

## Disaster Preparedness in Jakarta Museums

**Pienke W.H. Kal**

*Senior Curator*

*Royal Tropical Institute-Tropenmuseum (KIT)*

*The Netherlands*

### *Resumen*

#### **Preparación contra las catástrofes en los museos de Yakarta**

*Se han llevado a cabo un programa de formación y un proyecto de cooperación entre el Tropenmuseum de Amsterdam y siete museos de la ciudad de Yakarta.*

*Las primeras fases del proyecto comprendieron: una comprobación del estado de las colecciones de los museos, así como la realización de actividades de formación y de prácticas "in situ". En todo plan de emergencia, las dos prioridades deben ser: salvar las vidas humanas y salvaguardar las colecciones, haciendo hincapié en la conservación preventiva. Para alcanzar esos objetivos, es fundamental establecer un plan de evacuación de las personas y las colecciones.*

*Los posibles riesgos identificados son los siguientes: naturales y técnicos o humanos (ignorancia, etc.). Para luchar contra estos últimos, es importante efectuar un análisis de riesgos de la zona interesada - que puede revestir la forma de una comprobación de la situación en materia de catástrofes - y activar las redes de profesionales en torno a los museos (servicios contra incendios, policía, servicios técnicos, etc.), a fin de poder ejecutar el plan de evacuación en condiciones óptimas.*

### *Résumé*

#### **La prévention des catastrophes dans les musées de Djakarta**

*Un projet de coopération et un programme de formation entre le Tropenmuseum d'Amsterdam et sept musées de la ville de Djakarta ont été mis en place.*

*Les premières phases du projet comprenaient un constat d'état des collections des musées, des formations et des mises en situation. Dans un plan d'urgence les deux priorités sont le sauvetage des vies humaines et la sauvegarde des collections (accent mis sur la conservation préventive). Pour mener à bien ces objectifs, le plan d'évacuation des hommes et des collections est déterminant.*

*Les risques potentiels identifiés peuvent se résumer à des risques naturels, techniques, de comportements humains, d'ignorance, etc. Pour lutter contre ces derniers, il faut souligner l'importance d'une analyse des risques de la zone concernée qui peut prendre la forme d'un "constat d'état des catastrophes" et activer le réseau de professionnels autour des musées (brigades, police, service techniques, etc.) dans le but de procéder au plan d'évacuation dans des conditions optimales.*

A few weeks ago a work conference was held in the Netherlands with the title "Glamour for Safety and Security" — a cry for more interest in and attention for disasters in institutions responsible for collections, i.e. institutions like museums, libraries and archives. In the Netherlands water is a rather common threat. Every year we experience heavy storms, rain and high water levels in our big rivers because countries upstream have heavy rainfall. All this water is a threat to our dikes and if water seeps through the dikes, or worse, if the dikes break, the towns behind the dikes will have a disaster to deal with.

During the conference held in The Hague, several presentations showed an example of what happened during the disasters last year in both Germany and the Netherlands. Slides showed how the staff of the museum or archive, handled the situation and the use of the disaster contingency plan, if it was helpful. It has turned out that many museums have a form of disaster contingency plan in the Netherlands. And if they do not have one yet, the Institute for Cultural Heritage in the Netherlands (ICN) can provide a manual to produce one.

But what about Indonesia?

The Tropenmuseum in Amsterdam has been cooperating with the City Government of Jakarta for many years now. The focus is on strengthening the museums of Jakarta, mainly by training. The projects are financed by the Ministry for Development and Cooperation in the Netherlands and co-financed by the City Government of Jakarta.

What was the situation in some of the Jakarta museums?

We worked in seven museums:

- the Museum of the History of the City of Jakarta;
- the Modern Art and Ceramics Museum;
- the Wayang Museum;
- the Textile Museum;
- the Maritime Museum;
- the Revolution Museum;
- the Museum of Tombstones.

In the 2000-2003 project for cooperation and training, we first conducted an audit of the collections in the Jakarta museums. The report with the results of the audit was then used as a reference for subsequent training in preventive conservation and collection management.

Pest control and risk management turned out to be difficult training subjects, mainly because they belong to the realm of practical management, and in many museums management and practice are different realms, responsibilities far apart and kept separate in the museum organisation.

