Lao Animation: The Development of Production Techniques from the Beginning Until Now

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Abstract: This study studies the development of Lao animation production techniques from the beginning to the present day. It would appear that the world seems to be interested in investing in the entertainment industry, there is a huge demand and to supply it requires some responsive actions. In general, the media industry is always at the top of the list of the most profitable industries. The animation industry can be categorized as a part of the service sector in almost every country that has been hit by the waves of globalization. Therefore, different animation techniques are used to help boost information consumption. In contrast, Lao animation has grown only slowly because of limitations and constraints but it certainly exists, however, appropriate development assistance from the government is needed. Certainly, animation production techniques were only slowly adopted alongside other development areas. In terms of data collection, the related data was gathered using research tools that included, observation in-depth interview and focus groups that contained various types of informants. Moreover, in order to clarify the results, all techniques used in Lao animation will be identified and divided into eras. To be able to identify and explain the use of animation techniques, some theoretical concepts were utilized including; Globalization theory, diffusion theory and system theory. According to the gathered data, the results indicate that the development of Lao animation production techniques can be divided into three eras. In each era, the production technique was applied differently depending on the context and circumstances. Traditional and digital animation production techniques were used by Laotian artists to produce animation artworks. Furthermore, social and economic aspects were the variables that strongly affected the development of the production techniques due to the limitations of infrastructure and human resources, advanced animation techniques remain unavailable for many groups of artists, companies and organizations. Fortunately, the government has shown concern about the issues and plans to strengthen related aspects that will help facilitate the industry development in Lao PDR.

Key words: Animation, production technique, creative industry, digital media, Laos, organizations

INTRODUCTION

The development of communication technologies and the appearance of Lao animation: There is no denying that technology has played a part in many developments that have been seen around the globe. It has shaped our culture in a new revolution of communication which has had various effects on our lives. The waves of globalization have pushed communication technologies to be more incalculable, drastically changing the way we communicate and using forms that we had never expected to be available within our generation. If we look at the development of communication technologies during the period from their origins until the present, it is very obvious that many technological improvements have been developed. From smoke signals to telephones, television and radio, all have been used to convey different types of messages, they are commonly used and slowly developed in order to cope with the demands for higher communication capacity. Fascinatingly, after the invention of the internet, technology seems to have shown even faster improvement because the internet

helps in facilitating the transfer of data and information much more quickly, transferring in ways that most of us have never experienced before (Henry, 2017).

It is the rapid growth of economies, technologies and the invention of the internet that has really affected our communication systems. Many communication methodologies and tools were invented in order to increase the flow within the system as well as to support different types of media. Organizations and companies have tried combining media to create an impact in telling stories or in encouraging people to believe numerous ideas (Shah, 2009). Consequently, media and technologies have been used as a part of business strategies and in advertising because of their massive potential. The power for reaching various types of demographics is endless and wide open. The capability of computers has increased significantly which allows end-users to achieve faster calculations as well as providing accessibility to many different resources. Societies in the modern era have had to embrace the diffusion of communication technologies which have led to cultural changes, driven by the digital transformation. Noticeably when observing closely the revolution of communication technologies, we see the combination of design elements for the purposes of creating attention such as newspapers that always put large fonts alongside eye-catching photographs we typically see this on the internet also, especially with modern websites. Cinema has always pushed the viewing experience by using sight and sound (Smith, 2008). The movies are now trying to provide new, unexpected experiences by visualizing actions that are not possible for humans at this time. Computer Generated Images (CGI) are broadly used in movies, games, video production and in the advertising industry. Consequently, visualization undoubtedly becomes part of our culture.

