

A Study about A Design Process of Interactive Multimedia Content Based on a Cultural Background (for an Indonesian Folktale)

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ABSTRACT

As the computer becomes a trend, interactive multimedia design can be one media to communicate the cultural knowledge. A folktale can be a powerful material to show a country's culture. In this project, we try to make the folktale content to be understood easily by implementing some cultural information background. The main aim of this project is to give a vision of the richness culture through the interactive multimedia technology. In this paper, we would like to show a flow map content, a streaming of design process and a visual interface design prototype. Finally, interactive multimedia design content is very useful for a transferring the richness culture because people tend to like a multimedia content. In order to make an effective interactive multimedia design content based on a cultural background, a designer should need to understand about users, culture, technology and the whole design process.

Keywords: Design Process, Interactive Multimedia, Culture, Technology.

1. INTRODUCTION

Historian Eric Hobsbawm said that human beings enter the ages that are lost their memory. It was caused by the dissolution of the past life and routine cultural and emotional information because of the rapid social changes and development of technology. Apparently myths and legend through verbal information is not enough for younger generation. To determine the history and memory of beings, and to give vision the richness of culture, various storytelling tools are restored. One of them is Interactive Multimedia. The heritage from the older generation to the younger generation must be done to save the culture and the history of one country. Interactive Multimedia Design is one of the ways out that can be offered to transfer the message in this era. The interaction that comes from the interactive multimedia design make the user becomes more active by using computer and involving in the story.

2. THEORETICAL BACKGROUND

2.1 The Concept of Interactive Multimedia

Interactive multimedia goes by several different names. Among them are Multimedia and Hypermedia. "Interactive multimedia" refers to multimedia that allows for

user control.

An important distinction exists between a multimedia project and an interactive multimedia software project. A multimedia project simply presents information to an audience through the use of a variety of media; music videos, for example, employ audio and video to present entertainment. On the other hand, interactive multimedia allows the audience or user to participate and control information. The media could include text, graphics, audio and video.

2.2 Interactive Multimedia Design

There are three characteristics that should form a key part of the interaction design process. These are: a user focus, specific usability criteria, and iteration.

Usability and feedback are the important factor in designing interactive multimedia. Designing usable interactive products requires considering who is going to be using them and where they are going to be used. Another key concern, is understand the kind of activities people are doing when interacting with the products. The appropriateness of different kinds of interfaces and arrangements of input and output devices depends on what kinds of activities need to be supported.

2.3 Interactive Multimedia as a Storytelling

Digital storytelling is the process wherein producers and consumers share the story through the multimedia, such as screen, text, voice, music, video, animation, etc. Multimedia ultimately aims to attain maximum efficiency by satisfying the emotions of consumers.

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A storyteller, Shirly Raines, defined the elements of story telling: story, audience and narrator. As the technology develops, the computer can be functioned as a narrator. The story becomes two way interactions.

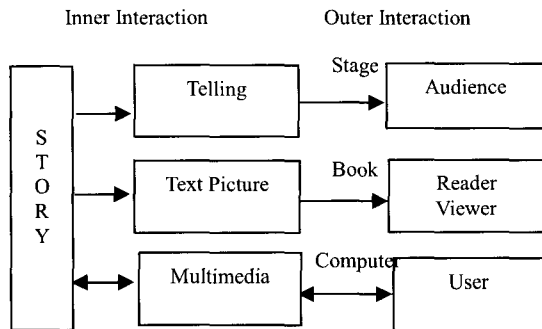


Fig. 1. Interaction in Storytelling

3. STORYTELLING ELEMENTS

3.1 Graphic Elements

The design image takes the Indonesian original image character combined with Indonesian famous pattern, named Batik. Certain pattern is put into graphic design then some modifications are made. Batik as the famous Indonesian pattern will be taken to influence the character of graphic designs such: drawing, background image, style etc.

This design shows the Indonesian culture, so the user can recognize the Indonesian original image character.

3.2 Multimedia Elements

Common media selection is based on the specific characteristics of the different representation (text, voice, audio, picture and moving picture). Text has authority reflected in a long tradition of trust and confidence in printed words. For people who can hear, voice is the most natural common mode. Sound can make a graphical interface more realistic, giving it an audio texture. Pictures can represent complex information at a glance. Movement makes it possible to demonstrate complex conditions and relationships between actions and events. A good combination of multimedia elements, make interactive storybook a good tool for learning process and giving the feeling impact to the user. For children, they can be captivated by the engaging music, large and colorful graphics and lively animation.

