President's opening speech ICMS annual conference Milan July 4, 2016

(This speech is not used due to Willem's illness)

Ladies and gentlemen,

The board of ICMS is very thankful when members offer to organize an annual conference and we are very grateful to Mr. Tian Kai and his organizing team for all they did so far.

I would also like to thank the president if ICOM China and the Provincial Leader for their generous support. It is not the first time that we are in China and we always feel welcome and at home.

The conference in Copenhagen in September 2014 was a great success thanks to the organizing committee. The planning for the Zhenghzou conference went underway early in the new year and resulted in a nice program. I am looking forward to having a great and well organized conference.

The theme of the conference is "Science and technology" with the emphasis on "INNOVATION". The scheduled presentations will show all participants that also in the business of museum security the developments in technology are moving quickly and innovatively.

The world is changing and we all have to deal with catastrophic terrorism. This sounds scary but at the end of the day we all know that we are not able to prevent these actions.

Although the threats are more present than ever before, we as museum security staff should be vigilant and do our work as usual to prevent incidents on the old way, like theft and burglary. During this week in Zhenghzou we will learn about innovations to assist us in this important work.

I wish you a pleasant and interesting conference.

Willem Hekman

Chair ICMS

Bob Combs (USA)

The following is a description of my "Year in Review" presentation for the conference. Feel free to edit as you see fit:

Cultural Property Protection: Year in Review

This presentation will feature a fast-paced review of significant incidents that have impacted cultural properties throughout the world during the last year. We will learn from the misfortunes of others and explore practical steps that can be employed to safeguard our collections and institutions.

Bob Combs (USA)

Director of Security & Visitor Services

J. Paul Getty Trust

Vernon Rapley (UK)

Title: Building partnerships to protect the world's cultural heritage and landscapes.

Abstract:

Museums have a duty to protect and conserve their collections for future generations, but this duty extends beyond their walls and spreads across the globe. We must engage at every level and with every conceivable partner, to prevent the scale of loss and destruction that has so sadly been evident in recent years. In this presentation, Vernon Rapley will discuss national and international collaborations designed to share information and actively encourage proactive co-operation. He will explain the need for 'big picture security' looking holistically at global concerns and translating this intelligence into local action. He will demonstrate the use of intelligence sharing groups such as; the National Museum Security Group (UK), to show the benefit of working with other museums and cultural venues when assessing risks by identifying threats and vulnerabilities. He will also discuss the international liaisons that the V&A has established, under the banner of 'Culture in Crisis', to assist in the protection and preservation of cultural goods and landscapes at risk of destruction, looting or theft. He will seek to demonstrate that by engaging on an international stage with diverse partners, we can improve the secure our own collections from the ever present threat of terrorism.

Biographic notes:

Vernon Rapley is the Security Director at the Victoria & Albert Museum in London and leads the V&A's 'Culture in Crisis' programme. He is the; founder and chairman of the National Museum Security Group, the UK lead for Tourism on the Cross-sector Security and Safety Communications Group, a member of the NPCC (National Police Chiefs' Council) Heritage and Cultural Property Crime Working Group and a member of the UK Military Cultural Property Protection Working Group.

Before joining the V&A in 2010, Vernon served as a police officer for 24 years, the last 10 years as the head of the Art & Antiques Unit at New Scotland Yard. During that time he overtly and covertly investigated all manner of art and cultural property crime. He was a member of The Interpol Tracking Task Force (Iraq), as well as representing UK Law Enforcement on International initiatives to combat the illicit trade of cultural goods from: Afghanistan, South America, Eastern Europe and South East Asia and others. He formed a number of long lasting community partnerships, including the creation of ArtBEAT, a unique use of expert volunteers drawn from the cultural sector to assist the police. Towards the end of his police career he organised two public exhibitions of Fakes & Forgeries, attracting 30,000 visitors.

