STRUCTURAL SEMANTIC FOLKTALE MODEL AS A VISUALIZATION MEANS OF STRUCTURAL AND SEMANTIC RELATIONSHIPS BETWEEN MALAYSIAN FOLKTALES' CLASSES

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ABSTRACT. A study is conducted to preserve Malaysian folktales through a development of a Malaysian Folktale Classification System (MFCS) which is currently absent in Malaysia. The systematic classification system is developed by integrating three essential folktale unit: function, motif, and type. Such integration is necessary to ensure the classification system covers two significant aspects of a folktale which are structure/form and content/semantic. As a result of the integration, structural and semantic relationships are born, but they are embedded in the classification system. In order to visualize the duo-facet relationships, a network model coined as a Structural Semantic Folktale Model (SSFM) is constructed. The network model is a vital support and extension of the classification system because it permits deeper study to be conducted on the root of the Malaysian folktales collected. As an effort to visualize the model systematically, a computer assisted qualitative data analysis (CAQDAS) Atlas.ti is utilized. Being the emphasis of this article, it is hoped that the network model would provide a platform for understanding the core of one of Malaysia's intangible cultural heritages and beckons deeper study on such connections.

Keywords: structural semantic folktale model, network model, pictorial representation, Malaysian folktale classification system

INTRODUCTION

Preservation of folktale, myth and legend are eminent in this digital epoch to avoid such priceless heritage from being swallowed by globalization and commercial entertainments (Dorji, 2009). Such heritage though seems irrelevant to some, may indeed impart good ethics, internal strength, attitude transformation, sensible verdict, benevolence, and mirrors culture's identity which becomes the foundation to develop a country of unsurpassed cultural values (Babalola & Onanuga, 2012; Kirmani & Frieman, 1997). Six phases are acknowledged as basics toward the folklore preservation effort: identification, conservation, preservation, dissemination, protection, and finally, international collaboration. The focus of this study is identification. In identifying folktale, there are several endeavors recommended. One of the significant recommendations is through a creation of identification and recording system as stated in the 1989 Recommendation on the Safeguarding of Traditional Culture and Folklore and such suggestion is apt to be accomplished via folktale classification system (UNESCO, 1989). Folktale classification system fosters systematic and centralized folktale identification, and

this is in line with UNESCO's suggestion in the safeguarding of intangible cultural heritages (UNESCO, 2003). Many nations have begun the movement of folktale classification such as China, Japan, Spain, and much more, but Malaysia is still behind in this matter (Abd. Wahab, 2005). In fact, it is found that currently Malaysia is void of any folktale classification system. Therefore, this study examines the Malaysian folktales to produce a systematic classification system fitting to preserve the intangible heritage. Though the focus of the article is the network model, it is imperative that the classification system analysis is reviewed first because the model is an extension of it. Thus, in a nutshell, the following section presents the analysis of the folktale classification system this study conducted.

FOLKTALE CLASSIFICATION ANALYSIS

A collection of 269 validated Malaysian folktales were analyzed to develop the MFCS. The folktales were collected in a literary form and scoped to the Malay's, and Malaysian Borneo's (Sabah and Sarawak). In order to collect the folktales, a purposive sampling was used. To define the population of the folktales collected, relevance criteria was established by the ownership and definition of the folktale. The ownership safeguarded the folktales collected as truly Malaysian and of cultural value. The definition erected in the study ensured the tales collected were strictly folktales and instead of another form of folklore (legend and myth). Initially, 426 folktales were collected. Using the relevance criteria, each of the folktale was reviewed critically and eventually only 269 were accepted as data to analyze and classify toward the development of the MFCS.

