Conference Paper

Development of Infographic Character Design of Malaysian Mah Meri Tribe'S Animal Masks As Learning Media of Traditional Masks

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Abstract

Malaysian Mah Meri Tribe's Mask is one primitive mask which existence has become an artifact stored in the museum and a learning media for younger generations on their culture. Masks that had been created are representations of ancestors and they were used in worshipping ceremonies dedicated to the ancestors. The mask is used for funerals (tiwah), fertility rites, and serves as the provision of the dead in the grave or as the grave watcher (Martono: 2017). Mah Meri tribe is a sub-ethnic group of orang asli who live along the Selangor coast. This community group has settled for a long time in the region and their daily life is farming. Among the routine life of the Mah Meri tribe, there is the Mah Meri mask dance that tells the history of the ancestors of the tribal people who represent animals that live on the ground, in swamps or rivers which they encountered, both having good and bad impacts on their lives. The problem arose when the Mah Meri Tribe animal mask was displayed in the Museum of Asian Art with a lack of information, this is not enough to be used as a learning medium. The research method used is Borg and Gall's development model which simplified into 4 steps namely: (1). research and information collecting, (2). Planning, (3). develop a preliminary form of product, (4). final product revision. The result of this development is a learning media application that can help tourists of all ages to learn the mask of Orang Asli of Malaysia at the museum more easily.

Keywords: Character Design, Infographics, Mask, Mah Meri

1. Introduction

Orang Asli of Malaysia is a group of people who live in the forest located in Peninsular Malaysia. They live in groups consisting of 28 ethnic subgroups. The ethnic sub-groups have different cultures, languages and beliefs rooted in the habits of their daily life. Datuk Antony Ratos in his book Orang Asli and Their Wood Art (2003: 25) mentions that forests, mountains, rivers, flora and fauna are the main attraction of their daily lives for hunting, fishing, trapping.

How to cite this article: Lisa Sidyawati, Joni Agung Sudarmanto, Encik Muhammad Hawari Bin Berahim, and Abdul Rahman Prasetyo , (2020), "Development of Infographic Character Design of Malaysian Mah Meri Tribe'S Animal Masks As Learning Media of Traditional Masks" in *International Conference on Art, Design, Education and Cultural Studies*, KnE Social Sciences, pages 14–29. DOI 10.18502/kss.v4i12.7579

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Mah Meri is one of the sub-ethnic groups of orang asli who live along the coast of Selangor. This community has settled for a long time in the area and their daily lives involve collecting rubber latex, planting palm trees, and rice, while their stock is poultry. The Mah Meri tribe has rather easy access to go to the city because they have motorbikes, bicycles, electronic equipment, television sets and mobile phones.

Among the routine life of the Mah Meri tribe that has been outlined, there is an art which also serves as a mean of worshiping the spirits of the ancestors in the form of mask dances. This Mah Meri mask dance tells the history of the tribal community interacting with nature so that it will form the figure of an ancestor who represents animals that live on the ground, in swamps or rivers that they encountered, both having good and bad impacts on their lives. The Mah Meri mask dance is performed at any time such as during full moon celebrations, fishing activities, or for treatment processions. The animal mask displayed depends on which ancestor is needed for a specific purpose. The animal masks depict good, bad and funny traits.

Most of the animal masks belonging to the Mah Meri Tribe are stored at the Museum of Asian Art, Universitas Malaya. According to the researcher's interview with the head of the museum, Abdul Aziz Abdul Rasyid in June 2019 explained that Mah Meri's animal masks are stored in the museum to be functioned as a learning medium for young Malaysians, in particular, to get to know the diverse tribes and cultures that exist in Malaysia. The animal mask belonging to the Mah Meri tribe is an original mask made by the Mah Meri Tribe which was obtained by the museum when the Mah Meri Tribe had finished using the animal's mask in a ritual ceremony.

However, problems arise when the mask of the Mah Meri tribe is displayed in the Museum of Asian Art. This animal mask is still very minimal in the information. Even the information label attached next to the mask on display is just the name of the mask, this is not enough to be used as a learning medium, while visitors who are adolescents and adults are not just tourists but they are also looking for information about the mask, given the Museum of Asian Art is located in a university.