Ms. Tiziana Maffei (Italy)

To be provided

Mrs Lynda Albertson (Italy)

To be provided

Anton Annenkov (Russia)

To be provided

Mrs Paulina Florjanowicz (Poland)

Some aspects of protecting the martyrdom museums in Poland – new types of threats

Abstract

Given at ICMS Annual Conference, Milan 2016

This year's presentation is a continuation of the topic started in 2015 that referred to challenges in protecting large-scale museums, located on open grounds, namely the martyrdom museums located in former German Nazi concentration camps documenting the dramatic history of Holocaust and World War II. In these museums, due to restrictions resulting from the need to protect all historic values of the site, including the landscape, installation of visible security equipment is impossible. Therefore in 2015 we presented wireless seismic detectors, sensitive to intruders within a 100-meter radius, which turned out to be a perfect solution to this challenge.

In 2016 we presented a new type of challenge for security staff related to drones. Unauthorized breach of airspace above large open-area museums by drones is a new type of threat. Museum Staff have no information whether the drone is operated by an amateur or professional photographer, or perhaps by a terrorist. Drones are usually operated by visitors from outside the museum, which makes it even more complicated to control. Solutions applied so far include: establishing a no-fly zones for drones over museums (temporary or permanent – the process is very complicated); once drone is spotted by museum Staff, the Police are notified and if it is possible to identify the drone operator – he or she is arrested; and finally - in case life of visitors or Staff is at threat – the museum security can shoot the drone down.

The paper also included an overview of special security measures introduced at the Auschwitz-Birkenau State Museum at the former German Nazi Concentration Camp, due to the World Youth Day and Pope Frances visit, which took place in July 2016.

Paulina Florjanowicz (Ministry of Culture and National Heritage) & Krzysztof Osiewicz (National Institute for Museums and Public Collections)

Ms. Freda Nkriote (Kenya)

Problems facing museums in the changing Kenyan landscape

The National Museums of Kenya (NMK) is a state corporation established by an Act of Parliament-the Museums and Heritage Act 2006. It is a framework of museums in both the capital and the regions. NMK manages priceless collections of Kenya's living cultural and natural heritage of national and international importance alongside many Regional Museums, Sites and Monuments. Of recent, the NMK has been undergoing challenges in managing its sites and collection due to the changing cultural and ecological landscapes in Kenya. The cultural and ecological changes are caused by both natural and human made. The natural factors include the changing weather patterns due to

climatic changes which have led to increase in amounts of rainfall and consequently to major floods in Kenya resulting to deaths and loss of properties. The floods have altered the landscapes through mud falls and landslides, houses have collapsed in many places and biological agents such as moulds have set into the affected areas. The museums movable collections have not experienced direct effects from the floods, unlike the monuments along the coastline. For example, the Vasco Da Gama Pillar and Fort Jesus museum. On the other hand, human made factors have had devastating effects on cultural landscapes. In 2006 the president of Kenya signed a document namely Kenya's 2030 Vision whose objective is to help transform Kenya into a "newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment." The Vision is based on three "pillars": Economic, Social, and Political. As such, rapid developments of infrastructure to support this vision are currently in place and therefore one is able to experience cultural landscape destruction through the use of heavy machinery and community protests. Besides the physical destruction of cultural landscapes, in 2010, Kenya adopted a new constitution which devolved the central government into 47 counties. Each County is under the leadership of a senator and a governor and has its own members of county assembly. Therefore the government does not have any control over the county development projects. Due to these changes each County has embarked on rapid development agendas hence contributing to major changes on the cultural landscapes.

This paper will discuss these challenges and the actions that the museum is putting in place to deal with them. These actions include cultural impact assessment before the commencement of any major development, monitoring of the ongoing projects, and use of preventive measures like building of sea walls to prevent flooding and destruction of immovable and movable cultural materials among other actions.

Ms. Simona Tordi (Italy)

4th of November 1966: Florence flood in the Central Archives of the State's sources

On November 4th, 1966 the city of Florence has experienced one of the most dramatic chapters of its history. Serious damages throughout the territory and in the historic town center were caused by the Arno river overflows. The artistic heritage suffered serious harm, causing deep emotion worldwide.

