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2-Dimensional Animation:
The After-Effect of Perak's War

Muhammad Faiq Adam bin Kamarudin
Bachelor of Multimedia Technology (Hons.) in Interactive
Multimedia Design (BIMD)
Universiti Kuala Lumpur
Malaysian Institute of Information Technology (MIIT)
faiq.kamarudin@s.unikl.edu.my

Madam Roslinawati Bt Jaafar
Senior Lecturer
Creative Multimedia Section
Universiti Kuala Lumpur
Malaysian Institute of Information Technology (MIIT)
roslinawati@unikl.edu.my

Abstract—**Most of Malaysians citizen are already familiar with the story and the impact left by the Pangkor Treaty, and the appointment of J. W. W. Birch as the first ever resident to ever resides in Tanah Melayu. The event become a marking point of intervention amongst the British in the Malaya's states of administration. However, the anger among the Malaya's citizen arises due to the basis that was introduced by Birch which leans heavily towards the oppression in Pasir Salak which causes his own death that later on triggers the Perak War. Aftermath of the tragic event leads to the death sentences of many people. The higher authorities such as Sultan Abdullah and a few other Malay officials were thrown to Seychelles Island as a punishment. It is quite concerning that the younger generation as of today mostly are lacking in the knowledge of history especially the history which was not presented in the education system. The aim of this research is to help the younger generation about the lost history of Sultan Abdullah after the tragedy of the Perak War in the style of 2-Dimensional animation by the way of storytelling. 2-Dimensional animation was chosen as the method is believed to be a more convenient and easier way to educate and inform audience especially the younger audience on the importance of history. The method chosen will help in understanding more about the story portrayed. 3P model was chosen as the commodity of the project which consist of pre-production, production, and post-production.**

Keywords - Pangkor Treaty; Perak War; Death of Birch; Sultan Abdullah Life; Seychelles Island; 2-Dimensional Animation; 3P model.

I. INTRODUCTION

Learning about history is a necessity to be obtain in the daily life as it helps nourishes the way of one's thinking and it can affect the way we look on things that are happening. By learning and knowing history, we are not to repeat the same mistake of the past that has been done repeatedly due to lack of knowledge on the history itself. Although most of us are interested in learning history, the interest mostly peaked in educational institute and does not grow further. The main knowledge gain regarding history was obtain in school but sadly, not from other sources especially due to the method provided which convey the message in such an unentertaining way of conveying the history's story.

The main problems that contributed in the making of this project is the lack of awareness and understanding in Malaysian's history among the younger generation especially. A survey was done to proves this statement and in the survey the researchers realizes that the respondent majorly responds as to uninterested in learning more about the history outside of educational institute. The target audience done for this survey is mainly on the ranging from the age of 15 to 25 years old. The target was listed as those chosen age because it is a must to spread awareness on the importance of learning more about the knowledge of history as it can change one's mind on the way they move, think and decision making in life. Moreover, the exposure of the Malaysian's histories is insufficient outside of the educational institute. Finally, low interest amongst the younger generation in learning more about the history that took place in Malaysia. The objectives and target to overcome the problem that had been found is to help propagate the forgotten past about one of the highest authorities of Malaysia also known as Tanah Malaya at the time. Also, to create an animated overview of the Malaysian's history. To investigate the usefulness of using the 2-Dimensional animation as a method of conveying messages to the audiences on whether it can ease the process of learning or not.

As for the conclusion, the history knowledge is to more exposed in various other way and places in hopes that in can helps the process of learning and in order to help improves one's though about the way of thinking. A new profound respect can be obtained on the founding fathers of Malaysia.

II. RELATED WORKS

In this section, the researchers will be explaining the demand, definition and also the challenges faced in the project that used animation as a medium and finally comparing it to looks on what to be improved. The researchers also will be identifying on whether the usage of animation is corelate to the better understanding and whether the output given is on a much easier side to digest. This section will mainly talk about the 2-dimensional animation as an approach and will be comparing to the existing animation that had been done regarding Malaysian's history.

