

A Model for Animation of Yorùbá Folktale Narratives

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ABSTRACT

African folktales particularly, Yorùbá folktales are on the verge of extinction due to modernization. Though attempts have been made in the area of digital storytelling and multimedia technology to enhance its teaching, learning and competitiveness. The paper argues that animation as a multimedia element has drawn the attention of both young and old, and has shown to be a veritable tool for both formal and informal education used in making sense of place, culture and heritage serving as a medium for fostering the spirit of reading among children and younger adults, promoting socio-cultural norms, and values, preserving and conserving our cultural heritage and revitalization of our indigenous languages. The aim of this study is to propose a model of animation for Yorùbá folktale in order to motivate the reading and socio-cultural awareness among children and young adults. In order to capture the animation and Yorùbá folktale features and components for the model, this paper focuses on related conceptual model, review of previous models and analysing the digital application of animation in Yorùbá folktale. As a result, the study hopes to help preserve and popularize folktales among children and young adults which will also provide guideline strategy to animators in developing Yorùbá folktales.

Keywords: Animation, Yorùbá folktale, Multimedia, Model, Education.

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1. INTRODUCTION

The rapid advancement in Information and Communication Technology (ICT) in the last decades have significantly changed the content and practice of education. This advancement of ICT application in education makes it complimentary medium of education and learning process. In fact, in the last two decades, there has an increasing demand for instructional needs both in quality and quantity. Today, ICT plays an important role in educational institution as well as entertainment and since its technologies has come into every facets of our lives including learning; many educational studies and curriculum have been consummated to that structure. So, the introduction of ICT into education as well as entertainment has provided more efficient and customized software teaching aide thus reaching a great number of people [27].

The use of this IT application has enabled instructional materials to be utilized in a variety of exciting elements to deliver knowledge and instructions in order to ensure that student focus on learning strategies. Also, the bedrock of the information revolution is the development of digital technology particularly, multimedia, which has brought about a significant change in the way we conceive, describe and foresee our world.

Multimedia Technology is an aspect of ICT which involves the use of text, pictures, audio sounds, videos and computer generated animation or any combination to convey facts, beliefs, ideas and stories that when communicated will provide value to the audience on a computerized platform [25]. The multimedia elements when appropriately used are able to strengthen students' understanding and memory of the learning content. In essence the emergence of multimedia technology is one of the most exciting innovations in this age of IT [10].

Multimedia technology finds its application in various areas including, but not limited to, advertisements, art, education, entertainment, engineering, medicine, mathematics, business, scientific research and spatial temporal applications. It is used in instruction in a variety of creative and stimulating ways such that it can be used to teach specific subject matter, societal values, or to change behaviour by endangering specific socio- cultural attitude, such as to address health matters among others.

Animation is a Latin word called ‘Anima’ which means ‘soul’. Simply put, to animate is to give life to inanimate objects, drawings, and images. In fact, animation is the rapid display of sequence of images to create an illusion of movement [23, 4, 11]. The development of modern animation began in the 1930’s in America during which the animation popularized by Disney using 3D. During the 1964, the scene of animation shifted to computer where Bell laboratories started to develop computing techniques for producing animated films. However, cartoon animation in Nigeria is dated back to the colonial era among which the pioneering cartoonist is Akinola Leseke. There exists two types of animation namely: two-dimensional (2D) and three-dimensional (3D) animations.. Though there is no rigorous classification of computer animation [18], they are however classified into three (3) such as 2D animation drawn in colloid or other traditional painting, computer animation and stop motion which is based on production process, and its impact[22]. There are various techniques for creating animations: flipbooks, stop-motion, cut out, rotoscoping and so on.

