sense of presence. Today, 360-degree cameras are relatively more accessible. Of course, there are high-end 360-degree cameras such as Nokia OZO, but today devices such as GoPro Max, Samsung Gear 360 and Insta 360 are preferred even for many professional settings. Additionally, the viewers are not restricted to VR headsets and/or Google cardboards. Due to YouTube and Facebook support, 360-degree formats can also be watched and shared through computer and mobile phone screens. Therefore, a continuously increasing number of viewers as well as producers can contribute to the changing relationship between the user and the camera. However, it should be noted that the visual language of the traditional screen media depends on a defined screen edge. As VR writer Stefan Grambart underlines, for 360-degree video productions, there should be a new grammar in order to write engaging stories but it is not defined yet (as cited in Dooley, 2017: 164). At this point, we may firstly focus on the possible effects of an undefined screen edge in 360-degree documentaries.

While watching *Behind the Fence*, one feels as if s/he is in the concentration camp. It is possible to view entire scene from many perspectives. In other words, one does not watch the actions, places, and people from the perspective of a single cameraman. We also do not see the cameraman or the crew because 360-degree cameras are wireless, tiny and very easy to store and carry around. However, in *Exiled*, we can assume the possible effects of the presence of the crew or at least the cameraman. Instead of a tiny 360-degree camera recording everything around by itself, surely there is a cameraman carrying and directing a gun-like camera toward people. In this regard, WeiB admires filming a guerrilla documentary in 360 as there is no need to point the camera in anyone's direction. He underlines: "The camera was discreet and filmed in all directions, so people acted naturally. I think it's the most

effective ways to film a documentary because people acted like themselves all the time without any fear of the cameras" (WeiB, 2018).

Undoubtedly, the camera is discreet; therefore, it may be claimed that *Behind the Fence* captures what is happening inside the camp with minimal intervention. This is the reason why Rousseau (2016) thinks that with the help of 360-degree cameras it is possible to capture reality in a fully immersive and interactive way. However, we should not only think about what the film shows us. Especially if we consider the recording phase of the film, we may analyze it in a more holistic manner. Directing a gun-like camera may understandably be disturbing for the people being recorded. That is why in the 1950s, the Direct Cinema movement and 'fly on the wall' approach of Cinema Verité saluted the introduction of relatively light and small 16mm cameras for filming real life without intervention (Winston, 1995: 147). However, it should not be forgotten that before recording the scenes in *Behind the Fence*, the crew were surely there and placed this tiny strange box-like camera carefully. Possibly people haven't seen this electronic device before. Since it is not a candid record, people should have been informed about the shooting. Additionally, and more importantly, while the actions take place, the crew (at least the cameraman) tries to hide in order not to be seen within the scene. Regarding that difficulty, Dooley (2017: 164) argues that capturing all directions by a 360-degree camera, hiding technical equipment and crew create problems and limitations. Under these circumstances, it is impossible to claim that there is no fear of camera and therefore, people act more naturally. Just knowing the presence of any camera may be enough to affect people's behavior. Thus, we cannot assume a smaller fly will capture the reality better than a bigger fly on the wall, while the crew tries to hide themselves during recording.

Apart from these difficulties, Nunes and Lee (2019: 313) underline that VR documentary has the power of looking. 360-degree environment helps viewers feel as if they are really there (Barisa, 2019) because it allows viewers to look in different directions. At this point, we may deduce that in 360-degree videos the viewers can look in directions which the camera operator has not looked at and considered. While this provides filmmakers new opportunities for telling stories, it may also create drawbacks. The viewers can look at unintended areas such as faulty areas or under

the camera (Nunes & Lee, 2019: 311). For instance, while *Behind the Fence* shows the viewers entering the military camp, a 360-degree camera is placed on the top of a moving car. It shows the environment, checkpoint of the camp, and also the refugees walking, but it is possible for a viewer to look at the top of the car, to the empty sky while trying to explore different perspectives by playing with the computer mouse.