Animation is another form of multimedia that combines different media elements to tell stories. The first modern use of animation was during the 90 sec when there were many organizations and companies that wanted to have a different approach to persuasion. Animation was used in many countries to achieve many end goals. Interestingly, the creation techniques were slightly different at that time because of the limitation of technology and knowledge. However, studies show that in different regions, they found ways to express their beliefs using these methods. For example, one of the oldest continuous painting sequences was found in Burnt, Iran. It is considered to be an attempt to imitate animal movements without the use of high-end technology which was obviously unavailable during that time (Ball, 2008). Clearly, the idea of expressing movement is actually not that new, humans had already tried to

achieve it in ancient times. In addition, this type of storytelling technique is also widely used in Asia. China and Japan are recognized as countries that have become influential in animation production, especially, "Manga", a Japanese drawing style that has become a part of Japanese industry and been embraced by people from all around the world. Consequently due to its popularity, Japanese Manga has transformed into "Anime" (known as Japanese animation) and has spread into the south-east regions. During the 90 sec, globalization spread many aspects to these local areas such as laborers, transportation, capital assets and information technology, therefore, cultural diffusion was unavoidable. Countries in the Mekong Region including Thailand, Myanmar, Lao PDR and Cambodia were continuously accepting modern innovations and technologies without hesitation because of the rapid growth of the global economy. This is when animation started to show up as cartoon serie's on television and as imported movies screening in local cinemas.

Apparently, Thailand is one of the fastest growing countries among the greater Mekong sub-region. So, Information and Communication Technology (ICT) has rapidly developed over time. Unsurprisingly, there was a time when many animations were imported from the western and eastern countries, they were very popular among the Thai kids and teenagers who were categorized as the newer generations (X and Y). Since, then, the number of animation and multimedia production companies has drastically increased, along with the service industry. Many government and private organizations pushed games and animation to be a part of the service industry which was prosperous at that time. However, while Thailand and other countries like Vietnam and Cambodia were also developing game and animation industries. Lao PDR still had an uncertainty in developing its direction, mainly because of conflicts that occurred between groups of people and the strict rules and regulations imposed by the Lao government. Fortunately, after the change in economic policy of 1986, the New Economic Mechanism (NEM) was officially used in order to be able to catch up with the others (Kotchapakdee, 2016). Evidently, in this era there is some evidence indicating the use of Lao animation on a variety of media platforms including television, commercials, propaganda, education and even on the internet, particularly in social media.

Since, the change in Lao economic policy, communication technology has played an important role in Lao industrial development by contributing news and information on many important issues which were gradually transformed from traditional methods into a

more modern approach. Phenomenally in 2012, one of the first Lao animation series named "My village" or in Lao "Bann Kong Khoy" was officially launched to the public, it was considered as the very first cartoon animation to be originally produced by a Laotian artist. It is an Early Childhood Development (ECD) that has been supported by UNICEF Laos. The series screened on Lao National Television Chanel 3 and Lao Star every Sunday Morning (Anonymous, 2013). Phoumivong (2015), a fine art lecturer from the National Institute of Fine Arts and a producer of the series is now wildly famous among a newer generation of Laotians because of his animation research. Souliya explained "The reason behind the success of my research starts with the love of innovation and creativity that come with modern culture, also I strongly believe that different forms of art can help improve people and our society in many ways". Without proof, the statement may sound impossible, considering the context of Lao PDR but it really reflects in his artworks. Over several years, Souliya has proved that he has produced many artworks, especially film and animation which has helped increase awareness of significant issues such as global warming and healthcare as well as other less known issues in Lao society. Additionally, he has been invited by many art galleries and museums in East Asian countries to represent Laotian art with the potential to influence the Lao media industry in a new direction.

Interestingly, the production technique that was used to produce "My village" was called "Stop-motion" which is an animation production technique among several others. Also, this technique requires a foundation in animation creation in order for it to be properly executed, therefore from observation, it leads to the hypothesis "Was there any Lao animation available before the current era?" Moreover, if there was "How did Laotian artists learn and apply the animation techniques to their artworks?" Unfortunately, the development of Lao animation from past to present is currently unclear because it has never been officially documented. So, to be able to investigate and collect the related data, a qualitative research, comprised of various research instruments needed to be conducted to discover Lao animation development and techniques that have been used from the beginning until now.

Aim of the research: The following are the main objectives of this study:

- To study the development of Lao animation production techniques from the beginning until now
- To study the current situation of Lao animation production and its trend towards Lao economic development

MATERIALS AND METHODS

Qualitative research methodology was employed in this study with the population and subjects specifically in Vientiane prefecture. The various research instruments included, survey, observation, in-depth interview and focus group interview. Before conducting the research, all the instruments were sent to a panel of experts who had expertise in communication technology as well as fine and applied arts for their feedback, suggestions, evaluation and for validation purposes. Consequently, some modifications to the instruments were made to ensure their usability when collecting data in the study field.

