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TABLE OF CONTENTS

	page
01 <i>Visualization of Seeking Identity on Transnational Children in Be Prepared Graphic Novel</i> Johanes	— 001
02 <i>Implementation of Augmented Reality for Isometric Works at The Animation Art Exhibition (Animaxtion)</i> Tito Ari Pratama and Ely Rosita	— 012
03 <i>Designing Children's Story Book as An Introduction Towards Silek Harimau Martial Art</i> James Trisno and Yana Erlyana	— 026
04 <i>Reconstruction Of Creative Products Based Using Design Thinking Approach: The "Spirit Of Majapahit" Case Study</i> Shienny Megawati Sutanto, Marina Wardaya, and Hutomo Setia Budi	— 039
05 <i>Redesign The Traditional Folklore: Achieving A Sustainable Folklore for The Future Generation</i> Hedi Amelia Bella Cintya	— 050
06 <i>Story Design In Fine Dining Projection Mapping Project "Si Dulang"</i> Yohanes Merci Widiastomo	— 065
07 <i>Analysis of Basic Cinematography Component in The Short Film "Tilik"</i> <i>Directed by Wahyu Agung Prasetyo</i> Halimatus Sya'diyah and Asidigisianti Surya Patria	— 074
08 <i>Representation of Superheroes in The Character of Alana in The Sri Asih Film</i> Dedy Arpan	— 090
09 <i>Interactive Book Design for Child Speech Delay Therapy</i> Leonardo Adi Dharma Widya and Prasna Juwita	— 102
10 <i>Analyzing The Adaptation of Ramayana Wayang Characters in Code Atma Video Game</i> Ariel Marsha Luana Brahmana and Banung Grahita	— 114

VISUALIZATION OF SEEKING IDENTITY ON TRANSNATIONAL CHILDREN IN BE PREPARED GRAPHIC NOVEL

Johanes

Received September. 13, 2022; Revised November. 07, 2022, Accepted May. 10, 2023.

Abstract: *Be Prepared* is a graphic novel about Vera, the daughter of immigrants from Russia. In her storyline, Vera faces many cultural challenges when dealing with American and other Russian immigrant children. Vera attempts to find identity amidst the differences between the original culture of Russia and the American culture as the country she lived in. The situation between 2 cultures is a challenge for transnational children. This study aims to analyze and see the meaning represented in the graphic novel, especially how transnational children obtain identity and adapt to their environment. The research method used in this research is semiotics and literature review. The semiotic method is used to see the relationship between signs to get the meaning. The semiotic theories used in this research are based on Roland Barthes's theories. Another method is the literature review which is conducted by overviewing the signs through several published literature to expand the meanings. The base theory used in the literature review is a cultural study that consists of ideas about acculturation, immigration, and cross-cultural theories. From this research, it can be seen that in the comparison of situations of 2 birthday parties, there are expectations in acculturation. The worship scene in the Russian Orthodox church represents immigrant families' coping mechanism for acculturation stress. The signs seen in the graphic novel are also seen in the acculturation stage of Vera's character to gain identity, which can be divided into three stages, namely, the stage of seeking recognition, the stage of imitating, and the stage of integration

Keywords: transnationalism; immigrant; acculturation; graphic novel; sequential arts.

Introduction

There are many human experiences that can't be explained clearly through words and voice. An attempt to represent human experiences is through a visual medium. Visualization of experience can appear as an embodiment of human mental conditions and complex situations that are faced by an individual. Yet an illustration is not enough to portray a long format of storytelling. Therefore to portray

human experience, graphic novels can be an appropriate medium. A graphic novel is a form of sequential art that is created by arranging pictures to make meaning. The composition of a graphic novel can include dialog balloons to clarify intonation and emotion in the scenes that are presented (McCloud, 1993).

The graphic novel can reflect the author's perspective of reality (McCloud, 2000). In the creating phase of the art,

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the artists experience a filtering process because they need to choose the characters and story background that must be presented in the form of style and composition. Style and composition are signs of the author's identity (Davies, 2019).

The graphic novel term itself is a distinction from the comic term. The term distinction provides an epistemological difference to overcome public prejudice because the comic is originally based on the word comix, which means funny and silly. In the graphic novel, story plots, themes, and pictures can represent more severe societal issues (McCloud, 2000).

Graphic novels can be part of the children's literature category if placed from a children's perspective as the center of the story. The content of children's literature contains the development of children's life experience and knowledge that include the development of mind, emotion, language, and psymotoric. Children's literature does not represent cynical themes such as politics, broken hearts, and desperation (Nurgiantoro, 2018). Based on the definition above, Be Prepared is included as a children's graphic novel.

Be Prepared graphic novel as can be seen in Figure 1, was created by Vera Brosgol in 2018, is a semi-biographical book. It was because the author has the same name as the story's main character, Vera. Although the graphic novel's storyline also contains fictional elements from the author's imagination. In the graphic novel Be Prepared, Vera is a girl from a second-generation Russian immigrant family who struggles to adapt to the society around her. In the early part of the story, Vera wants to become normal as an American child.

Vera tries to assimilate with another American child but fails because her birthday party is conducted by mimicking American birthday party culture. As a result of her failure to mimic American



Figure 1. The cover of Be Prepared graphic novel
(Source: Brosgol, 2018)

culture, Vera is deserted by her American children's friendship circle. After the birthday party, Vera assigns herself to a summer camp with other Russian immigrant children. Vera is enthusiastic about meeting other Russian immigrant children because she sees the encounter with them as the solution to her friendship problem. However, Vera's expectation of summer camp is inaccurate because she doesn't know about Russian children's culture. Vera can get a friend in summer camp after she meets a girl younger than her called Kira. Friendship with Kira is the conclusion of Be Prepared Graphic novel.

Based on the structure of the story plot and sequential pictures in the graphic novel, Vera is a girl who experiences a problem with seeking identity because she is a transnational child. Children's development to understand identity is mainly conducted by finding justice, rights, obligation, prosperity, role, authority, hierarchy, norms, and societal expectations. Transnational children understand the

concept of identity simultaneously as the culture acculturation process.

The effort to understand new cultures, rules, and societal expectations is the meaning of acculturation. During the acculturation process, an individual needs to practice interacting with another. However, the success of interaction is not only about language fluency; it can be about work habits and skills (Orozco et al., 2005). Transnational children's challenges can be doubled because they need to learn from more than one community standard. Community standards also can contradict each other, which can be a source of confusion.

Transnationalism is an attempt of transnational people to maintain their cultural connection with their original nation and sojourned nation. The effort to maintain connection can simultaneously occur with the adaptation process (Bradatan et al., 2010). Transnationalism emphasized the set of relations and connections that continuously expanded. The relations and connections mentioned above include religion, culture, and international domiciles (Vertovec, 2009). Transnational children are unique because of their uncommon set of connections and relations.

After reading the Be Prepared graphic novel, the question that emerges from the research is, "How can transnational children's challenges of seeking identity be portrayed in the graphic novel?" The question can be answered by obtaining deep meaning from signs found in graphic novels.

Methodology

The research is conducted by semiotics and the literature review method. The Semiotics method is a way to find meaning from cultural manifestation that occurred in society (Hoed, 2014). Semiotics theory

applied in the research is based from Roland Barthes's theory. He states on social and cultural life, signs is an expression, and signifier is the content. Roland Barthes's theory consists of 2 types of signs which are denotation and connotation. Denotation is a general meaning of the sign, and connotation is a meaning obtained by finding the relation between signs. Clarification of Roland Barthes's theory can be seen in Table 1.

Table 1. Semiotic Theory by Roland Barthes.
(Source: Cobley & Jansz, 1999)

Signifier	Signified
Denotative	
Connotative Signifier	Connotative Signifier
Connotative Sign	

On the semiotic method developed by Roland Barthes, there is a unit of sign, namely Lexia. Lexia is the way to sort signs on the narration discourse into simplified fragments (Budiman, 2011). Lexia, found in the graphic novel Be Prepared, can arrange based on the scene that repeatedly occurs in the story. Repeated scenes emerge in the story, which can be contradicted each other to make antithesis meanings called symbolic codes. Examples of Lexia in the Be Prepared graphic novel are birthday scenes, Catholic church worship scenes, and summer camp scenes.

The literature review method is applied to explain and expand the meaning of signs with references from another discipline's knowledge. In relation that develops from provided references, the literature review method can assign the position of researcher with the conducted research (Ridley, 2012). The literature review method in this research is applied to explain meaning after the signs have been found using the semiotics method. The

literature review applied to this research uses cultural study theory which consists of ideas about immigration, cross-culture, and acculturation theories. Discourse about meaning in this research also applies theories and research results from the psychology discipline to understand the perspective of transnational children's mental state.

Story plots in the graphic novel are divided into three parts as the foundation of research. 3 part of the story plot consists of the setup stage, confrontation stage, and resolution stage. Partition of the story formula is based on Aristotle's theater formula and Syd Field's theory from the book titled Screenplay.

The setup part in the Be Prepared graphic novel is the birthday party scene and Vera's preparation for the summer camp scene. The setup part can be found on pages 4 to page 102. The confrontation part is the summer camp activities scene, Vera's exiled scene, and Vera's encounter with Moose Scene. The confrontation stage can be found on pages 103 to 173. The resolution part of the graphic novel occurs when Vera meets Kira until the summer camp is over. The resolution stage can be found on pages 174 until page 244.

Result

In the setup part of the graphic novel, Vera, as the main character, faces two social environments: the social environment of American children and the social environment of fellow Russian immigrant children. The American children's social environment can be seen in birthday party scenes and the environment of fellow Russian immigrant children can be seen in Russian Orthodox Catholic church worship scenes.

The sign and meaning that is founded on the birthday party and church worship

scenes can be represented in the Table 2, below:

Table 2. Explanation of signs on
set up part of the story in a graphic novel.
(Source: Personal documentation)

Signifier 1	Signifier 2	Denotative Signified	Connotative Signifier
Sarah Hoffman's Birthday Party	Vera's Birthday Party	Identity Recognition for Children	Expectations of cultural acculturation
Indoor Russian Orthodox Catholic Church Worship with family	Outdoor Russian Orthodox Catholic Church Worship on summer camp	Religion as a safe space for immigrant	Acculturation stress

Discussion

In the beginning, the graphic novel shows a birthday party of the American children which is Sarah Hoffman's birthday party. The next part shows Vera's birthday party as a comparison of the situation. The comparison is laid bare by the author when, for example, a specific brand of pizza or even a specific kind of cake that Vera wants for her birthday after she attends Sarah's birthday party as can be seen in Figure 2 and Figure 3.



Figure 2. American Birthday party culture
(Source: Brosgol, 2018)



Figure 3. Birthday party of Vera as Russian Immigrant children
(Source: Brosgol, 2018)

Comparing the two birthday parties, the sign of American children's parties and Russian immigrant children's parties become the connotation signifier of cultural acculturation expectations. Cultural acculturation expectations are attitudes expected from the immigrant when they come into contact with the dominant culture (Berry, 2003). From the presentation

in the graphic novel, it can be seen that there is a gap in cultural acculturation expectations between Vera and her mother.

Generally, the role of parents is to become a reference for the children to understand the culture of the surrounding community, such as lifestyle and quality of life (Orozco & Orozco, 2002). However, in the event of a birthday party in the graphic novel, Vera, as a child, is exposed to more references shown by American friends who have a more dominant culture, this makes Vera feel an inner conflict. Inner conflicts in immigrant families are usually vented through their religion.

The role of Vera's religion as a child experiencing transnationalism can be seen through the Russian Orthodox Catholic worship ceremony (Figure 3). Even though she couldn't understand the meaning of the Russian Orthodox Catholic worship ceremony she attended, Vera still attended it. In the graphic novel, the Russian Orthodox Catholic faith is a cultural belief system. The function of a cultural belief system is to provide standards on how to behave and to give a sense of security in socializing. This sense of security includes interpersonal networks, shared understanding, and support providers (Orozco & Orozco, 2002).

A contradicting experience occurred when Vera joined the worship with the Russian children at the camp as can be seen in Figure 4. The worship outdoors in the rain becomes a symbolic code sign of acculturation stress. Acculturation stress occurs due to 2 causes, the first is shock due to contact with another culture, and the second is the interaction between the dominant culture, which, due to lack of knowledge resources, raises prejudice and discrimination with a non-dominant culture (Berry, 2006). The scene displays a failure of traditional belief systems as a provider of security due to Vera's lack of understanding of the environment around her.



Figure 4. Russian catholic orthodox worship scene with Vera's family
(Source: Brosgol, 2018)



Figure 5. Russian catholic orthodox worship scene in summer camp
(Source: Brosgol, 2018)

The birthday party scenes and church worship scenes form a picture of Vera's condition for the reader. After going through the setup stage, the reader currently knows that as a child of Russian descent, her mother guides her habits and behavior, but because Vera lives in the social environment of American children, whatever Vera's mother did for her only makes Vera become more rejected by her friends.

Being rejected by her American friends makes her determined to join a Russian children's summer camp. However, confusion reoccurs because she expects the camp activity will be similar to how the American children's camp usually is. She thinks it will be more enjoyable for her if she gets to do it with her fellow Russian children. This Russian children's summer camp incident shows Vera's stages of acculturation by accepting her environment as a transnational child exposed to American culture are shown. The explanation of Vera's experience in Russian children summer camp as the stages of acculturation for transnational children can be seen more clearly in the Table 3 and Table 4 below:

Table 3. Explanation of signs on confrontation to resolution part in the graphic novel story
(Source: Personal documentation)

Signifier 1	Signifier 2	Signifier 3	Denotative Signified	Connotative Signifier
Vera pleases her older friends with her drawing skill and snack gift	Vera mimics her older friends by mocking a weak child at summer camp	Vera befriend a younger girl at summer camp	Vera's Experience in Russian Children summer camp	Acculturation stages of transnational children

Table 4. Stages of acculturation signifier on the graphic novel
(Source: Personal documentation)

No	Signifier	Acculturation Stage Of Transnational Children
1	Vera pleases her older friends with her drawing skill and snack gift	Seeking Recognition stage
2	Vera mimics her older friends by mocking a weak child at summer camp	Imitating stage
3	Vera befriend a younger girl at summer camp	Integrated stage

In the story's confrontation part, namely during the summer camp, Vera's attitude towards the other children changes. At first, Vera tried to get recognition from the older children. To get recognition, Vera did several things, starting with drawing her friends' faces to get appreciation, then smuggling snacks so they could be distributed to friends at the camp. Examples of Vera's efforts to obtain this recognition can be seen on the following pages on Figure 6:



Figure 6. Vera's stage of seeking recognition
(Source: Brosgol, 2018)

Vera's attempt to get an acknowledgment fails after she is caught by a coach smuggling snacks. After being caught by the supervisor, the entire camp is also searched so that Vera's friends became hateful of her. After the incident, Vera became ostracized by her friends.

Vera is accepted back into the camp's social environment after she imitates the older children's behavior by bullying her weaker friends. When she bullies the weak, Vera feels that she has an outlet after being pushed aside by the others, even though she feels that this was wrong. An illustration of Vera's behavior, when she participated in bullying her friend, can be seen on Figure 7.



Figure 7. Vera's stage of imitating
(Source: Brosgol, 2018)

Vera then changes her behavior again after she meets a very beautiful moose in the forest; this scene is the beginning of the resolution stage in the graphic novel. The next day after seeing the moose, Vera chooses to be herself and help a friend who had been bullied before. Vera's change in character finally made her get a friend named Kira. When she befriends Kira, Vera becomes herself without caring about what other people think. Kira is younger and equally ostracized by the other kids. After befriending Kira, activities at summer camp are more enjoyable for Vera. Illustrations of the process of changing to be yourself and gaining friends can be seen in Figure 8.



Figure 8. Vera's integrated stage
(Source: Brosgol, 2018)

The change in behavior experienced by Vera during the summer camp event is a signifying pattern of the stages experienced by transnational children. If seen from the depiction in the graphic novel, these stages can be divided into three stages, namely, the stage of seeking recognition, the stage of imitating, and the stage of integration with the new environment. The stages in seeking recognition occur because transnational children need to understand the context of norms that apply in a new environment. In understanding this context, a transnational child must build connections to receive social assistance. Social assistance can be in the form of real help to complete daily tasks, guidance, and advice from others.

However, efforts to gain recognition in the new environment still depend on the social skills obtained from the previous environment. Someone who tends to be

rigid, such as being shy, arrogant, and sensitive to outside opinions, will experience difficulties at this stage with the threat of alienation or rejection from others (Orozco et al., 2005).

After the stage of seeking recognition, the imitating stage is carried out as a sense of alertness in adapting to a new environment. In imitating, a child will look for a maternal figure or mentor who is considered the most influential in social circles to be a reference. The process of imitation is actually a fundamental thing for humans in knowing their own identity because other people's opinions can be seen as a mirror of self. If others appreciate the imitation process, then a child or even an adult will feel valuable and competent. The process of imitation can occur when a person has not been able to digest the reality around him; if self-awareness of the environment has been obtained, then the person can get a distinctive identity (Horkheimer & Adorno, 2002). Distinctive identity is the result obtained in the integrated stage. The integrated stage is the stage reached when transnational children can evaluate phenomena that occur in a cultural context. The cultural context in question is when someone focuses on goals, reviews previous experiences, possesses intercultural sensitivity, accepts differences, has intentions to behave interculturally, and tries to do so (Bhawuk et al., 2006).

Conclusion

A graphic novel can represent an abstract situation and engage the reader to emphasize the characters within. Inside the narration and experience of Vera at birthday parties, the function of a parent is very important as a behavior map of what is correct or wrong in society. However, in the graphic novel representation, Vera's parent does not understand the expecta-

tion of children in the new environment.

In transnational situations, mainly parents cannot learn fast enough as their children in the adaptation process. Although immigrant parents have language skills, they can't grab the context of cultures, norms, and rules in the sojourning country. Even from the parent's perspective, a new culture can be seen as a corrupt influence on their original country's culture. Therefore, parents need to have flexible behavior and expectation to keep connected with their children as immigrants.

In the graphic novel, the Russian Catholic Orthodox church is represented as a safe space for immigrant families. Essential functions of a religious institution are also perceived by varieties of immigrants around the globe. The existence of God is a force to keep respect, mercy, and love value around immigrant communities (Ehrensaff & Tousignant, 2006). The symbol of the values of religion can be manifested through religious leaders.

In the development of transnational children, values in religious communities can be different from values in real socio-cultural systems of the new environment. The situation is well presented when Vera feels envious to a religious leader figure that is placed indoors, yet she worships outdoors on rainy days. The conclusion after seeing the presentation of the worship scenes in the graphic novel is that participation in religious institution stands as a good acculturation stress coping mechanism yet have limitation in nurturing immigrant communities. Religious institutions are simply positioned as a medium of cultural transition for immigrants.

The acculturation stages experienced by Vera in the graphic novel are the seeking recognition stage, the imitating stage, and the integrated stage. The stages can be compared to acculturation strategy

practices from John W. Berry, a psychologist who focuses on cross-cultural and immigration phenomena. In his book titled *Handbook of Cross-Cultural Psychology Volume 3* in 1997, he divided the acculturation strategies into four results, there are marginalization, separation, assimilation, and integration. From the representation of *Be Prepared* graphic novel and John W. Berry's theory, the process of assimilation can be conducted in parallel. It means, in the sojourner nation, an immigrant can experience different stages and behavior results depending on participating communities.

The representation in *Be Prepared* graphic novel has limitations. In the graphic novel, Vera's family is a Russian immigrant from the middle-lower economy class. Economy class is an important point that has an effect on Vera's perspective and decisions. Based on the argument above, the story in general, can't represent another economic class, family, or individual. Representation of the acculturation process should not be seen from a stereotypical perspective, even if the story is based on the author's real experiences. To overcome the stereotypical view, the readers need to be guided to experience an encounter with immigrants and new cultures to emphasize the actual situation. Besides the limitations, a graphic novel can be a gate to understanding pieces of knowledge, mainly for children, because a graphic novel as a medium is easy to read and remembered.

The suggestion for the future is to research the acculturation process of transnational children on opposite sides. The opposite side means the graphic novel story about children from first-world countries who live in second or third-world countries. The suggestion is based on the graphic novel *Be Prepared*; Vera's family is represented as a family who wants to get a second chance and follow the American dream. The research can be compared to

get more interesting results and enhance the understanding of how to visualize transnational children's challenges.

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IMPLEMENTATION OF AUGMENTED REALITY FOR ISOMETRIC WORKS AT THE ANIMATION ART EXHIBITION (ANIMAXTION)

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Received March. 06, 2023; Revised June. 09, 2023, Accepted June. 15, 2023.

Abstract: In exhibitions, animated artwork also develops following technological advances and the needs of exhibition visitors. One of the concepts of the exhibition is to exhibit isometric drawings as shown in the exhibition, then visualize them in 3D animation using the Augmented Reality method. Augmented Reality is a technology that runs and combines digital content created by computers in real-time. In the results of the research that has been carried out, if the results of the implementation of Augmented Reality (AR) using Unity software have been successfully implemented on Android-based Smartphones and Tablets by practicing Isometric objects that are displayed when smartphones with the Android operating system or Tablet trigger prints of student work which contain printed images of work in Animaxtion.

Keywords: augmented reality; unity; animaxtion; isometric.

Introduction

An exhibition is an activity to show our works to the general public. The attempted activity displayed various works, ideas, and items arranged neatly with various accessories. Various new models or forms are offered in a way that is different from those on the market. According to the previous study, new artwork, new creations, new methods, and new forms become trends that attract audiences, so the items on display are more catchy (Mardi, 2021, p. 544). The methods used to display works have also changed and evolved. According to Nahak, today's globalization society has favored new methods and culture from the outside world, which are considered more practical than local and old meth-

ods, so adapting is one way that has the potential to maintain the existence of an activity, one of which is a work exhibition. A good exhibition space can evoke the emotional reaction of guests. An earlier study said that every decision in designing must convey a message that speaks to guests through digital media, form, space, material surfaces, lighting, and sound, so the exhibition space can create an atmosphere of space that evokes feelings and emotions in audiences (Locker, 2011). Therefore, further research on the revolution of new spaces in every exhibition must be explored.

However, if we reflect on several museums in Indonesia, which are sometimes not too crowded to visit, creative

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Implementation of Augmented Reality for Isometric works at Animation Art Exhibition (Animaxtion)

activists must innovate in enlivening the exhibitions of the works they create. One method that is relatively new and liked by young people is the Augmented Reality (AR) technique. Augmented Reality (AR) technology has become an important field of research in Indonesia. The potential for AR in Indonesia is snowballing, although it is less massive than what is being done abroad (Endra & Agustina, 2019). Augmented Reality (AR) is a variation of virtual space or more commonly called Virtual Reality (VR). VR technology can make users immersed in a synthetic area. When the user is immersed in the area, the user cannot see the real world.

In contrast, AR technology users can view the real world (Azuma, 1997) with virtual objects added to the real world. So, users perceive virtual and natural objects as being in the same place. Augmented Reality also has considerable potential to develop the value of work because, as explained by Azuma, it is as if we see the work in the real world, where it is difficult to realize it in the real world immediately.

Now, augmented reality is increasingly being supported by development technology, and many online platforms and applications are starting to be used to produce augmented reality. Augmented reality uses picture markers like patterned images, then placed on various primary media such as paper, walls, and anything. Applying augmented reality to works of art can be a creative solution in work exhibitions, one of which is Animaxtion.

The Animation Art Exhibition (Animaxtion) is an exhibition of works by first and third-semester students from Multimedia Nusantara Polytechnic which contains their mid-semester and final semester assignments. Students take the initiative to show the development of their work through an exhibition so they can get appreciation and develop their artistic aspects. The exhibition took place for almost

a month and is attached to the exhibition poster in Figure 1.



Figure 1. Animaxtion exhibition poster (Source: Animaxtion, 2023)

Animaxtion offers various display types of works, such as isometric design. According to the Glints website, isometric design is a design method that displays 3D objects using 2D techniques (Ismi, 2022). The isometric design makes it easier for designers to create objects by assisting them with the appropriate sizes and lines. The projects displayed in the exhibition are the work of mid-semester students at Multimedia Nusantara Polytechnic like in Figure 2.



Figure 2. An example of one student isometric work. (Source: Personal research documentation)

It is possible to create isometric art using augmented reality technology, allowing for marketing beyond the confines of 2D media. The technique applies to using the student's work as a trigger marker (printed arts) for the augmented reality system. So, when visitors use their mobile devices, such as phones or tablets, which have installed the exhibition team's augmented reality software, the camera responds to 3D visuals. With this approach, this application would eventually grow with other media and make upcoming exhibitions more advanced and futuristic. Also, this raises the number of people that visit the Animaxtion display. It may lead to the creation of new ways of communicating strategies for exhibition visitors.

In this study, the researcher aims to explain the methods and techniques for producing augmented reality applications that can help the imagination of exhibition visitors to increase the value and development of Animaxtion's exhibitions. The augmented reality production software used is Unity 3D, which is integrated to create games, simulations, and architectures. Then the base markers that use the student's drawings are processed through the Vuforia library. Vuforia is a software development kit used to create custom augmented reality. With Vuforia, electronic devices can recognize and track images, objects, text, and markers and reconstruct them into an actual form. (Sudana et al., 2016). By looking at how vital isometric sections are in the Animaxtion exhibition, this research will focus on developing Augmented Reality application products for student isometric works. This research produces an augmented reality application focusing on student isometric work called Animaxtion AR Isometric on Android smartphones and tablets. The final production results are also expected to become HKI so that the development of the creative industry will be more advanced.

This research also creates various questions that are answered through this research. Among them:

1. How is the production method of augmented reality applications implemented with isometric works?
2. What can be produced from the production of augmented reality applications in the isometric works of the Animaxtion exhibition?

Methodology

This research has a project/work basis through a qualitative approach. The qualitative approach of the project was chosen because in this study, the researcher emphasized the substance of the observation of the phenomenon of the art exhibition. The researcher sees the need to interpret the visible and more impactful results to touch the hearts of the audience present. Hence, the researcher has the mindset to develop augmented reality software to try to see the difficulty level in developing this software which will affect the next animation exhibition. Furthermore, there are three reasons for using qualitative methods: the researcher's view of the world, then the nature of the research question, and how practical reasons are associated with the nature of qualitative methods. (Kasinath, 2016). This study collected data from several kinds of literature, observational studies, and experiments. The literature method is collected based on previous research regarding Augmented Reality. Then the researcher also solves the problem by researching the art exhibition through various journals and articles.

Observational studies are carried out by observing various Augmented Reality works outside art exhibitions and their production processes through various online tutorials. Through the various methods observed, the researcher hopes

to implement them through student animation exhibition works. After obtaining this data, the author and members of several animation students at Multimedia Nusantara Polytechnic experimented with the production method of augmented reality works for their exhibition. This process can be done after the student's work is ready to be processed into augmented reality products. In the APK building process, researchers were assisted by two students named George Kanino Mantiri and Dev Aras.

Therefore, a multimedia methodology is needed to develop this AR application. According to Binanto (2010), the multimedia development methodology comprises six stages: concept, design, material collecting, assembly, testing, and distribution. These six sessions cannot be exchanged. Even so, the concept session must be the first thing to do.

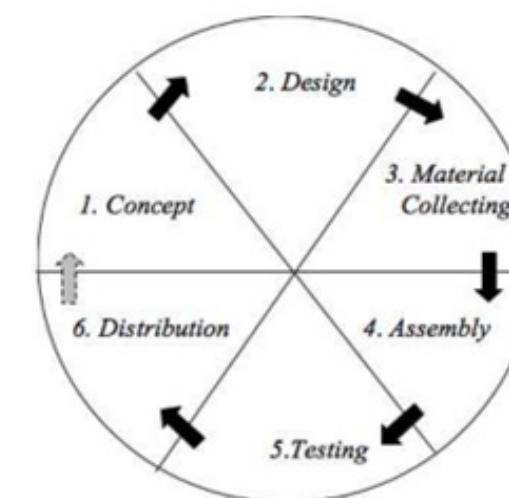


Figure 3. Multimedia Development Stages
(Source: Yulsilviana, 2017)

1. Concept

The concept stage is the stage for determining the goals and who are the users of the program (audience identification). The goals and end users of the program affect the nuances of multimedia as a re-

flection of the program and the goals of creating works and multimedia later. In addition, this stage will also determine the type of application (presentation, interactive, and others.) and the purpose of the application (entertainment, training, learning, and others.). Basic design rules, for example, application size, targets, and others, are also defined at this stage. The concept that has been formed since the isometric work was created and started talking about the AR method as an optional exhibition allows the design of this application to be correctly conceptualized later.

2. Design

Design (design) is the process of making specifications to determine the style/style in a work creation process at the beginning of production. The design needs to be made as detailed as possible so that in the next session, namely collecting and assembling materials, a new decision maker is no longer needed. Just use the decisions that have been determined in this session. In practice, project work in the initial session will often experience material increases, reductions in application parts, or other changes. In the production of Isometric AR, there are two design stages: the design of the Isometric and the design of the Augmented Reality program in figure 4. Because the two are different things in the production process, but still cannot be separated. For Isometric, students have designed before their isometric 3D production through sketches. As for the design of the AR application, we can start by laying out the position of the button layout and what features are in Augmented Reality.

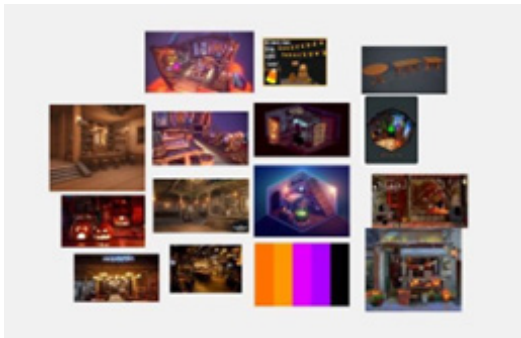


Figure 4. Isometric work design stage
(Source: Personal research documentation)

3. Material Collecting

Material Collecting is the stage of collecting materials according to the work needs. At the time that Isometric Augmented Reality works, the material used is the work of students who have been processed in 3D software, then designed through Augmented Reality production software. This stage can be done in parallel with the assembly stage. So, the process will run simultaneously during the assembly stage.

4. Assembly

The Assembly stage is the stage of making all multimedia objects or materials. Application development is based on the design, process and navigation stages. This stage will take much time in the production field. In the production process of Isometric Augmented Reality, several software are used:

a. Blender

Blender is an engine for producing 3D animation. Both are widely used in the animation industry for production. Blender has modeling, simulation, rendering progress, and compositing capabilities that offer a comprehensive creative feature set on a highly extensible production platform like in Figure 5. Blender is provided free on the internet.

