Representation of the Glorious Era of Majapahit Through the Choice of Characters in Visual Novel Game Designs

Pratama, Dendi
Visual Communication Design
Faculty of Language and Art
Universitas Indraprasta PGRI
Jakarta, Indonesia
dendi.pratama@unindra.ac.id

Wardani, Winny Gunarti Widya
Visual Communication Design
Faculty of Language and Art
Universitas Indraprasta PGRI
Jakarta, Indonesia
winny.gunartiw@unindra.ac.id

Akbar, Taufiq
Visual Communication Design
Faculty of Language and Art
Universitas Indraprasta PGRI
Jakarta, Indonesia
taufiq.akbar@unindra.ac.id

Abstract
The glorious era of Majapahit Kingdom was signed by the presence of figures who play a role in the development of human civilization. The glorious era of Majapahit is also an important historical note of Indonesia. Popular figures in this era include Gajah Mada, Raden Wijaya, and Tribhuwana Tunggadewi. Quantitatively, this study conducted a survey of design students at the University of Indraprasta PGRI Jakarta, especially the creators who are interested in the creation of visual novel games. They made choices against the characters of Majapahit which are considered to have the potential to become the main characters that attracted attention to the game. The visual novel is a game that emphasizes its strength through characters and visual narration. While qualitatively, the analysis of discussion using nonverbal communication theory approach to the description of the three figures, as a visual element that can represent the glorious of Majapahit Kingdom. The results of this study useful to be used as a reference in the design of visual novel game design characters. In addition, the results of this study can also open insights about the potential figures in the history of Indonesia that can be visualized as a game character that represents the meaning of history.

Keywords: representation, visual characters, visual novel, Majapahit kingdom

INTRODUCTION
The ruling era of Majapahit Kingdom is a part of Indonesia’s history, specifically in the Hindu-Buddha era. Nowadays, the remnants of their civilization can be found in East Java region, specifically in Trowulan, Mojokerto. The glorious era of Majapahit Kingdom, which takes place from 1293 to 1389 AD, leaves many historical records about their journey to glory, featuring many notable figures such as Raden Wijaya, Tribhuwana Tunggadewi, and Patih Gajah Mada. The history of Majapahit Kingdom has played an important role in the history of Indonesia. The remnants of Majapahit civilization and their historical value are not only meant to be preserved, but also to become a source of inspiration, knowledge, and unbending spirit to move forward for many generations to come.

This study is a continuation from the research aimed to create a narration of the glory of Majapahit Kingdom in the form of visual novel games by designing the central figures in said era such as Raden Wijaya, Tribhuwana Tunggadewi, and Gajah Mada. Creating a design for these central figures is an important element in visual novel game making because one of the main strength of visual novel games lie in the narrative and the visualization of its characters.

Visual novel games, or commonly called as bijuaru nobera in Japanese, is an interactive game using audiovisual media featuring text-based story with distinct narratives. The game also features static and dynamic visuals. The story and the dialogue are placed within a box along with the image of the character related to the dialogue [1]. In the visual novel games, the players are conditioned as if they are talking with the character within the game. The players are also given the option to choose their own storyline and choose whose character’s story they want to know better. Visual novel games are usually played in PC and gaming consoles, but they recently can also be played in the ios and android-based smartphone. Visual novel game is not a visualized novel, but an adventure video game presented in a particular way containing deep narrative, plot twist, and storyline options that the player can choose. Based on that, the interesting story of the glorious era of Majapahit Kingdom is a great fit to be adapted into the narrative style and audiovisual based media of the visual novel games.

Today, many visual novel games circulating in Indonesia are produced in Japan. Thus, the narrative and the visuals are influenced mainly by the Japanese culture. The rise of visual novel as a new genre in video games has inspired many Indonesian game makers to develop Indonesian visual novels. The rise of the popularity of this genre can also be seen in the vndb.org website, where many Indonesian visual novels can be found. However, the narration explored within those visual novels is still about fantasy or romance instead of exploring the narrative found in Indonesian history. The visualization of the character in those visual novels is also still generally influenced by the Japanese manga visual style. Therefore, this research aims to create a character design with a distinct visual style based on Indonesian historical culture, especially in Majapahit Kingdom era. The basis for character design of Raden Wijaya, Tribhuwana Tunggadewi, and Gajah Mada in the previous research was in reference to the story of Majapahit. The historical narrative in this visual novel...
game was hoped not only to communicate sociocultural values but also to be a media to educate youth and future generation regarding the role of each historical figure interactively. This research involved 250 visual communication design students in Universitas Indraprasta PGRI to understand how the youth respond to the visualization of Majapahit Kingdom central figure’s character design.

