

CHANGING TRENDS INDIAN FILM EDITING TECHNIQUES – A STUDY

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Abstract

Film editing technique in India witnessed swift changes due to the advancement in technology. Advanced technologies have provided various kinds of devices, equipment and software for film editing. This research basically aims to study the various technological developments and the advancement of techniques in film editing, the increased usage in special effects, the digital effects and their articulation in recent Indian movies. The study is also making an attempt to evaluate the latest softwares that are being used in film editing and their effects. Four sample movies were chosen for the analysis. The analysis results reveals that there has been maximum usage of recent techniques in the songs, various scenes and sequences in the movies. Sha

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Introduction

Film editing technology has witnessed a swift advancement in recent times. Basically, film editing can be considered as an art that enhances an entire movie. It is one of the key parts that play a vital role in the culmination of the process of making a movie. Without the process of editing, the completion of any movie is not possible.

Recent years have witnessed the evolution of a variety of techniques being used in editing films. The advancement in technologies have provided various kinds of devices, equipment and software for film editing. The process also involves the role played by the editor who is skillful enough in mastering the new techniques in various ways. The combination of the latest techniques and the skill of the editor bring out a unique piece of work in any movie. This research studies the technical aspects involved in the process of film editing.

What is film editing

Film editing is a process of selecting and assembling the various shots and sound tracks into a coherent whole. The aesthetic choices of the editor will vary according to the kind of film in which he or she is working. Editing is normally done after the shooting of a film when the production is edited, dubbed and prepared for distribution. Sharp film editing can make a good production look great. Conversely, sloppy editing can undo a solid script and even negate the fine efforts by the director, the actors, and technical crews. A good editing enhances the film's narrative and emotional power.

Origin of film editing

Film editing gradually evolved from the process of physically casting and taping together pieces of film, using a viewer such as an upright device called a moviola or a flatbed device to look at the results. Steinbeck and KEM are two companies that made flatbed editing tables. When the work print is satisfactory, it is used to make a negative cutting list which is used by a negative cutter to cut either a single strand negative or multiple rolls. The use of different rolls allows for dissolves to be created on the actual printing machine.

Effects such as super-impositions, wipes, and non-standard dissolves require additional steps of re-photography on an optical printer. The prints can be made from the negative. Since the film is

physically cut and pasted a non linear style of editing is evolved. At the work print stage, strips of the film can be placed in any order. This approach is generally considered superior to the strictly linear approach that was necessary in wider editing through the 1970s. A video 'cut' is relaying the copying of scenes from various tapes on to a master tape. Before the development of powerful computer systems that could store large numbers of data for transfer, it was necessary to make the transfer in strictly linear order. Trying to insert a shot between two shots already on the master tape could require re-assembly of the tape from that point to the end of the master tape, a time consuming process.

Types of editing

Film editing is generally classified into linear and non-linear editing. Linear video editing is the process of selecting, arranging and modifying the images and sound recorded on a video tape better captured by a video camera generated from a computer graphics program or recorded in a studio. The linear film editing used to be done by an instrument called " moviola " until the advent of computer-based non-linear editing in the early 1990s.

The development of computer technologies in the 1990s paved the way for the non-linear editing system. Non-linear editing depends on softwares used the editor, like the final cut, pro-avid and adobe premiere which are widely in use nowadays. Compared to the linear editing system, the non- linear editing system is comparatively easy to a work, less time consuming and allows the editor to use special effects.

The influence of special effects in Indian movies

Bollywood has a strange relationship with technology. Of course, they have a business to run and the financiers are hesitant to invest in something new and non-traditional. But Indian film makers are finally crossing over to the digital era where the magic is created not while shooting but during post production and at the editing table. Special effects have made an entry into Indian film industry in abig way. From 'Lagaan ' to ' Lakhya' and ' Koi mil gaya' to 'Khaki' or 'Qayamat', most films are now making use of special effects to get the right look.

Harry Baweja's "Qayamat" was India's first completely post-production, colour-graded movie. The film was shot in celluloid, but instead of giving it the white treatment the entire film was

digitally processed in the laboratory to achieve colour tones in the print. The planes and warships in the movie were digitally introduced.

The use of special effects in Indian movies till a few years ago would be confined to just a scene or two in an odd film. Now, film after film have special effects creating lead roles.

Until five years ago the special effects in Indian films were way below Hollywood standards. Digital special effects were imported in the mid 90s with foreign technicians. But things improved rapidly and today it is the Indian companies that regularly carry out top notch work for overseas customers. New generation directors patronize special effects studios like, Digital Arts Media in Bangalore, Prime Focus, Prasad Labs, Rajitaru, Maya Entertainment, U TV in Mumbai, Ramoji Rao's Film City in Hyderabad, Pentamedia and Real Image in Chennai. For the discerning Indian movie goers, computer-generated special effects are now par for the course.