A. 2-Dimensional Animation

The digital animation environment is created at a much higher quality and faster pace as the technology is evolving quickly. According to Purwaningsih (2017), it is extremely necessary that this evolution is presided over by a

specific kind of animation that can be called artistic. Nowadays, the animators' backgrounds and character designs are either scanned into a computer device or drawn directly into it (Moreno, 2014)

The Case Study

Other such similar topic that uses the same method and suggest the same categories of stories which is history were found on Youtube. This section is the part where the researcher's ideas were gathered by comparing on the strengths and weaknesses of other 2-dimensional animation which already exists. The animation style chosen was also based on the strength of all combined animation positive output.

B. Motion Graphic of Malaysian History

Fig. 1. Motion Graphic of Malaysian History

In motion graphics style, the short-animated video was made. A project by Muhammad Shafreez Iqhwan bin Saiful Bahari, a final-year student at Tenaga National University. The animation reveals Tanah Melayu 's rough history from the year 150 until 2018, when Tanah Melayu was updated to a new name for Malaysia, with a little bit of text as the viewer's source data. The clip is essentially a slide of cartoons over the course of 150 years. The animation style is quite simple and easy to be digested although having quite complex character design. The simplicity is what makes this animation easy to be looked at.

C. Alternate History of Malaysia

Fig. 2. *Alternate History of Malaysia*

Another example of using motion graphics as an animation style to relay messages to the viewer. The artist goes by the name of CBMY General, mostly using Wikipedia in the entire video as his research tools on the history of Malaysia. Throughout the film, information such as text was used. Due to the approach of the animation, the attention span of the viewer for the animation itself may be short due to the lack of contact with the audience (i.e. no voice, narration). However, while the shared knowledge is beneficial, the animation of the video is very unpleasant and bored to enjoy it. The animation is literally a picture with some moving text and an occasional pop up of flags and such. The overall look of the animation is quite unattractive to be watch as a whole.

Why was Singapore Kicked out of Malaysia?

Fig. 3. *Why was Singapore Kicked out of Malaysia?*

A documentary in the form of animated historical short films that took place between Malaysia and Singapore. This is an artist who goes by the name History Matters on YouTube. It tells a tale of how Singapore went from being in Malaysia before it was launched in 1965, and it's a rare event that only happens to a few other nations. Not only was text used as the source of data, but there was also a voice over to carry out and clarify the circumstances. By using a very easy way to animate the story that was supposed to be presented, due to the manner of the video edited, the viewer will effectively receive it.

D. Pasir Salak in History

Fig. 4. *Pasir Salak in History*

Muhd Hikam Abdul Shukor, an artist, directed and illustrated it. A detailed history of a place in Perak called Pasir Salak, a historic riverside town near Ipoh, the capital of Perak. This tells the tale of the faces and the awful case of J. Killer W.

W. Birch., Perak's first British resident. Today, Pasir Salak is also known as one of the names of the parliamentary constitution. During the year 2017, the animation aims to encourage the visit to Perak. The animation is very attractive because of the plot and the narration expressed through the video. For a longer period, the viewer will have a better time viewing the video because of the beautifully arranged animation. The animation approach is rather astonishingly good and better than the other reviewed animation. It is very smooth and interesting as it is complete with the element needed for attracting the viewer attention span, it combines complex animation and both simplicity which is quite interesting to be digest.

TABLE 1 Summary of Comparison

Title	Text / Subtitle	Voice Over	Illustrations	Music
Motion Graphic of Malaysian History	Text based animation, no subtitles. Basic font chosen.	None	Interesting and precise animation of an item/people.	Music only.
Alternate History of Malaysia	Text based animation, no subtitles. Basic font chosen.	None	Not animated, just a picture with a dialogue box.	Music only.
Why Was Singapore Kicked Out of Malaysia	Includes text, no subtitles. Suitable font chosen.	None	Simple but interesting approaches used on the animation style.	Suitable background music and narrator included.
Pasir Salak in History	Informative text, subtitles provided. Basic font chosen.	Voice over helps improving and conveying the messages.	Complex, eye catching animation.	Suitable background music, great choice of background speech, and narrator included.

