
The Greatness of Clove : Challenges in Preserving Historic Newsprint Collection in Monumen Pers Nasional Solo, Indonesia

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Abstract:

Monument Pers Nasional Solo is a center of press documentations situated in Central Java, Indonesia that has a collection of newspapers in printed form amounting to two million more, originating from various regions in Indonesia. Newspapers have a vital value for Indonesian and press history. The collection of newspapers in Monument Pers Nasional are dated from the period before Indonesian independence in 1945 until now. This fact shows that the physical and intellectual preservation of the newspaper collection information as an object for administrative, legal, fiscal, evidence and historical research purposes is a central function of an integral component of information center management. The purpose of this research is to identify the implementation of the preservation program in Monumen Pers Nasional, and to reveal the challenges faced in the newspaper preservation actions kept since the Indonesian independence era and the constraints faced in the preservation efforts of the collection. This research is a qualitative research using case study. The method used are interview and document study. The findings of this study are special collections displaying information about the history of the press in Indonesia divided into two are the intellectual property and press objects. An intellectual collection of newspapers, magazines, books, and bulletins. Newspapers are stored and organized by classifying it accordingly by title and year of publication. The classification aims to facilitate the collection retrieval system. The newspaper preservation actions in the Monumen Pers Nasional are conducted curatively and preventively. The region of Solo, Indonesia, has a tropical climate which include rain and dry seasons. Climate diversity affects insect reproduction. In response

to this, the Monumen Pers performs another preservation method by utilizing the unique species of Indonesian cloves. Clove is a native Indonesian plant which is widely used as a cooking spice and the main ingredient of clove cigarettes. Cloves are easy to find since they grow in tropical climates and are cheap. Use of cloves by the Monumen Pers is having it wrapped in a small paper and then placed around the collection of the newspaper. This is because of the smell of the cloves which can repel insects such as moths, termites, cockroaches, and rats. In conclusion, the newspapers is an important evidence and source of learning. The importance of the function of the newspaper, then the Monumen Pers Solo is to preserve newspapers in order to always be used for future generations. Constraints in preservation are funding and human resources. Suggestions found in the field of this research will be aimed at people who have attention in the field of newspaper collections, especially the issue of preservation of media papers that have historical value.

Keywords: Preservation, newsprint, Monument Pers Nasional Solo

Introduction

Preservation is one of the main activities in the library. The definition of preservation according to the International Encyclopedia of Information and Library Science (2003) is “The process and activities that stabilize and protect objects so that they will be permanent and durable, or as long-lasting as it is possible to make them”. The purpose of preservation is to maintain the information contained within the library collection. These collections are used as reference materials which include books, directories, almanacs, yearbooks, dictionaries, encyclopedias, newsprints, and the libraries stored in the library. In the context for Indonesia, pursuant to Law No.43 of 2007, “A library is an institution that provides information about the works of the professionally and the system of education, research, preservation, information and recreation needs of the users”. However, formal information institutions are not just libraries, other institutions which also preserve the collection include archives and museums.

Newspapers are among the preserved collections of information agencies. This is because newspapers have a vital value in history, some of which include Indonesian history and the press. Locally compiled and created resources, particularly local newspapers, are excellent potential sources (Bopp & Smith, 2011). In addition to being a source of information, newspapers store various events as a memory for society. One of the institutions which keeps newspapers in printed form is the ‘Monumen Pers Nasional’. The institute is a center of press documentation located in Indonesia which has a collection of newspapers in printed form with a total of more than two million copies and came from various regions in Indonesia.

According to ALA Glossary of Library and Information Science (2013), “Preservation is the activities associated with maintaining libraries and archival materials for use, either in their original physical form or in some other usable way”. This is in accordance with the activities of the Monumen Pers Nasional which preserves for the collection of newspapers. The location of an information agency located in Solo, Indonesia (one of the tropical countries) poses various challenges in preservation. "According to the director of the National Preservation Office of the Australian National Library, Jan Lyall, there are several factors that make archival life very difficult in the Asia / Pacific region as well as tropical climates; political unrest / war; the lack of acknowledgment of the need to preserve by the government; the selling of valuable heritage material to fulfill basic needs of the local population; physical isolation; and differences in language and literacy skills” (Teygeler, 2001).

