

Preservation, Conservation and Access Project at National Library, Singapore

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Introduction

My paper is on the Preservation, Conservation and Access Project that is ongoing at the National Library of Singapore. Called the Preservation, Conservation and Access Project (PCA in short), the project involved the fumigation, conservation and selective microfilming, conservation and digitization of our rare and heritage materials.

It was a huge undertaking, due to the collection size, the fragility of the collections, the various formats involved requiring different types of conservation treatments and the logistics of tracking such a huge collection.

Staff involved with the project had to pick up new skills, in the area of preservation and conservation. The project also emphasized the need for inter-departmental co-operation as well as strategic partnerships with relevant external institutions to which we outsourced the works.

This paper will discuss the background to the project, the challenges & issues faced and the learning points.

Objectives

The objective of the project is to preserve, restore, archive and make accessible about 85,000 rare and heritage materials of the National Library with a budget of S\$2 million. The project officially began in April 2003 and was scheduled to continue for 2 years. The major deliverables are :-

- To provide access via microfilming and digitization
- To preserve via microfilming, archival boxing and encapsulation
- To fumigate
- To conserve rare books

The impetus for this project came from the need to establish the National Library of Singapore as a premium and one-stop reference and knowledge centre for Singapore heritage materials within the region and globally. Another driving force was the urgent need to improve and facilitate access to rare and valuable heritage materials for researchers, historians and other library customers. Thirdly, and most importantly we wanted to conserve and preserve our rare and heritage materials to halt their deterioration and prolong their shelf-life.

By doing this, we hoped to preserve and archive the historical and social memory, and the literary heritage of Singapore, for the strengthening of the Singaporean identity and for the benefit and consumption of the future generation of Singapore

The project was outsourced to the National Archives of Singapore, as the National Library did not have a conservation unit of its own.

Challenges, Issues & Decisions

This was not a simple and smooth-going project. Despite the many hours of planning, discussions and negotiations with the various parties involved, there were always issues and areas of contention that cropped up later and there arose a few factors beyond our control.

These issues had to be studied objectively and decisions had to be made with the long-term goals of the organization as well as in the best interests of the collections

Firstly, convincing management on the benefits of the project was not easy. Especially, when we had to go to the drawing board to re-do and re-look at our proposals.

We also had to decide whether we should set up our own conservation unit or outsource.

The logistics of preparing and storing the collections, and managing their flow was a huge challenge. How do we identify and sort a collection size of 85 000 heritage materials for fumigation, conservation, microfilming and digitization within a limited time period? Secondly how are these to be transported to our vendor, the Archives and ensure that they are not unduly stressed, keeping in mind certain preservation standards, especially for the rare books? Thirdly, how do we track the collections which were going back and forth?

One important question we had to ask ourselves is to what extent and how much do we conserve a rare book?

We realized that timeline was a factor that we could not control totally. Although we planned neatly on paper the timeline for the various preservation and conservation tasks, in reality the timeline had to be extended as we met with several loopholes and new surprises.

The scope of the project was something we had clearly defined from the start. As the project proceeded, we had demands and requests from various groups in National Library who either wanted their items fumigated or conserved. It was indeed surprising that all these requests only surfaced once we had started the project. We decided on each request based on their merit and the urgency of the need. This required a lot of good project management on our part.

Cost was another factor. Due to the uniqueness of each book and the fact that each book needed a different type or degree of treatment, the costs for conservation tended to vary or increase in most cases.

I will elaborate on some of these challenges and issues later.

Starting the Project & Selecting the Vendor

We started this project because we wanted to preserve our 2600 plus rare collection through conservation repair and microfilming. After several discussions with management, we decided to look into the hybrid method of microfilming and digitizing at the same time. The hybrid method refers to the book being scanned once and the image can then be converted to either a microfilm or digital copy.

We were also tasked by management to get one vendor who could do conservation repair as well as microfilm and digitize; this was to minimize handling. This limited our choice of vendors. Although there were several vendors who could do microfilming and digitization, there was only one who could do conservation repair, the National Archives of Singapore. (Historically the National Library did not have a conservation unit of its own)

Another factor that influenced our choice of vendor was the quantity of the collections. The initial figure of 2,600 actually grew to 85,000. This new amount included, besides the rare collections, other Singapore heritage collections of various formats. The increase in amount did make our project a bit more complicated and more challenging.