A more important problem than looking at unintended or faulty areas is that the viewers' freedom to choose where to look also creates the fear of missing (Nunes & Lee, 2019: 313). In his study, Jones (2017) shows participants 360-degree videos. He finds out that the participants are immersed in the story, yet despite the presence of techniques to direct users where to look for instance by using sound, the participants report the fear of missing out some actions or something important (Jones, 2017: 182,183). It is oblivious that while watching *Behind the Fence*, the viewers may miss something in many scenes. In order to avoid this, we observe that generally the duration of each shot is taken longer in the film and of course, this, in turn, increases the duration of the film.

Another method in dealing with this problem is the visual placement of the main actions within the scene. In *Behind the Fence*, the main and important actions that shouldn't be missed, have generally been placed in the middle of the visual area instead of left or right sides. For instance, U Wirathu, the Buddhist leader of the "696" Nationalist Movement, is shown while he is walking among the people and talking in the middle of the visual area. Nevertheless, if a viewer still prefers to look at the right or left side, it causes missing some visuals as well as difficulty in focusing what U Wirathu says. On the contrary, in *Exiled*, the viewers may concentrate much easily on what is being told in the interviews and what is shown in relation to the verbal claims of each side of the conflict. In this regard, it might be claimed that the absence of interactivity in *Exiled* is compensated by providing focus on the viewers to question and interpret the main arguments within the speeches and actions.

Instead of framing, *Behind the Fence* gives more time to the viewers by letting them try different perspectives and look at where they want. The viewers' freedom to move their gaze and see the whole surrounding may point a change in the relationship between the viewers and the camera. However, this freedom should not be

exaggerated. It should be noted that it is the directors of *Behind the Fence* who have already decided what to show in 360 degree, where to put the camera, how close to stay to the subjects, which actions to be recorded, which parts of the raw footage would be included in the film, and duration of each scene. As Crawford-Holland (2018: 21) mentions, VR presents an inevitably subtractive interpretation of reality due to the choice of the subject, camera placement, editing, or the use of non-diegetic sound. Since the viewers are only given very limited freedom to 'play' with the chosen visuals, I claim that for the sake of this limited freedom given to the viewers, the directors left out all the cinematic narrational potentials of camera movements (pan, tilt, zoom, etc.) and shooting scales. In contrast, by using close-up shots showing the faces, eyes, hands even fingers of people interviewed, *Exiled* effectively helps the viewers to realize the emotional intensities of people.

In *Exiled*, it is the director of the film who strictly decides where the viewers should look. In contrast, the directors of *Behind the Fence* give the viewers freedom to look where they want. However, this freedom is limited because its borders are drawn by the directors who decide what to show and how. At this point, I claim that the interactivity in *Behind the Fence* surely attracts the viewers by giving them a virtual camera to look around. However, this viewing experience is similar to giving a camera to a child and letting her play with it as a toy. She turns the camera in every possible direction in the name of freedom. Undoubtedly, experimentations, as in the case of the child, with the visuals should not be underestimated. They may cause the discovery of totally new and more effective ways of telling visual stories. VR filmmaking is still a maturing medium and filmmakers are still experimenting, and they're what kind of narratives can be done. However, there should be a new "grammar" but it is not yet fully defined (Grambart as cited in Dooley, 2017: 164). Thus, while evaluating the cinematographic potential of 360-degree cameras in encouraging viewers to act for socio-political causes, it is better to consider 360-degree documentaries as Weidle (2018: 422-423) does, namely as another contribution toward the creative treatment of actuality.

Editing / Narrational Styles

Dooley (2017), in comparing the storytelling formats in VR and classic media, underlines that storytelling in 360-degree VR format involves a user-focused engagement. The viewers are not passive as the viewers of classical narrative media. Therefore, in case of narration, there are both challenges and opportunities for the VR creators (Dooley, 2017: 161). First of all, without using close-up and cut points, attracting the viewers' attention is among the most crucial challenges as far as 360-degree films are concerned (Dooley, 2017: 168). In other words, for the sake of viewers' freedom to look in a 360-degree video environment, the story may be ignored. The enhanced spatial immersion that 360 video provides may be used to create more engaging storytelling techniques. However, as Zhang et. al. (2017) mention, while focusing on the enhancement of spatial immersion, narrative elements are significantly missing. At this point, we may compare the usage of narrative elements in both documentaries.