The MFCS was developed by employing an adapted structural-semantic analysis method which utilized three prominent folktale units: function, motif, and type (Kerbelyte, 1995, 2011; Propp, 1998; Thompson, 1966; Uther, 2011a, 2011b, 2011c). The method and the units warrant that the classification covered two important aspects of a folktale namely structure and content. The classification process was conducted on three levels starting with the function, motif, and finally the type. The first-level classification was the identification of structure, and the second level concerned the motif in the identified structure. The third-level classification identified the best type that represents the Malaysian folktales. This three-level process created the classification system for the Malaysian folktales.

The first-level classification analyzed the folktales to acquire the sequence of the function of dramatis personae (actor in the folktale). The function is the action of the dramatis personae that personifies recurring constants in shaping the folktales' structures and storyline. The effort to identify and extract the structure of the folktales was supported by the thirty-one functions of folktale (Propp, 1998) The dramatis personae performing the action in the folktale were used as the guiding factors to identify the functions. As soon as the functions in the folktales were acquired, the folktales were grouped and organized according to the similarity in the pattern of the sequence of function extracted (Dundes, 1962; Lwin, 2010).

The second-level classification engaged the extraction of motifs from the groups of folktales, which were organized based on the pattern of the thirty-one functions. The process to analyze and devise the group of motifs was guided by the original motif-index, which encompassed twenty-three motifs of folk literature (Thompson, 1966). The process of motif extraction and division was also established on Thompson's approach (Thompson, 1951). Motif abstraction was grounded on the basis that it must be an unusual and striking entity in the folktales because it serves as the core semantics in defining the embedded meaning. Concerning that, the particular division of the folktales into motifs was based on the three categories of the motif. The categories–actors, items, and single incidents–acted as guiding factors in identifying the motifs embedded in the folktales. The motifs retrieved from the analysis were arranged into groups steered by the twenty-three main motifs of folktale and by the submotifs

residing under each of the main motifs. Some of the motifs reflect the European culture and are inappropriate to be assimilated into the Malaysian culture. Only the ones deemed as fitting to represent the Malaysian folktales were selected. As the decision rules of grouping, the folktales containing the same motifs were situated together (Thompson, 1951). Some of the folktales were placed in more than one group to create motif classes because a single folktale may contain more than one motif (Goldberg, 1998). The groups of motif organized repopulated the folktales organized according to the sequences of functions in the first-level classification. This measure exposed two possibilities of the arrangement of the folktales. The first possibility was that the folktales remained in the former groups, which were organized based on the similarity of sequences of functions. It is due to the resemblance of the groups arranged based on the motif and function. The second possibility that was more likely to occur was that the folktales were shuffled into new groups based on the motifs' groups identified. Recapping that the motifs identified were based on the former groups of functions, this new arrangement displayed the structural relationship of the different groups of motif connected by the functions. The structural relationship is defined as the relationship that exists between a specific class of structure and class of motif established. The relationship signifies the sequence of structure that supports the specific class of motifs. Subsequently, the groups of the motif were used to identify the types of the folktale in the third-level classification, which eventually personified the MFCS.

The third-level classification was the last stage in analyzing the Malaysian folktales toward developing the classification system. This level pertained to the conception of the types of Malaysian folktale and was the last unit that fashioned the classification system. The ATU type-index classification had guided the process of fabricating the types for the Malaysian folktales with its seven latest international types of folktales (Uther, 2011a, 2011b, 2011c). The folktales, which were grouped according to the motifs in the second-level classification, were analyzed again based on the overall theme. The motif in the content identified in the second-level played an integral role in determining the semantics of the content toward obtaining the theme which became the guiding factor to attaining the type. As a rule, the ATU type that best matches the theme (s) of the folktale was assigned as the type of the folktale (Jason, 2000). Nonetheless, in the case the folktales were long and divided into multiple episodes, they were assigned to more than one types (Jason, 2000). Similar to the second level classification, the folktales were grouped and organized according to the similarity in the type extracted. Since one folktale can be assigned to more than one type, there was a possibility that the former groups based on motif were rearranged into new groups based on the types groups identified. Considering the types were formed based on the semantics dictated by the motifs, the new arrangement created the semantic relationship of the diverse groups of type linked by the motif. In the context of this study, the semantic relationship is defined as the relationship that occurs between a specific class of motif and class of type established. The relationship denotes the motif(s) that eventually shape the type of the folktale.

