

## **Heritage under Siege from Climate Change: Lessons from the Past on Coping with Disasters for Philippine Museums, Archives and Libraries**

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### **Abstract**

In this paper we will begin by examining case studies on natural and manmade disasters that have endangered heritage collections in the Philippines and Southeast Asia. These will be analyzed within the context of culture in the region where disasters are seen as fateful events and acts of god. Linking them to current concerns with climate change is particularly timely, as the Philippines' National Framework Strategy for Climate Change 2010–2022 does not mention cultural heritage in its agenda. Moreover, this may also be understood in the framework of a social situation where saving lives take precedence while museums are disregarded when catastrophes strike.

In recent years, more attention elsewhere has been given to emergency preparedness for heritage collections as threats grow from wars, greenhouse gas effects and poverty. We will be presenting not only scenarios that emanated from museums and heritage professionals' experiences but also the theories that are developing within the structure of ICOM's Museum Emergency Program in partnership with Getty Conservation Institute and ICCROM. Having received training and actively participating in giving training, we will share lessons we have learned that contributed to our research skills to effectively manage our museums, libraries and archives.

### **Introduction**

The Philippines, like many Asian and Pacific countries, has its share of natural disasters. In 2009, it was ranked first in the world for having the most natural disasters and third last year (after China and India).<sup>1</sup> But this does not mean these have become less destructive to lives and property. As climate change has made the impact of disasters more intense, these events have also been more disruptive and the costs high. Last year's impact to humans was 50 percent less than 2009, but this figure from the Citizens' Disaster Response Center challenges the country to be taken out of the top ten list. Preparedness is one strategy to enable the Philippines to achieve this.

Given the above and the predictions that the future impact of climate change will become worse, there is no mention of how to address the effect on cultural and natural heritage in the National Framework Strategy for Climate Change 2010–2022. There are reasons for amending this Framework to address these gaps, as we will argue in this paper. Heritage protection is just as important as the lives to save because for many people in the Philippines disadvantaged by disasters, identity from cultural and natural heritage is life itself. Without these assets, most communities will become dysfunctional.

### **Climate Change and Disasters in Museums**

In late September 2009, a storm (local name Ondoy, international name Ketsana) that appeared like any other during the typhoon season in the Philippines brought so much rain that it inundated many parts of Metro Manila and most of Luzon. The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) documented a record-high amount of rainfall

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<sup>1</sup> Citizens' Disaster Response Centre (2010)

in 24 hours at 455 millimeters (17.9 in). The amount of rainfall recorded for six hours, which was 341.3 millimeters (13.44 in), was comparable to the 24-hour rainfall in 1967. The damage to property was estimated to be Php 6 billion or US\$ 1.38 million.<sup>2</sup>

Despite the damage, the report that reached the International Council of Museum's Museum Emergency program and the Blue Shield was that there was minimal damage to museums in the Philippines (pers. comm.). Dubbed as a super typhoon, Typhoon Ondoy was a big eye opener to any emergency disaster program of national or local scope. The National Museum buildings had their share of damage: The National Museum (NM) of the Filipino People building's ground floor, where some of the galleries with NM collections are located, was reached by water almost knee-high. These collections on display were transferred to the vacant galleries on the upper floors. Some of the wood parquet floors and showcases were damaged and have to be replaced. Those collections that cannot be moved (immovable or due to size constraints) were soaked until water receded. Remedial conservation treatments were made to arrest further deterioration. It was just fortunate that the damage to those unmoved collections were slight due to them being made of inorganic materials that were mostly stone and metals.

The street that separated the NMFP and NM National Art Gallery (NMNAG), called the Finance Road, was impassable while within the entire perimeter of NMNAG the flood almost reached the ground floor of the NMNAG. NM visitors that were trapped by the sudden surge were advised to stay at the NM for safety measures. It was opportune that two participants (Balarbar and Esguerra) along with an instructor/participant (Labrador) underwent Museum Emergency Program training for Southeast Asia in 2006. In their capacities as scientific conservator, restoration architect and museologist, they were able to apply what they learned instantly as their disaster prone setting proved a ground on which they could provide assistance.

### **The Museum Emergency Program**

The Museum Emergency Program (MEP) initiated by ICOM was launched in its 1998 Triennial Meeting as part of its overall strategy on Risk Management. It was to satisfy the needs expressed by museum professionals all over the world regarding emergency preparedness and reaction. One of its aims is to increase competence and expertise, as well as to consider it in the context of the framework of the concerns of the International Committee of the Blue Shield (ICBS), which was formed in 1996 and its vital work was recognized in the Second Protocol to the Hague Convention agreed to in April 1999 by 84 countries. The ICBS was created to facilitate international responses to threats or emergencies, working together on a global level.

