

Silek Movement Analysis for Martial Arts Animators Using a Dance Studies Perspective

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Abstract

This paper discusses Silat Minangkabau from the West Sumatran Oral Traditions self defence known as *Silek*, using movement analysis. This focus is to understand the characteristics of movement unique to traditional styles in the streams of silat schools called *sasaran* in the Minangkabau language. Applying movement analysis has an important role in understanding how the silat body moves in time and space. These researchers argue that using this approach will strengthen and hone the artistic skills and perspective of an animator interested in understanding the movements when creating visuals based on martial arts. Further focus in this paper is to scrutinise the traditional Minangkabau self defence style known as the *silek harimau*. Although there are already creative works of animators on silat, movement analysis hones the precision of gazing upon the visual aspect of bodily movement in the context of emic views.

Keywords:

silek, oral traditions, Minangkabau, animators, movement analysis



Introduction

Animation as a global media industry, travels easily and the work is often shared across countries and even continents, but has less local context so that very young audiences may watch happily wherever the animation may originate. The range of companies involved include conglomerates such as Disney to small independent animation designers with only a PC and the latest software package (Westcott.2011). Rayna Denison on Japanese anime argues that, creativity in anime have overlooked aspects and elements. Transcultural creativity practices of Japanese anime span across borders, hybridise content, and open a space relevant beyond their home nation, demonstrating the global reach of Japanese cultural products (Denison 2011). Animation is a technique that enable a series of static images to look as if they were alive, able to communicate verbally, with action and with the ability to move (Nor Azan MZ and Nur Yuhanis MN. 2007).

The images in martial arts animation have a context connected to a distinct cultural way of moving. Thus a correct way of portraying the self defence technique and aesthetics involved is important to understand. For a non practitioner of the martial arts this would need tools to fully understand the way a certain martial arts practitioner would move to bring close enough realistic life to the animation. Previous writers on motion capture technique for traditional art of self defence such as Suwichai Phunsa et.al (2009) have argued in their paper on Thai self defence as cultural heritage heritage, on the requirement of taking great care and attention in designing the structure, since martial arts and self defence have unique characteristics and has a role in giving knowledge, gain attention, and support and conserve traditional culture.

Silat Minangkabau called *silek* is a traditional self defence style of martial arts from West Sumatra in Indonesia. The forms of the many styles of silat Minangkabau passed down through centuries as oral traditions are still taught in the villages known as *kampung*s. However due to a stronger interest in foreign martial arts and national standard schools, the traditional styles have faced a huge possibility of decline. Some styles have possibly disappeared due to the lack of interest. Recent re-emerging interest have risen due to a National effort enthusiastic to nominate pencak silat a term for Indonesian traditional martial arts, as a large step in 2019 for acknowledgement from UNESCO as an Intangible Cultural World Heritage. This enthusiasm has given rise to silat festivals nationwide. Recently in 2019, supported by *Indonesiana* a governmental cultural program by the Ministry of Education and Culture, called Silek Arts Festival (SAF 2019) the 22 *tuo-tuo silek* of Silat Minangkabau Elders who are the Masters of Minangkabau Silat, received life-time achievement awards.

Silat Minangkabau in the past was spread by the mobility of the Minangkabau youth which is called *merantau*. Merantau is a part of the Minangkabau culture for their youths to seek experience and gain wisdom and adulthood through the hardships of this act of travelling outside their *kampung*s. The Minangkabau youth, entered Islamic education learning in the small mosques called *surau* and also entered training in the traditional silat schools called

sasaran. Previous research on the silat Minangkabau have been written by Sedyawati (1980), Nor (1986), Navis (1986), Holt (1991 p 297), Murgiyanto (1992), Hiltrud Cordes (1994), Ismar (1998, 2012), Pauka (1998) Kartomi (2012), Maizarti (2013 p 5-6), Minarti (2014), Utama (2012), Mason (2016). Silat Minangkabau have also transformed into traditional dance and theatre and developed into contemporary cultural expressions. However not all of the richness of knowledge transmitted through the beauty and the strength of movements of the many styles of silat Minangkabau have been written down much less having the visual presence in animations.