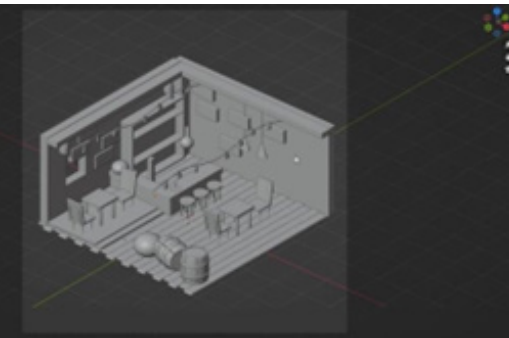


Figure 5. Isometric work design stage
(Source: Personal research documentation)

b. Unity 3D

Unity 3D is a cross-platform game engine. Unity is an integrated tool for creating games, building architecture and simulations. However, Unity is not designed for the design or modeling process because it is not a tool for designing and modeling 3D. If we want to design, use another 3D editor like Autodesk Maya or Blender. In Unity, 3D scripting features support three programming languages, JavaScript, C#, and Boo, used to edit AR scripts.

c. Vuforia SDK

Vuforia is an Augmented Reality Software Development Kit (SDK) for mobile devices that enables the creation of AR applications. The Vuforia SDK can also be combined with Unity, namely the Vuforia AR Extension for Unity. Vuforia is an SDK provided by Qualcomm to help developers create Augmented Reality (AR) applications on mobile phones (iOS, Android). AR Vuforia provides a way of interacting that utilizes the camera of a mobile phone to be used as an input device, as an electronic eye that recognizes specific markers.

5. Testing

After completing the production process (assembly), the testing stage is at-

tempted by running the application or program and seeing whether there are errors. Generally, the initial stages in this session are carried out through an alpha testing process where the tests are carried out by trials or the manufacturing area in the project. After passing the alpha test, Beta testing involving end use can be run.

6. Distribution

After the testing phase is carried out and cleaning bugs and errors in the application is made and carrying out the final export the application will be stored in a storage medium. Sometimes the more content components in the application, the larger the size of the application. Then a compression step for the application will be carried out. The distribution process also distributes the production results so that consumers can try the products created. This stage can also be called the evaluation stage for developing finished products so that they become better. The results of this evaluation can be used as input for the concept stage in further product development.

In this case, the researcher distributes works with samples of Animaxtion events held throughout January. This activity is part of a series of Multimedia Nusantara Polytechnic Campus Visits, which invite various Vocational High School students around Tangerang. Approximately 50 students visited the animation exhibition providing 3D Augmented Reality rides. Because this research focuses on production techniques, the number of viewers, audience ratings, and their responses will be used as material for improving future applications

Later, this research will entirely focus on post-production monitoring of 3D modeling production and focus on Unity and Vuforia. Blender is only a tool for extracting 3D files, as discussed in the re-

sults section.

Result

Making isometrics more attractive in exhibitions is an important work where the implementation of augmented reality into works is an effort to attract more modern communication methods. Broadly speaking, isometric production to an advanced augmented reality form requires a very long journey so that the applications created run perfectly. Depiction through a short diagram can be seen in Figure 6 , below:

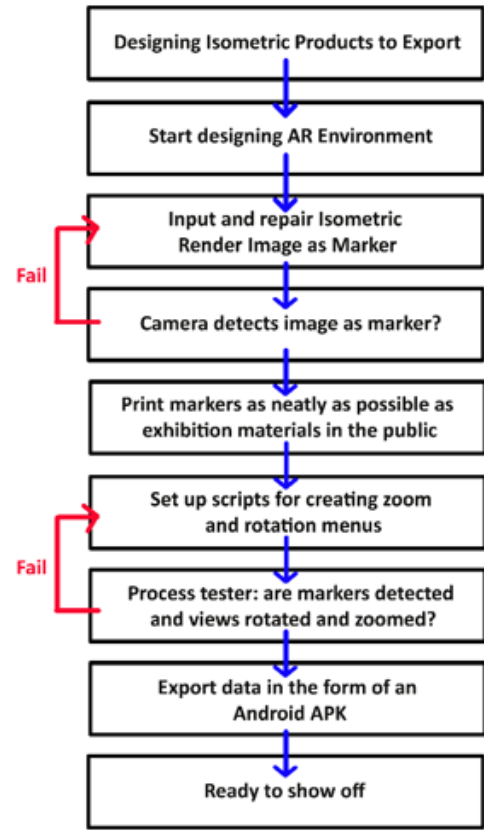


Figure 6. System Flowchart
(Source: Personal research documentation)

The diagram above has explained the various steps so that the AR application can be used, but researchers try to describe some crucial points in the AR production process.

1. Export 3D Isometric to AR environment.

Isometric artworks are a mid-semester assignment for MNP animation students, so when these AR productions are made, their work has been assessed and curated according to the needs of the Animaxtion exhibition. This is done in order to maximize the exhibition space and work effectiveness. Curation was also carried out to whip up other students whose works still needed to be selected to try even harder for the next exhibition. Export is done through the blender software; after improvements, the isometric 3D work is ready to be exported.

After the work has been repaired, the first step is to export the data file to FBX format. FBX files are perfect for VR and AR because they support various data types, including geometry, animation, skinning, and lighting (Vivian, 2022). Researchers carry out the baking process (the process of transferring texture data from one 3D model to another 3D model. Speaking, people are doing this generally when they are trying to take a high-poly model and convert it to a low-poly model) because in the process, we won't be using the shading and lighting from Unity 3D, but from Blender. The steps for exporting in Blender like in Figure 7:

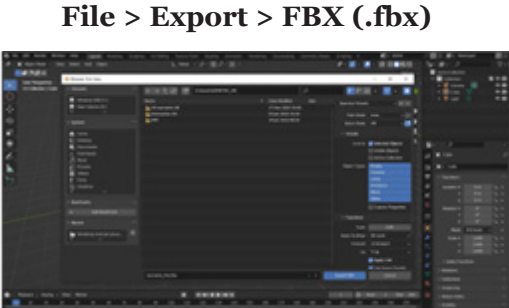


Figure 7. display export fbx from blender
(Source: Personal research documentation)

After it has been exported, the file is ready to be imported into the Unity 3D software as an Augmented Reality production engine.

2. Making Augmented Reality Applications.

This process is the main focus in research because it is a crucial part in the process of making AR. The first step is of course to create an Augmented Reality project with Unity 3D software. here I use the 2020 version because I feel that I am quite familiar with the tools that are presented. After the project is finished, the next step is to export the FBX file that was created earlier in Blender. In Figure 8, shows the progress described earlier.

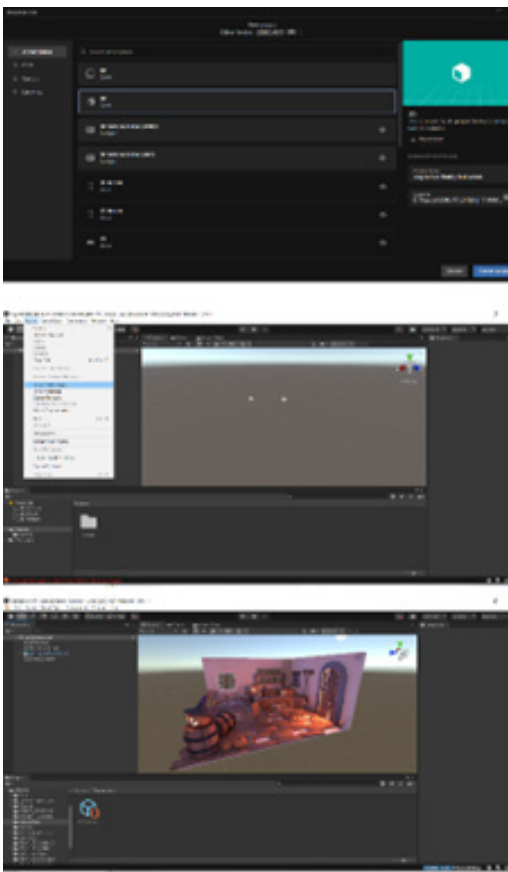


Figure 8. Overview of creating projects and exporting FBX
(Source: Personal research documentation)

The next step is to create an AR camera. To make all AR needs from databases, licenses, triggers and AR settings, researchers use additional software engines with the Vuforia SDK plugin. The Vuforia SDK can be accessed and downloaded for free on the Vuforia site. After all needs have been exported and the data processed, then make sure the Vuforia SDK is integrated with Unity 3D. In Vuforia, there is a system that creates image triggers as our Augmented Reality markers, so that when we finish printing the physical form of the work that becomes our program marker, the system will automatically read it and display the AR screen. However, there is a star system in Vuforia which is useful for

indicating the level of accuracy of reading markers. The more stars, the more easily the image will be read as a trigger for the AR program. So try to have as many stars as possible in our image.

After everything is integrated, we have to export all the plugins that we have created and downloaded in the Vuforia SDK earlier. Steps to export plugins from Vuforia SDK to Unity 3D: Unity 3D > Assets > import package > custom package > select Vuforia Plugin. Each progress can be followed according to Figures 9 and 10 and see the progress response in the future.

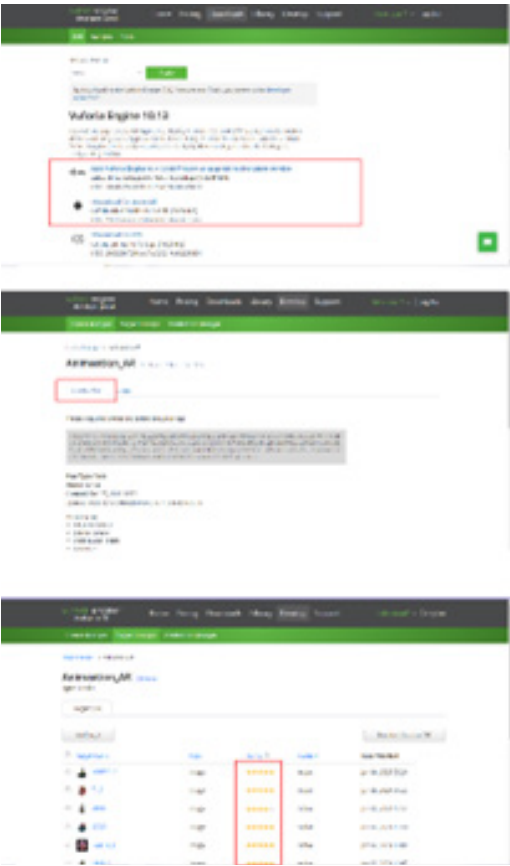


Figure 9. Important data in Vuforia SDK
(Source: Personal research documentation)

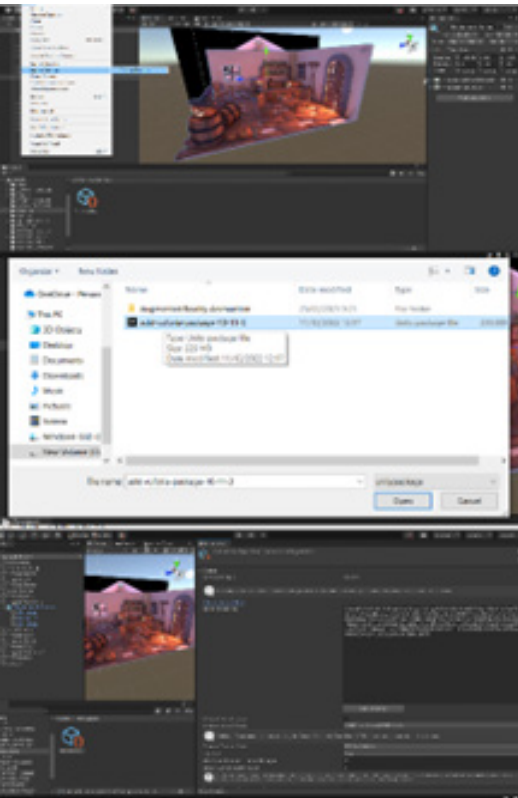


Figure 10. Vuforia Configuration in Unity 3D
(Source: Personal research documentation)

After that, Vuforia has integrated successfully. How to activate Vuforia in Unity 3D: GameObject > Vuforia Engine > select as needed, such as an AR camera (as a special camera for AR products) or Image Target (create a Trigger in the project).

The next step is to put the rendering image into the target image form in AR. Make the position of the virtual trigger in the Unity 3D engine as close as possible so that later when testing the AR camera trigger, it will be in the position designed in Unity 3D. After everything is installed, the researcher can try the AR camera test by pressing the play button on the project desktop as can be seen in Figure 11.

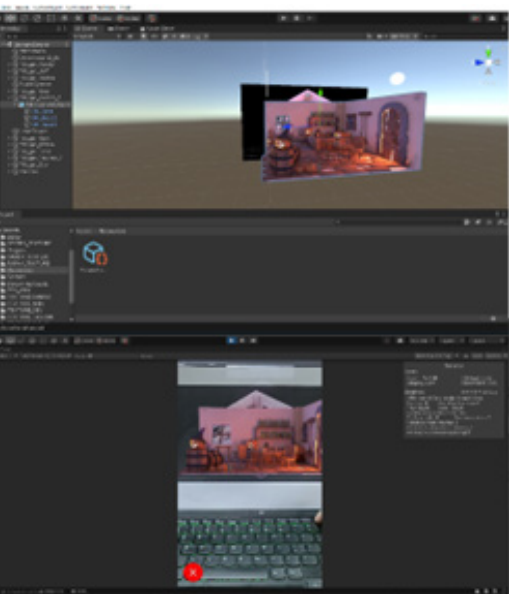


Figure 11. Integration of Image Target as Marker and testing camera was successful.
(Source: Personal research documentation)

If the camera test fails, then the Image Target import process must be repeated again. Usually, the main cause is a weak trigger (if the Vuforia SDK menu had a low star) so the marker is not readable. However, if it has been read, then the AR-making process has been completed. However, if we refer to this default menu, AR cannot be rotated and zoomed because there is no such menu in Vuforia. Actually, there is a built-in plugin from Unity to adjust the zoom and rotate the display, namely Lean Touch. However, if the settings presented are inappropriate, the book changes the default script that was created with Microsoft Visual Studio. As in Figure 12, the coding process for adding figures is carried out sequentially at each step of the process.

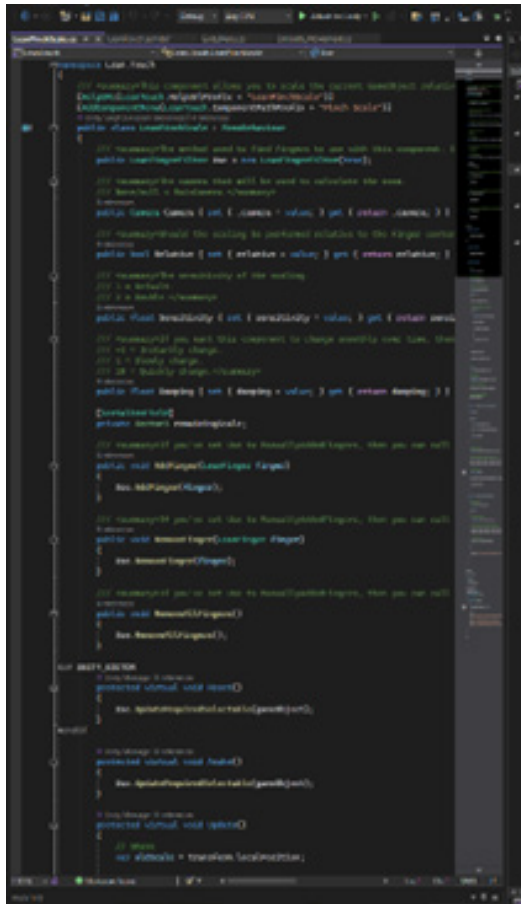


Figure 12. Editing zoom and rotate script from Lean Touch with Microsoft Visual Studio.
(Source: Personal research documentation)

If all processes have been completed, the researcher tries to make the main menu display UI as an introduction to the customer before entering the application. Researchers also hope that one day they can include various ornaments in the UI for the main menu display, such as sponsors, campuses, and other menus. The researcher made two main buttons and two images that could directly access various websites. The Start button functions to enter the AR camera menu with the Augmented Reality application that we have created. Meanwhile, the exit button functions to exit the Augmented Reality program. Then there are two introducto-

ry images that the researcher inserts in the main menu display of the research application, namely the Animaxtion logo image, which when clicked it immediately connects to the Animaxtion Instagram event. Meanwhile, there is the Multimedia Nusantara Polytechnic logo under the menu, where if clicked, it will go to the campus's website like in Figure 13.

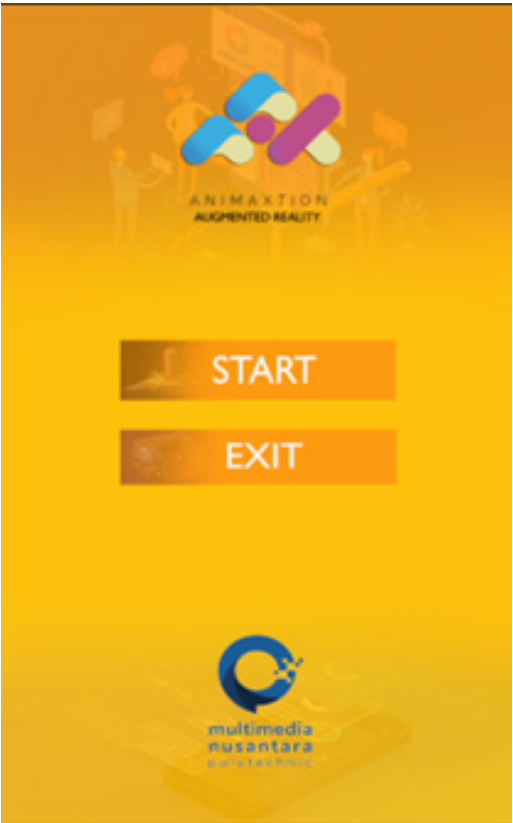


Figure 13. Display UI Home Screen application AR Animaxtion
(Source: Personal research documentation)

The production method is almost the same as creating a zoom and rotate script, but the packaging is smaller. So, it does not require as many script commands as zoom and rotate earlier in Figure 14.

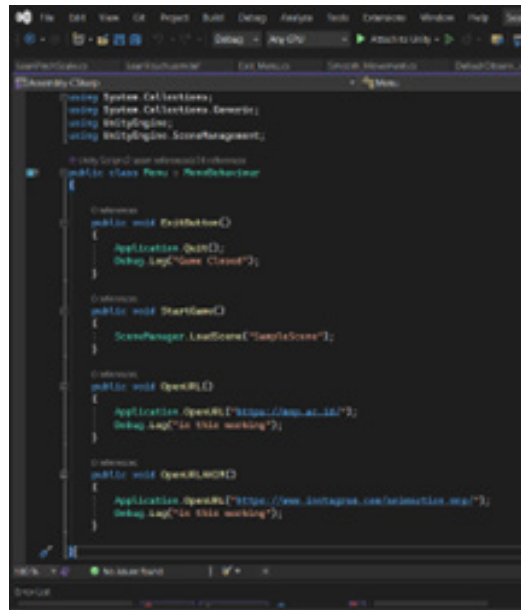


Figure 14. Scripting in UI Home Screen
(Source: Personal research documentation)

Suppose there are no more problems regarding the process that has been running and all trials in Unity 3D are successful. In that case, the research can proceed to the next stage, exporting Augmented Reality data into APK form.

3. Export Augmented Reality data into APK.

The following process can be carried out if all stages of the AR production process in Unity have been carried out. Test trials via the AR camera have also been tested. After all the AR tests and designs have been completed, the next step is the Export AR process to APK form. In the process, researchers encountered a few problems. Researchers only need to set the type of APK that was created to be used for what device. For now, researchers are trying to make APKs that support Android only. APK build process:

File > Build and Settings.

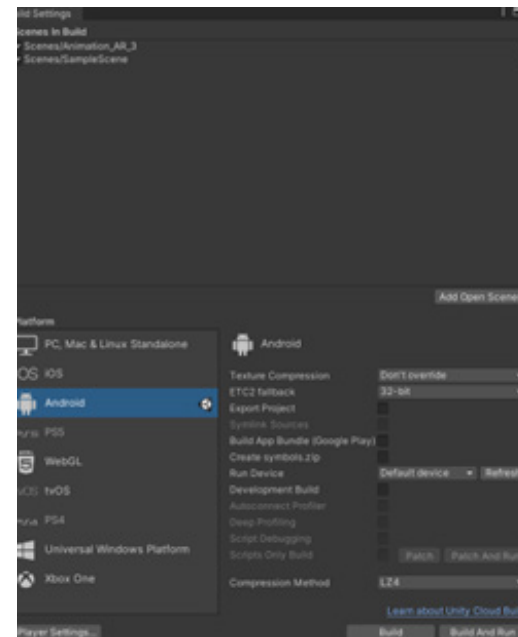


Figure 15. Display build and settings in Unity
(Source: Personal research documentation)

Before pressing the Build button, it would be wiser to check all the requirements in the Player Settings, which are in the column at the bottom of Build and Settings as can be seen in Figure 15. In the Project Setting menu, we focus more on the Player section to set various types of apk profile settings later. The most important thing here is to change the name of the Package Name, so that it will make it easier later in the apk creation process. Then the Minimum API Level is used as a Limitation on the types of Android that can use this APK. As of Unity 2020 and Vuforia has an Android 6.0 “Marshmallow” Limit (API level 26) as the lowest limit for Android devices capable of running APKs. Then the Target Architectures themselves are set in ARM64 mode because most smartphone and tablet devices currently use 64-bit apk types.

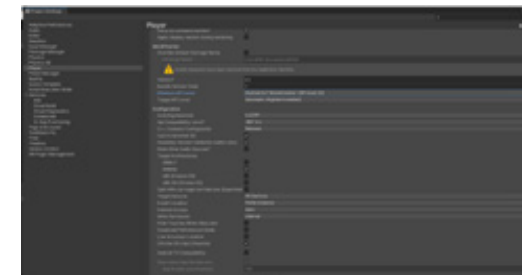


Figure 16. Player Setting in Build Setting Unit 3D
(Source: Personal research documentation)

If we have done the setting process, the next step is to do the Build. Always keep an eye on the Build process because sometimes there are errors in the progress. If there are no obstacles, an APK file will be created, which can be directly extracted to a smartphone or tablet device. As in Figure 17, the APK is formed with the icon that we have set during the export process in Unity 3D earlier.

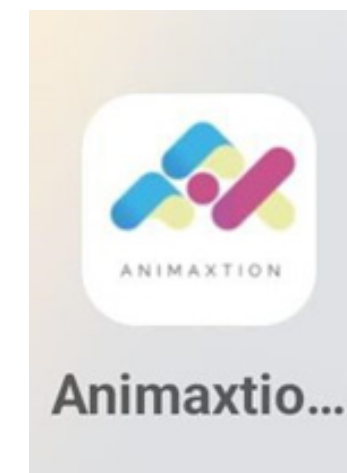


Figure 17. display APK Animaxtion AR in Android
(Source: Personal research documentation)

Discussion

While making an Augmented Reality application, the process and flow follow several other research results even though they do not use the same target. Previous researchers found obstacles to markers like what they did, and there are prob-

Conclusion

From this stage, AR production actually has a large and structured scope of production. However, because the production of works was assisted by

lems with markers made with ARToolkit (Yulsilviana et al., 2017). ARToolkit has several problems regarding markers with different positions. This study found that the support for AR features is growing through the presence of the Vuforia SDK, which is easier to store and markers are more easily triggered on smartphone or tablet devices.

The researchers followed when the event took place from January 10 to 27, where the 3D Isometric AR stand was quite popular in the eyes of visitors. However, researchers found several limitations and affordability of the applications that researchers created. In Figure 18, shows visitors enjoying exhibition activities and shows the limitations of visitors in using tools, so further improvement is needed on this matter. Visitors question access to apk for the public, where researchers' limitations on the Playstore license affect visitor comments about the need for online media to support AR. Researchers hope to develop this AR application into a more affordable media for the wider community in future studies.

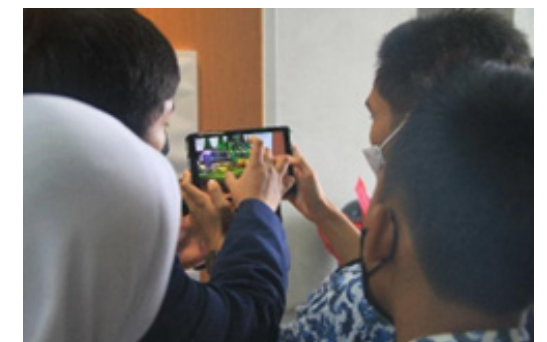


Figure 18. Visitor tried Animaxtion AR in Exhibition
(Source: Personal research documentation)

mid-semester works from MNP animation students in the form of 3D isometrics, it became easy for researchers to design systems where several students also assisted researchers. This AR production makes this kind of production system capable of being run by students, and it is hoped that in the future, it can help the New Media college learning system where AR is attractive to exhibitions. The animation production process which is almost entirely implemented coupled with the application of new media AR can be an innovation in future learning and visualization development.

This can be seen from several observations of the Animaxtion exhibition that has been running where the Isometric 3D AR arts have been visited and tried by visitors and attracted the attention of visitors so that it becomes the main attraction in art exhibitions.

However, all methods have drawbacks. Researchers got a good response from the audience, but due to limited devices because the application devices have yet to be widely disseminated so the system is still offline the thing to complain about. The researchers hope that for further development of Augmented Reality applications, it can develop to a more modern online level.

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DESIGNING CHILDREN'S STORY BOOK AS AN INTRODUCTION TOWARDS SILEK HARIMAU MARTIAL ART

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Abstract: Indonesia has a martial art, namely the martial art of Pencak Silat. Pencak Silat has various variations due to the diversity of cultures in Indonesia. Unfortunately, Pencak Silat is currently less in demand due to various reasons, but one of them is competition with foreign martial arts. One of the martial arts of Pencak Silat whose existence is threatened is the martial art of Silek Harimau, this is made worse by the absence of written documentation regarding Silek Harimau. Therefore, this design aims to create media in the form of illustrated children's story books that introduce Silek Harimau to children. This design will use descriptive qualitative research methods, and data collection methods in the form of interviews, observations, literature studies, and questionnaire surveys. The design will use the Design Thinking method which consists of various stages, namely: Emphasize, Define, Ideate, Prototype, and Test. These design stages will later produce a media in the form of a illustrated children's story book entitled "Menjadi Kesatria Harimau".

Keywords: martial arts; children; picture book; stories

Introduction

Pencak Silat is an Indonesian martial art culture. Pencak Silat has its own uniqueness, because it does not only teach you how to defend yourself. But it also teaches you many life's values (Rachman et al., 2021). The cultural diversity in Indonesia also gives Pencak Silat many variations in technique and culture (Rachman et al., 2021). Western Sumatra is a region in Indonesia that is famous for its Pencak Silat. In Western Sumatra, Pencak Silat is called Silek. One of the most well known

Silek and has been the pride of Western Sumatra is Silek Harimau (Agusta, 2021). Unfortunately, currently Pencak Silat is not really in the interest of the public. The leading cause being a competition with foreign martial arts. Such as, Taekwondo, Muay Thai, Karate, etc (Rachman et al., 2021). Silek Harimau also has no written documentation, these problems may cause Silek Harimau to become extinct as a culture.

Therefore, we have to raise awareness and interest of the public (especially

children) towards local culture. Because children are our next generation. In order for our culture to not be forgotten, they need to be firm and interested towards our local culture (Aisara & Widodo, n.d.). Unfortunately, there are not many media that discusses Silek Harimau, especially for children. These days, children's books in Indonesia are usually filled with novels, short stories, and teenage literature (Dharma, 2019). These are previous journal articles, that covers similar topic about Pencak Silat and Silek Harimau:

- Information Design for Tiger Silek Martial Arts of West Sumatra through Webtoon Comic Media (Zona, 2019).

- Socialization of Pencak Silat Preservation as Indonesia's Cultural Heritage and Soft Power (Rachman et al., 2021).

- Creation of Pencak Silat Illustrated Books for Children Aged 6-9 as an Effort to Recognize the National Cultural Heritage (Natassia et al., 2015).

- Webtoon Comic Design as Media for Pencak Silat Stories (Ashiddieq & Aditya, 2021).

- The Design of Pencak Silat Comics as a Media of Historical Information and Knowledge (Satriyo Utomo, 2014).

Based on these journal articles, local martial arts such as Pencak Silat and Silek Harimau tend to be viewed as ancient and outdated. These journal articles also described the lack of media that covers most local martial arts.

Acknowledging there are urges on creating a media for children to raise their interest towards Silek Harimau, it becomes the background for the author to design a children's story book as a media to introduce children towards Silek Harimau. The book will have a fictional story, accompanied with many facts about Silek Harimau.

Designing a children's story book that introduces children towards Silek Harimau, is the main difference of this design from other designs. Most designs used digital comics, and information books for their media. This book will also mention some cultures of Western Sumatra as a cultural approach.

Methodology

1. Research Methods

In this design, the author will use qualitative descriptive research methods, the author used qualitative methods because the author will research an object that is a local martial art called Silek Harimau. This qualitative research will be using a descriptive approach. Because the data that has been obtained by the author will be analyzed, and the result of the analysis will be a description from the object of the research.

2. Collecting Data Method

In this design, the author used the following methods to collect data:

- Interview, the author interviewed Edwel Yusri Datuak Rajo Gampo Alam. He is the master of Silek Harimau martial art. The purpose of the interview is to collect data about Silek Harimau martial art. Other than the master of Silek Harimau martial art, the author also interviewed Lenny Wen, she is an author and a writer of children's story book. The author interviewed Lenny Wen to gain insights about designing a children's story book.

- Observation, to obtain any information about the existence of a book about Silek Harimau. The author commenced an observation at the bookstore website, and many e-commerce sites such as shop-

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ee and tokopedia. The author also visits many Gramedia Book Store to observe the competitor product.

- Survey, the author used likert scale questionnaires. The author chooses young parents as the respondent with purposive sampling. The purpose of this survey is to know which variables are important to the respondents. These questionnaires will be analyzed through interval technique.

- Literature Review, to support the design the author collects many data by reviewing many literature media.

3. Design Method

After collecting data, the author commences the design process by using a design thinking method. According to Kelley and Brown (2018) as cited by Mawarni, (2021), design thinking has a couple of steps. Here are the steps of design thinking:

1. Empathize, on this step the author collects data to find out the problem that will be used as the background of the design.