In addition, before the study was conducted, the defined target groups were asked to give their permission beforehand. Informants included, key informants, casual informants and general informants. Some informants were later discovered by using the snowball technique. This study has thirty informants including five key informants, ten casual informants and fifteen general informants. These were people who research in related fields, particularly in media and the digital industry.

Next, the data collected was gathered and analyzed by structural and functional theory, cultural diffusion theory, globalization theory, post-modern theory, system theory and presented by descriptive analysis.

Conceptual framework: The study took into account the development of Lao economic growth and the cultural changes in Lao PDR that have significantly developed due to the new economic mechanism, since, 1986. To study the development of Lao animation production techniques from the beginning until now some theoretical concepts were used during the analysis process to help explain the diffusion and application of production techniques used in Lao animation which was specifically produced by local artists. Thus, theoretical concepts including; Globalization, culture and innovation diffusion as well as system theory are used in the data analysis process. Consequently, the result will generate a new knowledge of the development of Lao animation production techniques as well as a complete picture of the digital media industry. Last but not least, the result will help create guidance in developing various directions and strategies that might be useful for upcoming approaches such as digitalization and creative industry development.

RESULTS AND DISCUSSION

The results of this study are divided into two parts, the first part will describe the development of Lao animation production techniques from the beginning up

until now, this part will be explained by using the analyzed information from literature review, collected data and related theoretical concepts. In addition, system theory will be intentionally used because the system elements will help indicate input, process, output and outcome which will illustrate the animation production technique that occurred in each state. The second part will indicate the current situation of the Lao animation production and its trend towards the creative industries approach. Also, a prediction for the animation and media industry will be expressed as part of the result in order to help create guidance for further study of the industry and production techniques.

Lao animation; The development of production techniques from the beginning until now: As previously mentioned to investigate the history of Lao animation development, especially focusing on production techniques is not an easy process because of the limitations of the literature review and the availability of related documents. The reasons for the limitations are cultural constraints including political issues, language and understanding of the Lao context. In the past, most of the researchers or journalists were foreigners interested in documenting Lao history and development in various fields. Also, most of the study and research has been focused on other areas rather than media and communication technologies which are considered as a "Modern development" in Lao society. Tsugata (2003) a Japanese researcher who was interested in the film and media industry, traveled to Lao PDR in order to search for unwritten clues. Unfortunately, due to the limitations of communication technology in that period of time, Nobuyuki did not successfully collect enough information to prove the appearance of Lao animation, nonetheless what he found was still very useful for further study. Nobuyuki said, "There was a sign of cultural diffusion in many areas after the change of the economic mechanism, different types of media and communication technologies seem to be absorbed from East Asian countries including China, Japan, Thailand, Cambodia and Vietnam".

According to the rationale above, it would be impossible to indicate Lao animation production techniques if the timeline of animation development is left unclear. Fortunately, after already spending almost three years collecting data in Lao PDR for my PhD. Dissertation, I met many informants that helped me fill in the blank spaces that have been left empty for a very long time. The result from that study shows that the Lao animation industry can be divided into three eras that include the first era of Lao animation (1976-1985), the second era of Lao animation (1986-2000) and the third era of Lao

animation (2000%). Interestingly, each era has different animation production techniques due to the availability of media and technology that was embraced by the Lao government and local people.

What is interesting about animation production techniques is that even under challenging circumstances, the Laotian artists still had a willingness to learn new skills and gain knowledge to enhance their creativity. Considering system theory to have a complete circle of animation production, three elements are required including, input, process and output. However, Yamjareon (2016) an expert on Lao film industry development suggested that the circle of media production will never be completed without including the "Outcome" which can play a big role in any upcoming media in Lao PDR. Therefore, this study will take four elements of production into the analysis process in order to ensure the clarity and validity of information. Moreover, to identify the use of animation production techniques and its development, it is crucial to extract the techniques used from the artworks produced by local artists in particular. Therefore, from previous study, interviews and observation, Lao animation production techniques can be divided into lists as follow.

