



Visual Floorplan Strategy for Camera and Lighting of “Our Story, Batak Weaving”, Fashion Documentary Film

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Abstract. This study examines the development of visual floorplan strategies for camera placement and lighting design in the fashion documentary film “Our Story, Batak Weaving.” The research aims to explore how cinematographic planning can enhance narrative delivery and strengthen cultural representation. Departing from the limitations of conventional production-based approaches, this study adopts a design-oriented research framework that integrates visual planning, spatial analysis, and cinematographic theory. Ulos, a traditional Batak textile, is positioned not only as a cultural artifact but also as a dynamic element within contemporary fashion discourse. The methodology combines field observation, visual analysis, and iterative floorplan design to determine camera positioning, movement, and lighting configurations. The study applies principles of cinematography, including composition, spatial continuity, and lighting aesthetics to create visual coherence and emotional depth. The findings indicate that structured floorplan strategies significantly contribute to visual storytelling effectiveness, particularly in highlighting texture, color, and symbolic meaning. This research contributes to documentary cinematography by proposing a systematic approach to visual planning while reinforcing the role of film as a medium for cultural preservation. Top of Form Bottom of Form

Keywords: Documentary Film, Cinematography, Ulos, Contemporary Fashion.

1 INTRODUCTION

1.1 Background

Ulos is a traditional textile originating from the Batak community in North Sumatra, Indonesia, carrying profound philosophical, symbolic, and aesthetic values (Niessen, 2009). Beyond its ceremonial function, ulos embodies cultural identity and spiritual meaning that have been preserved across generations.

In contemporary contexts, ulos has increasingly entered the domain of modern fashion, influenced by the expressive and visual-oriented tendencies of younger generations, particularly Gen-Z (Nanda, 2024). While this transformation expands its visibility, it

also raises concerns regarding the potential detachment of ulos from its original cultural significance. The textile risks being reduced to a purely aesthetic object rather than a meaningful cultural artifact.

This phenomenon reflects a broader issue in cultural preservation, where traditional values struggle to remain relevant in rapidly evolving visual cultures. Younger Batak generations, especially those in urban environments, often experience a weakening connection to their cultural heritage. As a result, the meaning and function of ulos continue to shift away from their original context.

Documentary film offers a strategic medium to address this gap. Through cinematographic techniques, film enables the integration of visual, emotional, and narrative elements to communicate cultural values effectively (Rabiger & Hermann, 2014). Previous works demonstrate that strong visual storytelling—through composition, lighting, and camera movement—can enhance audience engagement, particularly among younger viewers.

However, existing approaches often emphasize production outcomes rather than the systematic design of visual strategies. Therefore, this study proposes a structured approach to cinematographic planning through the use of visual floorplans, focusing on camera placement and lighting design as key components in shaping narrative meaning.

1.2 Problem Identification

1. Limited understanding among younger audiences regarding the cultural and symbolic values of ulos.
2. The transformation of ulos into contemporary fashion risks diminishing its cultural meaning.
3. The lack of structured cinematographic strategies in documentary production limits the effectiveness of visual storytelling in cultural preservation.

1.3 Research Questions

1. How can the cinematographic aspects of an ulos documentary be designed to communicate effectively to the intended audience?
 2. How can cinematography enhance audience interest and understanding of ulos?
 3. How can the director's concept contribute to building dramatic value and enhancing audience engagement?
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1.4 Design Objectives

This This project aims to develop a systematic approach to visual floorplan design in documentary cinematography by analyzing the role of camera placement and lighting strategies in enhancing narrative delivery and emotional engagement. Furthermore, it seeks to contribute to cultural preservation by presenting ulos through a visually compelling approach supported by a strong theoretical framework.

1.5 Benefits of the Project

This research contributes to the field in three key aspects:

1. **Theoretical Contribution:** Extends cinematographic discourse by integrating spatial floorplan design into visual storytelling frameworks.
2. **Practical Contribution:** Provides a structured methodology for filmmakers in planning camera and lighting setups.
3. **Cultural Contribution:** Strengthens the role of documentary film as a medium for preserving and recontextualizing traditional cultural heritage.

