Rang Sazi: Introduction and Evolution of Color Film Technology in Pakistan

Zuraiz ur Rehman Niazi

Abstract

This paper discusses the introduction and evolution of color film technology in Pakistani cinema. It focuses on the transitional period from the 1960s to the 1980s and highlights the major technological and practical changes in the production of films in Pakistan, contextualizing the semiotics and importance of color for this film industry. While discussing this transition from black and white to color film in Pakistan, it also connects this shift with the evolution and introduction of color film technology on a global level, including earlier technologies of color and colorization. The research is supported by a short analysis of some early Pakistani color films. Field research at Evernew Studios, one of Pakistan's oldest film studios, also sheds some light on how the industry transitioned to color film and how technology and filmmaking was affected.

Keywords: Color Film Technology, Development of Pakistani Film, Pakistani Film Studios, Film Technology and Infrastructure

Introduction

Color films have evolved greatly since they were first introduced in Pakistan in the 1960s. Unfortunately, there is little literature available that can address the questions of the technology and techniques that were used to make color films in the country at that time. *Azra* (dir. Munshi Dil, 1962) is known to be the first Pakistani color film. However, color was not new to the subcontinent. *Azra* came out twenty-five years after the first Hindi color film *Kisan Kanya* (dir. Moti B. Gidwani, 1937). Early color films in the subcontinent were either hand painted or used color film stock, like those is western countries. Today, in Pakistani cinema, digital technology is becoming the standard mode of production, although remnants of the older technologies are still present. Even though investments have started to flow out of color film stock and into digital modes of production, there are still some Pakistani filmmakers who prefer to work with the older technology. This research paper looks at the evolution of color technology in Pakistani cinema, and further analyzes the transition from black and white film stock to color film stock and then from color film stock to digital technology. The paper also highlights the impact of these transitions on the editing and post-production¹⁸ of films.

¹⁸ Post-production is a final stage in the process of filmmaking. At this stage, the film is edited and necessary changes are made in the footage, sound and color etc. before it can be played on cinema screens.

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Color is a significant part of both film style and narrative. It not only helps the audience connect with the content by making it more real, but it "can evoke potent emotional responses in viewers and is therefore one of the director's most important tools" (Detenber 334). Pakistani filmmakers have been using this tool for almost six decades now. The first full-length colored box office super hit was the film Naela (dir. Sharif Nayyar, 1965). It is claimed to be one of the greatest romantic films made in Pakistan by Pakistan Film Magazine ("Naela"). The songs like Gham-e-dil Ko In Ankhon Se/Grief of The Heart From The Eyes sung by Mala were famous not only because of Shamim Ara's acting but also because her acting was complemented by the radiant colors of the set. In over fifty years, Pakistani filmmakers have mastered the art of not only making color an important part of film narrative, but also using color as a tool for narration. Movies like Ho Mann Jahan/Be Where Your Heart Is (dir. Asim Raza, 2016) and Punjab Nahi Jaungi/I will not go to Punjab (dir. Nadeem Baig, 2017) did well in the box office in part due to their focus on high quality post-production and color grading. ¹⁹ In both films, colors were used to set a certain mood and even to depict in which part of the country the scene is supposedly located. For example, in Punjab Nahi Jaungi, the set design, clothes and makeup were all more vibrant and saturated when depicting Punjab, as compared to scenes that portrayed Karachi. The director based the film style on the stereotypes that exist of Punjab, as being a province with vibrant and loud colors. However, in order to understand how color became so intertwined with film style and narrative, it is essential to to look at how color films and color grading originated globally.

The Origin of Color Films

Filmmaking, just like still photography, started in black and white. Since the birth of film, there was a lot of interest in the possibility of color films. Paul Schrader, an American screenwriter, film director, and film critic elaborates on the evolution of color film technology and the role of color, writing that until the late nineteenth and early twentieth century filmmakers and photographers relied on the chemical silver halide which reacted with light to produce black and white images. Schrader explains that early method of producing color pictures were either hand painting the films or using chemicals like metallic dyes. The latter also came to be known as tinting. Both methods had flaws in them and required a lot of time and resources. It was nearly impossible to achieve continuity and consistency of colors using these methods, as every frame was separately colored and therefore differed from the other. Schrader further explains that in the first two decades of the twentieth century much more consistent and efficient ways of color films prevailed. These new additive color and two-strip Technicolor²⁰ techniques relied on both the camera lens optics and chemicals. Both techniques used prism beam splitters and red and green filters to record on film strips. However, unlike additive color technique, two-strip Technicolor used two separate film strips to record the film instead of one. The two strips, magenta and cyan negatives, were then cemented over each other in film processing labs using chemicals to produce color prints. The twostrip Technicolor method helped produce the first American colored feature, The Gulf Between by Wray Bartlett Physioc in 1917 (Schrader 53). In 1928, this method was improved by the addition of a third yellow strip which complemented the magenta and cyan negatives. This provided a full

¹⁹ Color grading is a procedure used in the post-production stage of filmmaking to enhance the color and images in a footage to give it consistency and to differentiate between different environments.

