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MRE Proposal – Project with CSTM

Far From the Sea

A New Model for the Interpretation of Ships Models

and other Maritime Technological Artefacts in Heritage Settings.

I am proposing an online digital exhibit of 3D image-objects of artefacts related to maritime history from the Canadian Science and Technology Museum’s collections. The exhibit will feature ship models and navigational instruments from various eras. I will be creating and digitally curating the 3D image-objects in an online exhibit platform that forefronts the materiality of the artefacts. The chosen platform allows for annotations to be applied directly to the digital object, allowing a continual reframing and expansion of the exhibition of the objects via curated commentary and input from public viewers.

The individual identity and agency of these technological objects are often glossed over in heritage and museum settings in the pursuit of presenting more general themes and events from history. Ships models have often used as physical stand-ins for the vessels that they are modeled upon, while navigational instruments serve as illustrative diagrams that augment descriptions of the history of seafaring. What is often not foregrounded are the models *as* models – why they were made, who made them, and the purposes they served – or the navigational artefacts as individual tools which had interactions with people and with the past. These facets of artefact agency will be front and centre of this project.

The purpose of the exhibit is to recalibrate visitor’s notions of the purpose of displaying objects in heritage settings, by demonstrating a different way of approaching an object. By emphasizing the particular agency and history of each object, the exhibit avoids the common issue that museum spaces require objects to act as stand-ins or exemplars of trends and eras. Instead of forcing a ships model to be merely a representation of the ship itself, or reducing a navigational instrument to the mathematical relationships it employs to determine position, this 3D digital exhibit allows users to explore each item in depth as a node intersected by the many social, technological, and political influences and engagements the original object experienced.

Using photogrammetry imaging software, I will make 3D image-objects of artefacts in the collection of the Canadian Science and Technology Museum. The exhibit size will depend on the time it will take for me to learn how to create high quality image-objects, as well as the time necessary to process each individual object. At this time, it is projected that 4 or 5 image-objects of ships models will be made, along with 6 to 8 image-objects of navigational instruments.

Each one of the 3D image-objects will require 60-100 photographs to be taken of each object, depending on its size. All images will then need to photo-masked, a process that outlines the object and cuts out the background “noise” of the surrounding environment. It is possible for this part of the process to be crowd sourced, as there is a pre-existing crowd sourcing system in place at the British Museum which has been operating successfully and efficiently for several years. Connections with museum staff through Carleton University will hopefully allow me access to this resource. If this is not possible, this may limit the number of image-objects I will create. Once this process is complete, the photo-masked images are input into software available through the Carleton History Department’s Underhill Digital Research Room, and the data can then be manipulated to create the 3D image-objects.

The proposed hosting platform, which is also used by the British Museum, allows users to ‘handle’ the image-object so that they can view it from all angles. It also allows the curator to add annotations to the images, which users can click on to reveal further information about the object. This can be prescriptive description of what the object is and what it does, as well as related to the specific history of the individual object. There is also potential for the website to act as a means of crowd-sourcing information about objects in the collection, as users can submit potential annotations that can be approved and edited by the curator that will then be visible to other users.

Should this planned exhibition be successful in gathering meaningful information and feedback about objects from users, the door is open for future exhibitions of other 3D image-objects of artefacts from the CSTMC collections to be exhibited and commented upon by the general public. This allows greater access to the massive collections that are largely inaccessible to the public, and also allows for the augmentation of what the museum knows about the objects in its collections.

In addition to the exhibit itself, I will be writing a major research essay that outlines my pedagogical and theoretical frameworks, as well as my reflections on the utility of this project. This will include a prescriptive guide that outlines the processes so that expansion of the project can be easily undertaken in future by other researchers.

Working Schedule: (dates indicate completion of task)

Technical:

Dec 10 Photograph and initial mock-up of test-run object

Dec 10 Test flexibility and mechanics of platform

Jan 8 Final list of objects to photograph and exhibit

Jan 30 Photography of objects completed

Feb 15 Photo-masking of images completed

Feb 30 Photogrammetry of 3D image-objects completed

Exhibit:

Jan 10 Initial exhibition plan (working text, schematic of design)

Jan 30 Design of digital exhibition space

Feb 21 Initial annotation texts

Feb 21 Finalization of design

Major Research Essay:

Dec 23 First draft of literature and museological practice review

Dec 23 First draft of initial theoretical frameworks

Jan 30 Second drafts of first two sections

March 15 First draft of reflections on process

March 30 Full working draft

April 7 Revisions from supervisor

April 14 Completion of Essay