Using Photogrammetry to Survey the Côa Valley Iron Age Rock Art Motifs: Vermelhosa Panel 3 Case Study

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Abstract : The Côa Valley, listed World Heritage since 1998, presents more than 1300 open-air engraved rock panels. The Archaeological Park of the Côa Valley recorded the rock art motifs, testing various techniques based on direct tracing processes on the rock, using natural and artificial lighting. In this work, integrated in the "Open Access Rock Art Repository" (RARAA) project, we present the methodology adopted for the vectorial drawing of the rock art motifs based on orthophotos taken from the photogrammetric survey and 3D models of the rocks. We also present the information system designed to integrate the vector drawing and the characterization data of the motifs, as well as the open access sharing, in order to promote their reuse in multiple areas. The 3D models themselves constitute a very detailed record, ensuring the digital preservation of the rock and iconography. Thus, even if a rock or motif disappears, it can continue to be studied and even recreated.

Keywords: rock art, archaeology, iron age, 3D models

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