

**A LOOSE PRINCIPLE FOR SABAH FOLKTALES
ANIMATED CHARACTER DESIGN: ADOPTION
OF KANSEI APPROACH**



TEDDY MARIUS SOIKUN

UMS
UNIVERSITI MALAYSIA SABAH

**FACULTY OF COMPUTING AND
INFORMATICS
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2019**

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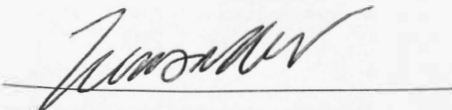
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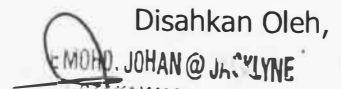
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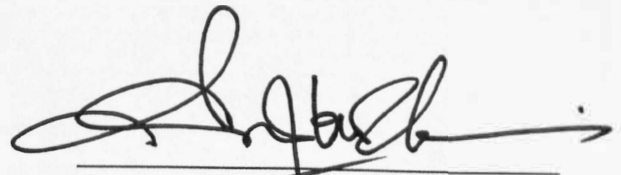
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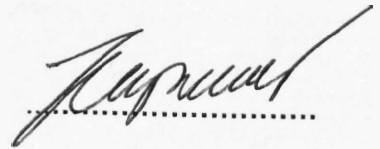
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DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries, and references, which have been duly acknowledged.

23 September 2019



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23 September 2019

ABSTRACT

In the folktale-based animation character design domain, the word 'appeal,' carries substantial weight. Many designers were familiar with the principles of 'appeal' as one of the essential elements. 'Appeal' can be defined as anything intriguing that draws and maintains attention. "Whereas the live-action actor has charisma, the animated character has appeal" (Thomas & Johnston, 1995). Related research focused on the technicality, which made animation character design 'appeal' rarely touched. The vague understanding and subjective nature of 'appeal' together with low supporting literature and comprehensive information had made it difficult to achieve. Local Folktales based animation also presents poor acceptance. The research aims to investigate the factor of 'appeal' through popular animation character designs. The 'appeal' information obtained from the popular animation character design is used to provide supporting methodology and literature to the animation character design domain. The research aims to develop loose principles of design to achieve 'appeal' that provides understanding, assistance, and knowledge to design new folktale-based animation character design. The research framework adopts the Kansei Engineering (K.E) method with the addition of art and design theories to further enhance the artistic effort. By using Qualitative Content Analysis (QCA), firstly, the research utilizes QCA to select seven (7) folktales based Japanese animation specimens from hundreds of animations from 1990-2015 significant with folktales traits. Japanese animation was chosen on its popularity ground through empirical research. Thirty-Six (36) animation characters determined by using the QCA and matrix system. The research produces twenty-five (25) design elements. Sixty (60) Viewer's Impression Words (VIW) determined through the use of formalistic and visual semiotic analysis (FVSA) through ten (10) expert's impressions. From the FVSA analysis, a measurement tool consists of sixty (60) VIW Semantic Differential (SD) scale questionnaires were distributed 100 evaluation subjects from the researcher University. The results from the measurement activity were analyzed using multivariate analysis to understand the 'appeal' factor. The loose principles called Animation Character Design Appeal Principles (ACDAP) were then proposed from the measurement. ACDAP was used as a loose rule of design to create new Sabah's folktales-based animation character by selected animators, and the new animation character designs were compared with existing Sabah's animation characters design to justify the proposed ACDAP. The ACDAP managed to assist animators in designing new Sabah's folktales-based animation characters. Results obtained showed improvements in the structure of 'appeal' in the new design. The method had provided a way to understand the principle of 'appeal' embedded in existing popular animation. It also had helped the research to devise a new loose principle to achieve 'appeal.' The methodology used in this research and the proposed ACDAP had been proven to provide understanding, assistance, and knowledge in the folktales-based animation character design domain. Although the size of the research might not reflect the whole animation domain, However, it laid some foundations in the process of understanding and applying 'appeal' in animation character design.