In ancient times and ancient societies, storytelling is one of the oral traditions practiced in the community through which knowledge (beliefs, such as customs, norms and values) and information are delivered by words of mouth (orally) from the older generation to younger generations [15,8]. There are several types of stories which include folktale, animal stories, legends, myths, proverbs, and tales [31]. Folktales are stories about people’s lives and imaginations as they struggle with their fears and anxieties about the world around them. [2] defined folktale as sayings, verbal compositions, and social rituals that have been handed down by word of mouth from generation to generations. Folktale is one of the commonest and most popular form of oral literature in African societies. In term of form, it is a traditional story which is told for entertainment and believed to be handed down in written or oral form. In this context, the folktales as a literary genre embraces a range of narratives that varies from explanatory stories, humanistic stories to fairy tales [5, 6, 9]. concluding remarks.

Yorùbá people have a rich and complex folklore system, which consists of riddles (*aló-apamò*), jokes (*ẹ̀fẹ̀*), wise sayings (*ọ̀rọ̀-ìjìnlẹ̀*), Proverbs (*òwé*), Folktales (*àlùlò*), and so on. These folktales add value to life and teach morals which help in making decision and motivate the awareness of the society to change behavior [17]. The Yorùbá homeland is located in West Africa. It stretches from a savanna (grassland) region in the north to a region of tropical rain forests in the south.

Presently, they are found in large concentration along the West African coast as well as other major cities of the world [14, 3].

Yorùbá language is spoken mainly by the natives of southwestern part of Nigeria with an estimated population of over 37. 2 million [16].

1.1 Problem Statement

There have been several attempts by folklorist and other stakeholders in Nigeria to document, produce and present their various folktales. Today, African folktales particularly, Yorùbá folktales are on the verge of extinction and the danger that looms over Yorùbá language and its heritage is increasing daily especially as more natives move to urban areas where most interactions are done in English language (urbanization). Furthermore, there is at the moment, a dearth of criticism of Nigerian folktale especially, Yorùbá folktales which is fundamentally as a result of non-recognition of the folktale as a form worthy of serious academic attention in our educational system, hence the insufficient production of its animated stories and play among native animation developers. Also, the Yorùbá folktales are slowly being forgotten by the youths and children in this 21st century due to modernization and they seem to have no knowledge of the existence of such stories since they are exposed to foreign stories such as Cinderella rather than tales of Ìjàpá and Baba onikan. It is also true that many adults or parents rarely or never tell such tales to their children any longer.

Currently, Nigeria produce few or no animation stories, while most of the animation stories viewed are imported from United States, Japan, Korea and so on which in essence are technological enhanced than the local ones in Nigeria. However in terms of content (value, moral, lesson etc) and plot, they are poorly suited for children in Nigeria because they do not conform with our local socio-cultural values which is peculiar to Africa [32, 33].

Therefore, there is need for research to develop a framework or model with good story plot that takes into consideration the socio-cultural values for educating as well as entertaining our children. This will help in preserving and popularizing Yorùbá folktales in our society so as to ensure the continuity of folklore for future generations. This study hopes to revive and redeem the dearth thus making folktale art more vibrant and recognizable. In order to conserve Yorùbá folktales, a model for animating Yorùbá folktales will be presented and discussed in this paper as a guide for animators.

Having described the background of the study, the problems addressed, and the aim, the rest of this paper is organised as follows. Section 2, examines previous related works, folktales and animation principles while the conceptual framework is discussed in Section 3. Section 4 describes the proposed framework for digital animation of Yorùbá folktales in general based on several characteristic features, and Section 5 is the conclusion.

2. RELATED WORKS

The study of narratives has had a long history in Artificial intelligence. Narratives are a representative of aspect of human experience. They are used to communicate, convince, encourage and entertain [7]. [5] and [7] categorized narratives into formal, somewhat, traditional (myth, legend and folktale) and informal folktale is a generic term for various form of narrative prose literatures found in oral traditions of the world. Folktales are heard and remembered and they are subject to various forms of alterations in the course of retelling thus folktale differs. [35] in his work stated that these tales are receptive of the specific cultural background. Folklore is common to all people, its understanding, appreciation and sharing in another culture's folklore transcends race, colour, social class, and creed more effectively than any other single aspect of human existence.

