



Peer Community In Archaeology

A meticulous description of archiving research data from a long-running landscape research project

Isto Huvila based on peer reviews by [Dominik Hagmann](#)  and [Iwona Dudek](#)

Scott Madry, Gregory Jansen, Seth Murray, Elizabeth Jones, Lia Willcoxon, Ebtihal Alhashem (2023) A Focus on the Future of our Tiny Piece of the Past: Digital Archiving of a Long-term Multi-participant Regional Project. Zenodo, ver. 1, peer-reviewed and recommended by Peer Community in Archaeology. <https://doi.org/10.5281/zenodo.7967035>

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The paper “A Focus on the Future of our Tiny Piece of the Past: Digital Archiving of a Long-term Multi-participant Regional Project” (Madry et al., 2023) describes practices, challenges and opportunities encountered in digital archiving of a landscape research project running in Burgundy, France for more than 45 years. As an unusually long-running multi-disciplinary undertaking working with a large variety of multi-modal digital and non-digital data, the Burgundy project has lived through the development of documentation and archiving technologies from the 1970s until today and faced many of the challenges relating to data management, preservation and migration.

The major strength of the paper is that it provides a detailed description of the evolution of digital data archiving practices in the project including considerations about why some approaches were tested and abandoned. This differs from much of the earlier literature where it has been more common to describe individual solutions how digital archiving was either planned or was performed at one point of time. A longitudinal description of what was planned, how and why it has worked or failed so far, as described in the paper, provides important insights in the everyday hurdles and ways forward in digital archiving. As a description of a digital archiving initiative, the paper makes a valuable contribution for the data archiving scholarship as a case description of practices and considerations in one research project. For anyone working with data management in a research project either as a researcher or data manager, the text provides useful advice on important practical matters to consider ahead, during and after the project. The main advice the authors are giving, is to plan and act for data preservation from the beginning of the project rather than doing it afterwards. To succeed in this, it is crucial to be knowledgeable of the key concepts of data

management—such as “digital data fixity, redundant backups, paradata, metadata, and appropriate keywords” as the authors underline—including their rationale and practical implications. The paper shows also that when and if unexpected issues arise, it is important to be open for different alternatives, explore ways forward, and in general be flexible.

The paper makes also a timely contribution to the discussion started at the session “Archiving information on archaeological practices and work in the digital environment: workflows, paradata and beyond” at the Computer Applications and Quantitative 2023 conference in Amsterdam where it was first presented. It underlines the importance of understanding and communicating the premises and practices of how data was collected (and made) and used in research for successful digital archiving, and the similar pertinence of documenting digital archiving processes to secure the keeping, preservation and effective reuse of digital archives possible.

References:

Madry, S., Jansen, G., Murray, S., Jones, E., Willcoxon, L. and Alhashem, E. (2023) A Focus on the Future of our Tiny Piece of the Past: Digital Archiving of a Long-term Multi-participant Regional Project, Zenodo, 7967035, ver. 3 peer-reviewed and recommended by Peer Community in Archaeology.
<https://doi.org/10.5281/zenodo.7967035>

Reviews

Evaluation round #1

DOI or URL of the preprint: <https://doi.org/10.5281/zenodo.7967036>

Version of the preprint: 1

Authors' reply, 29 June 2023

Thanks to our two peer reviewers for your constructive comments. We have addressed, we hope successfully, each comment and have followed your directions in making these revisions. We have removed the first graphic, as it was not readable and we feel that it was not vital. We hope that we have succeeded in addressing your comments, and look forward to the next step in this process. Thank you for your time and effort to improve our paper. -Scott Madry

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Decision by Isto Huvila, posted 27 June 2023, validated 27 June 2023

Revision

Dear authors,

Thank you for your submission.

The reviewers find the paper interesting but recommend several revisions to improve it.

Please upload a modified version of the manuscript on the preprint server, and ok this website a document with your answers to the reviewer's comments and a document with track changes.

All the best

Reviewed by **Dominik Hagmann** , 11 June 2023

Review: "A Focus on the Future of our Tiny Piece of the Past: Digital Archiving of a Long-term Multi-participant Regional Project"

This highly interesting paper presents a comprehensive and insightful exploration of the challenges and solutions associated with digital archiving in the context of a long-term, multi-participant research project.

