

SCENOGRAPHY PROCESS IN MOVIES AND PLAY PRODUCTIONS

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ABSTRACT

Scenography in movie and play production is a creative process done by production designers and art directors. This is an important and initial part of any kind of movie and play production. The goal of this paper is to investigate the process of scenography in movies and play productions. Where the paper will show the pre-production and production process of movie and play production scenography. This paper will also show the similarities and differences, importance, and relationship between arts and science in movie and play production scenography. As an artist, I believe it is my intrinsic responsibility to share my study about movie and play production scenography with the researchers and design students, as well as those who are interested in working in the scenic design industry. Using literature reviews, document analysis, surveys, and case studies, I found that uses of science are available in the scenography process. This research study will also ensure that modern technology upholds and enhances the processes of scenography in movie and play production and is manageable for production designers and art directors.

Keywords: Scenography, Movies, Play Productions, Drawing, Model Making.

Introduction

The art and practice of designing and building a real, virtual, or visual environment for movies, TV series, and theatrical productions is known as scenography. To enhance narrative and produce an immersive experience, it involves carefully organising architectural elements, room configurations, and ornamental accents (Malloy 2022, 1).

Scenography is a specialized area of theatre productions; props, makeup, and costumes are just a few of the intricate elements that make up scenography. Another of these intricate components of theatre presentations is scenography. Set and scenic designers are in charge of constructing the stage or setting that tells the tale, using scenes of rooms, buildings, and outdoor areas. The set's dimensions and angles must be the basis for the presentation elements; the scenes always shift or flow through the furniture or items that occupy them (Howard 2009, 1-3).

Often referred to as scenic design, scenography is a specialized area of filmmaking that focuses on creating the actual environment in which a film is set. This involves planning, arranging, and creating the tactile and visual settings in which events take place and characters interact. The production designer or art director, who collaborates closely with the filmmaker to bring the visual elements of the script to life, is frequently in charge of the scenography in movie production (Barnwell 2022, 1-8).

Methodology: The research study utilized both primary and secondary data. Primary data was gathered through visits to movie and play production sets, as well as interviews with art directors and production designers in the movie and play production industries. Secondary data were sourced from books, theses, journals, websites, and magazines.

The Processes of Scenography

Script Reading and Analysis: The reading of the script at the commencement of the production in both theatre and cinema is always the first step in the scenic design process. Reading the script is a crucial and active step in the procedure. Decisions about what to do and how to begin are listed here. Designers simply cannot produce a good scenario until they have a thorough understanding of it. Solving a mystery

is the goal of script analysis. It is where directors and designers discuss what should be included in the text and offer their thoughts. This happens in both theatrical and movie scenography (**Porter 2014, 103;113-114**).

Visual Research with Concept Drawing and Painting: The process of creativity is fuelled by visual exploration. Identifying images that will spark the designer's creativity and connecting with the themes and ideas of the story is a productive research technique. The reading and analytical phases of the design process are when designers begin to acquire inspiration if they pay attention to them. By posing fresh queries and opportunities, both exercises ought to pique their interest. In order to create visually appealing work, designers need to look for visual inspiration (**Porter 2014, 120-122**).

Sketching is crucial to the draughting process. Designers can solve problems more quickly when they use sketches. Designers sketch their ideas and present them to the directors after reading the script. Once the design has been approved by the directors, the designer will present scene concepts to the rest of the production team so they can grasp the directors' perspective. Making the creation of films and plays a reality begins with this (**Dorn and Shanda 2012, 136**) (**Figure 1**).