The museum management did not always see pests, for example, as a disaster; they were more of a permanent nuisance. A bomb explosion is a more obvious disaster, one which Jakarta experienced in a hotel lobby this summer and which Bali experienced last year.

The first phase of the project was to survey the collection, to conduct an audit. The second phase was training and practice.

Training included recognition of bio-deterioration, deterioration caused by light and climatic conditions, e.g. a high percentage of relative humidity. There was training in recognition of fungus damage, establishing the cause of this type of damage and how to prevent it, learning how to clean objects and so on.

During the practice afternoons we re-organised the stores of the Jakarta History Museum. This meant completely removing all objects and parts of objects from three stores, cleaning them, including the racks and cupboards, making a plan to re-organise the collections, cleaning the objects superficially (loose dirt), and putting them back in the cupboards. The new location of each object was thus registered on a card and the cupboards were closed with cotton curtains to protect the collection from dust.

The reorganisation meant first re-positioning the objects according to the material and size of the objects. The whole group was involved in this and became aware of the process of safeguarding the collection by cleaning it, giving it a cleaner and safer place to stay, proper registration and insofar as possible, proper climatic condition. When we started, the situation was a disaster, but in the process it became a nice, clean, workable store for collections.

Going back to the Glamour Conference in The Hague, the Netherlands: in the event of a disaster, flooding for instance, the museum or library or archive should fall back on its available contingency plan. The plan should be part of a whole network, including police, fire brigade, organisations assisting in packing and transporting the collection and dry-freezing facilities. There are rules and regulations that are supposed to be known, although they often do not work the way they should. But these are calculated risks.

In a city such as Jakarta, the risks will be calculated differently. For instance, the rule that the fire brigade should be at the scene within five minutes is not feasible for Jakarta museums as they are in the traffic-congested old town. Perhaps each museum should have its own fire-fighting professionals and equipment. If this were the case, the weakest link would be the evacuation of the collection after the fire is extinguished, but also in the case of flooding.

How could evacuation be incorporated into training in preventive conservation?

Evacuation is of course one step, one phase in the overall safety contingency plan. This includes people, the collection and building, plus the safety of the organisation. As the subject is preventive conservation of collections, I shall not discuss the safety of people, both visitors and staff. In disaster plans the safety of people is always the priority. Here I am talking about the second priority, the safety of collections.

Before formulating a plan, an audit should be conducted, not only of the situation and condition of the collection, in stores as well as in exhibit

presentations, but also of a possible evacuation routing and the availability of evacuation tools.

For evacuation, the museum personnel should be aware of and have basic knowledge of which materials are sensitive and which are less sensitive. For example, the audit in the Jakarta museum, showed that handling by people was the most frequent cause of damage, and that was because of ignorance. Handling and transportation of objects were part of the training programme, but this was not extended to the evacuation of objects, taking them to a safe place in the presence of a threat. In cases of evacuation, the museum personnel should be aware of and have basic knowledge of the historic, artistic, religious, symbolic or financial value of the different parts of the collection.

In Jakarta the discussion was not directly concerned with the possibility of evacuation, but emphasised preventive conservation priorities. We started by considering the different value an object can have for the owner, buyer, curator or conservator. This was a difficult discussion, because the museological line of thinking was not familiar. Most museums in Jakarta do not buy collections because of lack of money; active conservation and restoration are not done because of lack of facilities and sometimes lack of knowledge.

An extreme example can be seen in the Museum of Tombstones. The museum is a small open-air museum with tombstones, mostly of Dutchman who died in Jakarta before 1940. The museum only has the tombstones and the bones have been re-buried elsewhere. As most of these Dutchmen were Christians, their tombstones often bear a cross, a symbol which many Muslim Indonesians cannot tolerate, so the result has been broken tombstones and graffiti.

There are also positive examples, of course, such as the national flag of the Republic of Indonesia which was first raised in 1945. The flag was conserved and recently restored by the Laboratory for Conservation of the City of Jakarta, work commissioned by the President of the Republic of Indonesia. The flag will be on display in Jakarta in a climate-controlled and impact-resistant showcase. I do not know if they have an evacuation plan, but everyone in Indonesia is aware of the historic and symbolic value of the object; there is no doubt about that.

But what of the value of museum collections in general?

My experience has shown that the question of an object, what it is, why it should be preserved and why it should be safeguarded against disaster, vandalism and terrorism, is a difficult but essential discussion.