The key to the success of spreading the word about the MEP is its methodology of Teamwork for Integrated Emergency Management (TIEM). It was jointly organized by ICCROM, ICOM and the GCI (Getty Conservation Institute). Conceived as a three-phase pilot training project for national heritage institutions in Asia, it including a two-week course workshop held in August 2005 in Bangkok, Thailand, distance mentoring over a period of seven months, followed by the final review meeting in June 2006 in Seoul, Korea. During the last meeting, assessments and projections were made. Several enthusiastic proposals were given by the participants, which included forming a network, and fundraising plans were made to support this network. Participants also had a chance to speak at a public forum hosted by the National Folk Museum of Korea in which audiences were comprised of cultural officers, local museum personnel and students.

Going through this course, the first in the world, inspired participants to practise in their own countries what they have learned. This was the case for me too, and that meant integrating what I have learned. This includes the notion that preventive conservation measures are very

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<sup>2</sup> <http://www.typhoonondoy.org/>

much part of this, such as conducting an integrated pest management and practising sound and regular housekeeping in the museum.

Before the MEP, those of us who teach museum studies courses have already included some courses that had resonance to the substance of the MEP. It served to enhance our curriculum through transmitting the new information that was disseminated during the different phases of the MEP, using the reference materials, and putting the mentoring methods in practice. From these developments we were able to build on other graduate courses within the MA Art Studies (Museum Studies) program. Other related training projects comprised public relations, grant writing, security of cultural property and updating skills on handling and care of collections within the framework of museums.

Besides being involved in an academic program that links to the work involved in the MEP, there are also non-formal training courses I have organized that include orientation seminars, workshops and lectures in conferences. This will be explained below since these activities continue to be highly subscribed and result in getting invitations to run workshops on disaster management.

Prior to undergoing the TIEM course, Labrador had been involved in preventive conservation courses that somewhat touched aspects of those taught during the course. Her reflection on past courses and the activities related to MEP made her aware of the importance of gathering the knowledge and experience, bringing that forward, and connecting them to the new information and ideas from the MEP training program.

### **Non- formal Training**

At the University of the Philippines' Vargas Museum (UPVM) Labrador initiated the Museum Professional Study Series (2002–2007) in which experts in the field were invited to give a hands-on workshop. One of these was a four-day workshop on Basic Documentation with Condition Reporting, given by paintings conservator Nicole Tse of the University of Melbourne. It was part of an exchange involving running this activity annually in exchange for her three-year research on the Mechanical Behaviour of Western Painting Materials in Tropical Conditions with other Southeast Asian partners. On 26 October 2005, the day before her actual workshop began, the National Museum of the Philippines' architect Evelyn Esguerra, conservator Robert Balarbar and I held a Seminar on the Museum Emergency Program. As mentioned above, we were participants in the TIEM Pilot course. The participants responded appreciatively to our seminar and Tse suggested that it become part of museum administration education.

Continuous non-formal training at the UPVM has now included constant review and improvements of its own MEP. Daylong quarterly emergency drill involves morning seminars, courtesy of our partners in the emergency response sector, such as the fire brigade, Red Cross and police.

As for the NM, after the TIEM course, Balarbar and Esguerra were able to develop an emergency disaster plan. The plan constitutes the safety and protection of the following: NM staff and visitors, the collection, and building (in that order of priority, people being its first priority). Several committees were formed and to name a few: Safety and Welfare; Security, Fire Brigade; Information and Communication; Recovery and Conservation; Collection Registration, Building Maintenance and Engineering, among others. The NM Director, as the MEP manager, and the employees of NM serve as members of the different committees. Each committee was asked to formulate their own plans of action to avoid confusion and to ensure no duplication of responsibilities in case disasters struck, hopefully to avoid commotion. Fire drills, monitoring of fire extinguisher/suppressors, and fire prevention lectures were conducted on a regular basis.

Likewise, NM once had a lecture on earthquake awareness and preparedness. The topic on museum emergency preparedness is now included and coordinated with the basic museology training that the NM is conducting annually.