The types identified in the end collectively created the classification system this study aims to achieve, and it represents the functions and motifs identified in the first- and second-level classification respectively. The structural and semantic relationships emerged between the folktale's classes are embedded in the MFCS hence they cannot be seen tangibly. Therefore, in order to make them visible, they have to be visualized, and this study had chosen to present both of the relationships via a network model. Borrowed from the concept of database's network model, the model represents objects and their relationship flexibly through links (Silberschatz, Korth, & Sudarshan, 2010). The subsequent section explains the method used to construct the model.

MODEL REPRESENTATION METHOD

A model aids in channeling internal thought process in mind to the outer boundary to communicate ideas and solutions on a particular subject matter. With this purpose, the magnitude and gravity of forming a standard model representation method are undeniable. A standard representation method would ensure all users comprehend the model equally, and this alone makes it fundamental. Fortunately, there are three categories of representation methods that can be used to form a standardized model, specifically textual representation, pictorial representation, and multi-faceted representation (Onggo, 2010; Wang & Brooks, 2007).

The second representation method was chosen to model the complex relationships among the folktale classes. The pictorial representation method is more practical in a sense that it permits the representation of information via pictures and lines. The use of pictures in representing the model enables the information structure to flow non-sequentially, which suits a more complex model. Typically, in the pictorial representation method, a diagram is used to signify information with shapes or symbols while linking them with arrows and lines. Though the original domain of application is a simulation, it is found that the pictorial representation method is fitting with what the study aims to achieve with the model. The main reason for adapting the pictorial representation method is its use of diagrams, which is a form of pictures, in the representation of the model. The use of diagram is beneficial because it aids to solve problems, and also represents complex mental imagery (Larkin & Simon, 1987; Onggo, 2010). The method communicates complex non-sequential information effectively via pictures; thus, its adaptation in this study is astute because folktale classification is by no means straightforward and sequential. The classification by function, motif, and type, and also the relationships established between the classes of folktales exhibit a complex and entangled configuration of narrative information. Via the use of shapes, symbols, and linkages, the relationships based on the structure and semantics of the folktale classes can be lucidly visualized. Furthermore, in implementing the method, a visualization utility in a computer-aided qualitative data analysis software (CAQDAS) known as Atlas.ti was utilized.

STRUCTURAL SEMANTIC FOLKTALE MODEL

Based on the MFCS developed, the structural and semantic relationships were established between the folktale's classes for all the three levels of classification. In order to visualize the embedded relationships, the network model coined as SSFM was constructed as illustrated in Figure 1. The subsequent section discusses the SSFM regarding the structural and semantic relationships of the Malaysian folktales analyzed for the classification purpose.

Discussion of the Network Model

For all the three levels of classification, each class established which was represented as a code in Atlas.ti, became a node as it is transferred into the Network View of Atlas.ti during the model construction. Thus, accordingly, six nodes were formed for the structure class, twenty-two nodes for the motif class, and six nodes for the type class. Once the nodes were placed in the Network View accordingly, transitive (directed) relationships in the form of directed arrows were manually created based on the developed MFCS and the tested relationships among the folktales' classes. They began with the structure nodes climbing to the type nodes through the motif nodes. The directed arrows which represent the relationships were designed differently to visibly demonstrate the nodes that are linked via positive relationship and those that are not. The solid arrow represents the positive structural relationship that exists from the structure node to the motif node. The solid arrow also represents the positive semantic relationship from the motif node to the type node. On the other hand, the dashed

arrow signifies the relationship that does not exist between particular nodes, hence, a negative relationship. Looking at Figure 1, the complex relationship is evident. It is due to the number of motif classes and repetition that occurred in the course of classifying the Malaysian folktales at the second and third level.