The essay presents an analysis of documentation relating to the Florence flood within the Ministero per i Beni Culturali e ambientali (Ministry for Cultural and Environmental Heritage) of Italy's archival sources, preserved in the *Archivio Centrale dello Stato* (Central Archives of the State) in Rome. A chronicle of the dramatic days and its consequences through events reports, lists of damages, first interventions, implemented and ongoing measures, expenditure and restoration forecasts, appraisals, additional staff/ financing requests, relation of work progress, photographic annexes. It collects the voluminous correspondence between the central bodies of the State Administration and the various competent Superintendence Offices in the territory.

The 50th anniversary of the Florence flood inspires some considerations about the importance of ensuring protection and emergency planning projects in museums and cultural landscapes, in order to prevent risks and damages that natural disasters, such as the flood of the Arno in November 1966, may cause to a cultural heritage.

Ms. Erika Jensen (USA)

To be provided

Joint meeting with ICMS, ICOM-CC and DRTF

Museum under fire – preparing and responding to disasters

<u>Meeting objectives</u>: How can museum professionals learn and be better prepared when our museums and cultural heritage sites are damaged by disasters? What are the experiences when natural or human-made disasters hit the museums and what has been done? What precautions can we take with respect to health and safety? How can risk assessment be improved? What tools are being applied for rescuing and how do these work on a long term? The questions are enlightened by short presentations followed by a panel discussion including professionals who have been dealing with disasters from different perspectives; first aid, security, rescue and conservation.

Session type:

Joint session between DRTF (ICOM Disaster Relief Task Force. Contact: Corine Wegener), ICMS, International Committee on Museum Security (contact: Willem Hekman), ICOM-CC, Conservation committee (contact: Kristiane Strætkvern)

1. Disaster Risk Reduction for Museums

- A. Corine Wegener, Chair of ICOM Disaster Risk Management Committee "Lessons Identified: Are we making progress toward Disaster Risk Reduction for Museums?"
- B. Willem Hekman, Chair of ICOM Committee on Museum Security. "The New Normal: Museum Security in Times of Crisis"
- C. Marco Ciatti, Superintendent of the Opificio delle Pietre Dure, Florence: "The Flood of Florence, fifty years later"

2. Museum Leadership in Safeguarding Heritage at Risk around the World

Panel moderated by France Desmarais, Director of Programmes at ICOM, on the role of the world museum community in protecting heritage, including examples of museum engagement in safeguarding heritage at risk in different countries.

Panel participants:

A. Markus Hilgert, Director of the Ancient Near East Museum in the Pergamon Museum, Prussian Cultural Heritage Foundation, Berlin, Germany

B. Corine Wegener, Cultural Heritage Preservation Officer, Smithsonian Institution, "Changing Minds, Changing Policy: The Smithsonian Cultural Rescue Initiative"

- C. Lisa Pilosi, Sherman Fairchild Conservator in Charge, Metropolitan Museum of Art
- 3. <u>Cultural Property Protection in Conflict CIMIC (civil-military cooperation)</u>
 - A. Peter Stone, UNESCO Chair on Cultural Property Protection and Peace, University of Newcastle (UK), Secretary of the Blue Shield International
 - B. Italian 'Blue Helmet' new initiative, Capitano Francesco Provenza (Italy)

Sergio Olivero (Italy)

Virtual reality and immersive environment for security of Movable Cultural Heritage (MCH)

Artworks and monuments are the expression of civilizations, and represent the roots of the identity of people. In this article artworks (such as paintings, statues, etc.) are named *"Movable Cultural Heritage"* (MCH) not to include monuments and buildings. MCH are today threatened by natural hazards (such as floods, earthquakes, landslides, tsunamis, etc.), anthropic attacks (vandalism, looting, deliberate destruction, terrorism) and the booming of illegal market.