2 DESIGN DEVELOPMENT

2.1 Discussion and Data Analysis

A preliminary survey involving 30 respondents aged 18–21 was conducted to understand audience engagement with documentary films. The findings indicate that most respondents watch documentaries 1–2 times per year, with a preference for historical and socio-cultural themes. Approximately 33% perceived documentaries as more engaging than fiction films, while 46.7% expressed interest in increasing their viewership.

These findings suggest that while documentary consumption among younger audiences remains relatively low, there is significant potential for growth when supported by compelling visual storytelling. In particular, participatory documentary styles are favored due to their ability to establish emotional connections, present relatable narratives, and maintain high visual quality. This aligns with existing theories that emphasize the role of cinematic techniques in enhancing audience engagement and meaning making.

2.2 Visual Design Framework

Moodboards The visual design of the documentary is developed through an integrated framework consisting of moodboards, photoboards, and storyboards, which function as tools for translating conceptual ideas into visual strategies (Rosenthal, 2002; Keating, 2012). Rather than serving merely as pre-production references, these tools are posi-

tioned as part of a systematic design process that informs cinematographic decision-making.

The moodboard is structured around the key themes of *Elegance*, *Contemporary*, and *Juxtaposition*, representing the tension between the sacred cultural value of ulos and its transformation within modern fashion. This conceptual foundation guides the selection of visual elements, including color palettes, textures, and lighting tone.

Photoboards and storyboards further operationalize these concepts by defining shot composition, camera angles, spatial relationships, and lighting schemes. This approach ensures visual coherence and supports narrative continuity, reinforcing the role of cinematography as a meaning-making system rather than a purely technical execution.

2.3 Production Results

The production was conducted across multiple locations in North Sumatra, including Medan, Parapat, Pulau Samosir, Siborongborong, and Tarutung, involving various cultural practitioners, designers, and weavers. Key informants consisted of fashion designers, ulos entrepreneurs, weavers, and cultural experts to explore both the cultural significance and contemporary transformation of ulos. Notable contributors included Riki Damanik, Torang Sitorus, Renny Manurung, Ramula Situmorang, Corry Panjaitan, Marince Nababan, Edward Tigor Siahaan, and Vera Hutahuruk. The filming process was carried out in several representative locations such as Gallery Ulos Bagasnitorang (Medan), Riki Damanik Studio (Medan), Kampung Ulos Huta Raja (Samosir), Museum Huta Bolon (Samosir), Jabu Gaya Silangit (North Tapanuli), Huta Art Space (Siborongborong), and Galeri Dame Ulos (Tarutung), selected based on their relevance to the cultural and production context of ulos.

Instead of focusing on procedural descriptions, this study analyzes how floorplan-based strategies informed cinematographic decisions across different spatial conditions. The use of visual floorplans enabled systematic planning of camera placement, movement, and lighting configurations. Across various interview settings, a three-point lighting approach was consistently adapted to local environmental conditions, including variations in natural light, spatial constraints, and background context. The positioning of key, fill, and back lights was not only intended to achieve technical balance but also to enhance subject dimensionality and emphasize the texture and materiality of ulos.

From a theoretical perspective, these configurations reflect principles of spatial continuity and visual hierarchy in cinematography. Camera positioning and lens selection were designed to establish intimacy, guide audience attention, and reinforce narrative emphasis. For example, close-up compositions were used to highlight the intricate details of ulos, while medium and wide shots contextualized subjects within their cultural environment.

Furthermore, the iterative adjustment of floorplans across locations demonstrates the flexibility of design-based cinematographic planning. Challenges such as inconsistent lighting conditions, environmental noise, and spatial limitations were addressed not only through technical solutions but also through adaptive visual strategies. This high-

lights the importance of integrating design thinking into documentary production, where cinematographic decisions are continuously refined in response to contextual variables.

Overall, the findings indicate that floorplan-based visual planning contributes significantly to achieving visual coherence, emotional depth, and narrative clarity. This approach moves beyond conventional production practices by positioning cinematography as a structured and theory-informed design process.