Based on the problem above, researchers sought a solution which is developing a learning media in the form of infographics, this learning media is in the form of augmented reality-based application. This application contains information about the animal masks belonging to the Mah Meri tribe with a display of character design equipped with text, so that visitors can easily access information about an animal mask displayed in the museum, visitors will get a picture of the animal mask when used in mask dances and get information about the masked figure.

2. Literature Review

2.1. Character Design

Character design is one form of illustration that comes with the concept of human beings with all its attributes (character, physical, profession, residence, and even fate) in various forms, can be animals, plants or inanimate objects. Characters are varied, seen from their roles, there are men and women, humans, robots, monsters, and others. A character can be described as human traits in general in which humans have many traits that depend on the factors of their own lives. Humans as individual-socialist creatures have a strong social character and are different from other living creatures. To show the existence of themselves humans must have their distinct characteristics.

Kevin Hedgpeth and Stephen Missal in his book Exploring Character Design (2006) stated that characters are things that are emotionally noticed by the audience, whether by loving them, hating them, or fascinated by the presence of the character itself. So to say, characters are elements that make a story worth reading or listening to, and can invite us to respond emotionally to their existence in the story.

2.2. Infografis

Infographics (Infographics) is an abbreviation of Information Graphics. Infographics are visualizations of data, ideas, information or knowledge through charts, graphics, schedules and others so that data, ideas, information or knowledge can be presented through more than just text and have a strong and more interesting visual impact (Kurniasih: 2015). Thus it will arouse the readers' awareness to understand data, ideas, information or knowledge more quickly and accurately.

2.3. Traditional Mask

The mask is an illustration of a character or a characterization. The function of masks and mask performances is to fulfill the needs of artistic expression, many artists or craftsmen make masks not based on religious elements, the creation of masks is an attempt to illustrate the typology characterization of a certain character. The masks were created as depictions of ancestors and for worship ceremony of ancestral spirits. The mask is used for funerals (tiwah), fertility rites, and serves as the provision for the dead in the grave or as the grave watcher (Martono: 2017).

The mask can be used as a tool to connect to the spirits of deceased ancestors in a shamanism ceremony. Mask performance is a form of performing arts which has magical value. For example, traditional ceremonies in Batak, Toraja, and tiwah in East Kalimantan. The function of the mask is used for the safety and strength of a leader, the decorative pattern of the mask is considered to have the strength that can provide protection to its people, (Mugiyanto, 1983: 52-53).

The function of masks and mask performances in the premodern era is to fulfill the society needs for cultural rituals. In the modern era the role and function of the mask art is as an expression of art, not based on any religious elements, and is an attempt to describe the typology of characterization (Sedyawati, 1992: 6-7)

2.4. Learning Media

In general, media is the plural word of "medium", which means an intermediary or intro-duction. Gerlach and Ely in Setiadarma (2006: 3), said that when media is understood in a broad outline, it means humans, materials or events that build conditions that make students able to obtain knowledge, skills or attitudes. The media that are used in the field of teaching or education then changed the term into a medium of education or learning media.

Sanjaya, (2008: 205) also argues that learning media includes hardware and soft-ware. Hardware is tool that can deliver messages such as overhead projectors, radios, televisions and so on, while Software itself is the content of the program that contains messages such as information contained in transparency or books and other printed materials, stories contained in the film or material that is presented in the form of charts, graphs, diagrams, and so on.

3. Research Method

Method development of Infographic Character Design of Malaysian Mah Meri tribe's Mask as a Learning Media for Traditional Mask follows the development model of BorgGll & Gall. The reason for choosing the Borg and Gall development model is because the steps in this study are in accordance with the initial concept of development that the researcher did. Nana Syaodih Sukmadinata (2006: 169-170) explained that the development model of Borg and Gall has ten implementation steps but in this study, they are simplified into 4 steps considering the limitations of research time, can be described as follows:

3.1. Research and Information Collecting

At this step, the researchers made observations in the field, namely at the Museum of Ethnic Arts in Malaysia and the Mah Meri Tribe community to collect data on the Mah Meri Tribe animal masks for the literacy of development of animal mask infographic character designs based on augmented reality.

