



# Impact Of Technology On Film Production: Discourse Of Analog And Digital Imaging

**M. Raju**

**Associate Professor**

Department of Visual Communication

Dr. Ambedkar Government Arts College, Vyasarpadi, Chennai-600039, Tamil Nadu, INDIA

## Abstract

The film is always reinventing and adopting the changes related to technological innovations. From the invention of film as a medium till the arrival of digital technology, it constantly worked on improving camera formats, visual language, and mounting techniques but the fact that the camera cannot create the content by itself. It is a capturing device, that captures whatever is placed in front of it. Digital technology explored the possibilities of space, camera, characters, and sound with the help of computer graphics. With a capturing device, the directors can narrate the story through their creative thought and presentation. In the early stages, the film was recorded as a stage play. Later some directors made the film with their directorial touch which was a unique treat. The aesthetics of visuals played a vital role in presenting the story. presently creativity is the dominant aspect and digital filmmaking will make all the impossible possible.

**Key Words: Analog, Digital, Visual Aesthetics, Narration, Convergent technology**

## Introduction

The film is a unique medium that adopts a change in all aspects of its process right from production to distribution. In the process of image creation, there are two techniques used, one is analogue and the other is digital. Analogue is a wave pattern and digital is a numeric pattern. Though analog is a superior-quality image rendering technique, the only technique that can produce a continuous tone, had some disadvantages in terms of carrying information in the broadcasting process because of the rich quality of the information the file size was larger compared to digital transmission. The other disadvantage is that the quality of production and distribution vary from one another. For example, when media content is produced with costly equipment and has high-resolution images, and when it's delivered to a low-cost television set in a rural area will not give the

same quality of image. We witnessed this when the direction of the wind changed the quality of the image received by the low-cost television, jumping into frames moving from top to bottom. Someone would be running to the rooftop to adjust the antenna and asking the person who is sitting in front of the television set, whether the image is displayed in a viewable quality. This was the biggest challenge in the analog technique which is superior and not able to be taken to all parts of the transmission boundaries in a uniform way as the reception gadget also should be a quality instrument. The digital is a binary code combination and **IO** is shuffled with multiple permutations. In the case of the movie again the quality of production does not match the reception quality of the television, though the films were transmitted through television people tend to watch the films in theatres. This advantage was keeping the film business healthy till the new economic policy was implemented in the year 1990.

### **Creativity and Analog Film Production**

The filmmaking content was limited to melodrama, the stage drama was shot by the camera by making the locations in the studio. There was not much scope to narrate the story visually. Though it was an analog film production Mahendiran, Balu Mahendra, Bharathiraja, and Mani Ratnam tried to treat the films visually, without the special effects, they interpreted the aesthetics of visuals and the way the images were presented to the audience is remarkable.

### **Creativity and Digital Film Production**

The digital platform provides endless opportunities for creative visual production, imagining any unknown concept or visualizing beyond reality that could be produced with digital imaging, number software available to design and execute live characters and virtual worlds. Making these characters room around the virtual space is possible with animation techniques. With the help of digital imaging techniques. A single format that connects across the production stages is made possible through convergent technology.

### **Methodology**

The images are taken from the selective films of directors who made a signature in the filmmaking with their directorial touch. Selective images with scope to discuss with creative aspects of the films are presented with the description, analyzed, and interpreted with independent and dependent variables.