Filming locations included:

- A. Gallery Ulos Bagasnitorang, Medan – 8 February 2025
- B. Riki Damanik Studio, Medan – 10 February 2025
- C. Kampung Ulos Huta Raja, Samosir – 14 February 2025
- D. Museum Huta Bolon, Samosir – 15 February 2025
- E. Jabu Gaya Silangit, Tapanuli Utara – 17 February 2025
- F. Huta Art Space, Siborongborong – 18 February 2025
- G. Galeri Dame Ulos, Tarutung – 19 February 2025

A. Torang Sitorus (Ulos Entrepreneur)

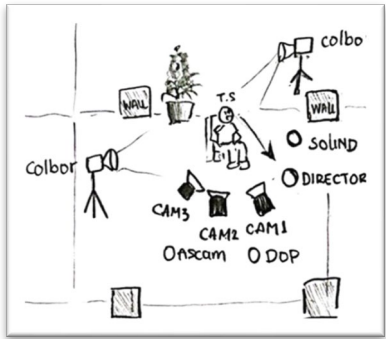
The production process always began with adjusting framing to maintain alignment with the film’s aesthetic, followed by discussions on shot selection to strengthen the narrative (Figure 1). A floorplan layout is designed to achieve a consistency in the shooting process (Figure 2). Lighting was then considered to ensure the subject’s face received balanced illumination, using one of three color temperatures: 2700K, 3200K, or 5600K, to complement the often-changing natural night light at Galeri Torang Sitorus. Three-point lighting was employed to give the subject greater dimensionality. The Key Light (Colbor CL60R) was positioned at 45° from the subject, while the Fill and Back Lights (also Colbor CL60R) were placed around -45° to provide supporting illumination.



Figure 1. Production Floorplan for the Torang Sitorus Interview Session
(Source: Personal Documentation)

Although there were differences in image quality and color due to the use of different camera types, the footage was adjusted during production to align the three cameras with their respective lenses. Further refinements of saturation and color tone were made during editing. A challenge during the interview at the Torang Sitorus location was a sudden camera issue: the a7S II had to be replaced with an a6300. Investigation revealed an SD card problem with the a7S II, causing it to be inoperable. Additionally, unstable weather conditions, such as sudden rain, required flexibility to maintain visual consistency across scenes.

Format: XAVC S 4K, Frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.



Picture profile: PP8 S-Log3, color mode S-Gamut3.Cine,

Lens: Master - zv e10ii: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Close Up - a6300: sony 85mm f/1.8

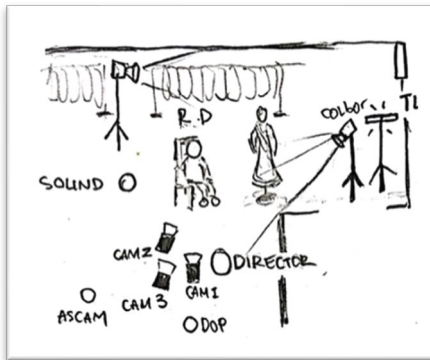
Figure 2. Floorplan Layout for Torang Sitorus Interview Shoot
(Source: Personal Documentation)

B. Riki Damanik (Fashion Designer)

The production process always begins by adjusting the framing to align with the film’s visual aesthetics, followed by discussions to select the best shots to strengthen the narrative. Lighting is then considered, choosing from three color temperatures—2700K, 3200K, or 5600K—to balance the natural night light coming from the main studio door of Riki Damanik (Figure 3). The lighting setup uses a three-point lighting technique to give the subject more dimension. The Key Light is placed at 45° from the subject using a Colbor CL60R. The Fill Light and Back Light, serving as supporting lights, use a Colbor CL60R and Godox TL60 positioned at approximately -90° from the subject. In this floorplan (Figure 4), the three temperature options—2700K, 3200K, and 5600K—are applied to balance the natural night light from the studio’s main entrance.



Figure 3. Production Floorplan for Riki Damanik Interview Session
(Source: Personal Documentation)



Format: XAVC S 4K, Frame Rate 24fps

(Interview), settings 100M 4;2;2 10bit.