3.2. Planning

At this stage, the researcher compiles work steps for product development and alternative solutions if there are problems in the preparation of the infographic character design of Mah Meri tribe's animal mask based on augmented reality

3.3. Develop a preliminary form of product

At this stage, the activities carried out are:

1. Create an infographic character design for the Mah Meri animal mask on paper that will be transformed into digital form.

2. Develop an infographic animal mask character design belonging to the Mah Meri Tribe with a digital process

3. Arrange a set of validation instruments that will be filled by expert validators

4. Conducting an expert validation with media expert validator, namely visual communication designer, grammar expert validator, and material content validator

3.4. Final Product Revision

At this step, the final input by the validators are used to finish the Mah Meri Tribe animal mask infographic character and turn it into a ready-to-use product

4. Discussion

The results of the development of the infographic character design of the Mah Meri Malaysian Animal Mask as a Traditional Mask Learning Media can be described as follows:

4.1. Moyang Bioi

The original story of Moyang Bioi in Joanne Heng's writing in the 2000 book The Mah Meri Mask Collection published by Akademi Pengajian Melayu, Universiti Pengajian Malaya mentioned: Once, a human being went into the jungle. She wanted to eat the betel leaves in the jungle. The betel-leaf plant was climbing up a tree that had been urinated on by a tiger. The woman did not know this. She took the leaves and ate them. About two or three months later she became pregnant and gave birth to a baby tiger. The baby tiger continued to grow up. The villagers did not like the baby tiger because it became a nuisance to the villagers, so the villagers chased it away. The mother and her child went to the jungle. The mother slept on the fig tree and the child slept underneath it.

From the story above, the researcher took the essence to be developed into an infographic character design to help people get information about the mask. In addition to the drawing of the character design, it is also equipped with writings so that the infographic content can be fulfilled. Infographics (Infographics) is an abbreviation of Information Graphics. Infographics are visualizations of data, ideas, information or knowledge through charts, graphics, schedules and others so that data, ideas, information or knowledge can be presented more than just via text and have a strong and more interesting visual impact (Kurniasih: 2015). Thus it will arouse the readers' will to understand data, ideas, information or knowledge more quickly and accurately.

The visualization of Moyang Bioi's mask was taken from the original form of the mask combined with the Mah Meri mask dance costume.

The picture above is a mask dance that is often performed by the Malaysian Mah Meri community. The costume of this dance is made from plants that grow nearby, these plants are shaped like hair and clothing. This mask dance is a story of the daily life of Mah Meri tribe, this dance is also used as rituals for healing and casting out evil spirits. Its usage is following the character being played. The characters resemble humans, birds, animals that are on the ground and animals that swim in the water. Meanwhile, the characteristics represent good, bad and witty nature (Ratos: 2003).

Visualization of the infographic character design of Moyang Bioi mask is on the left and the information writing is on the right, it was developed based on the graphic design principle namely sequence. Sequence is making priority sections and sorting information from what must be read first to last (ilmunesia.com:2019).

The background on the screen is made in reddish-brown color which means that the Bioi Ancestor is a person who accepts hardships with sincerity. Reddish-brown

Figure 1: Moyang Bioi Mask (Source: Researcher Documentation: 2019)

Figure 2: The Mah Meri Malaysian Mask Dance (Source: Panorama Magazine.com. Accessed in November: 2019)

color in color theory symbolizes wholeness, stability, simplicity, friendship, and reliability (Wicaksono: 2013). In addition, there are yellow star effects in the background that represents wealth, gold, light, life, sun, luck, joy, happiness, earth, optimism, intelligence (Wicaksono: 2013). This refers to the embodiment of Moyang Bioi, who willingly accepted the situation even though he was chased out of the village, not because of his fault.