²⁰ Technicolor is a series of procedures that were used to process color motion pictures. Technicolor technology was the first to successfully process a natural color footage. Different versions of Technicolor procedure came in the decades that followed 1916, the year Technicolor was introduced to the world.

range of colors instead of just red and green range. The three-strip Technicolor method was used in many films afterwards including the Academy award-winning *Flowers and Trees* in 1932 directed by Burt Gillett (Schrader 53).

In the 1940s, three-strip Technicolor started to get replaced by the panchromatic²¹ film stock. Although this panchromatic film stock was produced by Kodak in 1913 it only became affordable in the 1940s. The film stock produced rich colors and required no special cameras. It was also just a single strip that recorded all the spectrums of colors, and soon became the standard in the industry. Technicolor followed Kodak and started making their own single strip panchromatic film stock in 1955. Even up till the 1960s, many directors preferred working in black and white. However, those working with color started to use it as a tool and character. A film that artistically played with color was *Red Desert* (dir. Michelangelo Antonioni, 1964). Paul Schrader claims that Red Desert "is the film that changed everyone's attitude towards color and completely freed its use from realism" (Schrader 55). It was the first time the colors were manipulated to be different than what they were supposed to be or expected to be. This helped the director set a different mood for every scene which complemented the story line. It took over 40 years for color to become the standard in the industry. Today, digital post-production has become a significant part of filmmaking. Filmmakers spend more time in post-production than they spend time shooting the film. Using digital post-production and color grading, the color of anything in the scene can be changed.

A History of Pakistani Color Films

Although *Kisan Kanya* was the first colored Hindi movie of the subcontinent, Howard writes that all production in India during the 1950s was in black and white (223). When he was writing his paper there were two separate attempts being made to make color films. He claimed that the film *Jhansi ki Rani/Queen of Jhansi* (dir. Sohrab Modi, 1953) was supposed to be completed in 1952 and be India's first Technicolor film (224). The other film, *Aan/Moment* (dir. Mehboob Khan, 1952), was being shot in Kodak chrome at the Central Studios Bombay, and Kodak stock film was being used to experiment whether it could replace Technicolor. Howard clarified that the "two films... [were to] be India's first films in natural color, but not the first in color" (224). Before this the film sequences were hand painted frame by frame. Howard explains the procedure:

A production line was set up with girls of the [Art] school seated approximately a yard apart, each with one color of paint. The film passed in front of them on a track frame over illuminated ground glass. Each girl would daub her assigned part of each frame, following a color scheme worked out for them. (224)

Hand painted sequences were "not natural; often colors would run over, or a frame might be missed, or other mistakes made" (225). However, introduction of Technicolor and Kodachrome meant an end to the hand painted sequences.

Alamgir Kabir's work provides reasons for why the Pakistani film industry was lagging behind its Indian counterpart. The lack of resources due to the Indo-Pak partition affected the film industry badly. It took years for the Pakistani industry to catch up to rebuild itself. Thus, it was behind even

²¹ Panchromatic film stock is a film negative that is sensitive to the entire spectrum of colors. It is used to capture a footage in natural color.

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in the introduction of color technology. Following its introduction, it took many years for Pakistani filmmakers to fully adopt color cinema; we can see this through Mushtaq Gazdar's work, which clearly shows that there were black and white films being produced even until the early 1980s.

Early Color Films

Pakistan's first color film *Azra* only had its songs in color. The rest of the movie was in black and white. The only accessible clip from the movie is of the famous song *Kuch Bhi Na Kaha Aur Keh Bhi Gaye/You Said Nothing and Still Said Something* sung by Noor Jahan. The entire song has been shot in a single location and the entire sequence has a yellow tint over it. The yellow tint may have been used to show that the scene was sunlit. The song sequence has clearly been colored using metallic dyes also known as the tinting or dye-transfer method. Paul Schrader explains:

When exposed to light the silver halide in the film's gelatin emulsion is converted to metallic silver, which blocks light and appears as the black part of the film negative (but prints as white). By adding a so-called sensitizing dye, it could come out another color - blue and white, red and white, etc. (Schrader 53).

