

CONTRIBUTIONS TO PROTECTION OF MUSEUM OBJECTS AND CULTURAL ASSETS IN TERMS OF NATURAL DISASTERS

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Abstract: *Our cultural heritage and our attitude towards it together with the way we keep our heritage and the system by which we evaluate it – all this determines our position in social development and the degree of identity. Museums and other institutions responsible to take care of and handle the cultural heritage every single day make efforts to counter risks to cultural goods and slow the deterioration of tangible heritage. While actually we can never completely eliminate the risks, by identifying threats and by getting full knowledge of risks, as well as through adequate use of preventive measures, we can indeed contribute to the preservation and sustainability of cultural heritage.*

Keywords: *cultural heritage, preventive conservation, safety, security, risks.*

The cultural heritage, both tangible and intangible, is our common property and wealth. As a unique sum of a thousand years of experience and knowledge, preserved in various stages of development of humanity and civilization, it is an irreplaceable source of invaluable important guidelines for the further evolution of the heritage that we will leave to those who come after us. Our cultural heritage and the relationship that we have toward it, the way we keep it and the system by which we evaluate our cultural heritage – all this determines our position in social development and the degree of identity. European Commission Conference on Cultural Heritage, held in Strasbourg in 2000 raises questions and defines the position for the application of science in this field. Some of the problems identified are:

- Leading programs of exploring the field of cultural heritage mean emphasis in research material, despite the fact that the threats come from natural hazards and the environment;
- Highlighting the concept of sustainable development and the principle of precaution;
- Demanding interrelations between safety of visitors and access to sites and requirements to preserve the authenticity of cultural property;
- Potential analysis and risk assessment, cost-benefit analyses, analysis of environmental impact.

Museums and other institutions responsible to take care of and handle the cultural heritage every single day make efforts to counter risks to cultural goods and slow the deterioration of tangible heritage. While actually we can never completely eliminate the risks, by identifying threats and by getting full knowledge of risks, as well as through adequate use of preventive measures, we can indeed contribute to the preservation and sustainability of cultural heritage. Preventive conservation (the first international conference on preventive conservation was organized by the ICC [ICC – International Institute for Conservation of Historic and Artistic Works] and CCI [CCI – Center for Cultural Interchange] held in Canada in September 1994, and was entitled “Preventive conservation: practice, theory and research”) seeks to promote the necessary theoretical and methodological knowledge and action concepts, in order for this operation to be effective.

In contemporary practice in museums, the importance of the field of preventive conservation has continuously increased. The aim of preventive conservation is to slow down the process and mitigate the consequences of degradation, thus preserving the integrity of museum collections in order for them to remain available to the society (the audience), both now and in the future. This objective can be achieved only through considerable social awareness and through multidisciplinary approach to preventive conservation. Both multidisciplinary approach and team work of experts of various profiles concentrate all the necessary knowledge and increase the efficiency of protection. Scope of preventive conservation requires knowledge from many fields: museology, art history, architecture, law, chemistry, physics, biology, security and many others. Each museum collection, each museum exhibit and the museum itself have their own specificities which further determine the number and profile of experts that should be involved in their protection.

Security protection in the function of preventive conservation aims to help create a safety culture in museums and other cultural institutions. Security culture creates security awareness and moral norms. Indeed, safety awareness becomes a cultural pattern when the community truly accepts and manifests that the behavior that disrupts and threatens the security of the museum environment is unacceptable. This kind of social consciousness is of great importance for the preservation of cultural heritage.

Threat and endangerment that may cause extensive damage to cultural goods, with major consequences, must be faced seriously, even when the probability of achieving threats is moderate or quite small. Forms of endangerment can be divided into anthropogenic and natural forms of endangerment—whereby the anthropogenic forms include those generated by human activity, while floods, earthquakes and other natural disasters are considered to be of natural origin.

Hydrological disasters—floods occur as a result of overflow of water out of the natural and man-made boundaries, or when the water flow exceeds the capacity of the natural retention and infiltration. Most often the causes of flooding are precipitation (rain and snow), water level in the rise time and the occurrence of landslides. Indirect causes of floods and factors which favor their creation are the size and shape of the basin, relief and its features, as well as the saturation of soil with water.