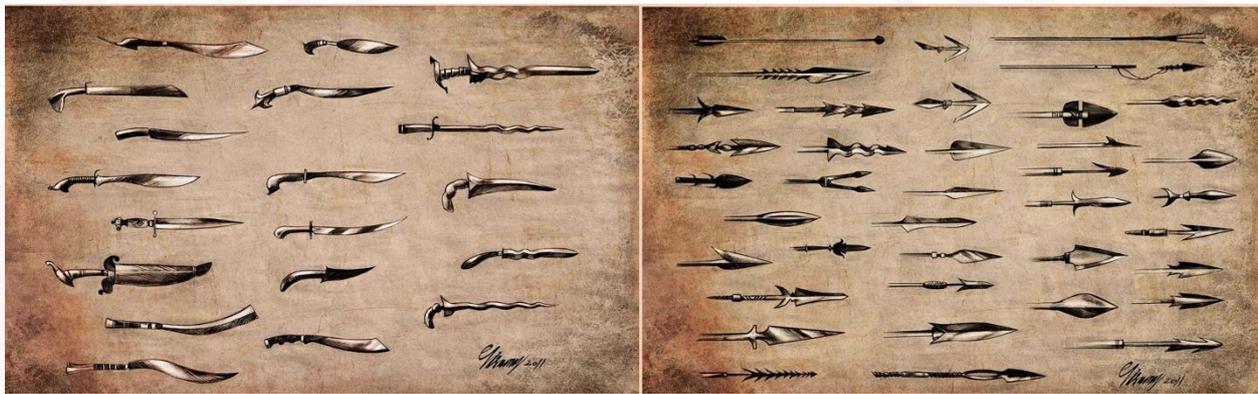


Figure 1: Visual Research and Concept Drawing of Weapons for “Baahubali” Series, Designed by Mr. Vishwanath Sundaram.

Selection/Making of Costumes and Properties for Set and Characters: Making or choosing the clothes for the scene background is always required when designing a scene for a movie or play. A black background must be used behind sequences of misery and pain in a play production, for instance, because the scenes cannot be presented with a colourful background. On a movie set, this usually happens in scenes with visual effects and special effects. An item that sets the mood of a scene or the character of a narrative is called a prop. Anything that is used on a set during a performance might be considered a prop. The many functions of the props used in the scenes are important to the characters, plot, and situation (**Brutto 2002, 21, 45; 56**).

Main Findings

Through this research study, we found some additional results, which are important to know for the scholars and professionals who are related to this field. There are three things we found through this research study.

Relationship between Art and Science in Scenography

Scenographers and art directors play a key role in turning texts into visually and functionally captivating environments in theatre and movies, serving as prime examples of the blending of the creative arts and sciences. The visual representations of people's imaginations and creative abilities are portrayed in the arts, which create works that are largely appreciated for their aesthetic value or emotional impact. Therefore, scenography is considered an art form (**Brutto 2002, 1; 29-31**). The sciences and the arts may

be closely related or clearly distinct at different points in time. Over the past century, however, there has been a formal increase in the intersection of art and science as separate but complementary professions (**Popat and Palmer 2005, 47-48**).

Numerous scientific disciplines are employed in theatre and film scenography, including mathematics, physics, chemistry, colour and lighting, special effects, visual effects, computer-generated imagery, and more. These disciplines are partially accessible in both scenography domains (**Sundaram; Vadivelan; Sabbani; Nigotre Sabbani; Reddy; Kaithwas; Kunju, pers. comm., April, 2024**).

- **Sketch/Drawing and Mathematics:** The majority of designers use thumbnail drawings and sketches to convey their ideas. Before being performed on set, these are transformed into scale designs for a three-dimensional model. To develop and convey their design concepts and start bringing them to life, designers must use sketches (**Baker, M.J. et al. 2020, 5**) (**Figure 2**). The ground plan, front elevation, and side elevation processes are being progressively initiated by scale drawing and conversion. Drawing would not have been feasible without precise measurement; thus, the designers were already using mathematics before they began this process. To ensure that every property in the scene is precisely the right size, the designer will measure everything before drawing it; otherwise, the properties won't look as good in the scene (**Brutto 2002, 57-58**). We already know that mathematics is a component of science, and without it, it would be difficult to create a scenic model on paper or in real life. (**Rout 2022, 348; 352-359**).



Figure 2: Sketch of Weapons for “Baahubali” movies, designed by Mr. Vishwanath Sundaram.

- **Role of Colours:** Colours play a crucial role in scenography. In the real world, on TV, and on stage, colours typically serve to subtly and powerfully express emotions. Any movie or theatre scene must include colours as a key aesthetic element. The lights allow the audience to see a scene on a movie screen or a play in a theatre. Making everything on stage visible and intelligible is the primary goal of lighting, and the second is to provide the right tone for each scene and moment in the play. The audience is given an emotional experience by combining the lighting and set components, which is influenced in part by colour perception (**Chagnolleau 2013, 2**). Colour is used by scenographers in both theatre and film to affect the sets, costumes, and props (**Archer et al. 2010, 196; 232**). Since colours are the components of light and work closely together, designers believe that paintings are a tremendous source of inspiration for composition, lighting, and colour (**Brutto 2002, 79; 85-86**). The aforementioned elements demonstrate the exquisite and essential role that colour and light play in the creation of theatrical and film sets, a branch of science that was developed by scientist Isaac Newton.
- **Physics and Chemistry:** The scenography is merely a localised collection of properties (**Maquil, The Colour Table 2010, 2-3; 11-12**), and chemistry and physics are used when discussing properties.