Objectives of the study

To study the story line and the technical aspect of the sample movies

To research the different variety of film editing techniques used in the above sample movies along with its technical definition.

To analyse the area of importance of the latest techniques used in the sample movies.

Sample size

The sample consists of the three films: KRISH directed by Rakesh Roshan, ANNIYAN and JEANS, both directed by Shankar.

Approach study

The tool used for this research is content analysis which is a method of studying and analyzing communication in a systematic objective and quantitative manner for the purpose of measuring variables. One of the advantages of content analysis is its potential to study trends occurring over long periods and a particular period of time. Here the content analysis is conducted in order to obtain the basic information needed to analyse the latest editing trends of film editing in Indian movies.

KRISH

Director- Rakesh Roshan

The movie entwines the best of western technology and eastern medley. It is about Krishna, a man born with magical powers which he inherited from his father. The superhero goes to Singapore with his love interest, Priya. In Singapore Krishna encounters a megalomaniac scientist Dr. Siddarth Arya, who dreams of becoming god. Krishna transforms into a masked crusader to stop Dr. Arya from pursuing his destructive dreams.

Technical aspect

Bollywood's first superhero movie Krish grossed a mind blowing \$32 million in two months, making it one of Indian cinema's major hits. The credit goes in large part to the ninety minute special effects orchestrated by an SFX company. It was the Hollywood formidable visual effects duo of Marc Kobe and Craig Mumma who worked with a team of more than 100 VFX specialists in Prasad EFX and came up with stunning and technically superb VFX sequences.

The VFX team had worked on the colours, mood and the overall ambience in the film. As far as the EFX team is concerned, they had kept a realistic touch and had given just the right level of suitable colour adjustments.

ANNIYAN

Directed by Shankar

Annyan is a remix of English films "Seven" and "Primal Fear" with a dose of Shankar's own Indianness. The movie tells the story of young lawyer Ramanujam, who suffers from multiple personality disorder which turns him into a psycho killer. To justify the hero's action, there are scenes depicting social crimes and the death of the hero's sister.

Technical aspect

Annyan is the first Indian movie to be dubbed in French and released in all French speaking countries. The film took over two years to complete (2003-2005).

In a first for Indian films, this film used the time slicing technique used earlier in 'The Matrix'. Time slicing is about numerous stills on a system of 120 cameras, a special ring and precise control in the post production scene superbly choreographed by Peter Heynes.

The quality of special effects used in this movie was excellent. As for the script, the concept was the standard story about bringing justice to the needy. But this was a film where the public accepted the hero with his faults. Under Shankar's direction, the hero's acting came out very well.

JEANS

Directed by Shanker

Jeans narrates the story of twin brothers (Prasanth in dual role) who are medical students together with their father live in the USA, running a food and catering business. The movie opens with the arrival of heroine (Aishwarya Rai) and her brother for the brain tumor operation of their grandmother in the United States. One of the twins falls in love with Aishwarya. The hero's father is opposed to it, as he wants his two sons to get married to twin sisters. The story is all about how they finally convince the hero's father to accept his love for Aishwarya. Although the story content is minimal, Jeans is highly entertaining. The conclusion is that Shanker is not a great story teller, but he is an excellent movie maker.

Technical aspects

Jeans has the longest running sequence (30 minutes) of special effects amongst any film made so far, including Steven Spielberg's Jurassic Park. The special effects in the film were created by Pentafour Company in Hollywood. The two Prasanth in the film look like two 'real' people and not like the usual ugly "cut and paste job" seen in many Tamil films. This movie boasts of being the first with "DTS" sound system. The seven wonders of the world are shown in the "Pookul Olinthirikkum" song. From the technical aspects of the movie we can divide the history of Tamil films into Before and After Jeans era.

Video effects used in the sample movies

The following are some of the recent effects seen in the sample movies.

Visual effects (VFX) are being used to create an illusion. They may be simple and unobtrusive or elaborately impressive. In more extreme applications, the audience will feel the presence of some supernatural things. The special effects are subtle, their methods undetectable and are used for very practical reasons. For convenience, economy, safety, reliability and when a particular visual impact is not possible in other ways.