2. Define, on this step the author already knows the problems and the needs of the user. Therefore, on this step the author will determine which design will be made.

3. Ideate, on this step the author decides on the idea, concept, and strategy for the design.

4. Prototype, on this step the author already created the prototype of the design from the idea, concept, and strategy.

5. Test, on this step the author tested the design to the user and experts.

Result

There are two results from this design. Which are Main Media and the Supporting Media. The main media is a Children's Story Book, which introduces Silek Harimau to children. While the Supporting Media, are the media that promotes the Main Media.

1. Main Media

Following are the specifications of the main work of this design as can be seen in Fig. 1;

- Size (cm) : 20x20cm
- Paper Type : Art Carton 260gsm
- Lamination : Doff
- Type of Cover : Hard Cover
- Volume : Case Binding

Number of Pages: 39 pages (1 Half Title, 1 Copyright Page, 37 Main Texts)

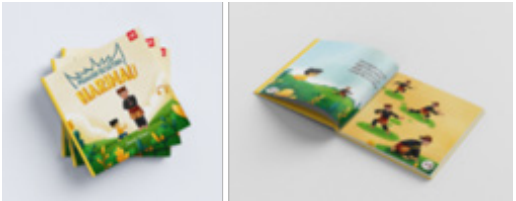


Figure 1. Book's Mock Up
(Source: Personal research documentation, 2022)

2. Supporting Media

The design of supporting media will be divided into two categories, namely above the line, and below the line. Each supporting media retains the looks, tone, manner, and mood of the main media.

- 1. Above The Line
 - Instagram and Facebook Feeds

Instagram and Facebook feeds are used as the media to notify people regarding book release events, and to remind people that the book has been released. The design is made by following the concept of the main media. The Instagram and Facebook feeds are using the illustrations of the main media and using the GoodDog Plain and Caveat font. The Instagram and Facebook feeds are used during the pre-event and post-event as can be seen in Figure 2 and Figure 3.



Figure 2. Pre-event Feeds
(Source: Personal research documentation, 2022)



Figure 3. Post-event Feeds
(Source: Personal research documentation, 2022)

- YouTube Ads

The YouTube ads contain the information of the event because it will be shown during the pre-event period. The ads also have the book name style so that the media will be recognizable as shown in Figure 4.



Figure 4. YouTube Ads
(Source: Personal research documentation, 2022)

- Web Banner

The aim of the web banner is to attract the attention of potential customers and provide information to potential customers regarding products and upcoming book release events. The web banner will be shown during the pre-event period. This can be seen in Figure 5 below:



Figure 5. Web Banner
(Source: Personal research documentation, 2022)

- Poster

There are going to be two kinds of posters which are the pre-event and post-event posters as can be seen in Figure 6 and Figure 7. The aim of the pre-event poster is to attract the attention of potential customers and provide information to potential customers regarding products and upcoming book release events.



Figure 6. Pre-Event Poster
(Source: Personal research documentation, 2022)

The post-event poster has the purpose of attracting the attention of potential customers and to notify that the book has been published and can be found at the Gramedia bookstore.



Figure 7. Post-Event Poster
(Source: Personal research documentation, 2022)

- X-Banner



Figure 8. X-Banner
(Source: Personal research documentation, 2022)

The x-banner as can be seen in Figure 8 aims to attract attention during the event so that it can attract potential customers to come to the booth to buy the book. The design emphasizes product and event information. The x-banner will be used during the event.

- Hanging Banner



Figure 9. Hanging Banner
(Source: Personal research documentation, 2022)

The hanging banner is made to attract potential customers' interest and curiosity about the stories in the book. The hanging banner will be hung at the ceiling of the Gramedia bookstore. The hanging banner has some teaser of the book so the potential customer will be curious about the book. The hanging banner will be shown during the post-event period.

- Tent Card



Figure 10. Tent Card
(Source: Personal research documentation, 2022)

The tent card as seen in Figure 10 is made to attract potential customer interest and curiosity about the stories in the book. The tent card will be displayed at the cashier of Gramedia bookstore.

2. Below The Line

- Gimmicks (Totebag and Keychain)



Figure 11. Totebag and Keychain
(Source: Personal research documentation, 2022)

These gimmicks seen here in Figure 11 aim to attract potential customers to buy products. The gimmick keychain was chosen because it is suitable for the target of the segmentation, while the totebag is felt to be useful especially during events to bring books. The totebag and the keychains design is the same as the one on the book's cover.

- Booth



Figure 12. Booth
(Source: Personal research documentation, 2022)

The booth will be used during the event as a place to buy books. The booth design is adjusted to be similar with the design of the book as can be seen here in Figure 12.

- Uniform



Figure 13. Uniform
(Source: Personal research documentation, 2022)

This t-shirt uniform was made for employees in the booth to wear. The uniform has the namestyle of the book on the front. There are the use of several logos such as: the Gramedia, Silek Art Festival as well as a sentence to persuade children to learn about Silek Harimau as can be seen in Figure 13.

Discussion

1. Emphatize

Survey

Based on the results of the questionnaire survey filled by 102 respondents, the respondent reached many following conclusions:

- Children's story books would be more interesting if they were equipped with pictures and bright colorful colors.
- Children lack knowledge and interest towards local cultures.
- Parents tend to choose children's books with a cultural theme in it, instead of other themes.
- Parents feel that books are a great medium for children to promote their growth, and parents tend to choose physical books instead of digital books.

Based on the result of the interview with Edwel Yusri Datuak Rajo Gampo Alam the history and knowledge of Silek

Harimau is passed down verbally. In the era of Datuk Suri Dirajo's Kingdom, the king had a knight called Harimau Tjampa. Harimau Tjampa used a martial art technique called Silek Harimau.

Based on the result of the interview with Lenny Wen, Indonesian children's story books tend to explore religious and moral themes. Lenny Wen thinks that children's story books can adopt any kind of art style. She also commented that children's story books need to use the proper words that fits to be read by children. Lenny Wen thinks that children's story books are an effective medium for children to learn.

Lenny Wen also thinks that using children's story book as a media to introduce local culture to children is a positive thing, and she also thinks that the children will be more interested towards local culture if children's story book covers the local culture theme with interesting story, relatable characters, suspense, and illustrations to raise the value of the story.

The author commenced an observation by searching books that discuss the local martial art Silek Harimau on Gramedia's website, Shopee and Tokopedia e-commerce. The author also visited many Gramedia Book Store to observe the competitor product. Based on the results of the observation, the books that discuss Silek Harimau are really rare, especially for children. Most children's books tend to have a fictional fantasy theme that is equipped with morals lessons. Children's books that discuss local culture tend to be rare. Based on the data that have been collected and after reviewing many literature media. The author has reached a conclusion that Silek Harimau has a really small number of enthusiasts, and there is no written documentation. There are not enough Children's books that discuss cul-

tural themes. Children tend to be interested in children's story books that have bright and colorful colors.

2. Define

In this step the author defines the solution to the problems that arise from the background. In this design, the author decided that "Children's Story Books as Media for Introducing Silek Harimau" for children, especially boys aged 7-9 years, can be used as a solution to the existing problems.

3. Ideate

This step started by the author started developing ideas, strategies and concepts for the design. These ideas, strategies and concepts will be applied in the process of designing the book based on existing theories. Before creating ideas, concepts and strategies the designer draws up a SWOT strategy from a SWOT analysis.

Table 1. SWOT Strategies
(Source: Personal research documentation, 2022)

	Strength (S)	Weakness (W)
Opportunities	SO Strategy, designing children's story books with cultural values.	WO Strategy, the book focuses on introducing Silek Harimau.
Threats	ST Strategy, designing a book with interesting illustrations, so children will be interested in reading the book.	WT Strategy, using illustrations to introduce Silek Harimau, and making children interested in reading the book by using gimmicks.

Based on the SWOT analysis, the author will be using WT strategy as the strategy in the design. Making a book with interesting illustrations to introduce Silek Harimau. Other than using illustrations, the author planned to use many gimmicks to raise interest and brand awareness.

4. Prototype

In this step the author has turned the idea, concept, and strategy into the design. Which is a children's story book.

Mood, Tone, Manner and Looks



Figure 14. Moodboard
(Source: Personal research documentation, 2022)

Mood, tone, manner and looks of the design can be seen in the moodboard of the design on Figure 14. For its looks, the children's story book used an illustrative look. The tone of the book is colorful and bright colors. The author dominantly used warm colors (mostly yellows) for the book. The author also used blue and green colors to balance the tone. The purpose of using warm colors as the dominant color is to convey fun and exciting feelings towards the reader. The author used an uplifting manner, so the reader can feel uplifted when reading the book. The author expects the book to have an encouraging mood so the readers can feel spirited while reading the book.

Characters

The author uses shape language to design the characters. Here are the designs of the character:

- Tito

Tito is the main character of the story. The author wants the character of Tito to be likable, friendly, active, and fun. Therefore to convey those characteristics, the author made Tito's character to be physically curvy and rounded. Because curvy and rounded shapes tend to show a welcoming and warm feeling. Other than shape language, the author also used colors to convey such characteristics. Tito's character can be seen at Figure 15.

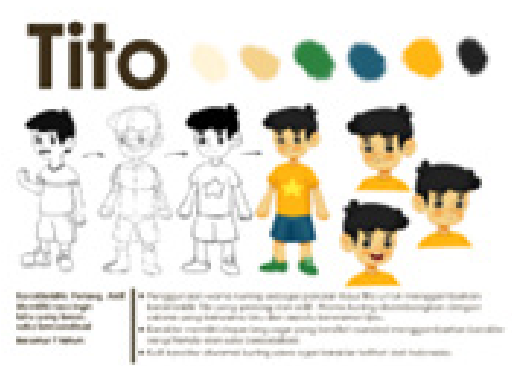


Figure 15. Tito's Character
(Source: Personal research documentation, 2022)

- Kakek

Kakek means grandfather in Indonesia. In this book Kakek is Tito's grandfather, the author wanted Kakek to have wise and trustworthy characteristics. Therefore, the author tends to draw Kakek's character with a square shape. Because square tends to convey big, strong, calm and trustworthy characteristics. Kakek character can be seen in Figure 16.



Figure 16. Kakek's character
(Source: Personal research documentation, 2022)

Colors

The author uses color to convey and express moods. In this book the author used many bright and colorful colors.

The main colors of this book are yellow, blue and green as the Color tone can be seen in Figure 17. The author used yellow as the dominant color, to convey moods such as exciting, fun and warm. But the author also balanced the tone of the book, by using blue and green color.



Figure 17. Color Tone
(Source: Personal research documentation , 2022)

Typography



Figure 17. Color Tone
(Source: Personal research documentation , 2022)

In the title of the book, the author uses Good Dog Plain and Bahnschrift Bold Semi Condensed fonts as can be seen here in Figure 18. GoodDog Plain is used in

the words “menjadi”. The GoodDog Plain font is handwritten, then for the Bahnschrift font is edited again by changing the thickness of the strokes in the writing. This makes the Bahnschrift font look more handwritten. This font was chosen for the title because it matches the mood and tone that the author wanted to convey in this book, namely uplifting and fun. Apart from GoodDog Plain and Bahnschrift, designers also used the Caveat font for the body text. This handwritten font was chosen because it doesn't look stiff and because it's sans serif body text which makes it easier to read as shown in Figure 19.

Layout and Grid

The design of this book uses a circus type layout and also a picture window type. For the grid the designer uses the column and manuscript grids as shown in Figure 19.



Figure 19. Layout and Grid
(Source: Personal research documentation, 2022)

Imagery

This book has an imagery concept in the form of cartoon-style illustrations. This book uses the characters as the main illustrations as can be seen here in Figure 20.



Figure 20. Tito's Imagery
(Source: Personal research documentation, 2022)

As a supporting element, this book uses many floral illustrations, Minang culture (Rumah Gadang, Songket, Deta) as shown in Figure 21.



Figure 21. Rumah Gadang's Imagery
(Source: Personal research documentation, 2022)

Namestyle

An element is added to the top of the namestyle, which has a shape similar to the roof of the Rumah Gadang. As shown in Figure 22.



Figure 22. Namestyle
(Source: Personal research documentation, 2022)

This is to provide a characteristic for the namestyle so that it can become the identity of the book and does not look too general. Part of the namestyle “Menjadi Kesatria” uses the font GoodDog Plain in the form of handwriting typography. Then, for the “Harimau” the author uses the Bahnschrift sans serif font which is modified to looks like handwriting typography. The “Harimau” in the namestyle is enlarged to emphasize the Silek Harimau.

Cover

The designer makes the cover with various illustrations on the front and back of the cover, as shown here in Figure 23.



Figure 23. Book's Cover
(Source: Personal research documentation, 2022)

These illustrations are pictures that will be in the book so that readers understand about the book.

Key Visuals

This book uses character designs and its illustrations characteristics to be used as key visuals, as can be seen in the illustration in Figure 24.

The characteristics of the illustrations in this design can be seen from the characters illustrated with curvy shapes, the use of thick eyebrows in each character. Apart from the characters, there is also a feature of using textures on the illustrations.

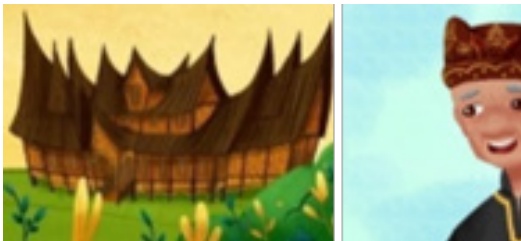


Figure 24. Book's Illustration
(Source: Personal research documentation, 2022)

Storytelling

This book uses a storytelling plot that uses one of the universal plots Voyage and Return. The plot focuses on the main character who visits a new and unfamiliar place. On this plot the character will discover new things (Ffion, 2015). It's the same with the story of Tito coming to his grandfather's house which feels new and foreign to Tito.

This book uses the storytelling technique Monomyth or it can also be called The Hero's Journey. In this technique the main character or "hero" comes to a new place and faces challenges and gains new knowledge (Ffion, 2015). This book tells the story of Tito who visits a new place and learns about Silek Harimau from his grandfather. This is in accordance with the Monomyth technique.

Test

At this stage, the author commenced a product trial by asking for criticism, opinions and suggestions from illustrator and writer of children's book Lenny Wen. Lenny Wen stated that visually this book has satisfying and great visuals. However, the story line can still be polished by providing conflict. Apart from conducting trials on expert designers, the author also conducted trials on prospective customers, the results of these trials were:

- The design has bright and colorful colors that are suitable for children.
- The design is fun and easy to follow.
- The illustrations are great.

From the results of these trials it can be concluded that designs with bright and colorful colors tend to be liked by children.

Conclusion

The result of this design process is a children's story book called "Menjadi Kesatria Harimau" which aims to introduce Silek Harimau martial art to children. The designs are expected to have implications in the form of raising awareness of the public and children towards local martial arts in Indonesia, especially Silek Harimau.

There are limitations in the design, such as the Silek Harimau material which isn't entirely discussed. The author feels like there was not enough time to observe the movements in Silek Harimau. It is hoped that this design can be used as a reference for designers and researchers with similar topics in the future. In creating a design, it is necessary to have a deep understanding of the problem under study so that it can provide a design with a very appropriate solution. In the next design, the designer is advised to discuss Silek Harimau in more detail. Apart from that, it would be better if the stories that were prepared were given more attention by giving the story elements of conflict so that the story would be more interesting.

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RECONSTRUCTION OF CREATIVE PRODUCTS BASED USING DESIGN THINKING APPROACH: THE “SPIRIT OF MAJAPAHIT” CASE STUDY

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Abstract: Indonesia is a country rich in culture and heritage. This richness of culture can be seen from artifacts and historical sites found throughout Indonesia. However, Indonesia's younger generations are less familiar with their own culture. This is caused by various things, one of which is the rarity of historical heritage products reconstructed to be introduced to Indonesia's younger generation. This research was conducted to analyze the process of reconstructing Indonesian historical heritage, the Spirit of Majapahit using a Design Thinking approach. The research and analysis of the process of re-creating the Spirit of Majapahit can form the basis of a design mindset that can be used as a guide in recreating local Indonesian historical products. This research uses a qualitative data collection method which is carried out by structured interviews with personnel who are actively involved in the process of reinventing the Spirit of Majapahit and experts on Indonesian culture. In addition to qualitative methods, literature studies are conducted to find data regarding the process of creating creative products, previous research on the adaptation of Indonesian local historical products, and audience responses to the reconstruction of past cultural products. The results of the study are used as the basis for creating a product design mindset module based on Indonesian local history which is linked to a systematic and replicable Design Thinking approach.

Keywords: design thinking; spirit of majapahit; history; cultural revitalization.

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Introduction

Indonesia is a country rich in priceless history and cultural heritage. However, today’s Indonesian youth are less familiar with Indonesian history and local culture when compared to popular foreign cultural products. This is because many historical products of Indonesia are not displayed and presented properly.

Currently, popular foreign cultural products that enter through mass media and modern communication technology are better known than cultural products resulting from local history. So it is necessary to make active efforts to revitalize and reconstruct the products of Indonesian history from the past so that they can be reintroduced to the younger generation of Indonesia.

The flow of change and the influx of popular cultural products caused by globalization and technological advances cannot be resisted. Therefore, efforts to reintroduce Indonesian history and culture need to be carried out through the creation of creative works in the form of popular cultural products that can be enjoyed by the younger generation in Indonesia.

To reconstruct products from local Indonesian history, a design mindset is required that is replicable and can be used as a guide when designing. This design mindset is needed so that the reconstruction of creative products based on history and culture is carried out based on research so that the results are not fictitious and far-fetched.

Based on the results of an interview with Ms. Rizky Sumartini, Young Expert Cultural Officer, East Java Cultural Heritage Preservation Center (BPCB), many local creators do not master the design mindset, so the design results are not in accordance with Indonesia’s local history and culture. So even though many local creators use local cultures

as a source of inspiration when working, because they do not yet have an in-depth research-based design pattern, the content displayed is still not accurate.

From the explanation above, it is known that there is no research-based creative product design mindset module for local Indonesian creators that is systematic and replicable. To discover this design mindset, researchers will analyze the design thinking approach used in the reconstruction of the Spirit of Majapahit ship.

Based on this explanation, the formulation of the research problem is: How is the Design Thinking approach used in the reconstruction of Indonesian local history and culture-based products, such as the Spirit of Majapahit ship?

Methodology

Research will be conducted using qualitative data collection methods. Qualitative data is data that emphasizes the quality rather than the amount of data. The first phase of the research conducted will focus on data generated through literature studies and interviews with Mr. Sumarwoto, Chair of the Majapahit Lovers Community, who is directly involved in the re-construction project of the Spirit of Majapahit Ship, and Mrs. East Java Cultural Heritage (BPCB). The interviews focused on the design thinking process approach in the reconstruction and re-creation of the Spirit of Majapahit ship.

The conclusion drawn in the qualitative study process is carried out by building knowledge from understanding the individual’s unique point of view and the meaning attached to that point of view (Creswell & Poth, 2018).

Result

Based on data from BEKRAF, creators and creators of creative works in Indonesia are creative industry players who are dominated by Millennials and Generation Z. Millennials and Generation Z have similar characteristics; both of them consider pseudo and virtual reality to be more real than the reality around them and are familiar with global popular culture rather than local culture.

When designing creative works based on local history and culture, these creative industry players experience difficulties because they are not too familiar with local culture. So they can’t accurately render it into popular works. This was verified by the researcher during the initial research data collection in an interview with Mrs. Rizky Sumartini, who stated that most of the popular works based on Indonesian culture were not designed through a research and consultation process. So that the resulting works tend not to present history and culture accurately but only as visual aesthetics. In fact, there have been attempts to accurately adapt local culture into pop culture products to be introduced to the younger generation. One of them is a creative work in the form of a comic entitled *Garudayana and the Grand Legend Ramayana*, created by Is Yuniarto.

Garudayana and Grand Legend Ramayana are manga-style comics (Japanese comic style) that are favored by the younger generation in Indonesia. Uniquely, these two comics were created based on the adaptation of local Indonesian culture, especially Javanese wayang. From interviews conducted by researchers with Mr. Is Yuniarto, it is known that when designing characters, world settings, and equipment, such as accessories, costumes, and weapons, into his comics, Mr. Is first conducts a research process on local culture that will be adapted to the comic to ensure accuracy.

During the early stages of design, Mr. Is Yuniarto did research first by looking at references from existing Javanese wayang. The characteristics of the characters to be redesigned are then recorded and modified to maintain the characteristics of the characters displayed. An example is the Gatotkaca character, typical of the Javanese wayang, that appears in the *Garudayana* comic. Mr. Is describes the characteristics of the mustache, star on the chest, wings, and bun (hair hat model) according to the puppets of the Gatotkaca people as can be seen in Figure 1.



Figure 1. . Gatotkaca - Wayang Orang, *Garudayana*.
(Source: Rias The Glory of Bhatarayuda (Arfiani, 2013), *Garudayana* (Yuniarto, 2010))

Apart from Is Yuniarto, researchers also interviewed other local creators who also made works based on local Indonesian culture, namely “Gromore Studio”. Gromore Studio created the animated story of the Archipelago, inspired by Indonesian fairy tales and legends.

In making the animation work, Gromore Studio first conducted research on the settings, clothes, stories, characters, costumes, and accessories that would be displayed in the animations being made. The results of this research can be seen in

the visualization of the animated content, which can show the uniqueness of Indonesian culture. Gromore Studio researches stories from existing fairy tales, then creates an animation based on a version of the existing folklore.

For the design of the visual appearance of the characters, Gromore Studio takes inspiration from Indonesian traditional clothing. As an application in design, Gromore Studio creates assets that are adapted to the local culture of the regional stories that are raised. For example, in one of the animated works, The Legend of the Straits of Bali, made by Gromore Studio, the dragon character is shown, which is taken from the Javanese dragon design. The characteristics of this Javanese-style dragon can be seen from the shape of the crown worn on the dragon’s head, as can be seen in Figure 2.



Figure 2. Gromore studio animation.
(Source: Channel YouTube Gromore Studio)

The results of the researcher’s interviews with Mr. Is Yuniarto and Gromore Studio show that the first step to re-creating Indonesian culture and history into

creative works is in-depth research to gain a thorough understanding of the objects to be adapted into popular works. The design process carried out by these local creators has similarities with the design stages using the Design Thinking method.

According to the Hasso Plattner Institute of Design at Stanford, “design thinking” is an iterative, non-linear process used to understand users, challenge assumptions, redefine problems, and create innovative solutions for prototyping and testing. This process is commonly used by designers to find solutions to complex problems and create new products (Black, Gardner, Pierce, & Steers, 2019).

Design thinking is a framework or method of solving problems. Design thinking has been around for decades but only started to become widely recognized in the last five or ten years. The first stage of design thinking is researching the problem; the next is narrowing the research area using educated guesswork, intuitive judgment, or simple common sense. And the third stage is to design a solution that can solve the problem (Martins 2009).

The five main phases of design thinking are empathy, definition, ideation, prototyping, and testing. Through these five phases, the designer will make observations, formulate problems, seek alternative solutions, create visual representations, and seek feedback to be able to find unique design solutions and solve problems. These five phases are not always sequential and can be executed in parallel, non-sequentially, or repeatedly. This mindset is designed to support a broadly shared view of the design thinking process (albeit using different terminology), suggesting exploratory data collection first, followed by idea generation, followed by a third phase of prototyping, and then testing. This process emphasizes iterative exploratory cycles using in-depth research to develop insights, followed by a process

of brainstorming to develop new ideas and then creating prototypes and experiments to test them (Liedtka, 2018).

Discussion

Ships are a means of transportation that were widely used in Indonesia in ancient times. Shipbuilding technology was well mastered by the Indonesian people at that time (Lelono, 2009). Indonesian ancestors with strong maritime souls have sailed to neighboring countries and sailed the oceans. This is also enshrined in various reliefs and inscriptions found in Java and Sumatra (Setianingsih, 1993). One of them is the ship relief enshrined at Borobudur Temple. The relief depicted on the Borobudur Temple further reinforces the glory of Indonesian maritime history in the past (Nastiti, 2021).

Sailing ships are thought to have appeared in Java at least around the 9th century AD. This ship was used by the ancient Javanese and other ethnic groups in the archipelago to cross the oceans. Wijaya, D.A. (2022). Maritime activity in East Java at that time was only recorded during the Singasari Kingdom era, around the end of the 13th century. The Majapahit Kingdom, as the successor of Singasari, expanded maritime activities with the concept of the archipelago it proclaimed. (Munandar A.A., 2013) To support its maritime activities that spread throughout the archipelago, the Majapahit Kingdom had many large and small boats, sailing ships, and other junks. Jung is a giant ship used by the Majapahit Kingdom as a military transport ship. Jung used to conduct trade from Southeast Asia to the Middle East.

The Majapahit Kingdom is one of the kingdoms in Indonesia with historical values that need to be preserved. This can be seen from the cultural heritage site of the Majapahit kingdom in Trowulan, Mojokerto, which is the location of the Majapahit

Kingdom. This kingdom left behind many historical and magnificent cultural products, one of which is the Jung Ship. Unfortunately, this is not known in today’s society. Many of the younger generations have never heard of, understood history, or recognized the form of Jung from the Majapahit era. Moreover, until now, the shape of the Jung, or sailing ship, of the Majapahit era was also not known with certainty. This lack of knowledge also encourages the younger generation to not understand Indonesia’s maritime power and to not be proud of it.

Based on these problems, the Jung reconstruction project from the Majapahit era in the form of a replica was born. The construction of the replica was initiated by the Majapahit Lovers Community, which started in January 2009 and aims to introduce Majapahit culture and maritime excellence to the younger generation of Indonesia. This plan has the support of various government agencies, such as the Ministry of Culture and Tourism, the Ministry of Transportation, the Ministry of Foreign Affairs, the Coordinating Ministry for Maritime Affairs, the Director General of Immigration, and the Ministry of Law and Human Rights. The ministry showed support by providing assistance by facilitating licensing and so on until the replica ship was finally successfully built and sailed until it arrived in Hokkaido, Japan.

This research wants to analyze the thought process behind the creation and expedition of the Spirit of Majapahit Ship using the Design Thinking method to find a design mindset that is replicable and can be reapplied to other creative projects.

Stage I. Empathize

Design thinking requires the designer to understand the target audience or users at a very deep level by observing and

knowing them (the empathy phase).

The reconstruction of the Majapahit ship is planned as a monument to introduce cultural heritage to the younger generation in Indonesia and get them to know Indonesian local culture. (Sumarwoto, personal communication) December 15, 2022) Because it is aimed at introducing cultural heritage to Indonesia’s younger generation, an appropriate strategy is needed so that the Jung reproductions created are not only accurate and historical but also able to attract the attention of and be accepted by the younger generation.

Therefore, in addition to building a replica of Jung from the Majapahit era, the Majapahit Lovers Community organized the Spirit of Majapahit expedition. The expedition was an activity initiated by the Majapahit Lovers Community with the aim of promoting and preserving maritime historical and cultural values. It received support from Jero Wacik, the Minister of Culture and Tourism at the time, and was supported by other government agencies. This 13th-century Majapahit ship replica voyage has the aim of proving that maritime relations existed between Majapahit and the Ryukyu Kingdom in Okinawa, Japan. In addition to proving this, it is hoped that the traces of this voyage will arouse the interest of the younger generation in Indonesia’s maritime glory in the past.

The replica of the Majapahit ship will sail from Indonesia with an initial destination of Okinawa, Japan, before heading to a final destination in Tokyo via the Kagoshima region. The choice of this destination is not without reason because it is in this region of Okinawa that traces of the past were found by sailors from the Majapahit Kingdom who had anchored there. One of these traces is the discovery of an ancient dagger 22.1 cm long at Enkuji Temple, Okinawa, Japan. Historian Kurayoshi Takara from Ryukyu Univer-

sity estimates that the keris came from the Majapahit Kingdom. These traces were also strengthened by the discovery of 13th-century Japanese Imperial Imori ceramics in Trowulan, East Java.

Stage II. Define

To maintain the educational value of the Spirit of Majapahit replica, the ship replica production process must be carried out based on data and scientific studies so that the resulting replica is not fictitious and far-fetched. In the Define phase, creators conduct research to collect data to provide an overview of creation and broaden insights to deepen the exploration process in creation. Data collection can be done through literature studies, interviews (with cultural leaders, traditional leaders, etc.), and observing archaeologists’ remains both in visual form (reliefs and statues) and non-visual form (inscriptions, oral culture, etc.).

To create a ship design that is in accordance with history, archaeological facts, and culture, accurate data is needed. The data includes the shape, equipment, and ornaments installed on the ship. Until now, the form of a boat or sailing ship from the Majapahit kingdom era is unknown. This is due to the limited data available. The data available so far is only sourced from:

a. Relief from the temple was found. The reliefs at Penataran Temple depicting large ships from the Majapahit era are not clear. Indeed, there is a boat in the relief of the temple, but the boat only depicts a small boat or canoe with a small capacity (2 people are shown in the relief).

b. Literary sources (literary works and inscriptions) made during the Majapahit kingdom mostly cover land, forests, mountains, palaces, and hermitages. Sea travel and stories that discuss sea voyages have not yet been found.

c. Archaeological remains in the form of the remains of large boats or sailing ships from the time of the Majapahit kingdom are still very few (Munandar, 2011).

Due to the lack of data and information regarding ships from the Majapahit Kingdom era, the Majapahit Spirit Ship reconstruction team conducted research on the ship reliefs at Penataran Temple, Blitar, and the ship reliefs at Borobudur Temple as can be seen in Figure 3, as well as the shape of the “Borobudur Ship,” which was used to sail from Indonesia to South Africa (Sumarwoto, personal communication, December 15, 2022).



Figure 3. Borobudur Ship Relief.
(Source: kebudayaan.kemendikbud.go.id)

Apart from examining the reliefs on the temple, the reconstruction team also examined the wreck of a wooden ship buried on Rembang Beach, which is thought to have originated from the late Majapahit dynasty or at least the Demak era (Nugroho, W. D., 2009).

Another source used by the reconstruction team as a reference was the letter of Fernando Peres de Andrade, who was Commander of the Portuguese Fleet in Malacca. The letter was written in 1513 to Alfonso de Albuquerque (Halimi, 2006). The contents of Fernando Peres de Andrade’s letter described the Majapahit

Ship as being very large, so that the Anunciada Ship next to it felt very small. Alfonso also reported that the Portuguese fleet had attacked the Majapahit ship with large cannons, but the shots could not make a hole in the ship. The data obtained from this research is not enough to determine how the Majapahit Ship actually looked. Because of that, the reconstruction team asked for help from the Director General of Culture who was serving at the time, namely Mr. Hari Untoro Dradjat, to hold a seminar to gain an understanding of the true shape of the Majapahit Ship.

