

The Need for Collaboration to Preserve Southeast Asian Manuscripts

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VIEWPOINT

Abstract

This paper emphasizes the preservation of palm leaf manuscripts with regard to digitization and collaboration of related institutions. While many institutions focus on digitization, some issues have been raised to spread awareness of strategies and patrons. Therefore, the concept of collaboration among institutions at all levels—local, national, and international—is proposed. The idea of digitization suggested in this paper is considered as a part of preservation. Moreover, the concept of collaboration is highlighted as a key to unlocking the limitation of manuscript preservation in Southeast Asia.

Keywords: preservation, digitization, Southeast Asian manuscripts, collaboration, DREAMSEA

INTRODUCTION

Before the invention of the printing press, early documents were produced by hand. Most manuscripts in Southeast Asia used palm leaves (*Corypha umbraculifera*, *Borassus flabellifer*, and *Corypha utan*), mulberry tree (*Broussonetia papyrifera*), and khòi tree (*Streblus asper*) as writing media. The palm-leaf manuscripts in Southeast Asia represent the first paper-based printed material in the region. The format of palm leaf manuscripts is long narrow strips that use a rope to bind things together and are protected by wooden covers or cloth wrapping. Though there was no clue about using palm leaves for the first time, the evidence of the oldest palm leaf manuscripts was found in Central Asia in the 2nd century AD. In South Asia, there are still surviving manuscripts from the pre-16th century. In Southeast Asia, the idea of using palm leaf as a material to record was derived from India and Sri Lanka around the 16th century (Gaur, 1979). These materials are used for religious and meritorious acts. Normally, the manuscripts are kept in the national library, monastery, mosque, temple, and the private residence of the owners. The content of the manuscripts mainly contains religious aspects. Therefore, most actions regarding the manuscripts connect with translation, explanation, application, interpretation, and critical edition (Bodhiprasiddhinand, 2021). Aside from religious features, there are also information regarding herbs medicine, literature, folktale, astrology, and laws contained in the manuscripts that

are waiting, like a time capsule, for the next generation to discover and study. At this moment, physical and digital preservations are two vital procedures to answer how these valuable heritage manuscripts could survive sustainably. Many countries in Southeast Asia have continued preserving actual artifacts, microfilming, and digitizing documents for over 40 years. Also, Western institutions play an important role to help and provide funding and the know-how for the local units to support manuscript preservation. However, there are massive manuscripts hidden in many communities around Southeast Asia. While these manuscripts are not always known to many, technological advancements have effectively connected everyone and have opened doors for many opportunities to link different local institutions that keep and preserve their manuscripts. Due to the value of these manuscripts locally and regionally and the imminent danger of losing them forever, the author argues that collaborations, both locally and internationally, are highly needed.

PRIMARY INSTITUTIONS THAT PERFORM MANUSCRIPT PRESERVATION

There are a few well-known institutions that have had strong roles in manuscript preservation since the beginning of 1972. These organizations have been continuously working to protect and preserve the wisdom and knowledge contained in the original artifacts. The Pali Text Society in London, established by T.W. Rhys Davids in 1881, was the first institute that

focused on the translation and preservation of Pali text or known as the palm-leaf manuscript. He pioneered the concept of “textual criticism” since many palm leaf manuscripts from various ancient languages, for example, Pali, Sinhalese, or Singhala, Burma, and Tham scripts, were revised. Another institute that has been very well-known as the primary institution for palm leaf manuscripts is the Centre for the Study of Manuscript Cultures and the University of Hamburg in Germany (Bodhiprasiddhinand, 2021).