Picture profile: PP8 S-Log3,

color mode S-Gamut3.Cine

Lens:

Master - zve10: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Figure 4. Floorplan Layout for Riki Damanik Interview Shoot
(Source: Personal Documentation)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production, adjustments will be made to harmonize the outputs from both cameras with their respective lenses. During the editing process, further refinements will be applied to saturation and color tone. The main challenge during Riki Damanik’s on-location interview was the sound, as many vehicle noises were picked up. We will address this issue during post-production editing.

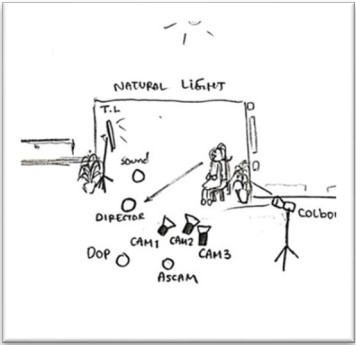
Ramula Situmorang (Weaver)

This production process always begins by adjusting the framing to remain consistent with the film’s aesthetic and selecting shots that strengthen the narrative. Next, lighting considerations involve choosing from three temperature options—2700K, 3200K, or 5600K—to balance the natural light in the Hutaraja Gallery. The lighting setup uses a three-point lighting technique to give the subject more dimension. The Key Light, a Godox TL60, is positioned at a -45° angle from the subject (Figure 5). The Fill Light prioritizes natural light from the window to Ramula’s right, and the Back Light, using a Colbor CL60R, acts as supporting light placed approximately 90° from the subject. A floorplan layout is designed to achieve a consistency in the shooting process (Figure 6).



Figure 5. Production Floorplan for Filming Ramula Situmorang Interview Session
(Source: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production, adjustments will be made to harmonize the outputs from both cameras with their respective lenses. During editing, further refinements will be applied to saturation and color tone. The main challenge during Ramula’s on-location interview was the sound, as a lot of karaoke noise was picked up. We will address this issue during post-production editing.



Format: XAVC S 4K, Frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.
Picture profile: PP8 S-Log3,
color mode S-Gamut3.Cine

Lens:
Master - zve10: sony 20mm f/1.8
Medium - a7siiii: sony 50mm f/1.8

Figure 6. Floorplan Layout for Riki Damanik Interview Shoot
(Source: Personal Document)

D. Marince Nababan (Ulos Entrepreneur - Souvenir Business Owner & Expert)

This production always begins by adjusting the framing to remain consistent with the film’s aesthetic and selecting the best shots to strengthen the narrative. Next, lighting considerations involve choosing three color temperature options—2700K, 3200K, or 5600K—to balance the natural light in Marince’s store. The lighting setup uses a three-point lighting technique to give the subject more dimension (Figure 7). The Key Light, a Colbor CL60R, is positioned at a 90° angle from the subject, while the Fill Light prioritizes natural light coming from the entrance of Jabu Gaya Store. A floorplan layout is designed to achieve a consistency in the shooting process (Figure 8).



Figure 7. Production Floorplan for Filming Marince Nababan Interview Session
(Source: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed in editing, and in production it will be adjusted to match the outputs from both cameras with their respective lenses. During the editing process, further refinements will be made to saturation and color tone. The challenges during Marince’s on-location interview session were the narrow space and the sound, as a lot of vehicle noise was picked up. We will resolve these issues through post-production editing.



Format: XAVC S 4K, Frame Rate 24fps
(Interview), settings 100M 4;2;2 10bit.

Picture profile: PP8 S-Log3,
color mode S-Gamut3.Cine

Lens:

Master - zve10: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Figure 8. Floorplan Layout for Marince Nababan Interview Shoot
(Source: Personal Document)

E. Renny Manurung (Entrepreneur, “Dame Ulos”)

This production process always begins with adjusting the framing to remain in harmony with the aesthetics of the film. Lighting considerations between 3 color temperature options of 2700K, 3200K, or 5600K as a balance of natural light in Dame Ulos (Figure 9). The lighting used is a three-point lighting technique; the subject will be more dimensional. Key Light placement with Colbor CL60R 45° from the subject. Fill Light prioritizes natural light from the window to the right of Renny as a supporting light

