Introducing SEADDA

Saving European Archaeology from a Digital Dark Age

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Introduction

Making archaeological data open and freely accessible must be a priority across Europe, but this cannot be achieved unless that data can be archived, migrated and disseminated within a persistent repository, in accordance with the FAIR (Findable, Accessible, Interoperable, Reusable) principles. The depth of the problem for archaeology has become starkly apparent through the work of EU projects such as ARIADNE² (Advanced Research Infrastructure for Archaeological Dataset Networking in Europe) (Aloia et al., 2017). Data often languishes in unreadable formats with inadequate metadata, and it is no exaggeration that Archaeology is facing a Digital Dark Age unless urgent action is taken. However, projects such as ARIADNE have also revealed the key to mitigating the crisis is to bring archaeologists together to share expertise and create resources that allow them to address the problem in the most appropriate way within their own countries (Wright and Richards, 2018). Important international standards exist, such as the OAIS (Open Archival Information System) standard for digital preservation, the Core Trust Seal for repository accreditation, discipline-based standards for file formats and metadata, such as those proposed in the Archaeology Data Service (ADS)/ Digital Antiquity Guides to Good Practice (Fig. 1). However, there is no single way to build a repository, although to be successful, archaeologists must be at the decision-making heart of how their data is archived, to ensure re-use is possible. It is also clear that there is an appetite for data re-use (e.g. Fig. 2) and that we can build on the experience gained by organisations such as the ADS, DANS, SNDS and the DAI (e.g. Richards et al., 2013; Richards, 2017).

This paper will introduce a new COST (European Cooperation in Science and Technology) Action: SEADDA (Saving European Archaeology from a Digital Dark Age), which started operation on 1 May 2019 and will run for four years.³ SEADDA will play a vital role in establishing an international network of expertise in archiving and disseminating archaeological data. It includes archaeologists from

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² http://ariadne-infrastructure.eu/

³ https://www.seadda.eu



nearly every European country, as well as four international partners (Argentina, Canada, Japan, and the United States). It brings together archaeologists, experts in archaeological data management, and experts in open data dissemination and re-use. SEADDA will create publications and materials that will set out the state of the art for archaeological archiving across Europe, and recommendations to mitigate the crisis. It will organize meetings and training that will allow archaeologists from countries with archiving expertise to work with archaeologists with no available archiving options, so they may share knowledge and create dialogue within their countries to move forward. It will allow countries to see where gaps exist and how they might collaborate to address issues together. Participants in this CHNT Round Table session will also be invited to contribute their own experiences to the discussion.

SEADDA comprises four working groups, reflecting different levels of experience of the partners, and their specific interests:

Stewardship of archaeological data

WG1 brings together those with varying levels of experience to share their successes and challenges in this area, not only for knowledge transfer, but to understand where opportunities may lie for members to support each other in their efforts to move forward. It aims to explore ethical considerations regarding the extension of stewardship of the archaeological record to include preserving digital data, and whether professional guidance exists on a regional or national level. It also considers issues of responsibility as to where and how data should be preserved, and who is legally required to fund the short and long-term costs of preservation.

Planning for archiving

WG2 explores the practical issues surrounding the creation of an appropriate repository for archaeological data. This will range from understanding hardware and software options for those needing to set up an archive in their country, management structures, and the training of archivists. It considers existing best practice, changing future needs, and pragmatic technical and structural solutions.

Preservation and Dissemination Best Practice

WG3 seeks to understand international best practice regarding archiving and preservation. It is exploring current practice in digital archiving and preservation generally, including repository accreditation, and the implications surrounding working with the myriad forms of archaeological data. It is also surveying future trends to understand the changing digital landscape and how digital archaeological practice may change.

Use and Re-Use

WG4 is seeking to understand how to optimise archives and interfaces to maximise the use and reuse of archaeological data. It will explore how archaeological archives can better respond to user needs, and ways to document and understand both quantitative and qualitative re-use. This will include understanding barriers to re-use, such as IPR and licensing, but also issues around the design of underlying data structures and their interfaces.



Together, our Working Groups aim to address each of the FAIR principles from an archaeological perspective.



Fig. 1. Archaeology Data Service / Digital Antiquity Guides to Good Practice



Fig. 2. Re-use figures for an example digital archive

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