LITERATURE REVIEWS
A. The Central Figures in the Glorious Era of Majapahit Kingdom

According to the Center of Information for Majapahit in Trowulan, Mojokerto, there are short descriptions of each of the three central figures in the glorious era of Majapahit Kingdom.

Raden Wijaya is the founder and the first king of Majapahit Kingdom with the title of Kertarajasa Jayawardhana. He laid down the governmental foundation of Majapahit Kingdom. Raden Wijaya ruled from 1293 to 1309. After stepping down from the throne, Majapahit Kingdom was ruled by one of his sons, Kaligemet with the title of Jayanegara. However, because of his young age, the kingdom sees many rebellions. Majapahit Kingdom began to stabilize after the death of Jayanegara in 1328. The throne then was assumed by Raja Patni, one of Raden Wijaya’s wives. With the help of Patih Gajah Mada, the rebellion within the kingdom has successfully vanquished. The throne was then assumed by Tribhuwana Tunggadewi, the daughter of Raja Patni. The vanquishing of rebellion by Gajah Mada brings Majapahit into a path toward bits glory, becoming a great nation.

The devotion of Gajah Mada toward Majapahit Kingdom resulted in his famous oath known as Sumpah Palapa. Tribhuwana Tunggadewi and Patih Gajah Mada continued to bring glory, making Majapahit Kingdom as one of the famous kingdom in its era. In 1350 M, Tribhuwana stepped down from the throne and her son, Hayam Wuruk assumed the throne and Majapahit Kingdom then entered its glorious era. Majapahit Kingdom began its decline after the death of Gajah Mada in 1365 and later on started its path to ruins after the passing of Hayam Wuruk in 1389.

B. Representation

Barker [2] stated that representation is an act of symbolism that mirrors an independent object world. In cultural studies, representation does not simply reflect things in symbolic form; rather, it constitutes the meaning of that which they purport to stand for. In other words, the study of culture is an exploration of the processes of representation since there is a signification process within which the system with differential signs generates a different meaning.

In the context of visual communication design, representation is a depiction through elements which give visual meanings. The visualization of characters as a presentational code in visual novel game design can carry out a representational message. Thus, the creation of the character design for Raden Wijaya, Tribhuwana Tunggadewi, and Gajah Mada in visual novel game is a part of signification process, where the meaning can be understood through the visual elements found within.

C. Visual Characters

Visual character is one of the selling points for visual novel games. Character design in visual novel game is a result of illustration as one of the elements of graphic design. The illustration of the character can evoke imagination and perception, building an image representation. Character design needs to have a distinct visual style as an identifying sign that carry out a particular message. Illustrating a character using a distinct visual style can also represent an idea and communicate it toward the audience.

In his book titled “Playing to Win”, Daniel Sloan [3] describes the findings of Miyamoto, the creator of the legendary gaming icon Mario, that the appearance of the ingame characters need to have a particular personality reflecting those of human. They also need to help bring actions and movements that can push the gaming industry to upgrade their contents. Miyamoto’s statement can be a reference in designing visual characters.

In this study, the character design for Majapahit Kingdom refers to the anatomy of human body, and also refers to their statues figures, included the ancient Javanese kings accessories such as ancient gold ornaments, gold upper arm bangles, and ancient gold necklace. The result of the previous study in character design can be seen in figure 1.

Figure 1. Characters design of Raden Wijaya [4] Gajah Mada, Tribhuwana Tunggadewi [5]

D. Nonverbal Communication

Fiske (2007) in Gunarti W.W., Piliang, and Syarief [6] said that nonverbal communication can occur not only through the use of presentational codes such as gesture or posture, but also through representational messages which is a process of conveying information or ideas by creating texts independent from the communicator or situation. In other words, presentational codes can become representational messages using the elements of signs, among others, in the visualization of the character to bring the personality that is easy to grasp and understood by the player.