Episodes like the devastation of Iraqi museum system, Syrian war and the current attacks and destruction of both artifacts and monuments by IS are causing a growing awareness by the International Community to protect cultural heritage. The needs for skills and competences to protect Cultural Heritage is growing, with a focus on developing new technologies and methodologies able to cope with emerging threats.

The paper will present some operational initiatives that are being implemented in Torino by SiTI.

Specific technologies able to achieve these objects are:

<u>Geomatics</u>: documentations of movable and immovable goods, structural monitoring, restoration support, high precision in artworks reproduction, 3D databases.

<u>Increasing in Investigation Capacity to face illegal trade</u>. Recent technological development allows the creation of databases hosting billions data (Big Data) enabling: new safety process, contrast to illegal trade of goods, storing of 3D artworks images (the development of digital database is a strategic activity in to protect MCH).

<u>Virtual Environments</u>: interaction of the operators with of 3D high resolution objects and environments. Augmented Reality technologies: integrating virtual information and objects into real scenarios, enriching human perception and allowing for interaction with virtual prototypes.

<u>Imaging:</u> Imaging techniques are based on optical effects. Multispectral analyses represent a noninvasive technique currently adopted in the Cultural Heritage to perform diagnostic on artworks and to increase safety of conservation/storage environment. Some examples of Imaging techniques are: reflectance Transformation Imaging (RTI); Algorithmic Rendering; Photogrammetry; Advanced Spectral Imaging.

References:

UNISDR (2015), Sendai Framework for Disaster Risk Reduction 2015 - 2030, http://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf, 1-37

ICCROM The European Union's Judicial Cooperation Unit, Protecting Cultural Heritage in Times of Conflict, http://www.iccrom.org/ifrcdn/pdf/ICCROM_18_ProtectingHeritageConflict_en.pdf, 1-62.

Making use of new technology to protect cultural heritage

The examination of thieves' modus operandi tends to indicate that they don't necessarily use sophisticated means to act, on the contrary! It's why, in order to dissuade a thief, we should above all promote the use of common sense and pragmatism, suggesting simple solutions for very little cost instead of spectacular prevention measures.

However, it would be irresponsible to ignore the possibilities offered by new technologies, as today there are more risks that endanger our heritage than ever before. It's why the necessity to preserve cultural goods, in particular the most valuable and vulnerable ones, requires exploring new innovations to limit the risks. With this in mind, we could focus on several technological solutions.

First, two types of technology which can assist with effective surveillance and allow for the possible detection of an intrusion before the theft:

• Thermal cameras

As one of the main goals of security is to prevent the risk of intrusion in a site, thermal cameras can be an appropriate and well targeted solution.

• Drones

The second type of technology is drones, particularly using them to combat archaeological looting as guarding archaeological sites is an extremely demanding task in term of funds and personnel, especially when the territory is large and the number of possible looting targets is high.

Then, after having focused on these preventive functions offered by technology, two others types of technology which can assist with recovery in case of theft:

• DNA codes

Here, the products range consists of a marking system, with a number of solutions containing a unique DNA code. These products have two major interests, by uniquely marking and making it possible to trace both stolen property and the criminals that stole them, with identification capacities in case of robbery, and also by offering a deterring aspect to the thief.

• Tracking systems

Tracking systems (such as the well-known GPS) have an extremely effective impact in limiting robberies but they must be very small and discrete.

In conclusion, all these technical solutions are clearly valuable and can greatly contribute to the improvement of the protection of cultural heritage. But as you perfectly know, good security requires adopting a holistic approach, with a need for balance between organisational, constructional and electronic measures.

