Merging Museums with the Classroom: Using Collections to Teach Maritime Archaeology

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Abstract
Although there is a growing interest in studying maritime archaeology even at the undergraduate level, it can be a challenge to bring to life for non-divers both the mechanics of an archaeological investigation, but also the joy of discovery and satisfaction of identification of a wreck site. This paper will describe possible alternative methods of recreating that entire process through the use of museum collections. In particular, I will discuss a project undertaken by undergraduates at Harvard University in partnership with the Peabody Museum of Archaeology and Ethnology. Students were required to choose a ship model from the museum’s collections and, with very minimal initial information, had to research its historical background and construction techniques, treating it as an archaeologist would a shipwreck site. This paper will introduce the benefits and challenges to both the students and the museums in using this type of approach.

Key words: Collections, Ship models, Museums, Public Engagement

Project Description
While a postdoctoral fellow at the Reischauer Institute of Japanese Studies (Harvard University) in spring of 2016, I was invited to teach an introductory class on maritime archaeology in the anthropology department. Even though the Boston, Massachusetts, area has a rich maritime history, such a class had never previously been taught at Harvard. Since my fellowship was a nonrenewable, single-year appointment, there was no opportunity to develop a sustainable maritime archaeology program there. The class, ANTHRO 1281, was therefore
designed as a stand-alone introduction to the field, with no prerequisites for undergraduates.

My two main goals for this class were to give the students as much hands-on experience as possible to evoke the excitement involved in maritime archaeological fieldwork, and to emphasize the need for archaeologists to disseminate our work to a wide variety of audiences. The challenges to the first goal, however, were that the students were not certified divers and even if they were, Boston in the winter months does not provide ideal diving conditions! We were fortunate to collaborate with NOAA staff members from Stellwagen Bank, who did an ROV demonstration one evening at the campus pool, and with Victor Mastone at the Massachusetts Bureau of Underwater Archaeological Resources, who took us to a shoreline wreck site. There the students were even able to do some preliminary mapping of an 18th century shipwreck.

While these experiences were valuable and students cited them in class evaluations as some of the most exciting aspects of the class, they did not provide the in-depth experience of exploring a single site over a longer period of time. Nor are they necessarily able to be replicated in other areas where there might not be a NOAA ROV to borrow or a convenient shoreline shipwreck site. To provide students with at least a sense of the research aspects of maritime archaeology, as well as to achieve the second class goal of emphasizing multiple means of interpreting the site, I approached the Academic Partnerships department at the Peabody Museum of Archaeology and Ethnology (PMAE). Located on Harvard’s campus, the museum was founded in 1866 and is home to over 1.4 million artifacts. As part of its mission, the museum promotes using the collections for “unique opportunities for innovative teaching, research, and
enrichment at Harvard” and other communities (Peabody Museum of Archaeology and Ethnology). The Academic Partnerships Department is excited to work with instructors and make collections available to students, and that made for a natural collaboration between the ANTHRO 1281 class and the museum.

The PMAE has in its collections over seventy different ship models, many of which were donated to the museum in the late nineteenth and early twentieth centuries. Most of the models represent indigenous watercraft from Asian, Oceaniac, and Native American peoples (Figs. 1 and 2). As many of them came to the Peabody from another Boston-area museum that was destroyed in a fire, documentation is minimal for the vast majority of the models. One typical accession card simply reads “Chinese Boat. Peale’s Museum, ca 1840.” Due to space limitations, very few of the models are displayed in the public galleries.
Fig. 1: Representative ship models from the PMAE collection, No. 32-62-60/D4111. (Damian)

Fig. 2: Representative ship models from the PMAE collection, No. 99-12-60/52934. (Damian)
These models became our “shipwrecks.” In class we discussed the anonymous nature of much of maritime archaeology. Few archaeologists know that they are working on a Vasa, a Mary Rose, or a CSS Hunley when they discover a wreck. Instead, they encounter an often unnamed vessel in a particular geographic region, and must identify diagnostic features and do research to determine the type, time period, and origin of the vessel. Students were charged with treating the models in a similar manner, using them as substitutes for a shipwreck. Where was it from? Who might have sailed on this kind of ship? How can we determine what type of vessel it was? The minimal documentation for these models was therefore not an impediment to the process, as students were required to research and discover the answers themselves.

A second component to the museum partnership was to create an online exhibit for the Peabody Museum (visible here: https://www.peabody.harvard.edu/node/2619). In keeping with the course goal of disseminating information to multiple audiences, students were to not only write an academic term paper about their model, but were also required to write several shorter, public-focused introductions to their models that became the heart of the online exhibit. The multicomponent assignment therefore spanned the entire semester.

Students each chose a single model as their focus. They arranged with the Academic Partnerships office to visit the museum and investigate their model, taking photographs and making notes and sketches of diagnostic features. They were not meant to be researching the model maker or the actual model itself, but instead were to treat the model as an archetype, treating it as a shipwreck. The first assignment focused on the historic background of the vessel, and the second on a detailed discussion of the
ship construction features. Research was often a challenge if the only information they had to begin with was “Chinese boat ca 1840.” As secondary scholarship on some of these vessel types was limited, students discovered the importance of incorporating multiple lines of inquiry into their research, including artwork, primary source ethnographic accounts, and even films.