One interesting effort is created by Arisman (2019) titled *The Ancient Silat*, produced by *kenaris animation* and is available to the public on youtube. Although the Arisman animation shows quite good knowledge on the distinct basic movements of silat minang and uses traditional musical background, however it can be seen that there is still needed further understanding on how the diversity of how the body moves distinctly according to the uniqueness and characteristics of each traditional silat Minangkabau style. It is hoped that through research on silat oral traditions more Animations will be created. Building a strong visual of silat minangkabau oral traditions will not only be part of the creative industry but also be taking part of 'Recognizing the importance of traditional knowledge as a source of intangible and material wealth, and in particular the knowledge systems of indigenous peoples, and its positive contribution to sustainable development, as well as the need for its adequate protection and promotion.

Recognizing the need to take measures to protect the diversity of cultural expressions, including their contents, especially in situations where cultural expressions may be threatened by the possibility of extinction or serious impairment as stated in the Basic Texts 2015 EDITION of the 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions in the The General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 3 to 21 October 2005 at its 33rd session affirming that cultural diversity is a defining characteristic of humanity, conscious that cultural diversity forms a common heritage of humanity and should be cherished and preserved for the benefit of all,

It is hoped that further encouragement and knowledge for Animators as recorders of precision of movements will increase their role in conserving martial arts oral traditions. Globalization with stronger, interconnections and the digital era would be the platform for their art on traditional heritage.

Method

The seed for this research was planted when the first time silat Minangkabau captured the imagination of the first author for this paper. This moment was when she was still a child in the seventies growing up far from West Sumatra in a foreign land outside of Indonesia and

watched a traditional dance performance called *tari piriang* based on silat Minangkabau. Her father, the performer, was a Minangkabau born in West Sumatra in Payakumbuh and raised in Lintau. Growing up in the *kampung*s he had learned traditional silat from his youth as did most Minangkabau at the time. He spent his time at the *surau* learning the Islamic faith and practices and at late night spent time at the *sasaran* learning silat Minangkabau. He then travelled in merantau as most Minangkabau youths did but had wandered further than most.

In 1996 this eagerness to learn about her family roots led to qualitative research on the *galombang* dance which is also rooted in silat oral traditions. This ethnographic research was conducted in her fathers birth *kampung* and the *kampung* where he was brought up. This study of the forms of traditional silat Minangkabau, resulted in a dance anthropology bachelor paper for her studies at the Institut Kesenian Jakarta. In 2012 as a choreographer previously trained in the dance program at the Faculty of Performing Arts Institut Kesenian Jakarta, she then collaborated in creating a choreography together with Edwel Yusri Datuk Rajo Gampo Alam a grandmaster for the silat harimau Minangkabau school in Jakarta, which is based on the tiger movements. His style of silat Minangkabau originated his merantau and learning from various masters from different areas in the hinterlands of West Sumatra. This collaboration resulted in a Masters thesis on the silat harimau Minangkabau style. In 2017, further research on silat Minangkabau oral traditions brought her to do more ethnographic work in the southern coast of West Sumatra with the Harimau Tongga silat Minangkabau in Painan. The qualitative method in collecting the data involved interviews, observations, and taking part in the training as part of participatory observation. This was to gain in-depth understanding from an emic view of silat Minangkabau. This current research is still in progress.

Currently Silat Minangkabau has developed and transformed into what Walter J Ong named as a “secondary Orality” in the electronic age through film, websites, blogs, social media groups and Whatsapp chats. On the transformation of oral traditions from extensive research, Pudentia (1992) argued that there are many possible transformations that are not only cultural but also in form such as *pantun* into drama, opera, novel and film. Pudentia (2010) further argues that ‘culture can only be revitalized when a cultural tradition is considered of significant importance by its owning community. How important it is for the identity of that community or in how far it symbolizes that community can only be established after in-depth study.