4.2. Moyang Pongkol

The original story of Moyang Pongkol in Joanne Heng's book in The Mah Meri Mask Collection in 2000 published by Akademi Pengajian Melayu, Universiti Pengajian Malaya states: One day in ancient times, the parents of a child went to work and immediately

Figure 3: Visualization of Infographic Character Design of Moyang Bioi Mask (Source: Research Results: 2019)

afterwards the child called for his parents. Not long after, the parents appeared. The faces look similar to the parents who had just left. The child was happy. He then cut a fish (in fact a yam (keladi) leaf which looked like a fish) and cooked a quarter of the fish and ate it. He rested for a while.

After a while, there appeared a tail from a hole in the pillar of the house. The child noticed the tail under the house and quickly tied the tail to the pillar of the house. Then the child pretended to cook the keladi but in fact, he was heating a piece of iron. When the iron was red hot the child pushed it into the back of the parent. He immediately died. He was not a human being but a tiger. Thus, it is called the Spirit Pongkol. The real parents returned home. As it was the Spirit Pongkol, different types of leaves were gathered, the thorny brinjal was cut as well as bantut leaves. If he becomes a man, let him be a man. Thus, he is no more.

The visualization of Moyang Pongkol's mask was taken from the original form of the mask combined with the Malaysian Mah Meri tribe mask dance costume.

The background on the screen is made in dark purple color which means that Moyang Pongkol is a person full of deception. The color purple in color theory symbolizes cruel, rough, sorrow, envy, and mystery (Wicaksono: 2013). In addition, there are some purple star effects in the background. This refers to the embodiment of Moyang Pongkol who is a symbol of human's cunning seeking a chance to deceive other humans.

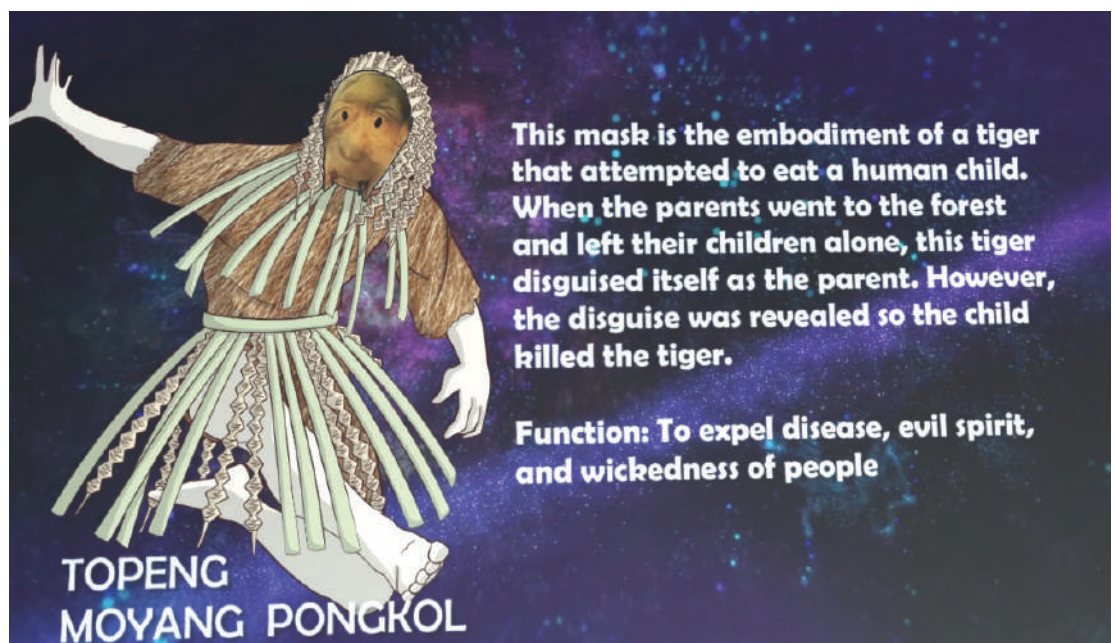**Figure** 4: Moyang Pongkol Mask (Source: Researcher Documentation: 2019)

This mask is the embodiment of a tiger that attempted to eat a human child. When the parents went to the forest and left their children alone, this tiger disguised itself as the parent. However, the disguise was revealed so the child killed the tiger.