Details of the students’ work can be seen on the online exhibit, but a typical example is of work done on a model titled “War Canoe.” The accession notes included information that the model originated in Sarawak, Borneo (Malaysia), and referenced the Iban tribe. Using a flag included with the model, students were able to date the ship to the late 19th or early 20th century (Gilbert). Records from European explorers described the seafaring members of the Iban tribe as the Sea Dyak, and students relied heavily on those sources to discern who may have used this type of vessel and the context in which it sailed (Kimball). The models therefore served as stand-ins for actual shipwreck sites, as the focus was not on the individual model and its creator, but on the model-as-typical-watercraft.

The museum aspect of the project was divided into three different components. As these were put online for a general audience, students were charged with writing to that public, foregoing a more traditional academic writing style. They needed to consider how to draw their readers in to learn more about their vessels, balancing being informative and exciting. The first two assignments consisted of a photo of their vessel (taken by the student), accompanied by a brief introductory paragraph and followed by a more in-depth analysis (2 – 3 pages) of their findings. The third assignment was to create a museum label for their boat, introducing
the artifact to someone who might be walking past the model in a physical exhibit. Once they had learned as much as they could about their watercraft, they needed to consider what was most important for the casual museum visitor to learn about their boat.

The original intent was to announce each component of the project to the public as it was put online and solicit feedback and suggestions. Particularly since many of the models had such limited documentation, crowdsourcing the research in this way was one strategy that could provide the students with more insight into their vessel. Incorporating the public suggestions and feedback from the instructor and teaching assistants, students needed to complete a final assignment rewriting their publicly focused entries as a more academic term paper. This was meant to help them again consider those multiple audiences and adjust their communication styles accordingly. Some obstacles hindered that ideal realization of this project, however, as I will address in the next section.

The entire project was designed to emulate the archaeological process: the “discovery,” research, and interpretation of a shipwreck site. It spanned the entire semester, allowing students to expand their research as they considered the different aspects of their vessels. While some students expressed frustration at spending “so much time” on a single ship type in their research, I believe it was an effective introduction to the research process for an archaeological project – particularly when some archaeologists can spend years on a single site.
Challenges to the Project

Because this was the first time I had taught this class, and because this was the first time the Peabody Museum had partnered with a faculty member to use student classwork to create an online exhibit, there was an element of trial and error to actualizing the project. None of the following comments are meant as criticisms of the PMAE staff, as everyone involved was extremely enthusiastic about the collaboration, and the Academic Partnerships staff in particular were tremendously accommodating. Here I describe the issues that arose simply to note potential pitfalls for future similar projects.

The first issue was simply that of the actual web coding. As I myself am not a programmer, this became an additional project for the museum’s web developer on top of his other duties. In addition, since he was only in-house certain days of the week, progress at putting the information provided by the students online was sometimes slower than I had hoped. Progress was further hindered by my own failure to clarify how best to provide him the data. For example, for the first two assignments the students needed to submit a stand-alone image of their boat to be used as a cover photo, a short paragraph, and a longer paper. Initially the students embedded their cover photos directly into the Microsoft Word documents containing their paragraphs and longer essays, but that became problematic for the web designer to extract and put online. We decided on a file naming convention for both images and documents, and had the students re-submit their files via Dropbox. Streamlining this process took some time, and thus the public launch of the website was delayed until both the first and second assignments were already online.
This, then, affected the ability to promote the website and adequately crowdsource feedback as I had initially hoped.

The second, and perhaps more striking, issue came in the form of copyright considerations. Many of the students found different images in their research that they wanted to incorporate into their analyses, and therefore scanned them and included them in their papers, with proper citations. When it came to putting those images online, however, a question arose regarding copyright of those images, regardless of educational fair use. According to the Academic Partnerships department, “Each image would have had to have been reviewed on a case by case basis, to determine whether their use was “transformative” [which would have been impossible due to the time constraints of the class].” (Rose)

The public distribution inherent to internet display was the main concern, as it increased the risk that the copyright holder may have discovered that his/her image was being used without permission. It was decided that it would be safer to remove any images that were not either in the public domain or the students’ own photos or sketches from their papers. This put an additional burden on both the students and the instructors, as everyone needed to re-edit their papers and verify the ability to use any embedded images. Students were understandably upset at needing to delete certain images, since in many cases they referred to those sources in their written analyses and felt that the removal would hinder the ability to effectively convey their argument. We therefore compromised by substituting an “image redacted” icon for the deleted images, which we hoped would indicate to any readers that any missing information was not due to student error.
A final concern came from an individual student. Since the Peabody Museum wanted to be sure that students were getting credit for their work online, and since ideally the project would be receiving feedback directed at individual submissions, we decided to have the names of the students clearly associated with their web submissions. One student approached me with concern, as she had been the victim of online stalking in the past and did not want her name to be searchable. With her permission, we compromised by including the student’s initials instead of her full name.