4. INDONESIAN FOLKTALE

4.1 Aspects of Indonesian Folktale

The Indonesian folktales are made based on the culture, society and social life of each area. Basically, the author wants to give positive education to children. The story in the folktale, help children understand about good attitudes and morals.

4.2 The Origin of Indonesian Ceremony Kasada

This project takes one of the famous folktales in Indonesia, The Origins of Kasada. This folktale is from East Java. The folktale is not as popular as Kasada ceremony, but it is contained the rich culture of Tengger society. Every year the people of Tengger have an offering ceremony below mount Bromo. The event takes place on the 14th of Kasada (10th month). This project tries to tell the story behind the ceremony. By making this story into an interactive story, user, especially children can easily understand the folktale, know the place of Mount Bromo and the culture of Tengger society.

5. PROCESS OF FOLKTALE CD MAKING

5.1 Collecting Resources

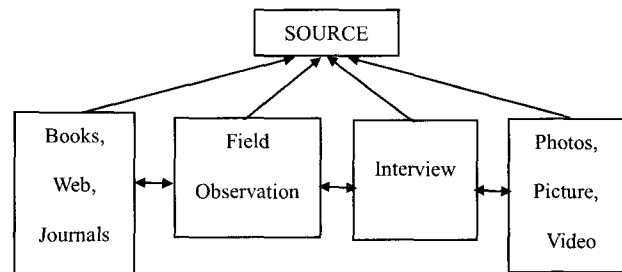


Fig. 2. Resources Collecting

5.2 Reviewing and Gathering Related Sources

After collecting resources, analysis must be done to know what are the sources needed to be applied in the folktale.

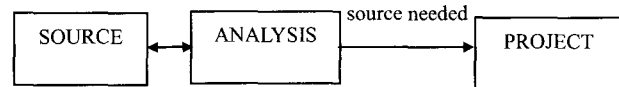


Fig. 3. Analysis the Resources

5.3 Making Concept and Work Flow

Before making a concept, analysis must be made in order to make an effective interactive story for children.

Table 1. Analysis Interactive Story

Interactive story	Effective	Not effective
Interactive	Clear option	Many option
Usage	Easy to use	Difficult
Story	Simple	Complicated
Design	Interesting	Boring, Repeat design

Through the clear concept, a user can get the message of the story, have different feelings about the place where the story come from and also experience the variety of culture.

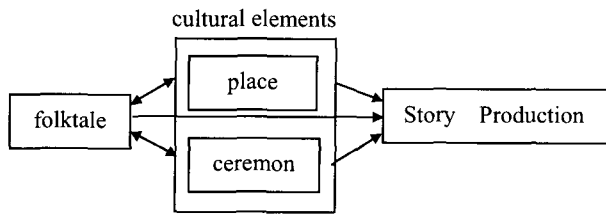


Fig. 4. Work Flow

5.4 Producing Interactive Multimedia

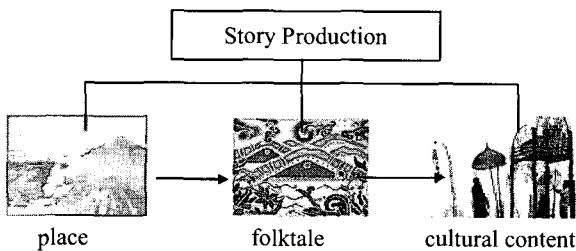


Fig. 5. Flow Map

5.5. Testing and Modifying

Testing will be done through survey to know the usability and the feedback.

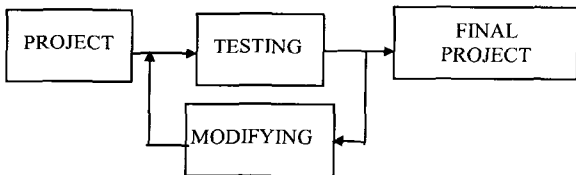


Fig. 6. Testing Modifying

6. IMPLEMENTATION CULTURE TO GRAPHIC ELEMENTS

To make the folktales content can be understood easily, this project try to implement cultural information based on a Java Cultural Background, where the story is originated. Graphic design style has been taken from the local content, which is the formal cloth pattern of people who do the ceremony. The idea was come from the batik motif, one of the famous patterns in Java.

6.1 The Analysis Process.

The analysis began with the cultural approach. The transfer of culture can be from many sources including folktales. Folktales has many kinds of elements that can be used to give a certain image to the folktales. From this source the idea is began, and folktales can have its local contents which can transfer the richness culture.

