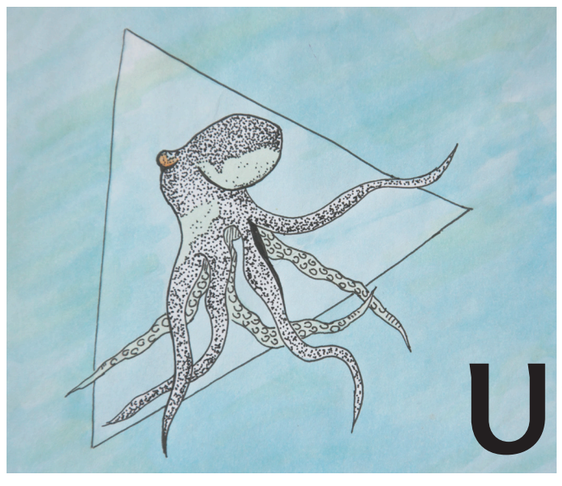

RISK MANAGEMENT - Underwater Cultural Heritage

Introduction

Risk management and risk assessment are primarily concerned with the analysis of potentially occurring events, which may have a harmful influence in a future timeline. Using various analytical models, these events can be identified in advance and the likelihood of their occurrence can be minimized or completely blocked [ROMAIKE 2018]. The process of risk management should be focused on the identification and analysis of all endogenous and exogenous risk potentials. Identified risks are revised and expanded in a continuous process to allow complete coverage [ROMAIKE 2018]. This cycle consists of several recurring phases (risk identification, analysis, assessment and control) that can be successfully simulated using models and communication processes [ROMAIKE 2018].

Cultural Property

Risk management and especially the risk assessment models used in cultural heritage are the Cultural Property Risk Analysis Model (CPRAM) by Robert Waller [WALLER 2003], the ABC method by Stefan Michalski and José Luiz Pedersoli Jr. [MICHALSKI 2016] and the QuiskScan by Agnes Brokerhof and Anna Bülow [BROKERHOF, BÜLOW 2016]. These are being continually developed through various areas of science and applied to institutions, collections and museums in many parts of the world.

Underwater Sites and State of Research

The Master thesis will mainly deal with a subsection of comprehensive risk management and risk assessment. Investigations will specifically refer to the protection of underwater cultural heritage to highlight, compare and explore the context and need for risk management within underwater environment. In order to get a complete overview, the paper presents the main topics: underwater archeology, risk management in general, risk management in the protection of cultural heritage on the mainland and subsequently in water or underwater. This presented structure should serve for the development of a risk management model. Research literature of underwater archeology will be incorporated into the considerations. The author Mark Dunkley and his risk model for underwater sites relates mainly to the assessment of shipwrecks. [DUNKLEY 2008; MANDERS 2017; MAARLEVELD et al. 2013; DUNKLEY 2008; GRENIER et al. 2006; etc.]. A systematic approach should be developed and shall include any type of occurring risks. Different risk models of the namend authors shall be compared in the Master thesis and will be evaluated by the author. The focus lies on the CPRAM model, the ABC method, the QuiskScan, and the shipwreck model by Mark Dunkley. On the basis of these systematics, a new or extended model for underwater cultural heritage will be developed and checked for its applicability by means of an underwater site.

Aim of the Thesis

The aim of the Masters thesis is to develop an extension of existing risk models within the cultural heritage sector dealing with terrestrial and in particular maritime cultural assets. In the end there should be an easy-to-use and understandable manual that researchers can use to make it easier to assess and thus preserve cultural heritage. Due to various contacts with Martijn Manders and Mark Dunkley, a research and cognitive interest in the topic to be worked on can be confirmed. Since DUNKLEY has already developed a „tool kit“ for underwater sites, the research area of the thesis, as also proposed by Dunkley, would relate to insights and further developments in the risk management of material groups and their potential hazards. For the author of the thesis it is important to contribute to the exploration and conservation of underwater cultural assets. The system to be developed should be easy to use, understandable, to assist in the evaluation of these hard-to-reach sites and finds.

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Illustrations:
Cover Photo: Illustration of the author

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