ABSTRAK

PRINSIP LONGGAR BAGI REKABENTUK KARAKTER ANIMASI CERITA RAKYAT SABAH: ADAPTASI PENDEKATAN KANSEI

Dalam domain animasi cerita rakyat, perkataan 'appeal', membawa maksud yang besar. Bagi juruanimasi, 'appeal' membawa maksud sesuatu yang menarik dan mampu mengekalkan perhatian. Bagi Pelakon ianya dikenali sebagai karisma, manakala animasi ia dikenali sebagai 'appeal' (Thomas & Johnston, 1995). Penyelidikan karakter banyak memberi tumpuan kepada aspek teknikal, yang membuatkan 'appeal' dalam reka bentuk watak animasi jarang disentuh. Kurang kefahaman dan sifat subjektif 'appeal' dan maklumat komprehensif yang kurang menjadikannya sukar untuk dicapai. Animasi cerita rakyat tempatan juga kurang diterima di Malaysia. Penyelidikan ini bertujuan menyiasat faktor 'appeal' melalui reka bentuk watak animasi yang popular. Maklumat 'appeal' yang diperoleh daripada reka bentuk watak animasi popular digunakan untuk menghasilkan metodologi dan literatur sokongan. Ia juga bertujuan untuk membangunkan prinsip reka bentuk 'loose' untuk mencapai 'appeal' yang memberikan pemahaman dan pengetahuan dalam merekabentuk watak animasi. Rangka kerja penyelidikan ini menggunakan pendekatan kaedah Kansei Engineering (K.E) dengan penambahan teori seni untuk meningkatkan lagi kefahaman artistik. Dengan menggunakan Analisis Kandungan Kualitatif (QCA), Penyelidikan ini memilih tujuh (7) spesimen animasi Jepun dari beratus-ratus animasi dari tahun 1990-2015 yang signifikan dengan ciri-ciri cerita rakyat. Animasi Jepun dipilih berdasarkan popularitinya melalui penyelidikan empirikal. Tiga puluh enam (36) karakter animasi ditentukan dengan menggunakan QCA dan system matriks. Penyelidikan ini menghasilkan dua puluh lima (25) elemen reka bentuk. Enam puluh (60) Viewer's Impression Words (VIW) ditentukan melalui penggunaan analisis formalistik dan semiotic visual (FVSA) melalui sepuluh (10) animator dan ahli akademik. Dari analisis FVSA tersebut, 'measurement tool' yang terdiri daripada enam puluh (60) kuadran skala Diferensial Semantic (SD) telah diedarkan kepada satu ratus (100) responden daripada Universiti penyelidik. Hasil daripada aktiviti ini ia dianalisis dengan menggunakan analisis 'multivariate' bagi memahami faktor 'appeal'. Prinsip 'loose' yang dipanggil Prinsip 'appeal' Reka Bentuk Animasi (ACDAP) kemudian dicadangkan dari aktiviti tadi. ACDAP digunakan sebagai peraturan reka bentuk yang 'loose' untuk merekabentuk watak animasi berasaskan cerita rakyat Sabah yang baru oleh animator terpilih. Reka bentuk watak animasi yang baru dibandingkan dengan reka bentuk watak animasi Sabah yang sedia ada untuk mewajarkan ACDAP. ACDAP berjaya membantu animator dalam merekabentuk watak animasi. Hasil yang diperoleh menunjukkan peningkatan dalam struktur 'appeal'. Kaedah ini telah menyediakan satu cara untuk memahami prinsip 'appeal' yang terkandung di dalam karakter animasi popular. Metodologi yang digunakan dalam kajian ini dan ACDAP yang dicadangkan juga dibuktikan mampu untuk memberikan pemahaman dan pengetahuan dalam domain reka bentuk watak animasi berdasarkan cerita rakyat. Walaupun saiz penyelidikan ini mungkin tidak mencerminkan seluruh domain animasi, Namun, ia dilihat dapat meletakkan beberapa asas dalam proses pemahaman dan penerapan 'appeal' dalam reka bentuk karakter animasi.