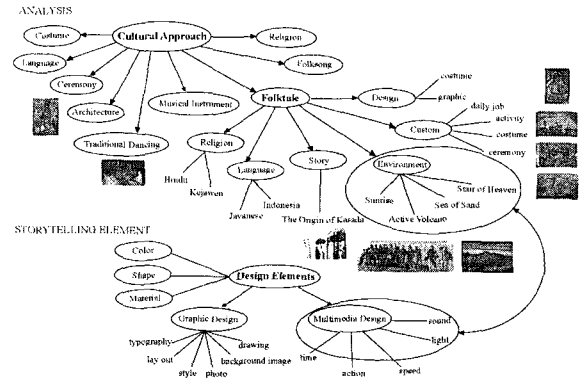


Fig. 7. Cultural Analysis

6.2 Analysis of Graphic Design

The color of the folktales background was picked up from the environment. The color of the sky was created by the range of sun rise to sun set. Later, the color was applied for the background story. Bromo Mountain is famous with sun rise, sea of sand and stairs of heaven. The color of three main environments are tried to be implemented in the story of folktales. The red color can represent active volcano, yellow color can represent the sun rise and blue color is the stairs of heaven. These three colors were also implemented in the story climax and anticlimax.

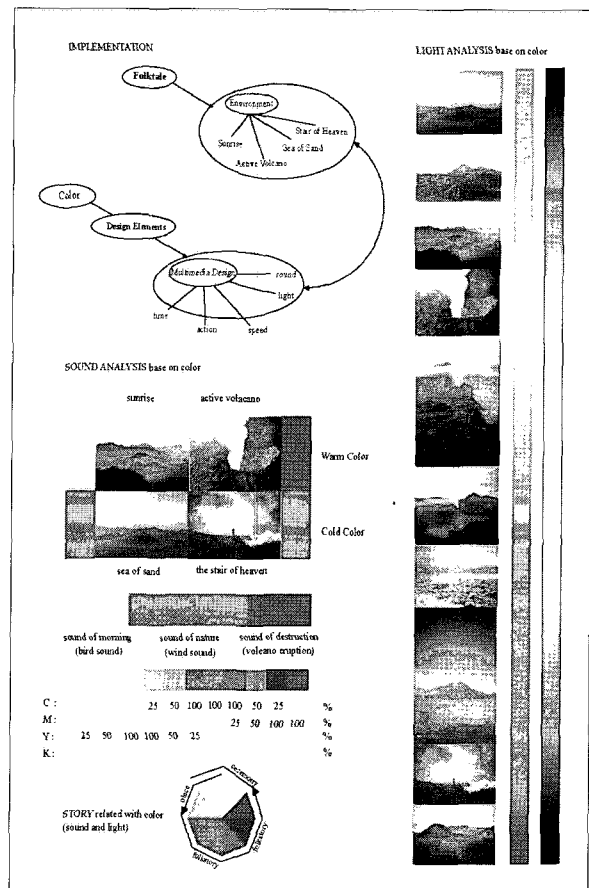


Fig. 8. Color Analysis

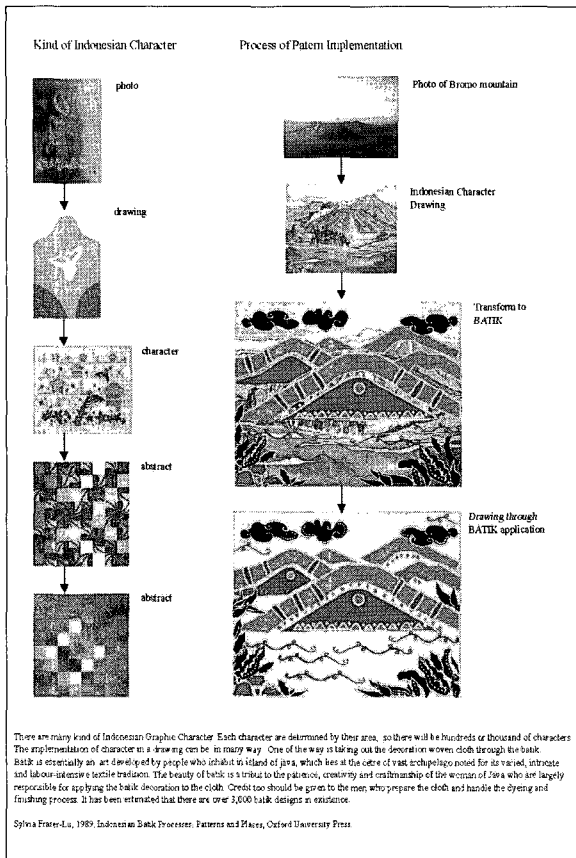


Fig. 9. Pattern Analysis

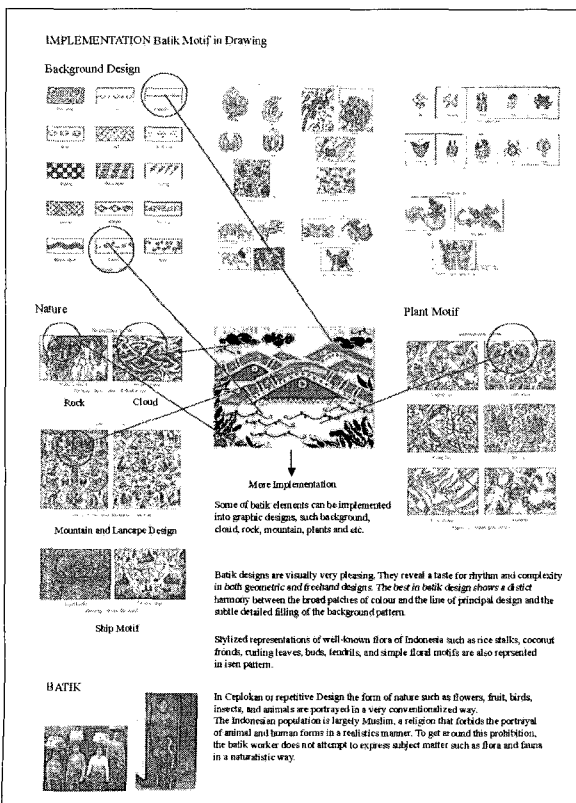


Fig. 10. Implementation Pattern to Graphic Design

Through the analysis of the graphic pattern, Batik is the most suitable pattern for the folktale graphic design.