The crisscrossing solid and dashed arrows display the complexity of the structural and semantic relationships in the Malaysian folktales. It is imperative to break down the relationships between levels by way of the MFCS to understand these relationships. Starting with the first level (the structure), looking at the folktale classified; the majority of the structure classes support the 22 motif classes at the second level. It is found that Structure A does not support the motif class of Humor while Structure F the motif class of The Nature of Life. Next is the second level, which is the motif. Six motif classes do not cohere with particular type classes in forming a whole theme while the rest of the motif classes cohere with the type classes. They are the class of Tabu, The Dead, Unnatural Cruelty, Sex, The Nature of Life, and Humor. The class of Tabu does not cohere with the type class of Tales of Stupid Ogre (Giant, Devil) and Formula Tales. As for The Dead, it does not cohere with the type class of Formula Tales, while Unnatural Cruelty and The Nature of Life are also the same. Meanwhile, the class of Sex does not cohere with the type class of Tales of Stupid Ogre (Giant, Devil). Last but not least, the class of Humor does not cohere with the type class of Tales of Magic and Formula Tales. The next section explains the implication of the model.

Implication of the Network Model

The network model visualizes the structures that support the smaller narrative elements (the motifs) and the motifs that constitute the whole theme (the type) of the Malaysian folktales. More so, the model as well contra-visualizes the former notion by showing the motifs that are not supported by the particular structures and the themes that are not formed by the certain motifs. The model is imperative as it serves to supplement the MFCS to pervade understanding of the existing and non-existing structural and semantic relationships among the three levels of classifications of the Malaysian folktales.