As for the conclusion after reviewing the animation listed in the Table 1 shown above, the researchers have chosen to mix all the positive element and improves the animation by having a mixture of all. The choice of music, subtitles, voice over and illustration style will dictate and navigate the pace of the animation made. Hence, an animation that contains all of the above elements will help in enhancing the viewing experience for the audience.

III. METHODOLOGY

This section will include an overview of the process used to complete this analysis. In order to achieve the objective of this project, the approach will help to clarify the stages and methodology required. The equipment needed to build this project, such as software specifications and hardware requirements on the researchers and user side, will also be included in this section. The system used is the 3P model consisting of the Pre-Production, Production and Post-Production, which will be concentrated on the whole project.

A. Research Instrument

Analysis tools are the tools equipped by researchers to effectively encapsulate the data needed during the research phase. Edeking, J. (2018), mentioned that research tools are tools designed to support data collection for analysis purposes.
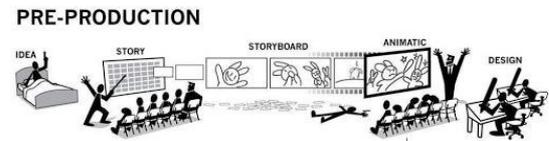
B. Project Phase
Pre-Production

Fig. 5. 3P Model, Pre-Production

This is the state of problem solving that is referred to as the Pre-Production Phase. To schedule the animation steps and tasks, pre-production is necessary. The concept, plot, storyboarding, animation, and design are part of this process.

To render the animation, this is where the design and data collection of the research knowledge will be acquired. Once the data has been obtained, the next step, which is the development phase, will be performed. Since it is based on history, the plot must be true. It is important to be done correctly in the storyboarding process for greater animation outcomes. Once the storyboard stage has passed, on the pre-production stage, the design of the character and the layout are just as significant.

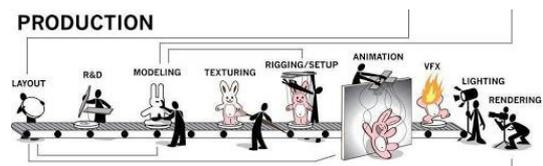Fig. 6. Character Design using Adobe Illustrator

Production

Fig. 7. 3P Model, Production

The work done is mostly produced on the computer using applications such as Adobe Illustrator and even Adobe After Effect in the production process. For the animation, all the effects and proper setup are necessary, such as character modelling, texturing, rigging, animating and adding visual effects and proper lighting. This process also involves rendering.
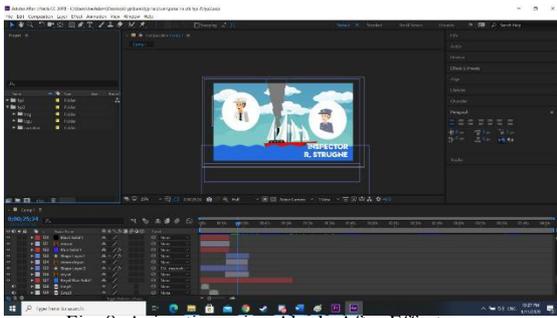
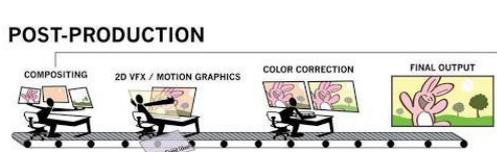Fig. 8. Animation using Abode After Effect.