COLLABORATION IN BUILDING A DIGITAL MANUSCRIPT REPOSITORY

As stated by Huges and Prescott (2018), the main reason for digitization is to improve accessibility, particularly to support remote access. Southeast Asia is one of the regions that are rich in religion, culture, and diversity. As mentioned previously, the palm leaf manuscripts are the first printed materials containing a lot of valuable information that could reveal the truth in and about the past, as well as treasured wisdom and knowledge that constitute the heritage that is worthy of preservation. In 2017, the DREAMSEA project was launched and funded by two famous institutions in palm-leaf manuscript studies—the Centre for the Study of Manuscript Cultures (CSMC) of the University of Hamburg in Germany, and the Arcadia Foundation in the United Kingdom (DREAMSEA Programme, 2021). This program aims to preserve the endangered manuscripts and their contents in Southeast Asian countries as well as to disclose the immense cultural treasures to the world (DREAMSEA Programme, 2021). With this attempt, the ancient manuscripts and their contents would be protected from threatening situations such as inappropriate storage, the depreciation of local people, and language difficulty. This program has been collaborating with many local institutions to digitize the manuscripts, save the literary heritage and safeguard cultural diversity. As members of the program, the author and the team, who have well understanding and experience with palm-leaf manuscripts in the northern part of Thailand, have been working alongside local people under the DREAMSEA Programme. The main purpose of this initiative is to digitize the content and implement standard metadata that would be compatible with information searching in the future. As a result, the valuable contents contained in the manuscript could be preserved and easily accessed. Likewise, both the local heritage and harmonious culture of Southeast Asia are introduced to the world.

Another good example that demonstrates networking collaboration wherein many institutions are involved is the Digital Library of Northern Thai Manuscripts Project (PNTMP). This project, which started in 2013, focused on digitization to bring all manuscripts

collection available online containing 3,914 manuscripts and 159,564 images. This project was initiated from 1983 to 1992, by Harald Hundius, a German scholar and a guest lecturer in the Thai Department of Chiang Mai University. Funded by the German Federal Foreign Office, it was carried out by the Center for the Promotion of Arts and Culture, Chiang Mai University. The project was also co-founded by the Henry Luce Foundation, the Andrew W. Mellon Foundation, the University of Pennsylvania Libraries, and the School of Arts and Science at the University of Pennsylvania. As a result, the manuscripts in the Northern part of Thailand were digitized by a number of institutes including the University of Pennsylvania, Chiang Mai University, the National Library of Laos, and the Berlin State Library, and Herrmann und Kraemer GmbH (Digital Library of Northern Thai Manuscript, n.d.).

PRESERVING LANGUAGE AND CULTURAL DIVERSITY THROUGH DIGITIZATION

Rooted from their rich history and culture, one of the strengths of Southeast Asian people is having high performance in literacy as evidenced by their writing traditions. The high degree of diversity of ethnic groups, religion, language and culture shows the rich cultural heritage in Southeast Asia such as Indonesia, the Philippines, Malaysia, Thailand, and Laos. This diversity, therefore, attracts many scholars to visit and stay to study the diversity of writing traditions (DREAMSEA Manuscripts, 2021).

To preserve cultural heritage, scholars at the national and international levels continuously build networks and work together. The scholars have rescued the physical manuscripts as well as their contents. For physical manuscripts, the local institutions involved such as universities and local administrative organizations would step in to help clean actual manuscripts. In Lanna tradition, this tradition is called *Tak Tham* - the ancient Lanna tradition that people bring out the palm leaf manuscripts to clean and dry in the sunlight. There will be a big celebration among the Buddhists before bringing the palm leaf manuscripts back to where they are kept (Jarusawat, 2020). Regarding this, the community could not only maintain rituals of manuscripts but also raise awareness of respect and value among the community. Moreover, another good example of preserving knowledge recorded from ancestors both in a physical and spiritual way is how the local community in Indonesia brings manuscripts out while Balinese women worship (with flowers and incense) and chant. Palm leaf manuscripts are considered very sacred because these are the means that the Goddess Dewi Saraswati uses to disseminate knowledge. In Thailand

and Laos, some monasteries bring manuscripts out for cleaning and praying by monks as they dedicate merits to the owners. These actions show the highest respect for the manuscripts as holy objects.

