Visualizing a Wired World’s Past

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Reflecting on Making and Mapping a 3D Digital and Printed Past for the Great Bike Race Book

by Bernard K. Means

For four years now, I have been working with VCU students and partners in the heritage community to create virtual models of artifacts and other important items through 3D scanning, either in the Virtual Curation Laboratory (//vcuarchaeology3d.wordpress.com/), which I direct, or on location. We have worked to share our virtual models, including online at the Virtual Curation Museum (//virtualcurationmuseum.wordpress.com/) and through 3D printed replicas of artifacts that we have scanned. Most of our artifacts come from the U.S., ranging in age from 10,000 years ago to the 20th century, and from archaeological sites located throughout North Carolina, Virginia, Maryland, Pennsylvania, and New York. We do have artifacts from other parts of the world, particularly from the collections at the Virginia Museum of Natural History (//www.vmnh.net/) in Martinsville, but also some that I helped scan this summer at HNB Garhwal University (//vcuarchaeology3d.wordpress.com/2015/08/17/my-passage-to-india-stage-3-building-a-virtual-bridge-between-virginia-commonwealth-university-us-and-hnb-garhwal-university-india-a-global-classroom-initiative/) in India.

Image courtesy of Brittany Blanchard.

3D printed replicas of artifacts scanned in India.

This latter scanning trip really got me to thinking about how we could best share our digital artifact models to a global audience, and fortunately I was able to teach Visualizing a Wired World’s Past during the UIC Road World Championships. Working with the ALT Lab, an interactive map of the world was created, and a form was developed where students taking the course could enter information. Students who took the class would enter basic information about each of three objects, upload an animation, and create a video where they discussed a 3D printed replica of the artifact, such as this one from Marjorie Burnett.

The seven students that participated in the course seemed to enjoy learning about the past, and sharing their stories with the international participants if the Bike Race.
All students were given an opportunity to work in the Virtual Curation Laboratory, and they particularly enjoyed printing and painting replicas of the artifacts that they would use to complete their forms during the Bike Race Week.

- Hannah Lickey holds a 3D printed sculpture of Ganesha.
- Michelle Taylor holds a replica of an antelope femoral head from Zaire that she has painted to look like a bike race participant.
- Taylor Conrad paints a 3D printed artifact replica.
Communicating virtually with some of the students was not as sophisticated as I had originally intended. Email turned out to work perfectly well to ensure that students had all the tools they needed to successfully complete the course, although it was a bit challenging to work purely remotely with students and not have access to the Virtual Curation Laboratory. While I would definitely make some changes to how I taught the course, I think it provided a solid framework that I plan to expand into all of my research and teaching as a way to dynamically involve VCU undergraduate students in communicating the work of the Virtual Curation Laboratory to preserve and share their work to a global audience. I had each student write a reflection on what they thought of the course as well, and I include these links below:

Brittany Blanchard: //rampages.us/wiredworldspast/student-reflections/pick-me-pick-me-the-object-seemed-to-say/
(//rampages.us/wiredworldspast/student-reflections/pick-me-pick-me-the-object-seemed-to-say/)
Marjorie Burnett: //rampages.us/wiredworldspast/student-reflections/bringing-back-the-right-side-of-the-brain/
(//rampages.us/wiredworldspast/student-reflections/bringing-back-the-right-side-of-the-brain/)