Table-1

Sl.No	Name of the movie	Visual effects used	Song/Scene/Sequence
1	KRISH	YES	Scene and Sequence
2			
3	ANNIYAN JEANS	YES YES	Scene and Song Scene and Song

In the first movie, the special effect is used in the fire scenes where Krishna actually takes to the flying motion while rescuing the kids during the first half of the movie. The flying action seems to be very light on the foot and the visual effect is used in the action sequence in the movie as well. In the movie Anniyan too visual effects are used in scenes, sequences and songs. The visual effects are mainly used in the places where Anniyan's role is being depicted with his eyes given the blue colour and his voice given a special echoing audio effect. There are some visual effects in one song titled "Nokia". In the movie Jeans, the visual effects are mainly used in the scenes where the twin heroes appear together and in one song where Aishwarya Rai is made to dance in a 'twin' style which is depicted as a graphic work in the movie concept.

Special effects (SFX) such as fire, explosions and fog are special crafts and best left to the expert. In amateur hands the results can be uncertain, unconvincing or dangerous .

Table -2

SN	Name of the movie	Special effects used	Song/Scene/Sequence

1.	KRISH	YES	Scene and Sequence
2.			
3.	ANNIYAN	YES	Scene and Sequence
	JEANS	YES	Scene and Sequence

The main trace of the special effects is in the fire scene where the superhero climbs the roof to rescue one of the children who is trapped in a fire. This is an action sequence too like the rope lifting stunt seen in recent Indian movies. To present a super action, the rope is hidden with the usage of special effects. In the second movie it is used in the scenes where the character of Anniyan changes into the reality of multiple personality disorder, when he meets his girlfriend before he chases to kill her. The hero portrays twin roles as Remo and Anniyan. He plays the two roles simultaneously in one shot which is very tactically presented by the usage of special effects. The sequence where Anniyan kills the first victim by using buffaloes uses special effects. In Jeans the special effects are used in one sequence in the climax where an animated dinosaur comes to greet the couples on their wedding day and in one opening scene in the movie which was shot in a US theme park where an artificially activated chimpanzee roars aloud in one scene. *Chroma key technique* has endless applications, especially when combined with other video effects. It can simulate total reality or create magical, stylized decorative displays. The opportunities are endless, the economies considerable. But it needs to be applied carefully, keeping in the mind its problems and limitations, if accurate and convincing results have to be achieved. Forethought and careful planning can save great deal of rehearsal time.

Table -3

SN	Name of the movie	Technique used	Song/Scene/Sequence
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1.	KRISH	YES	Scene
2.			
3.	ANNIYAN	YES	Song
	JEANS	YES	Song

This insertion technique is experimental in the first movie where the superhero appears with his mask, it is accompanied with magical transitions and displayed in many places in the movie. In the second movie this technique is used in almost all songs, especially with one song with the actual normal character of the Anniyan. It is classical lined rhythm which is shot in Tulip Garden in Amsterdam among a variety of coloured and orderly arranged rows of tulip flowers. Next, in the third movie this technique is used in one song titled “Anbe” which portrays a historic melodramatic concept. It has special traditional sets for each pair and the song has unique insertions of the cut shots on screen with fantastic colours.

Editing feature technique: We can pick out and change particular sections of coding, adding, replacing, omitting, copying, duplicating etc.

Table- 4

SN	Name of the movie	Technique used	Song/Scene/Sequence
1.	KRISH	YES	All Three
2.			
3.	ANNIYAN	YES	All Three
	JEANS	YES	All Three

According to table 4, this editing feature technique is not only being used in the three movies but in the making of all movies. It is a basic editing process for editing any video track or movie. In this process adding, replacing and copying is very general but duplicating is necessary for special effects movie such as those of the samples. In the first moviet it is evident that when the old man (father) of the hero is depicted to look like the hero, Hrithik Roshan plays a dual role by

using the duplicating features. In the second movie when Remo changes to Anniyan in the hospital scene, the duplicating features are used. In the third movie this feature is used to portray the twin roles of the hero.

Multi split screen is a method of showing the screen divided simultaneously into two, three, four or more sections, with or without border lines. This technique is common in action movies.

Table-5

SN	Name of the movie	Technique used	Song/Scene/Sequence
1.	KRISH	YES	Sequence
2.			
3.	ANNIYAN	YES	Nil
	JEANS	YES	Scene

According to table-5 this technique is particularly traced in the first movie in the scenes where the future computer is examined by the scientist and in the visuals and the scientist and the hero see the various shots of the future in one full screen split into small squares for different sequences. In the third movie this kind of effect is evident in one scene when Aishwarya thinks about her past life and the circumstances that happened in the second half of the movie, when she repents for her mistakes. Her thoughts are shown in a double split screen.