The study of meaning behind the visual character as a sign has also been done previously by Winarni, Gunarti w.w., and Sukarwo [7] resulting in three visual signs that
are needed to give meaning to the visual characters, which is: 1. Facial feature, 2. Body posture, 3. Fashion style. These three elements are to build perceptions about the character of personality, attitude, and status. In visual novel games, having the option to choose a character is essential to bring the sense of adventure into the game. Hence, nonverbal communication through the visualization of a character needs to be more than attractive, but also easy to understand and brings joy to the players.

**PROBLEM STATEMENT**

Nowadays, the market for visual novel games in Indonesia has been a competitive one. Local game developers need to create a better visual novel game to compete with Japanese games. This situation is one of the motives behind the study on how to design a visual novel character that can represent Indonesian historical events such as the glorious era of Majapahit Kingdom. Creating the visuals for three characters from Majapahit Kingdom is a starting step for a design process in visual novel game development.

This study put forwards some problem statements, such as which character can better fit the visual novel game regarding Majapahit Kingdom. Furthermore, the problem also related to how the visual elements can be used to evoke imagination and build perception specifically to bring about the sense of glory in Majapahit Kingdom. This study aims to better understand the audience choice for choosing visual characters that have a distinct visual appeal in relation to the visual elements contained within by analyzing the questionnaire taken for the visualization of each of the design for Raden Wijaya, Tribhuwana Tunggadewi, and Gajah Mada. This will also discuss the impact of visual elements within the characters to see the implication on their visual appeal.

The results of this study can be used as a reference in the process of character design of visual novel games. In addition, the results of this study can also bring insights about the potential figures in the history of Indonesia that can be visualized as a game character that accurately represents the history. Furthermore, the narrative design of this visual game can become a product of creative industry that plays a role in preserving our historical civilization and culture and as an inspiration for the local game developers to explore themes related to our rich cultural and historical heritage.

**METHODOLOGY**

This study uses mixed method research methodology, combining the qualitative and quantitative method. Using this mixed method, the study aims to complete the data needed, especially regarding the opinion and perception of the audience toward the character design and to analyze how it impact the character’s visual appeal.

Quantitatively, this study conducted a survey from students of visual communication design at Universitas Indonesia PGRI Jakarta, especially those who are interested in the creation of visual novel games. They need to choose which of the three characters of Majapahit that they considered has the potential to become the main characters and can attract the audience to play the game. The questionnaire was done using stratified random sampling which surveys major respondents, students with design background that are familiar to the characters of Majapahit Kingdom and have knowledge about visual novel games. The minor respondents, students that has no design background or not familiar to the characters of Majapahit Kingdom and don’t have knowledge about visual novel games, are excluded. This was done so that the data gathered from the questionnaire can give a significant result. The questionnaire was made using Likert scale that was commonly used to measure opinion and perception of a person or a group, especially regarding social phenomenon that was put into a research variable. The measurements used are laid down in four options of answer: strongly agree, agree, don’t know, and disagree.

On the other hand, qualitatively, the analysis was done using nonverbal communication theory focusing on the kinesics study laid down by Abne Eisenberg and Ralph Smith in Wardani [8], which is a study of gesture as a language. The body language in the context of character design can be seen through the facial expression, posture, and other supporting elements such as fashion and attire. In relation to the visual novel game development, the structure of kinesics signs can help evoke imagination and build image representation on the role of the characters in the glorious era of Majapahit Kingdom. Di dalam desain komunikasi visual, struktur tanda kinesics di dalam karakter visual dapat membongkar imajinasi dan representasi peran tokoh di masa kejayaan Majapahit. Generally, the methodology used in this research can be seen in figure 2.

**RESULTS OF ANALYSIS**

The result from quantitative data shows a percentage chosen from three visual characters as a central figure from Majapahit Kingdom that was deemed to have a visual appeal to be the main character for visual novel games. From 275 questionnaire results, we obtained the data from 250 design students using stratified random sampling.