The seminar was held by inviting various expert speakers, including shipping experts from France and Germany, shipping expert academics from the University of Indonesia, the Surabaya Institute of Technology, Diponegoro University, Gajah Mada University, Sriwijaya University, Hasanudin University, and Persada University, shipping experts including Mr. Djauhari from Mojokerto, and also a psychic from Kendal.

Stage III. Idea

The ideation stage supports divergent thinking, so the construction team can come up with multiple solution concepts. In the Ideate phase, the reconstruction team used the data obtained during the Empathize and Define phases to design ships, ornaments, and other complementary objects to match the archaeological facts while still being attractive to the target audience.

Through the results of the seminar and based on the historical records found, the reconstruction team found that the Majapahit era ship could carry as many as 1,000 people, horses, war equipment, and food. Southeast Asian maritime archaeologist P. Y. Manguin argues that the Majapahit ship has a shape like a typical Indonesian ship that has a double rudder.

Maritime expert Horst Leibner argues that the Majapahit ships had double rudders as well as more than two triangular masts, using rectangular sails (Burningham & Mellefont, 1997).

In order for the visualization of the ship to still has the cultural characteristics of the Majapahit Kingdom era, the reconstruction team also conducted further research on the ornaments that will be used on the Spirit of Majapahit Ship. After the shape and design of the Spirit of Majapahit ship had been agreed upon, the results of the design were returned to seminars in front of experts and the public for validation.

Even though there are still pros and cons, especially from archaeologists regarding the legitimacy of the formation of the Spirit of Majapahit Ship, the results of the design from the reconstruction team are considered to be able to describe and have characteristics that show the Majapahit Kingdom. The positive response from experts and the public about the design of the Jung Spirit of Majapahit then became the basis for building the prototype of the Spirit of Majapahit ship.

Stage IV. Prototype

The prototype stage supports convergent thinking to create ship prototypes that are in accordance with the concepts obtained during the ideation phase. From the data obtained during the Ideate process, the reconstruction team agreed that the Majapahit Ship was approximately 150 meters long. In addition, the Majapahit Ship is also known to have two masts, with a main mast as high as 10 meters and a rear mast of 7 meters, using candik, and having a symmetrical shape of the bow and stern. Even though the ship is equipped with sails, at the stern of the ship there are oars. The reconstruction team then made a ship blueprint based on these findings.

After the blueprints were completed, the reconstruction team made a visual appearance so that the ships made were expected to be 'similar' to ships from the Majapahit kingdom era.

The actual size of the Majapahit Ship was estimated at 150 meters, but due to cost considerations, the reconstruction team could not build a replica of the Majapahit Ship like the original. Therefore, it was decided to build the Spirit of Majapahit ship at a scale of 1:6, which is 21 meters long and 5 meters wide as can be seen in Figure 4.

For authenticity, the shipbuilding will be done with teak wood and the traditional peg technique, which, according to Professor P.Y. Manguin, was used in the era of the Majapahit Kingdom in the 13th century (Manguin, 1993). The shipbuilding was carried out in Sumenep, East Java. The ship will mainly be propelled using sails, but for security and safety reasons, the reconstruction team added engines and modern navigation technology such as GPS, marine radar, Navtex, and radio communication via satellite.



Figure 4. Spirit of Majapahit ship.
(Source: gapuranews.com)

Stage V. Test

The final stage of the whole process is testing. The trial will be carried out by sailing a prototype ship on a goodwill mission from Jakarta to Japan on the Spirit of Majapahit expedition. This aims to prove that with the maritime technology

possessed by the ancestors of the Indonesian people in the 14th and 15th centuries, Majapahit was able to sail the oceans to anchor in Hokkaido, Japan.

The Spirit of Majapahit ship finally departed for Japan. The ship was released by the Coordinating Ministry for Maritime Affairs and Resources on May 11, 2016 from the Marina Jakarta pier. With the theme of the traces of the glory of Majapahit, the ship sailed on the route Jakarta-Pontianak-Brunei-Manila-Kyusung-Okinawa-Kagoshima-Nagoya-Tokyo with 10 crew members as can be seen in the expedition route in Figure 5.



Figure 5. Spirit of Majapahit Expedition Route.
(Source: maritim.go.id)

On July 17, 2010, the Spirit of Majapahit arrived in Manila and was sent back to Indonesia due to the Domeng storm in the South China Sea. The Manila Port Office and Weather Information Center did not allow the Spirit Majapahit Ship to sail to Okinawa for safety reasons. The voyage was delayed again due to the 9.0 on the Richter scale earthquake in Japan in 2011. The Japan Nuclear Safety Agency reported that the nuclear reactor situation was in an emergency condition. So that the mission of the Goodwill Ship of the Spirit of Majapahit was again delayed and had to stay for some time at Benoa Harbor, Bali. It was only on June 24, 2016 that the Spirit of Majapahit expedition arrived at Kagoshima Harbor, Japan, which was the last stop before the Spirit of Majapahit was displayed at a museum in Tokyo.

Conclusion

Learning from the reconstruction process of "Jung Spirit of Majapahit", it can be concluded that the reconstruction and expedition of the Spirit of Majapahit were carried out based on the mindset of design thinking. Ship reconstruction was carried out with the aim of reintroducing Indonesia's maritime glory in the era of the Majapahit Kingdom, so the reconstruction team had to conduct in-depth research to rediscover the shape of ships from that era before carrying out the process of building and sailing the ship.

The stages taken by the reconstruction team can be described through the mindset of design thinking and can be used as a reference in creating creative products based on history and local culture as follows:

1. Empathize: Understand the target audience at a deep level. To introduce local history and culture to the wider community, especially the younger generation, creators need in-depth knowledge of how to communicate using media and vehicles that attract the attention of their target audience.

2. Define: In creating creative products related to local history and culture, research is needed in advance so that the products produced are not fictitious and far-fetched. The lack of historical records and data can make it difficult for creators to carry out the research stage, so creators can discuss with cultural experts, for example, a community of culture lovers or state agencies such as the BPCB. In this case, government support and infrastructure for providing access and data are needed by creators.

3. Ideate: At this stage, the creator has obtained good data about the target audience or about the cultural and historical objects that they want to communicate. The data is then analyzed to produce vari-

ous solution concepts. This stage supports divergent thought processes that explore different ideas.

4. Prototype: At this stage, the creator returns to the concept of convergent thinking, namely focusing on one solution and creating a concrete prototype to solve the problem. At this stage, if needed, the creator can conduct research again to determine the best solution by involving expert sources and potential users of the creative products to be produced. Responses from informants will be used in the process of perfecting the prototype.

5. Test: In the final stage of the design-thinking-based creation process, the creator conducts a real trial to find out whether the resulting creative product can solve the problems formulated at the beginning of the design process. The wider community’s response at this stage can be used as input and material for improvement in future creation processes.

Communicating history and culture that have been “lost” through creative products cannot be done with 100% accuracy. Changes and adjustments are needed so that the product is accepted by the target audience and in accordance with the context of the time. These adjustments are still acceptable as long as the creative products produced have gone through a process of creation based on design thinking supported by research that is developed into a creation concept based on divergent and convergent thinking and has gone through a research and verification process supported by experts in their fields (historians, cultural experts, as well as the experts involved).

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REDESIGN THE TRADITIONAL FOLKLORE: ACHIEVING A SUSTAINABLE FOLKLORE FOR THE FUTURE GENERATION

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Abstract: *Traditional folklore has experienced a decline in interest from generation to generation, leaving a significant question as to why younger generations are losing their interest in traditional tales. Despite the positive effects of traditional folklore on readers, this phenomenon calls for investigation. This study employs a descriptive-comparative preliminary investigation to address the decrease in interest in traditional folklore. Firstly, the present study aims to investigate the underlying reasons for the observed decline in the popularity of traditional folklore. Secondly, the study endeavors to comprehend the efforts undertaken by researchers and artists to counteract this waning interest. The previously identified determining factors will serve as guiding criteria to address the second research question. The ultimate outcome of this study will provide a comprehensive summary of the factors associated with the diminished appeal of traditional folklore among the younger generation, as well as the diverse attempts made by artists and researchers to rejuvenate this cultural heritage.*

Keywords: *traditional; folklore; storytelling; descriptive study*

Introduction

Traditional folklore is a cultural heritage that has been passed down from our ancestors. Indonesia, as a culturally rich nation, possesses various types of traditional folklore. Nevertheless, the abundance of traditional folklore is not met by the interest of younger generations towards these tales (Putra et al., 2023). In fact, this interest tends to decrease from generation to generation.

While this phenomenon is widely known among various researchers, many attempts have already been made to resolve it, such as the research conducted by Astriani & Turman (2022). The biggest question surrounding this phenom-

enon remains unanswered: how could it happen? In terms of the benefits of traditional folklore, research conducted by Agbenyega et al (2017) shows that providing oral storytelling about traditional folklore to children during their formative years does not yield any negative results. On the contrary, telling children traditional folklore may help them develop reflective thinking about their social lives in the future. The narrative of traditional folklore reflects the moral character (Babamuradova L, 2022), and values (Gafurovna, 2022) of a given population. Neglecting these Folklores could be equated to disregarding the long-standing moral values that have been upheld over time. The phenomenon of losing interest in traditional

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*Redesign The Traditional Folklore:
Achieving A Sustainable Folklore For
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folklore has now become a liability. An exploratory research conducted by Utami & Sama (2022) has pointed out a possible explanation for this phenomenon.

The way in which traditional folklore is presented may be a contributing factor to the declining interest of younger generations. Specifically, the manner in which these tales are conveyed could provide insight into this trend. According to Utami & Sama (2022), changing the medium of storytelling can affect the level of interest in a particular folklore among the Generation Z. The study also found that animation has become one of the most popular ways to convey folklore stories, with a 46% acceptance rate, followed by film and comics, which only garnered 33% and 21% acceptance respectively. Pop (1964) show different way of thinking. While the exploratory studies by Utami & Sama (2022) pointed out storytelling media can affect the acceptance of a traditional folklore, Pop (1964) show that the content of traditional folklore itself might affect the acceptance of traditional folklore. Whereas (Hidayat et al., 2019) mentioned that younger generations prefer instant process, differ from the older generations. The younger generation has vastly different lifestyles and cultures compared to the generation when traditional folklore was being told. These differences may be a reason why the younger generation loses interest in traditional folklore. The way the main characters behave in their daily lives is just different from how the younger generation behaves in today's era. Through this phenomenon, the mentioned research also shows that traditional folklore, mainly in Romania Pop (1964), undergoes drastic modifications to make their story relevant to the younger generation. These modifications could vary in terms of genre, interrelation, and artistic form.

The introduction of this study has prompted several inquiries. Firstly, an investigation is warranted into the un-

derlying causes and mechanisms that contribute to this declining of interest phenomenon. Secondly, it is essential to explore the collective efforts made by researchers and artists thus far to mitigate this phenomenon. Prior to addressing the second question, it is necessary to identify the factors that may shed light on the answer to the first question. By examining the types of actions undertaken by researchers and artists in response to the second research question, it becomes possible to discern the suitable actions required due to the vast changes and possibilities associated with Folklore redesign.

Thus, the research question for current study can be written as follow:

1. What are the contributing factors that have led to the declining interest of the younger generation (under 20 years old) in traditional folklore?
2. What measures have researchers and artists implemented to counteract the influencing factors and reintroduce traditional folklore to the younger generations?

Methodology

To examine the decreasing interest of younger generations in traditional folklore, a descriptive-comparative research study will be undertaken. This particular method has been selected for its capacity to provide insights into a social phenomenon by employing comparative analysis utilizing specific criteria within smaller case studies that are relevant to the phenomenon and not being limited by the type of the phenomenon, whether it's a culture or psychological phenomenon. Utilizing descriptive-comparative, this study will entail an extensive review of literature to acquire pertinent data, not only from contemporary scientific re-

search pertaining to the phenomenon, but also from recent artistic works related to traditional folklore. The collated data will subsequently be scrutinized using a comparative analysis approach, wherein each data point will be assessed based on pre-determined criteria.

In addition to seeking a better understanding of the reasons behind this phenomenon, the research will also investigate what has been done in previous scientific and artistic works to reintroduce traditional folklore to younger generations. The research procedure can be summarized as follows:

1. Collect The Data
2. Construct The Criteria
3. Compare The Data
4. Analyze The Comparison
5. Answer The Question

Collect The Data

As previously stated, the data collected for this study will not be restricted to recent academic and scientific research, but will also include works of art related to traditional folklore. The criteria for the data below:

1. Any scientific research published within the last five years, including but not limited to journals, articles, conferences, and reports with the main objective of promoting traditional folklore.
2. Any films adapted from traditional folklore within the last ten years.
3. Any animated cartoons adapted from traditional folklore within the last ten years.
4. Any comics, whether in physical or website form, adapted from traditional folklore within the last ten years.

In order to ensure the relevance of the sources under investigation, it is crucial to prioritize the utilization of the most recent available sources as the primary criteria. This optimal criterion can be effectively applied to research articles and conference proceedings, given the extensive availability of such sources. However, considering the limited availability of resources in the realm of films, cartoons, and comics, the timeframe for the criterion has been extended to accommodate this constraint.

The primary focus of this study revolves around the artistic works and research endeavors aimed at reintroducing traditional folklore within the context of Indonesia.

Construct The Criteria

The comparative study method will be employed in this research to compare the data collected from the previous steps. To ensure consistency in the comparison, a set of criteria will be established based on past research related to the phenomenon. This set of criteria will be used as a standard for evaluating the data collected from various scientific and artistic works.

The study will use a comparative method to analyze the collected data from previous research and works of art. A set of criteria will be established as a standard for the comparison process, which will be constructed based on past research related to the phenomenon. For instance, research conducted by Utami & Sama (2022) and Lee et al (2021) suggests that the media used to tell folklore can affect the acceptance of traditional folklore by the younger generation. Similarly, Febriani et al (2021) found that changing the storytelling media to comics made traditional folklore more appealing. Another research conducted to understand the appeal of comic were also conducted by

Hadi & Mansoor (2021). It is important to note that different media require different storytelling techniques, and not all techniques may be favored by the audience. Past research by Amelia et al (2021) categorized the differences in media and how information is conveyed despite the same title and character. Both Utami & Sama (2022) and Lee et al (2021) also indicated that animation cartoons have become one of the most popular media for the younger generation. Therefore, first criteria based on the type of media used in scientific research or works of art will be established.

These criteria are expected to provide answers related to the type of media used, whether it is digital media such as webcomics and digital games or physical media such as board games or even oral storytelling.

Second criteria were inspired from research that has been conducted by Pop (1964) and Hidayat et al (2019). The third criteria will inquire about the impact of the research and artwork that has been conducted. While the processes of changing the media and adapting traditional folklore to appeal to younger generations are interesting processes, the impact of these efforts is also a critical consideration. Hence, the third criterion, “What is the extent of impact caused by scientific research or artwork?” was developed. To answer this criterion, there are differences between scientific research and artwork. In scientific research, such as journals and conferences, the impact of the research is measured through the evaluation phase of the journal or conference. The opinions of respondents and the number of respondents are examples that can be used for the third criterion. In contrast, unlike scientific research, there is no evaluation phase for artwork. To measure the impact of artwork that has been produced, the number of viewers is taken as a measure. For different types of artwork, such as films or physical comics, the number

of tickets and copies sold can be used as measurements.

Compare The Data

The criteria for comparison have been established based on the previous step. The answers for each of the criteria will be extracted from the data collected in the first step. The criteria from each data set will be presented in a tabular format that includes the title, type of data, and creator of the scientific research or work of art. The year of creation will also be presented, along with a timeline. An example of a table for research conducted by Astriani & Turman (2022) can be found in Table 1.

Analyze The Comparison

During the comparison step, each criteria of the research will be examined. Table 1 provides an example of this process. For criteria 1, the research by Astriani & Turman (2022) used digital games as a medium to attract the youth. The research acknowledged the popularity and rapid growth of the digital game industry, which made it an ideal medium. For criteria 2, the research did not provide any information about changes made to the story or characters of the traditional folklore, except for the title which was altered to appeal to the young generation. For criteria 3, the research distributed a questionnaire to 21 respondents to better understand whether they gained new knowledge about traditional folklore. In summary, the focus of the research in Table 1 was mainly on criteria 1, using popular media to appeal to the young generation. Although there were changes made to the traditional folklore elements, the research did not explain them in detail. These changes may have been accidental or due to execution obstacles. The impact of the research showed a significant result for the survey group. Prior to playing the

games, the survey group had only 50% knowledge of traditional folklore, but after playing the games, their knowledge increased to 95.4%.

Table 1. Example of The Comparison Table
Source : Writer

(Astriani & Turman, 2022)	
Year	2022
Type	Research Proceeding
Title	Eden Eternal: Game Based on Candi Prambanan Indonesian Folklore
Criterion One	Digital Game – The conducted research attempted to utilize diverse media to attract the younger generation
Criterion Two	Title – The research altered the title of the traditional folklore about Candi Prambanan to "Eden Eternal" in order to make it more appealing to the younger generation.
Criterion Three	The research was evaluated by 21 respondents, and the results showed that 95.4% of the respondents learned many new things related to traditional folklore.

Answer The Question

Indeed, at the end of the research, the insights gained from the analysis of the data can help answer the initial research

question and provide valuable information about the traditional folklore and its adaptation to appeal to younger generations. Additionally, the analysis may also uncover research gaps and suggest potential research guidelines for future studies in this field. By identifying these gaps, researchers can focus on areas that require more attention and investigate further to improve the understanding of the adaptation of traditional folklore in modern media. Furthermore, research guidelines can provide a roadmap for future studies, outlining the steps and methods required to conduct thorough research in this field.

Result

The compared data are as shown at Table 2.

Table 2. Comparison Table
Source : Writer

(Putra et al., 2023)	
Type	Research Proceeding
Tittle	Development of Timun Mas Game Platformer for Increasing Generation Z Interest in Indonesian Folklore.
Criterion 1	Digital Games - The research aimed to compare the effectiveness of digital games and text in capturing the attention of Gen Z.
Criterion 2	The research did not make any changes to the traditional folklore besides the storytelling technique. This could be due to the objective of the research,

	which was to compare the effectiveness of digital games and text in appealing to the younger generation.
Criterion 3	It appears that the digital games were found to be more efficient than the text version of the traditional folklore in the research's group, although not significantly so.
(Bramantyo et al., 2022)	
Type	Work of Art : Film
Tittle	Satria Dewa : Gatotkaca
Criterion 1	Film - "Satria Dewa: Gatotkaca" utilized film as the media to convey the story of mighty Gatotkaca.
Criterion 2	Change of stories – The work of art, "Satria Dewa: Gatotkaca," utilized the medium of film to modernize and retell the story of the mighty Gatotkaca. The storyline was updated to the modern era, and the characters were portrayed wearing science-fiction-inspired costumes and using modern devices to align with the trend of western superhero movies. Additionally, the story of Pandhawa vs Kurawa was

	transformed to fit into the modern era.(Saptanto & Dewi, 2020)
Criterion 3	The film "Satria Dewa : Gatotkaca" has been watched more than 2 million times with 23 thousand likes. (Aditya, 2022)
(Prihantanti et al., 2022)	
Type	Research Journal
Tittle	Skenario Film Roro A Paradox Adaptasi Cerita Rakyat Roro Jonggrang.
Criterion 1	The conducted research used a film scenario, which is a written description of the events, actions, and dialogue that will take place in a movie. The scenario was based on the famous traditional folklore called "Roro Jonggrang," which was adapted for the film.
Criterion 2	The study modified the storyline of Roro Jonggrang to suit contemporary social issues, such as feminism
Criterion 3	It seems that the research did not include an evaluation phase and mainly focused on the creative process of adapting traditional folklore to fit modern issues.

(Astriani & Turman, 2022)	
Type	Research Proceeding
Title	Eden Eternal: Game Based on Candi Prambanan Indonesian Folklore
Criterion 1	Digital Game – The conducted research attempted to utilize diverse media to attract the younger generation
Criterion 2	Title – The research altered the title of the traditional folklore about Candi Prambanan to "Eden Eternal" in order to make it more appealing to the younger generation.
Criterion 3	The research was evaluated by 21 respondents, and the results showed that 95.4% of the respondents learned many new things related to traditional folklore.
(Anantarupa, 2022)	
Type	Work of Art : Digital Games
Title	LOKAPALA
Criterion 1	The work of art "LOKAPALA" utilized digital games as its medium to reintroduce traditional folklore to the younger generation. Through the game, players can explore

	the story of Lokapala, a group of legendary warriors, and their journey to save the world from evil forces. The game is designed with various features, such as character customization, multiplayer mode, and in-game purchases, to engage players and make the game more appealing to the younger generation.
Criterion 2	The LOKAPALA game made aesthetic modifications to the appearance and presentation of the traditional folklore characters. These modifications encompassed various aspects such as the characters' physical forms, art style, and other elements used in the game. (Agung et al., 2021)
Criterion 3	According to Google Playstore, LOKAPALA has been downloaded for 1 million times and earn rating of 3.8 from 5. LOKAPALA itself, have target audience of teenager mostly at age of 17 to 25
(Satria & Herumurti, 2021)	

Type	Research Journal
Title	Role-Playing Game as Learning Media To Support Online Learning
Criterion 1	The conducted research used digital games as the media to create an adaptation of folklore.
Criterion 2	The conducted research utilized a digital game as a medium to adapt the traditional folklore of "Bandung Bondowoso." In addition to the original story, the research incorporated modern social problems such as environmental issues. The art style of the characters was also changed from its traditional form to a more contemporary chibi style.
Criterion 3	The research included an evaluation phase to the target audience, junior high school students. However, the objective of the evaluation was to assess the degree of enjoyment and learning that occurred during gameplay rather than to measure the impact on traditional folklore.

(Winatha et al., 2020)	
Type	Research Journal
Title	Adopting Indonesian Folklore as an Instructional Media Through Cards Games
Criterion 1	The conducted research put traditional folklore into cover of card game to tell the stories of the folklore
Criterion 2	The research did not mention about changing the aspect of the folklore
Criterion 3	The research conducted was focused on the creation of card games as learning media to learn traditional folklore. The research did not mention any user participation in the research.
(Storytale Studios, 2018)	
Type	Work of Art : Digital Games
Title	Pamali : Indonesian Horror Folklore
Criterion 1	"PAMALI" Indonesian digital game about mythical traditional folklore such as kuntilanak and pocong
Criterion 2	The game underwent an artistic transformation to align with Western modern horror games, utilizing 3D assets and a dark ambience

	to enhance the game's atmosphere. Additionally, a narrative story was added to provide depth to the folklore's ghosts. (Trattner, 2020)
Criterion 3	The research did not mention any specific evaluation process. However, the game Pamali received positive feedback from users, with 487 recommending it on the Steam platform. With player 0 (Yuniarto, 2013)
Type	Work of Art : Comic
Title	Garudayana Saga
Criterion 1	The work of Art "Garudayana Saga" use comic as it's media to tell the stories of Kurawa vs Pandhawa
Criterion 2	The "Garudayana" made a change to the art style and how the character looked while still maintaining a certain aspect of the original folklore. The stories of Garudayana also earn a modification to fits modern interaction (Dadi et al., 2018)

Criterion 3	Garudayana became one of the most influential comics in the effort of adapting traditional folklore and became the most favorable comic at its era in Indonesia (Putra, 2021) With the target audience of teen (OPAC Perpustakaan Nasional RI, n.d.)
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First Criteria

Based on the available data, it is likely that adjusting to the suitable media of storytelling can have an impact on appealing to younger generations. The use of modern media, such as digital games, films, and digital platforms, can help make traditional folklore more accessible and relatable to younger audiences. Additionally, making changes to the aesthetics, narrative, and themes of traditional folklore can also help make them more relevant to modern audiences.

However, it is important to note that this conclusion is based on the analysis of the first criteria only. To have a more comprehensive understanding of the impact of media on appealing to younger generations, further analysis of the other criterion is required.

From the analysis of the first criteria, it can be observed that games are the most preferred media for both scientific research and works of art. However, some studies use different types of games, such as card games, as seen in the research conducted by Winatha et al (2020). Both physical and digital forms of games have been found to enhance the interactivity

of the storytelling process, which can attract the audience better, as mentioned by Amelia et al (2021). Research conducted by Rachmavita (2020) also noted that the interactivity of games can aid in better audience engagement. Moreover, Nugraha & Mansoor (2021) found that interactive games can help students learn better, making them an effective educational media.

On the contrary, while the use of media such as games and digital platforms have been widely employed in both scientific research and artistic works, the film medium has been exclusively used by the latter, with little to no utilization in scientific research. The reasons for this phenomenon remain unclear; however, it may be attributed to the significant resources required in producing films, including manpower and materials. To date, there is a dearth of reported scientific research that has extensively utilized films in studying traditional folklore. Nonetheless, Prihantanti et al (2022) conducted a research in which they attempted to create a complete scenario for a modified traditional folklore film.

Second Criteria

In contrast to the first criteria, not all data adheres to the second criteria of changing the media of storytelling. Some researchers choose to keep the original stories intact and only modify the medium for conveying them. This raises a question: "Is changing the element of traditional folklore not that effective?" However, as with the previous statement from the first criteria, this question can only be answered after analyzing the impact of such modifications, which is the third criteria. Currently, research conducted by Baihaqi et al. (2022) may provide an answer to this question. While Pop (1964) mentions the importance of changing the elements of traditional folklore to fit the younger

generation due to the different culture Hidayat et al (2019), Baihaqi et al. (2022) explain that the process of adaptation is not easy. Extensive research on the original material is necessary to maintain the core values of the material in the adaptation process and differentiate between creating adaptations of existing folklore and creating new stories. The difficulty of this process is exemplified in the adaptation attempt of LOKAPALA.

Research by Agung et al. (2021) mentions that the new design of traditional characters in LOKAPALA succeeds in delivering the aesthetic aspect of "Nusantara" through the costume and physical appearance of each character in the game. However, Feldman's theory of aesthetics reveals that the philosophy value of character adaptation in LOKAPALA is somewhat lacking. The research also mentions that this lack of depth in adapting the character can be caused by market demand, mostly player of MOBA Games that can be described as mostly male and at age of 17 to 25. More than just philosophical aspects need to be considered during the adaptation process. In addition to the creation of "Satria Dewa: Gatotkaca", there are other notable efforts to create adaptations that should be considered in the research. However, these works are intended to reintroduce old superhero comics rather than traditional folklore, rendering them unsuitable for the research. One example of such a work is the 2019 movie "Gundala Putra Petir", which attempts to revive a superhero with the same name from 1969.

The "Satria Dewa Universe" and "Bumi Langit Cinematic Universe", as shown in Figure 1, are creative endeavors by filmmakers in Indonesia to reintroduce traditional folklore and past fictional stories to younger generations. To achieve this, both works of art adapt the formula of well-known superhero movies, such as the "Marvel Cinematic Uni-

verse” (Saptanto & Dewi, 2020) They create a universe where all the superheroes and traditional folklore characters come together and engage in action-packed fantasy movies to capture the attention of younger audiences.



Figure 1. Satria Dewa Gatotkaca and Gundala Putra Petir
[Source: <https://www.kompas.com>, <https://tribun-news.com>]

Third Criteria

After reviewing the previous research and work attempts to reintroduce traditional folklore to the younger generation, the question arises regarding the impact of these efforts. Although some of the work did not report the impact of their efforts, the available data is sufficient to answer the first and second criteria. While the first criteria was previously identified as the most critical one, based on the number of research conducted and the findings related to media interactivity, it is too simplistic to assume that this criteria is the most critical. Although most scientific research agrees on the effectiveness of

changing media, the work of art that had a larger impact due to a larger audience also agrees that changing media is an important step in redesigning traditional folklore, but did not stop at only changing the media of the traditional folklore.

The use of different media to adapt traditional folklore, such as from text to film, has been found to attract younger generations to consume the content (Utami & Sama, 2022). However, the effectiveness of this approach in retaining audience interest remains uncertain. This raises the second criterion of whether changes made to traditional folklore elements have an impact on attracting younger generations. PAMALI, a game mentioned by Trattner (2020) is an example of a media adaptation that lacks traditional folklore elements but is still engaging to play. The adaptation of traditional folklore elements can vary due to the absence of standards and guidelines on how to do so, and depends on the researcher or artist’s approach. For instance, Satria & Herumurti (2021) and Prihantanti et al. (2022) changed the stories of traditional folklore, similar to the adaptations made in works of art such as PAMALI and Garudayana Saga. Other researchers chose not to change the stories but instead altered the presentation, such as Putra et al. (2023) It is a mistake to say that this criterion has no significant impact on the effort to attract younger generations. Garudayana Saga, as mentioned by Wayan Dadi et al. (2018) is proof of its significance. Despite not using the most preferred media of games, Garudayana Saga remains one of the most influential works in reintroducing traditional folklore.

The comparative study has been completed, and several novel insights have been obtained from each criterion. The question now is whether these new insights can address the questions that were raised.

Answering The Question

The comparative study has been completed, and several novel insights have been obtained from each criterion. The question now is whether these new insights can address the questions that were raised. “How did the younger generation lose its interest in traditional folklore?” The research findings indicate that the primary reasons for the decline in interest of younger generations in traditional folklore lie in the first and second criteria for data collection. Specifically, the medium used to present traditional folklore has been identified as a contributing factor. Traditional folklore is commonly presented in the form of text-based books, sometimes accompanied by illustrations. However, the use of pure text as a storytelling medium is now considered obsolete (Lee et al., 2021).

To rekindle the interest of younger generations in traditional folklore, the use of text-based media is no longer recommended. Nevertheless, some questions still remain regarding this medium. For instance, what are the most effective media for reintroducing folklore? The research points to several popular media, including comics, games, and films. Each of these media can be further subcategorized; games, for example, can be divided into board games, card games, and digital games, while films can be divided into real-life and animated formats. Thus making this question require an extensive research in the future.

The second criteria concern the alteration of elements in traditional folklore, as originally proposed by (Pop, 1964) in the need for renewal of traditional folklore. Despite the medium used, traditional folklore often contains outdated ways of life that may not be relevant to younger generations. However, the research has shown that the changes made to traditional folklore vary widely in terms of

which elements are altered by researchers or artists and how they are changed. As mentioned by (Baihaqi et al., 2022) adaptation is a complex process that requires a thorough understanding of the original source. Some works have successfully adapted these sources and gained popularity, while others are still lacking. A comprehensive guideline addressing this issue could be immensely helpful in the future.