We did look into the pros and cons of setting up our own conservation unit but decided against it due to the specialized expertise and skills required, and since our timeline is short.

We also explored sending our collections to overseas conservation companies. However this was not feasible due to the collection size & the constraints of timeline and costs.

Based on the above factors, we decided to work with the National Archives who already had an established conservation unit and were located quite near to the National Library.

However, we had to split up the project into two and award the digitization job to a commercial vendor. The reason being that we wanted to digitize in colour and Archives was only able to scan in black & white.

Collections Preparation & Management

Identifying the Collections

Although we wanted to preserve all our heritage collections, we also realized that it is impossible to preserve everything and that we had to be selective. Deciding on the

collections that needed to be preserved and conserved was not an easy task. We had to prioritize the collections based on their heritage, historical and literary values and those that are unique and irreplaceable.

Based on these criteria, we identified materials from our Rare, Legal Deposit, Closed Stacks and the Donor collections as important collections that require preservation. It was easy enough to select the Rare materials which is our prime and oldest collection and which contained items in urgent need of repair. We also decided to focus on our closed stacks collections (which were mostly from our predecessor library, the Raffles Library). The reason for selecting Closed Stacks collection over the Legal Deposit or the Donor collections was primarily because the former is an open-access reference collection although access was restricted to researchers only. Moreover, it is part of the National Reference Library's Heritage collection. And the reference library was due to move to a new building in mid-2005.

The other collections, though equally important, were kept under closed access and thus were less frequently handled.

Besides the Rare and the Closed Stacks collections, maps, posters and literary manuscripts were also identified for the PCA project. This amounted to about 85,000 items in total.

Sorting the Collections

Sorting the collections for fumigation, conservation, microfilming and digitization was a tedious and time-consuming task. As we had no prior experience in preservation and conservation, we had to seek the help of the conservator at the National Archives of Singapore. The conservator was asked to do a condition study of the collections and recommend appropriate treatments.

Since the collection size was too huge, the conservator and her two assistants could not look at each item individually. They did a general condition study and recommended three categories of conservation treatment for our heritage materials.

By working along with the conservator, we acquired the necessary knowledge in identifying the type of treatment for each book and sorted them accordingly. We then used our own manpower to look at the books and sort by treatment type based on their condition.

Also, it was too time-consuming to identify each book that needed fumigation. As such, a decision was made to fumigate all. Anyway, most of them are older materials and most were housed in the stacks except for the rare books. The rare books were kept in a special climate control room. Being rare, priority was given to them for fumigation.

A decision was made that only rare materials will be microfilmed, as these are not for public access. Identifying rare titles for microfilming was a challenging and time-consuming task. As our microfilm copies were not displayed in the OPAC but in the card catalogue, we spent a lot of time in confirming if an item was microfilmed or not. Some books had a stamp with the microfilm number while others only had a phrase saying “Available on microfilm”. For the latter, we had to confirm the number from the card catalogue. In some cases, the microfilm number on the book was wrong; as such, this had to be verified via the card catalogue.

A lot of time was invested by staff in visiting Archives and working closely with the conservation unit there in order to ensure standards were maintained and variations for conservation work were approved. Not only did this improve our rapport with the Archives staff, it was also useful in helping us to better communicate our needs and requirements. At the same time, we learned more about conservation including the various types of treatment, the tools and the methods used.

In identifying titles for digitization, we had to select those, which were in the public domain. As our timeline for the project was tight, we could not afford to seek clearance for copyright.

In order to facilitate our work, we had to sort the books by their type of treatment as well as whether they needed microfilming or not. We did not include digitization in this sorting, as the titles were not many.

We came up with a grid to guide us in our sorting.

<i>Treatment</i>	<i>Microfilmed Already</i>	<i>To Microfilm</i>
Orange	S	A
Green or Orange/Green	B	C
Pink	D	E

Each box under each of the above category was given a number in successive order. For instance, books that were brittle and need microfilming were placed under the E category. When these books are packed in boxes, the boxes were labeled as E1, E2, E3 and so on.

This grid was useful not only in sorting the books but also in tracking, and in communicating with the vendor and in identifying the requirements for treatment.

Various Categories of Treatment

The first category, the orange category included books that needed re-binding. The second category was the green category and included items with loose pages that needed repair. The third category, the pink category, was for the severely damaged and brittle items.