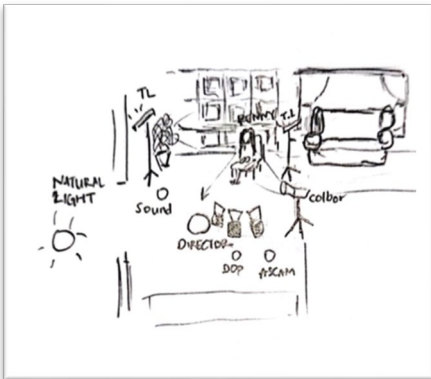
using Godox TL60, around -90° from the subject and back Light around 90° . A floor-plan layout is designed to achieve a consistency in the shooting process (Figure 10).



Figure 9. Production Floorplan for Renny Manurung Interview Session
(Source: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production it will be adjusted to match the outputs from both cameras with their respective lenses. During the editing process, further refinements will be made to saturation and color tone. The challenge during Renny’s on-location interview session was the presence of people passing by in the background. We will resolve this issue by cutting those parts during post-production editing.

Format: XAVC S 4K, Frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.



Picture profile: PP8 S-Log3, color mode S-Gamut3.Cine, Lens:

Master - zve10: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Figure 10. Floorplan Layout for Renny Manurung Interview Session
(Source: Personal Document)

F. Edward Tigor Siahaan - Pengusaha “PILTIK COFFEE”, Photographer & Owner “HUTA ART SPACE)

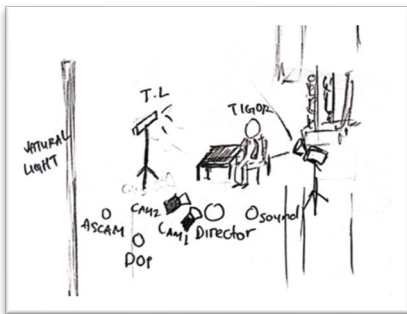
This production process always begins by adjusting the framing to maintain consistency with the film’s aesthetic and selecting the best shots to strengthen the narrative. Next, lighting considerations involve choosing among three color temperature options—2700K, 3200K, or 5600K—to balance the natural light at Huta Art Space. The lighting setup uses a three-point lighting technique to give the subject more dimension. The Key Light, a Colbor CL60R, is positioned 90° from the subject (Figure 11). The Fill Light relies on natural light from the windows of Huta Art Space. The Back Light uses a Godox TL60, positioned approximately -90° from the subject. A floorplan layout is designed to achieve a consistency in the shooting process (Figure 12).



Figure 11. Production *Floorplan* Pengambilan Gambar Sesi Wawancara Edward Tigor
(Sumber: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production it will be adjusted to match the outputs from both cameras with their respective lenses. During the editing process, further refinements will be made to saturation and color tone. The challenge during Tigor’s on-location interview session was a delay in the shooting schedule, caused by Tigor’s limited readiness before the interview process.

Format: XAVC S 4K, Frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.



Picture profile: PP8 S-Log3,
color mode S-Gamut3.Cine

Lens:

Master - zve10: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Figure 12. Floorplan Layout for Edward Tigor Siahaan Interview Session
(Source: Personal Document)

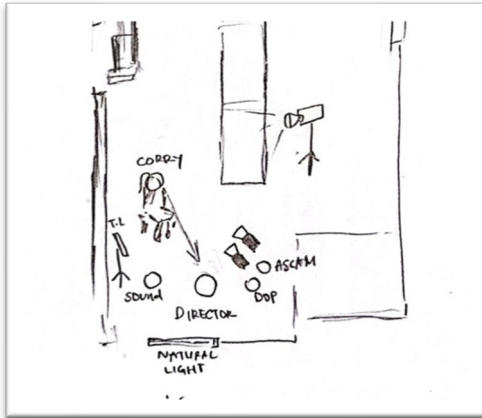
G. Corry Panjaitan (Tutor & Expert)

This production process always begins by adjusting the framing to remain consistent with the film's aesthetic and discussing the selection of the best shots to strengthen the narrative. Next, lighting considerations involve choosing among three color temperature options—2700K, 3200K, or 5600K—to balance the natural light at Huta Art Space. The lighting setup uses a three-point lighting technique to give the subject more dimension. The Key Light, a Godox TL60, is positioned 30° from the subject (Figure 13). The Fill Light relies on natural light from the windows of Huta Art Space. The Back Light, using a Colbor CL60R, is placed approximately -100° from the subject. A floor-plan layout is designed to achieve a consistency in the shooting process (Figure 14).



