

# Exploring Principle Components for Digital Heritage Preservation on Malay Folk Dances

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## Abstract

The culture of Malay has its own unique and distinctive identity and is the largest ethnic group that account for more than half of the Malaysia population. Performing arts is one of the creative forms of culture expressions that had been classified under the intangible cultural heritage by UNESCO. Dance is one of the domains within the performing arts that symbolised each unique ethnic group culture identity. Malay folk dances can be identified within certain regions or spiritual practices, often performed in festive celebrations such as wedding parties or religious ceremonies that include the dance movements, music and costumes. The preservation and enhancement of intangible cultural heritage through digital technology are becoming extremely important as to safeguard this irreplaceable source of social identity from fading away especially to the younger generation. Sustaining the continuity and integrity of cultural identity through folk dance would provide a local sense of unity and belonging, thus the transmission of intangible cultural heritage through digital technology is imperative as to ensure its wider recognition and dissemination. This paper is a part of research in laying foundation for digitising Malay folk dances comprises of movements, music and costumes. It focuses on the role of digital technology on enhancing cultural experience by exploring principal components with regards to their similarities and differences.

**Keywords:** Principal Components, Malay Folk Dances, Intangible Cultural Heritage, Digital Preservation

## Introduction

Admitting the negative impact of intolerance, deterioration, disappearance and destruction of the intangible cultural heritage, especially due to a lack of resources for safeguarding such legacy, *The United Nations Educational, Scientific and Cultural Organization* (UNESCO) decided to endorse the label of intangible cultural heritage to protect the practices, representations, expressions, knowledge, skills as well as the instruments, objects, artifacts and cultural spaces associated therewith that communities, groups and, in some cases, individuals recognize as part of their cultural heritage (Article 2 Convention, 2003). By issuing the *2003 Convention* for the safeguarding, which means measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation,

protection, promotion, enhancement, transmission, particularly through formal and non-formal education, as well as the revitalisation of the various aspects of such heritage had acknowledged the importance of all the five domains (see Figure 1) including performing arts (Severo & Venturini, 2015; Johannot-Gradis, 2015; Hafstein, 2015; Foley, 2014).

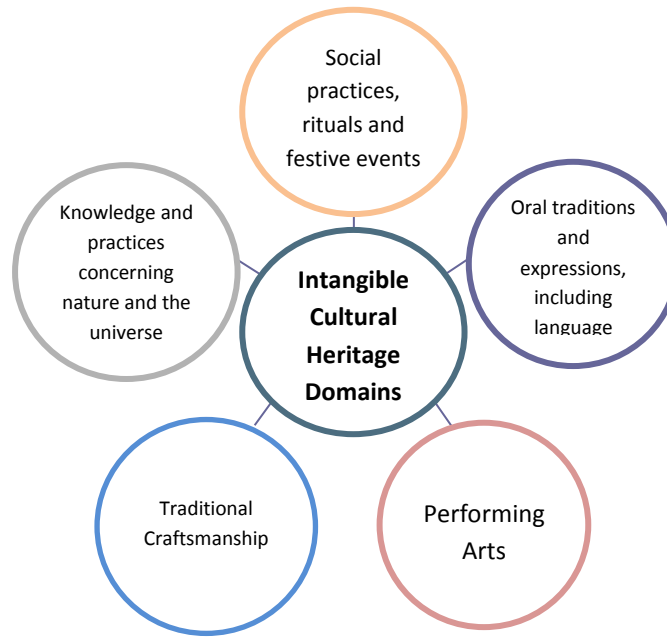


Figure 1: Classification of Intangible Cultural Heritage Domains

According to Coogan (2011), performing arts comprise theatre, dance, opera and the circus, which often refers to convey artistic expression. Meanwhile, UNESCO specifically defined performing arts as range from vocal and instrumental music, dance and theatre to pantomime, sung verse and beyond. They include numerous cultural expressions that reflect human creativity and that are also found, to some extent, in many other intangible cultural heritage domains. Numerous forms of performing arts are under threat today. Human conflict, greed, lack of respect and awareness for the cultural heritage are human blunders to the depletion of our valuable legacy (Idris et al., 2016). Kabanda (2014), highlights that performing arts exhibit direct effects on social progress and indirectly contribute to nation branding, social inclusion, cultural democracy and shifting cultural behaviors hence the important to preserve the novelty on cultural perspective of these performing arts are imperative as to transmit the original factual information and our own cultural identity inspiration to community.

