

# tutorials/3d-ethics-propoaal.md

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 [github.com/ctschoeder/tutorials/blob/master/3d-ethics-propoaal.md](https://github.com/ctschoeder/tutorials/blob/master/3d-ethics-propoaal.md)

ctschoeder

## Digital Tutorial in Creating a 3D Scanning Project for Cultural Heritage Objects

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### About this tutorial

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This tutorial is created primarily from materials created by and provided by Dr. Susanne Garrett, CLIR postdoctoral fellow at the University of Oklahoma Libraries.

This tutorial lives online at <https://github.com/ctschoeder/tutorials/blob/master/3d-ethics-propoaal.md>

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## 1. About Cultural Heritage Scanning

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As we are studying in this unit, scanning historical and cultural heritage objects can help research on those objects, because you can study them closely without having to touch them or move them or move TO them. As we have studied during our earlier units on Cultural Heritage (e.g., Native American and Indigenous DH), there are also some ethical issues to consider.

In this tutorial, we are pretending the world is your oyster, and you may have access to scanning almost any cultural heritage object you like. You'll explain why you want to scan it, why you think a scan would be valuable, and consider the ethical implications of scanning.

## 2. Learn about 3D Scanning at OU

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In this tutorial, you'll select an object for scanning and explain why it should be scanned. First, familiarize yourself with scanning at OU by reviewing the [Cheat Sheet](#)

## 3. Find an Object for Scanning

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Find an object in a museum that you want to scan.

- If you've been to a museum recently and know something right away, go ahead and pick that. Find the museum's website online and see if you can find an official link to the object. Make a note of that link!

- You can also go to the [Sam Noble Museum website](#) and click on Permanent Exhibits or Collections. Browse around to find an object.

Make a note of the link to the object or its image on the museum site! Bookmark it or copy and paste it into a text file for future use.

As you pick your object, remember what you learned in the videos about the labs at OU about texture vs shiny. Flat objects and reflective objects will be difficult to scan.

## 4. Complete Part 1 of the 3D Scanning Ethics Activity

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The following has been taken from Dr. Susanne Garrett's 3d Scanning Ethics Activity Sheet!!

### Readings

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For further resources, see:

Bond, S. 2007. Digitally Reconstructing The Faces of Ancient Palmyra.

<https://www.forbes.com/sites/drsarahbond/2017/07/05/digitally-reconstructing-the-faces-of-ancient-palmyra/#150a9ecd8fb8>

Bond, S. 2016. The Ethics of 3D-Printing Syria's Cultural Heritage.

<https://www.forbes.com/sites/drsarahbond/2016/09/22/does-nycs-new-3d-printed-palmyra-arch-celebrate-syria-or-just-engage-in-digital-colonialism/#6d91725077db>

Haritha Dasari, Assessing Copyright Protection and Infringement Issues Involved with 3D Printing and Scanning, 41 AIPLA Q.J. 279 (2013) (17 pp)

R. Eric Hollinger, Edwell John, Jr., Harold Jacobs, Lora Moran-Collins, Carolyn Thome, Jonathan Zastrow, Adam Metallo, Günter Waibel, and Vince Rossi. Tlingit-Smithsonian Collaborations with 3D Digitization of Cultural Objects. (53 pp)

<https://www.smithsonianmag.com/smithsonian-institution/replica-tlingit-killer-whale-hat-spurring-dialogue-about-digitization-180964483/>

<https://www.npr.org/sections/alltechconsidered/2018/05/21/609084578/3d-scans-help-preserve-history-but-who-should-own-them>

Who Owns 3D Scans of Historic Sites? 2019. Esther Shein. Communications of the ACM 62(1) 15-17.

### Readings Dealing Specifically with Human Remains

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Hirst, C.S., White, S., & Smith, S.E. 2018. Standardisation in 3D Geometric Morphometrics: Ethics, Ownership, and Methods

Decker, S. & Ford, J. Chapter 13 Management of 3D Image Data

Márquez-Grant, N. & Errickson, D. Chapter 14: Ethical Considerations: A Added Dimension

Hassett, B.R. 2018. Which Bone to Pick: Creation, Curation, and Dissemination of Online 3D Digital Bioarchaeological Data. *Archaeologies* 14: 231-249.

Katherine A. Smith\* (2016). NOTE: "Transplanting" Organ Donors with Printers: The Legal and Ethical Implications of Manufacturing Organs. *Akron Law Review*, 49, 739. (legal note)

## Pre-Lecture/Activity questions

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In your document where you've recorded the link to your object, please answer the following questions:

What is the object?

Describe the physical properties of it?

Why do you want to scan it?

How does your usage (why you want to scan it) guide your plan for data capture? (What aspects are most important to capture? Do you need color and texture? How accurate does the model need to be?)

Who do you want to have access to the model? What kind of access? (Can anyone view it? Modify it? Use it? Will you charge?)

How does your plans for who has access guide your decisions about where to store it? (Are you going to keep it on a hard drive? Upload it to Dropbox? website?)

## 5. Watch or Review the Photogrammetry Video

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Watch or Review the Photogrammetry Video posted to Canvas. If you have already watched it, skim the auto transcript or your notes if you took them. If you haven't watched it yet, go to the course Canvas site > Files > 3D Scanning Videos and watch the photogrammetry video (mp4) or listen to the audio (mp3).

## 6. Complete the Rest of the Activity

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The following questions come from Dr. Susanne Garrett's 3D Ethics Activity. Please answer these questions in your text file.

What physical properties of the object are amenable to capture?

What properties of the object might be difficult for capture?

Who owns the object?

Who might have an opinion about how the digital model of the object is used? What is their relationship to the object? Should their opinion be considered? Why or why not?

Have any of your answers to the pre-lecture questions changed? Why or why not?

## 7. Post your proposal!

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Post your proposal to the private course blog. Please include:

- An image of your object
- Link + credit to institution to your object
- Text of your responses

I look forward to seeing what might you want to do!