Function: To expel disease, evil spirit, and wickedness of people

TOPENG MOYANG PONGKOL

Figure 5: Visualization of Infographic Character Design of Moyang Pongkol's Mask (Source: Research Results: 2019)

4.3. Moyang Buaya

The original story of Moyang Buaya in Joanne Heng's writing in The Mah Meri Mask Collection in 2000 published by Akademi Pengajian Melayu, Universiti Pengajian Malaya

mentioned: Originally, crocodiles were three step-children forced by their step-father to go fishing. Unfortunately,, the three step-children couldn't find any fish. So the step-father told the children, no fish, no food. The three step-children tried their best to find a fish but failed. When they went home without any fish, it made the step-father hate them more and no food was provided for them. Hungrily the three step-children picked the left-over food which was thrown away by the father. One day one of the three brothers went fishing alone for seven days.

After seven days, the older brother informed the father, and said, "Father, brother has been away fishing for seven days without returning, maybe he has been caught by the devil (jembalang). The brother who had been gone for seven days, walking, said to himself, "If by seven days there are still no fish I won't return home. I will jump into the water and be a crocodile. "When I become a crocodile, I will destroy human beings who have done wrong or suffered disappointment". At the moment he jumped into the water and become a crocodile and began searching for animals or human beings who had sinned. His way in catching animals or human beings was by using "magic leaf" to see each the objects. If the magic leaf shows a human being disguised as an animal, the human being will be caught by the crocodile and it will be his food.

The visualization of Moyang Buaya's mask was taken from the original form of the mask combined with the Malaysian Mah Meri tribe mask dance costume.

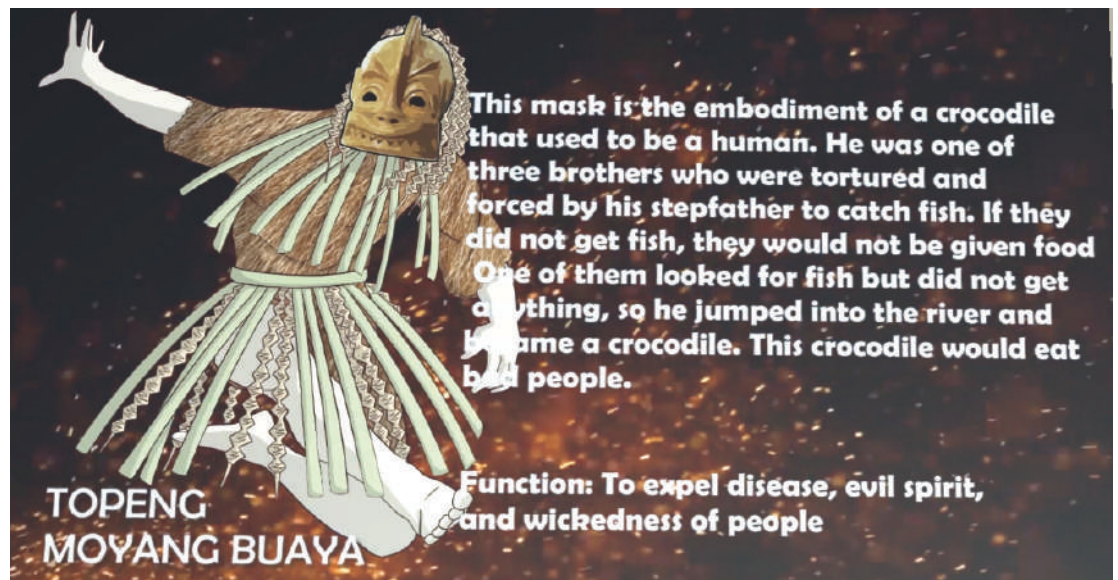**Figure** 6: Moyang Buaya Mask (Source: Researcher Documentation: 2019)

Figure 7: Visualization of Infographic Character Design of Moyang Buaya's Mask (Source: Research Results: 2019)

The background on the screen is made in reddish-brown color meaning that Moyang Buaya is a figure who cares for his brother. Reddish-brown color in color theory symbolizes wholeness, stability, simplicity, friendship, and reliability (Wicaksono: 2013). Also, there are yellow star effects in the background that represents wealth, gold, light, life, sun, luck, joy, happiness, earth, optimism, intelligence (Wicaksono: 2013). It refers to the embodiment of Moyang Buaya who is a figure that is very concerned about the condition of his brothers and he will destroy evil..

