Data and Metadata Profile

([Link](https://figshare.com/articles/dataset/3D_data_for_recreating_a_bronze_portrait_figure_from_Cleveland_Museum_of_Art/5234890))

The data to be analyzed are a collection of various image files which are cumulatively intended for a 3d modeling software. When this data is input into the proper software, the output would be a recreation of *Bronze portrait of a man*, a 1st century bronze head. The original head was found in Northern Italy and is believed to be a likeness of Marcus Vipsanius Agrippa, but is possibly some other high-ranking Roman official. It is an excellent example of the realistic portraiture of the late Republican Period of the Roman Empire. The statue’s body, however, is lost to time. Although the data states that the original figure is housed at the Cleveland Museum of Art, the piece now exists at the Metropolitan Museum of Art.

The 3D modeling data come from a technologically-minded archaeologist who creates 3D representations of priceless pieces of art in an attempt to preserve them in a digital format. The key stakeholders are the creator, Daniel Pett, as well as the organizations that fund and utilize Daniel’s work, The Fitzwilliam Museum and The University of Cambridge to name a couple. The Cleveland Museum of Art is also a stakeholder as the original user of the model and, presumably, the entity which called for its creation in the first place. Interestingly, the MoMA is also a key stakeholder through its decision to not use the model in its digital collection. The data itself include 81 photographs of the statue’s head (JPG), monochrome masks of the same photos (PNG), the final 3D model file in four file formats (JPG, MTL, OBJ, and STL), a README.md file and a LICENSE.md file. Although a specific program would be required to render the images into a 3D model, the specific program used for this model is not named. After some research, it was discovered that the MTL file is opened in Alias/Wavefront, the OBJ file can be opened by a number of 3D CAD programs such as Rhino or Blender, and STL files are native to CAD programs created by the company 3D Systems. The data itsel is licensed under creative commons and no other usage restrictions are mentioned.

The metadata exists within the text files included with the data and is entirely unstructured. The README.md file includes metadata pertaining to the object being analyzed such as the title, approximate time and location of its creation, and a brief description. The LICENSE.md file contains metadata specifically about the creative commons license associated with the data. The metadata does not include a lot of information about the model itself, such as what the intention of its use is or what software(s) were used to make it. None of the metadata is structured to a standard, but it is organized to be human readable.

If there were perhaps a file specifically intended for metadata, and on top of that, the metadata were structured to a specific standard, then this data would be much more easily found on a searchable repository environment. The folder and file names are also very weak in their descriptions. For example, the folder is titled ‘Clevelandportraitofaman.zip’ when the Cleveland Museum of Art has severalpieces entitled *Portrait of a man*, thus potentially confusing this data with the data for those other pieces. The images all also were named via the generic ‘IMG\_23…’ file naming convention used by the camera that took the pictures. Also, if more information were included about how to stitch the images together to create the final model or about how the final model(s) were created, it may help a user unfamiliar with the process understand the purpose of every image clearer.

Although there is no evidence that the data lead to an official publication, the model itself is viewable as a fully rendered 3D model on sketchfab. The implication is that this model was available on the Cleveland Museum of Art’s website when the foundation housed the actual piece, however now that the piece is now on view at the MoMA, the page no longer exists. This theory is given more traction as the Cleveland Museum of Art website does include several 3D models of their current pieces, while the MoMA does not. The model itself can no longer be found online besides sketchfab, but its original intention was to be used to represent the actual piece for the Cleveland Museum of Art’s digital collection.

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