There are many kinds of batik motif, such as: rock pattern, cloud pattern, plant pattern etc., some of them can be implemented directly and some of them have to be modified. In this project, there are two ways of batik implementation. First, the pattern was implemented directly to folktale graphic design. The second was selecting some patterns, combine them and do some modification to become an element in a folktale. The other graphic design was made by hand drawing, with rendering and coloring which were made as similar as Batik pattern. The next process was combined the pattern with the selected color background, which match with the story, for example: the climax of the story is when the volcano erupted, the suitable background color is red, whereas when the situation as calm as sunrise, the yellow color is implemented.

After graphic design analysis, multimedia design analysis has to be done. Sound and motion have to be matched with the story and graphic design.

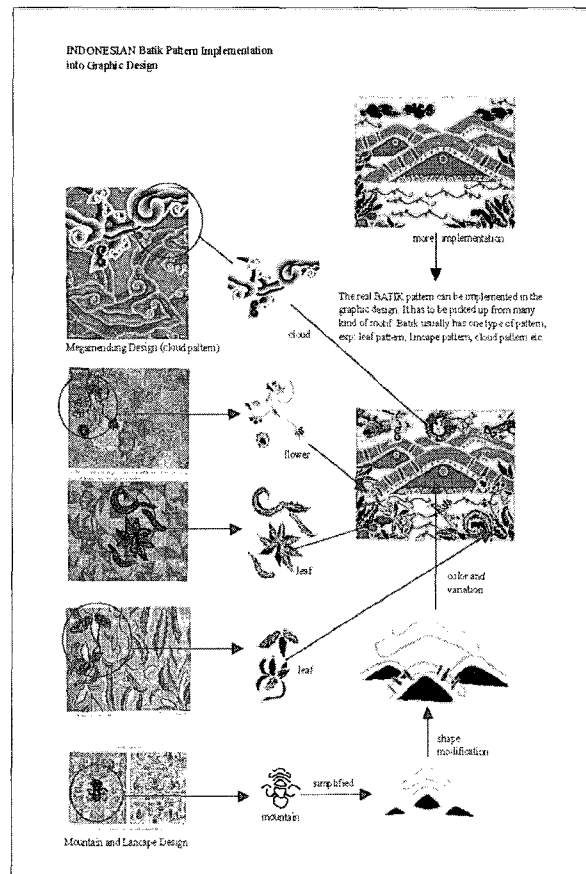


Fig. 11. Implementation Pattern to Graphic Design

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