The Yorùbá recognizes two (2) classes of tales: folktales (*ààlò*) and Myth-legend (*itàn*). Folktales seem to have resulted from the combination and evolution of simpler elements that contains several cycles and recycles of basic narrative structure. It will not be possible to make much progress in the analysis of narrative until the simplest and most fundamental structures are analyzed in direct connection with the aim of identifying the basic functional units of narratives and also determining their overall structure.

Folktale plays significant roles in the life of the society it belongs. Folktales have been shared in every society to entertain, educate, and preserve culture. As emphasized in the United Nations Educational, Scientific and Cultural Organization (UNESCO) Convention for the Safeguarding of Intangible Cultural Heritage (2003), folktales play an invaluable role, along with other cultural traditions, in

bringing people closer together and ensuring exchange and understanding among them [30]. This affords message with great content to target audience, that is, children wherein the result shows that different factor have effects on the children such as liking and disliking cartoon character, costumes, accessories. Rough folktales, children are given a glimpse into a world where fantasy and reality meet. Again, most folktales and songs condemn bad behaviour as goodness triumph over evil and is always rewarded; heroes and heroines live happily ever after, while villains are suitably punished.

2.1 Previous Works on Folktales Animation

From literatures, there are several research in digitization of folktales with the view to presenting a computational model for the development of digital artifact and software. [29] subjected the African folktales, particularly Yorùbá folktale narratives to computational analysis which prompted the need to expand the application. The study considered Yorùbá folktale which is said to be an essential tool for educating the children and youth on the morals and culture of the society. [24] evaluated the effectiveness of storytelling based on local content of Malay folktale. In the study, seven types of folktales were selected. In order to accomplish this, the old content were replaced with new medium of presentation by using multimedia technology of 3D, interactivity, internet and web education.

In 2007, [23] presented a conceptual model for edutainment Animation Software in order to motivate socio-cultural awareness among children. In the study, the proposed model used 2D animation which also includes some learning activities related to the story. However, the folktale part needs to be modified so that it can give the characteristics and features of the folktale as shown in Figure 1

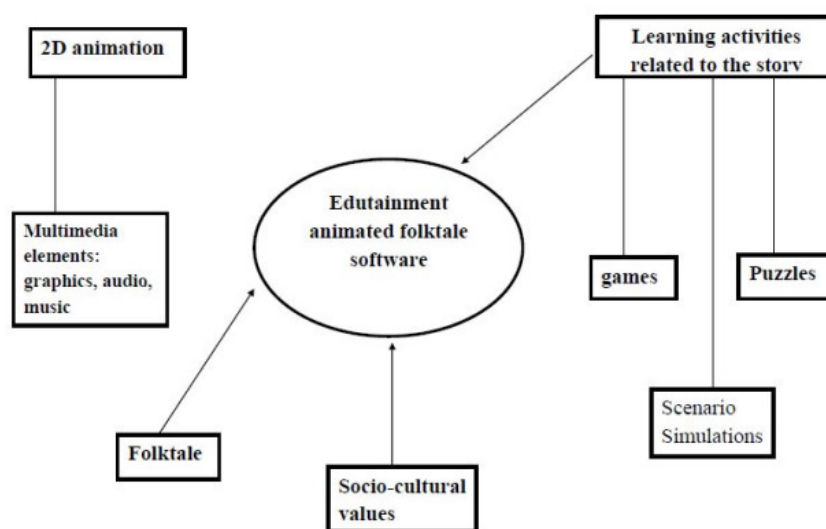


Figure 1: Conceptual model for Edutainment animation

Similarly, [9] presented her Courseware development to project positive value and Images of TRAdigital Malay Oral narrative (CITRA) model which is also in line to revive and encourage the reading habit among student. Here, the proposed model illustrated in Figure 2 consists of several components such as pedagogical approaches, learning theories and holistic development but not much details were given on the characteristics and elements of folktale.