For the preservation and dissemination of contents, the manuscripts are firstly rescued for further study in research, teaching, and learning specifically for areas of orthography, paleography, culture, transliteration and critical, herbal wisdom, ancient law, and literature (DREAMSEA, 2021). To confirm the importance of studying these manuscripts at the global level, there are some Ph.D. theses published recently such as *Relationship between Anisong Manuscripts and Rituals: A Comparative study of the Lan Na and Lao Traditions* by Silpsupa Jaengsawand in 2019; *An Exploration of the Potential for Collaborative Management of Palm Leaf Manuscripts as Lanna Cultural Material in Northern Thailand* by Piyapat Jarusawat in 2018; and *The Stab-Stitched Binding of Tai Manuscripts: A Survey of the History, Technique, and Function* by Agnieszka Helman-Wazny, Direk Injan, Khamvone Boulyaphonh, and Volker Grabowsky in 2021. Second, the manuscripts are aimed to be published and translated in both local languages and in English for worldwide access and dissemination. The third target is to digitize the manuscripts for preservation. Fourth, the database is aimed to provide open access for users to increase the use of the manuscripts. Having a repository helps to store the contents for faster retrieval, access, and effective services for all the people. Some of the manuscripts in English and local versions can now be found in websites such as the Digital Library of Northern Thai Manuscripts, and the Digital Library of Lao Manuscripts. Also, other manuscripts that come from different parts of Southeast Asia can be found in the DREAMSEA Repository.

Starting in the 20th century, digitization has appeared to be the best solution to copy and convert printed materials such as books in general, rare books, special collections, and manuscripts to digital. Digitization is also done to protect and maintain the materials by creating digital products worthy of long-term preservation (Conway, 2000). The benefits of digitization are to increase access, create new types of research, new users and new uses, and preservation (Hirtle, 2002; Lee, 2001). Consequently, the digitization of manuscripts was chosen and done because: 1) the use of manuscripts is replaced by digital version and from digital access; 2) the digital copies are widely accepted, and the number tends to increase; and 3) the use of physical manuscripts will decrease (Hirtle, 2002).

However, Huges and Prescott (2018) addressed that “the use of digital tools is simply another (and very

fascinating) aspect of a long-term investigation of manuscripts, but they are just one approach among many: they are part of a continuum of copying manuscripts and using them in novel ways” (para. 35). There are some main issues about cost, time, and quality to concern. For the cost, digitization is expensive (Huges & Prescott, 2018). Some digitization projects in Southeast Asia were granted and happily continued with stable financial support. On the other hand, a lack of financial support could result in the project being stopped. According to Lee (2001), the sample costs for 19 photocopies digitization would be USD 5.70. For a small manuscript (around 200 folios), the expenses of digitization would be around USD 964.00. Though there are still many manuscripts to be digitized, and dreams of capturing human knowledge by digitizing everything have perhaps been too dominant in recent years, the question was raised if digitization is the most useful way for the readers (Huges & Prescott, 2018). According to Conway (2010), the dilemma of the cost was also pointed that large institutions like libraries, archives, and museums took great efforts to maintain the proper environment such as light and humidity. Therefore, the organic particles in the manuscripts are not destroyed for long-term preservation. Regarding this, why do they do that if digitization could be fully substituted for the actual artifacts? Undoubtedly, scholars would like to preserve the actual artifact as it is considered a world cultural heritage object. For digitization, the scholar must determine the manuscript as case-by-case whether digitizing projects are worth the cost (Lee, 2001).

Time is another issue of concern because there are massive amount of manuscripts that need to be digitized. Additionally, these initiatives require support from scholars or institutes to do proper digitization. Also, in terms of image quality, the principle of quality for preservation applied in digitization is another concern (Conway, 2010; Huges & Prescott, 2018). There are also specific technical issues that arise regarding good quality of image resolution, use of color calibration to set color consistency and exacting, and the process of creating watermarks and the file names (Fadlan, 2019). There are also other types of digital images used such as 3D, reflectance transformation imaging (RTI), and hyperspectral imaging. These types of digital images have high resolutions that enable a number of ways to show different perspectives of manuscripts (Huges & Prescott, 2018).