It is found most folktale-related models converge on the use of the Malaysian folktales as content. The network model, however, reflects more of the heart of the folktales and does not utilize the Malaysian folktales as content or medium to achieve higher purposes. The model also does not provide guidance on how to use folktales to improve a nation's life but instead, to visualize the structural and semantic relationships within the MFCS ascertained during the analysis stage. It is important because it speaks volume on the underlying skeleton of the Malaysian folktales, the structure, and the gist that is built upon the skeleton, which is the content. Knowing the specific sequence of structure that supports the certain content of the Malaysian folktales and vice versa enable understanding the core of one of Malaysia's intangible cultural heritage passed on for generations. Culturally, it invites study on such relationships and presents a platform to compare the state of both relationships with similar relationships of the folktales from other nations. The succeding section presents the future work related to the SSFM.
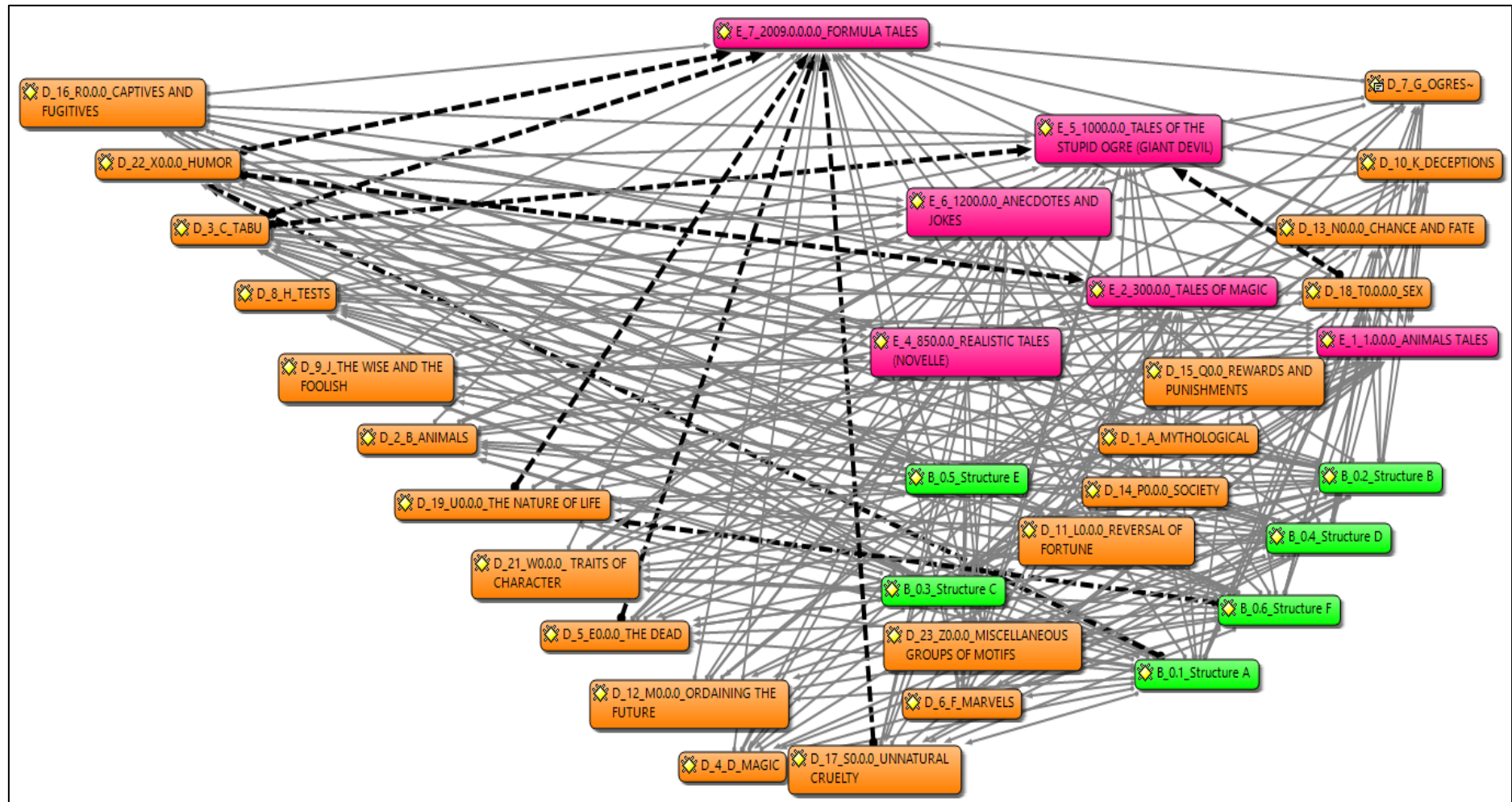
Figure 1. The Structural-Semantic Folktale Model

CONCLUSION AND FUTURE WORK

The objective of this study is to develop the MFCS by integrating the three important folktale units: function, motif, and type. The integration of the three units warrants the MFCS covers two significant and connected aspects of a folktale study which are structure/form and content/semantic. Such integration resulted in embedded structural and semantic relationships between the established folktale's classes. As the effort to visualize the hidden relationships, the network model, SSFM, was constructed operating as the supplement and extension of the MFCS. As the central on the article, the SSFM is important because it reveals the information that the MFCS does not. The MFCS plays an integral role in preserving the Malaysian folktales via the systematic classification. Instead, the SSFM excavates deeper and exposed the core of the duo-relationships which can be used to examine further the two significant foundations of the Malaysian folktales: the structure and the content. The purpose of the model is to illustrate the complex structural and semantic relationships established between the folktales classes of the three level classifications which without it, would be difficult to perceive. The relationships represent the positive and negative aspects of the Malaysian folktales classified and it stopped here. In future, negative relationships can be further studied. If applied in different context, the model might be able to assist in understanding the nature of the Malaysian folktales better from the facets of function, motif and type. For instance, the information gained from the knowing of the negative aspect of the relationships could trigger a future study that converges on finding the answers to why a particular Malaysian folktale with Structure A does not correlate with motif class of Humor and indirectly affected type class of Tales of Magic and Formula Tales.

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