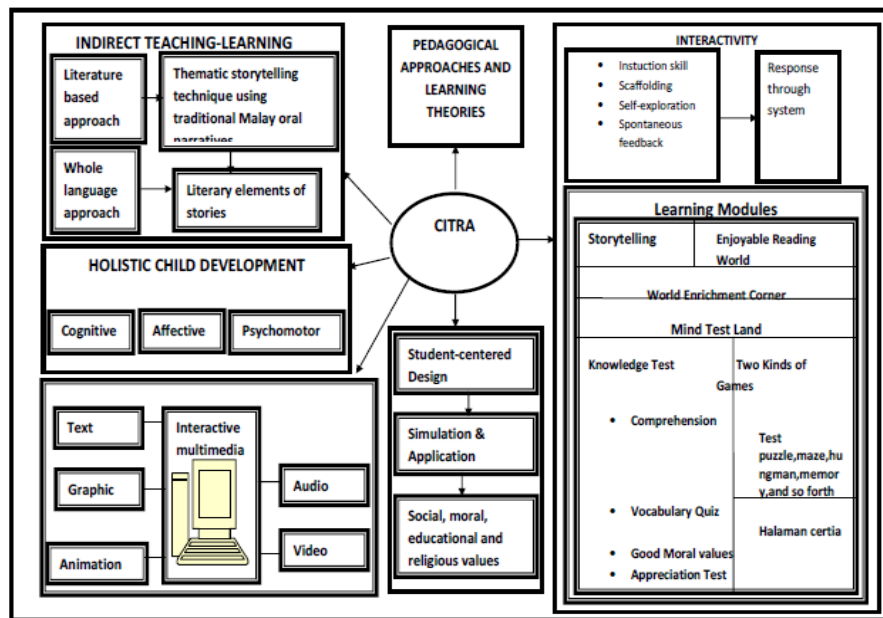


Figure 2: CITRA model for Edutainment animation

According to [1] the mobile Yorùbá language tutor 'Asa' is an interactive application for kids to get acquainted with the basics of Yorùbá language. The application uses games, animation, voice, and colorful graphics to teach the Yorùbá culture and contains topics including etiquettes and ethics in the language. Again, [34] presented a Malaysian folktale animation which improved on the drawback identified in the earlier developed model.

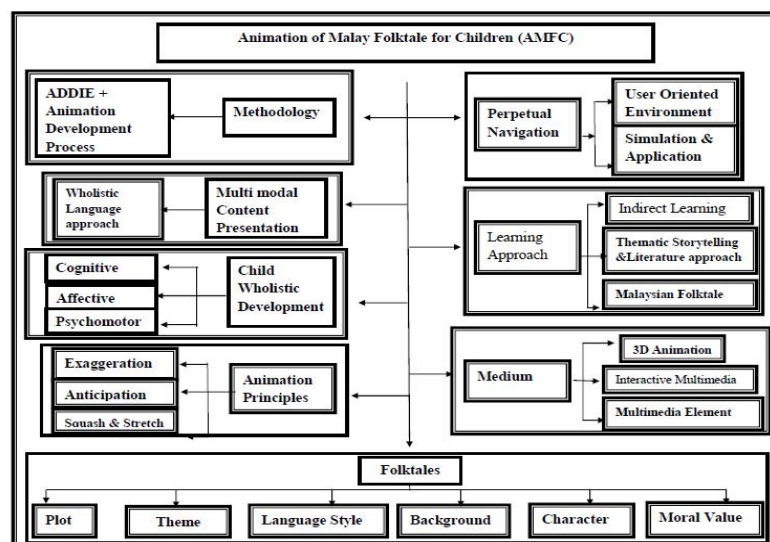


Figure 3: Proposed Model for animation Malay Folktale.

