Risk Analysis and Emergency Management Vital to Cultural Preservation

MCLEAN, Va. (Nov. 13, 2017) - Preserving cultural heritage, from ancient sculptures to contemporary art, has been practiced for millennia but has only recently been addressed by structured risk analysis and management methods. As part of a symposium presented by the Society for Risk Analysis (SRA) Applied Risk Management Specialty Group, five studies on cultural property risk analysis will be presented to help decision-makers from museums and other institutions ensure proper protocols are in place to preserve valuable cultural property. These include proper risk analysis models and emergency management plans in the face of environmental risks, chemical and physical degradation and armed conflict.

In *Risk Analysis Targeted to Each and Every Manager’s Perspective*, Robert Waller of Protect Heritage provides a Cultural Property Risk Analysis Model (CPRAM) for initial risk ranking and screening to help serve as a guide for museum managers to target their own risk analysis and identify risks to be dealt with immediately. “Medium to large museums, like any organization, are subject to silo effects,” Waller said. “When preservation is a high-level institutional goal, a simple, hierarchical structure of the CPRAM permits custom interpretations and representations of each manager’s ability to influence risk to collections based on the scope of control enabled by their responsibilities.”

A risk analysis model must ultimately lead to a collections emergency management plan. In 2012, the Smithsonian Collections Emergency Management Working Group was established to study and make recommendations for improving collections emergency management, planning, preparedness and response. This interdisciplinary group, jointly co-chaired by the National Collections Program (NCP) and the Office of Protection Services, developed *Preparedness and Response in Collections Emergencies (PRICE) – The Smithsonian’s Collections Emergency Team*.

Samantha Snell presents the Smithsonian Institute’s PRICE program that strengthens and supports a museum’s ability to respond and prepare for emergencies. When activated, this system provides collections support, response and recovery. It also serves to promote and foster improved communication and collaboration among Smithsonian museums and with first-responders, sister cultural institutions and professional organizations. The PRICE team is part of the Smithsonian Emergency Operations Center and is generally available for advice, consultation, and assistance related to collection emergencies. In its first nine months, PRICE has developed multiple initiatives to revitalize collections emergency management at the Smithsonian.

Environmental factors are critical to the art of culture preservation. Led by Lukasz Bratasz and his team of researchers, an analysis of the current environmental conditions in three buildings of the Yale’s Peabody Museum of Natural History (YPM) revealed that the Environmental Studies Center, the most modern YPM building, was the least energy efficient of the three and one of the least energy efficient buildings at Yale University. The results of the *Evaluation of Environmental Risks and Environmental Costs at Yale Peabody Museum of Natural History* allowed staff members to identify preservation...
priorities for YPM collections. It also promoted new proposals for climate control that would reduce energy consumption and lower carbon dioxide emissions, which can be hazardous to preservation.

In another museum case study, Chemical Deterioration and Physical Failure – Risk-Informed Archive Facility Planning, Barbara Swiatkowska and researchers studied the National Museum in Krakow, Poland, which holds one of the leading national collections of works on paper. These include drawings, watercolors, works of important artists and large groupings of documentary prints, for which the museum is planning a new storage facility. During the value assessment and risk analysis process, Swiatkowska and her team determined that more focused risk analysis concentrating on two key hazards, chemical deterioration and physical failure upon handling, was needed.

“We analyzed various risk factors for deterioration — paper brittleness, paper pH, vulnerability of the technique in which the work was executed, degree of protection of objects against physical forces — based on research and feedback given to us by museum conservators from long-term collection observations,” Swiatkowska said. “The information collected was then introduced into a specifically developed software tool which calculated and presented magnitudes of risks across the entire collection.”

No matter how much a museum or institution can prepare for environmental damage, cultural heritage sites and collections around the world are currently at risk from one of the oldest and most damaging of man-made hazards: armed conflict. From the looting of the Iraq National Museum in 2003 to the intentional destruction of multiple archaeological and religious sites by religious extremist groups such as ISIS in the past few years, cultural heritage professionals in several countries now face the potential for collateral and intentional damage from armed conflict at a rate not seen since World War II. While many may lament that there is little that can be done, colleagues working in today’s war zones have had significant success in protecting collections and sites using the same basic methods developed during World War II. Corine Wegener outlines these methods in Analyzing Risk For Cultural Property During Armed Conflict. The methods include coordinating and negotiating with armed groups, stabilizing and securing collections where they are, and in the worst-case scenario, evacuating collections to more secure locations.

To protect humanity’s greatest treasurers, it is vital that risk analyzers and emergency management teams work closely together for safe and secure methods of preservation and conservation.

These studies will be presented during the Cultural Property Risk Analysis symposium on Monday, Dec. 11 from 10:30 a.m. – 12:10 p.m. at the 2017 SRA Annual Meeting at the Crystal Gateway Marriott in Arlington, Virginia.

*Lukasz Bratasz, Ph.D. from Yale University, Barbara Swiatkowska from the National Museum in Krakow and Robert Waller, Ph.D. from Protect Heritage Corporation will be available for media interviews at the 2017 SRA Annual Meeting. Please contact Melanie Preve at melanie@bigvoicecomm.com for all interview requests.

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About SRA
The Society for Risk Analysis is a multidisciplinary, interdisciplinary, scholarly, international society that provides an open forum for all those interested in risk analysis. SRA was established in 1980 and has
published *Risk Analysis: An International Journal*, the leading scholarly journal in the field, continuously since 1981. For more information, visit [www.sra.org](http://www.sra.org).