![Graph showing method of analysis](image)
A. Percentage Result of Raden Wijaya

When given the option to choose Raden Wijaya as the main character in visual novel games that represents the glorious era of Majapahit Kingdom, the response from the questionnaire shows: 55 students choose strongly agree (22%), 128 students choose agree (51%), 63 students choose don’t know (25%), and 4 students choose disagree (2%). Figure 3 shows the response.

B. Percentage Result of Gajah Mada

When given the option to choose Gajah Mada as the main character in visual novel games that represents the glorious era of Majapahit Kingdom, the response from the questionnaire shows: 117 students choose strongly agree (47%), 114 choose agree (46%), 18 students choose don’t know (7%), and only 1 student choose disagree (0%). Figure 4 shows the response.

C. Percentage Result of Tribhuwana Tunggadewi

When given the option to choose Tribhuwana Tunggadewi as the main character in visual novel games that represents the glorious era of Majapahit Kingdom, the response from the questionnaire shows: 32 students choose strongly agree (13%), 123 students choose strongly agree (49%), 78 students choose don’t know (31%), and 17 students choose disagree (7%). The response is shown in figure 5.

Based on all of the percentage results shown on choosing the three characters as the main character of the visual novel games, it can be inferred then the percentage number of those who choose “strongly agree” and “agree” as a whole. A high percentage number shows that the character will likely has more appeal to be the main character that can represent the narrative of the glorious era of Majapahit Kingdom. The comparison of the three responses shows that Gajah Mada was chosen by seeing the 231 responses (41%) for Gajah Mada to be the main character in the visual novel game, Raden Wijaya placed second with the response of 183 (32%), and 155 responses (27%) placed Tribhuwana Tunggadewi in the third place. These responses can be seen in figure 6.

The response data shows that each of the three characters basically has equal appeal to be the main character for visual game novel. However, Patih Gajah Mada was deemed more popular by the data. This might be caused by the curriculum taught in the school regarding Patih Gajah Mada as a famous and brave figure that is known for his oath, Sumpah Palapa, and there is no historical reference that shows the real face of Gajah Mada and his deeds. Therefore, this opens up an opportunity to depict Gajah Mada in a creative way in terms of visualization, especially in the visual novel.
game based on Indonesian historical narrative such as the glorious era of Majapahit Kingdom.

To analyze the appeal of Gajah Mada as the main character for the visual novel game, the questionnaire then was done to ask some key points to gain opinions and perception toward the element that contribute the most to the visual appeal of the characters. The questionnaire taken shows result as follow:

1) Facial expression as the element that builds audience perception and imagination towards the characteristics of Gajah Mada to represent his role in the glorious era of Majapahit Kingdom has a number of response which shows: 93 students choosing strongly agree (37%), 113 students choosing agree (45%), 31 students choosing don’t know (13%), and 13 students choosing disagree (5%). The percentage can be seen in figure 7.

2) Body posture as the element that builds audience perception and imagination towards the characteristics of Gajah Mada to represent his role in the glorious era of Majapahit Kingdom has a number of response which shows: 127 students choosing strongly agree (51%), 95 students choosing agree (38%), 20 students choosing don’t know (8%), and 8 students choosing disagree (3%). The percentage was shown in figure 8.

3) Costume and attire as the element that builds audience perception and imagination towards the characteristics of Gajah Mada to represent his role in the glorious era of Majapahit Kingdom has a number of response which shows: 96 students choosing strongly agree (44%), 111 students choosing agree (38%), 34 students choosing don’t know (14%), and 9 students choosing disagree (4%). The percentage can be seen in figure 9.

Based on the response before, the study can compile the response of “strongly agree” dan “agree” as a whole to see that each of the visual elements, which is facial expression (33%), body posture (35%), and costume and attire (32%), has an equal role in contributing to the image building of Gajah Mada as the main character. The difference of percentage result between the three is not significantly impactful (see figure 10). This result shows that in order to visualize a character with distinct personality, the three visual elements need to be properly designed to support the image building of the character. This is because the three visual elements have the potential to communicate the idea related to the cultural value.