There were cases where the books could fit into two different categories as in both orange and green. This was resolved by negotiating with the National Archives to include a fourth category.

A issue that arose later was the contention by the National Archives that they were spending more time treating the materials in each category than was originally planned. For instance, they allocated about 2 to 3 hours for treating an item in the orange category. However, the actual conservation work took longer for some books in this category. As more resources were being deployed than originally planned for, Archives requested for a change in the pricing. This was negotiated and agreed upon as extra costs for variations.

The Extent of Preservation and Conservation

How and to what extent should we preserve and conserve our heritage materials was an important decision for us. Do we preserve the content of the book or do we treat the book as an artifact and preserve its original look as much as possible.

In the past, a few of the rare materials sent for conservation repair came out looking totally new, like a new book. These books were unbound and tissue-mounted. They came out thicker than their original size and had to be re-bound using a new cover.

For this current project, we had to decide whether to conserve the book totally in order to prolong its shelf-life or maintain the original integrity of the book by avoiding full restoration.

Although, Archives assured us that the type of tissue and leaf-casting fibre used now is much finer than in the past and thus the size of the book will not be altered much, we were not convinced of full restoration.

On the Archives part, they felt that a damaged book has to be treated fully so as to facilitate handling. On our part, we were keen on preventing the mistakes of the past and also in ensuring the original look and feel of the rare books are not altered much.

After several discussions and several negotiations, we agreed on minimal conservation repair and retaining the original look as much as possible. And to further protect the book from environmental damage, we decided to place all in archival boxes. Initially, Archives was resistant to the idea of doing minimal repair as it involved a lot of manual work, which is time-consuming. It was faster for them to unbind the book and do tissue-mounting or leaf-casting using a machine.

It took a lot of time and effort for us to communicate our requirements to Archives and to convince them that the rare books are to be treated as an artifact and are not meant for frequent handling.

We also put forth a request that books should not be unbound. This did pose a problem especially when the spine was too tight for microfilming or the book was too brittle. In such cases, one of the project team members will visit Archives to re-look at the book and discuss further on the alternatives available.

We also had to come up with certain criteria to guide us on making decisions. For instance, if the book is the only copy or it was published in Singapore and is out of print or stock. Also if the binding is unique and Archives are not able to replicate the same binding, then we decided not to microfilm them or to digitize them. We are currently exploring ways in how we can overcome such issues.

Logistics & Operations

Planning the logistics for such a huge collection was indeed challenging and eye-opening as well. We had to ensure proper handling of the fragile collections as well as security.

We also improvised by using existing resources, which helped us facilitate the movement of the collections.

Transportation

Instead of getting our own transportation company, we used the existing vendor hired on a term contract by the Admin department. As the vendor had to transport fragile materials, we had to provide strict requirements for handling.

Due to the fairly short distance and the costs constraints, we settled for a non-air conditioned truck. We also scheduled the despatch for early mornings before 10am when the weather is cooler.

Ideally we would have liked to transport the rare items in archival boxes. Due to the costs constraints and the collection size, we improvised by placing them in clean envelopes and then in newly purchased boxes for transportation to Archives. Once they were at Archives, each book was placed in custom-made archival boxes after fumigation.

Storage

We needed a lot of space to work on the collections that were going through the PCA project. We needed space to identify the treatment for each book and then sort them into various categories. We needed space to keep our boxes that were used to pack the books. We needed space to store the fumigated books separately from the unfumigated ones.

As our work area was only sufficient to create a quarantined area for a few boxes, we sourced for and sent the fumigated items to a warehouse, a separate one for rare and non-rare books. Likewise for the unfumigated items.

Tracking

Tracking the various collections undergoing various types of treatments was indeed a challenging task. We needed to track the boxes of collections that were going for weekly fumigation; also those that were going for conservation repair; besides these, we needed to track the maps and posters that were going for encapsulation.

We also needed to track the boxes that were transferred from storage to our work area so that we could sort them and list them. We needed to track the collections that were returned from the National Archives after treatment.

At the same time, we needed to track the titles that were going for digitization to another external vendor.

To track all the books, we used Microsoft Excel to create lists of the books in each box. A master list was created to track the boxes that included the date the box was sent out and returned.

