# Changes in the Documentary as A Result of Technological Changes

Documentary film is motion picture which is non-fiction and is meant to document some aspects of reality. Documentary films are made primarily for the purpose of instruction, education, or keeping a historical record of some past or present occurrence. It is a way of observing life in a film. Originally these documentaries were shot on a film stock which was the only available medium but the trend has changed to video and digital production which can be made for television shows or released into cinemas. In documentary films, the original actor and the original scene are better alternatives in representing the real world as compared with their fictional counterparts.

## History

Early films were dominantly a novelty of showing an event. These films were captions of single shot like a boat docking which were about a minute in length. The short length was as a result of technological limitations. Films that showed many people were most often made for commercial purposes. Most of the films that were made at the end of 19th century were films of medicine and science fields. These films were non-fiction. This time, the novelty wore off giving way for the caption of scenic views. Travel documentaries, then called travelogue films were quite popular in the early 20th century. They were referred to as scenics by the distributors and were the first form of films at that time. Up to this time, there was little understanding that camera could be used to construct some kind of narrative. Later the films embraced primitivism and exoticism in a staged story that was presented as a re-enactment of real life. In 1914, the first biographical documentaries were produced

In the 1920s the documentary world embraced romanticism with a number of romantic documentaries filmed. The documentaries were beginning to get some influence from the modern art such as cubism, constructivism, and impressionism (Dovey & ebrary 2000). It is at this time that aspects of film editing, motion caption and time-lapse were used to make the documentary more real. Films used to be shot silent and then the synchronization of the sound was done later at editing. The first documentary that used the motion picture camera to tell a story took fourteen-month expedition. It took hundreds of footage hours, a thousand pound of chemicals, twenty-five thousand feet of film, and two thousand dry plates. Trains were used in Siberia which was equipped with filmmaking equipment and printing press and curried actors who gave live performances. Advancement in camera technology allowed the synchronization of pictures and sound on the location as events happened (Aston, Gaudenzi, & Rose, 2017). Currently, the making of documentaries has been enhanced by the technological advancement in cameras and equipment used in editing the documentary.

Technological advancements have really created evolution in how the documentaries are shot edited and released to cinemas and television programs. Increase in internet use, interactive capabilities of the web, and cheaper digital technologies have led to growth in web-based documentaries (Izod & Kilborn 2000). Producers are able to review the documentary as the shooting is taking place, therefore, reducing the production time. In the shooting of Samsara film, for example, the film was shot in five years but editing started in the third year of shooting. This is in contrast with Baraka film where editing started after the shooting was completed. Technology has led to the invention of new cameras that allow cinematographers to shoot in high definition that gives the viewers more amazing views. It has enabled shooting of movies that were not possible before.

## Cost

Previously film was the only medium of earlier filmmakers which were too costly. The film was disadvantaged as it was impossible to re-use. The film was impossible to re-use. Therefore, during shooting they had to produce a footage that could be used or else the resources employed that day would result to waste (Bolton, & Bloomberg 2013). For example, in Baraka film, during the editing, the producers cut the negatives and combined what was useful in the film while in Samsara film; the negatives were scanned and worked on digitally. The process of cinematographers developing the film and editing it was also expensive. Digitization of the process means doing away with film canisters that were common in filmmaking. Production companies are able to do their shooting with less waste, therefore, keeping the process under a small budget.

## Editing

In the past, editing was one of difficult tasks in shooting a film. Adding visual effect was a challenging task of precise art where the effects had to blend seamlessly with what was being shot. This is because film producers relied on manual techniques to create visual effects. This was a difficult process that the editors no longer have to go through. Digital effect is created and added to the shot in the same program. This software allows the editors to work on an entire film piecing the scenes together then add in the effects (Rogers, 2013). The audio has a high definition that ensures that the audience will hear every word in the documentary.

## Shooting

Digital shooting is convenient as it allows so much to be shot at little time. The use of retakes has been minimized by use of multiple cameras on a single shot which gives the cinematographer to get multiple angles of the same scene with minimal cost (Sickels, 2011). The invention of single lens the reflex camera that is affordable and its video function has high-quality image combined photojournalism with video making narrative increasing the quality output in a documentary. The modern cameras are smaller in size and ability to present a more intimate shot that makes the audience feel present at the scene. For example, In shooting Baraka documentary, the cinematographers used 70mm camera which was able to use a mix of photographic styles. In Samsara documentary, 70mm camera was preferred but they also used 65mm digital camera whose scenes were output to digital cinema package.

High budget cameras are beginning to use digital cinema cameras like red epic while small budget documentaries are using cameras like Canon C300. Recently, the invention of drones is changing the documentary field with drones becoming part of the inventory of every filmmaker. The kind of caption that could be achieved through the use of a helicopter has been simplified by use of a drone (Straubhaar, LaRose, & Davenport, 2013). This has improved the quality of captions and reduced the total cost of production.

## Distribution

The current technology has enabled digital distribution of films through platforms like YouTube. Although the digital distribution of films has not hit the apex of its capabilities, it has grown to be a marketing platform with the possibility of fueling a revolution with far-reaching impacts. Documentary makers only need to create a trailer and YouTube crowd can find the trailer through thumbs up without having to dig for it. Rights of content are also distributed digitally (In Merrill, & In Raduchel, 2013). For example, Baraka film was produced and released in a film in 1992. However, the film release was scanned at 8k resolution after the film became obsolete and released in a DVD format in 2008. Samsara film was released in DVD and digital formats online.

## Preservation

Initially, film stocks were preserved in videotapes which were too bulky. The videotapes are not preservable for a long time as they are prone to wear and tear and they are flammable too. Documentaries can be stored digitally in server backups without taking up too much space. The cost associated with digital preservation is much lower as compared to the cost of storing film copies (Bruzzi, 2011). Digital archives provide the user with ease of retrieval as production companies can easily retrieve earlier versions of a documentary. With the technological shift, the production process was democratized leading to lower production costs. For example, the documentary general hospital was aired on televisions from 1972 to 1979. By 2012 out of 270 episodes, only thirty-eight copies of episodes were surviving. The surviving copies were made into DVDs although most of those surviving were previously made in colour but are available in black and white. The previous copies did not just get lost but the quality of surviving copies was really damaged through wear and tear.

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