4.4. Moyang Lembu

The original story of Moyang Lembu in Joanne Heng's writing in the 2000 book The Mah Meri Mask Collection published by the Akademi Pengajian Melayu, Universiti Pengajian Malaya mentioned: The Spirit Lembu originated from a human being. He was haunted by evil influence and was hated by all. Later he was chased away. No longer able to stay, he packed up his belongings and went away. He walked on and on without food for days. Then he saw a garden of grass where it was shady. The day being very hot, he felt hungry. He could not bring down the rice on his shoulder. He shouted, "Help! Oh God." The God replied, "You cannot eat rice, for when you eat rice your illness will return".

When he ate the grass his face changed to that of his friend. "I cannot eat grass because my canine teeth are too long". The God said, "You can change. But unfortunately you cannot become a human being. You will become an ox (lembu) with four

legs". He was forced to be an ox, for if not his illness would return. Because the ox is not afraid of human beings, it has become a slave.

The visualization of Moyang Lembu's mask was taken from the original form of the mask combined with the Malaysian Mah Meri tribe mask dance costume.

Figure 8: Moyang Lembu Mask (Source: Researcher Documentation: 2019)

This mask is the embodiment of an ox that used to be a human. He was an evil man and was hated by everyone. God punished him by turning him into an ox that only ate grass and became human's slave because if he ate rice then his evil traits would return.

Function: To expel disease, evil spirit, and wickedness of people
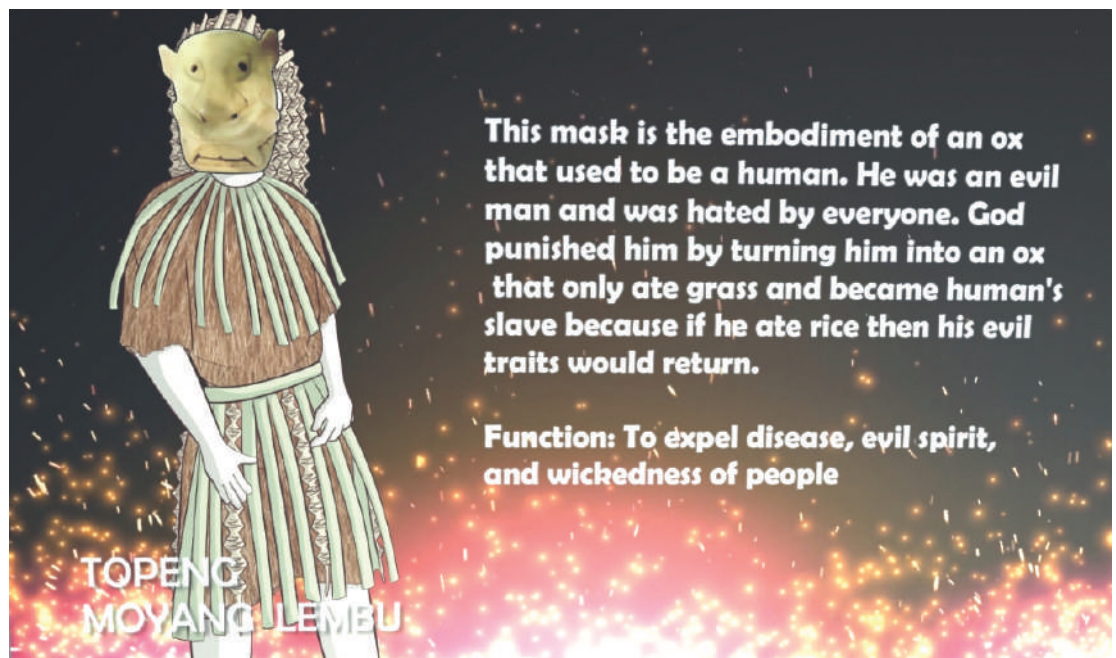
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MOYANG LEMBU

