Plan Overview

A Data Management Plan created using DMPonline

Title: 3DWorkSpace - an open science/interactive tool for 3D datasets

Creator: Jill Hilditch

Principal Investigator: Jillian Hilditch, Jitte Waagen

Data Manager: Jitte Waagen

Project Administrator: Jillian Hilditch, Jitte Waagen

Affiliation: University of Amsterdam (Universiteit van Amsterdam)

Funder: Netherlands Organisation for Scientific Research (NWO)

Template: Data Management Plan NWO (September 2020)

ORCID iD: 0000-0002-8313-7402

ORCID iD: 0000-0001-8884-3704

Project abstract:

New tools are urgently needed for 3D datasets to improve accessibility, facilitate engagement/interaction with the datasets and promote two-directional knowledge transfer. 3DWorkSpace will adapt the open source Voyager 3D digital museum curation tool suite (Smithsonian Institute) to promote interactive engagement with traditionally complex digital datasets. Embedded structured guidance/training for gaining competence and skills for interpreting 3D datasets will allow broader narratives to be generated and open up new avenues for knowledge publication through the creation of annotated personal 3D collections that can be tailored to specific learning goals or interests.

ID: 95110

Start date: 01-03-2022

End date: 30-11-2022

Last modified: 08-03-2023

Grant number / URL: https://www.esciencecenter.nl/calls-for-proposals/open-escience-call-2023-oec-2023/

as they would like in their own plans, and customise it as necessary. You do not need to credit the creator(s) as the source of the language used, but using any of the plan's text does not imply that the creator(s) endorse, or have any relationship to, your project or proposal

3DWorkSpace - an open science/interactive tool for 3D datasets

General Information

Name applicant and project number

Jillian Hilditch
203.001.026

Name of data management support staff consulted during the preparation of this plan and date of consultation.

Hanna Fricke (Data Steward, Faculty of Humanities, UvA)

1. What data will be collected or produced, and what existing data will be re-used?

1.1 Will you re-use existing data for this research?

If yes: explain which existing data you will re-use and under which terms of use.

- Yes

The project will re-use existing datasets from the 4D Research Lab (Drone) and the NWO-VIDI Tracing the Potter's Wheel project (Hilditch-PI) experimental ceramic datasets. All of these datasets are open access and there are no constraints on their use/re-use.

1.2 If new data will be produced: describe the data you expect your research will generate and the format and volumes to be collected or produced.

The data this project is going to collect are 3D models and annotation sets. All information will be stored in a scene descriptor file (.svx, an open format created by the Smithsonian Voyager app), but the 3D models will be stored as .glb and .gltf files (open file formats). The file size for the 3D models is estimated at a maximum of 500MB for each scene.

1.3. How much data storage will your project require in total?

- 10 – 100 GB

We expect about 3 scenes for the 4DRL and about 40 for the TPW, which would arrive at 43 * 500MB, ca. 21.5GB.

2. What metadata and documentation will accompany the data?

2.1 Indicate what documentation will accompany the data.

The 4D Research Lab will produce a report on the production of the 3DWorkSpace app, which will be made available through the 4DRL Report Series (open access paper series in PDF format).

The Smithsonian Cook pre-processing app will be used to process the different file types into the Voyager app, which in turn will produce metadata and paradata.

The coding for the 3DWorkSpace app will be documented through in-line comments.

All this guarantees that the data, software and methods are published FAIR, stored long-term and are available for third-parties, without any restrictions.

2.2 Indicate which metadata will be provided to help others identify and discover the data.

The 3DWorkSpace metadata will be generated via the Smithsonian Cook pre-processing app, the 4D Research Lab series, in-line comments for the coding, and all made openly available via Figshare. We will also publish the description of the code, and how to implement it, within Github, thereby maintaining full open access to the metadata.

3. How will data and metadata be stored and backed up during the research?

3.1 Describe where the data and metadata will be stored and backed up during the project.

- Institution networked research storage

MS Teams/Sharepoint - General group storage

3.2 How will data security and protection of sensitive data be taken care of during the research?

- Not applicable (no sensitive data)

4. How will you handle issues regarding the processing of personal information and

intellectual property rights and ownership?

4.1 Will you process and/or store personal data during your project?

If yes, how will compliance with legislation and (institutional) regulation on personal data be ensured?

- Yes

We will gather and store names of individual authors via user names, i.e., roles where annotations or comments or media files are added to the 3D models. Consent will be asked during the registration process for storage of any personal data in relation to the user account, such as an email address for personalised notification settings (notification of a subsequent comment on a model in which the user has already added a comment, or comments on an annotated collection of models selected by the user).

4.2 How will ownership of the data and intellectual property rights to the data be managed?

5. How and when will data be shared and preserved for the long term?

5.1 How will data be selected for long-term preservation?

Question not answered.

5.2 Are there any (legal, IP, privacy related, security related) reasons to restrict access to the data once made publicly available, to limit which data will be made publicly available, or to not make part of the data publicly available?

If yes, please explain.

- No

5.3 What data will be made available for re-use?

Question not answered.

5.4 When will the data be available for re-use, and for how long will the data be available?

Question not answered.

5.5 In which repository will the data be archived and made available for re-use, and under which license?

Software:

The project will result in an adapted version of the Voyager app that will either be submitted to the original source code in GitHub, or as a separate forked version of the app in a GitHub repository of the 4DRL, provided with a tag/version number, and made available through Figshare.

The software will be released with the Apache 2.0 license, either contributed to the original Voyager project, or stored in a separate GitHub repository, provided with a tag/version number, and made available through the UvA instantiation of Figshare. This ensures that the software will be attributed a DOI as well as a license, and easily findable and available for further (re-)use.

Viewers:

The 3D pilot viewers will be kept available through the existing digital infrastructures of the 4DRL and TPW, both guaranteed by the Amsterdam Institute of Humanities Research, UvA.

Scenes:

The individual models and related annotation sets will also be persistently deposited individually as single files in Figshare, with a license and DOI.

The 4DRL and TPW scenes will be available under a CC-BY-NC-SA license.

5.6 Describe your strategy for publishing the analysis software that will be generated in this project.

We are not going to create any dedicated analysis software.

6. Data management costs

6.1 What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

This will fall under the scheduled phases of technical development, case-study preparation and standardisation, and Figshare and Github implementation, so a total of 80 hours across project personnel.