- **Applications of Physics:** Physics is the study of matter, energy, motion, force, and how these interact. Physics describes how objects move, behave in nature, and fall. In the process of designing a set, designers and crews use every aspect of physics to create properties, set up lights, and use concept drawings and colours. They examine everything from how materials behave when used to create properties to how the properties move after creation and whether they are functioning properly (**Mohindroo 1997, 18**).

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- **Application of Chemistry:** The science of chemistry studies the composition, properties, and behavior of matter in order to comprehend the effects of chemical reactions. A chemical change is the transformation of one material into another, creating new materials with distinct characteristics and creating one or more substances. When two or more reactants are mixed together and a change in temperature, colour, or other characteristics is noticed, a chemical reaction is probably going to happen (**Cartechini et al. 2021, 189**).

In scenography, everything that absorbs visible light particles has colour. The colour of light that can pass through a transparent item determines its exact colour. The colour of an object that is transparent is determined by the colours of light that can flow through. An object's colour is determined by the light it does not absorb (**Chandrasekaran 2001, 66**). The set's single-colour light cannot be changed chemically, but LED (Light-Emitting Diode) and RGB (Red, Green, and Blue) lights may (**John, Toedt et al. 2005, 152-153**).

Usually, these things take place in play and movie productions. In the absence of that, scenography would involve chemical alterations such as using smoke on set, setting fire on set, exploding a car or building on a movie set, altering the natural colour of any property that cannot be recovered, and adjusting the brightness of the lights. This analysis and discussion lead us to the conclusion that chemistry and physics are incorporated into scenography.

- **Computer Science:** A unique and essential invention that helps people and the globe is computer science. Computer architecture, artificial intelligence, software systems, graphics, computational science, and software engineering are among its areas of expertise. In theatre and cinema, scenography usually falls under the graphics area. To make it feasible, computer science is used in scenography everywhere, and sketches are created using various software programs (**Hoveyda 2000, 67**). The field of computer science frequently exhibits and offers a high degree of production design. Even filtering and colouring the set and properties need the use of a computer, as can be shown if we closely examine the many procedures that are intimately linked to the computer-assisted production design stages. Computer science is only used in a few theatre productions, such as for digital set modelling and sound design. But in the process of creating a movie set, it is used extensively with various processes like visual effects, visual special effects, computer-generated imagery, compositing, matte painting, motion capture, digital effects, animation, lighting, and look (**Gress 2014, 108;124;143;323-327**).
- **VFX:** VFX, or visual effects, are always created using computer software. In addition to adding locations, stunts, and sets, visual effects can be used to build entire virtual worlds, expand existing sets, add computer-generated features, and create sets that are impossible, expensive, or time-consuming to make in real life. Visual effects, often known as VFX, are solely utilised in movie sets and not in stage productions. Because in post-production, visual effects are always added by

filmmakers. Examples of pre-VFX are blue and green displays with various features and cables cooperating. Digitally eliminating cables and blue/green screens during post-production is known as visual effects (VFX) (Ryu 2007, 5-7) (Figure 3).



Figure 3: Scenic Sets for VFX Designed by Mr. Ramakrishna Sabbani for Film “Antariksham 9000 KMPH”.

- **CGI:** Computer-generated Imagery or CGI is produced by imaging software for a variety of uses, such as visual art, advertising, anatomical modelling, engineering, architecture, television (TV) shows, video game art, and special effects in movies. Furthermore, CGI is used in applications for virtual reality (VR) and augmented reality (AR) (Abbott 2006, 89-92). CGI is utilised in film scenography for both three-dimensional items, places, and surroundings as well as two-dimensional computer-generated imagery, including text, objects, backdrops, and environments (Figure 4).



Figure 4: Example of CGI from the film set “Ponniyan Selvan”, Conceptually Designed behind the Set Model by Mr. Vishwanath Sundaram.