Figure 9: Visualization of Infographic Character Design of Moyang Lembu's Mask (Source: Research Results: 2019)

The background is made in black color which means that Moyang Lembu was an evil person. The black color in color theory symbolizes remorse, anger, death, and fear (Wicaksono: 2013). Also, in the background, there are some effects of fire that represent anger. It refers to the embodiment of Moyang Lembu who is a symbol of humans who commit evil deeds on a daily basis and get punished by God following their deeds.

4.5. Moyang Anai

The original story of Moyang Anai in Joanne Heng's writing in the 2000 book The Mah Meri Mask Collection published by Akademi Pengajian Melayu, Universiti Pengajian Malaya mentioned: The Spirit Anai originated from the male ant-hill. The wife of the Anai wanted to strengthen her position. They were all united under one King and so held a meeting to kill human beings. But unfortunately the humans are big and the ants are small, so they cannot kill the human beings.

The King agreed that human meat tasted good. The ants too held a meeting and all agreed to kill the humans. The Anai wondered at the strength and power of the ants. Perhaps because they had weapons, the ants did not want to follow the plans of the Anai though they paid lip service. In their hearts, the ants wanted to save the humans.

The humans wanted to listen to the meeting of the Anai but could not because the path was too narrow. King Anai vowed to take revenge on the humans. After the meeting, the ants left and on the way they met the humans.

"How are you, humans?"

"Some are fine and others not so, it is difficult to explain."

"Do not be afraid and do not be deceived by the Anai. They are going to eat you."

The human replied, "We are not afraid." "Don't," said the ants, "Ah! Don't!"

The ant said that this house would become the Spirit of Anai.

"Which house?"

"The tall house."

A little while later the ant-hill would begin to shake and the face of the bakat jantung would frighten away the humans. So to live, human beings must kill in this world.

The humans collected different types of leaves and repeated the words seven times until the spirit became a human or if it became an Anai it is no more.

The visualization of Moyang Anai's mask was taken from the original form of the mask combined with the Malaysian Mah Meri tribe's mask dance costume.

Figure 10: Moyang Anai Mask (Source: Researcher Documentation: 2019)
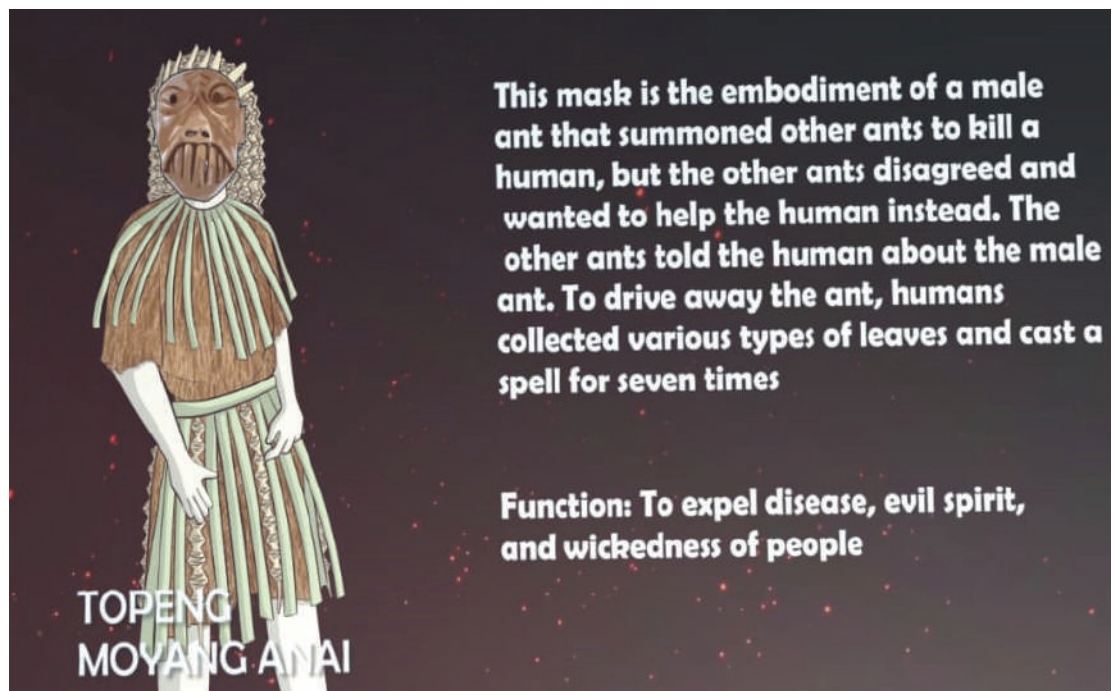