Discussion

Departing from question number 2 of the research: “What actions have researchers and artists taken to reintroduce traditional folklore to younger generations?” can be answered by referring to Table 2. The research also identified another criteria that could be useful for future studies. This criteria was based on the work of Choi et al. (2022) who developed tools to stimulate cognitive function in the elderly. The adaptation of traditional folklore created in their study may differ from adaptations created for a younger audience, as age can affect the ability to retrieve information, as noted in Ajayi (2019) research. A new criterion, “Age of Audience,” was established from both studies. However, for the current study, the criterion for age has been stated at the beginning of study. Therefore, the study did not take into account the variations in the age of the audience. It is possible for the future research to include the age variation to have better understanding related to interest in traditional folklore.

Conclusion

The preliminary studies on the phenomenon of declining interest in traditional folklore have been conducted and the questions raised have been answered. The first question regarding why this

could happen has been explained through two points. First, the medium of traditional folklore, which is predominantly in pure text form, is no longer effective in capturing the interest of the younger generation. Second, the elements of traditional folklore need to be changed to remain relevant to the current generation. However, the process of adapting traditional folklore is complex and requires maintaining the core values of the original stories.

Several studies have been conducted to address the declining interest of traditional folklore to younger generations (age <20). Many artists have attempted to reintroduce traditional folklore in various forms, but these efforts have not been sufficient. Further research is required to ensure the preservation of traditional folklore, or else they may become forgotten by future generations. If this continue, this might lead to the loss of character, value and moral (Babamuradova L, 2022) that become the identity of a society.

Future Research

The study that has been done found many blank fields from each criterion that require extensive research in the future. These fields are:

1. Media, what are the most effective media for telling a traditional folklore that could appeal to the younger (age <20) generation?
2. Guidelines, adapting a traditional folklore require extensive understanding for the original source. What are the steps required to successfully making adaptation of a traditional folklore?
3. The declining interest of Traditional Folklore is happening in the younger generation. The question was, what about other age groups?

Each of these questions require exten-

sive research in the future.

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STORY DESIGN IN FINE DINING PROJECTION MAPPING PROJECT “SI DULANG”

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Abstract: Projection technology is a technology that is familiar to modern society. It has been seen a lot in everyday life, from attending class lectures and watching movies in the theater. Projection technology is also used in creating art, such as projection mapping in various objects. Projection-Mapping is one of the technological achievements that opens complete access for artists to create and tell stories uniquely. Storytelling is something that humans always do over generations. The usage of technology these days is not limited in terms of form. One of the innovative ways to use projection mapping is “le Petit Chef.” The combination of fine dining restaurants and the immersive experience when watching animation on a consumer table has positive outcomes for the restaurant industry. Based on the case study of projection mapping named “le Petit Chef”, this research will focus on creating a story for projection mapping titled “Si Dulang”. This research will also identify the factors the storyteller needs to consider when adopting new technology.

Keywords: storytelling; projection mapping; fine dining; animation

Introduction

Storytelling is an art that is very old but still relevant today. Greene (1996) says that times are constantly changing, culture is also changing, and the existence of storytelling can continuously adapt to the conditions and situations around it. One of the things that play an essential role in storytelling is the human desire always to communicate feelings and experiences through the art of storytelling. According to Sawyer (1967), primitive forms of storytelling are like dancing, rituals or tribal ceremonies, and other things to give expression to something.

Aristotle said that a story must have emotion, fear, and catharsis. It is the foundation of modern storytelling elements that exist today. Miyamoto (2017) added

that Poetic’s book explores tragedy in storytelling that develops into a modern storytelling structure. The book has six principal essences of storytelling: plot, character, thought, diction, song, and spectacle. Chatman (1978) further said that apart from the elements of narrative, there are two essential parts: the story itself and the chain of events that occur in a story. Furthermore, Chatman explained that the distribution of contexts in a narrative is closely related to semiotic theories, such as the theory expressed by Saussure previously regarding Signifiers and Signified in semiotics.

Another aspect that influences the development of storytelling is the presence of technology. Projection mapping is a method of conveying images through a projector that can be displayed not only

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on a screen but in the form of walls or other objects that previously were not a medium for displaying moving images. In its application, projection mapping can stimulate the emotions of the audience. It was explained in a study conducted by Ekim (2011). This study was called the Yekpare Project, where the projection mapping method displays the visual effect of light on a building wall.

Apart from its use on building walls, one of the well-known products from the projection mapping method is Le Petit Chef, made by Skullmapping. The uniqueness of Le Petit Chef is the use of projection mapping in the room to provide a new experience for visitors who attend a restaurant. On this occasion, restaurant visitors will be entertained by moving images displayed on the dining table. According to Williams (2021), Le Petit Chef is a projection-mapped dining with branches in several parts of the world. It shows that the community can well accept this adaptation. Lalomia (2022) Le Petit Chef is an exciting uniqueness. Besides combining fine dining and projection mapping concepts, restaurant visitors get a positive impression from the content. Exciting story and visual aspects give visitors a warm experience and learn something.

This background motivated the researcher and team to explore more about the experience felt by visitors and how to make it for Indonesian cuisine. Therefore, cooperate with several parties. The first party was a UMN Film lecturer named Christine Mersiana Lukmanto, who has an interest in doing visual design. The second party is MDN (Multimedia Digital Nusantara), an animation studio that has explored the field of projection mapping. Then the last party is Ms. Adestya Ayu Armeilia – Deputy Head of the Hospitality Department, who has a background in the culinary field. Each party has a role in this research.

The research questions that will be explained in this paper are:

1. How to design stories for projection mapping in fine dining?
2. How did technical factors impact the story and creative treatment when producing the prototype of “Si Dulang”?

At the end of this research, the authors and team will produce a prototype which MDN will then consider to develop this product to have commercial value.

Methodology

This research approach used by the researcher is qualitative. This approach was chosen because the researcher will focus on the factors that will impact when creating a story for similar projection mapping in the future.

1. Multimedia Development Cycle

In the development phase, the researcher used five stages multimedia development cycle as can be seen in Figure 1. The stages are initialization, Blueprint Design, Assets Preparation, Product Development, and Testing & Validation (Rickman Roedavan, 2022).



Figure 1. Stages of Multimedia Development Cycle
(Source: Roedovan, 2022)

a. Initialization

The first step is to discuss the menu with Adestya. Bali became the theme of food and storytelling (Kruger, 2014). At this stage, Adestya has selected the fine dining menu. The planned output for making this prototype is a hybrid form, which will combine 2D animation forms and 3D animation forms. Blueprint Design

Based on the analysis of data that has been collected and direct observations made, the author and the team made a plan for making a prototype with the title Si Dulang. Si Dulang is an original character created based on the data obtained and combined with a concept designed by the research team. The author and the team will bring up one of the Balinese stories as a compliment from a cultural perspective apart from the visual aspect attached to the attraction. It is because the theme chosen for now is Balinese dishes.

The genre that will rise in this narration is the genre of adventure. This genre was chosen because it is relatively easy to understand and represents Indonesia’s archipelago in the long term.

The visual design for “Si Dulang” was assisted by Christine, who focused on the character and environment design (Lukmanto, 2022). It can be seen in Figure 2, the design of Dulang’s character wearing clothes that support his adventurous activities and full of curiosity.



Figure 2. Si Dulang Concept
(Source: Personal research documentation)

Christine also designed the antagonist and supporting characters: Barong, Rangda, and Pecalang. These characters represent Hindu culture as a majority religion in Bali. Barong represents goodness, visualized as a lion-like creature, and Rangda represents evil (Pringle, 2004). As an illustration, it can be seen in Figure 3 listed below.



Figure 3. Si Dulang Character Sheet
(Source: Personal research documentation)

Christine also creates environment designs based on the Bali environment. In the early stages, the researchers break down which area of the environment will be used in animation as can be seen in Figure 4. The purpose of doing this is for the basis of technical analysis at the later production stage.

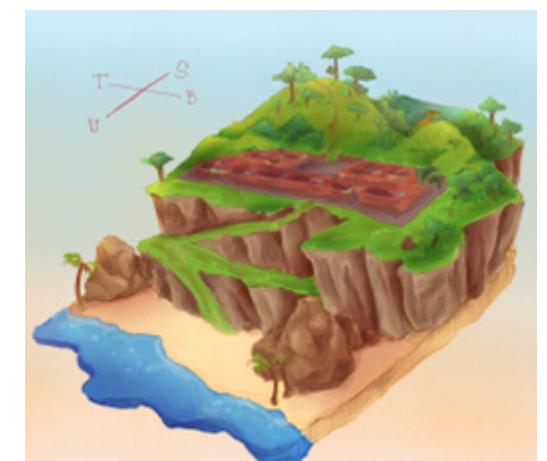


Figure 4. Si Dulang Environment
(Source: Personal research documentation)

b. Asset Preparation

After the initiation phase, the researcher and the team created 3D Modeling for characters and environments. This stage involves the help of Christine and several artists recruited to do 3D production. The production team will later be tasked with creating 2D and 3D assets, animating, and post-production. 2D and 3D Assets created using After Effects and Blender. In general, the asset preparation can be seen in the following chart or Figure 5.

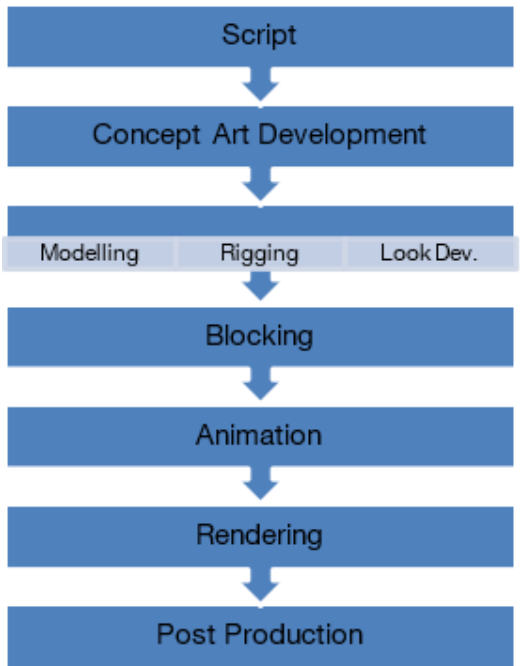


Figure 5. Asset Preparation Phase
(Source: Personal research documentation)

c. Product Development

The product development process started when the researcher and team entered the animation phase. In this phase, the production team needs to carefully animate with the researcher’s direction because of the technical aspect that must be considered for creating this projection mapping. This phase ended with the 2D and 3D render completed.

d. Testing & Validation

After having the product, the research team will conduct prototype dissemination by conducting trials at limited places and invitations. Given the relatively limited time, the research team will conduct trials with only one course out of the plan.

2. Story Structure Framework

In terms of storytelling, the writer will use a three-act structure. It is because structural elements in narrative storytelling are crucial elements that make it easier for the audience to understand the story. He explained simply that the story can be divided into three parts, namely, Setup (act 1), Confrontation (Act – 2), and Resolution (Act – 3), as can be seen in Figure 6 (Field, 2005).



Figure 5. 3 Act Structure
(Source: Field, 2005)

Result

1. Story of Si Dulang

At the beginning of this research, data about projection mapping is collected from the literature or books. After that, the team collected data from online sources for data regarding the projection mapping carried out by Le Petit Chef. The author analyzes data from references and reviews found in online media to obtain primary data for this study.

The Balinese dishes based on Adesty’s course were designed into four stages. The course stage design for the

shown in Table 1 as follows:

Table 1. Scene of Si Dulang
(Source: Personal Research Documentation)

Course & Dishes	Story Concept
Course 1 : Rujak Kuah Pindang	Dulang first met Barong in a forest in Bali. Si Dulang helped the barong recover his strength by making Rujak Kuah Pindang with the available ingredients.
Course 2 : Be Pasih Basa Genep	After meeting Barong to recover his strength. Barong and Dulang go directly to the village to save the village. With all his remaining strength, Barong manages to drive Rangda away. This scene will end with Si Dulang making soup for Barong and Pecalang.
Course 3: Ayam Betutu	Dulang prepared himself and the villagers to fight Rangda. Tray make food full of energy to increase the strength of the villager. This episode ends with the return of Rangda.
Course 4: Fruit & Pies	Barong faced Rangda again and finally managed to beat Rangda forever.

The logline of this story is:

Si Dulang, an adventurous cook, meets and helps Barong, a sacred being for the Balinese people, fight Rangda, who is terrorizing the village.

In this research, The author provides a pattern that is easily digested by the audience. The author applies a 3-Act-Structure that consists of Setup - Confrontation - Resolution.

a. The setup will contain the problems that Si Dulang will solve. This act will introduce Si Dulang as the main character

in this story. Here the writer will try to briefly give the audience about the character’s motivation, character goals, and a little background of Dulang. The duration of this section is 30 seconds to avoid audience boredom. The treatment that will be used in the making Act – 1 is motion graphics and 2D animation.

b. Confrontation contains the actions of Si Dulang and Barong to solve the problem. This section will begin with the appearance of the Dulang at the beginning of this section. The main problem is that Si Dulang feels sorry for Barong, that beat up by Rangda. Finally, he wants to help Barong to recover. The duration of the second part is quite long, about 2 minutes. The threat that will be used in Act - 2 is 3D animation.

c. This section will show Dulang making the dishes that the audience will be consumed at the table. At the end of each section, the audience will be served real food in front of them. Si Dulang decides to help Barong by cooking Rujak Kuah. This section begins with an introduction to the main ingredient in this dish, namely mango, and finishes by going through the stages of cooking it. At this stage, a 3D animation treatment will be carried out with the addition of 2D animation to explain one of the critical ingredients of the Rujak Kuah Pindang dish.

This research aims to obtain full-length for Course – 1, namely Rujak Kuah Pindang. The overall duration of this projection mapping course is approximately 5 minutes.

2. The Making of Si Dulang

a. Technical Assessment of Projection Mapping

Technical assessment is a stage that must be carried out before carrying out production. In this phase, the researcher

consults with parties from MDN to obtain a schematic of the projection mapping that will be done. The output of this stage is a schematic of the system to be made, as well as several measurements that will later become crucial aspects of animation production.

The projector that provides video shows will be placed over the table without being obstructed by any object. It must be done to prevent unwanted shadows on the dining table. The following schematic as can be seen in Figure 7, will be made during the prototype trial period.

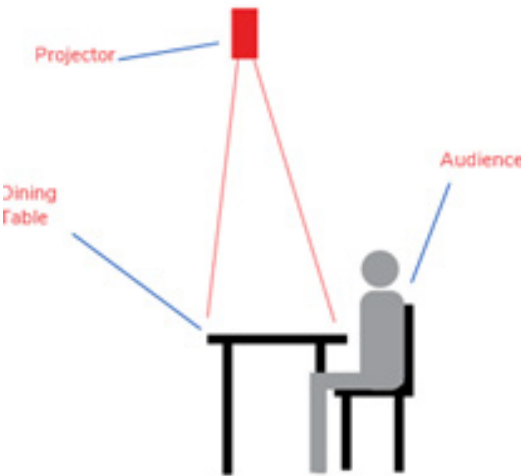


Figure 7. Table Setup
(Source: Personal research documentation)

The table size to be used is 80 cm x 80 cm. It is crucial to define the aspect ratio that will be used later. Based on that data, the researcher will use the aspect ratio of 1:1. The second thing is to determine the type of plate used. After discussing with Adestya, the researcher will use a standard plate with a diameter of 23 cm.

The third and most important thing is to determine the camera’s angle. From the measurement results by estimating the average table height to the sitting height of Indonesians, which is 165 cm, the tilt angle set for the camera is around 23-24

degrees.

b. Screenplay dan Storyboard

Based on the visual design provided by Christine and the logline we discussed in the early stage, the researcher wrote the screenplay immediately. The researcher must consider the technical aspects consulted before writing the screenplay. The screenplay made for Act – 1 consists of 5 pages with an assumption that the Animation duration is approximately 5 minutes.

Broadly speaking, the screenplay for “Si Dulang” is not much different from animated film scripts. However, what needs to be considered is how to hint to the storyboard artist and animator which part is 2D and which is 3D. Because there are overlapping sections when 3D has a role as background and 2D animation is the main story at that part. The environment set will not change until the end of Act - 1. Shown here in Figure 8 is an example of Act – 1 screenplay.

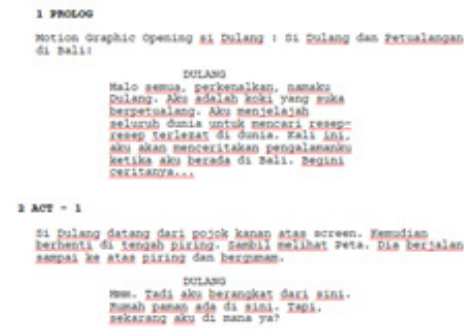


Figure 8. Si Dulang Screenplay
(Source: Personal research documentation)

The next stage is to make a storyboard for production guidance. In this phase, the researcher separate based on production method. For 2D animation, Storyboard will be strongly required because it will be needed for animators when they create animation as can be seen in Figure 9. Because it will be projected onto the

plate, the storyboard artist used a mask to create it. The masking can be any size as long as the shape is circular.



Figure 9. Colored Storyboard for 2D animation
(Source: Personal research documentation)

However, in 3D animation, the researcher decided not to use a normal storyboard. The first reason is to save time so that it can enter the production process. Another reason is that it will be more accessible when using a draft camera from 3D software directly. To create a clear action of the Dulang character, the researcher wrote notes directly in screenshot images captured from 3D view. Figure 10, listed below is an example of how researchers draw notes in screenshot images.

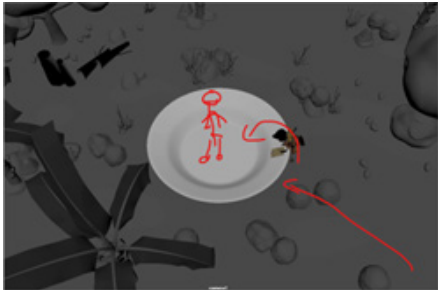


Figure 10. Notes in Screenshot Image
(Source: Personal research documentation)

c. Rendering

The rendering process for Act takes 1 month. This phase needs to be done very carefully. Researchers need to make sure the camera position is perfectly aligned in 3D software each time before rendering. The challenge will come when combining 2D and 3D animation. For the 3D animation, the production team used Autodesk Maya and 2D animation created with Adobe Illustrator and After Effects.



Figure 11. Final Render of Si Dulang in Act 2
(Source: Personal research documentation)

d. Prototype

The researcher finished this phase with the help of MDN staff. To complete this stage, the first thing to do is choose the right projector. This kind of projection mapping cannot use an ordinary projector due to lack of resolution. This problem creates a pixilated image on the table. A laser projector is considered the best option of projector for “Si Dulang” projection mapping.

Second, researchers need to do a calibration process to match the projector position and the table as can be seen in Figure 12. This phase finished using a particular software called MadMapper.

The function of this software is to adjust the angle from the original final render to match the angle of the table perfectly.

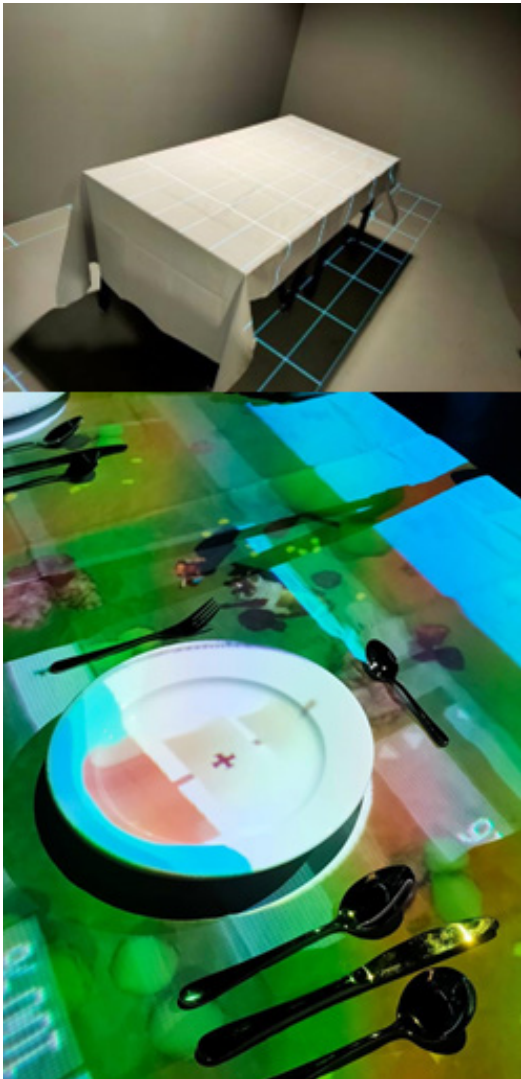


Figure 12. Calibration Process
(Source: Personal research documentation)

Discussion

In the process, the author makes several notes related to this research.

1. The basic principle of story structure in film and animation can be applied

to producing projection mapping for fine dining. However, the creative teams, especially scriptwriters, must consider some aspects, such as duration and technical setup for the projector, to maximize the experience.

2. Extensive research is needed to perfect Si Dulang’s character. It is because Si Dulang initially took the concept of backwoods cooking - where the cook uses natural materials and tools for cooking. Due to the limited window to explore this concept, the researcher feels the backwoods concept is not fully explored.

3. Technical aspects should be considered when creating similar works at the beginning of planning. Although it is not an aspect discussed in this report, this topic will cause problems if it is not well planned from the beginning. Examples of technical aspects that are taken into account are the table’s shape, the table’s height, the distance between the table and the projector, the type of tablecloth, and the shape of the plate to be used.



Figure 13. Projection Mapping of Si Dulang
(Source: Personal research documentation)

Conclusion

This prototype takes five months for the production process. The prototype was presented in January by presenting to MDN, related lecturers, and external parties from the hospitality industry for one day. Dulang and Barong successfully work perfectly.

The challenge in designing the story of Si Dulang is that the story needs to be well delivered and attract the audience to enjoy the fine dining experience. To achieve the goal, the creator must understand the animation film production process and know the technical aspect of projection mapping.

On the creative side, storytellers need to consider several things. First, story designers need to understand the character perfectly. Second, story designers need to understand the food that is served to the audience. These two aspects are interconnected. The researcher hoped that in the future, research would be able to be more explorative in creating a story for projection mapping.

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ANALYSIS OF BASIC CINEMATOGRAPHY COMPONENT IN THE SHORT FILM “TILIK” DIRECTED BY WAHYU AGUNG PRASETYO

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Abstract: *Tilik is one of the short Indonesian drama films produced by Ravacana Films in 2018. From its visual appearance, almost 90% of its length dominantly show scenes of getting on a truck on the way to the hospital, and only interspersed with scenes of stopping at the mosque, and road. However, this film managed to become a trending topic in 2020. This film is also one of the short film categories that has successfully obtained achievements from the audience and awards at film festivals. Therefore, the purpose of this study is to analyze how the basic visual components of cinematography in Tilik’s short films uses Bruce Block theory. This research uses qualitative descriptive methods, or methods used to search, collect, analyze research data and are presented in descriptive form. Through this method, Tilik is analyzed with a scientific approach to identify how the basic visual components of cinematography is used according to Bruce Block’s theory by observing the elements that make up the film. The results of this study show that the seven basic visual components of this Tilik short film are fulfilled. The results of this study show that the seven basic visual components of this Tilik short film are met. With the fulfillment of the basic visual component of the film, it is able to make the film more interesting and comfortable to look at, as well as being able to affect mood.*

Keywords: *basic visual; components; cinematography; tilik; film*

Introduction

A short film is a film with a short duration, but there is no standardization. Usually the maximum limit for a short film is determined by a film festival for it to be categorized as a short film, in Indonesian film festivals the maximum duration is 60 minutes (Puri & Hartanto, 2020). Short films have their own characteristics com-

pared to feature films. That is, apart from being short in duration, the shooting process is also short, unlike wide-screen films which take longer, shooting can be done with a single cam or multiple cams, and short films do not just convey information like a company profile. The advantages of short films are that they are quickly understood, cost-effective, do not require much time, and are easy to access (Indri-

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*Analysis of Basic Cinematography
Component in The Short Film “Tilik”
Directed by Wahyu Agung Prasetyo*

Halimatus Sya’diyah¹
Asidigisianti Surya Patria²

asti, 2021).

Film Tilik or in Javanese which means “to visit” is one of the short Indonesian drama films produced by Ravacana Films in 2018. If you look at the visual appearance, almost 90% of the 32 minutes and 34 seconds in length, it turns out that it is dominant in showing scenes of mothers boarding the trucks on their way to the hospital, and are interspersed with scenes such as stops at a mosque, and on the way. However, this film actually managed to become a trending topic after the producer released it on the Ravacana Films YouTube channel for free on August 17 2020.

This can be proven on the Ravacana Films YouTube platform, which has received 26 million views, 880 thousand likes and 94 thousand comments to date. The comments consist of 99% positive comments compared to negative comments. Based on traffic from Google Trends 2020, the film Tilik managed to become the most popular search, reaching 92 in the period 16 to 22 August 2020, and reaching 100 from 23 to 29 August 2020.

Then, based on traffic from Google Trends 2021, the film Tilik has become a popular search, reaching 88 in the period 11 to 17 July 2021, and reaching numbers up to 100 in the period 5 to 11 September. This film also attracted public interest from 29 regions in Indonesia, one of which is the Yogyakarta area with the most enthusiasts, reaching 100%.

Apart from being a trending topic, this film is also one of the short film categories which has won several awards, including winning the 2018 Maya Cup for the selected short film category. The Maya Cup is an annual Indonesian film award which started in 2012 (Putra, 2021).

The short film Tilik also received the Official Selection Jogja-Netpac Asian Film Festival (JAFF) award in 2018. JAFF is the first Asian film festival in Indonesia which

focuses on the development of Asian cinema. Since its inception, JAFF has collaborated with NETPAC (Network for the Promotion of Asian Cinema), a worldwide organization with 30 member countries. Every year, JAFF always presents awards for the best Asian films as a form of appreciation for Asian cinema (Nadilo, 2016).

In addition to these two awards, the film Tilik also won the Official Selection World Cinema Amsterdam 2019 award. World Cinema Amsterdam is a week-long celebration of films from Africa, Asia, Latin America and the Caribbean (World Cinema Amsterdam, nd).

The director behind the success of the film Tilik is Wahyu Agung Prasetyo. Wahyu Agung Prasetyo is usually called Agung. Director Agung started his career in filmmaking since 2011, then in 2015 he and his friends founded a production house known as Ravacana Films. Director Agung is one of the most accomplished young filmmakers. From a series of short films by director Agung, they have won awards at various festivals. The festival is national and international (Puspita, 2020).

Relevant previous research includes research by Puri Sulistiyawati in 2019 entitled “Analysis of Basic Visual Components of Cinematography in the Live Action Green Book Film”. in 2018, and in a study entitled “Analysis of the Basic Components of Visual Storytelling in Social Campaign Videos About Student Sexual Harassment in the Short Film “Locker Room” by Greta Nash” by Annisa Rizka Liliandari in 2020. The three studies examined cinematography in films with the aim of knowing the concept of cinematography. While the difference with this study lies in the variables studied and a deeper discussion by linking the basic visual components of cinematography and shooting angles.

The aim of this research is to describe

the seven aspects of the basic visual components of cinematography from the short film Tilik by Wahyu Agung Prasetyo. The basic visual components of the cinematography include space, line, shape, tone, color, movement, and rhythm using Bruce Block's theory.

Methodology

The research method is basically a scientific way to obtain data with specific purposes and uses (Sugiyono, 2013). This study uses a qualitative descriptive research method, in which this research is used to search, collect, process, analyze research data and present it in a descriptive form. According to Mukhtar (2013) descriptive research method is a method for finding knowledge or theory of research at a certain time. Whereas the qualitative research method is a research method based on the philosophy of positivism, used to research natural objects, where the researcher is the key instrument, and the research results emphasize meaning rather than generalization (Sugiyono, 2013).

Through this qualitative descriptive method, we will analyze the short film Tilik with a scientific approach to the basic visual components of cinematography according to Bruce Block's theory by observing the elements that make up the short film Tilik including seven aspects, namely space, line, shape, tone, color, movement, and rhythm then associated with the shooting angle or camera angle. Analysis of the basic visual component was carried out by observing all scenes from the short film Tilik as can be seen in Figure 1. After observing the entire scene, identifying and relating the seven basic visual component aspects of cinematography to the scene in the film is then described through words. Data collection was also carried out by conducting literature studies on relevant journals and gathering the required theories.

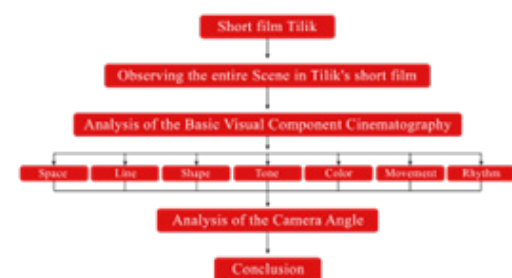


Figure 1. Analysis Framework Chart
(Source: Sya'diyah, 2023)

Theoretical framework used in this articles are as follows:

a. Cinematography

Cinematography is an English word, namely Cinematography which was adopted from the Latin "Kinema" which means picture. Cinematography has the same object as photography, namely capturing the reflection of light that hits an object or objects. However, the difference is that photographic equipment captures a single image, while cinematography captures a series of images (Suwanto, 2020). The term cinematography is always related to films, films and cinema. Film literally is cinematographie which comes from the word cinema which means "movement". Tho or phytos which means "light". Film can also be interpreted as a mass media which is complex in nature, consisting of audio and visual which has the ability to affect the audience's emotions from the visuals presented (Alfathoni & Manesah, 2020).

In addition, film can also be said as a social and cultural document that can help communicate the era in which the film was made, even though filmmaking was never intended for this (Ibrahim, 2011). This can also be a supporter that film can also be a medium for information, campaigns, education, entertainment, and even social criticism regarding a problem in life which is quite effective, persuasive, and can represent phenomena that exist

in the social environment.

b. Basic Visual Components

According to Block (2021) basic visual components are present in every visible moving or still image and can communicate moods, emotions, ideas, and provide a visual structure to the image. The basic visual components of the cinematography include:

1) Space

Space is a fairly complex component, because it not only defines the screen when all the components are visible, but this space has several complex sub-components that must be understood. Space on the screen and in the real world certainly have differences. Space in the real world is a three-dimensional space, which has height, width, and depth. Whereas in a movie screen, or so it only has two dimensions which only have height and width.