Dance, though very intricate, may be defined simply as ordered bodily movements, usually performed to music. According to Pusnik (2010), dance is most frequently described as a way of human expression through movement. A number of theoretical definitions of dance state it as a conscious way of rhythmic movements of the body in a defined bounded space where it communicates through cultural codes (Koff, 2015; Bannerman, 2014). Malay folk dances through their cultural codes can be identified within certain regions or religious practices, which are often performed in festive celebrations, wedding parties or religious ceremonies that may include one or a combination of these elements: dance movements,

music, instruments and costumes. Emphasising on Malay folk dances, the practice of dancing is usually connected with the joyous occasions for the community and closely associated to the typical common village activities such as planting paddy and kite flying (Gonzales, 2000). Some of these dances can be traced to animistic beliefs and rituals. Since the 15<sup>th</sup>. century, Malay culture had a great influx of traders and missionaries that brought their own culture, tradition, practices and beliefs hence some of the Malay folk dances were influenced by them.

### **Preservation on Malay Folk Dances**

Close to Malay's heritage, Malay folk dances had been influenced by several cultural practices and traditional components such as martial arts, story telling and humors. According to Soon (2017), a folk dance is unique and some of them had been known as royal court dances. Royal court dances were originated since the early Malay kingdoms in the 14<sup>th</sup> Century and had been exclusively performed only to the noble courts for examples *Inang* and *Ceracap Inai*. These types of dances were performed for the Sultan and royalty during special occasions that portray a graceful style where the dance movements are slow, sustained and controlled. It showed modesty and respect of the commoners towards the Sultan and royalty. According to Salim (2011), the four basic genres of Malay folk dances are namely: *Asli*, *Inang*, *Joget* and *Zapin*. These are amongst the popular Malay folk dances (other than *Mak Yong*, *Kuda Kepang*, *Ulik Mayang*, *Ceracap Inai*, *Ayam Didik*, etc.) that had been performed frequently in many cultural events and commonly been broadcast on television (Itar, 2014). In exploring the principal components on Malay folk dances, their similarities and differences have been classified according to the three basic components: i) dances movements; ii) music, which related to their musical instruments and sound; and iii) the costumes, wore by each particular dancer. By categorising the four basic genres of Malay folk dance into two main groups, comprises of the original dances and adopted dances, each of them also have their own distinctive beats and rhythm that helps to further the categorisation between both groups (see Figure 2).

As a house to multiple ethnic groups emphasising on Malays, most of the Malay folk dances have its own kind of music and musical instruments, giving us a world rich with variety styles of dances. Elaborating more on the four basic genres of Malay folk dances namely as *Asli*, *Inang*, *Joget* and *Zapin*, each of them has their own dancing style identity that features a valuable expression of folklore, a form of art that evolved from the lives of ordinary people in villages and tribes that strengthened their sense of community as a whole. The *Asli* dance was based on the Malay 'asli' (traditional) songs like *Makan Sireh*, *Asli Selendang*, *Sembawa Balik*, etc. The dance portrays meaningful steps of slow, flowing and elegant movements performed by the dancers as it depicts the charming nature of Malay ladies. The *Inang* dance style was associated with the dance movements of 'inang' (maids) which originated during the period of the Sultan Melaka. The song was said to had been composed by the order of Sultan Mahmud Shah possibly as a lullaby to help him sleep.

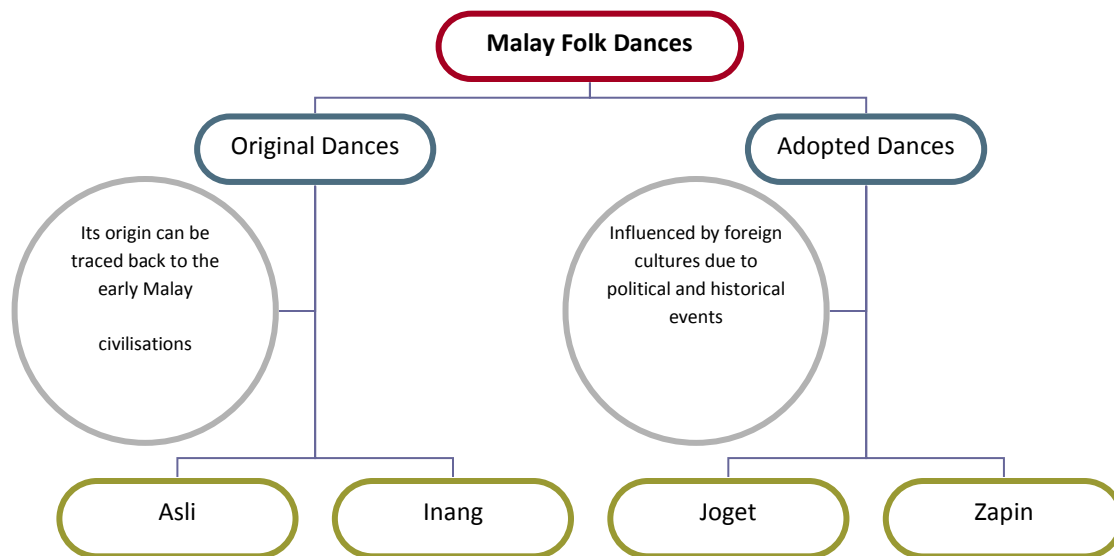


Figure 2: Categorisation of Malay Folk Dances adopted from Mohd Hisham Salim, 2011