ISSUES AND CONCERN IN DOING COLLABORATION

As mentioned earlier, there are diverse institutions that work on digitization preservation at the local, national, and international levels. This is because there are

massive cultural manuscripts spread in individuals' residences, monasteries, and mosques all over Southeast Asia. Therefore, one institution cannot do or provide digitization and build one database for these valuable objects. At this stage, the disruption in terms of management should be a concern since all rare and ancient manuscripts are priceless in terms of history, culture, information studies, etc. For over 40 years, there are various public and private institutions including independent scholars who dedicated their time, budget, and other resources to preserve manuscripts and these ancient artifacts.

Concerning the uniqueness of the digital preservation for manuscripts, the universal standard is a major concern for the collaborating institutions. Thus, the standard of metadata for manuscripts and guidelines for the image is strongly recommended.

As suggested by Huges and Prescott (2018), libraries and scholars should work together to develop a better critical framework for the potential of digital delivery. Moreover, the insufficiency of the critical framework for the digitization and dissemination of manuscripts is a good explanation of why much digitization does not draw on the evidence of use (and re-use) of digital images to inform future initiatives. Therefore, the library, archives, and museum should participate more in the preservation area. At the moment, some institutions focusing on preservation exist, such as 1) the Special Collections Working Groups of the Association of Research Libraries (ARL) (founded in 2007); 2) the Rare Books and Manuscripts Section (RBMS) of the American Library Association; 3) the Council on Library and Information Resources (CLIR) (supported by the Andrew W. Mellon Foundation); and 4) the Society of American Archivists (SAA) (Elings & Brandt, 2013).

Besides, one of the good examples of collaborative works in manuscripts preservation is the DREAMSEA project. Funded by the Andrew W. Mellon Foundation, the local institutions working on various fields of library, archives, and museums in Southeast Asia, that are working on manuscripts, are gathered to work together. In Thailand, the Digital Library of Northern Thai Manuscripts is invited to work on this project and its main objective is to preserve the ancient document and manuscripts that are scattered in the northern part of Thailand. Therefore, the local institutions, who not only are able to access those hidden artifacts but also understand the contexts of local communities, should be included. Consequently, not only the objective of manuscript preservation is efficiently achieved but the standard of metadata for manuscripts and guidelines could also be applied.

With regard to cultural diversity, the various languages manifest the nature of culture in Southeast Asia. The contents in the manuscripts found in this region were written in many languages such as Pali, Sinhalese, Burma, and LannaTham scripts. As a matter of content, the language family tree, thesaurus, or ontology of these languages should be created. Therefore, the relationship could be linked from another manuscript to one another without language's limitation.

THE FUTURE OF MANUSCRIPT PRESERVATION: RECOMMENDATIONS

For the Council on Library and Information Resources (CLIR), the issues on the digital collection that need to be addressed include digital curation and the development of new relationships with users (Prochaska, 2009). Moreover, the institutions should work closely with the local users to describe the collections as well as mirror traditional functions with the Open Archival Information Systems (OAIS) model. Additionally, the volume and scale should be well managed. It is also important to identify partners and be prepared to wait for new technology that helps achieve more satisfactory curation.

Furthermore, the Special Collections Working Group has proposed that the institutions with collections should be more conscientious with and aware of the cost of maintenance and its availability (Prochaska, 2009). This would help the institutions decide whether their collection should be in digital or in other formats. Also, the accessibility for digital format should not be restricted, and there should be transparency in terms of provenance wherein the source of acquisition is provided. Moreover, good practices in records management should be developed to ensure the discoverability and accessibility of records. Likewise, the problems of hidden collections (the manuscripts that are still locked and kept in many monasteries) should be addressed and discussed so that the digital challenge could be overcome. Scholars have to continuously raise awareness among the owners of the manuscripts, such as community members and monks, about the importance of the ancient manuscripts they are holding and keeping, as well as the need for these manuscripts to be revealed and be translated in other languages to increase their readability and accessibility. Digitization would therefore be a tool to make the manuscripts accessible so that the public would have the opportunity to learn more from and about the manuscripts.