Research on the collection of preservation in Indonesia has been done by Triwibisana Gunawan et al (2013) entitled "Digital Transformation with Repography Method As Efforts Preservation of Rare Newspapers in National Library of Indonesia". The research results indicate that by using reprographic, has more value than results obtained by using a digital camera. Judging from the quality of the resulting digital format has a value appeal to users, as well as the efficiency of the digital transformation process itself. Further note, Imam Mahmudi (2014) wrote a thesis entitled "Preservation of the collection of newspapers: a case study at the Monumen Pers Nasional". Mahmudi found that the existing policy as a guideline or technical guide for preservation of newspaper collection in Monumen Pers Nasional is based on the Decree of the Minister of Communication and Information Technology Number. 06 / PER / M.KOMINFO / 03/2011 on the 'Organization and Working Procedures of the Monumen Pers Nasional' which became the basis of the implementation of the Monumen Pers Nasional which regulates its Main Tasks and Functions. Preservation actions were taken in the form of preventive, curative, restorative, and media transfer.

Based on a previous research, the authors will also write about preservation especially on newspaper collection in Monumen Pers Nasional, but the main focus of the author on one of the uniqueness of the use of natural materials is clove as one of the materials that support the preservation of the collection. The collection of newspapers in the Monumen Pers Nasional dates from the period prior to Indonesia's independence in 1945 until now. This fact shows that the physical and intellectual preservation of information collections of newspapers as objects for administrative, legal, fiscal, evidence and historical research purposes is a central function of the integral component of the information center management.

Disaster response in preservation effort is by placing the collection of newspapers on the high building, which is on the 4th floor, to avoid flooding. This is because the region of Solo is classified as lowland. The region of Solo, Indonesia, has a tropical climate which include rainy and dry seasons. Climate diversity affects insect reproduction. In response to this, the Monumen Pers performs another preservation method by utilizing the unique species of Indonesian cloves. Cloves are materials that are used. The purpose of this research is to identify the preservation program implementation in Monumen Pers Nasional, the usage of cloves, to find out the challenge in preservation of newspaper kept since the era of Indonesian independence, and constraint in the effort of conserving the collection. This study uses a qualitative approach. The method used is case study. Data collection techniques through interviews with employees working at the Monumen Pers Nasional involved in preservation of newspaper collection. In addition, the authors also make direct observations at the place of this museum to see the process of preservation. Observations conducted to determine the challenges faced by workers to retain information in the physical condition of collections to date with tropical Indonesia's climate conditions with one of its uniqueness using clove material.

Historic Newsprint Collection in Monumen Pers Nasional

The Monumen Pers Nasional is a press documentation center that is tasked with documenting media proofs throughout Indonesia. There are many collections published by more than one million copies from various regions in Indonesia. Collection of newspapers kept from the time before independence until now. In addition to storing the collection of newspapers, the Monumen Pers Nasional also stores a collection of press objects from the early days of the press in Indonesia. As a supporting center for documentation of the press field, Monumen Pers Nasional has a library that specializes in providing a wealth of information collections in the press field. The following is the mission vision of the National Press Museum,

Vision:

Become a national press center based on information technology

Mission:

- a. Documenting, conserving evidence of media publications and historical objects of press coverage from all over Indonesia since before the proclamation of independence to date
- b. Communicating documents and collections of press, communications, historical information to the general public to support the builder of the soul and personality of the nation (nation and character building)
- c. Realizing the object of scientific tourist visits in the field of press and become agents of information dissemination and 'media literasi' for the community.