Figure 11: Visualization of Infographic Character Design of Anai Mask (Source: Research Results: 2019)

The background on the screen is made in dark purple color meaning that Moyang Anai was an evil animal that often killed humans. The color purple in color theory symbolizes cruel, rough, sorrow, envy, and mystery (Wicaksono: 2013). Also, there are

some purple star effects in the background. This refers to the embodiment of Moyang Anai who is a symbol of greedy humans.

5. Conclusion

The infographic character design of the Malaysian Mah Meri tribe's animal masks has succeeded in facilitating the delivery of information about the mask artifacts displayed at the Museum of Asian Art, because what originally was displayed there was merely the label name of the mask while the public needed an interesting and interactive infographic, both for the young and adults. The delivery of information is now based on technology and has also become a learning media.

References

[1] Hedgpeth, K & Missal, S. 2006. Exploring Character Design, Thomson Delmar Learning: Canada.

[2] Heng, J. 2000. The Mah Meri Mask Collection. Akademi Pengajian Melayu, Universiti Pengajian Malaya: Malaysia.

[3] Kurniasih, N. 2016. Infografis. Proceedings of National Seminar "Komunikasi, Informasi dan Perpustakaan di Era Global": Jatinangor, 15 Juni 2016. Hal. 456-465.

[4] Martono, et al, 2017. Topeng Etnik Nusantara dalam Perkembangan Budaya Global. Jurnal Mudra: ISI Denpasar.

[5] Mugiyanto S. 1983. Pertunjukan Topeng di Jawa. Jakarta: Majalah Analisis Kebudayaan. Th. III.2.

[6] Prabowo, R., et al. 2015. Pengenalan Rumah Adat Indonesia berbasis Augmented Reality dengan Memanfaatkan KTP sebagai Marker. Prosiding SNATIF Ke -2.

[7] Ratos, D. A. 2003. Orang Asli and Their Wood Art. Times Media Private Limited: Singapore.

[8] Siswanti, S. D., et al. 2016. Tracking Markerless Augmented Reality untuk Design Furniture Room. Prosiding Annual Research Seminar 2016: Computer Science and Information and Communications Technology. Vol 2 No. 1. Universitas Sriwijaya Sumatera Selatan: 6 December 2016. Hal. 277-383.

[9] Ulinnuha, et al. 2018. Kajian Semiotika: Identitas Budaya Lokal dalam Film Golok Lanang Wanten Karya Darwin. Ikraith-Ekonomika, 1 (2), November 2018, 106-115.

[10] Wicaksono, A. R., et al. 2013. Komposisi Warna Website Universitas Kelas Dunia, Studi Kasus Harvard University, University Of Cambridge Dan National Taiwan University. Seminar Nasional Informatika: Yogyakarta.

[11] Sukmadinata, N. S. 2013. Metode Penelitian Pendidikan. Bandung: PT. Remaja Rosdakarya.

[12] Sanjaya, W. 2008. Perencanaan & Desain Sistem Pembelajaran. Jakarta: Kencana. Prenadamedia Group.

[13] Sedyawati, E. 1992. Topeng dalam Budaya. Jakata: Gramedia.

[14] Setiadarma, W. 2006. Produksi Media Pembelajaran. Surabaya: Unesa University Press.