The era of diffusion: traditional techniques: This era occurred from 1975-1985 which is the first era before the change to the new economic mechanism in 1986. During this time period, information and communication technology was starting to be subtly diffused into the south-east regional countries but it was not clearly obvious. Khamsouk Kaewmingmuang, a national Laotian artist who genuinely played a big role during the government and social conflicts during the time, described the situation that local artists encountered. Khamsouk said, "There were many limitations and constraints that kept pulling them back from learning and improving their art skills. Most of the artists had to research for the government to help in drawing propaganda billboards or leaflets for various purposes whereas artists who did not research for the government spent their time creating artworks to support their souls without earning much money from their art". Also, the lack of Lao education development led to the disappearance of an increasing number of the younger generation of Laotian artists. Apparently, arts and crafts were considered to be things that were only used for specific end goals not as a job to make a living.

However, during all of the frustrating situations, Khamsouk kept expressing his personal interest in painting, even if he had a hard time in pursuing his dream to be an artist. He had been drawing and painting

whenever he had free time which later helped him became a Laotian artist who mainly sold his artworks for a living. Even though he said that animation was not relevant in that era because of the lack of technology, some of his artworks express a sense of movement that helps convey the message to the viewer. Some good examples of applying these kinds of expressions can be seen in Lao newspapers that were available during the 90 sec (Ivarsson, 2008). Furthermore, (May Chandavong), another fine arts lecturer from the National Institute of Fine Arts completely agreed with the hypothesis that animation did not exist until the changes to the economic mechanism. May added, "Communication technology was only used by the government and military service, it was not available for the average citizen". However, he strongly believes that Lao animation has the potential to be developed in the future because his colleague (Souliya) has already shown that his animation series (My village) can be effectively used as a medium to deliver any messages needed. Furthermore, all the support that Souliya received from the government and outsiders were a sign to guarantee the continued availability of Lao animation.

According to the information, the result shows that there was no appearance of Lao animation in this era, yet, existing artworks which have been preserved by local artists, reflect the need for creative movement, emotion and facial expressions using different forms of media such as study, billboards, leaflets or newspaper. Accordingly, these artworks were taken into the analysis process, using system theory to identify input, process, output and outcome. Considering the production circle, there was no such thing as "Animation" in this era but there was a need to imitate movements as stated. Traditional drawing and painting techniques were widely used by local artists in order to produce a variety of artworks. Fascinatingly, multiple panel sequence began to show and was broadly used among the Lao government and groups of people to promote ideas. The techniques commonly used any basic drawing and painting tools including, pencil, pen, crayon, paintbrush, watercolors and a color tray. These tools were affordable and simple find in the local area.

The era of innovation overlapping between traditional and digital: Since, the deployment of the new economic mechanism in 1986, apparently, the waves of globalization kept pushing many aspects of Lao development in different ways. Pat Kotchapakdee and Natthapong Yamjareon concluded in their Lao media studies that, since, 1986, there was an era of innovation that certainly shows the need for new media and modern technology. Industries have gradually transformed from the traditional into more innovative directions while radio and television

became a part of Lao society. Later, the internet also became popular because of its convenience. Meanwhile, different types of media started to combine and helped enable the Lao information and communication technology industry.

Based on the collected data, Souliya Phoumivong seems to have been the only Laotian artist to produce animation and be able to successfully launch the series on national television channels. His research is widely recognized in Laos as well as in Thailand. Fortunately, he kindly recounted his animation journeys and opinions on the trends of digitalization that occurred in Lao. He also described his will in pursuing his dream of being an artist, he started by selling painting artworks at the night market near the Mekong river, for a few years. But his enthusiasm led him to explore different types of media production including photography and film. Later, he discovered digital arts, produced by digital equipment and he suddenly realized its powerful potential, consequently, it was Souliya who was supported by the government and international organizations, including the Japan Foundation and UNICEF Laos to help develop and provide education for the new generation of Laotian artists (Corkill, 2010). Nonetheless, he admitted that he may not be the only one who knows about animation.