Post-Production

Fig. 9. 3P Model, Post-Production

The final stage of the animation development pipeline is the Post-Production Phase. It is referred to as the tasks to be completed before a project finish. This is where the structure of the animation is done to make it easier to display, motion graphics and certain visual effects and colour correction are done to make the viewing eyes friendly. During this process, all the audio will also be placed in. The final performance would then be presented on the online site such as Youtube.
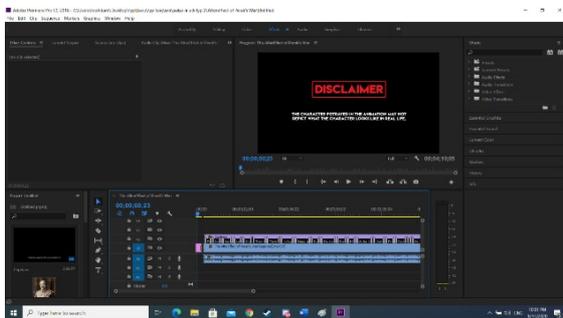

Fig. 10. Touch-up using Abode Premiere Pro CC

IV. TESTING AND RESULTS

This stage was to determine whether the completed product was able to convey the message and aid in the research. Questionnaire was distributed to a total of 30 respondents from the age that varies around 15 to 40 years old. The primary purpose of the questionnaire is to ensure that the researchers understand the project and to ensure that the researcher's necessary goals are met. This will therefore assist the researcher in enhancing the quality of the projects to come. This also will help to know if the respondents agreed on the objectives set by the researchers have been met. Thus, concludes by the result of the responses that the method used for conveying the topic of history using 2-Dimensional approach is a success as it is able to notify and inform the audience about Malaysia's histories that in the need of acknowledgment by the society in itself especially amongst the younger generations.

The outcome of the questionnaire that had been answered are fulfilling to the main problems and objectives targeted for the projects. Results is as follows:

Fig. 11. Percentages of respondent's that agrees on the effectiveness of medium used.

Based on figure 5, all the respondents agreed that the medium used in this project is helping them digesting the story better. This fact resolves the objective on the purpose of using animation as medium to convey the message of history. The method used has help the respondent in gathering new information easier
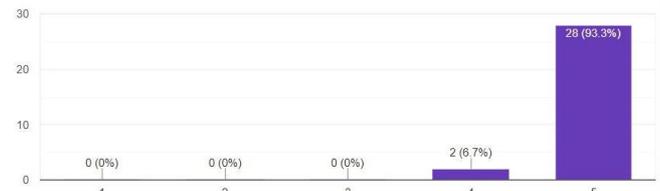

Fig. 12. Percentages of respondent's opinion on the informativeness of the animation

Based on figure 6, 28 out of the 30 respondent believes that the animation is indeed very informative and the remaining share the same though on it be quite informative. The information conveys is relatively easy to be gathered is believed due to thechoice of the medium used on this project.
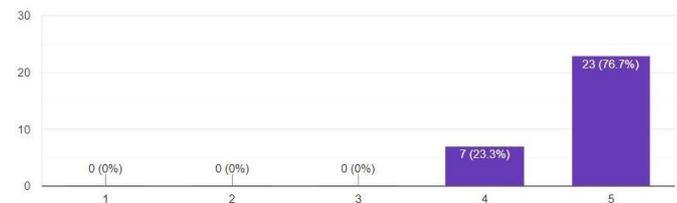

Fig. 13. Percentages of respondent's interest in finding out more similar animation

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Based on figure 7, 23 respondents are very likely to goes on finding other similar type history related video after watching it while the remaining 7 are quite likely to do it. This achievement has defeated the main problem which is the interest amongst younger generation on finding more and learning more about the topic of history. This result in significantly wider knowledge and better perspectives on life.

V. Conclusions

The overall effectiveness of the project is to be considered a success as it has achieved the objectives of the project. All the problems were relieved, and the objectives were successfully gain. This confirms the reality of the awareness that need to be made upon the history acknowledgement amongst the younger generation. Although being able to achieve the goals, the researchers believes that there still are lacking in term of animating the animation thoroughly as the animation is not as perfect as their target. Improvement of the project can be made on the narration, making sure that the voice is clearer for the pronunciation and for more history story telling is to made sure to gather a lot of resources for history is supposed to be a fact and not a tale.

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