Both of *Asli* and *Inang* which had been categorised under the original dances group can be traced back to the early Malay Kingdoms in the 14<sup>th</sup> to the 15<sup>th</sup> Centuries. Meanwhile, dances which had been categorised under the adopted dances group comprises of *Joget* and *Zapin*, principally had been influenced by the foreign culture in terms of their movements, music and musical instrumentations as well as costumes (See Figure 3). The origin of *Joget* dance had been traced back to a Portuguese dance, which started in Melaka. *Joget* dance movements follow a tempo, which is fairly quick with teasing and playing between partners. Through the years, *Joget* has become a way of traditional entertainment within the society. *Zapin* is a popular dance form in Malaysia especially in the state of Johor. It is believed to have been introduced by the Arab-Muslim missionaries from Middle East in the 14<sup>th</sup> Century. In the olden days, only males were allowed to perform *Zapin*. As time passed by, female dancers are recognised to perform the *Zapin* too.

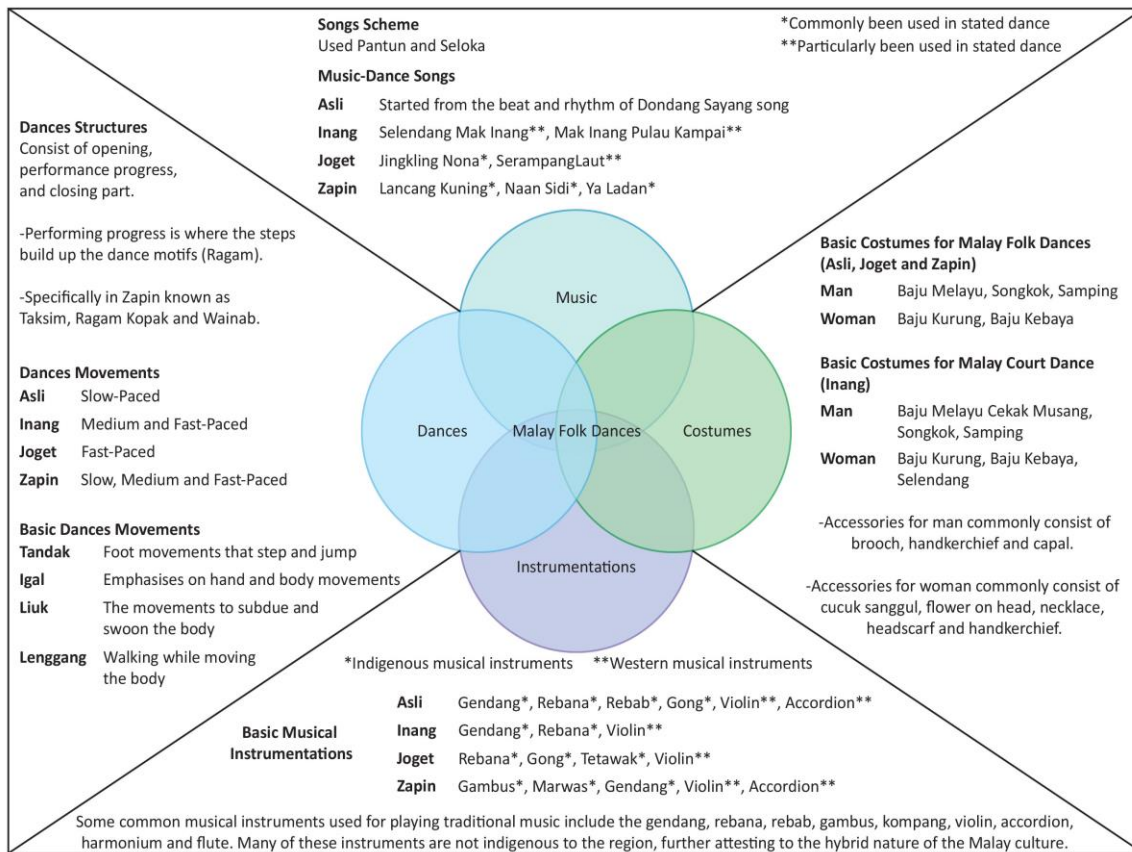


Figure 3: Categorization of the principal component of Malay Folk Dances

### Digital Preservation

Nowadays, the emergence of new digital technology has enable us to find solutions to fulfill the important aspects of preservation, where the valuable resources are rapidly digitised into digital environment in the name of safeguarding. Tangible cultural heritage such as artifacts in museum are made available over the Internet, meanwhile documentation on intangible cultural heritage is also being rapidly digitised into digital environments. The cultural heritage is becoming digital heritage (Hennessy, 2012). The definition of digital heritage promoted by UNESCO in its Charter for the *Preservation of Digital Heritage* (2003) label both 'digitised' and 'born digital' resources. The necessity of taking into account the protection of digital heritage was first identified in 2003, which had been mentioned in UNESCO's Charter (Lusenet, 2007; UNESCO, 2003). This emerging field calls for research addressing issues and strategies of appropriation and legitimation on digital heritage, its perimeters of preservation, comparative studies of preservation policies and tools among countries (Musiani & Schafer, 2016).

Nowadays, digital technology is used in many domains of our life. It is difficult to imagine that an architect, engineer or designer working without a computer workstation. In the last few years, rapid development of microprocessor technology has caused super-fast