Next border technique normally puts a color border around a small picture that has been inserted within the frame. This technique is basically used in promoting the titles of a movie or to highlight the entry of the hero or to show the hero or the heroine. The purpose of this technique is to support and depict the enhancement of the visual.

Table-6

SN	Name of the	Technique used	Song/Scene/Sequence

	movie		
1.	KRISH	NO	Nil
2.			
3.	ANNIYAN	YES	Song
	JEANS	NO	
			Nil

According to the table the border technique is a typical form of effect used in the second movie in one classical duet, which has a special interior set which looks very traditional. Here the song is actually being visualized as of it is seen through a TV frame or theatre frame in the main display. The frame has a colorful and flowery border to cover the acting.

Breakthrough/Videometer is another recent technique which allows one picture to dissolve in tonal order into another. It is mainly used in normal cut shots or in song sequences. Its purpose is to merge the visual with the sequence.

Table-7

SN	Name of the movie	Technique used	Song/Scene/Sequence
1.	KRISH	YES	Scene and song
2.			
3.	ANNIYAN	YES	Scene and song
	JEANS	YES	
			Scene and song

According to table-7 this particular technique is very frequently used in all the three movies in various scenes and in the songs which have cut shots and joints. It is used in all movies as it is a very basic and commercial technique in editing.

Another technique is *Matrix-Wipe* where the picture resembles a jigsaw puzzle in square sections. As pieces are removed at random corresponding parts of the new picture beneath are revealed until it is finally complete. The importance of this effect is that it visualizes a rich transition on the screen. This technique is mainly noticeable in emotional scenes and in song tracks. Its use is also evident in 3-D and animation movies.

Table -8

SN	Name of the movie	Technique used	Song/Scene/Sequence
1.	KRISH	NO	Nil
2.			
3.	ANNIYAN	NO	Nil
	JEANS	NO	Nil

According to table 8, this particular technique recently introduced in the Indian special effect movies is not being used in these sample movies.

Then we have *Effects Dissolve* where it is a smooth transition between two dissimilar effects. This effect is also frequently used to add rituals to song visuals.

Table-9

SN	Name of the movie	Technique used	Song/Scene/Sequence

1.	KRISH	YES	Scene and song
2.			
3.	ANNIYAN	YES	Scene and song
	JEANS	YES	Song

In the first movie *Effects Dissolve* is used when the father of *Krishna* while examining the super computer thinks of his past when his wife gave birth to his son. His thoughts are shown with dissolve effects as a flashback scene and it is noticeable in the song shots too. In the second movie this effect is evident when Remo comes to meet his lady love in the middle of the night. He sits on the open roof which is shown against black sky with stars and while he speaks in between the stars move out like an animated visual. Here the dissolve effect is used in the sky visuals, and in the high-tech duet titled 'Nokia', in the dance in front of a car scene. Some dissolve with waves effects is noticed. In the last movie the dissolve effect is noticed in the love duet climax showing the Seven Wonders of the World, in some shots where the Eiffel Tower is shown at a longer distance with the shot covering the couple.

Since *Avid Editng* technology is a frequently used software in editing recent Indian movies, it is necessary to study the effects produced by it and its usages.

Some of the latest editng techniques and frequently used in the Indian movies from the Avid Media Composer are:

Blend is a technique that allows dipping and dissolving of colour and fading from and into colour and allows picture super imposition also. This is mainly used in song sequences. Its importance is that it supports the mood of the visual. Then there is a **box wipe** and **edge wipe** used in both songs and scenes to show rituals. Next, there is a technique called **Illusion FX** which allows color mix, film gains, fluid blur and morph motion, blur pattern generator, radical blur, random blend, to ripple, roll up, to sparkle, to swirl and even to twist and wave transitions. This effect is used in emotional or any particular scene where it becomes necessary for enhancing the visual according to the concept.

Table-11

SN	Name of the movie	Effects used	Song/Scene/Sequence
1.	KRISH	Illusion FX	Sequence
2.	ANNIYAN	Illusion FX	Sequence
3.	JEANS	Illusion FX	Nil

Table-11 shows that in the first movie this technique was used in one stunt sequence in the climax part where the superhero performs a kung-fu stunt in a forest garden. The real fight movements are done with artificial techniques which make use of most of the features of the illusion effects such as blend, ripple, swirl etc. In the second movie this effect is evident in a karate stunt sequence when Anniyan chases the heroine to kill her. Here again effects such as roll up, swirl and twist are used.

It also produces a wide range of **plasma techniques** such as **plasma wipe borders** which produce metal frames, round borders, soft sky visuals, square borders, stone frames and wood frames transitions. The **plasma wipe center** produces brick, canvas, elliptical and twirl effects. The plasma effects are mainly used in the titles of the films or in songs.