This space component is divided into two parts, namely primary or main and secondary. The main space components consist of four concepts, namely deep space, flat space, limited space, and ambiguous space. Deep space is the illusion of the depth of a three-dimensional world on a two-dimensional screen surface. Flat space is the opposite of deep space, where this flat space emphasizes the true two-dimensional quality of the screen surface itself. Limited space is a combination of deep space and flat space. Ambiguous space is generated when the viewer cannot understand the actual size of the object in the frame or when the viewer finds the shooting space unrecognizable. Ambiguous spaces can be created using lack of movement, unfamiliar pattern shapes, tones and textures, mirrors and reflections.

Secondary concepts of the visual space component include Aspect Ratio, close

and open space, and contrast and affinity. The Aspect Ratio is a pair of numbers indicating the relationship between the width and height of a frame, its purpose is to tell the proportions of the width and height, not the actual size of the frame. Close and open space is a type of space that is outside the screen frame line. Contrast and affinity can occur in three ways, namely with shots, from shot to shot, and from sequence to sequence (Block, 2021).

2) Line

Lines are the result of other visual components because they can appear with the presence of tone or color contrast. Line visual components can be found in almost every object around us. For example, doors have vertical lines and walkways have horizontal lines (Block, 2021). Meanwhile, according to Irawan and Tamara (2013) the line is the most important visual element, this is because the line is the first incision when designing or drawing.

3) Shape

Shape is a component contained in the visual space. Forms are also the same as the basic types of space and line. The basic shape is an object that will reveal the basic shape. The basic form consists of two kinds, namely two dimensions and three dimensions (Block, 2021).

4) Tone

Tone is an easy to understand visual component and one of the most powerful visual components. The tone referred to in this theory is lighting. The audience or audience will usually look at the lighter areas first. The brightness of objects also has a great influence on the mood of a scene. In general, viewers associate darkness with sadness and brightness with happiness (Block, 2021).

5) Color

Color is a component that is difficult to describe accurately and easily misinterpreted. In the color system there are two parts, namely additive colors and subtractive colors. Additive colors are colors that come from light or involve mixing colored lights. That is, light of one color and light of another color are emitted onto the same surface, where the two colors overlap or mix, a third color is obtained. The primary colors in the additive color system are red, green, and blue, which are commonly referred to as the RGB color mode. While subtractive colors are colors that come from ingredients called pigments. The subtractive colors consist of cyan, magenta, yellow (yellow) and when the three colors mix or overlap each filter will reduce the wavelength of the color, so it will produce black. These subtractive colors are commonly referred to as the CMYK color mode (Block, 2021).

6) Movement

Movement is the first visual component that can attract attention, and is an important aspect in a film, because in a film, of course, there are various movements. In this component there are three kinds of movements, namely continuum of movement, camera movement, and object movement (Block, 2021).

According to Blocks (2021) continuum of movement is a way of controlling the audience to see and how their point of attention moves from one area to another. Camera Movement the camera movement that can build a dramatic atmosphere. The camera can move in two dimensions or three dimensions. Two-dimensional camera movement is pan, tilt, And zoom. While the three-dimensional camera movement is dolly in/out (perpendicular to the figure), tracks left/right (aligned with the image) and cranes or boom up/down (usually parallel to the image). Object movement is the movement that occurs when an actor or object moves.

7) Rhythm

Rhythm is a component in the film that can be described through what is seen, heard, and what is felt. Each rhythm consists of three sub components, including alteration, repetition and tempo (Block, 2021).

c. Camera Angle

Camera angle is the location of the camera placement when taking objects in the frame. According to Mascelli (2010) in general, the camera angle level is divided into three, including:

1) High-angle is a shooting technique by pointing the camera down to capture an object

2) Eye level is shooting by pointing the camera parallel to the object, positioned to observe the whole event from the same height.

3) Low Angle is taking pictures by pointing the camera up to see objects

Meanwhile, when viewed from the size of the image or object, it is divided into seven types, namely:

1) Long Shots are shot taken with a wide panoramic size.

2) Medium/Middle Shot is shooting that is limited to the waist to the head

3) Medium/ Middle Long Shot size is wide shooting, but the object is limited to head to knee.

4) Extreme Long Shot is a type shot of a long image, depicting a large area from a great distance, or showing the object's surroundings in its entirety.

5) Close Up is a technique of taking pictures close to the object or the size of the object limited from head to neck.

6) Medium/Middle Close Up is to

show objects or actors in the film as limited to the mid-waist and shoulders, up to the head.

7) Extreme Close Up is a shooting technique that displays only certain parts of an object.

Choosing a good camera angle can increase the visualization of a dramatic story. Conversely, choosing a camera angle carelessly can distract or confuse the audience in interpreting a scene

Result

Tilik (mejenguk) is an Indonesian drama short film by Wahyu Agung Prasetyo which was produced by Ravacana Films in 2018 and was released by the producer on the YouTube platform for free on August 17, 2020. Tilik as can be seen in the poster in Figure 2 is one of the short films that passed the curation of the special fund of the Special Region of Yogyakarta Province Culture Office in 2018. This film explores the culture of Indonesian society in everyday life, especially the phenomenon of rural communities, namely visiting sick people in groups or together. This culture has even become a local wisdom for Indonesian people, and is still widely applied in rural communities, especially in Java.

Tilik tells the story of a group of women who travel by truck to visit the village head who is being treated at the hospital, along the way the women chatter and gossip. This is considered very relevant and describes the figure of mothers who are often found in the surrounding environment. Films like this besides being able to attract attention, discussion, and praise, can also provide lessons in life for self-assessment and are able to open minds to make people aware of bad incidents that still happen frequently and should not be imitated.



Figure 2. Tilik Movie Poster
(Source: <https://www.themoviedb.org/>)

Analysis in short films This view is carried out in each scene or scene in the film. When viewed from its visual appearance, Tilik's film has a unique and simple appearance, because throughout the duration of this Tilik short film, the scene is dominated in a truck, but it is still well packaged in terms of shooting.

Discussion

1) Space

Deep space is an illusion of depth on a two-dimensional screen surface. The point is when the image on the screen can present a view that convinces the audience to see three-dimensional depth on a two-dimensional surface. In deep space there is an indication of depth, namely convergence. This convergence is the

most effective depth guide (Blocks, 2021).



Figure 3. The scene when the group of women boarded the truck to go to visit the lurah
(Source: Ravacana Films youtube platform)

When viewed from a visual perspective, at 6:09 minutes it shows a deep space component. The deep space component uses one vanishing point convergence. This can be shown by the objects of trees, motorbikes, fences on the right side of the truck which show changes in size from large to small so that the image in the scene succeeds in displaying a three-dimensional impression as can be seen in Figure 3.

While the level camera angle used in the scene is a high angle, because in taking the picture the camera position is above the object or the human eye line. This high angle level has a dramatic impression or meaning, because in that scene it clearly shows the atmosphere of the women riding the truck and is the initial atmosphere where gossip about Dian begins. Besides that, by using this level camera angle, the object will look inferior or low, and it will be depressed because the object looks smaller.

Then according to the size of the image or object, shooting in that scene uses a medium long shot which shows all the objects but on the actor's body half is visible from the knees to the head. The impression generated from this medium long shot is to clearly record the neutral body movements of the women who are in the



Figure 4. Scene when the truck is on its way
(Source: Ravacana Films youtube platform)

truck.

Another deep space component can also be seen at 23:49 in the following scene image. The scene also uses a vanishing point convergence line, where objects that are further away from the camera appear smaller. This can be seen from the object of the truck motor, the gate which looks smaller and smaller as can be seen in Figure 4.

Levels camera angle used on scene the following is eye level, because the placement of the camera angle is directed parallel to the object. meaning or impression arising from taking pictures eye level this is a normal view and does not have such a dramatic feel to it.

Meanwhile, when viewed from the size of the object, the shooting technique used is long shot, because the whole object is in frames clearly visible. The function of taking pictures of long shots on scene is to display the truck object with a wide background so that the street scene is clearly visible.

The scene at minute 22:11 as can be seen in Figure 5, also illustrates the presence of a deep space component, this can be seen from the change in size. When the two actors who are talking are bigger, the objects of trees and roads that are further away from the camera look smaller.



Figure 5. The scene when Bu Tejo and Yu Ning clashed
(Source: Ravacana Films youtube platform)

Camera angle levels used in this scene is the same eye level as the scene at minute 23:49 Previously, because the placement of the camera was parallel to the object, the audience could normally see the position of Bu Tejo and Yu Ning who were fighting as seen in the scene.

While the type of shot used is medium or middle close up because the actor is shooting from the chest or mid-waist and shoulder to the head while still showing a background that can be enjoyed. The choice of this type of shot serves to clearly show the audience the facial expressions and scenes of the actor when speaking, as in the scene clearly shows the facial expressions and movements between Bu Tejo and Yu Ning who are in conflict because Yu Ning, who is still in the Dian family, does not accept gossip. spread on social media about Dian being labeled as a bad woman. So that the choice of the type of shot can influence the audience to be carried away by a tenser atmosphere.

Flat Space

Flat space is a visual component that defines the two dimensions of the actual screen surface.



Figure 6. The scene when the group of mothers arrived at the hospital and were talking with the village head's daughter
(Source: Ravacana Films youtube platform)

Figure 6 shows the existence of a visual component of flat space, which can be seen from the consistency of the size of the actors who are talking so that they can emphasize the flatness or two dimensions of the screen. In addition, all actors are also on a horizontal line parallel to the image plane.

Component of flat space is visible using camera angle technique at eye level where the position of the camera is parallel to the object or only shows according to the eyes of someone who is standing and does not create any impression, because of the shooting angle eye level this is the same as how the audience sees in real life.

When viewed from the size of the object in frames, the type of shot used is medium shot. Medium shot this can be said intermediate shot because it is between long shots and close up. Actor shot from waist to head. Type of shot doesn't put any emphasis, because the mothers are in frames it looks neutral which is on scene it doesn't show any feud, but only a conversation scene about the news of the lurah who is still in the ICU, so many people are not ready to visit.

Limited Space

Limited space is a specific combina-

tion of layouts that have a unique visual quality that can be distinguished from deep space and flat space.



Figure 7. Scene when a group of women stopped at the mosque to go to the bathroom
(Source: Ravacana Films youtube platform)

After observing from all over the scene, visual component of limited space can be found at minute 11:54, where a scene showed that there was a specific combination of deep space and flat space as can be seen in Figure 7.

The limited space visual component uses the eye level camera angle because the position of the object is parallel to the camera where inframesit is seen to have three frontal planes in foreground (FG) the area close to the camera, Midground (MG) objects farther from the camera and background (BG) the object farthest from the camera. Due to changes in the size and placement of the actors, this results in a well-separated visual appearance. shooting angle eye level on scene this doesn't give any impression, because the audience can see normally like in real life.

Where as type of shot used is medium or middle close up because the actor is shot from the chest to the head or is called a half-body portrait. This type of shot has the meaning of emphasizing the scene and the facial expressions of Mrs. Tejo and Yu Sam who are engrossed in discussing Dian up to the election of the village head. So that the audience can feel or be carried away by the atmosphere of the conversation.

Shots in this scene also contains many illusions of depth or deep space including resizing, texture diffusion, top-down and overlapping positions. However, lines of convergence or lines that converge to present the illusion of depth have been removed.

Ambiguous Spaces

Ambiguous space occurs when the audience cannot understand the size of a location, object, or camera position. Ambiguous space can create confusion within the audience due to the size of the object being manipulated. Usually ambiguous space used in horror films to enhance the emotional mood of a story.

In the scene at minute 18:10, the technique uses an unusual camera angle so that it can disguise the actual space of a known location or object as can be seen in Figure 8.



Figure 8. Scene while on the go
(Source: Ravacana Films youtube platform)

Therefore, this approach can give rise to a component Ambiguous space. The ambiguous space visual component occurs when the first sight of the audience is only a black object with a deep white line frames the shape of the object is not clear.

Aspect Ratio

The secondary component of space, is aspect ratio. Aspect ratio is a pair of

numbers indicating the proportional relationship between the width and height of the screen or spaces, not the actual screen dimensions (Block, 2021).



Figure 9. Preliminary view of the film censorship agency's description
(Source: Ravacana Films youtube platform)

Aspect Ratio in most short films uploaded on the YouTube platform have aspect ratio 16:9, however used in the short film Tilik this is ratio 2.40:1 is similar to some movies "widescreen", which, when viewed from the screen display of the short film Tilik, is almost two and a half times wider than its height. And aspect ratio which is almost identical to this, which is equal to 2.39:1, is still used today.

Close and Open Space

Nearly every image we see is an enclosed space, because it is physically enclosed by a frame. For example, museums displaying artwork in frames have created closed borders on each image. In a magazine or book, the borderline is the border of the picture or the edge of the page. Television screens, computers, cellphone covered by a plastic frame, well it's the same as in the short film. Look at this because it was released on the Youtube platform so it has a space covered by a plastic frame because Youtube is accessed on a computer, tablet or cellphone.

While open space cannot be displayed properly, this is in accordance with Bruce Block's theory where television screens,

computers, or cellphone can't display open space because it has extraordinary frame lines. In contrast to the screens of large theatrical performances, they provide the best opportunity to eliminate frame lines and can create open spaces.

Contrast and Affinity

Various component spaces actually can be associated with the principle of contrast and affinity. contrast and affinity can happen in shots, from shot to shots, and from sequences to sequences. In this short film Watch, for example, contrast and affinity are not clearly found.

2) Line

The line visual component is a very important visual element because it can control space, movement, and rhythm. Component lines this can be seen through the differences in tone and color. Lines can be revealed or hidden depending on the tone against the backdrop (Blocks, 2021).



Figure 10. Scene when the group stops in the middle of the rice fields
(Source: Ravacana Films youtube platform)

The scene at minute 8:26 as can be seen in Figure 10, shows a component line that occurs because of differences in tone and color. This can be seen from the results of the contrast tone between the expanses of rice fields, vast mountains and the sky. The shooting angle used in

this scene is eye level, where the placement of the camera is parallel to the object or equivalent to normal eye view, so it doesn't have any impression or emphasis.

Whereas type shot used in the scene is extreme long shots, because it describes an object that is very far away and displays a wide panorama. Type of shot in the scene is used to show a truck stopping in the middle of a beautiful expanse of rice fields and mountains. So that the audience is not bored with scenes dominated by trucks and can feel the atmosphere of the story presented in the short film Tilik.

3) Shape

Shape is a basic visual component that can be categorized into two, namely two-dimensional and three-dimensional shapes. Squares, circles and triangles are categories of two-dimensional shapes, while examples of three-dimensional shapes are cubes, spheres and pyramids. When viewed in the real world it seems to be filled with objects of different shapes, making it impossible to classify all. However, we can organize shapes by simplifying them and ignoring details.

If seen from the visual display in minute 8:49 as can be seen in Figure 11, components shape which stand out and are clearly visible can be found on the door of the mosque, which has basic shapes such as squares and rectangles.



Figure 11. Scene when the group stops at a mosque
(Source: Ravacana Films youtube platform)

The scene used eye level camera angle, where is the placement of the camera parallel to the object inside frames. The type shot used is long shot, which uses a wider panorama to show the place and atmosphere of the scene made. The function or impression conveyed from use type shot like in the scene of minute 8:49, as can be seen in Figure 12, showed the atmosphere of the mosque from the side of the mosque's foyer to stop mothers on their way to the hospital, and also functions as an opener before using a closer shot, which is the stopping scene when some of the women use the mosque's bathroom.

In Figure 12, the basic shapes that stand out and look detailed, namely on the hospital building, the truck body, and the floor of the hospital parking lot which have square and rectangular shapes.

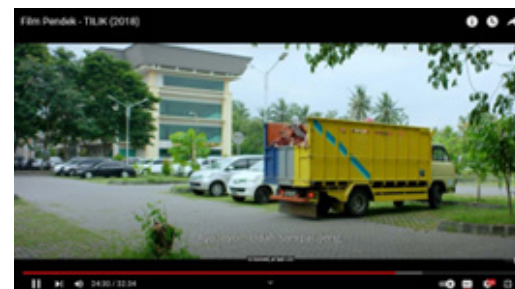


Figure 12. Scene when the group arrived at the hospital parking lot
(Source: Ravacana Films youtube platform)

Camera angle levels used on scene is similar to angles used in minute 8:49 which is the eye level angle, where the position of the camera is parallel to the image object or when viewed it will be parallel to the audience's eyes. This is intended so that the audience can see normally as by seeing the scene that occurred in the parking lot.

When viewed from the size of the image or object that is inside the frame, the type shot used is long shots. The use of this type shot in a scene aims to display or show clearly the atmosphere of the park-

ing lot at a hospital as the last stop where the Lurah was treated.

4) Tone

Tone in the basic visual component of cinematography mentioned is the lighting or brightness of objects. To implement the tone in the film, there are several techniques, namely controlling tone, coincidence and non coincidence, and contrast and affinity (Blocks, 2021).



Figure 13. The scene when the group of women boarded the truck to go to visit the lurah
(Source: Ravacana Films youtube platform)

Lighting techniques in this film predominantly uses reflective control lighting techniques. Reflective controls is a lighting technique that puts tone completely at the hand of the art director and costume designer. As in outdoors scenes seen in Figure 13, which showed a sunny weather, the range of tone in the scene is controlled by the actual brightness of the props, clothing or costumes arrangements and location.

This can be seen in the scene at minute 1:41, shown in Figure 13, which uses reflective control because it has the same lighting intensity in each scene and uses tone control through props, namely the truck that the women are riding, the clothes and the location used. By controlling the tone of the props, clothing and location, they are able to support the appearance of the short film Tilik, which well present the atmosphere of the day.



Figure 14. The scene when the police give a ticket to a group of women who are going to visit the lurah
(Source: Ravacana Films youtube platform)

Besides reflective control, in the scene at minute 23:32, as can be seen in Figure 14, it was also found that the film uses coincidence of tone technique. The coincidence of tone is an incidental lighting technique, without physically hiding the subject behind other objects. Its function is to clarify the appearance of the actor in frames, making it easier for the audience to see the subject or actor clearly.

The shooting angle used on scene is eye level because the object is aligned with the camera as well as from the size of the object type shot used is close up, where the subject close-ups actor is face. Type of shot in a manner close up has the meaning of emotional emphasis on the facial expressions of the policeman who is stopping or giving instructions to stop to the women inside the scene. So that the audience is able to see the eyes and facial expressions of the police (actor) easily and clearly that there is an order to stop.

5) Color

Color is a visual component that is easy to misinterpret. Color can be used to express similarities or differences between characters, events, and locations. Therefore the color of the object in each shot must be chosen carefully. From 32 minutes to 34, the length of the duration in this short film, after being observed,

reaches 90% using complementary colors. The selection of complementary colors is used to display a dramatic contrast, namely warm and cool. The choice of color can support the storyline, namely gossip scenes interspersed with feuds in the short film *Tilik*.

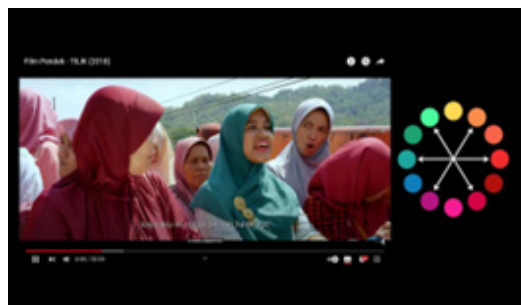


Figure 15. The scene when the group of women boarded the truck to go to visit the lurah
(Source: Ravacana Films youtube platform)

The selection of complementary colors can be seen in scene at minute 6:54, with the help of the color wheel on the side which uses a combination of red, purple, orange, blue, and green as shown in Figure 15. The orange color can be seen in the color of the truck and the impression of lighting that describes the hot atmosphere during the day. The blue-gray color for the sky and several actor costumes as extras. Light purple color, also used for some of the extras who are behind. Meanwhile, the green color is in the trees and mountains and is used for the costume of the main character, Mrs. Tejo, so that she gets a contrasting impression from her interlocutor who is wearing a red costume. The combination of these colors can produce dynamic tension in the film and provide unity and beauty to the visual structure of the film.

6) Movement

Basic visual component of movement is an important aspect in a film, because a film certainly has various movements in

each of its scenes. Movement is a visual component that can catch the attention of the audience the first time. Inside the visual component movement there are three ways for a movement to occur: continuum of movement, camera movement, and object movement (Blocks, 2021).

Continuum of Movement

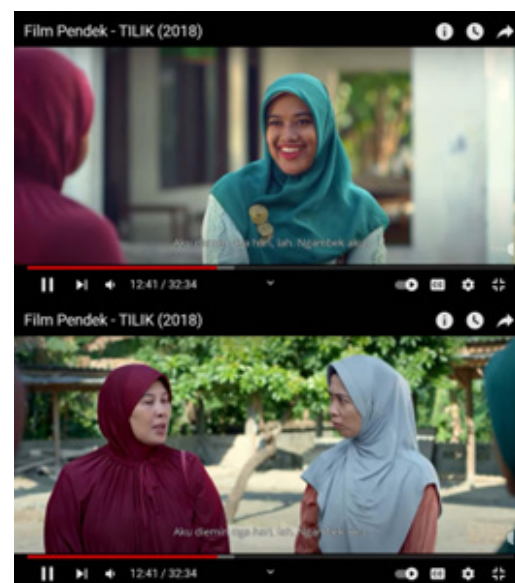


Figure 16. Scene when talking about Dian
(Source: Ravacana Films youtube platform)

As shown in Figure 16, the images emphasize its continuum of movement from shot to shot. This continuum of movement uses a movement technique that connects the two shots when there is an alternating conversation between actors. so that the audience's attention point will shift from one face to another.

The scene at minute 12:41 used eye level camera angle, because the camera is placed parallel to the object to observe events from the same height as the normal eye. Whereas type shot used is middle close-up, namely the condition of the object that is visible only half the body or from waist to head, it serves to clearly show the movements and facial expres-

sions of the actors. As seen on scene that, election middle close-up emphasizing the movements and details of Bu Tejo, Yu Sam, and Yu Tri's facial expressions when talking about Dian, so that the audience is able to clearly see the facial expressions of the actors, which accentuate their emotions when talking about Dian as the seducer of their husbands. This is used so that the audience can be carried away emotionally with the story that happened.

Camera Movement



Figure 17. Scene when the truck is traveling
(Source: Ravacana Films youtube platform)

Figure 17 is the scene at minute 18:13 to 18:18 which show a visual component of movement based on the camera movement. Where the camera movement technique used is tilt up technique, which is the technique of taking pictures by rotating the camera from the bottom up.

Whereas the level of camera angle used in the snippet of the scene is eye level, because the position of the camera and the truck object, along with the background, are parallel, the audience is able

to see according to normal eyesight. From the view of the image or object in frames, type shot used is from extreme close up the lower front of the truck at 18:13 minutes shifted to long shots which features a wider panorama of shot at the 18:18 minute. This is so that the audience can see clearly the atmosphere of the road that is being displayed. This type of shot followed a wide area as the scene progresses, as in the scene which shows the full running truck object.

Object Movement



Figure 18. Scene when Dian walked towards the car of the lurah's husband's
(Source: Ravacana Films youtube platform)

In the screen world every moving object generates a track. Tracks are paths created by moving objects. In the scene at minute 29:14 shown here in Figure 18, it can be seen that there are shots that follow the movements of the actors. It can be seen that technique or camera angle used is eye level so that it is at eye level with the audience. Meanwhile, when viewed from objects that are in frame the type shot used is long shots which serves to display a wide panorama in a frames and as shot opener before use shot which is closer. The use of long shots on scene is to display the movement of actors walking from a distance until they enter the car, then shot will be directed closer to the actor Dian.

6) Rhythm



Figure 19. Scene when the group arrived at the hospital
(Source: Ravacana Films youtube platform)

Rhythm in film has three sub-components, namely alternation, meaning that between sound and silence that will create a rhythm, as well as repetition, which is images or areas that are repeated will create a rhythm and tempo. The difference between walking and running is the tempo.

In the film *Tilik* the rhythm of repetition can be seen in the scene in minute 24:12 as can be seen in Figure 19. The rhythm of repetition can be seen from the repetition of window, hospital door and truck bodies which are dominantly square or rectangular in shape. The scene uses a deep shot angle on eye level where the picture is taken by directing the camera parallel to the object. Extreme long shot are also used, where the technique broadly shows the setting of the place and describes the atmosphere of the hospital.

Conclusion

The results of the analysis of the basic visual components of cinematography carried out in the short film *Tilik* by Wahyu Agung Prasetyo prove that the basic visual components of cinematography are fulfilled properly. Space is a complex visual component, because it doesn't just represent the screen on which the other six visual components can be seen, but space

alone can make an important contribution to the overall visual structure. Line is a visual component that can control space, movement and rhythm in the short film *Tilik*, which can be found due to differences in tone or color contrast. Shapes have a neat composition but in the real world it is filled with objects of different shapes, and it is impossible to classify all of them. The tone used in this *Tilik* short film dominantly uses lighting techniques that have the same intensity in almost every scene and dominantly uses complementary colors to create a dramatic impression. Movement is also an important visual component, which in itself has three subcomponents. These sub-components it can make the film's visual appearance even more interesting. As for the basic visual component of rhythm, the short film *Tilik* does not feature complex rhythms.

With the fulfilling of basic visual components of the film, it is able to make the film more interesting and able to influence the mood of the audience. The results of this analysis also prove that short films that look simple and natural must still pay attention to the basic visual components of cinematography to increase the quality of a film. This research still has many shortcomings, namely the limitations of writing so that it cannot contain the entire results of the analysis on the short film *Tilik*. It is hoped that similar research can discuss more broadly by using case studies of the visual component of films in more depth.

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REPRESENTATION OF SUPERHEROES IN THE CHARACTER OF ALANA IN THE SRI ASIH FILM

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Abstract: *Sri Asih, the first superhero character in Indonesia created in 1954 by R.A Kosasih in comic media, has undergone several adaptations in comics and films with different character variations and story backgrounds. In 2022, Jagat Sinema Bumilangit re-adapted the Sri Asih film using a different approach. The film introduces a new main character named Alana and presents a storyline adapted to the current context. This research purpose is to analyze the representation of superheroes manifested in Alana's character in the Sri Asih film 2022. The study employs a descriptive qualitative approach and refers to Roland Barthes' theory to uncover the meanings of denotation, connotation, and myth within the Sri Asih film. The research findings reveal 10 scenes that represent superheroes through the character of Alana. The results provide insights into how superheroes are portrayed through the character of Alana in the Sri Asih film. Additionally, the study uncovers the presence of heroic myths in the visual narrative structures of the film. These findings contribute to understanding the adaptation of superhero characters and how they remain relevant to popular cultural trends, attracting fans from generation to generation.*

Keywords: *representation; superhero; sri asih; film; barthes; myth*

Introduction

Superheroes have become idolized characters in popular culture and are a beloved film genre by many people. In film narratives, the concept of superhero characters is often visualized as figures who rescue humanity from evil and challenging times. Superhero movies provide the ideas of peace, safety, and freedom (Ellis, 2023). According to Scott Bukatman (2003), superhero characters not only become part of popular culture but also represent symbols and ideologies of power, freedom, and morality.

In Indonesia, the first created superhe-

ro character was Sri Asih. It was created by R.A Kosasih in 1954. Sri Asih was first published through comic books (Bonneff 2008). The Sri Asih comic gained many fans, and in the same year, Sri Asih was adapted into a feature film directed by Turino Djunaidy and Tan Sing Hwat. Then, in 2022, it was adapted into another film with the same title and directed by Upi Avianto.

Sri Asih is a female superhero who possesses extraordinary powers and abilities inherited from Dewi Asih. In each era, there will be an incarnation of Dewi Asih, bearing the title of Sri Asih. As Sri Asih, she is connected to her ancestors

and can manifest their powers within her (Bumilangit, 2023). In the 2022 film version of Sri Asih, there is a new character named Alana who becomes Sri Asih, with the storyline adapted to the current era. These elements make it an interesting subject for analysis in the context of superhero representation in films.

According to Danesi (2010), film can be defined as a text that involves photographic images that create the illusion of action and motion. Piliang (2004) explains that text, in a broader sense, refers to messages in the form of visual and verbal signs, which produce visual and verbal texts such as advertising images, comics, television, films, fashion, dance, theater, sculpture, architecture, and urban planning. Films are intentionally made to provide special effects to the audience through the messages contained within creatively presented storylines (Pratista, 2017).

The previous study conducted by Atmaja (2022) examined the representation of superheroes in the film Gundala using Roland Barthes semiotic analysis approach. Through Roland Barthes semiotic theory, this research aims to provide a deeper understanding of how the representation of superheroes can be manifested in the character of Alana in the film Sri Asih. This study will analyze the signs that represent superheroes in the introduction of the character Alana.

The analysis of signs will encompass the visual aspect of mise en scène, as well as the narrative aspect of the character Alana. In the context of mise en scène, it includes everything that is in front of the camera and captured in the film production (Pratista, 2017). Meanwhile, in the narrative aspect, this research will examine how Alana's journey as a superhero is developed through the plot, conflicts, and character development. Therefore, it is

hoped that the representation of Alana as the superhero Sri Asih can be identified. The aim is for the results of this study to contribute to the development of research on superhero characters in the film genre, especially in Indonesia.

Methodology

The methodology used in this study is descriptive qualitative research with a semiotic analysis approach based on Roland Barthes' theory. Descriptive qualitative research generates descriptive data through direct observation of the researched object. Its purpose is to explain and interpret the object based on its actual conditions (Sugiyono, 2011).

Data collection is carried out through observation and literature review. Observation is done by directly observing the Sri Asih film. Meanwhile, the literature review is conducted by searching for data from sources such as journals, books, and websites that can support this research.

The research begins by conducting direct observations of the Sri Asih film (2022). Then, a selection of scenes is made to be the units of analysis. The units of analysis are chosen based on their characteristics, namely scenes in the Sri Asih film that contain signs representing a superhero. Data analysis uses the techniques of Miles and Huberman, with stages of data collection, data reduction, data presentation, and conclusions (Sugiyono, 2011).

Visual analysis employs the semiotic approach of Roland Barthes to identify the meanings of signs in the Sri Asih film (2022), particularly in the representation of superheroes. Roland Barthes' semiotic approach is employed to conduct this analysis. His theory of signs explains a

language system that consists of signifiers and signified. The semiotic approach is divided into two levels of understanding; denotation and connotation. Denotation refers to the literal meaning while connotation refers to the implicit meanings associated with culture and beliefs embedded in the signs.