This means that just like in the west, color films started from the most basic technique in Pakistan. However, it changed rapidly and soon films were using color film stock.

Naela, as mentioned earlier, was one of the first full-length color films to hit the box office in Pakistan and was the first colored film made in Evernew Studios. A close analysis of the clips of Naela's famous songs Mujhay Arzoo Thi Jis Ki and Door Veeranay Mein show that the film was shot on old color film stock. In the song Mujhay Arzoo Thi Jis Ki, Shamim Ara's dress is vibrant red and her jewelry yellow. The wall behind her has been intentionally kept white to make the actress stand out. In both the songs, there is an inconsistent saturation of the colors, which keep changing with every frame, getting either darker or brighter at random. This may be a result of rotting or deterioration of the film stock over the years. In Door Veeranay Mein we can actually observe the colors losing so much saturation in some parts that the print becomes completely black and white. For its time the movie was state of the art and started a new wave that motivated many filmmakers to start working in color.

Discussion of Data

To fill in the gaps that exist in the literature on the history of Pakistani color films I conducted primary research. The data was collected by doing one-on-one interviews with conventional²² filmmakers from Lahore. I interviewed filmmakers that have worked on color films during and after the 1960s, both in film studios and in film labs²³.

After the partition of British India in 1947, there were sixteen functional film studios in Pakistan, twelves of which were based in Lahore and the other four in Karachi. Today, out of those sixteen,

²² Filmmakers who, in the era of digital cameras and technology, prefer to make films using the old analog film cameras and technology to make films. These filmmakers consider their work to be artistically superior then those of the modern filmmakers, who prefer to use the digital means to make a film.

²³ Film Labs are laboratories in which the footage of a film is edited, developed and printed by the specialists of the field.

only two of the studios are functional, namely Bari Studios and Evernew Studios. In comparison to Evernew Studios, Bari Studios is struggling financially and is not producing many films. I decided to visit Evernew Studios and ask the filmmakers there about the origins, and evolution of technology and techniques of color films in Pakistan.

The people I interviewed at Evernew studios were Ali Jan, chief cameraman at Evernew Studios, Daud Butt, a film director, and Z. A. Zulfi, one of the most experienced film editors in Pakistan. Ali Jan has been a part of Evernew Studios since 1958. He has worked on both black and white, and color films. He was working as an assistant on sets of most of the early color films produced in Evernew Studios, including *Naela*. Z. A. Zulfi joined the industry ten years after Ali Jan, in 1968, and called that time a "black and white filmon ka zamana"²⁴. Zulfi has worked as an editor for many Pakistani films including *Miss Lanka* (dir. Iqbal Akhtar and Mohammad Ziauddin, 1985) and *Jungle ka Qanoon/ The law of wild* (dir. Masud Butt, 1995). Zulfi's work, just like the work produced in Evernew Studios has been confined to film stock. He, like most of the filmmakers working in Evernew Studios has very little or no experience of working on the new digital technology. Daud Butt is a Punjabi film director and has worked on more than 200 films. Butt came into the industry two years after Zulfi, in 1970. The films that he has worked on include, *Danka* (dir. Daud Butt, 1977) and *Wadera* (dir. Daud Butt, 1985). During the 1970s, Butt only worked on black and white films, and his first colored film was called *Kala Samundar/Black Sea* (dir. Daud Butt, 1983).

According to these three filmmakers, the first full-length Pakistani color film was made in East Pakistan, and was known as *Sangam* (dir. Zahir Raihan, 1964). It was after this release that the culture of full-length color films started in West Pakistan. Ali Jan and Daud Butt explained that it was less expensive to make black and white films, which is why many directors preferred to stick to black and white even till the late 1980s. They further added that even in the late 1970s the price for a 1000-foot black and white film stock was around 410 Pakistani rupees, while the price of a 1000-foot color film stock was 1500 Pakistani rupees. Such differences were significant as the films that were being made at that time had very small budgets. It was in the late 1980s that the supply of color film stock increased and its prices started to fall. By the end of the 1980s, almost all of the industry had started to use color film stock. After a decade, in the late 1990s, new digital cameras and technology started to flow into the industry which gave birth to several new production houses.