# Data Presentation

## Transforming from Melodrama to Visual Narration (Analog Images)



*Mullum Malarum (1978) Mahaendran*



*Moodu Pani (1980) Balu Mahaendra*



*Veedu (1988) Balu Mahaendra*



*Muthal Mariyathai (1985) Bharathi raja*



*Kadalora Kavithaigal (1986) Bharathi raja*



*Agni Natchathiram (1988) Mani Ratnam*



*Uyire (1998) Mani Ratnam*

<b>Data Presentation</b>		
<b>Sl. No</b>	<b>Image</b>	<b>Description</b>
<b>1</b>	<b>A1</b>	The image exposes the action happening in the hill area, and the procession reveals that it's a cultural festival of the people living there. The costume of the group divulges the community they belong to. Low angle shot by wide angle lens.
<b>2</b>	<b>A2</b>	A young lady enjoys the moment of rain, her facial expression shows her excitement about being in the rain, and the background blurring helps to isolate the subject from the background, Mid-close-up shot by Telephoto lens.
<b>3</b>	<b>A3</b>	A young couple were chatting at an intimate stage. The eye contact exposes the honesty of the subject they speak. The staring look of the young lady reveals the amount of affection she has for him, a suggestion shot by a Telephoto lens.
<b>4</b>	<b>A4</b>	An old man is moving. The mood of the frame is sober. The frame is composed of three partitions of the visible place. Light and shade are used to narrate the aspects of life. A long shot by a Wide-angle lens.
<b>5</b>	<b>A5</b>	A middle-aged man and a young woman. As they were not sitting equally, they were not couples. The contact of the body is so limited revealing the honesty in their relationship. The costume of the couple discloses that they are not of the same class. A mid-shot by the normal lens.
<b>6</b>	<b>A6</b>	A couple in a conversation at the seashore. the costume of the lady reveals that she belongs to a decent middle-class and the costume of the man reveals he is from grassroot. The body language of the lady reveals that she is in a commanding position over the man. A long shot by a normal lens
<b>7</b>	<b>A7</b>	A young couple is in a rhythmic action. The young lady is staring at the man. The posture of the man exposes the happiness of being with her. The normal shot is dramatized by using the filter in front of the lights. A Long shot with a normal lens.
<b>8</b>	<b>A8</b>	A young couple is together without completion of being together. The young woman is not looking at the face of the man, but he continuously makes his conversation. The net before the couple suggests that there is an obstacle to continuing their relationship. Mid-close-up shot by the normal lens.

## Trasforming from Reality to Virtual Reality (Digital imaging)

**D1**



*Avatar (2009) James Cameron*

**D2**



*Enthiran (2010) S. Shankar*

**D3**



*Avatar (2009) James Cameron*

### Data Presentation

Sl. No	Image	Description
1	D1	A mountain valley massive in size that cannot be identified with the geography of Earth. The hill-sized rocks are floating in the air. A spacecraft is leading hundreds of helicopters like the Air Force.
2	D2	A small-sized robot sticks together with the magnetic force and takes the form of a giant robot. The army troops surrounding the giant robot look up with fear. The architectural design of the backdrop reveals it is not a living area.
3	D3	A mountain valley massive in size that cannot be identified with the geography of Earth. The hill-sized rocks are floating in the air. A giant species cannot be witnessed in any part of the earth is leading the way and the other species smaller in size are following. A living creature resembling a human being is sitting on the wings of the species.

### Analysis and Interpretation of Data

Sl. No	Dependent Variable	Independent Variable <b>Analog Imaging</b>	Independent Variable <b>Digital imaging</b>
1.	NARRATION	The scriptwriter and director will work on the scripts with the conceivable production possibilities. <i>Mullum Malarum, Moodu Pani, Veedu, Mudal Mariyathai, kadaloora Kavithaigal, Agni natchathram</i> and <i>Uyire</i> are drama films.	The digital production gives a high scope for creativity. The <i>Enthiran</i> a Drama blended with the science Fiction sequences. <i>Avatar</i> is a fantasy film over 90% of the production is done with digital imaging with computer graphics.
2.	SPACE	The space in which the story was shot through the analog imaging mostly with the physical space. The physical camera and lenses have limitations in operating and capturing the visual action.	The space in which the story was happening in the digital imaging are mostly with the virtual space. The virtual camera within the computer can create any action sequence possible.
3.	DUPLICATION	The process of duplication the objects or the human characters is highly labouring.	Duplication is an easy job by using the computer
4.	ACTION	Live-action shots are usually car chasing or fighting with the gang.	Action sequences are a major part of digital filmmaking. Computer graphics, Animation, and VFX are made possible of any impossible.