Outside the context of the UPVM, involvement in courses and conferences held

internationally and in the Philippines underscored the importance of MEP. After the TIEM Pilot course in Bangkok, Labrador gave a summary of the MEP and showed images from the course to the participants of the four-week CollAsia course on Conservation of Textiles in Southeast Asian Collections held in Leiden, The Netherlands, on 7 September 2005. CollAsia 2010 is a program jointly run by ICCROM and SEAMEOSPAFA (Southeast Asian Ministers Education Organization–Special Project on Archaeology and Fine Art) in Bangkok. It aims to develop conservation education and training in the Southeast Asian region.

From Leiden, the CollAsia participants and Labrador went to the ICOM-CC Triennial Conference in The Hague. ICCROM chaired the session on Market of Ideas on 15 September in which Labrador gave a short presentation on the University of the Philippines' museum studies program and its requirements for students that involve writing a Disaster Management Plan for a museum or heritage institution. Responses from members of the audience indicated the need to expand MEP awareness further.

Another opportunity to talk about the MEP took place at the International Committee on Training of Personnel (ICTOP) annual conference held 19–23 October of that year at the Institut National du Patrimoine in Paris, France. Included in Labrador's paper, titled "Partnerships in Training across Southeast Asia and surrounding areas," were the outcomes from the TIEM Pilot Course in Asia.

Locally, the National Museum of the Philippine's Roberto Balarbar, Evelyn Esguerra and I teamed up again for a one-day workshop on MEP with a practical exercise on emergency response drill at the Lopez Museum (a private institution) on 15 February 2006. Since it is within a large company building, participants included those responsible for security services and logistics. There were also fee-paying individuals from other heritage institutions, such as those from De la Salle University Museum in another island, Negros Occidental, as well as from the Armed Forces Museum.

On 29 May 2006, Balarbar, Esguerra and I also organized an MEP training day for another CollAsia course held in Manila. The difference between this and the CollAsia in Leiden was that we not only gave a seminar on MEP, but with the help of the team we also included an emergency response and salvage exercise at the National Museum of the Philippines and linked it to the course on storage of Southeast Asian Collections.

These initiatives were a substantial contribution to the graduate program on museum studies at the University of the Philippines. More particularly useful was the manner by which locals responded and created networks in emergency situations. There are indications that some indigenous practices could eventually be integrated into teaching MEP-inspired courses.

### **Beyond Museums**

Lectures on technical information on MEP are also being requested by a few private and government entities or associations: NCCA-NCOM/Committee of Monument and Sites, Society of Filipino Archivists (SFA), and the Philippine Group Law and Librarians (PGLL).

Though Balarbar and Esguerra believe that NM's MEP is far from perfect, this could serve as catalyst in disseminating the importance and awareness or preparedness. It should be a requisite for all museums in particular and all cultural agencies in general and a model with which to begin.

There were three workshops of SFA that focused on emergency disaster preparedness: one was in Baguio City (in the North) with Esguerra, one in La Trinidad, Mountain Province (Balarbar was alone there), and one in Cagayan de Oro with the paper conservator Maita Reyes a few years back.

After the lectures, the participants were grouped either according to the proximity from which they came or the hazards affecting their museums, libraries or workplace. Those grouped by proximity were asked to make their own emergency plan by creating committees to suit their requirements, based on Balarbar and Esguerra's lecture. Some of the participants lamented that

they are only few in their workplace, which made it difficult or nearly impossible to have all the committees in place. It was suggested in one of these workshops that some committees be merged and the stakeholders be part of their museums, archives and libraries. Other suggestions were the following: designate a particular office or organization that takes charge of one or two committees and have regular exercises based on the functions of the committees. They were presented a schematic diagram of how one committee can communicate with other committees in case of power failure.

While considering those elements of hazards affecting their work, they listed down the major elements and under each enumerated the severity of damages, effects, mitigation measures and frequency of occurrences, i.e., possible months of the year such hazard elements would occur and their predictable duration. Balarbar was surprised when a delegate of a small town from a remote island off Cagayan de Oro showed him their emergency preparedness plan for their town. It was very simple but nonetheless complete, and included what to do, where go to, whom to call, among others instructions. The town's people have their own tasks to do in case a disaster struck.

Part of the workshop included first-aid conservation measures for a recovered collection: how to handle and transport wet books/materials, how to dry documents, how to sort collections from the least damaged to the worst damaged, how to set up a temporary clotheslines (e.g., materials to use, and height and length). Participants were also taught how to use alcohols to eliminate further growth of microorganisms. I think participants comprehend the subject matter more clearly and effectively with actual hands-on experience. These exercises are the same as those conducted by Balarbar after he gave lectures on developing an emergency preparedness plan for the Phil Group of Law Librarians (PGLL).