The percentage shown above regarding the elements that can build the image of Gajah Mada as a character is then compared to the other two characters, Raden Wijaya and Tribhuwana Tunggadewi. The result shows that both of the characters also show an equal percentage regarding the role of visual elements that can build the image of their characters. The difference in percentage number is not significantly large. The difference is in which visual elements has a bigger percentage compared
to those found for Gajah Mada. The character of Tribhuwana Tunggadewi for example, the result shows that the biggest percentage is in her costume and attire (36%), while body posture is in the second place (34%) and facial expression in the last place (30%). The percentage can be seen in figure 11.

![Figure 11. Percentage of the visual elements that build the image of Tribhuwana Tunggadewi as a character](image)

Meanwhile for the character of Raden Wijaya, the result shows an equal number for costume and attire and body posture (35%) while the facial expression get a smaller number (30%). The percentage can be seen in figure 12.

![Figure 12. Percentage of the visual elements that build the image of Raden Wijaya as a character](image)

**DISCUSSION**

The result from the data analysis shows that Gajah Mada was more favorable as the main character for the visual novel game of the glorious era of Majapahit Kingdom. This result was based on many factors.

**A. Gajah Mada As The Chosen Main Character**

In the curriculum for elementary school and junior high regarding the history of Indonesia, Gajah Mada was a prominent figure and often times is included within the textbook because of his deeds related to his oath, *Sumpah Palapa*, in which he promised to unite all of the Nusantara region.

There are many clashing opinions regarding the real face and figure of Gajah Mada. Most of the historical documents and books depict Gajah Mada based on a prominent historian named Mohammad Yamin. As stated by Adam [9], the face of Gajah Mada shown in Yamin’s book titled “Gajah Mada, Pahlawan Persatuan Nusantara” published in 1945 and continuously being printed until now, is not the real face of Patih Gajah Mada but a part of an ancient pottery from Trowulan. Adam even argued that the “reconstructed” face of Gajah Mada found in the book was based on Yamin’s own facial feature. The statues featured in the Museum of Majapahit are also shown without any distinct facial feature.

Gajah Mada also took part in one of the phenomenal events of *Perang Bubat* involving Majapahit Kingdom and Sunda Kingdom lead by Prabu Maharaja Linggabuana in Pesanggrahan Bubat in 1357. The massacre of a group accompanying Dyah Pitaloka from Sunda Kingdom by Gajah Mada can be interpreted as one of Gajah Mada’s ambition in upholding his oath of *Sumpah Palapa*. The event of Perang Bubat still inspired many artists to make their own artistic work up until now. The research done by Baihaqi [10] stated that Perang Bubat as a historical event involving Gajah Mada, bring forth a negative influence and relations between the Javanese and Sundanese. This event brought up Gajah Mada as a famous figure in Indonesian historical event.

The many deeds of Gajah Mada still leave many stories that are interesting to be visualized. This brings up many curiosities to know better about the social life in the glorious era of Majapahit Kingdom which still implemented the social stratification influenced by Hinduism and Buddhism philosophy. The role of Gajah Mada as a general that is known as Bhayangkara is also an interesting appeal in the characterization of Gajah Mada. The cultural background of Majapahit Kingdom will influence the design and the way the character evokes imagination to the player.

The role of main character in visual novel game is very important since the main character will be the key feature to invite the player to delve into the adventure within the world and seeing the game’s many plots and different storylines. Main character can give a sense of purpose for the player to know the end goals that the player can aim by exploring the storyline and interacting with other supporting characters. Cavallaro [11] stated that the most important thing in visual novel games is an agent that can guide the motivation and goal of the player, which is a well defined character with a particular personality and aims. This will create a basis for an interesting conflict within the game. By using this agent, the player of visual novel games can thoroughly and logically understand the narrative behind the games better.

**B. The Appeal of Gajah Mada**

The appeal of Gajah Mada as main character cannot be separated from the visual element found within the character design that can alter the player’s perception. Qualitatively the kinesics study of the character which includes the study of facial expression, body posture, and costume and attire can be analyzed as a nonverbal communication that can carry out a message of his role in the glorious era of Majapahit Kingdom. The study about the appeal of this kinesics study will be laid out below.