Table-12

SN	Name of the movie	Effects used	Song/Scene/Sequence
1.	KRISH	Non	Nil
2.	ANNIYAN	Plasma wipe borders	Song
3.	JEANS	Plasma wipe center	Song

According to table -22, the plasma wipe border is used in the second movie in two songs, in one classical rhythmic song in the tulip garden and in one folksong in the second half of the movie, producing effects like soft sky. As for the third movie, the plasma wipe center is used in the classical song where Aishwarya dances on the stage. Here the twirl effect is used when the computer morph of the heroine collapses, when it becomes a naked skelton and when it runs and twirls very fast in the middle and across the screen.

There is a wide range of *Sapphire techniques* like the *Sapphire 2 blur+ sharpen* and *Sapphire 2 render* which produce S2-edge blur, blur motion and even grids transition. This effect is being used mainly in the editing of special effects and 3-D movies to add richness to the effects. Even *Sapphire 2 transitions* are available which give bubble, diffuse, glow, luma, puddle, speckle, static and vortex transitions. This technique can be noticed in normal song sequences to bring out the mood of the song.

Table- 13

SN	Name of the movie	Effects used	Song/Scene/Sequence
1.	KRISH	All sapphire techniques	Sequence
2.	ANNIYAN	All sapphire techniques	Sequence
3.	JEANS	Sapphire 2 transitions	Sequence and song

According to the table above, the *sapphire techniques* are used in the first movie in one particular sequence where the superhero chases the scientist to his laboratory in the island. The superhero jumps over the buildings, flies across the trees and glides over air and over water. In all these areas effects like S2-edge blur and blur motion are used. In the second movie when Anniyan chases the heroine to kill her, he jumps down tall buildings and climbs over huge buses and trucks moving on the roads. The effects like render, motion blur and diffuse and puddle are used. In the third movie, the dual role song by the heroine comprises of a visual in which the real

image of Aishwarya runs across her animated visual image, which is made to dance. When the real one runs in between the animated image, some dilution occurs which is depicted by visual effects such as *Sapphire 2 transitions*.

Findings

- 1.The foremost finding of the study is that the technology in the field of editing has tremendously advanced.
- 2.The technological advancement has paved the way for the emergence of more advanced softwares for film editing.
- 3.The advanced softwares have a wide range of editing techniques, transitions and effects.
- 4.There are more equipment in the new systems for the purpose of editing.
- 5.Indian movies are dedicated to using many special effects; many box office hit movies have used a variety of special effects, digital effects and transitions.
- 6.The new techniques are most useful when the concept of the movie has a unique sequence which is very different from that of a normal commercial movie.
- 7.Not only Bollywood produces different kinds of movies apart from the commercial ones, even Kollywood is producing different conceptual movies which require the usage of special effects and latest editing techniques.
- 8.Tollywood movies are no exception to this practice. Many Telugu and Kannada movies are being upgraded with special effects and transitions.

Findings based on analysis

1. The overall outcome of the above analysis relating to the latest editing techniques used in the three movies reveals that there has been maximum usage of these recent techniques in the songs, various scenes and sequences in the movies. This may be due to the requirement of the concept or the visuals and their importance.
2. It is true that some special effects were not used in any of the three sample movies, but their usage is in evidence in many other recent Indian movies.
- 3.

CONCLUSION

The emerging trends researched in this study have influenced both the video programming and video editing. However, the editors still follow the basic procedures for the three main post-

production stages. First, video editing is a process, a progression that can be broken into a logical sequence of steps. Second, it is both a technical and creative effort. It requires not only knowledge about editing equipment, but also a feel for the artistic principle that determines how a scene could be pieced together. Finally and perhaps most importantly, editing is a cooperative process, a team activity that requires the involvement and inputs from the producer, the director, the associate director, the script writer, audio technicians, videotape operators and, of course, the video editor.

Since there are plenty of skilled editors in the Indian film industries, the field of editing with advanced technology is acquiring a well standardized platform. There are creative editors in not only Bollywood, but there are also many well-trained and skillful film editors in Kollywood and other regional film industries. The experimentation with the new visual and digital effects has now framed the border of the emerging trends in the field of film editing. Different editing softwares with their latest versions have been updating the new range and variety of techniques and transitions along with the usage of digital and special effects. The upcoming boom will no doubt pave the way for many more latest softwares with many more advanced collection of special editing effects. The technological upgradations will push the software sector to launch and manipulate a wide expansion of many more innovative editing technologies to enrich the film editing process.

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