### **Background on the Graduate program at the University of the Philippines**

The MA in Art Studies (Museum Studies) program is interdisciplinary in approach and collaborates with other faculties within the University of the Philippines and beyond it. Recently we have been collaborating with the National Museum and the National Historical Institute, as well as the University of Santo Tomas Museum of Arts and Sciences. Part of the program, as I mentioned above, includes the Collections Management module in which the students are required to take on case studies for risk analysis and to write disaster preparedness plans.

The Collections Management module is a course primarily concerned with the care and management of cultural heritage and collections in museums and heritage centres. It discusses the basic principles and strategies of managing collections, focusing on preventive conservation. The course also addresses ethical issues and legal considerations affecting the acquisition and use of cultural objects.

The Museum Studies program at the University of the Philippines was formally inaugurated in 1998. Prior to that, we would offer classes on Curatorship, Collections Management and Museum Education as Special Topics classes. A task force comprised of myself and two other members of the faculty of Art Studies did a needs assessment and proceeded to run surveys with museum personnel nationwide. These exercises were useful not only for having the Museum Studies program officially recognized as an option for the M.A. Art Studies degree but also gave us a bigger picture of what challenges museums in the country face.

#### **A. Focus on Collections Management: The Curriculum**

The objectives of the Collections Management module include the following:

- To understand the scope of responsibilities involved in the management of museum collections and cultural heritage.
- To understand the philosophical and historical contexts of conservation practice and cultural heritage management.
- To learn the basic principles for the proper care of cultural material while on display, in storage, display, and in transit.

To achieve these, students are required to write a case-study paper and to collaborate in writing a group paper that involves doing a museum assessment. Finally they have to create a museum management plan with a disaster preparedness proposal. The students have appreciated these requisites, having learned to look carefully at the realities running a museum involve, as well as gaining more knowledge about managing collections in context.

B. The case study paper calls for each student to write an essay (2,500 words minimum) on issues or problems related to the management of collections in the Philippines or cultural heritage as a whole. This may be based on a specific type of collection (e.g., archival and memorabilia collections; natural history collections), professional training and practice, etc. The primary objective of the paper is to articulate and document actual problems and issues encountered in the museum or culture sector and frame them in an academic context. Aside from the use of second-hand and published data, students are encouraged to conduct interviews with museum workers and other professionals.

On the other hand, the group project (usually 3-4 students per group) involves a museum assessment and collections management plan that entails participation in practical exercises and activities. These could take the form of museums and collections visits, documentation and cataloguing, as well as research and interviews.

C. The museum assessment and collections management plan involves having each group conduct a comprehensive assessment of a museum's collections policies and programs. These are done in phases with the following results:

- Overview on Museum/Institution and assessment of collections management policy, programs and facilities.
- Significance assessment of collection: Students will select six (6) items from the collection and write a significance assessment for each. Selection of objects will be discussed with course tutor.
- Recommended emergency preparedness plan.

Each group was given time to present their assessment and to draft an emergency preparedness plan towards the last meeting of the term. We advise students to consult with the selected institution's management and staff to arrive at realistic assessment and feasible recommendations. At the end of the term, the host museum was given a copy of the final group paper. We have been using as a guide for the museum assessment the Getty Conservation Institute's "The Conservation Assessment: A proposed model for evaluating museum environmental management needs."

#### Balancing between Theory and Practice

The aim to embed emergency planning in the Museum Studies program is being achieved by balancing theory and practice in teaching conservation of collections. In this manner, students can be better prepared for museum work. Theory is necessary to give the students an opportunity to reflect upon their or other museum professionals' work and to rise above technical concerns of operating museums. Some of the areas of concern in conservation theory are:

- Defining a collections management policy
- Legal and ethical dimensions of collections management
- Acquisition and accession
- De-accession
- Factors that affect the deterioration of objects
- Managing the museum environment in macro and micro spaces: storage, and exhibition facilities
- Risk assessment and emergency planning

Conservation in practice, on the other hand, aids our students in understanding the

practical aspects of organizing a museum, including its limitations. It also trains them in actual museum work and alerts them to possible difficulties they might encounter in the course of managing a museum or heritage institution. Some of these areas are:

- Registration procedures: documentation and cataloguing
- Retrospective documentation
- Packing and transport of museum objects
- Managing conservation of organic and inorganic materials, including a visit to a conservation laboratory or a lecture by a practising conservator.
- Hands-on session on the fabrication of storage boxes and simple mounts for photographs and works on paper

The UPVM has been a laboratory for the students to experience conservation in practice by being involved as volunteers at different stages of preparing for exhibitions. During that period, a concerned museum staff, or I as the director of the UPVM, supervise them. Experiences from their involvement vary, depending on what is needed to be done. On the whole, the outcome has been useful, informing students for their final requirement on creating a disaster management plan.