computers to the consumer market. These machines are equipped with better and faster computer processor. It allows to see the surrounding world in other dimension and to experience things that are not accessible in real life or even not yet created. The digital media merely are tools or mediator to deliver information and have become almost seamless with the real environment, hence the manifestation of Virtual Reality (VR) and Augmented Reality (AR). Digital media have changed not only by allowing people to access information but also ways in which we can expand and enhance the digitised information environments (Metzger & Flanagin, 2008). Digital media emerge as a major premise of cultural heritage preservation. According to Cox (2011), although not long ago digitisation was seen as opposed to preservation, but this trend has shifted dramatically since then, partly because digitisation able for enhance access to our documentary heritage and partly because of the development in digitisation offer reliable approaches in expanding the usage.

### **Digital Preservation of Malay Folk Dance**

It is safe to say that while preservation through digitising musical songs and instruments as well as costumes are more manageable with the advantages of digital audio recording and mixing, 3D software and 3D scanner, digitising the body movements of a dancer represent the most challenging effort. Generally, the digital visualisation of movements falls into three basic categories: i) keyframing, ii) motion capture, and iii) simulation (Kwasnika & Wozniak, 2006; Hodgins et. al, 1999; Magnenat-Thalmann & Thalmann, 1996). The significance of the term keyframing can be traced back to traditional hand animation technique. Keyframing requires the animator specify critical key positions for the objects. The computer then automatically fills in the missing frames by smoothly interpolating between those positions. The characters for a movie called *Toy Story* made in 1995 were designed through key frame animation. It is believed that each character movements had as many as 700 keyframing controls (Terra & Metoyar, 2007). Motion Capture is the process of recording a live motion event and translating it into usable mathematical terms by tracking a number of key points in space over time and combining them to obtain a 3D representation of the performance (Parent et al., 2010) (See Figure 4). The technology enables the process of mimicking and recording a live performance into a digital performance (Menache, 2011). This technology has also enabled a number of famous athletes to supply the actions for characters in sports video games.

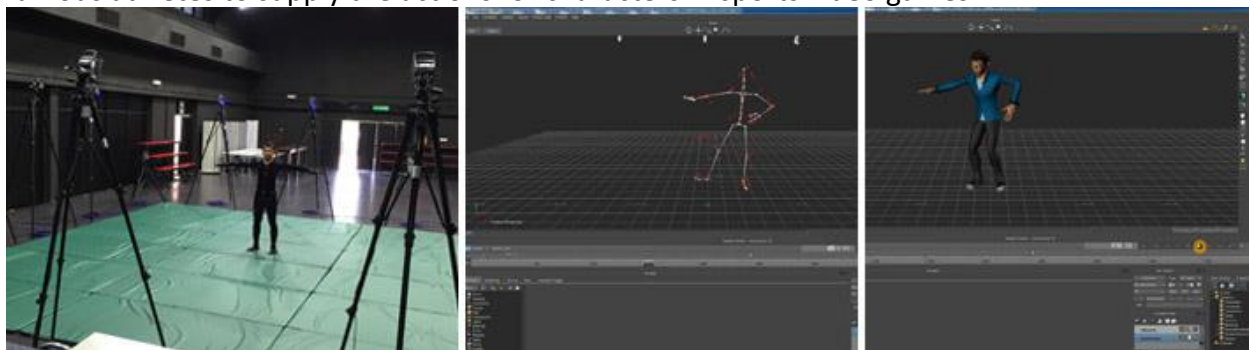


Figure 4: Recording and digitising dances using Motion Capture



On the other hand, simulation uses the laws of physics to generate motion of figures and other objects. Virtual humans are usually characterised and been represented as a collection of rigid body parts. These models though physically plausible are only an approximation of the human body. With more research and complex models the simulations are becoming increasingly life like. Simulations can be easily used to produce slightly different sequences while maintaining physical realism (Ingalls, 2008).