Figure 13. Production Floorplan for Corry Panjaitan Interview Session
(Source: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production it will be adjusted to match the outputs from both cameras with their respective lenses. During the editing process, further refinements will be made to saturation and color tone. The challenge during Corry's on-location interview session was the sound, as heavy rain suddenly created a lot of noise. We will address this issue through post-production editing.



Format: XAVC S 4K, frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.

Picture profile: PP8 S-Log3, color mode S-Gamut3.Cine

Lens:

Master - zve10: sony 20mm f/1.8

Medium - a7siii: sony 50mm f/1.8

Figure 14. Floorplan Layout for Corry Panjaitan Interview Session

(Source: Personal Document)

H. Vera Hutahuruk - Owner of “Piltik Coffee” & “Huta Art Space”

This production process always begins by adjusting the framing to remain consistent with the film’s aesthetic and selecting the best shots to strengthen the narrative. Next, lighting considerations involve choosing among three color temperature options—2700K, 3200K, or 5600K—to balance the natural light at Huta Art Space so that the subject receives even illumination on their face. The lighting setup uses a three-point lighting technique to give the subject more dimension. The Key Light relies on natural light from the windows of Huta Art Space. The Fill Light uses a Colbor CL60R positioned 90° from the subject, while the Back Light, also a Colbor CL60R, is placed approximately -95° from the subject (Figure 15). A floorplan layout is designed to achieve a consistency in the shooting process (Figure 16).



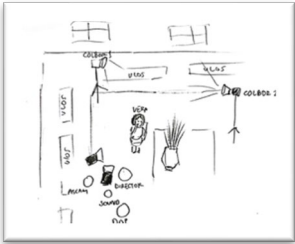
Figure 15. Production Floorplan for Vera Hutahuruk Interview Session

(Source: Personal Document)

Although there are differences in image quality and color due to the use of different types of cameras, the footage will be processed during editing, and in production it will be adjusted to match the outputs from both cameras with their respective lenses. During the editing process, further refinements will be made to saturation and

color tone. The biggest challenge during Vera’s on-location interview session was selecting a setting that was cohesive yet distinct from the other interview subjects.

Format: XAVC S 4K, Frame Rate 24fps (Interview), settings 100M 4;2;2 10bit.



Picture profile: PP8 S-Log3,
color mode S-Gamut3.Cine

Lens:
Master - zve10: sony 20mm f/1.8
Medium -a7siii: sony 50mm f/1.8

Figure 16. Floorplan Layout for Vera Hutahuruk Interview Session
(Source: Personal Document)

2.4 Conclusion & Recommendations

Conclusion

This study demonstrates that the integration of visual floorplan strategies into documentary cinematography provides a systematic framework for enhancing narrative delivery and cultural representation. By combining theoretical principles of cinematography with design-based methodologies, the research shifts the focus from production-oriented practices to a more analytical and structured approach.

The findings highlight that camera placement, lighting design, and spatial planning are not merely technical considerations but essential components in constructing meaning and emotional engagement. In the context of documenting ulos, these strategies effectively emphasize its texture, symbolic value, and cultural significance within contemporary fashion discourse.

Thus, this study contributes to the field of documentary cinematography by proposing a design-oriented framework that bridges practical implementation and theoretical understanding, while reinforcing film as a medium for cultural preservation.

Recommendations

Future research can expand this approach by exploring:

- The application of alternative cinematographic theories and visual styles in cultural documentaries.
- Comparative studies between different documentary modes to evaluate audience engagement.
- The integration of interactive and digital media formats to enhance accessibility and educational impact, particularly for younger audiences.

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