What was later discovered were a group of people who claimed themselves to be "The first generation of multimedia creators". In 2000, they also established a company, officially registered with the Lao government, named "D.K. Arts" in order to provide services for multimedia creation. In addition, they were officially interviewed by the vientiane times, a Laotian newspaper, about the opportunities for Lao animation in the future (Anonymous, 2006). During that time they produced many animations and really took advantage of the available technologies. Still, they talked about the influence of making animation that came from two people named Duangdy Khanthavilay and Kanha Sikounnavong who were believed to be the first group of Laotian artists to create 'Lao' animation, unfortunately, Duangdy later passed away in 2000 due to health problems, Khanha did not continue creating animation for unspecified reasons. Duangdy's story sounded unbelievable when I first heard about it because of a lack of evidence but after several attempts to revisit and further investigations with D.K. Arts members, they started to trust in the study and slowly revealed some crucial information which later became the key data of this study. The video animations Dungdee produced were shown and allowed to be used for academic purposes. Impressively, these videos contain different types of animation production techniques which can be broken down in many aspects.

The input of animation production that was produced in this era mainly came from the need for creation by the artists, all animation research were intended to express the artists ideas, concepts or beliefs that they wanted to reflect to society for example an animation telling a story about "Dumping garbage" as well as "Healthcare issues in Lao". In terms of the production process, the combination of traditional and digital production techniques had started to appear.

Traditional animation production techniques were mostly used to produce animation because of the availability of equipment. Hand-drawn animation was first applied to Duangdy's works titled "Pick up your own litter 1", this animation used simple hand-drawn and study animation techniques, music and sound effects was later added using a computer which helped create enjoyment for the viewer. Later, "No littering 2" and "No littering 3" were animations that used essentially similar techniques as the previous research but with more details added including, shadows, moving parts of characters (arms, mouth) as well as 'depth of field' which required creativity and a sense of motion to be displayed. Dubiously, the fourth animation was mysteriously missing due to 'technical problems' that occurred during the encoding process.

However, the 5 and 6th animations surprisingly used "Stop-motion" technique, one of the most unique animation creation methodologies that are still successfully used in many movies. Both of these animations can be assumed to be the earliest Lao animations to use stop-motion technique. Clay and study were used to build a character and props that were placed in each scene. Moreover, there was the use of a directional light source to help create strong shadows, contrast and to produce a beautiful composition. After that to capture a sequence of movements, still images were taken using a camera, these were later merged using a computer and specific software to create motion. Moreover, music and sound effects were creatively added to match the mood and context. Notably, these animations were believed to be the last stop-motion animations ever created within this era, before Duangee switched his interest to drawing animation in the final stage of his life.

Finally, the last three animations were produced using animation drawings. Traditional animation production techniques were used to create these animations, drawing and painting play a big part in the development process. Later, they were completed by adding music, sound and linking transitions to create a satisfying animation experience for the viewer. Sadly, in 2000 Duangdee peacefully passed away due to health problems. However,

these animations were not available to the majority of the Laotian people but specifically, launched to certain groups of people such as educational institutions or organizations. The reason for this limited distribution was because cinema and communication technology was not widely accessible by Lao people during that period. In addition to the outcomes, this era also reflects some additional feedback that was received from local and international audiences (UNICEF Lao).

Therefore, the results and analysis show that in this era, there was evidence of the appearance of animated artworks and the use of interesting production techniques, including traditional animation with various approaches (hand-drawn, study, stop-motion and clay). These videos can be considered as outputs that came from limited inputs which were mostly the ideas of the artists themselves while some organizations also started to recognize the benefits of using animation as a medium. At the same time, digital animation started to slowly diffuse into the Lao animation production process and later became accepted by local artists due to its convenience, affordability and practicality that helped to boost the animation production workflow. Consequently, it cannot be denied that diffusion of communication technology has had a huge impact on Lao animation production techniques.

The era of digitalization (modern era): The internet has become an indispensable communication technology that the younger Laotian generations commonly use in their daily lives. They check the news, E-mails, chat or even socialize through the different social media platforms. The internet, combined with mobile devices is rapidly growing and is totally unstoppable. Due to the changes that affect upon the Lao economy, the Lao government is forced to play catch up with the world by utilizing different strategies. The Lao national socio-economic development plan which will be updated every 5 years is currently in its 8th issue, deployed during 2016-2020. Evidently, Laos is aware of globalization, therefore, the current national development plan is more focused on human resources as well as information and communication technology (Anonymous, 2016).