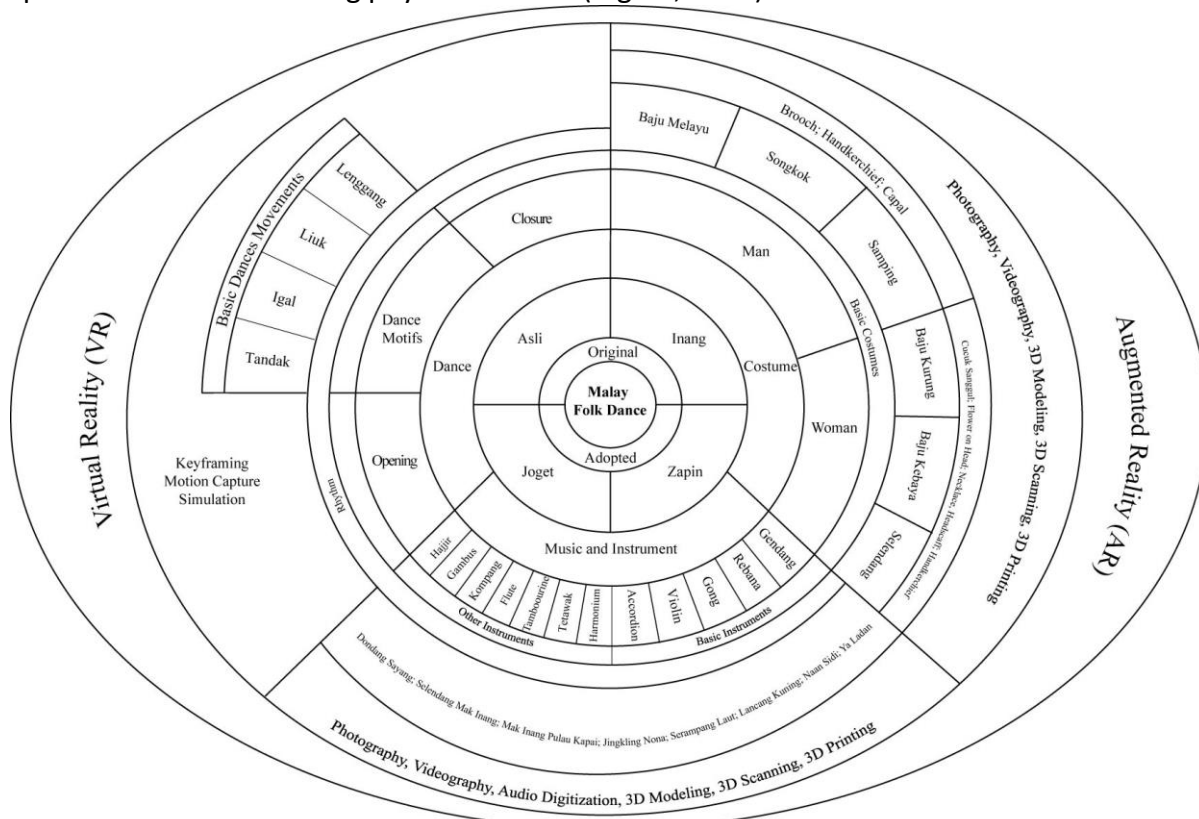


Figure 5: Categorisation of the principal component of Digitalisation Malay Folk Dance

### Conclusion

Digital media, tool and software are the major considerations that influence the quality of digital heritage that will be produced. As these components work in conjunction with each other, it is also important to make the right choice as to what, when and how these media, tools and software being utilised for ensuring the quality and accuracy of the digital heritage. The proposed framework (see Figure 5) outlining the important aspects of the principal component as a guideline in order to digitally preserves the Malay folk dance. Digital preservation is a complex field that encompasses many diverse issues arising from cultural, institutional and technical context of heritage. Thus, by fully understanding the issue and choosing the proper solution for digital preservation, we can ensure that our younger generation will have the access to our unique cultural heritage.

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