Protection of cultural property from flooding must be planned, and the museum workers and other experts must in advance be prepared for this kind of disaster. The plan in case of evacuation is necessary to prevent avoidable casualties and material losses due to the chaos that occurs when employees become aware of the dangers. The existence of the plan, as well

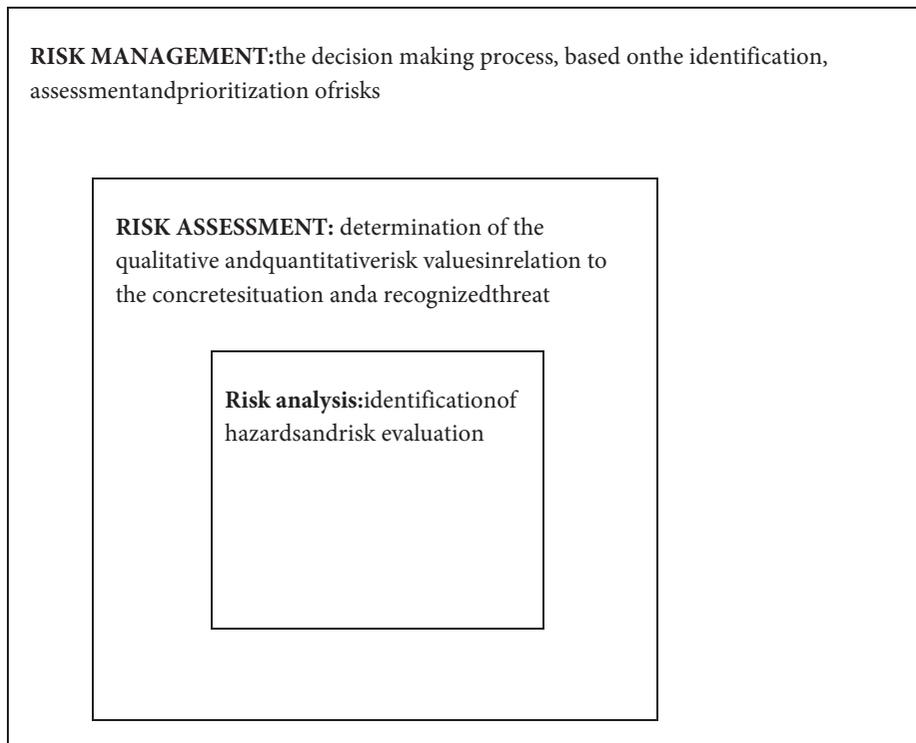
as training of the employees regarding the behavior in terms of risk can significantly contribute to effective coping.

The question remains whether we should disclose to the employees the real reason for evacuation in situations where it is not obvious, in order to avoid panic. If there are plans and regulations on the conduct of employees, they will abide by the instructions and attempt to rescue the museum objects, if possible. However, in case of evacuation, regardless of whether the reason for the evacuation is obvious or not, it is essential to define precisely and clearly marked paths and routes for leaving the building.

Due to the exceptional cultural, historical and material value of cultural property, legal and moral obligation of any museums and institutions of cultural heritage protection is to take certain security and safety measures. Unfortunately, the practice confirms that these measures are not implemented consistently, primarily due to lack of funding.

The first step in flood protection is the process of identifying the value of items that are kept in the museum. The list of subjects of the utmost importance prepared by the commission composed of museum professionals should be available to workers and security officers, so that, in case of evacuation, they are all informed on priority cases for rescue. In an emergency, they would attempt to relocate items to secret locations, which should be predetermined through the evacuation plan concerning exhibits. Confidentiality of locations is preferred because of possible thefts.

Table 1. Quantitative risk assessment requires calculations of two components of risk: R the magnitude of the potential loss L , and the probability, that loss might actually occur. [1]



Organization of storage space can greatly contribute to the protection of exhibits, especially in the case that relocation is necessary. Therefore, the organization of the depot should take into account the position of objects, space and possibilities for easy handling in case of rapid relocation. Also, the objects of the utmost importance should be labeled and placed on the most favorable location for transport.