1) **The visual appeal of facial expression:** In the study of face, there is a study about static facial sign...
which includes skin pigmentation, facial feature, and bone structure [12]. People generally tend to have a fixed perception of Gajah Mada’s facial expression. By hearing the name of Gajah Mada, people immediately build their own imagination referring to his commonly known image featuring rough and unsmiling facial feature with dark-skinned pigmentation and wide facial structure featuring a big jaw. Gajah Mada’s expression is perceived as having a cold facial expression, decisive eyes, and strong personality. This shows that the visual appeal of Gajah Mada’s facial expression represents his personality as a general full of confidence, brave, and strict.

2) The visual appeal of posture: White [13] argued that the representation of the body through facial expression, posture, and costume and attire can reflects a particular characterization. That is why the designer of visual novel games needs a thorough concept of character design which includes the character’s body movements. Body movements can communicate the character’s identity. The posture of Gajah Mada becomes the main focus of this study because of the appeal of the character, especially regarding his masculinity. The posture of Gajah Mada can represent his role as a great general who vanquished many rebellions, bringing Majapahit Kingdom into its glorious era. The posture was then designed with a visual focusing in his character having a firm and buff muscled body.

3) The visual appeal of costume and attire: All of the characters, Raden Wijaya, Gajah Mada, and Tribhuwana Tunggadewi, are shown wearing a Javanese ancient outfits. The costume worn by Gajah Mada is a kind of cloth coiled around the body, combined with a fabric with Batik motifs and long trouser above the ankle. The costume was adorned with golden accessories, gold upper arms bangle, gold belt, headband, and gold bangles worn in both of the wrists. In Majapahit Kingdom era, gold is one of the prominent currencies in trades and transactions. The attire adorned with gold bangles and headband can accentuate the character’s position just like those seen in the character of Raden Wijaya dan Tribhuwana Tunggadewi. In this sense, the attire represents ones social standings in society. Gold adorning the attire shows the glorious era of Majapahit Kingdom which developed greatly in terms of trades and economy.

CONCLUSION
This study concludes many important notes, especially in terms of Indonesian visual novel games. The character design of Raden Wijaya, Tribhuwana Tunggadewi, and Gajah Mada can have their own visual appeal to become the main character in a visual novel game. The research behind these character designs can be a reference in designing other characters for visual novel game that is based on Indonesian historical figures. The choice of Gajah Mada as main character that has a strong appeal to the player can be an inspiration for developing other historical figures as gaming characters, that within each of the historical figure, there is a story that can be explored as a source of knowledge. The narrative behind the glorious era of Majapahit Kingdom is one such interesting historical event that can be fully developed into a promising Indonesian visual novel game.

Through character design featuring a historical figure, this audiovisual media in the form of video game can be developed further into an interactive and attractive media for education that is fun and enjoyable. Three main points that need to be considered in designing a character regarding the visual elements that support the character’s appeal are facial expression, body posture, and costume and attire worn by the character. These three elements each has their own visual strength to build the character and to communicate a message that is easy to understand and pleasing to the eye.

Indonesian visual novel games as a local product has a big potential to compete with foreign visual novel games, especially those being developed by the Japanese, without following their visual style which popularized the visual novel as a genre. The discussion in this study hoped to push local game developers to find an inspiration in Indonesian own cultural and historical values in making their video games as audiovisual products to compete globally in the booming gaming industry. Character design with a particular visual style that can represent Indonesian history and culture can be a model of reference for future projects that can encourage a more creative approach in the implementation visual communication design as a field of study.

ACKNOWLEDGMENT
In the process, this study can be done because of the support of many. We would like to show our gratitude to Direktorat Jenderal Pendidikan Tinggi (Ditjen Dikti) within the scope of Kopertis Wilayah III, especially for the financial support through the funding grants of National Strategic Research (Penelitian Strategis Nasional) 2018 No. 0281/1SPLP/LPM/UNINDRA/III/2018. We also thank the support given by Lembaga Penelitian dan Pengabdian kepada Masyarakat (LP2M) Universitas Indraprasta PGRI, Jakarta.

REFERENCES