Nunes and Lee (2019: 311) claim that VR documentaries rely more on the act of looking rather than complex editing, yet precise control in editing and shooting are equally important in storytelling. As Weidle (2018:414) rightly argues, the camera and its affordances create possibilities for the filmmakers, but the usage of montage is vital to construct aesthetically pleasing and narratively cohesive films. In this regard, *Behind the Fence* gives the users freedom to decide where to look, but this freedom creates problems in structuring the narration. The reason is that there should be more time given to the viewers to let them look through different directions. Therefore, it may be claimed that the durations of shots are generally longer than they should be. For instance, in the second shot of *Behind the Fence*, we watch a Buddhist walking alone among the temples. Later we watch a refugee carrying his children and walking around the muddy place within the camp. In both shots, we watch them approaching the camera and turning away. Of course, in order to slow the rhythm of the film or to provide spatial information to the viewers, the directors may choose not to cut the actions. However, in both shots, and generally in the whole film, the long duration of the shots surely is not a choice but a necessity to give users freedom at the expense of effective control of time and precise editing.

Just removing a few unnecessary frames in editing may seriously prevent the loss of the interest of the viewer. Additionally, and more importantly, directors can control the manipulation of viewers' emotions, reactions and also interest by editing. As Nunes and Lee (2019: 313) underline, in non-VR documentaries, viewers' look is directed and guided. This is an important factor that provides an advantage in storytelling. In this regard, *Exiled* lacks spatial immersion, but it creates engaging and interesting storytelling by controlling the look and by precise editing. Although the duration of *Exiled* is one and half hour, its precise editing prevents the viewers' loss of interest. In contrast, *Behind the Fence* is 9 minutes long and still, it struggles to keep the viewers' attention for its duration.

At this point, we should also refer to a trend toward producing VR films for short durations (generally shorter than 10 minutes and in the form of episodes if necessary) because they require high attention (Jerald, 2015: 217). Broeck, Kawsar & Schöning's (2017) comparative study shows that watching 360° videos with moving viewports elicit a more immersive experience and higher viewer engagement but these videos are cognitively demanding and require constant user attention. Additionally, using HMDs may cause motion sickness and physical discomfort (Broeck et. al., 2017). Of course, it is possible to watch *Behind the Fence* via Head Mounted Devices and immerse into its story world. However, because of the time limit, the film tries hard to fit the interviews, archival footage, and daily lives of the refugees as well as written information into 9 minutes. If we take the necessity of using longer durations for each shot, we may ask whether *Behind the Fence* provides the necessary information to engage the viewers fully into the issue and encourage them to take action or it is just an example of what Gunning names 'cinema of attractions' that show viewers other parts of the world.

All in all, a film should provide the viewers the necessary background information about the events to encourage viewers to take action. In this regard, *Behind the Fence* gives very limited information in written format. However, *Exiled* provides comprehensive background information by giving voice to the people representing the conflicting sides and also by using a narrator's voice. In this regard, *Exiled* can be classified as a traditional documentary using archival footage, providing necessary information by talking heads and by a narrator. Compared to *Behind the Fence*, it might

lack technological novelty, but surely it has emotionally engaging storytelling. *Behind the Fence*'s technological novelty provides the viewers spatial immersion but we may ask whether it is needed and necessary to encourage action. In this regard *Behind the Fence* is a case of "the cinema of attractions" using the power of technological novelty, but lacking storytelling complexity.