Nowadays, when someone in the movie business mentions CGI technology at random, they almost invariably mention visual effects work as well. In a movie scenography or production, computer-generated imagery (CGI) can incorporate 3D models of several objects, such as humans, monsters, buildings, vehicles, explosions, and more. Many well-known productions use these kinds of computer graphics effects (Polozuns 2013, Computer Graphics, 10-11; 31).

We can conclude from the aforementioned talks and evidence that computer science has applications in play production and film scenography.

Differences between Movie and Play Production Processes:

“The relationship between theatre and film is far older and closer than is commonly assumed” (Bazin 2004, 81).

Although the scenography used in play and film productions varies, the initial steps are somewhat similar due to the methods involved. However, there are many hidden differences between movie and play production scenography.

- **Views from the Sides:** After a scene is recorded, it can be viewed from several camera perspectives, including top, front up, front down, right, left, straight, and angled perspectives. However, the audience can only appreciate the design from the side they will be sitting on, as it is difficult to see from more than one side in a play production (**Ramirez 2012, 49**).
- **Matte Painting:** Originally used in the film business, matte painting was a method used by visual effects artists and filmmakers to overlay scenes and create surprising illusions and truths (**Elosua, AB, & Aguirre, ME 2022, 86**). As opposed to theatre scenography, designers or art directors are provided the outlook of the characters, properties, and settings with matte painting before they begin work on a movie set (**McClellan 2022, 178**). Pencil, paper and watercolours are used in theatre to practise concept drawing and sketching. However, matte painting is accomplished in the film business with a variety of software programs.
- **Pre-Visualisations of Scene:** Artists from many departments will realize the vision of the production designer and art director once the main design for the film set has been chosen. (**McClellan 2022, 46; 49**) One way to achieve this would be to create pictures or animations of sequences that would later be used as a template for the movie, this does not occur in theatre scenography.
- **Visual Development:** In theatrical scenography, designers create a set model or minimal outlook for a single set in a constrained space. However, because the scenography in movies uses a variety of settings in various situations, set viewpoints are constantly increasingly important. The characters may even have only five or six characteristics (**Sundaram, pers. comm., April 24, 2024**).
- **Time to make a set for scenes:** A theatre set can be designed in 5–10 days, but for periodical, sci-fi, or mythical films, it can take up to 20 days, and occasionally up to 6 months. Film and theatrical scenography differ greatly in this regard (**McAuley 1988, 50**).
- **Virtual Studio:** Film scenography is being surpassed by modern technology. One of the contemporary technologies that have greatly influenced the design of movie sets is virtual studios (**Cremona and Kavakli 2023, 425**). We don't see this kind of technology used in theatrical scenography because plays are always performed live.
- **Unique Properties for VFX:** In contrast to theatre scenography, cinema scenography allows us to view a wide variety of remarkable properties for people (**Michaels 1998, 31**). For instance, Vallaladeva's War Chariot on a theatre set, as made for the Baahubali films (**Figure 5**).



Figure 5: War Chariot from “Baahubali” Movies, Designed by Mr. Vishwanath Sundaram and created by Mr. Vadivelan Velu.

The bulls of the chariot were merely properties that weren't genuine because they were VFX properties for the war chariot and the set. Additionally, when creating a set, it cannot be seen in a theatre (Sundaram, pers. comm., April 24, 2024).

- **Size of Properties:** A theatre performance always takes place in a small space, usually underground. Due to the performance space's existing limitations of being between 1000 and 5000 square feet, property sizes are always restricted. Massive statues are examples of how the assets in the film's scenography can take up more room than that. On a stage set, such things are not seen (Sundaram, pers. comm., April 24, 2024).
- **Properties Options:** Properties for the set are fixed for all time in a theatre. There is no way to change or swap them out while the performance is in progress. But, depending on the requirements of the actors or scenes, there are always a multitude of options for properties to fit the set in a movie. Reserve properties can be used if certain properties are not operational throughout the performance or do not match the set (Vadivelan, pers. comm., April 25, 2024).

Significance of Scenography

The audience's interest in theatrical plays and films has grown daily due to the stunning scenery and fresh worlds they present (Bennett 1988, 220-221). In addition to educating the audience about the play or movie they are watching; the scenography can also tell them about the characters on stage and screen (Barnwell 2004, 11). The most effective theatrical and film productions always take into account how the audience will see the scenography concerning the narrative (Bennett 1988, 295). When the curtain moves or the scene is displayed on the screen at the start of a play or movie, the audience's attention is drawn to the set's appearance, which keeps them eager to see "What's Coming in the Next Scene!" (Brutto 2002: 25). Scenography can be either realistic and artistic, abstract, or in the midst of the two (Brutto 2002, 48;62). The main objective of scenography is always to give the audience a sense of how the scene should be (Bennett 1988, 301-304). It can also be an opportunity to create something visually appealing to draw in the audience. Because some ideas or themes of the tale are initially presented through the scene and its architecture, rather than orally by the characters, cinema and theatre scenography is more important than in other genres (Brutto 2002,13).