And when we wanted to track a particular book, we used its barcode (which we can obtain from our catalogue) and did a search on the file directory listing, using Windows Explorer. This helped us locate the box in which the book is in and then we used the masterlist to track the box.

Others

Keeping the work area clean and free from pests was of paramount importance. Staff were told not to consume food and drinks within the project work area.

As the project dealt with rare books, we had to ensure proper security during handling, transportation and storage. Access to the rare collections was restricted to a few staff only.

Manpower

Instead of depending on existing permanent staff, we decided to hire casual staff to handle the operations work of listing and tracking the collections. One reason was that we required staff who could focus on the project, as it was very time-consuming and routine-based.

As for permanent staff, there were many other distractions unlike a casual staff. However, one disadvantage was that the casual staff may not stay very long which meant we had to re-hire and re-train regularly. We assigned a permanent staff to supervise the casual staff so as to ensure standardization.

All the casual staff had to be trained well in handling the collections carefully and gently. As the rare collections needed special treatment and handling guidelines, we only assigned the work to two of the casual staff, who are the most reliable. Fortunately, these two staff are still working with us on this project till to-day.

Open Communication

Keeping an open mind and having an open communication channel between the vendors were very important.

There were several face-to-face, email and phone discussions to ensure that our needs and requirements are communicated properly and to ensure that we understand the constraints of the vendors too.

We had to strike a balance between our requirements and the expertise knowledge of our vendors. There were times the vendor will revert to say that some of our requirements could not be met due to certain factors. In such situations, we will meet up with them to look for viable solutions that are feasible for both parties.

Although it was time-consuming and tedious, such regular communications and negotiations helped our vendors to understand our requirements better as well improve our interpersonal rapport.

Costs & Time Management

Managing the costs and time was a challenge by itself.

Although there was a quotation with a fixed cost, the National Archives requested for a re-look at the costs due to the increase in the resources required for them to do the preservation and conservation work. Basically the green, orange and pink categories for treatment threw in a lot more variations as each book took a different time for repair. As such, they decided to charge us by the time taken to repair a book.

As we needed our vendors to be sustainable and viable for our project to continue smoothly; certain concessions were made and we agreed to pay for the extra costs.

One issue that we had to deal with somewhat regularly was the requests from other sections in the National Library to fumigate or repair their books. In order to ensure that our timeline is not affected, we took in those collections that were critical.

Another important area was the work schedule. After much discussion, and noting the advice of the National Archives, we agreed to repair the brittle books first before microfilming and to microfilm the less brittle ones before repair. This will ensure that the resources are maximized as the Archives staff were focused on different tasks.

Learning Points & Benefits of the project

Having dedicated staff to focus on a project of such magnitude is essential. Although there are disadvantages in hiring casual staff, hiring and retaining reliable casual staff is very crucial. We included the casual staff in most of the staff welfare activities so as to inculcate a sense of belonging to the department. By retaining two of the casual staff for the duration of the project, we could ensure continuity.

Besides good staff supervision and management skills, one needs good negotiation skills and an open and adaptable mind; a keen sense of learning is also important. Although we were not well versed in the area of preservation and conservation, this project helped us pick up new knowledge and new skills.

Very importantly, one needs lots and lots of patience to look through the issues that crop up at different intervals and solve them objectively.

A good tracking mechanism is indispensable to large projects such as this. Without a proper tracking mechanism, we would have been lost in the sea of collections that were moving in and out.

It is advisable not to undertake such large-scale retrospective collections projects. If such projects can't be avoided, then phasing such large-scale projects to ensure that the milestones and crucial targets are met is necessary. Categorizing the collections by their type and format and by prioritizing them, we were able to ensure maximum optimization of resources as well as meet the timeline.

This project also emphasized the need for inter-departmental co-operation as well as strategic partnerships with relevant external institutions to which we outsourced the works. Networking was an essential skill.

Conclusion

Preservation and conservation work must be carried out continuously and not only to salvage the existing collection but also to proactively implement a preventive programme that would ensure newly acquired heritage materials are adequately preserved.

The Preservation, Conservation and Access Project at the National Library of Singapore is nearing its completion in September this year. This project taught us that a preservation strategy is necessary and that everyone in the library including the staff who process the books to the customer need be to educated on the finer points of preservation and the proper handling of library materials.

This will ensure that our literary heritage is preserved for the future generations and reduce the need for us to undertake corrective action later.

References

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