Moreover, he also developed a theory of myths, which is defined as social and cultural representations that embody an ideology or a perceived universal truth. Through his semiotic analysis, this research purpose is to uncover the meanings of signs used in the representation of superheroes in the character of Alana in the Sri Asih film and how these signs contribute to formation of myths about superheroes in Indonesian culture (Sobur, 2017).

Table 1. Roland Barthes Semiotic
(source : Budiman, 2011)

1. Signifier (Penanda)	2. Signified (petanda)
3. Denotative Sign (Tanda Denotatif)	
4. CONNOTATIVE SIGNIFIER (PENANDA KONOTATIF)	5. CONNOTATIVE SIGNIFIED (PETANDA KONOTATIF)
6. CONNOTATIVE SIGN (TANDA KONOTATIF)	

According to Barthes, language can become a myth under certain conditions marked by the presence of a second order signification system, known as the second order semiological system as can be seen in Table 1. This system includes rhetoric or connotation that emerges from the signs of the first system. Barthes stated that in this second level of semiotics, everything that is written or represented verbally and visually has the potential to become a myth (Budiman, 2011).

Result

Sri Asih Film (2022) Overview

Sri Asih (2022) is a film directed by Upi Avianto and written by Upi Avianto and Joko Anwar. The film is produced by Screenplay Bumilangit, a company that produces superhero films based on characters from Bumilangit, a company with a heritage of over 60 years in creating Indonesian superhero characters. The story in the Sri Asih film (2022), as can be seen in Figure 1, presents differences from previous comic book and film versions, providing a new interpretation of the superhero character Sri Asih. This film is part of Bumilangit's efforts to expand and develop the Indonesian superhero universe on the big screen.



Figure 1. Sri Asih Film Poster.
(Source: [instagram.com/sriasihmovie.official/](https://www.instagram.com/sriasihmovie.official/))

In this film version, Alana takes on the role of the main character, who is a descendant of Sri Asih. Alana was born as an orphan and grew up in an orphanage. Her parents died during the eruption of Mount Merapi, which occurred on the day of Alana's birth.

As Alana enters her childhood, she is adopted by a wealthy entrepreneur named Sarita Hamzah (Jenny Chang). Under Sarita's guidance, Alana grows up to become a talented fighter. Sarita raises Alana wholeheartedly, and Alana considers her as her own mother, creating a strong bond between the two of them.

Alana's journey as an emanation of Sri Asih began, with the inner strength and kindness that she inherits. Alana grows into a brave and caring person. Along the way, Alana learns to control the anger that comes from the evil forces that plagued her as a child. She learns to understand the values of life, sacrifice, and love that change her world and bring new hope to many.

Semiotic Analysis

The following analysis applies Roland Barthes' theory to analyze each unit of data in order to uncover the denotative, connotative, and mythical meanings that represent the superhero in the selected scenes used as the units of analysis.

1. Analysis Unit 01

Visual Sign :

00:01:16 - 00:01:25

Audio Sign :

Dialogue between Alana's biological father and mother (Sri Asih)

Mother : *"Iya, aku juga bingung. Setiap hari aku mimpiin gunung merapi. Rasanya kaya aku kepanggil kesini".*

Mother : *"Yes, I'm confused too. Every day I dream of volcanoes. It feels like I was called here."*

Denotation: A couple visiting Mount Merapi. They do this because the wife frequently dreams about Mount Merapi and wishes to go there.

Connotation: Alana's biological parents feel that visiting Mount Merapi can help them understand and uncover the hidden messages or meanings behind the wife's dreams. Additionally, there is a connotation related to the spiritual and certain beliefs that consider Mount Merapi as a sacred place with special significance. Another connotation is that the dream of going to the mountain is an instigation from evil forces to harm Alana's well-being.

2. Analysis Unit 02

Visual Sign :



00:02:52 - 00:03:10

Audio Sign :
The sound of the volcanic eruption roared like a terrifying screaming monster. Then Alana's biological mother screamed.

Mother : *"Cepetan pergi dari sini!. Cepetan pergi, cepetan!!!"*


Mother : *"Hurry up and get out of here! Hurry up, hurry up!!!"*

Denotation: There is a dangerous pyroclastic cloud from the eruption of Mount Merapi moving rapidly towards Alana's parents, who are frightened. The pyroclastic cloud sweeps and destroys everything in its path, including visitors and residents around the mountain who are running to save themselves. Then transforms into a face-like shape with a wide open red mouth, chasing Alana's parents as they try to escape in a car.

Connotation: The atmosphere is filled with tension and fear as Alana's parents face imminent danger. The transformation of the pyroclastic cloud into an angry face signifies the presence of evil forces that do not want Alana to be born and seek to harm them. This scene also has connotations that there is an entity associated with Mount Merapi.

3. Analysis Unit 03

Visual Sign :



00:03:18 - 00:03:30

Audio Sign :
Dialogue Alana Parents in car.

Mother : *"Yang, air ketubanku pecah".*
Father : *"Ga mungkin sayang, ga mungkin. Kamu baru lima bulan!"* (panicking while driving the car quickly)
Mother : *"Aku mau melahirkan sekarang"*

Mother : *"Honey, my water broke".*
Father : *"It's impossible dear, it's impossible. You're only five months old!"* (panicking while driving the car quickly)
Mother : *"I want to give birth now"*

Denotation: Alana's mother panics and experiences premature rupture of membranes when Alana is only five months old in the womb. This is not a normal condition as a fetus at five months of gestation is generally not fully developed and not ready to be born.

Connotation: A life-threatening situation for both the mother and the five-month-old fetus in the womb. Creating a tense atmosphere, showcasing the struggle between good and evil forces in their quest to ensure the safety of Alana and her mother.

4. Analysis Unit 04

Visual Sign :



00:04:25 - 00:05:21

Audio Sign :
Dialogue between the mysterious grandmother figure and Alana's mother with a gripping musical background

Grandmother : *"Adik..."*.
Mother : *"Bayi saya mau lahir, ughhh"*
Grandmother : *"Geletak Jeng, geletak"*
Grandmother : *"Ambegan ngih, Ngeden"*
Mother : *"ugg aaaa"*

Grandmother : *"Sister ..."*.
Mother : *"My baby is about to be born, ughh"* (in pain)
Grandmother : *"Jeng Lay, Lay down"*
Grandmother : *"Breathe please, Push"*
Mother : *"ugg aaaa"* (painfully straining with all her might)

Then there was the sound of a newborn baby crying

Denotation: With the setting inside a crash car. Narrow, dark and with scary red atmosphere. Accompanied by the background music pounding with a fast tempo, Alana's mother endures the pain of labor. A grandmother suddenly arrives to assist in Alana's birth inside a car that has crashed into the tree.

Connotation: The red aura symbolizes the presence of an entity that threatens the lives of Alana and her mother. Suddenly, a mysterious grandmother fig-

ure appears to help Alana's mother, who is experiencing a ruptured amniotic sac and about to give birth. The mysterious grandmother can be interpreted as a supernatural entity who comes to protect and aid in Alana's birth, thwarting evil plans that do not want Alana to be born. The sound of the baby's cry indicates that Alana is born prematurely at only five months gestation. This signifies that Alana is not like a typical human, but possesses a special gift or power that has yet to be fully revealed.

5. Analysis Unit 05

Visual Sign:



00:05:56 - 00:06:02

Audio Sign:
Dialogue between little Alana and her friends in the orphanage.

Tangguh: *"Nanti sobek komikku".*
Alana: *"Hei! Kembalikan komiknya Tangguh!"*

Tangguh: *"This can tear my comic".*
Alana: *"Hey! Bring back the comic Tangguh!"*

Denotation: In the orphanage, a group of big boys is seen taking Tangguh's comic book and playing with it. Tangguh tries to take it back but struggles because he is smaller in size. Then Alana arrives, and despite being smaller, she bravely approaches them and helps Tangguh by

reprimanding them and asking them to return Tangguh’s comic book.

Connotation: Alana displays extraordinary courage in confronting a group of big boys. This courage shows that Alana has a helping spirit from a young age and dislikes oppression. Alana demonstrates good social behavior through her tangible actions to help Tangguh regain his comic book. The connotation of this story can illustrate values such as bravery, friendship, and compassion for others.

6. Analysis Unit o6

Visual Sign:


00:07:17 - 00:07:42

Audio Sign:
Alana’s dialog with fellow orphanage children.

Alana: “Hei! Kembalikan komiknya Tangguh!”
Orphanage Child 1: “Eit, Ayo ayo ambil ayo, eit.. aaa ga bisa, hahaha pendek!”
Alana : “Hei!”


Alana: “Hey! Bring back the comic Tangguh!”
Orphanage Child 1: “Eit, Come on, come on, come on, come on... aaa can’t, hahaha, short!”
Alana : “Hey!”

Denotation: Alana asks the misbehaving orphanage kids to return Tang-

guh’s comic book, but her request is ignored, and they start teasing her. Alana becomes angry and stomps her foot on the ground, causing a wooden stick to fly up. She catches the stick and strikes one of the orphanage kids, sending them flying far away.

Connotation: This scene depicts Alana as extremely courageous and strongly opposed to oppression. However, her emotions are triggered when her opponents do not listen and tease her. Alana’s emotions become uncontrollable, causing her to stomp her foot and make the wooden stick fly forward. She hits her opponent with the stick, sending them flying far away. This would not be possible with ordinary human strength. The story connotes that Alana possesses hidden superpowers, but she has not yet learned to control her emotions and strength.

7. Analysis Unit o7

Visual Sign:


00:12:20 - 00:13:09

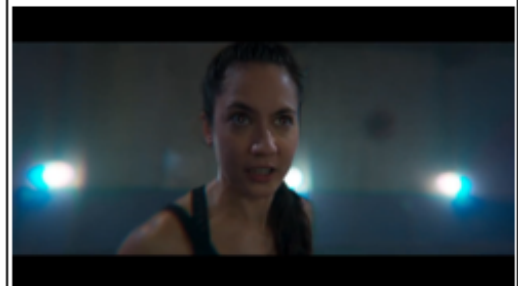
Audio Sign:
Dewi Api summons Alana while she is asleep.

Dewi Api : “Alana”
Alana wakes up and hears a sound resembling flames coming from outside the room
Dewi Api : “Alanaaaa! aaa”
(Dewi Api calls out and then screams.)

Denotation: In the dream, Alana is seen sleeping and then wakes up upon hearing someone calling her name. Alana approaches the source of the voice outside her window. There seems to be a mysterious entity in the form of a glowing mass of flames that transforms into the figure of the Fire Goddess, calling Alana as she screams. Alana feels frightened and eventually wakes up from her dream. The dream that she has been experiencing since childhood.

Connotation: Entity of Dewi Api is portrayed as an antagonist or villain with malicious intentions towards Alana. She appears in Alana’s dreams as a frightening figure. The presence of Dewi Api in the dream creates a menacing atmosphere, symbolizing the evil forces that seek to influence Alana and bend her to their will.

8. Analysis Unit o8

Visual Sign:


00:13:34 - 00:15:39

Audio Sign :
Dialogue between Sarita, Alana and Dewi Api in Alana's mind.

Sarita : “Taklukan diri kamu Al, jangan biarkan kemarahan menguasai diri kamu. Jika kamu membiarkan kemarahan menguasai diri kamu, maka suatu hari dia akan menghancurkan diri kamu ”

Sarita: “Conquer yourself Al, don’t let anger control you. If you let anger rule you, one day it will destroy you.”

Then there was a ringing sound and Alana heard Dewi Api’s voice.

Sarita : “Kendalikan diri kamu”
Dewi Api : “Keluarkan amarahmu, keluarkan amarahmu”
Sarita : “Kendalikan Alana”
Dewi Api : “Keluarkan, keluarkan amarahmu, keluarkan amarahmu!!”
Sarita : “Taklukan dia Al, hanya kamu yang pegang kendali atas diri kamu sendiri. Alana... Al...”
Sarita : “Untuk sementara kamu jangan ikut bertarung dulu ya, bahaya”
Alana : “Tapi aku ga mau dia kendaliin hidup aku lagi bu”
Sarita : “Kita akan kalahkan dia, ya?!”

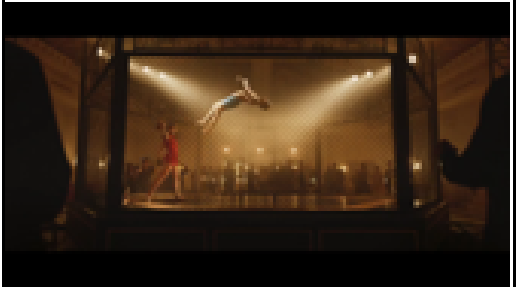
Sarita : “control yourself”
Goddess of Fire: “Take out your anger, take out your anger”
Sarita : “Control Alana”
Fire Goddess: “Get out, get out your anger, get out your anger!!”
Sarita : “Conquer him Al, only you are in control of yourself. Alana... Al...”
Sarita : “For a while you don’t join the fight, okay, it’s dangerous”
Alana : “But I don’t want him to control my life anymore ma’am”
Sarita says we will beat him, shall we?

Denotation: During a training session, Alana practices with Arita, her adoptive mother. Alana appears to struggle with controlling her emotions. Arita attempts to calm Alana’s emotions and help her overcome them. However, a vision of Dewi Api appears in Alana’s mind, urging her to unleash her anger. This almost causes Alana to lose control, but Ar-

ita continues to try to calm her. In the end, Alana and Arita manage to restrain the emotions within Alana.

Connotation: Within Alana, there is an anger that emerges and is difficult for her to control. Dewi Api symbolizes this negative force that seeks to exploit Alana’s emotions. Arita plays a crucial role in helping Alana control her emotions. The story depicts Alana’s internal struggle between emotional power and the will to control those emotions. It emphasizes the importance of support, guidance, and calmness in managing negative emotions that shape Alana’s character growth.

9. Analysis Unit 09

Visual Sign:

00:34:43 - 00:36:20

Audio Sign :
Alana’s dialogue against Mateo.
Mateo : “Lo harus belajar buat ngehormatin laki-laki!”
Dewi Api : “Alana”
Dewi Api : “Keluarkan! Keluarkan amarahmu, keluarkan, keluarkan amarahmu. Keluarkan Amarahmu.”
Arita : “Alana!”

Mateo : “You have to learn to respect men!”
Suddenly, a buzzing sound appeared along with Dewi Api’s voice inside Alana.
Fire Goddess : “Alana” (whisper)
Goddess of Fire : “take it out! Get your anger out, get your anger out, get your anger out. Get Out Your Anger. Get Out Your Anger!!!”
Arita : “Alana!”

Denotation: While Alana is in a helpless and defeated state, Mateo insults and belittles her, stating that she should respect men. Suddenly, a buzzing sound related to Dewi Api resonates within Alana, inciting her to unleash her anger. Alana rises with full strength and fights back against Mateo. Her punch sends Mateo flying far away. In the distance, Arita witnesses this and immediately calls out to Alana, making her realize her inability to control her emotions.

Connotation: This scene depicts a drastic transformation of power for Alana, from a weak position to regaining her strength. She defeats Mateo with a punch that sends him unconscious, which is unusual for a normal human. The voice of Dewi Api within Alana carries connotations of a call or evil power trying to control her. Dewi Api appears to influence Alana to use her power for malicious and dangerous purposes. Arita’s voice calling from a distance signifies emotional closeness between them and indicates Alana’s remorse for her actions and her desire to regain control over her emotions.

10. Analysis Unit 10

Visual Sign:

00:45:45 - 00:46:53

Audio Sign :
Dialogue as Alana fights off the enemy attack that harmed Arita.

Kala : “Kita pergi dari sini sekarang!”
Alana : “Apa yang gua lakuin?”
Kala : “Nanti kamu akan tau semuanya”

Kala : “We go from here now!”

Then Alana screams loudly, and her voice overpowers the enemy.

Alana : “What am I doing?”
Kala: “Later you will know everything”

Denotation: Alana is being dragged by two of Prayogo’s henchmen, but she effortlessly throws them off. She stomps her foot on the ground, causing a piece of iron to be catapulted upwards, which she catches. Alana uses the iron bar to swiftly fight against four of Prayogo’s henchmen. Then, Alana lets out a loud scream, causing her six enemies to be lifted into the air and then fall down. Alana is confused about what is happening to her, but Kala calms her down and says that Alana will understand later.

Connotation: Alana possesses dormant powers that, when unleashed, make her strong and capable of fighting her en-

emies. The displayed superpowers in this scene include stomping the ground with her foot, causing the iron bar nearby to be launched without direct contact. Additionally, Alana’s superpower is shown when she easily frees herself from the two people who were dragging her. Furthermore, Alana’s superpower involves a scream that can control her enemies, causing them to float in the air. This connotation creates an epic atmosphere, strengthening Alana’s role as a character with unique and superhuman abilities.

Myth

After analyzing the researched units, it was found that the scenes in the Sri Asih film (2022) contain a myth that depicts the journey of the hero.

The representation of a superhero character in the form of Alana in the Sri Asih film begins with a scene where Alana’s parents go to Mount Merapi in response to a dream. Then, a volcanic eruption occurs that claims the lives of Alana’s parents, coinciding with Alana’s birth. This scene carries a myth that implies that evil forces do not desire the birth or emergence of good powers. Alana, as a baby who will inherit the good powers of Sri Asih, becomes the target of evil forces that seek to control her.

Alana is born safe and healthy despite being only five months in the womb. A mysterious grandmother comes to assist in Alana’s birth. The myth contained in this is that Alana is not an ordinary human; she has been chosen to be a superhero since before birth. There is a supernatural entity that protects Alana to ensure her safety and survival, even though there are evil forces that do not desire her birth.

Several scenes where Alana helps her

friend Tangguh represent Alana’s superhero values. She is a character with great courage, concern for others, and a dislike for injustice, which is closely related to popular culture in Indonesia. However, Alana also has a flaw, which is difficulty in controlling her anger.

Alana possesses hidden superpowers. In several scenes, Alana easily defeats her enemies. She can manipulate wooden and iron objects with a kick without directly touching them. Her screams render her enemies helpless and floating in the air. Alana also possesses extraordinary strength that allows her to easily fight against her enemies, unlike typical human strength.

Discussion

This section describes the analysis and findings of the research data and explains the limitations of the study. It can also describe what the result of the study implies, why it matters, and the perspective for future research. The findings of this research focus on how the superhero character is represented in the character of Alana in the Sri Asih film 2022. The data analysis reveals at least 10 scenes in the film that depict the characteristics of a superhero through the character of Alana. These include special powers, extraordinary fighting abilities, heroic traits displayed in various situations, and the presence of evil characters seeking to harm Alana’s life. This demonstrates that the portrayal of a superhero in the Sri Asih film strives to remain relevant and engage fans.

However, this research has limitations. Firstly, it only analyzes one adaptation of the Sri Asih character, specifically the 2022 film version. Future research could involve other media, such as Sri Asih in comic form. Additionally, different research approaches, such as quantitative

methods involving respondent data, can be employed to deepen the understanding of superhero portrayals. Research can also be expanded to incorporate the cultural and historical aspects of Indonesia. This is important, especially in Indonesian popular culture, to provide interesting perspectives for the entertainment industry in adapting relevant and captivating superheroes that appeal to fans across generations.

Conclusion

This research reveals that the superhero character Sri Asih has been successfully represented through the character of Alana. The analysis conducted on the research sample shows that there are at least 10 scenes that depict superpowers, extraordinary fighting abilities, and the heroic nature of the character Alana.

This conclusion answers the research question about how the representation of a superhero is presented in the character of Alana in the Sri Asih film, and it also uncovers the presence of myths that work within the narrative structure of the film.

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INTERACTIVE BOOK DESIGN FOR CHILD SPEECH DELAY THERAPY

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Abstract: *The ability of speech is influenced by intrinsic and extrinsic factors. If the two factors do not support the development of speech in the child, then the speech ability will be late, which is called speech delay. If speech delay is not addressed immediately, then the impact will continue until the child is an adult. Therefore, interactive book design has a purpose as a media of stimulation that can be used by children and parents. This research will raise topics about the creation and application of interactive visuals in books. The results of this study are expected to be played by parents with children on a regular basis so that the features of this interactive book can be used effectively until the child is interested in learning to recognize and pronounce words or sentences and at the same time helps improve fine motor skills in the child.*

Keywords: *speech delay; interactive; book; stimulation*

Introduction

According to Santrock (2019) a baby's speech ability is influenced by 2 (two) factors, the factors is intrinsic that the condition of babies has psychological and physical involvement with the conversations and extrinsic influenced by the stimulation ability given by the people around them. Both of these factors can determine a baby related to the increase or lack of the development of speech ability in the baby. If these two factors do not support the development of speech such as there are problems in the speech organs or lack of stimulation of the parent's speech, then speech development in the baby will be slower and this phenomenon can be referred to as speech delay. According to

Nelson (in Nahri, 2010) stated that the prevalence of speech delay in preschool children in Indonesia ranges from 5% to 10%. Although the number of normal children is higher than that of children with speech delays, these problems mentioned earlier can have a negative impact on their future development. Therefore, the role of parents is important in dealing with this problem. In dealing with speech delay in the child, quality time parents have with their children is considered as very important because the child's speech delay usually needs a friend to study or play with. Therefore, it needs an interesting learning medium to introduce a word or phrase so that parents will be easier in stimulating their child with speech delay. According to Anggi (in Harususilo, 2019),

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Speech delay is divided into two groups: functional and non-functional speech delay. Non-functional speech delay is a disorder caused by problems in the way children respond such as Autism or ADHD (Attention Deficit Hyperactive Disorder), while functional speech delay is caused by a lack of stimulation in communication or miss parenting pattern of the child. Visual communication design can function as three media: persuasion media, identification media, and information media. As a student of visual communication design interactive part, the author has carried out the design of interactive books where this book will be an information media for functional speech delay children to introduce words or sentences and can be a therapeutic media for functional speech delay children.

In this research, the literature used are literature on the stages of child speech development, the play pyramid theory, and the interactive book theory.

A. The Stages of Child Speech Development

According to Einon (2006), newborn babies have a hearing system that is still weak to detect sounds. However, over time, the sensitivity of the baby's hearing to sounds will increase in a short time with stimulation. There are several ways to increase your baby's sensitivity to noise, such as: The first is to often speak to the baby with different voices such as a softly impressed mother's voice and a heavily impressed dad's, so that the baby can distinguish the origin of the voice based on where and from whom. Then the second is to create attractive rhythms and tones on words such as "be" and "li" or other words, so that the sound can attract the attention of the baby and enhance the baby's memory of the word. Then the third is listening to music or songs to calm and entertain the baby, so that the baby can understand

the tone or rhythm that relieves, so the baby can distinguish language. To know the characteristics of a child's speech delay, what you need to know is the stage of normal child speech development based on age.

The stage of speech development of a child who is 18 months old, the child is already able to start to speak and say a few words. At the age of 2 years, the child has already begun to combine several words to become a sentence and can also imitate what people say. At the age of 4 years old, the child no longer cuts a sentence into two words and the child can express what is in his or her mind. If the stage of speech development in a child does not correspond to his age, then the child can be said to have a speech delay.

B. The Play Pyramid Theory

According to Kudrowitz et al (2010), there is a classification of games based on the type of way a game product is played called the The Play Pyramid theory. The play pyramid consists of 4 types :

- Sensory is a type of game related to appearance that can involve the five senses, such as playing sand or plasticine. This sensory game is suitable for children aged 0 to 2 years.

- Fantasy is a type of game involving role-playing in which children will pretend to be a character, such as playing, cooking, dolls, or pretending to be doctors. This fantasy game is suitable for children aged 5 to 6 years.

- Construction is a type of game in which the principle is to create something or build something, the example of the game is to assemble a balcony and assemble lego. This construction game is suitable for children aged 1 to 2 years.

- Challenge is a type of game that

aims to challenge players physically and mentally, the example of the game is to complete the puzzle or answer a question. This challenge game is suitable for children aged 4 to 6 years.

The theory of The Play Pyramid will be used and applied in the design of interactive books for child speech delay therapy. The sensory will be implemented by displaying different textures and holding objects so that the child can recognize several examples of textures on the objects present in the book. In the construction process, the child will arrange the objects that are on the character according to the description in the book. Then, on the challenge, the child will answer the questions in the book and have to say the name of the object held.

C. The Interactive Book Theory

According to Whitehurst et al (1994) (in Altinkaynak (2019)), interactive books are reading techniques that aim to develop early language and literacy skills of children in the preschool period through active participation of children guided by adults. In the interactive reading book there are two techniques: CROWD and PEER. CROWD is a reading activity in which children are asked to define a term or sentence from a story and the child is asked to ask questions, character or event in the story. PEER is a reading activity in which adults correct the answers given by the child and repeat the words that have been corrected. True to the child. The difference between interactive books and other books is that the role of the reader (adult) will ask questions that can encourage the listener (children) role in answering or explaining more. It is about the words or events in the book. The interactive book design will display command sentences or question sentences in which adults can directly ask questions or give orders to the child.

To make an interactive book more interesting, of course, a paper mechanism that can be interacted with is needed. The paper mechanism applied to the interactive book one of them is the mechanism of paper with the moveable technique.

- Wheel/Volvelle is a paper mechanism that is driven by rotating wheels.
- Lift the flap is a paper mechanism that is moved by opening the lid to display images on the paper behind it.
- Pull tab is a paper mechanism that is moved by way of pulling or moving.

Movable techniques on interactive books can increase motorics in children.

Methodology

According to IDEO (2015), to create a design that is useful to humans, it takes 3 phases with the aim of building a sense of empathy faced by the society, knowing the ideas to be designed, and the result of the ideas will be a solution to the problems of the society that will be realized in three phases consisting of inspiration, ideation, and implementation as can be seen in Figure 1.



Figure 1. HCD Graphic
(source: Research personal documentation)

A. Inspiration

In this phase, there are two phases: empathy and problem definition. In the phase of emphasis done by doing searching information through search engines,

journals, online books, and websites about news related to speech delay and try to understand parents who treat child speech delay by conducting hybrid research such as quantitative research (interviews) and qualitative research (questionnaires). According to Moleong (2007), qualitative research is research that produces verbal or written data observed by researchers. (Siyoto & Sodik, 2015). In the qualitative research applied by interviewing two sources, Liana, who is a mother of a child with autism and a psychologist.

- Interview with Liana K. Chandra, M.Ed.

The interview with Liana, held on February 19, 2022, at 15:20 WIB. The results of the interview with Liana relate to her experience in caring for and developing speech skills in children, as follows.

According to Liana, children with speech delay do not necessarily have hearing problems and have autism, while children with autism will have speech retardation. A child with speech delay does not necessarily have autism, while a child with autism must have speech retardation, because the presence of an autistic child is difficult to focus on something, such as difficulty in making eye contact, when called does not respond, and an autist usually is not interested in human voices or human mimics so to teach a child in speaking feels difficult. To teach a child to speak or communicate with a child with autism, they should use clear images, such as "This is an orange" with the shape of the original orange fruit. It will be easier for children with autism to understand. Therefore, to teach the child speech delay can also use media methods that are clear images so that it can look inter-

esting and easily understood by the child. According to Liana, children who experience speech delay occur because of the lack of input from parents, so that the child can not express the output, the same way when the parents do not give stimulation to the child or rarely invite the child to communicate, so the child cannot communicate smoothly. Therefore, what parents should do is also help stimulate speech in the child independently, so that the child has an increase in speech as the child also develops rapidly. The speaking stimulation usually given by the students is by teaching them to speak with a spoken word, reading a storybook full of pictures, inviting children to sing, draw, and play with flash cards.

- Interview with Mikaela, M.Psi.

The interview was conducted with Mikaela who is a child psychologist. The interview was held on February 22, 2022, at 10.00 WIB. The results of the interview with Mikaela, related to additional insights on speech delay as well as opinions related to how the design of an interactive book that can help parents in giving speech stimulation to the child speech retardation, the interview is as follows.

According to Mikaela, the child has speech delays. The ability to speak has been developed since During childhood, speech delays usually appear at age. Under 5 years. Speech delays are generally diagnosed at the age of 2 years, but generally will be more Clearly seen at the age of 3 years. The usual child. Possible speech delays can be seen from the characteristics as seen in Table 1 as follows.

Tabel 1. Speech Development by Mikaela

Age	Speech Development
1 – 6 months	Normal babies can already whisper, but with speech delay babies does not whisper.
6 – 9 months	Normal babies can swallow, but the speech delay babies don't swell.
10 – 11 months	Normal babies can repeat words, and no meaning, like "ma ma ma", "Pa pa pa", but the speech delay babies not Speak a little word
12 months	Normal babies can already say words that have meaning, but speech delay babies still can't say a single word.
13 – 15 months	Normal babies can speak 4 to 7 words, while the speech delay can speak less than 4 words or not at all.
16 – 18 months	Normal babies can speak 10 words. Baby

Basically, children with speech delays may not have the ability to speak at the age they should. The impact of speech delay on the child is that the child's ability to interact socially becomes a challenge, as it is difficult to express his or her words or desires to others. Then the further impact of this lack of social interaction, causes the child to become more emotional and easily upset. Then the next impact of this emotional or upset child, the child will become a misperception of his own development as the child feels that he is not a good child, not a desired child, and a less fortunate child. Then the next impact, when the child is in school time then the child will be less successful academic understanding. Speech delay is an early symptom that will cause other disorders to have a continuing impact.

Causes of child speech delays are several factors, one of which is less stimulated by their parents. In addition, other factors also come from genetic factors such as autism and organic factors. So not all children with late speech also experience autism and not all autisms experience speech delay, but most children with autism are more likely to experience speech delay problems. Genetic and organic factors do not belong to the field of psychology, so the more emphasized are the fields of stimulation. Stimulation is usually given as speech therapy where stimulation is given to the area of the mouth or mouth and jaw as well, then there is also stimulation that makes the child motivated

	speech delay does not say a single word or just say a word from the back of the letter.
19 – 20 months	Normal babies can speak 20 words.

Interactive Book Design For Child Speech Delay Therapy

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to train speaking or communicating. To motivate your child to practice speaking, you should pay attention to the following three types of delayed speech sections, as follows:

1. The form of the child's pronunciation in speaking with the example letter "R" is spoken with the letter "L". (Fonologis atau Cadel). The stimulation that can be given can be written correctly.
2. Children can pronounce the word correctly, but do not know the meaning of the word (Semantic). The stimulation that can be given is the ability to add vocabulary, many of which start from members of the body, family members, or objects that are around them.
3. Children can speak, but cannot apply them properly. For example, their language is always formal while in non-formal situations (Pragmatic). The stimulation that can be given is two-way communication by reading a storybook and asking answers.