The basic subject of a play or movie can be revealed through the use of scenography, attributes, and scenes (Brejzek 2015, 20). Since the audience is always affected psychologically by scenography, its goal is to enhance their experience throughout the performance (Bennett 1988, 296-298). A scene's time

period, setting, character's personality, financial status, and other details are all depicted through scenic design, which provides the spectator a sense of the scene's brevity and adds to the ambiance of the particular place (**Brejzek and Wallen 2017, 65**).

- **Conveying Story Themes:** Themes, character interactions, and story arcs are communicated through scenic design, also known as scenography. Themes, character dynamics, and story arcs can be subtly communicated through architectural styles, structural motifs, and spatial arrangements (**Psarra 2009, 67-69**). The theme of the story can be conveyed to the audience at first glance through the use of scenic architecture (**Brejzek and Wallen 2017, 144-145**). A larger set architecture with enigmatic lighting can produce a stunning moonlight night (**Brejzek and Wallen 2017, 72-23**).
- **Conveyancing Periods, Regions and Creating New Worlds:** In each case, the scenic building depicts the time period of the scene or place (**Figure 6**). Filmmakers can now experience audiences from a variety of historical periods thanks to the scenography in movies (**Bruno 2002, 159-161**). As visual storytellers, scenic elements take viewers to other places and eras while bolstering the narrative setting's realism (**Barnwell 2004, 3-5**).

Films with memorable locales have the potential to become iconic elements that leave a lasting impression on audiences (**Gunning 2002, 3-5**). The scenic architecture and general design of a film or play determine its visual tone and atmosphere, successfully transporting viewers to many worlds and eras (**Brejzek and Wallen 2017, 66-67**). Through research, production design can produce a reality that is credible and reliable; this is known as verisimilitude, and it is seen as true or genuine (**Leff 1991, 68**).



Figure 6: Set from Movie “Rangasthalam”, Designed by Ms. Monika Nigotre Sabbani, describing the House of Village Leader.

- **Connect the Characters with the Scene's Atmosphere:** Important details of a character's personality, way of life, or past may be revealed by a well-designed scene (**Bennett 1988, 315-317**) (**Figure 7**). Due to the fact that scenography research will provide more authentic sensations once the set is completed (**Fischer 2015,75**). The characters in a film are more than the inhabitants of their place. The places that form the backdrop of their story are intrinsically linked to them. While a character's calm, orderly office may represent their controlled look, a crowded, chaotic flat may reveal their inner anguish (**Brutto 2002, 13-14**).



Figure 7: Character Vikramaditya's House from film "Radhe-Shyam", Designed by Mr. Raja Raveendar Reddy.

Conclusion

The scenography, to put it simply, is what filmmakers or theatre directors want to see when on the floor, generally used in movie and play production to make them understandable and meaningful to the audience. The methods of the scenography in the movie and play production are in a way similar; that's why there are similarities present in methods. Differences are also present in the methods because they are the same form of two different fields, one is film and another one is theatre.

Once the scenography is done by the designers, the audience can appreciate their beauty and architecture, which are works of art. The designers use scientific methods to accomplish this. From the beginning, there has been a connection between art and science in the scenography of films and plays. The creative art scenography relates to computer science, special effects, visual effects, lighting, physics, chemistry and drawing/sketching. Two fields that are crucial to the technological advancement of theatre and cinema production are computer science and the creative arts.

A film or play's scenography introduces the audience to the concept of the production while establishing the tone, time, style, atmosphere, and ambience. A stage show or a movie can be made or broken by its scenography. While bad scenography can derail a play or movie, creative scenography keeps the audience interested throughout the entire performance. For both movie and play production performances to be successful, the scenography's presentation is crucial. Using multiple periods, places, and locales, as well as integrating characters with their environment, scenography creates a new universe in theatre and cinema. We can therefore conclude that scenography always communicates the main ideas and important aspects of a narrative.

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