Based on the author's engagement in the manuscript preservation project, there are several points that were learned and could be used as models for existing and future preservation initiatives. In terms of *technical service*, manuscripts were generally recorded in the

information sheet by language and history scholars in the past. Though the main elements such as format, language, scripts, and content were listed, the standardization of bibliographic elements in the information sheet or metadata sheet was not done. For the library catalog, descriptive standards for cataloging rare materials such as the Descriptive Cataloging of Rare Materials (DCRM) and the Resource Description and Access (RDA) can be utilized to implement a uniform set of metadata for the bibliographic records of manuscripts in Southeast Asia. Also, the aim to link and preserve data inaccessible manuscripts could be more possibly achieved.

For the *database*, the author would like to recommend that libraries should be more engaged in cultural heritage, specifically manuscript preservation. Union catalogs such as OCLC's WorldCat should include more information on manuscripts and make them available online. In these ways, various users, specifically students and scholars, could use and access them worldwide.

For the *ethical issues*, the issues concerning privacy, autonomy, safety and security, the balance of power, human dignity, and justice (Royakkers et al., 2018) should be seriously taken.

With regard to enhancing the user experience, the *exhibition* would be another option for curated manuscripts. It would create the feeling of cultivation and discovery in public displays. The exhibition curator could engage more in manuscripts and help promote or discover the manuscripts collection. Moreover, the exhibition plays an important role in the students' informative outreach and learning as well as to create a platform of communication among scholars. Also, tablet technology is recommended to create attractive and user-friendly touch table experiences (Dysert et al., 2018).

In this paper, it is recommended that collaboration at all levels is important. It is undeniable that the palm leaf manuscripts preservation correlates with many units—the community, the local organizations, the scholars, and international institutes. Each unit has different capacities and ideas that fulfill the missing piece of palm leaf manuscript preservation. To clarify more, the community would not be able to preserve the palm leaf manuscripts correctly without the techniques and knowledge from the scholars. At the same time, scholars would not be able to work without the support from local and international organizations. Additionally, the hidden information contained in the palm leaf manuscripts would never be shown to the world without awareness and permission from the locals who own these valuable artifacts. At this stage,

the community members are the key since they are the closest unit to the manuscripts. Hence, the locals are the priority, as what has been done in the DREAMSEA project, since the locals best understand these manuscripts in terms of culture, language, and social context. Therefore, strong collaboration is highly required for further preservation and the sustainability of the Southeast Asian palm leaf manuscripts.

CONCLUSION

In conclusion, this paper would like to point out the need for more collaborations among various concerned individuals and institutions to tackle the challenging situation of the ancient manuscripts that are diverse in terms of form, culture, social context, and language. It is necessary for those who are working in this field specifically for historians and librarians to be aware and have a deeper understanding of the manuscripts. In response to this, a database for digitized manuscripts that is openly accessible should be developed. The people from the institutions at all levels—local, national, and international—should be involved. It is hard to believe that the limited accessibility of manuscripts is not only the vulnerable point but also makes them even more charming than other materials. Librarians should be involved in physical or digital preservation and should connect the small databases with a larger digital network that everyone can access. Moreover, the metadata elements should be properly determined to enhance compatibility when one repository database is ready. The importance of the cultural aspect and local context should be highly considered in digitizing the manuscripts since culture is separate from nationalism. The knowledge to correctly preserve the manuscripts should be provided because these ancient artifacts are priceless world heritage. Likewise, more learning spaces for manuscripts at local, national, and international levels should be established so that everyone could access or learn the contents of the manuscripts. More importantly, the key to successfully developing these works is a collaboration of all involved parties. Lastly, all knowledge and interests gained from the manuscripts must be returned to the people in the communities since it would be the best way to preserve and sustain the manuscripts.