Picture 1 : Display of newspapers

Based on the vision and mission of the Monumen Pers Nasional has a major role, one of which is the preservation of newspapers which own historical value to utilize the intellectual content of the newspaper for the community. The newspaper preservation actions in the Monumen Pers Nasional are undertaken curatively and preventively. The preventive actions are taken in the form of: a). environmental damage prevention, which includes: temperature control, water humidity, and control of light effects; b). prevention of human-caused damages, which include: procedures for holding collections, arrangement in storage, processing, and servicing the user; c). and binding collections. There are also curative actions, which include: a). fumigation by using Sulfuryl Fluoride SO_2F_2 chemicals; b). restorations by patching or tearing torn sheets, repairing damaged binding, and re-stitching the collection that had been repaired; c). media transfer, with stages: 1). collecting and selecting newspapers, 2). checking physical condition, 3). capturing with DSLR cameras, 4). editing and compiling, 5). final packaging; 6). and reproductions of posters used for exhibitions. Tropical climate conditions in Indonesia pose a problem for newspaper preservation. The effect of the tropical climate makes the ancient newspapers receive a lot of damage. The damage resulted in form of tore, discoloration, rotting paper and becoming crispy. Seeing the amount of damage, The Monumen Pers Nasional is innovating in preservation. Innovation is one of them by using natural plant materials. The natural ingredients used are derived from typical local Indonesian clove.

What is Clove?

Clove (*Syzygium aromaticum*) is one of the native plants which grows in Indonesia, especially in the Maluku islands. Cloves are a type of spice and have various benefits. Cloves are

commonly used as cooking herbs and also traditional medicine for various diseases. In addition, cloves in Indonesia are also used for the main ingredients of clove cigarettes. In European countries, cloves are used as a spice in the manufacture of spicy dishes. Clove plants have large tree trunks and hard wood. Clove plant height ranges from 20 to 30 cm. Part of clove plants that can be used are: flowers, leaves, wood, and twigs.



Picture 2 : Cloves

Cloves in its use can be utilized directly through simply drying or treating by extraction. Extraction is done to get the oil contained in the cloves that is located on the flowers, flower stalks, and leaves. The oil content found in clove flower is essential oil. Essential oils are the result of metabolic processes in plants due to the reaction between chemical compounds and water. Essential oils are synthesized in plant cells. Not only on cloves, essential oils are also found in other plants such as nutmeg (*Myristica fragrans*), vetiver (*Vetiveria zizanioides*), eucalyptus (*Melaleuca leucadendra*), cinnamon (*Cinnamomum verum*), basilicum (*Ocimum basilicum*). The use of essential oil is insect repellent. This is in line with what Dubey et al (2010) said: “Essential oils have been shown to possess antimicrobial and antifungal properties. Essential oils and their components acceptable for their multi-purpose functional use”. Isman and Huang (2000) also said a similar matter regarding that essential oils have many functions one of them is as an insect repellent.

Cloves are used by the Monumen Pers Nasional is dried clove flower that is on the cloves. Clove flower has a distinctive strong smell. The smell of cloves is used to repel moths and insects. In addition to using cloves, the Monumen Pers Nasional also uses white pepper as a preservation ingredient. The use of white cloves and white pepper is not only used for newspaper collection only, but also for the collection in the library. Cloves are also used as preservation materials in libraries. As for its use the same as in the collection of newspapers.

Challenges in Preserving Tropic Area : The Use of Cloves

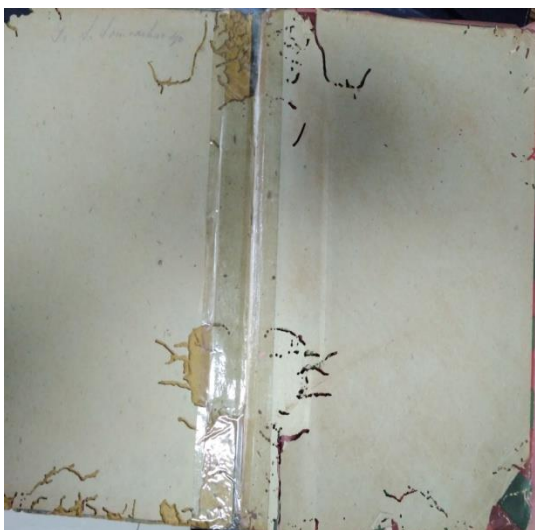
Cloves are being used by the Monumen Pers Nasional since 2016. The idea of using clove and white pepper as a preservation material started from a discussion by the staff with other collectors of paintings and batik collectors. One of the collectors of painting used patchouli (*Pogostemon cablin*) as the preservation of his paintings. Another collector is a batik collector which uses white pepper as a preservation of batik. Monumen Pers Nasional staff are looking for other ideas of natural materials that can be used as preservation materials. Some of the natural ingredients to be used are: vetiver (*Vetiveria zizanioid*), cloves (*Syzygium aromaticum*), and white pepper (*Piper nigrum*). In ancient times, fragrant roots are often used by the Javanese

community, especially as batik cloth deodorizer in the closet and cockroach repellent. Batik cloth is a traditional cloth from Indonesia, especially Java. However, the use of vetiver as preservation material for collection at National Press Monument is less suitable because the roots are easy to fall out and become dirty. In addition, the vetiver has a long and sharp shape can cause damage to the collection of newspapers. Therefore the materials used for preservation are cloves and white pepper.



