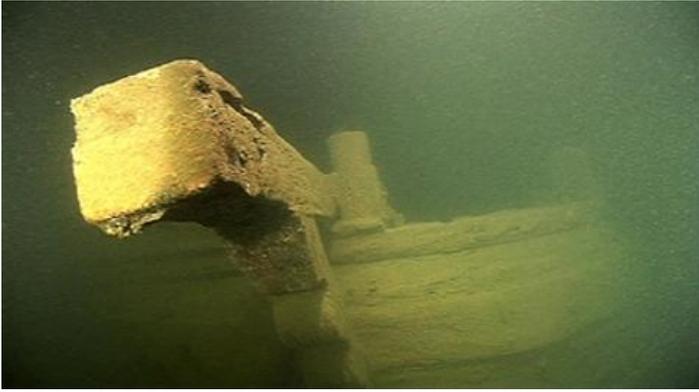


Re-discovering Vrouw Maria: virtual reality simulation



Researchers and students at the Department of Media (Media Lab Helsinki) in Aalto University School of Arts, Design and Architecture, have created an interactive, real-time, virtual reality simulation about the Vrouw Maria shipwreck.



The Vrouw Maria (Lady Mary) was a 18th Century Dutch vessel that sank in Finnish waters on its way to Saint Petersburg, bearing a precious cargo destined for the Empress Catherine the Great of Russia. It represents a valuable piece of European underwater cultural heritage: thanks to digital technologies anyone can 'visit' the shipwreck - and with no need to be a scuba diver.



Maritime Centre Vellamo

The simulation has been created as part of the temporary exhibition [Spoil of Riches ? Stories of the Vrouw Maria and the St. Michel](#) to be held at the Maritime Museum of Finland located in the grand Maritime Centre Vellamo in Kotka.

The Maritime Museum of Finland is a national maritime museum operating under the National Board of Antiquities and the Ministry of Education, destined to record the history of seafaring in Finland and to convey related information. The Maritime Museum collects and preserves items, photographs, archival material and literature pertaining to seafaring and boating.

This [exhibition](#) seeks to portray trading in the Baltic Sea area during the Age of Enlightenment and it is open from 25 April until 02 December 2012.

The simulation provides an opportunity to explore the underwater site of the Vrouw Maria. Using a gesture-based interface, visitors can follow a pre-recorded presentation of the foundering of the vessel. The gestures included in the interface include pointing forward, right or left and up, according to the user's desire. Visitors can also navigate freely through a virtual reality landscape and

inspect a selection of the remains of the wreck and the landscape.

The information spots ([PDF detail here](#)) provide the visitor with additional data (in the form of text, images, sound and video) about aspects of the site.

The work on the simulation is a continuation of work began by the Vrouw Maria Underwater Project in 2009. It is also part of the research done by the Media Lab Helsinki [Systems of Representation](#) research group on the theme of digital cultural heritage. Actually, everything started even before, thanks to a 3 years project funded by EC Culture 2000 Programme. This programme funded for the first time a project to preserve underwater cultural heritage: "Monitoring, Safeguarding and Visualizing North-European Shipwreck Sites: Common European Underwater Cultural Heritage - Challenges for Cultural Resource Management" (MoSS), and six European countries participated in it.

The MoSS project deals with the monitoring, protecting, and visualizing of shipwrecks and their conditions. It was based on four shipwrecks, all of them significant and important, showing a diversity of intercultural relationships throughout a long period of European history. The wrecks are in the Netherlands, Germany, Sweden, and Finland, representing different ship types. The oldest is from the 13th century and the youngest from the mid-19th century.

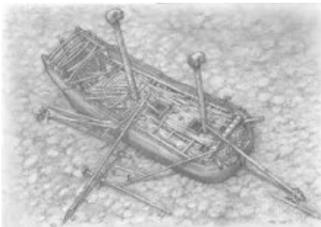
Germany: A Medieval cog from 13th century, at the mouth of the Prerowstrom.

Netherlands: A well-preserved shipwreck from the 1650s in western part of Wadden-Zee Lake.

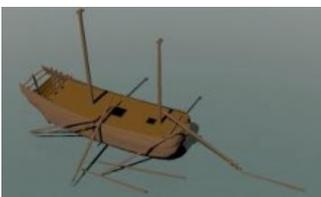
Finland: Merchant ship Vrouw Maria, lost in the southwest Finnish archipelago in 1771.

Sweden: Paddle steamer E. Nordewall, sunk in Lake Vättern in 1856.

The project had three main themes: monitoring, safeguarding and visualizing shipwrecks. In early 2000s, the project was innovative because it already took in consideration electronic media, digital technologies, video and computer animations. In particular, the Visualization theme included aerial photographs, geophysical survey methods, photography, graphics and photogrammetry, videotaping as well as models and replica.



graphic reconstruction



3D reconstruction

The project was organized by:

The Maritime Museum of Finland as the co-ordinator,

The Mary Rose Archaeological Services Ltd. from the Great Britain,

The National Service for Archaeological Heritage: Netherlands Institute for Ship- and Underwater Archaeology from the

Netherlands (ROB/NISA),
National Museum of Denmark/Centre for Maritime Archaeology,
The Department for Preservation of Archaeological Sites and Monuments / Archaeological State Museum of
Mecklenburg-Vorpommern from Germany,
Södertörns högskola (University college) from Sweden.

Learn more about MoSS project in the [PDF Final Report](#) (5,60 Mb)



Related links:



[Official website for Re-discovering Vrouw Maria](#)