However, the models presented are software based consisting of several modules which did not provide much details on animation principles and folktale features, although it was focused on Malaysian folktale. As a result of this, there has been a limited research on developing animation model for folktales. Therefore, this research aim to examine the principal components of animated folk stories focusing on *Yorùbá* folktales in increasing children's recognition and understanding of *Yorùbá* folktales.

2.4. Principle of Animation

The principles of animation were developed to make animation, especially character animation, more realistic and entertaining. These principles can be applied to the types of computer animation. Nowadays, there are several animation software that can be used in creating animated videos. Others include Adobe Photoshop, Anime studio, 3D Max, Poser, and many others. There are downloadable software programs and on-line applications, 2D program with automated templates, 3D modeling environments and sophisticated rendering platforms.

The process of producing animation in conventional method emphasizes some principles during the production. This is to ensure that the animation is produced not only able to attract the attention of the audience, but also look realistic. Therefore, in the production of digital animation, whether it is 2D or 3D animation, some basic principles have to be followed in order to ensure that the result obtained are more interesting and realistic [13,11, 26]. Some of the principles include squash and stretch, exaggeration, slow-in and slow-out, staging, secondary action, character personality etc.

3. CONCEPTUAL FRAMEWORK

Meanwhile, there has been an increasing interest in the analysis of various narratives (folklore) genres. In view of this impact, several studies have been carried out on folktales and its analysis. Generally, there are two main theories of narrative: Functionalist and Structuralist through which the relationship within which narratives are examined [21]. The first explicit theory of narrative, that is, the functionalist theory focuses on the roles played by narratives while the latter is concerned about how it is produced. Propp's while studying hundreds of Russian folk stories and fairy tales stated that all narrative have common structure. But [12] observed that Propp's work was a reaction to his dissatisfaction with the early 20th century theory.

As a functional enthusiast, he identified 31 functions parts and concluded that it is made from comparison of theories of the tales that the result will be morphology which is a description of tales according to its constituent components parts and relationship of the component to each other and to the whole story. Propp's proposed the scheme for its representation of range of Russian folktales.

However, the structuralist theory deals with features common to narratives, analyzing the nature, form and function of narration. [20] in his work while simplifying the idea of narrative theory suggested that all narratives including folktale have five stage model starting from initial state of equilibrium through an action disturbing or distorting that states to the attempt of resolving the disruption state, the solution state and finally to the terminal state in which the equilibrium is re-established the earlier theory proposed by Propp was relatively good but short of explicitness needed for a computational model of folktales. This is because they are loosely defined and lack formal definition for characters.

In the context of this work, it was discovered that the theory or model could not give the character components of the folktale some representation. For example, forgiveness and other characteristic attributes are found insufficiently represented or modeled by Propp's theory hence, not suitable for representing folktales and fables outside the Russian folktales [28]. However, the structural model of Todorov's theory is found amenable to the *Yorùbá* folktale and will be used adequately to analyse the folktales in preparation for the animation works.

4. RESULTS AND DISCUSSION

In order to present the proposed conceptual model for animated *Yorùbá* folktale, several models that were proposed by various developers have been developed. In addition, a comparative study has been done among the models and a suitable framework proposed. The conceptual model gives a view of the design phase of the project development. The complete and conceptual model is highly important as a point of reference providing guideline strategy for animators in developing *Yorùbá* folktale. The knowledge of the characteristic and feature components is significant in developing folktale animation for our cultural heritage. The model comprised of its structure in terms of the basic components and how they are interconnected. The model has eight elements as illustrated in Figure 4.

Here, we discuss the basic components of the model, the technology as well as the medium employed in realizing each components of the model, the technology as well as the medium employed in realizing each component.