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LIST OF ABBREVIATIONS

FVSA	-	Formalistic and Visual Semiotics Analysis
PLS	-	Partial Least Squares
KW	-	Kansei Words
VIW	-	Viewer's Impression Words
FA	-	Factor Analysis
PCA	-	Principle Component Analysis
KE	-	Kansei Engineering
FMCG	-	Fast Moving Consumer Goods
KE Type I	-	Kansei Engineering Type I
KES	-	Kansei Engineering Type II: Engineering System
ACDAP	-	Animation Character Design Appeal Principles
CGI	-	Computer Generated Imagery
P2P	-	Peer to Peer
KE Type IV	-	Kansei Engineering Type IV: Mathematical
SD Scale	-	Semantic Differential Scale
UX	-	User Experience Design
QTI Type 1	-	Quantification Theory Type I

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CHAPTER 1

INTRODUCTION

1.1 Overview

Plenty of efforts have been made to produce or create animation characters based on folktales. Projects by Cohen (2010) the secret of Kells, and Peters (2018) Disney's folk stories are examples of them. However, many productions have failed to attract viewers. In the local animation industry, one big-budget animated production called Oh La La failed to attract viewers because of the lack of quality in design aesthetics (Arshad, Kim, & Manaf, 2018). To make animation character attractive, Thomas & Johnston (1995) suggested that animators should follow the twelve (12) principles of animation. The principle that deals mostly on animation characters are 'appeal.' According to Surtees (2019), the secret to having a successful character is to make it believable, and many processes are involved in achieving 'appeal.' To create animation character designs on folktales that incorporated 'appeal' in its design needed a thorough understanding of the meaning of the word. The in-depth understanding of 'appeal' will help designers to create more believable characters. To understand the whole process of animation and study its whole traits would require much time ("Traditional animation," 2019). Therefore, the research will only investigate animation character's principle of 'appeal,' to understand 'appeal' in animation character design and to achieve 'appeal' in designing new animation characters. Discussions on animation character 'appeal,' especially that involves folktales animation were few; hence, it is essential to do so to support this study. To reach the animation character 'appeal,' the study on viewers' impressions should be pursued. Animation character design is a product just like any other tangible products that require positive impressions before the decision to view it.

To achieve 'appeal' in animation character design, it needs systematical ways. The research proposes that it requires a method that can translate the viewer's impressions to understand 'appeal.' The nearest method is Kansei Engineering, which has been developed in Japan for the past few by Emeritus

Professor Dr. Mitsuo Nagamachi. It is used to incorporate the feelings and impressions of the audience in the creation of products.

This thesis proposes to understand how folktales-based animation character design could be made appealing to the viewers and at the same time, enhance their interest in watching such animation. It is also to identify 'appeal' as well as design theories embedded in selected popular folktales-based animation. The hidden 'appeal' factor from existing popular animation could be the answer in understanding and achieving the desired factors of the principle. This research also proposes a method that can be used to grasp the viewer's impression and translate it as a basis to create new local folktale animation character designs that 'appeals.' In conclusion, the approach of Kansei Engineering in folktales animation character is hopefully to continuously develop and integrated with the adopted method to progress in the animation industry, generally.

1.2 Problem Statements

Problem statement presents the description of issues currently existing, which needs to be addressed in this study. The issues provide the context needed for the research and generate the questions, in which the research will answer throughout this study. The word 'appeal' often presents misunderstanding to designers and at the same time, an important principle in animation character design. The problem statements in this study associate the principle of 'appeal,' character design, and folktale-based animation. Below is the detailed description of the statements.

a. The vague understanding of the principle of 'Appeal' to designers and animators

The twelve principles of animation state that 'appeal' is one of the most important principles (Thomas & Johnston, 1995). The word is frequently misinterpreted to suggest cuddly bunnies and soft kittens. To designers and animators, it meant anything that a person likes to see, quality of charm, pleasing design, simplicity, communication, and magnetism (Williams, 2002). For an animation to be successful in conveying messages and receive decent viewership, it must contain the principle of appeal (Punsvik, n.d.). The 'appeal' in animation character could be the 'attraction' factor in getting more viewers and fans to relate to the animation character (K stuff,

2008).