In terms of the development of storytelling, Dooley compares 360-degree VR productions and early filmmaking. She argues that the practitioners began to record actualities first and it took time to narrate the story. According to her, "VR filmmakers are now exploring a new screen grammar for the 360-degree" (Dooley, 2017: 165) as in the case of the practitioners of the cinema. At this point, Crawford-Holland (2018) asserts that VR circles us back to the early cinema as Andre Gaudreault and Tom Gunning have defined as the cinema of attractions, which refers to the time when the narration is not developed but viewers just want to experience the apparatus itself and the illusion of cinema. Holland thinks that the same is true for VR practices. The early practitioners of cinema used cinema mainly to present a series of views to fascinate the audience. Similarly, instead of telling stories, 360-degree VR practices take the viewers to the "other parts of the world" such as refugee camps and show the shocking images of injustices. They generally rely on individual shots. They do not provide a wide variety of shots and they do not use sophisticated editing to convey meaning; therefore, VR practices resemble early nonfiction and lack the formal sophistication of documentary film (Crawford-Holland, 2018: 23-28).

Discussion and Concluding Remarks

The above analysis of the documentary films clearly demonstrates that 360-degree documentaries may provide a more realistic perceptual viewing experience and they may attract and immerse viewers more through their interactive format. However, these characteristics of the 360-degree VR format do not guarantee that it helps viewers really understand and share the feelings of others. In order for a film to fulfill its potential to encourage socio-political action, viewing it should help viewers really understand the specific situations and elicit strong a emotional response. One should bear in mind that the VR market relied mainly on the gaming community and in 2015 it became accessible to non-gaming communities (Jones, 2017: 172). As O'Flynn (2012: 142)

underlined, interactive documentaries are often designed as databases that allow audiences to play with the documentary content. 360-degree and VR technology may highlight opportunities to tell stories in novel and better ways. Even though documentary makers and journalists increasingly adopt VR technology to achieve social impact (Weidle, 2018: 413), they should not solely rely on its technological novelty and its interactive nature, and the potential proper usages of 360-degree cameras should be explored more critically.

The media is claimed to be undergoing a paradigm shift and, in this shift, 360-degree content is argued to have a detrimental impact. At this juncture, the following question is asked: "if a photo is worth a thousand words, how many words is a 360-degree photo worth" (Metry, 2017). Regarding that question, Manovich's (2014) claim should be remembered. Manovich argues:

> The introduction of every new modern media technology... from photography ….to Virtual Reality in the 1980s, has always been accompanied by the claims that the new technology allows to represent reality in a new way. Typically, it is argued that the new representations are radically different from the ones made possible by older technologies; that they are superior to the old ones….

Following these discussions, I am convinced that considering 360-degree filming in a techno-determinist manner is as wrong as underestimating the potential of 360-degree cameras and VR format. 360-degree filming can be so influential in encouraging socio-political action, but as Weidle (2018: 422, 423) says, 360-degree and VR technology should be evaluated as another contribution toward the creative treatment of actuality. This kind of approach will surely help filmmakers better understand the proper usages and real potentials of 360-degree and VR technology. Fowler (2016) claims that the biggest challenges of using a 360-degree camera are not technical; rather they are creative. In other words, shooting in 360-degree video is not technically difficult, but looking outside the frame of a traditional camera can also be boring unless the camera is placed in the middle of great landscapes or somewhere in the surrounding worth recording. At this point, one may ask which circumstances really require to be recorded in 360 degree. The answers may reveal the proper usages of 360-degree format.

All in all, 360-degree cameras might be the proper option for the representation of particular social situations, social movements, conflicts and actions due to their ability

to record and show in limitless point of views. 360 video cameras can surely be used influentially in recording specific circumstances such as protests in 360-degree and this may avoid missing or ignoring some crucial points of view. This may not eliminate, yet it can at least minimize the subjectivity of the cameraman. Today generally in the world and/or within numerous nation-states, the political climates are getting more and more polarized. In this regard, 360-degree camera and its technology prioritize an approach that covers all perspectives. In my opinion, considering this characteristic of 360-degree filming is crucial while trying to develop new storytelling formats that may effectively encourage viewers to take socio-political actions. Otherwise, a powerful social effect should not be expected merely due to the usage of 360-degree video in non-fiction films.

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