From the data collected from the research on the *silek* harimau, the movements of each *sasaran* were different in styles of technique though there were similarities in naming the movement. The names themselves had a general meaning in the Minangkabau language and the actual carrying out the movements depended on the interpretation of the individual of the master of the *sasaran*. To understand the distinction of movements, it was needed to record the movements, then interview the masters and record and video them teaching and giving instructions. The recordings were transcribed to be able to further gain a detailed description on the movements, A common approach to understand movement in dance studies is to use

Rudolf Laban's Notation and Effort Shape. Searching the literature, it was found that in sports there is technology used to help to decipher the precise way the body moves during a certain movement. It is hoped that these techniques in understanding movements albeit from a dance and oral traditions perspective, will be a benefit and contribution for future animators looking to develop new works on silat Minangkabau and perhaps other styles of silat elsewhere.

Discussions

Silat Minangkabau known as *silek*, as an oral tradition has been passed down from generation to generation through the centuries. In the *sasaran*, the *anak sasian* learns the *silek* style particular to the school. All knowledge of *silek* is transmitted from the memory of the master as *guru*, to pupil called the *anak sasian*

Oral traditions contain the knowledge, values, norms and are passed down without the use of writing, were an oral expression and developed far before writing. Therefore oral traditions contain songs and stories, proverbs, folktales, told and sung, recounted or retold without the use of writing (Lord 2000). Hence the transmission of oral traditions were oral and aural. Ruth Finnegan (2003) includes panegyric in the form of court poetry, elegiac for mourning, mantic poetry for special purposes such as for hunting or war, lyric, prose narrative, muthes, legends and historical narratives, riddles, oratory, drum language and drama. On the development of oral tradition studies, Finnegan argues that, the oral interpenetration and overlap the intermingling with other media such as music, dance, material displays, electronic options to changing genres to new media interacting with established themes in contemporary forms and not just 'traditional' ones (Finnegan.2003:84-86).The performer of oral tradition often has visual resources surpassing gesture and dramatic bodily movement is expressed in dance.

All kinaesthetic shape is dynamic and essential to the performance of the body, The dynamic nature of kinaesthetic experience is the key to what the dancer (performer) creates by muscular sensations and the image of his body seen by the audience (Barba and Savarese 1991 p 44).

The body movements of a *silek* practitioner that functions as a combat technique develops into an artistic performance when it is presented as having values of beauty. According to Navis (1984) generally *silek* potency is in the self defence technique from opponents attack. The techniques are called *tangkok* (to catch or to grab with both hands) and *ilak* (with means to dodge), *kabek* (meaning using arms and elbow to grapple the opponent). From the the grappling position movements such as to hurtle, throw, or wring. The dodging technique *ilak*, is to avoid attack by backing away, jumping, bending. Another name for avoiding attack from an opponent is called *gelek*, which can be done by moving the body to the side without moving the stance position. *Kepoh* is to slap away attack using the hand or foot. The body also functions as a weapon to attack using the fist, open palm, elbow, shoulder, knee and feet. The feet uses kicks, lundges, and slams also *sepai* which is a term for using the foot as a hook locking the opponents body (Navis.1984:2016).

The use of weaponry in *silek* performance have been researched and compiled by Donn F Draeger (2001) in book titled Weapons and Fighting Arts of Indonesia, which is considered an important work by martial arts enthusiasts. It contains 400 pictures of martial arts in Japan and Indonesia. His research uses a martial arts frame, weaponry, armory, self defence and combative sports, duelling, orientalism in martial arts, history of military theory and the art of military combat, recreation and sports.

Silek contains the collective memory of the Minangkabau using mnemonic devices. Transmission of the passing down include the method of handing down bodily movements, use of movements and transformations into artistic expressions such as dance, theatre forms.

There are different names for the sacred rites that are part of the initiation rituals. Bai'at, Kaputusan, Mandi Minyak are among the the different rituals conducted in various sasaran in different areas. The rituals are required to be passed before the intending pupil will be accepted into the *sasaran* as *anak sasian*. After being accepted into the *sasaran*, the anak sasian will then commence learning the movements specific to the master guru.