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REFERENCES

Bodhiprasiddhinand, P. (2021, October 2). *Karn troad chmra khamphee lae karn samrod pheu karn anurak khamphee bi lan thaw prathes tam matrathan sakol* [The textual criticism and survey for the conservation of Palm Leaf Manuscripts in Thailand by the international level]. In P. Bodhiprasiddhinand (Chair), Conference on *Karn troad chmra khamphee lae karn samrod pheu karn anurak khamphee bi lan thaw prathes tam matrathan sakol* [The textual criticism and survey for the conservation of Palm Leaf Manuscripts in Thailand by the international level].

Convey, P. (2010). Preservation in the age of Google: Digitization, digital preservation, and dilemmas. *The Library Quarterly: Information, Community, Policy*, 80(1), 61–79. <https://doi.org/10.1086/648463>

Conway, P. (2000). Otherwise: Rationale for digitization and preservation. In M. K. Sitts (Ed.) *Handbook for digital conservation projects: A management tool for preservation and access*. Northeast Document Conservation Center.

Digital Library of Northern Thai Manuscripts. (n.d.). *DLNTM project: Funding*. Retrieved from <http://lannamanuscripts.net/en/about#dlntm-project>

DREAMSEA Manuscripts. (2021, October 1). *Premiere launch: Southeast Asian manuscripts database launch* [Video]. YouTube. <https://www.youtube.com/watch?v=uB6XKoSS6aI>

DREAMSEA Programme. (2021). *About*. <https://dreamsea.co/>

Dyser, A., Rankin, S., & Wagner, D. N. (2018). Touch tables for special collections libraries: Curators creating user experiences. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 19(1), 41–57.

Elings, M. W., & Brandt, R. (2013). The FUTURES of technical services. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 14(1), 21–30.

Fadlan, A. N. (2019). *Digitisation manual*. PPT_DIGITIZATION_MANUAL_DREAMSEA.pdf

Gaur, A. (1979). *Writing material of the East*. The English Library.

Hirtle, P. B. (2002). The impact of digitization on special collections in libraries. *Library & Culture*, 37(1), 42–52. <https://doi.org/10.1353/lac.2002.0012>

Hughes, L., & Prescott, A. (2018, September). Why do we digitize? The case for slow digitization. *Archival Journal*. <https://www.archivejournal.net/essays/why-do-we-digitize-the-case-for-slow-digitization/>

Jarusawat, P. (2020). Sustainable preservation of Lanna palm leaf manuscripts based on community participation. *Journal of Literature and Librarianship*, 9(1), 22–38. <http://iafor.org/archives/journals/iafor-journal-of-literature-and-librarianship/10.22492.ijl.9.1.01.pdf>

Kotsupho, P. (2021, October 2). *Karn samroj anuruk phra khamphee bilan lanna jak adit-paccuban* [survey-conservation Lanna Leaf Bible from the past - present]. In P. Bodhiprasiddhinand (Chair), Conference on *Karn troad chmra khamphee lae karn samrod pheu karn anurak khamphee bi lan thaw prathes tam matrathan sakol* [The textual criticism and survey for the conservation of Palm Leaf Manuscripts in Thailand by the international level].

Lee, S. D. (2001). Digitization: Is it worth it? *Computers in Libraries*, 21(5). <https://www.infotoday.com/cilmag/may01/lee.htm>

Prochaska, A. (2009). Digital special collections: The big picture. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 10(1), 13–24. <https://doi.org/10.5860/rbm.10.1.313>

Royakkers, L., Timmer, J., Kool, L., & Est, R. V. (2018). Societal and ethical issues of digitization. *Ethics and Information Technology*, 20, 127–142. <https://doi.org/10.1007/s10676-018-9452-x>

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