Open Science approaches to archaeological digital production

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Abstract

Despite the increasing use of digital technology in archaeological research, provisions for the preservation of archaeological datasets are seldom sufficient. This is especially true for Greece, where the entire discussion is relatively underdeveloped and few repository facilities or guides for organising and preserving archaeological data collections exist to make researchers and professionals plan ahead of the "afterlife" of the datasets they create.

Recent calls encourage for an Open Science approach adding the need for data transparency and computational reproducibility in the production process of archaeological datasets. In this respect, SEADDA (*Saving European Archaeology from a Digital Dark Age*), tries to create a network of professionals to understand the current state-of-the-art across Europe in approaches regarding the stewardship of archaeological data and advance suggestions to mitigate the problems arising from poor digital data documentation and preservation strategies. In a similar fashion ARIADNEplus (*Advanced Research Infrastructure for Archaeological Data Networking in Europe*), tries to bring together the experience from a number of archaeological repository institutions as well as practitioners in order to align institutional and state level policies to data preservation with appropriate standards and EU requirements. The approach is linked to the gradual development of a meta-search facility (the equivalent of Europeana for archaeological data?) for datasets that have been produced across Europe with a varying level of resolution, documentation, scope and semantic interoperability.

As part of a global trend towards Open Science and Big Data applications, the scope of both projects appears very relevant with respect to the Greek context and our personal experience where data silos are the norm. The presentation will try to outline some of the prevailing problems in archaeological research in Greece with respect to data curation and dissemination in the past 30 years and describe the potential gains in terms of saving and re-using a generation's worth of archaeological research that already exists in digital form.

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