Stephen St. Laurent (USA)

The ICMS annual conference in Boston (USA) in August 2017

See the ICMS website for details (icms.icom.museum)

Tian Kai (China)

To be provided

Mrs Isabella Fiorentini (Italy)

Developing an effective emergency management plan. A proposal

The paper to be presented illustrates the activities of the Archivio Storico Civico and Biblioteca Trivulziana (Milan, Sforza Castle) regarding safety and emergency management, with particular focus on our past participation in the workgroup organised by the Region of Lombardy and our recent adoption of the integrated emergency plan. This document conforms to current Italian legislation and to guidelines drawn up by the regional workgroup. It has two parts: firstly, a detailed map of the collections, as they are actually laid out, for those entering the various parts of the Institute; secondly, a table of priorities to be rescued in the event of a disaster, in which the various sections of the collections are given a combined weighted rating for value and vulnerability.

This document is therefore of great practical use to those entrusted with organising the ordinary activities of the Institute, as well as to rescuers and emergency workers involved in recovering and making safe the endangered cultural assets.

Isabella Fiorentini, Luigi Spinelli

(Archivio Storico Civico e Biblioteca e Biblioteca Trivulziana, Comune di Milano, Italy)

Ms. Elena Franchi (Italy)

Security Games. Cultural heritage and museum protection in card and board games

Sometimes, a different approach to cultural heritage education and museum security can be conveyed by games. Indirect messages are often stronger than direct ones, and can reach a wider audience. In some cases, messages on cultural heritage protection are included in classic games, such as playing cards. This is the case of the Heritage Resource Preservation Playing Cards, created by the Combatant Command Cultural Heritage Action Group (CCHAG) of the US Army, to instill into the military personnel a sense of respect for the cultural heritage of the countries in which they were going to serve. Each card conveys a specific message, and each suit deals with a particular theme: diamonds for artifacts and treasures, spades for historic sites and archaeological digs, hearts for "winning hearts and minds" and clubs for heritage preservation. The background of the cards of the same suit is a piece of a puzzle, to show that if an artifact is looted or destroyed, important parts of the puzzle 2 and of history 2 are lost forever. On the other hand, there are card and board games that specifically deal with cultural heritage and museum security. Sometimes they're explicitly educational, and risk to be less captivating. Art collections, art thefts and thefts in museums are sometimes the topic of the game. Other board games ask players to save artworks in jeopardy. In all these cases, what is the aim of the game, and who's the winner? Card, board games and role-playing games can suggest new interpretations of reality and new points of view, and are often employed as teaching methods. They can convey content subjects, but can also be employed to develop new competencies and promote new strategies. Presenting some card and board games, we'll analyse the way authors conceived them, and players' reactions to the game. By trying to work out the messages conveyed by these games, we'll see the way card and board games could become part of an educational pathway on the protection of cultural heritage.

Kim Jongsok (Korea)

Protection of Cultural Heritage Against Cyber Threats in the New Digital Cultural Landscapes

Since the museum and the cultural sector began use of the computer system, the protection of the data stored in computers emerged to be a new issue. When the online connection of computers became technically possible, and the Internet was introduced, computer users started having worries on the data protection against the remote and anonymous attacks in the cyber space. The damage from such cyber threats, for example 'hacking' is growing. The monetary figure by cybercrime is approximately 575 billion US dollars annually according to the Symantec report. Also, it is said that more than 100 million people experienced the cyber threats in the recent years, and that the number of such victims is increasing.

Under the circumstances, the museum is not an exceptional domain of this matter, and has been warned to protect its electronic data and resources. Therefore, the museum professionals fully recognize the necessity of the risk management and preparedness against cyber threats.

My paper will present, first, the concept of protecting the digitised information, and the seriousness of the various kinds of cyber threats. Second, I will review some remarkable cases where the cultural sector including museums was attacked online by hackers. Third, my paper will introduce both some existing security measures and the future technology in the protection of electronic data on cultural heritage. Finally, I will propose a possible international network of co-operation for the protection, which includes ICOM, ICMS, the International Committee of the Blue Shield, and other related organizations.

KIM Jongsok (ICMS voting member), Curator

Cultural Relations and Publicity Division

National Museum of Korea, Seoul

Dick Drent (The Netherlands)

Risk analysis in the Museo Poldi Pezzolo in Milan

The report of this survey is confidential and can be obtained by a request to the board of ICMS