If there is a hydro-meteorological disaster, the evacuation plan is to be implemented and the objects are to be moved; the process of rehabilitation of damages and normalization of the institution's culture should be approached with utmost care. If the water has penetrated the depot and exhibition halls, in situations of increased moisture or other cases incurred as a result of floods, displaced objects should not be returned into such conditions. Only when the consequences are fully repaired and depots are ready to accept the exhibits, they should be returned safely in place.

With regard to the risk management in the field of cultural heritage, we use the following terminology: [1]

Hazard- a situation or factor that can cause harm

Risk- probability that a particular kind of damage might occur

Risk assessment- the process of identification of hazards and the probability of damage

Risk management- the process of deciding on taking the necessary actions

Table 2. Summary of significant accidents that endanger our cultural heritage in the last 50 years

Period	Institution, building, cultural property	Type of accident
1979, Montenegro	Cultural monuments, cultural - historical sites, local history museums in Bar, Kotor, Budva	earthquake
1999, Serbia	Cultural monuments, Vojvodina Museum, the Municipal Archives of Kragujevac, Film Archives - Cinematheque, archaeological sites Viminacium, monuments and monasteries across the country	war
2004, Kosovo and Metohija	Bogorodica Ljeviška Church, St. Archangels, St. George and many others. Monasteries: Zočište, Devič, and many others (a total of 35 Orthodox monasteries)	terrorist attack
2004, Niš, Belgrade	Mosques in Niš and Belgrade	terrorist attack
2004, Niš	Congregational Church	fire
2004, Mount Athos, Greece	Monastery Chilandar	fire
2010, Kraljevo	Historical Archives of Kraljevo, National Museum Kraljevo	earthquake
2014, Serbia	Cultural - historical sites in Valjevo, Čačak, Kraljevo, Obrenovac and others.	flood

CONCLUSION

Every cultural institution has its own peculiarities which must be taken into account in the preparation for emergency. The very nature of collections and materials, their geographic location, museum buildings, professionalism of employees, visitors, financial stability – these are some of the factors that influence the effectiveness of the protection plan.

Museum professionals and experts in the field of security should develop systematic programs to protect or systematic plan of response and preparedness in terms of emergency situations. To be fully prepared for emergencies is compulsory part of preventive conservation in the protection of cultural heritage, and the protection plan is expected to offer efficient and simplified solutions. Readiness and adequate response cannot prevent the accident itself or directly affect them, but right action can reduce, alleviate and even eliminate the consequences of emergency situations in cultural goods.

Contingency plan must be supported by the museum director (director of any given institution of culture), as well as the entire staff. The plan must be focused on the most likely situation, therefore it is inevitable to conduct a timely assessment of the risks. Also, one must take into account the dynamism, flexibility and promptness of the action plan. To achieve maximum efficiency, it is necessary to have active commitment of employees to change and modify the protection in line with the times and the changes that cultural institutions face at any given moment.

BIBLIOGRAPHY:

- [1] Ball, D., Watt, J., Risk management and cultural presentation, 2001.
- [2] Ashley Smith, J. Risk assessment for object conservation, Oxford: Butterworth Heinemann, 1999.
- [3] De Astis, V. Gasparini, B. Security technology handbook, Italy, 2006.
- [4] Vocabulary of Security Terms, edited by Gunter S. Hilbert, ICOM, Berlin, 2000.
- [5] Djordjevic, Obren, "Lexicon of security," Partisan books, Belgrade, 1986
- [6] Jakovljević, Vladimir, Struka i odgovornost struke u oblasti zaštite od požara, Zbornik radova, Višatehnička škola, Novi Sad, 2004.
- [7] Поповић – Живанчевић, Мила, Превентивна конзервација у музејима, Централни институт за конзервацију у Београду – ЦИК, Београд, 2014.
- [8] Waller, R. Conservation risk assessment: a strategy for managing resources for preventive conservation, In: Preventive conservation practice, theory and research: preprints of the contributions to the Ottawa congress, 12-16 September 1994 / Roy, Ashok (ed.); Smith, Perry (ed.); IIC. London: International Institute for Conservation of Historic and Artistic Works, 1994.