From 3 types of speech delay, the author designed this interactive book three types of speech delay stimulation. The conclusion from Liana's interview with Mikaela was that a child whose speech delay does not necessarily have autism, because speech retardation also has several other causes, such as genetic factors in the case is a child with autism. However, one of the common causes of speech delay is as mentioned earlier caused by parent's lack of stimulation to their children, such as massage. Oral part of the child and rarely invites the child to communicate in two directions. Parents who have a child speech delay should invite the child to talk therapy that at the same time gives stimulation to the child. In this way, the child's speech can grow faster. According to them, this interactive book design is expected to be a medium that can be played by children accompanied by parents, so that parents can communicate with their

children in two directions. The design of an interactive book should also be a story-book accompanied by pictures or illustrations, so that the child is easier to understand or understand the names of objects, the shape of the object, and the story flow in the interactive books.

Result

Further on the quantitative research was done by spreading a questionnaire to the community of parents who have children speech delay on Facebook. Here are the results of the query that has been done.

The results from 100 respondents were as many as 58% of respondents stated that the feature that can be applied to an interactive book is a puzzle, then as much as 14% said that a playable object is added to the interactive books feature, then so much as 6% of the respondents said that the lift the flap was added to an interactive book feature, and then so many as 22% respondents answered the other with details of as little as 7% answered 3 features that are puzzles, lift the flaps, and playable objects). Then it will be continued at the stage of defining the problem that is arranged in the form of fish bone as can be seen in Figure 2, as follows.

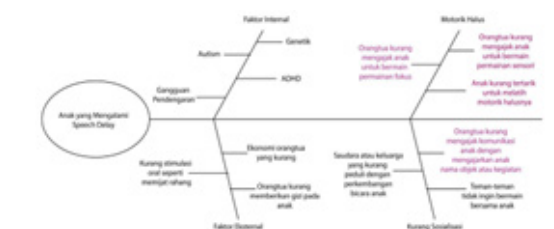


Figure 2. Fishbone Diagram
(source: Research personal documentation)

A fishbone diagram is a form of problem analysis to find some factors that cause a child's speech delay that will be determined by the writer. The causes of speech delay are selected due to fine motorics and lack of socialization. To increase motor skills, the solution is to design an interactive book. There are interesting images accompanied by the features of the game, while for parents who rarely bring communication, the book will be designed with the presence of stories or orders to tell the child to do something on the interactive books. After that, brainstorming is done with mind mapping. The findings are some interactive features that will be applied to the book, namely the theory of paper mechanisms (moveable) and the pyramid play theory.

The interactivity aspect in this book aims to train fine motorics in the child as well as attract attention to the child so that interactivity can be used as a feature (pull tab) that can be shifted, (lift the flap) which can be opened. Then in theory the pyramid will emphasize sensory, fantasy, and challenge. The word character that describes the interactive book is fun that is more specifically satisfying of the sensory features, lift the flap, pull tab, and feel the various textures of objects. Then the child's fantasy features will be accommodated with role-playing as a figure in the story, and the author's challenge features will make a challenge in the form of questions or children must say words or sentences so that this will be playful. From the presentation of mind mapping, we have found 3 keywords that will be applied in the design of interactive books, namely:

1. Fun

Children love to do fun things, just like playing. This fun word will be used in the interactive book in a way the child will be free to hold or touch an object according to his or her wishes. Fun is also included in the sensory features where the

child is free to feel the sensation of the texture of an object, lift the flap where children are free to open the cover of the object, pull tab in which the child freely shifts the image until their heart feels satisfied. The user of the book can also answer questions asked by the parents from the book, so that the two way communication between parents and children can be accommodated.

2. Caring

Generally speech delay children need friends to play together, so a sense of care from the people around them is also needed by the child. Therefore, this interactive book is created with the aim that parents can accompany and help children to play and learn.

3. Comfortable

The word "comfortable" properties will also be applied to story and visual story content. Therefore, the content of the story will be structured using a simple language and a story path that is easily understood by children and parents. (simple). The visual story will use illustrations that use colors that tend to be soft so that the child will be comfortable to see the story visually.

B. Ideation

At the stage of ideation is done with brainstorming to find the solution as can be seen in Figure 3. The solution found is an interactive book that can be played by the child and guided by the parents.



Figure 3. Brainstorming Scheme
(source: Research personal documentation)

The three specified keywords ("fun", "caring", and "comfortable") will be applied to the visual concept of design on the interactive book. This visual concept will be applied in the shape of the moodboard and the selection and determining the typeface.

1. Moodboard

The determined moodboard will affect the visual of the interactive book design. In determining the moodboard, the author adapts the 3 keywords that have been specified, namely "caring" that describes parents caring about the development of speech in the child so that parents want to accompany their child to play and learn, "fun" describes children who are happy to do activities. It is pleasant with the interaction between parents, children, and books, then "comfortable" where the child feels comfortable to learn to speak and understand a word or sentence. Here is the mood board that describes the three keywords as can be seen in Figure 4.



Figure 4. Moodboard
(source: Research personal documentation)

After selecting the moodboard, the visual of the moodboard depicts the care between parents and children so it will give a warm impression. The design of this interactive book for children's speech delay, so it means that parents will not give up in giving stimulation to their children. In addition, the child image in the mood board is also presented in a joyful manner so that the color of the visual is also emphasized on using full bright colors. Although the visual on the moodboard is full of colors, on the other hand the colors are also convenient to see so that the combination of colors also tends to give a soft impression. Figure 5 shown below is the color pallet that matches the mood board and will be used in the visual design of interactive books.



Figure 5. Color Palette
(source: Research personal documentation)

Based on the color palette, the color chosen as the dominant color is yellow because according to Rahmawati (2020), yellow can give a warm and funny impression and purple because purple can contrast with yellow, so it will be suitable when applied. Furthermore, according to Wolfard (2021), purple can also give an impression of beauty, which produces calm, creativity and reduces despair so that purple will also fit the goal of parents who will not give up on their child's condition. For visual illustrations will use a variety of colors that tend to be colorful but also soft.

2. Typeface

Typeface is one of the design elements that describe a content that fits the story's path. Interactive book design requires a typeface that is easy to read, impressive and funny. The typeface used in the design of interactive books is a typeface typeface without serif, because the typeface sans serif gives a friendly and non-rigid impression, so it will be suitable for the planning of an interactive book with the target audience of children. The typeface used is typeface somantic rounded designed by Lauren Lee who is an illustrator from New

York. This typeface is suitable for writing the title on the cover and can also be used as a body text. Then the next typeface is the typeface Dolpino is a typeface that is included in the classification for the genre of comic cartoon, so the letter dolpino has a cool, friendly, and playful impression. This typeface is suitable for children to draw attention to the child in looking at the name of the object to be pronounced because this type of font has a thick line of letters. The next typeface is an arial typeface with a type sans serif so it is easy to read and the typeface appears to be formal. Therefore, the author uses this typeface for the description of the interactive book publisher.

C. Implementation

The implementation phase is divided into two phases: Prototype and User Test.

1. Prototype

The prototype will be divided into two phases: Low Fidelity and High Fidelity. Low fidelity is the stage in which the writer performs as can be seen in Figure 6. Visual design is rough, so colors at low fidelity tend to be black and white. This low fidelity level aims to make the planning of the visual design of the interactive book so that the final outcome on the high Fidelity will be more structured or organized.



Figure 6. Low Fidelity
(source: Research personal documentation)

On low fidelity there are storyboards and book layouts. On the storyboard there is a series of stories about Niko's daily life that will be arranged together with the book layout. In the next phase of the prototype there is a high fidelity stage that already has color. At this stage you will be divided into the design phase of the logo, character, and the display of the entire interactive book.



Figure 7. Logo Design
(source: Research personal documentation)

The concept of the logo as can be seen in Figure 7, is designed with thick letters that are like a balloon and use colorful colors so that it will add a more joyful or fun impression.



Figure 8. Character Design
(source: Research personal documentation)

To create Niko's character design as can be seen in Figure 8, a proportion of the size of 3 heads consisting of 3 lines and using lines and circles to make other body members customized, then added with details of the shape of the face, hair, hands, legs, body, and color details. In the next stage is a view of the entire illustration of the interactive book as can be seen in Figure 9, below.



Figure 9. An interactive book illustration
(source: Research personal documentation)

This interactive book tells the story of a child named Niko who is about to go to school. This interactive book is then printed and translated into a book. This interactive book has a cover, 12 contents, and a cover. Interactive features include lift the flap, pull tab, sensory, and challenge. To see more interactivity on the book can be seen by scanning the QR code seen in Figure 10 below or you can also access the link: <https://tinyurl.com/crtniko>.



Figure 10. QR Code
(source: Research personal documentation)

Discussion

After the prototype phase was completed, a user test with questionnaires, interviews, and child observations continued while playing this interactive book. Based on the overall user test results, the visual on the interactive book is already suitable for children, the color used is already convenient to see, and the interactive book is assessed as already fun and interesting for children.

Conclusion

In the interactive design of the book, the author applied four interesting fea-

tures for the child: pieces of objects that can be held and pronounced the name of the object, a conversation balloon where the child can imitate the sentence, a moveable feature to train his motor skills, and there is a quiz that can generate two-way communication between parents and children.

By playing this interactive book with the child repeatedly, indirectly parents have given therapy to their child who has speech delays so that the child's speech skills can develop. Interactive book design that distinguishes for the normal child with speech delay is the design of this interactive book is the presence of activities in which the child can open the cover of an image object, shift the object of the image, and know the texture of the object, so that this can attract the attention of the child to learn while improving its motorics. In addition, this interactive book is filled with content that is easy to understand by the child of speech delay from the identification of the shape of the object, the name of the thing, the form of the word, and the phrase form so that the content of this book will be in accordance with the need of the child speech delay who will begin to learn to speak a word or sentence.

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ANALYZING THE ADAPTATION OF RAMAYANA WAYANG CHARACTERS IN CODE ATMA VIDEO GAME

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Banung Grahita²

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Abstract: Promotion of Wayang is important for future generations to continue cherish the value, meaning and pure passion just like how it is intended to be. As a traditional culture surviving the modern era, a modern adaptation is one of the many ways to promote towards the younger generations alongside other modern pastimes. The game "Code Atma" developed by Agate in 2020 has attracted the younger generation due to its appealing character design, that is a modern rendition to what is familiar, traditional culture. To ensure focus of the research, the chosen Code Atma characters would be the ones from Ramayana story: Shinta, Rama, Rahwana, and Hanuman. This qualitative research uses the comparative analysis to group and breakdown further the elements of a character, namely visual aspect, personality, and skills of each Code Atma character to the original Ramayana Wayang Kulit characters. The essential elements of each character are presented by analyzing the similarities using the Jungian Archetypes by Carl Jung. There are limits in redesigning a Wayang character for a modern adaptation, because posture, proportion, and clothing are core elements that must remain to keep the character's identity recognizable.

Keywords: adaptation; archetype; character; game

Introduction

Whether looking from the visual aspects, story or play itself, Wayang is the timeless culture of Indonesia. The craft has simultaneously progressed from being ceremonial objects holding good and bad spirits, into a visual narrative media used to perform folklore and poetry. As a traditional culture surviving the modern era, it can be easy to introduce but rather complex to take hold of enthusiasm when

the audience has little experience relating to said culture because according to Malinowski (Functionalism – Anthropology, n.d.) people must relate to make function.

Various efforts were made to promote Wayang in an international scale, and although it was successfully inscribed as an intangible world heritage by UNESCO in 2003 in an article about Wayang Puppet Theatre - Intangible Heritage - Culture Sector - UNESCO, (n.d.) , in reality ac-

cording to Rahayu, (2010) most Indonesian teenagers are influenced by mass culture and would rather prefer modern over traditional entertainments like Wayang puppet theaters.

Media is not only perceived as entertainment (Setiawan, 2013) but also a product of culture, implicating the existence of interaction and even market control. Instead of turning back from this change, the great power of media should be taken advantage of to create new possibilities where modern adaptations collaborate in promoting the traditional. With a big number of Indonesian internet users (63.08 percent) (Direktorat Statistik Keuangan Teknologi Informasi dan Pariwisata, 2021), digital entertainment becomes a prospective market control.

Game is one of the most engaging interactive media that significantly influences their players with an immersive experience built from interaction. Within April 2022, Indonesia ranked second highest in the country with most video game players, comprising 95,4 percent of gamers ranging from 16 to 64 years old, as seen on the Digital 2022: April Global Statshot Report as can be seen below in Figure 1 (Kemp, 2022).

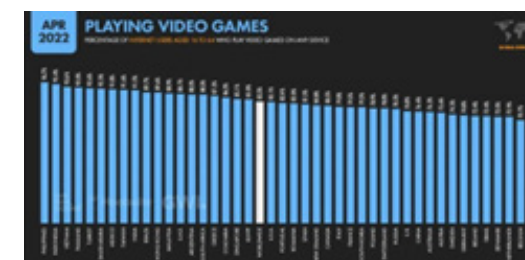


Figure 1. Percentage of video game players per country (Source: Digital 2022 April Global Statshot Report)

The success of the game industry brings a possibility to help engage cultural heritage (specifically Wayang) towards Indonesian teenagers. Research by Ahmad, Irfansyah, and Sulistyaningtyas (2023);

Andre and Suliman (2021); Mandasari and Pudjoatmodjo (2019), proves that games can be the best approach to introduce wayang characters to the younger generation. "Code Atma" as can be seen in Figure 2, is a game developed by Agate, released on June 24, 2020 (however this research will focus on version 1.1.52 updated on September 29, 2022). "Code Atma" is a role-playing game set in a world of technology and supernatural, catering to people interested in character design representing Southeast Asian culture starting from traditional Wayang (puppet), supernatural stories, and children's folklores.



Figure 2. Code Atma Promotional Event: Rangda's Blessing (Source: Code Atma Twitter)

Code Atma's selling point is familiarity within the characters. For instance, characters of Ramayana in Code Atma were adapted differently (not in Wayang style) creating a different tone but are still recognizable to their original identities. Visual Adaptation of Wayang Character on modern media is regarded as a necessity to reach out younger audiences, it will bring uniqueness and added value for the media as stated by Budi and Wailanduw.

This research studies how the visual

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adaptation of characters is done in Code Atma by comparing them to the traditional wayang characters.

Methodology

There are four characters of Code Atma that are analyzed, namely: Shinta, Rama, Rahwana, and Hanuman. As source of the comparison this research focuses on the Jogjakarta style of Wayang Kulit Purwa. According to Sunaryo (2020), Javanese Wayang Kulit Purwa has two styles, the Surakartan and Yogyakarta. Both of them are regarded as one of the old styles of wayang in Java that are based on Mahabarata and Ramayana stories.

There are two steps performed in this research. First, to classify each character whether from the original story or modern game, this qualitative research uses the Jungian Archetypes stated by Carl Jung (Tillman, 2012) as its basis. Jung describes archetypes as a figure, whether it be daemon, man, or process, that repeats itself in the course of history wherever creative fantasy is fully manifested (Barros, 2021). Archetypes are a core element in character design, it is how characters are grouped based on their reoccurring experience regarding personality, traits, occupation and more (fiction and nonfiction). These selected archetypes will help dictate the role for each Ramayana characters from the original story and the modern game. Due to the differences in each backstory, some characters might have more than one archetype.

Secondly, a visual analysis is done to identify differences and similarities between the wayang characters of Ramayana and the wayang-inspired character in Code Atma.

Result

As the first step of the analysis, classification of characters in traditional Wayang Kulit and Code Atma is done. It is found that each character in traditional Wayang Kulit and Code Atma have slightly different archetypes. The Classification can be seen in Table 1.

Table 1. Classification of Character's Archetype in Wayang Kulit and Code Atma Shinta

Character's Name	Archetype in Wayang Kulit	Archetype in Code Atma
Shinta	Lover	<ul style="list-style-type: none">• Lover• Magician
Rama	<ul style="list-style-type: none">• Lover• Hero	Hero
Rahwana	Ruler	Ruler
Hanuman	<ul style="list-style-type: none">• Caregiver• Hero	Hero

Due to the differences of the archetype, it is understood that each character in Code Atma would have a different depiction from its source in Wayang Kulit. The visual differences and similarities are identified in the second analysis as follows.

1. Shinta

Princess Shinta is known for her exceptional beauty, and as the reincarnation of Batari Sri Widawati (Wayang TV, 2021).

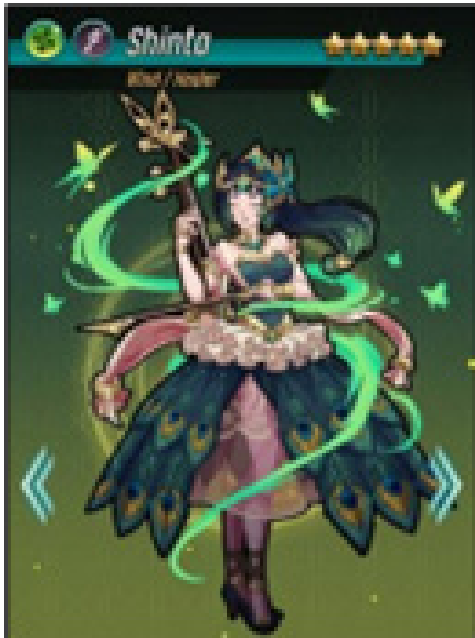


Figure 3. Code Atma Shinta Character
(Source: Code Atma Personal Documentation)



Figure 4. Ramayana Shinta Character Design
(Source: Wayang Kulit Gaya Yogyakarta: Bentuk dan Ceritanya)

Table 2. Visual Analysis on Ramayana Shinta and Code Atma Shinta

Form	Shinta (Code Atma)	Shinta (Wayang)
Headpiece (1)		
Hair (2)		
Accessories (3)		
Clothing (4)		
Belt (5)		
Accessories (3)		

The posture and body language in Atma Shinta (see Table.1) suggests that of a composed attitude, with her left arm bent closely below her chest, holding the tip of the bow, and her right arm lightly holding the instrument's neck. Her fingers form a very gentle grip, and her legs are standing with crossed legs. Atma Shinta conveys a gentle expression with both eyes closed, eyebrows positioned upwards, and mouth slightly opened.

Posture of Wayang Shinta also implies a graceful attitude, she is slightly bowing to the front (implying obedience and respect), along with her right arm bent

closely to her chest, and her left arm kept straight in the side as can be seen in Figure 4. The facial features of Wayang Shinta are similar, as both eyes are nearly closed, and her eyebrows are positioned upwards as well.

Although designed to very different tastes, there are many visual similarities found between Ramayana Shinta and Code Atma Shinta as can be seen in Figure 3. As seen on Table. 1, there are five components that are present in both designs, the first being her long luscious black hair (in number 2) that is described in her backstory. Both are wearing a big headpiece (number 1) that might correlate with her high social status of being a princess, or wife of Rama. Her nobility is also portrayed from the amount of complex accessories present in number 3 comprising golden accessories (possibly rings and bracelets) with traditional patterns that are worn on both fingers, hands, arms, and legs. Her body is wrapped in fabric that starts from the chest (number 4) all the way to her ankles, and another golden accessory (of what seems to be a belt, in number 5) is worn on top of said clothing.

2. Rama

Prince Rama is the husband of Shinta. He rules the Kosala Kingdom in Ayodhya (Wayang TV, 2021).

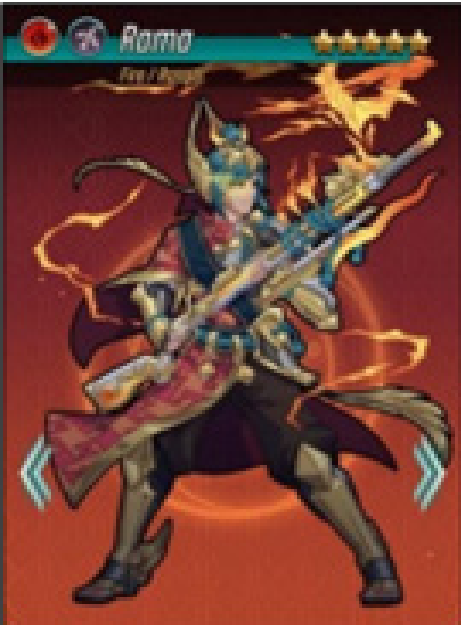


Figure 5. Code Atma Rama Character
(Source: Code Atma Personal Documentation)

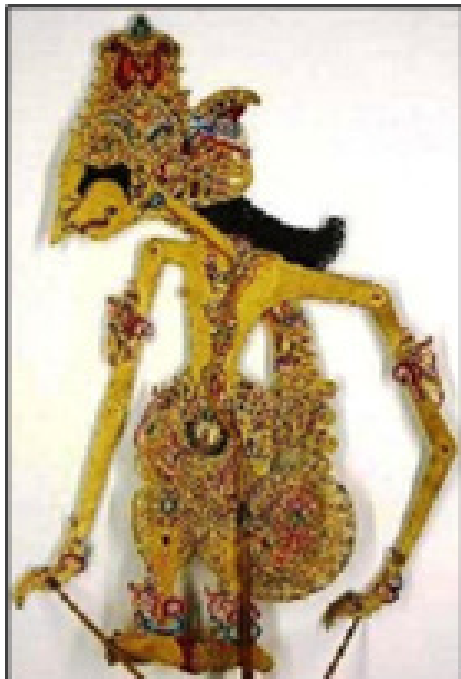
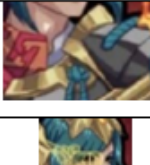
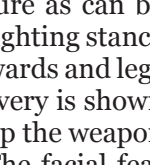


Figure 6. Ramayana Rama Character Design
(Source: Wayang Kulit Gaya Yogyakarta: Bentuk dan Ceritanya)

Table 3. Visual Analysis on Ramayana Rama and Code Atma Rama

Form	Rama (Code Atma)	Rama (Wayang)
Headpiece (1)		
Armor/ Accessories (2)		
Hair (3)		
Accessories (4)		
Clothing (5)		
Accessories (6)		

Code Atma Rama's posture as can be seen in Figure 6, suggests a fighting stance with both arms bending outwards and legs standing wide open. His bravery is shown by both hands that firmly grip the weapon (possibly a gun) upwards. The facial features of Atma Rama convey a determined expression from the slightly squinted eyes, eyebrows positioned near the eyes, and a slight smirk.

Posture of Wayang Rama is straight, with legs standing straight, and arms that are unbent (compared to Shinta, Rahwana, and Hanuman). His facial expression is quite tender and does not show signs of aggression, as seen from the eyes, mouth,

and eyebrows that are not exaggerated.

Overall, Rama has the average height and body proportion. There are 6 similarities found within the two characters in Table 2, firstly being the big headpiece (number 1) that consists of a circular accessory on top of his head, and the accessory that is stretched to the back of his head, like a wing. The headpiece is engraved with complex patterns of gold. Number 2 shows an accessory like a piece of armor between his neck and shoulders. Different from the original, Atma Rama's hair is colored teal, but both hairs are shoulder-length (number 3). Both are wearing accessories on the arms and legs (number 4 and 6), as his original design wears separate pieces of hand, arm, and leg bracelets, while the new design wears a gauntlet and armored shoes. There are multiple layers to his clothing (number 5) that makes it look heavy.

3. Rahwana

Rahwana is a powerful leader from the Alengka Kingdom with power and bad intentions to kidnap Shinta from her husband, Rama.



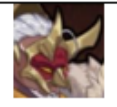

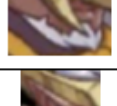

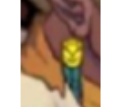



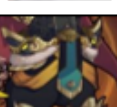
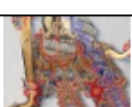


Figure 7. Code Atma Rahwana Character
(Source: Code Atma Personal Documentation)



Figure 8. Ramayana Rahwana Character Design
(Source: Wayang Kulit Gaya Yogyakarta: Bentuk dan Ceritanya)

Table 4. Visual Analysis on Ramayana Rahwana and Code Atma Rahwana

Form	Rahwana (Code Atma)	Rahwana (Wayang)
Headpiece (1)		
Mask (2)		
Beard (3)		
Earring (4)		
Armor/ Accessories (5)		
Clothing (6)		

Rahwana in Code Atma as can be seen in Figure 7, conveys a mighty figure due to his gigantic proportions compared to the other characters. A very daring attitude is displayed from his broad shoulders, muscular arms, and left arm bent upwards. Although Rahwana in Wayang design as can be seen in Figure 8 has no exaggerated muscle, he owns the biggest body proportion compared to the other characters.

There are 6 similarities between both designs (see Table 3), as seen on number 1, Rahwana is wearing a gold headpiece with an ornament that looks like a face. His true facial expression is covered by a red mask (number 2) with an aggressive expression that is monstrous (eyes squinting, presence of fangs), implying the corrupted creature he is. Although they have different hair colors, both Rahwana have sideburns and a beard (number 3). He is wearing earrings and accessories on his shoulder, possibly part of his armor (number 4 and 5). Unlike Rama, the shape of Rahwana's armor looks menacing as it contains many sharp ornaments. Rahwana appears to be heavy due to the multiple layers of bottom clothing (number 6).

4. Hanuman

Hanuman is also known as "Wanara" or half-human half-monkey creature that serves as a companion figure to Rama on his journey to find and fight for Shinta as written in Hanuman – A Great Warrior Who Played a Crucial Role in The Ramayana, (n.d.).

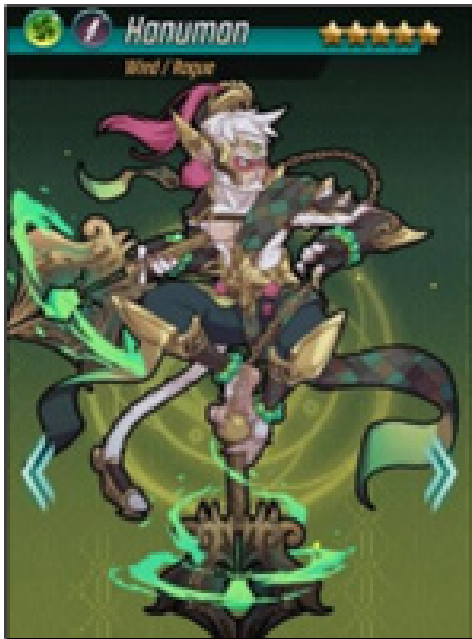
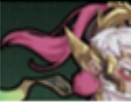

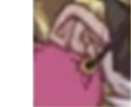
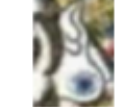
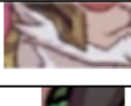





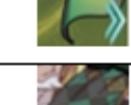

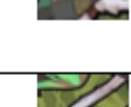
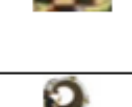


Figure 9. Code Atma Hanuman Character
(Source: Code Atma Personal Documentation)



Figure 10. Ramayana Hanuman Character Design
(Source: Wayang Kulit Gaya Yogyakarta: Bentuk dan Ceritanya)

Table 5. Visual Analysis on Ramayana Hanuman and Code Atma Hanuman

Form	Hanuman (Code Atma)	Hanuman (Wayang)
Headpiece (1)		
Ear (2)		
Beard (3)		
Accessories (4)		
Fabric (5)		
Checkered pattern (6)		
Tail (7)		

The posture of Hanuman in Code Atma as can be seen in Figure 9, displays a swift character with a good sense of reflexes as he positioned himself with balance on top of a small pole. It is accurate to the Ramayana Hanuman that is told to have swift movements, especially when he uses stealth ability while shapeshifting into a small monkey to enter the Alengka Kingdom. He displays a determined face with squinted eyes, tight eyebrows, and lips tightened. Hanuman's appearance

shows great strength despite his slightly shorter proportions.

Wayang Hanuman, as can be seen in Figure 10, resembles an anthropomorphic monkey with a brave posture (arms bent, legs opened wide) as if ready for battle. His facial expression is full of joy with mouth wide open and big eyes.

There are 7 visual similarities found between the two designs as seen in Table 4. Both Hanuman wears a headpiece (number 1 and 2) consisting of an ear accessory and a head accessory that is stretched to the back, resembling a tail. He has white fur all over his body, and a short beard (number 3). As a half-monkey creature, he possesses a long, white monkey tail (number 7). He wears accessories on hands, arms, and tail (number 4). Emphasizing an animal body, his upper body is shirtless, while his lower parts are covered in pants (number 5). His clothing consists of a long fabric (number 6) with a similar checkered pattern.

Discussion

Despite the many changes on the modern adaptation such as adding ruffles and layers of pleated skirt, side bangs, earrings, shoes, and ornaments, the core concept of Shinta remained the same through her clothing, facial expression, proportions, and posture.

Dressed as a noble with long natural black hair (described as one of her beautiful features), her visual suggests that of a princess who is obedient and respectful to her partner, consistently keeping both Wayang Shinta and Atma Shinta as the lover archetype. However, the changes are necessary to add a second archetype that is magician to the Shinta character.

As for the character Rama, many elements were added to the Atma design, but the essence of his royal and heroic figure

seems to remain. He resembles a person with power and kindness (from his tender facial expression), making him a savior, therefore fits into the hero archetype. The addition also removes the lover characteristic from Rama character in Code Atma.

The massive proportion of Rahwana is important to emphasize his great physical strength. Although Rahwana in Code Atma may not be an antagonist, he still has a threatening visual, making him a ruler archetype with controlling personality. A ruler archetype is not necessarily evil, but it is accurate to both Rahwana characters, who are menacing figures with power.

Code Atma Hanuman’s posture shows off the balance that animals naturally possess, displaying a state of freedom. With the free-spirit state and determined facial expression, Code Atma Hanuman is classified as the hero archetype. While, in Wayang Kulit Hanuman has a joyful expression, implying a playful and reassuring personality towards people around him, thus making him the caregiver archetype.

Conclusion

There are limits in redesigning Wayang characters for modern adaptation, because several aspects in visual and story might be modified to fit in the modern trend, but core elements must remain the same as it reflects the character’s identity. Since proportion, posture, and clothing are the essential elements of a character in archetype classification, it is allowed to create visual changes, as long as the character’s identity remains recognizable. Analyzing a character’s abilities (strengths and weaknesses) help bring out ideas to better understand its limits.

By properly adapting and designing characters accurate to the original archetypes, characters could pique the audi-

ences’ interest and serve as a selling point, eventually the modern media and its original source has a potential to broaden its promotion to the younger generation. Aside from introduction, familiarity will occur both from the origins and the modern adapted archetypes through the presence of modern adaptations of traditional culture. This article is just one of the many guides on adapting Wayang characters, or any traditional characters.

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