#### Risks in Museums and other Heritage Sites

Visits to other museums enhance students' experience at the UPVM. They learn about particular situations such as risks these museums encounter. In the case of University of Santo Tomas's (UST) Museum of Arts and Sciences, exhibition and storage areas are continually being studied to better improve them for the sake of their collection. The UST Museum is a private museum and has one of the oldest collections in the country, having been part of a study collection for medical students since the 17th century. Yet it still has no building of its own, having to share spaces with other departments. This includes the Chemistry department's laboratories just above the museum space. As a result, insurance companies refused to cover the UST Museum's collections.

Moreover, tours to the Museum of the Filipino People (part of the National Museum of the Philippines) also give museum studies students' ideas of what it is like to manage a big museum that employs more than 200 people and has separate departments that take care of particular collections. They learn about its lack of financial support and more professional staff despite its advantages as a national cultural institution. Recently, reorganizations and renovations, especially during the centenary celebration of the Philippines in 1998, informed students of the perils in the process. One of the challenges it faces is the government's call for austerity measures that requires it to limit opening hours. This has also meant a reduction in the number of hours the mechanical air conditioners are left on, which can contribute to threats to its collection.

Students also learn a great deal and draw information from visiting actual conservation laboratories within museums. One of these is the National Museum, which houses different laboratories for different materials. They find out in practical terms the importance of separating objects made from organic media from inorganic ones. Some of those visited regularly are the paintings conservation laboratory, the marine archaeological laboratory and the laboratory for ethnographic artifacts.

On many occasions, it is the National Museum's chief conservator and former ICCROM council member Orlando Abinon who gives graduate students a tour so they are able to get an overview of the special difficulties running a conservation laboratory involve. Sometimes they are able to observe treatment to objects, such as when Evelyn Elvena, museum researcher and textile conservator, demonstrated how she is able to clean an infested plant-fibre mat despite the lack of space and equipment.

Community visits or heritage sites are also valuable in making students understand the correspondence between tangible and intangible heritage. Over the past few years, students have

visited distant places such as Tayabas, Quezon and Bontoc, Mountain Province. In Tayabas, they created an exhibition with the staff of the Casa de Comunidad (equivalent to their town museum) and understood more about local representation and contemporary regard for historical sites. Their visit to Bontoc in the northern highlands has made them understand that the notion of preservation includes documenting indigenous knowledge.

### **The Future**

Emergency planning in museum training and museum studies programs are improving because we have now more knowledge and information about being better prepared for disasters. We are also more able to integrate across different fields and areas of expertise through interdisciplinary collaborations. Weaknesses, however, still lie in the need for more monitoring and teamwork to take place in museums and heritage institutions. Models of knowledge transfer, such as that of the TIEM mentoring phase, helped in emphasizing awareness that learning is a continuous, life-long process and cuts across fields and hierarchies.

In relation to the above, competencies in different aspects of integrated emergency planning must be developed and in finding ways of measuring those competencies. One approach is to integrate emergency preparedness so it becomes embedded in the consciousness of museum staff. This then becomes an everyday, matter-of-course concern and not just during emergency drills. In addition to finding funds to support this kind of program, finding more resources for in-kind assistance and generating more energy among staff and other stakeholders must be developed.

More research on traditional forms of coping with emergency within the MEP framework should be done. This is one of the aims of the TIEM and one in which we – those involved in the pilot course for Asia – must seek out. Along these lines, one of my graduate students in museum studies will be doing her thesis on preservation of intangible heritage in a community that is prone to disasters (including the continuing effects of the 1991 Pinatubo volcano eruption in the Philippines). Ultimately a centre for education on emergency preparedness for cultural heritage must be established as a site for interdisciplinary research work, collaboration and more teamwork.

In a region where natural and man-made calamities happen frequently, not only heritage professionals should be better prepared but also the public, with a shift in attitude towards that goal. We should then embark on more long-term strategies such as conducting a comprehensive needs assessment and writing about research in this field with a regional perspective and publishing more on emergency preparedness.

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