



God or the Devil Are in the Details Too

Reusing 3D Digital Resources for Cultural Heritage Research

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Abstract

In material cultural heritage research practice, little attention seems to have been given to the digital data lifecycle. And, although often mentioned, to making research data actually FAIR (Findable, Accessible, Interoperable, Reusable) [1]. In this talk, I will showcase an investigation on archaeological Greek and Cypriot pottery (c. 10th-4th BCE), with a strong emphasis on 3D digital resources. The objectives are manifold, namely: to understand the chronological and geographical variability of their production, use, and shape; as well as to enable conservation studies and monitoring. However, despite the considerable amount of 3D models of archaeological objects available online and elsewhere, I will demonstrate some of the barriers encountered to reusing them and proceeding with this investigation. This presentation tackles issues related to digital repositories and archives, quality and trust of 3D digital resources, contextual and useful metadata for research (including paradata), and data incompleteness. Knowing that although a resource cannot and need not be fully described, it can be better described.

CCS Concepts

• 3D Imaging • Archaeology • Digital libraries and archives • Document management and text processing • Documentation • Database theory

Keywords: 3D Resources, Archaeology, Digital Data Lifecycle, Conservation, Cultural Heritage, FAIR Principles, Pottery

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Short Bio

Vera Moitinho de Almeida is a senior researcher and coordinator of the Centre of Digital Culture and Innovation (CODA) at the Faculty of Arts & Humanities of the University of Porto, a member of CITCEM-UP and INESCC-UC, and an honorary senior research collaborator at LAQU-UAB. She has an unusual interdisciplinary academic background: a PhD (*cum laude*) from UAB, focusing on technological and functional analysis of archaeological objects using 3D digital models and reverse engineering processes; an MSc in Prehistoric Archaeology (UAB); an interdisciplinary MSc (*cum laude*) in Multimedia Technologies (FEUP); and a BA in Fine Arts (IPC), with a major in pedagogy, while having attended several courses in distinct fields. Her research expertise consists of three intertwined subjects: 1) 2D/3D digital imaging and visualizations for research and conservation of cultural heritage materials; 2) Computational archaeology; 3) Digital data lifecycle and FAIR principles. She has been actively involved in several international transdisciplinary scientific projects and has published extensively in the field of digital applications to research in archaeology, cultural heritage, and the digital humanities. <https://orcid.org/0000-0003-4979-8247>

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