From the situation described above, many industries in Laos have been growing steadily, including the service sector which provides various types of services to meet business needs. Entertainment, publishing as well as the advertising industry play a significant role in the modern era because the way businesses communicate with consumers has changed. The use of multimedia and interactive media has been significantly increased due to competition in the market. Effectively completing a

communication circle involves sender, channel and receiver. Due to the changes in information consumption, media production has needed to transform itself by using more interesting approaches. That is the reason why animation seems to be the medium that has been wildly used on different platforms including television, games and websites as well as in social media.

Although, in the digital era, the Lao animation industry is not entirely developed, this is due to limitations and constraints in many aspects including overseas investment, fundamental infrastructures and a lack of human resources. However, there are many groups of people, companies and organizations that have helped to push animation into a better situation, these include UNICEF, the Japan foundation and institutions that try to include an animation program as a part of their studies. Unsurprisingly, many Lao animations are yet to be discovered, most of the animations that have been found are by artists, specialists, groups of people, local and foreign companies who believe in the growth potential of Lao PDR. As previously mentioned, Souliya Phoumivong is not the only artist who knows how to create animation, there are also many other key informants from various backgrounds. Furthermore, the production circle is completed because the elements (input, process, output and outcome) are totally fulfilled by supply and demand. At present, there is a need for online marketing due to the competitive market, animation and infographics are the media preferred by consumers due to their ease of consumption.

According to the situation, the results show that a lack of technology and up to date equipment does impact upon the growth of the industry. Animations that developed during this period have unique characteristics. Modern production techniques were used in many research with the number of traditional animation projects being significantly decreased while the numbers of digital animations are greatly increased. Techniques included, traditional animation that is mostly created by hand drawings and painting. Different types of materials are used such as study, transparency sheets, clay and puppets. In contrast, digital animation techniques dominate the modern workflow including, 2D and 3D digital animation that is mostly created by computer. Green screen technique is used to create a complex composition and scenes that would be impossible in real life, characters and objects can be animated using specific animation software. An actual workplace is not even required due to the use of cloud storage and the internet which allow artists to research remotely in many locations. However, there are still gaps that need to be improved as the industry is still in its infancy.

Considering all the evidence of the situations, informants and animation artworks that have appeared from the 70s up until now, the analyzed aspects reflect the improvements in Lao animation. It has finally become a complete industry because it has more inputs, it has a technical process, its output has distribution approaches as well as its outcomes from various types of receiver. Globalization has brought innovation and technologies into Lao PDR, thus, the Lao government and people are absorbing the developing trends without hesitation. Digital media is becoming crucial to the younger generations and will tend to become more developed in the future.

According to the available animation artworks that have been discovered, Lao animation techniques can be divided into three periods. The first period was during the late 70 sec to the early 80 sec and appears to have used traditional production techniques which comprise of the application of art knowledge, natural tools and materials to produce the artworks. Hand drawn techniques were mainly used by artists, although the artworks that were created during that time were not considered as animation, since, they lacked motion that was perceptible to the human eye as this was impossible to produce. Still, they attempted to express motion and the change in the times. The second era shows some significant improvements in Lao animation when some interesting techniques were being used including, hand-drawn, study animation, stop-motion or claymation (clay animation). Later, modern technologies began to slowly sneak into the productions. Finally, the third era started from the year 2000 up to the present. Many animation techniques can be spotted including, 2D and 3D animation, motion tracking by using specific software, green screen techniques and digital motion creation that can be totally reproduced by the computer. Furthermore, the need for animation artwork tends to be increasing due to the rapid demand caused by information and communication technology.

CONCLUSION

Nonetheless, some advanced animation techniques are still missing from Lao animation because of affordability, limited knowledge, technology infrastructure and human resources. Creative space is needed to help educate the younger generations who are interested in animation creation. Animation production techniques should be included as part of a program or be an elective subject in educational institutes in order to develop proper knowledge.

SUGGESTIONS

Importantly, creativity and innovation will play a vital role in the Lao animation industry. Some of the missing animation techniques may possibly be applied to new Lao animation artworks in the future if the aspects of the industry are appropriately developed.

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