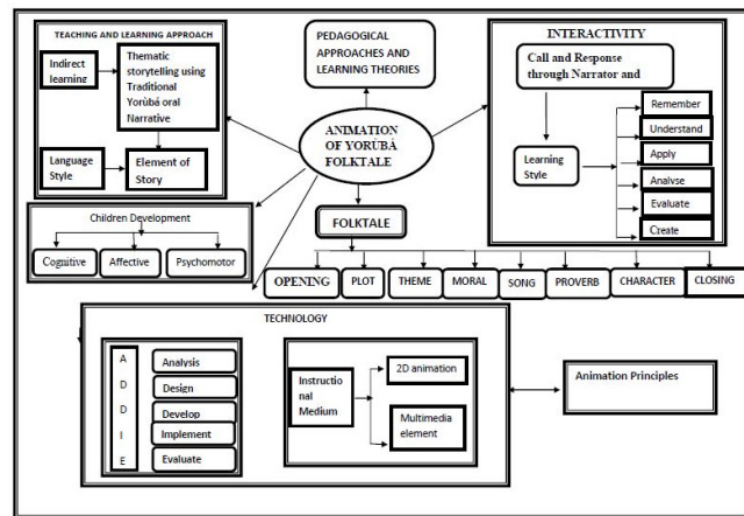


Figure 4: Proposed Model for Yorùbá folktale Animation

Child Development: This refers to the physiological, biological and emotional changes that occur in human between birth and end of adolescent as individual grows from dependency to maturity. The child development approach takes into consideration the literary experience of children which assists in cognitive learning, psychomotor and affective development of the children.

Animation principle: There are several animation principles of which twelve principles of animation are revised and selected ones will be applied in this project. The principles of animation that will be employed in the creation of the animation package are exaggeration, anticipation and squash and stretch. These principles are selected because the combination of them gives more effects and virtually a lot of thing can be achieved. For example, the characteristic in anticipation can be applied in the facial animation and character animation comprising of the mouth, eyes, nose and so on. Also, in the development process, the exaggeration principle elements such as sound, action body movement, facial expression and speech play an important role in order to make the animation more convincing. Similarly, the prominence given in the plot is to highlight the scene, expression and poses which can be adequately done by manipulating the colour, lightening and angle [19].

Learning Approach: The approach to learning is quite fundamental to knowledge acquisition, which affect how children learn and perceive things. In the development process, the folktale will be delivered through indirect approach such as with the use of thematic and literature based approach (comprehension) which will make the children to be involved, engaged both in spirit and mind. This kind of learning will eventually bridge the gap between formal and

informal setting because they are everyday happening and occurrence.

Language Style: This proposed model is developed on the language style in that the children can learn how to read and rely their experience effectively. The use of pictures and other visual representation of the folktale character and plots in addition with the text will make it relatively easy for children to learn and others to engage with the cartoon in a language that is not their native tongue.

Folktale: Essentially in Yorùbá folktale, there are nine components. They include the opening formulae, plot, character (actor), proverb, theme, morals, language style, songs and closing formulae. The study of Yorùbá folktale has emotional influence which conveys particular meaning to the children.

Medium: The instructional medium used in the proposed framework for the animation of the Yorùbá folktale is the multimedia technology which is linked together in a way that affords the children the ability to visualize the narrated story in 2D animation.

Learning style: There are about 7 learning style of which three are primary: visual, auditory and tactile. The use of blended learning style for teaching and educating the children is relatively new concept incorporated into the model. This is because our traditional educational system uses linguistic and logical teaching methods which do not have the memory recall capacity for the children.

5. CONCLUSION

A model for the development of Yorùbá animated folktale has been presented. The model consists of 8 elements. As a conclusion, this is developed as a guideline for the development of Yorùbá folktale animation designed to meet the needs of young children and adolescent. With this framework, it will encourage animators to develop Yorùbá folktale animation. Thus, this effort will help in educating young children to adopt good moral, values as well as promoting socio-cultural awareness and preserving our cultural heritage. Besides, helping to revive and sustain the existence and popularity of Yorùbá folktale among future generation.

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