Among the movements learned are

1. *salam*, a movement meaning giving respect and greeting toward some-one else.
2. *Pitunggue* meaning some-one as person to ask wisdom from but is also a body position stance to protect the upper torso
3. *Kudo-kudo* is a body position stance also known as the horse-stance. Different styles show different levels of stance connected to the distance to the ground. Usually this stance is in the pitunggue position, with bent knees and bent arms ready for an opponents attack
4. *Tagak itiak* meaning standing duck that shows a way of standing upright with one leg slightly bent and the foot nearly touching the ground.
5. *Gelek*, meaning referring to the sun sliding or setting. This movement is an act of moving sideways to avoid the attack from an opponent.
6. *Langkah*, meaning steps, and the movement of the feet to carry the body forward or backward. It can also mean an action to be taken

Movement Analysis Methods

Adrienne L Kaeppler(1978) founded a method of studying movement into basic units named kineme and morphokineme. Kinemes are the actions and the postures that although not having meaning but is considered important and prominent by the owning traditional community where the movements came from originally. Morpho kineme ia considered movement and a combination of kineme where only a certain combination contained a whole meaning. The next level are the motif and genre. Motif are frequent combinations that happen between

morohokineme till they form a small unit that is independent. Genre according to Kaepoler is the last level that is the whole structure of performance, with inter-relations between music and movement hence becoming an event that becomes the performance.

Kaeppler has shown by applying this method, a researcher is able to study the structure of bodily movement based on the movements performed by the carriers of the tradition themselves. The method uses structural analysis used in language studies to find the units and patterns in one system of bodily movement. The units in the third level are similar to the motif component in folklore and visual arts. Describing from a researchers point of view adding a dimension of units culturally recognizable will help understand the moving silek body. This method differentiates the body according to parts of the head, arms, legs, feet, torso, hip, to find the significant movement to be analyzed on the structure.

Rudolf Laban Method

Founded by Rudolf Von laban, this method is a system for notation of the human movement. This method is known as Labanotation and is a way to transcribe and record every aspect of movement. Using this method, the researcher is able to write down only what is considered important. Similar to music notation the laban notation uses a staff differentiating the left or right movements of the body, such as the transfer of weight, an empty space or lack of movement, the direction of movement, body parts and so on. Among *silek* researchers using this type of movement are Mohd Anis Md.Nor (1986) and Indra Utama (2017).



Rudolf Laban (source from wikipedia)

Rudolf Von Laban also developed the LMA Effort Shape theory that is used for analysing and documenting human movement. The changes in the movement are described as effort theory, whereas the shape theory describes the changing of the form of movement during the changes. Effort elements are divided into four dimensions: space, weight, time and flow.

Methods using Technology

Gait Analysis Laboratory System is a technology using markers and wands placed on the subject to be measured. Another method called A Codamotion system is the essential workhorse of any laboratory requiring a 3D movement analysis facility for multiple research projects.



Source from the internet

Free open sources are available and can be accessed through the internet such as Kinovea. Kinovea is completely free and open source. Kinovea is a video player for sport analysis. It provides a set of tools to capture, slow down, study, compare, annotate and measure technical performances

Silat Anime

Kenaris Animation is an example of a creator developing anime based on silek. It was released in 2017 and can be watched on youtube.



Source; Motion Capture; Silat the animation

CONCLUSION

Animation will bring new possibilities for the conservation, preservation of cultural heritage, in this case especially for the traditional martial arts. The rise of the creative industry is a strong supporting system for the growth of animators. However there needs to be an integration between the Body for Creative Economy for the support of new talent and scholarship for those interested in entering the training needed to create more animations based on the traditional roots in Indonesia. The training needed for understanding the distinctive movements and how they move in *silek*, also the scholarly background in studying the oral traditions self defence systems must have government support. An increase of the recording of *silek* arts will increase national pride because of the fluidity in nature of animation and will be of use to educate the public on the character ideals of a true *silek pendekar* warrior. This paper is to encourage interdisciplinary work and collaborations between Animators, dance experts, martial arts experts, scholars and the supporting industry.

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