Picture 3 : The use of cloves in newspapers

Another reason that underlies the idea of clove use is the Monumen Pers Nasional staffs wanting to reduce the use of chemicals such as camphor. Camphor's rapid evaporation is so quickly exhausted and wasteful. Another trigger that caused the emergence of moths and insects is the tropical conditions in Indonesia, especially in Solo, Central Java is located in the lowlands. The tropical climate causes heat and humidity. Air fluctuations in tropical climates affect moisture. Humidity has an impact on the environment, with one of them on the growth of insects and fungi. According to Muclis (2014), "changes in temperature lead to changes in humidity. Very drastic fluctuations affect paper damage, paper will loosen and tighten, if this happens repeatedly will break the chemical chain bond on cellulose fibers. Excessive moisture causes the water-soluble ink to spread and the paper will stick together and it will be difficult to remove when dry. Conversely, if the air humidity is too low, the paper becomes dry and wrinkly".



Picture 3 and 4 : Collection of newspapers damaged by termites

Curative action in preservation is fumigation. But the rules to do fumigation in routine every 6 months. Due to limited funds, fumigation is only done once a year. The idea of the use of cloves is one solution that can be used in the preservation measures which do not require a lot of expense. Cloves are easy to find and the price is quite affordable.



Picture 5 : Use of Cloves in Newspapers

How to use cloves:

1. Choose dried clove flower that has a strong and distinctive smell.
2. Make a small pouch like a tea bag with tile-based paper as wrapping.
3. The bags wrapper made with a size of 5 cm x 5 cm and then attached with masking tape.
4. Insert the cloves about 20-25 pieces into tea bags / wrapping paper as a tile.
5. Cloves are ready to put around a collection of newspaper. Cloves ready to put around a collection of newspaper. Cloves should be replaced if the smell is reduced or lost.

How to use cloves is the same as how to use white pepper. The use of cloves is easy and practical. Cloves are very easily available in traditional markets specialized in selling medicines and traditional herbal medicine. Purchases are made in kilogram size. Dried cloves price per month in July 2018 in Indonesia ranges from Rp. 90.000, - to Rp. 100.000.-. Dried cloves price is relatively more expensive 3-fold compared to the wet cloves. Clove production in Indonesia is 75% used for clove cigarette industry, and 25% is used for pharmaceutical and food industries. Compared with camphor, clove usage is relatively more efficient. The smell of cloves can last more than three to six months. In other hand, camphor is exposed to more rapid evaporation in less than a month. Cloves should be replaced if the smell is gone. The equipment used is also very easy to obtain. Monumen Pers Nasional has never conducted a trial in advance about how effective is the use of cloves if the experiment is done using insect traps made with various colored paper. However, although the trial has not been done yet, it looks different before use and after clove use. The effectiveness of the use of cloves is proven by repelling insects such as moths and cockroaches, termites and rodents.

Conclusion

The idea of using local wisdom, especially traditional crops such as cloves as preservation media that has many benefits, this is understood by the Monumen Pers Nasional, not only understood as something sacred. Cloves can be an alternative in preservation materials. The use of cloves is quite easy by simply inserting into a tea bag or tile paper and attached to the tamper. Furthermore, the bag is only placed in the surrounding newspaper collection. A typical aroma of cloves makes insects such as cockroaches, moths, termites, and rats do not come closer to the collection of newspaper. Clove is proven to be made natural preservation materials with a relatively cheap price. The use of cloves is very easy and practical. Cloves are different from chemicals that cause health effects for humans within a certain time. Cloves are safe for human health because of their natural and harmless smell. In conclusion, clove is one solution of natural preservation materials which are safe, easy, cheap, and practical in its use.

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