Most of these obstacles were due to the fact that this was the first time such a project had been conceived of and carried out at the Peabody Museum. If the museum collaborates in the future with faculty to create a similar exhibit, or when this kind of class is taught at other institutions, those issues have now been identified and can be corrected before the project begins.

**Benefits of the Project**

The stumbling blocks noted above were of small concern when compared with the overall benefits of doing this type of project. The Peabody Museum staff were excited to be a part of this project not only because it conformed to their mission, but it also allowed them to breathe new life into old collections. As noted above, the majority of the models cannot be displayed in the main galleries due to their size. When the Academic Partnerships staff first brought out the models for me to view prior to beginning the project, one exclaimed that even as a long-time staff member, this was the first time she was viewing the models. Allowing the students to research the vessels and create an online exhibit of the models enabled the Peabody Museum to make those long-stored objects
accessible to an online audience. In some cases, the students’ findings provided additional information or called into question the museum’s classifications of the vessels. One model, labeled a “Chinese barge,” was actually closer to a junk, concluded two students (Barrett, McGough).

As noted above, this project allowed non-diver students to get a sense of the type of research work and methodologies that archaeologists may have to use when trying to identify an unknown shipwreck. Further than that, however, many of the students found the experience valuable for a number of reasons. Several students elected to write a brief “reflections” post for the website, and other comments were gleaned from class evaluations. In these writings, many students noted the benefits in learning to communicate with various audiences. They often acknowledged that it was difficult at first to convey complex technical information in an accessible manner, but that it became easier with practice (Skendarian, Gerberich).

Several also appreciated that this assignment approached work on an actual site as closely as possible within the limitations of the class. One noted the restrictions in working with a model, since special arrangements had to be made with the collections staff each time she wanted to view the model. She acknowledged, however, that this was probably very similar to limitations an archaeologist would encounter on an actual site: repeated lengthy visits are not always possible (Lu).

Perhaps the most notable response, however, was the pride the students took in actively contributing to the field through this project. Comments included statements such as “knowing that my research for this project will be available online for the public to see makes me feel as if I am truly
a maritime archaeologist” (Lu), “I’m really glad I had the opportunity to break new ground and contribute to the academic world of maritime archeology with the research I conducted over the last few weeks” (Skendarian), and “seeing our work go on an actual museum webpage was a worthwhile finish” (Metoyer). An anonymous comment from class evaluations further stated, “The museum project was one that allowed such a realistic approach to maritime archeology and further enabled the ability for some realistic learning approach. It was one of the first times within my life that I’ve actually made a profound difference within the academic world and for that reason, it was an incredible experience.”

The students’ work is still part of PMAE’s online offerings and at present there are no plans to remove it. The class has therefore made a lasting contribution that will remain accessible to anyone interested in maritime history and ship construction of indigenous crafts from Asia, Oceania, and North America.

**Future Possibilities**

In planning this project, I was of course tremendously fortunate to have a museum such as the PMAE located on the same campus, with an incredible collection of ships’ models and staff who were excited to work with faculty and students. Obviously, this scenario is the exception rather than the norm. That being said, there are possibilities. Local maritime museums are likely to be interested in collaborating, and I have spoken with a faculty member of a Georgia university who intends to undertake a similar project in conjunction with the Ships and the Sea museum. Furthermore, in the Spring of 2018 I will be teaching a version of this class at my current institution, Monmouth College in Illinois (USA) – a very
landlocked college with no ship model collection at hand. I intend to test the idea that it should be possible to replicate this type of project with other materials. While models provide a tangible, three-dimensional representation of a vessel especially helpful for understanding elements of ship construction, photographic or even artistic representations of ships may be able to be used to the same effect. As some of the students noted in their analyses, the models were not always perfect representations of actual construction techniques either. While relying solely on two-dimensional depictions of ships may be even more limiting, in other ways it could widen the scope of discussion considerably. Instead of being confined to the extant items in a collection, the possibilities for research of images is nearly endless. Copyright considerations, of course, would still need to be taken into account.

While putting up an online exhibit is ideal in that it can both reach out to a worldwide audience and endure indefinitely, if programming or online access is an issue a physical exhibit could be mounted with the help of any local gallery space. Particularly if students are working with images, all that would be needed is some wall space for mounting the photographs and labels. At Monmouth College, I hope to make use of the resources afforded by the Museum of Underwater Archaeology (MUA; www.themua.org) to create an online exhibit, as well as appeal to the library for the use of gallery space to mount a physical exhibit on campus.

For an introductory class in maritime archaeology to a group of undergraduates who may or may not have prior experience or a desire to continue in this field of study, this type of project provides a good overview of the process of researching and interpreting a “shipwreck.” The satisfaction of creating an actual exhibit and contributing to the field was
for many an exciting way to experience a taste of what maritime archaeology is all about.

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