The term "respect" is important. Why should anyone show respect for an object? It is dead, old, no longer useful anymore, so why respect it? Old people deserve respect.

Why are knowledge of and discussions about value and respect also important? Because they will lead to priority planning. As panic and disorganisation will often occur when a disaster strikes, priority planning will not be followed as scheduled, but deep-rooted awareness and common sense will prevail; I am certain about that. Training in preventive conservation concentrates on building up awareness and using common sense based on awareness. This should be given more attention in our training courses and discussions.

Evacuation as a process has not been extensively developed in any of the existing contingency plans. The museum staff is supposed to know what to do. Is this realistic? My suggestion is: try it out! Do a drill with all the staff from the whole museum!

### **The Need for and Use of a Risk Analysis**

I have already mentioned the collection audit focused on evacuation as a preliminary step. The results of the audit can also be used for risk analysis.

I have looked at several examples of risk analysis and risk charts for Dutch museums. In general these formats could also be used in the museums of Jakarta or any other city in Indonesia or South East Asia, or Asia as a whole. The difference lies in priorities, and this is important because of the attention which will be given to the different potential risks.

An example of a Dutch risk chart would set the sequence of potential risks as follows:

- natural risks: flooding, lightning, insects, fungus, light, pollution;
- technical risks: industrial toxic fumes, fire, gas explosions, electrical short circuits;
- failure of main supply/communication (computerised) systems for climate control, of surveillance systems, smoke detectors;
- possibility of damage caused by human behaviour: attacks, theft, hostage taking, bomb alerts, sabotage, arson;
- accidents caused by ignorance, lack of discipline, lack of regulations, accidents during repairs to the building.

A risk chart in Jakarta would probably be as follows:

- possibility of damage caused by human behaviour;
- accidents;
- failure of main supply/communication (computerised) systems (this would be the least likely risk).

Natural risks, flooding for example, and in Indonesia of course earthquakes too, will probably be the first for attention from responsible governments, because most museums in Jakarta are in the old town, near the sea, downstream from a canal running through the crowded old city.

The continuous risk inside the museum, however, is human behaviour.

It would be an extremely interesting exercise to see how trainees in a preventive conservation course assess the probability and consequences of the potential risks mentioned above and how they draw up a risk analysis on the basis of their assessments.

Risk analysis obviously means formulating potential risks and discussing priorities, but also includes the following calculations:

- the score for past "history", e.g., how often did a given risk eventuate in the past one or two years? How often did a given incident occur?
- the "probability" score of a given risk occurring over the next year;

- the score for the “consequences” of a risk affecting the museum and its collection;
- the actual “analysis of the risk”, based on the scores calculated for probability and consequences.

### **Networking is an Essential Part of Risk Management**

The network of museums in Jakarta comes under the City Government of Jakarta. All major decisions concerning a museum are taken by the director of the department for Culture and Museums. In the event of a disaster, the network will be activated, including fire brigade, police, military, and technical services. Major disasters will be handled by them, so what are the tasks for the museum director and staff? Their duty is to take good care of the collection, because there will be no one else, I am afraid. And the best thing a director and staff can do is take their evacuation plan and implement the necessary procedures.

### **Conclusion**

For work and training of museum staff, specific attention should be given to the subject of “threats to the museum collection and building in natural and man-made emergencies”, with a specific audit included or appended to the audit of the museum collection. This “disaster audit” will include a description of the responsibilities within the museum organisation as well as the network around the museum. At least this should be the case. A risk chart and risk analysis will be the tangible result of the disaster audit.

Training projects for museum staff should include and discuss the formulation of both types of audits. An evacuation plan should be formulated. As a practical exercise, try to imagine a flood disaster; decide on what grounds a particular collection has been given priority and practice with an evacuation drill.

What I learned from the conference in The Hague was that risk preparedness in institutions with collections should be an integral part of preventive conservation. Training in this particular subject should receive as much attention as, for example, damage caused by insects and fungus.

In museums where risk procedures are available and where staff know what to do for evacuation, awareness must be developed on the need for moving the collection to a safe place and knowing how to do it. This means checking procedures and practice once a year.

I have always admired the History Museum in Hanoi, North Vietnam, where museum staff were trained to evacuate the most precious and historically important collections by packing them in metal cases and taking them to the countryside every time bomber planes threatened the city. Maybe we could ask them what their disaster contingency plan looked like.