'Appeal' is a perplexing principle to define as it is based on a personal character attractiveness (Walker, 2013). Walker also said that it is entirely subjective on the viewer's point of view and personal opinion as to what makes it as visually pleasing. He further adds that it is the character's visual qualities that get the viewer's attention during storytelling, and characters that are monotonous in terms of design and that are more generalized are far less exciting. With its ambiguity and subjectivity, it can be quite a challenge especially for beginners to design a memorable and suitable character, in where, when it comes to the early process of character design, a lot of mixed information and ideas from media, cultural background, popular trends and the attempt to add originality to a cliched character will come into mind (Yuen, Tarique Azam, & Ang, 2015).

Citing a study on web design using Kansei Engineering, in which the design elements, principles, and theories bares similarities to animation character design, Lokman (2010), said in realizing the concept in terms of Web site appearance, designers often misunderstand the description provided by users or user advocates, who in turn do not really understand the concept that they actually want. Animators and producers often face the same problem with concepts and themes wanted by the audience. She further adds, designers possibly come out with the specification by their intuition and creativity.

b. Low supporting literature and comprehensive information in the field of character design

According to Iuri (2009), the low number of supporting literature and comprehensive information in the field of character design presents a setback for designers and animators trying to find thorough information on the character design process, since having in-depth knowledge and understanding of it presents the beginning of the creation of expertise in the field. The activity in designing characters for computer animation demands a great deal of complex problem solving and combining aspects from the story, subjective ideas and abstract visual elements such as lines, shapes, and colors in order to generate a character that can be understood and believable (Attafe, 2007).

Although the information on character design and appeal are available through books and online resource, they usually focused on the techniques or style of specified productions and technical 'how to' (Iuri, 2009). Iuri further adds that whereas art books usually reveal process of character design but rarely touch on the complete process of making a character 'appeal' except for the artistic side of the drawing process, for instance on how to draw eyes that appeal.

To get a good animation character design, the one that appeals and attractive is the one that believable, memorable, and perfect for the story it was in. However, according to Iuri, he further mentioned that for the time being, there are no effective formulas to achieve the outcome and the approach taken by different animators and designers are varying between them. Designers will design according to their personal preferences, background and experiences in where, they will take into consideration their cultural background, existing and precedent studies as well as popular trends and ideas. The difficulty in creating appealing animation characters has similarities elsewhere like in Malaysia, students will design animation characters based on their experience due to the exposure from media, and most of the influence can be seen from anime and Disney (Yuen et al., 2015). Creating unappealing characters as part of any project could cause the failure of the project or production and at the very least, a negative response from the viewer (Tharib, 2013). Walker (2013) mentioned how there are various ways but no definite answers on how to achieve appeal in animation characters. Walker further adds, for now, it depends on estimation without having sufficient information on what is 'appealing.' Failure in an animation production is prone after a massive amount of investment.

c. Poor acceptance of folktale based animation in Malaysia

Most animation on folktales would get a low rate of numbers of viewers for some reason. The first folktales-based animation from Malaysia to be shown in cinema entitled 'Silat Lagenda' cost Rm 5 million to produce (Manah, 1998). Manah adds, however, the animation production only received RM 142 thousand in ticket collection. Manah also said that the folktales based Malaysian animation entitled Cheritera, which told a story on Iban folktale which is the Moon Princess and the King of the Sun with bits of other stories such as the buffalo and the mouse deer, with a

production budget of RM 1 million it only managed to receive around 2 thousand ringgit in ticket sales. 'Putih' with a story based on Malay folktales is an adaptation of the classic Malay folklore Bawang Putih Bawang Merah that is considered as a Malay version of Cinderella, gross in about 400 thousand with a budget of RM 2.21 million ("Filem Animasi Malaysia," n.d.). It can be seen that from these three big-budget folktales based animation, they did not fare well in the local market and did not manage to penetrate the international market. Among the reason for the poor performance was character design appeal, and the quality of the whole animation, storyline, and marketing strategy (Utusan Online, 2015). Citing a case from India, particularly on folktale animation, Sharma (2012) points, a lot of Indian animated content lacks an appealing narrative," Which is the identical case with folktales worldwide. India is one of the technology-advanced countries in the creative industry with rich content on folktales. She also said that animation companies, draw their plots from mythology: Ramayana in 1992, Hanuman in 2005, Krishna in 2006, and Luv Kush in 2010. Most folktales animation production is so focused on instilling values and moral tale until they forget that the foundation of any folktale animation is about affecting human emotions and she further said that almost none of the animated films have been successful (Sharma 2012).