The paper's strength lies in its practical approach to the subject matter. The authors candidly share their initial struggles with digital archiving, including a failed attempt to use the DSpace system. This honesty about the difficulties encountered in the early stages of their digital archiving journey adds a layer of authenticity to the narrative. It provides valuable lessons for other researchers embarking on similar projects.

The authors' exploration of different digital archiving environments, specifically Dataverse and Dryad, is thorough and informative. Nevertheless, the evaluation of these platforms' technical features, such as metadata standards, file formats, storage capacity, interoperability, and access control are somewhat missing. Elaborating on these points would provide valuable guidance for researchers seeking to preserve and disseminate their own data.

The paper's emphasis on the importance of digital archiving from the outset of a project is particularly noteworthy. The authors stress the need for long-term data management strategies and the integration of digital archiving technologies and specialists into research projects. This is a crucial message for the research community, particularly in an era where data is increasingly digital, and the reproducibility of research is paramount.

The authors' commitment to transparency, reproducibility, and collaboration in their research practices is commendable. Their hope that their data will prove helpful to future researchers reflects a forward-thinking approach that is likely to contribute significantly to the advancement of their field.

While the paper is commendable in many aspects, a few areas could be improved, such as more elaborated comments on technical details about the digital archiving environments used (*supra*), specifically Dataverse and Dryad. For instance, the authors could have elaborated on the metadata standards used, which would have benefited readers interested in the technical aspects of digital archiving.

Regarding this and other points, a few comments in the paper are strongly recommended to be considered.

Despite such minor issues, the paper remains a valuable resource for researchers interested in digital archiving, particularly in long-term, multi-participant projects. Overall, this paper is a valuable contribution to the literature on digital archiving in research. It offers practical insights, lessons learned, and actionable advice to benefit researchers in various disciplines.

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Reviewed by **Iwona Dudek**, 13 June 2023

The paper presents an ongoing project - an initiative for long-term digital storage of the results of forty-five years of interdisciplinary research. This effort has not yet been brought to a conclusion. However, the description of this valuable initiative seems to me a precious testimony and a warning to all those involved in science.

The manuscript is well written. At this stage of the project's development, no shortcomings in the research design, analysis or interpretation of the results are discernible.

Title

The title clearly reflects the content of the article.

Abstract

The abstract is concise and presents the main findings of the study.

Introduction

The introduction clearly explains the motivation for the study.

The research question and objectives are clearly presented.

The introduction builds on relevant research performed in the field (discussion within the archaeology community and the Computer Applications in Archaeology community).

Materials and methods

Details for the methods and analysis are provided.

More detailed information on the problems encountered and the resulting decisions on the methods planned to complete the metadata, provenance or missing keywords (if the project has reached this stage) would be welcome. These methods/procedures could then be reproduced by other researchers.

For example:

- Were certain data deliberately and consciously eliminated from the group of archived documents? If so, what were the principles and reasons for this selection?
- Is it planned to distinguish between metadata, paradata and ... currently existing in the documents in question from those that are reconstructed or deduced?
- Will the information about who is completing the data be retained?
- Is the documentation that has been destroyed or not made available in any way qualifiable - quantitatively or qualitatively? (quantity, type of data, their subject, ...) ? An estimation of the 'percentage' of lost data in relation to that which could be saved could be extremely informative.

Results

It is too early to evaluate the final results.

Tables and figures

All Figures are understandable without reference to the main body of the article.

Figures 1, 2 and 3 contain text which, in its current form, is not legible at 1:1 scale and needs to be enlarged (making it illegible in print). It would be very useful to be able to partially improve their legibility.

Discussion

The conclusions and cautionary statements made are adequately and clearly supported by the facts.

References

All references cited in the text appear in the list of references. The reverse is not true.

- a) Aczel B, Szaszi B, Holcombe AO (2021)
- b) Copiello S (2020)
- c) Doyle H, Gass A, Kennison R (2004)

The reference a) concerns peer reviewing, b) focuses on issues of the transition to a open access publishing landscape and analyses them from the perspective of Elsevier - a major commercial publisher, and reference c) is about the costs of open access publishing.

If the authors intend to cite them in the context of this article, the thematic link should be clearly indicated.

[Download the review](#)