## Conclusion

The history of the Tamil film industry cannot be remembered without these film personalities Mahendiran, Balu Mahendra, Bharathiraja, and Mani Ratnam. Mahendran played with human emotions and the poetic visualization of song sequences using montage cutting in his films *Nenjathai Killathe* (1981), *Metti* (1982). Balu Mahendra cameraman cum director pioneer in Tamil cinematography. His camera work will display millions of tonal values within the frame. The ability to control and explore natural light is witnessed in his film. Bharathiraja revealed the nuances of village life through his films. He made the characters with the inspirations of real-life situations. The local slang of dialogue delivery was used positively by him. Mani Ratnam minimized the dialogue and tried to treat the film medium more visually than dialogue-oriented. He experimented with adopting incidents from real life and made a docu-fiction *Nayagan* (1987). Analog imaging is the only instrument that filmmakers use to express themselves to the film audience. Shankar made his debut film in 1993 as a next-gen director who made experimental digital interventions in his films *Gentleman* (1993), *Kadhalan* (1994), and *Mudhalvan* (1999). He made a full-length science fiction *Enthiran* (2010) and made an all-time high collection at the Tamil Box office. The advantage of working in a digital format is shooting in a digital camera, editing in a non-linear console, colour correction, special effect, wire removal, audio effects, BGM, and compositing the entire production can collaborate and in theatres, QUBE digital projection will reach the audience. The superior technology is available to the filmmakers and the creativity is to be explored to provide new experiences to the audience.

## References

- Ahmed, S. & Sinha, A. (2016). When it pays to wait: Optimizing release timing decisions for secondary channels in the film industry. *Journal of Marketing*, 80(4), 20-38.
- Atton, C. (2008). Alternative media and journalism practice. In: M. Boler (Ed.), *Digital media and democracy: tactics in hard times* (pp. 213-227). Cambridge: The MIT Press.
- Aveyard, K. (2016). Film consumption in the 21st century: Engaging with non-theatrical viewing. *Media International Australia*, 160(1), 140-149.
- Biswal, S.K. (2019). Disability, deficiency, and excess: A cinematic construction of disability in popular odia cinema. *Media Watch*, 10(3), 723-736. Bondarenko,
- T.G., Maksimova, T.P. & Zhdanova, O.A. (2021). Technology transformation in education: Consequences of digitalization. *Lecture Notes in Networks and Systems*, 133, 659–666.
- Culkin, N. & Randle, K. (2003). *Digital cinema: Opportunities and challenges*. Film industry research group. Hertfordshire: University of Hertfordshire. 11 *Impact of Digital Technologies on the Development of Modern Film Production and Television*
- Elberse, A. & Eliashberg, J. (2003). Demand and supply dynamics of sequentially released products in international markets: The case of motion pictures. *Marketing Science*, 22(4), 329-354.
- Ezdina, N. (2021). The neo-industrial nature of the convergence of information and cognitive technologies. *SHS Web of Conferences*, 93, article number 01002. Fadeeva, A. (2020). Means of mass communication as a tool for cultural media product export: A case of South Korea. *Information Age*, 4(1), 25-29. Fair, J. (2006). *The impact of digital technology upon the filmmaking production process*. Dublin: MA in Film Studies.
- Fritzschea, A. & Dürrbeck, K. (2019). Technology before engineering: How James bond films mediate between fiction and reality in the portrayal of innovation. *Technovation*, 92, 10-17.

Gaustad, T. (2019). How streaming services make cinema more important: Lessons from Norway. *Nordic Journal of Media Studies*, 1, 67-84. Grundström, H. (2018). What digital revolution? Cinema-going as practice. *Journal of Audience and Reception Studies*, 15(1), 5-22.

Panda, I. (2019). Impact of Modern Digital Technologies on Film Industry. Retrieved from: <https://ivypanda.com/essays/impact-of-modern-digital-technologies-on-film-industry/> accessed 10th September 2021.

Patynkova, R.V., Minskaya, A.N., Sergienko, V.A. & Tarasenko, E.V. (2018). System of Technologies for Building the Information Space: Coverage Tools. *Journal of Communication: Media Watch*, 9(3), 418-425.

Prokopenko, O., Larina, Y., Chetveryk, O., Kravtsov, S., Rozhko, N. & Lorvi, I. (2019). Digital-toolkit for promoting tourist destinations. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 4982-4987. DOI:10.35940/ijitee.L3745.1081219\

Volkova, P., Luginina, A., Saenko, N. & Samusenkov, V. (2020). Virtual reality: Pro et contra. *Journal of Social Studies Education Research*, 11(4), 190–203.