Table 1.1: Malaysian Animation Production Cost VS Ticket Sales

Malaysian Animation Film	Production Cost	Ticket sales
1 Silat Lagenda (1998)	RM 5,000,000	RM 142,000
2 Cheritera (Sept 2001)	RM 1,000,000	RM 2,000
3 Putih (Okt 2001)	RM 2,210,000	RM 400,000
4 Budak Lapok (2007)	RM 2,590,000	RM 161,000
5 Seafood (Mac 2012)	RM 12,000,000	RM 2,360,000
6 War of the World- Goliath (Nov-2012)	RM 15,000,000	RM 280,000
7 Bola Kampung the Movie (2013)	RM5,700,000	RM 610,000

Source: Filem Animasi Malaysia. (n.d.)

d. Less awareness of folktales within the younger generation

Folktales are told from generation to generation, passed as a form of verbal stories, and it usually is a tale about people, life, animals, spirits, and fairy tales. Sometimes it carries morals and life values. In the past feudal period, Malay folktales move through generations orally and were documented recently in writing forms. It contained stories or narrative literature where it incorporated local situations, characters, and situations. The folktales were treated as a source of entertainment in the olden days. However, it is threatened with extinction as less awareness can be seen, especially with the younger generation (Amirudin, 2017). As stated by Saleem (2012) the reflection of folktales similarly in animation bears the responsibility of highlighting the underlying message and functions through its tales of legends and mythologies to make the receiver perceive the story as a symbol, a function that it has been performing from the times of oral tradition. Saleem further adds, creating folktale animations carry a distinctive weight and the aim of shaping and guiding young minds and perpetuating socio-cultural anxieties remains the same. Saleem also said that the responsibility of the storyteller has shifted from the shoulders of the elders in the family to the gadgets of modern society.

e. Local animation character design quality and 'appeal.'

The animation scenario in Malaysia paints a slightly different picture. Some research blames the aspects of animation education as the main cause of less quality animation (Fadli Abdullah & MD Sidin Ahmad Ishak, 2010). According to Koay (2010), Hassan Muthalib stated that a lot of animation production house complained that animation graduates are only trained on animation technology and are less knowledgeable on basic animation, storytelling, cinematography, acting, and editing.

Koay also adds that the father of Malaysian animation Hassan Muthalib points out that local film animators today are so engrossed with how their work looks visually, that they forget how to convey a good story. Animators and educators teach only the technique and software and forget the other important basic things to make an animation appeal. He further adds, "But they forgot that the technique is about sending the story across. A good technique or research method to create folktale based animation must be developed to at least improve the initial animation making process such as how to achieve appeal in character drawing, to attract viewers and

at the same time preserve and convey messages included in these familiar stories (Koay, 2010). Hassan (2000) adds that folktale heroes and stories must be promoted to the local audience, and this responsibility holds in the shoulder of animation production as a business. He further mentioned that the folktale-based animation had one problem to be solved. It is on how to make the animation characters 'appeal', interesting, to make the character and story perceived as a symbol, a function that a folktale should be making.

1.3 Research Objectives

This research aims to render evidence that by combining several art theories and adopting the Kansei Engineering method, it will be able to identify 'appeal' factors embedded in existing popular Japanese folktales-based animation characters. These 'appeal' factors are the main traits that made them popular (Eberle, 2015). The methodology to extract 'appeal' factors in animation character designs, therefore, must be investigated through Kansei Engineering approach to justify the theories, principles, and elements involved.

This research develops its objectives from issues related to the problem statements

- a. To investigate the factor of the principle of 'appeal' through existing popular animation character designs**
- b. To provide supporting methodology and literature to the animation character design field to achieve the principle of 'appeal' in local folktales animation character designs**
- c. To develop loose principles of design for 'appeal' that provide understanding and knowledge to design local (Sabah) folktale-based animation character designs**
- d. To design local (Sabah) folktale-based animation character based on the proposed new loose design principles**

The paragraph below explains the further description of the objectives:

- a. To investigate the factor of the principle of 'appeal' through existing popular animation character designs**