According to Ali Jan, the process of hand painted films was never introduced in Pakistan. He explained that the first studio to introduce color films in Lahore was called the Screen and Sound Studio. They introduced the method of tinting, using metallic dyes, to add color to a negative. The first film produced in Screen and Sound Studio to use this process was *Aik Dil Dou Dewanay/One Heart Two Lovers* (dir. Wazir Ali, 1962). However, this process was not very popular among the directors, as they preferred to work on the readily available color film stock. Interestingly, according to Ali Jan, the Pakistani cinema industry jumped directly into the use of color film stock. The color films made in Evernew, for example, even the early ones, always used color film stock. Unlike in western countries, the Pakistani film industry did not experiment with various methods of adding color in the films before perfecting it. It just adopted the already existing technology and, according to Ali Jan, did not even change the cameras.

²⁴ "An era of black and white films"

Ali Jan explained that the cameras at Evernew Studios were used for both black and white as well as color films. Technicolor cameras and methods were not used to make films in Pakistan. Ali Jan explained that the two cameras that the studio owned in the 1960s were a Mitchell camera and an Arri camera. Whenever a film was to be shot in color only, the black and white film stock was replaced with a color film stock. The camera itself was never changed. In that decade, 80 speed negative films were used in the cameras. Around the 1980s Arri 3 and Cinema Scope C2 cameras took over the market.

I visited Nisbat Market Lahore, which is one of the oldest and biggest camera markets in Pakistan, with questions regarding technological changes that took place during the transition from black and white to color cinema. Just like the filmmakers at Evernew, the merchants at Nisbat Market recalled that there was no change and shift in the cameras. "Sirf material badla tha,"²⁵ said one of the shopkeepers, pointing to how only the film negative changed while the camera remained the same. Eastman Kodak and Fujifilm were two companies that supplied the best quality negatives in Pakistan and were always the market leaders for the sale of panchromatic films.

Daud Butt explained that a lot changed in film direction when color films were introduced: "Asal photography tou thi hi black and white par, color par tou photography bohat asaan hai,"26 claiming that it is very easy to direct and shoot a colored film. He explained that just to differentiate between colors a film director and cinematographer had to use different angles and variations of lights. With color, you do not have to care much about camera angles and shadows formed by light. An interesting fact that Zulfi pointed out was that even when a movie was being shot in black and white the whole set of the movie was designed with appropriate colors. Even the costumes of the actors had colors that were on point, and nothing was either made more vibrant to stand out on screen or made dull to not stand out. For example, if a wedding scene was being shot in black and white, the bride wore a bright red dress. Therefore, film style, and in particular mise-en-scène, was not really affected by the introduction of color films.

Conclusion

From *Kisan Kanya* to *Azra*, the 25-year delay deprived the Pakistani industry from the extensive use of some of the earlier methods of making color films. Alamgir Kabir and Mushtaq Gazdar provide accounts of how before partition the cinema industry of the subcontinent was divided in the areas that later become India, Bangladesh and Pakistan. At that time, Bombay cinema was the main hub of all the advanced film technology in the subcontinent, though the cinemas of Lahore and Dhaka were not far behind when it came to film production. After partition, with most of the technology and skilled workers either left behind in India or separated by over a thousand miles in East Pakistan, that later became Bangladesh, West Pakistan's cinema suffered. The country lacked resources and infrastructure to make quality films. With the economy being rebuilt from scratch, investments were nowhere to be found. It took many years for the economy of Pakistan to become stable enough to divert resources to the cinema industry. On the other hand, India's economy did not suffer much as all institutions in India stayed intact even after partition. Thus, Bollywood was the first to adopt color film technology. Unlike Pakistani cinema, Indian cinema had the resources and infrastructure to experiment with hand-painting, tinting and Technicolor methods before they

²⁵ "Only the material changed"

²⁶ "The real photography was in black and white, the color one is very easy to do"

adopted the panchromatic film stock. Hence, although the journey of color films for both cinemas started from *Kisan Kanya*, Indian cinema had the opportunity to take this legacy forward before Pakistani cinema did.

Today, the Pakistani film industry has come far ahead from where it started. The contemporary Pakistani films are being made using advanced digital film technology and are marketed for their rich colors and quality. Although, Pakistan still lacks high quality film labs as most of the color grading is done in Thailand, this has not stopped Pakistani filmmakers from experimenting extensively with color.

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Naela (dir. Sharif Nayyar, 1965)

Punjab Nahi Jaungi/ I Will Not Go To Punjab (dir. Nadeem Baig, 2017)

Red Desert (dir. Michelangelo Antonioni, 1964)

Sangam (dir. Zahir Raihan, 1964) – added now

The Gulf Between (dir. Wray Bartlett Physioc, 1917)

Wadera (dir. Daud Butt, 1985)