

# Epigraphy in the Digital Age

Opportunities and Challenges in the Recording,  
Analysis and Dissemination of Inscriptions

edited by

Isabel Velázquez Soriano  
and  
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*In Memoriam* Prof. Joaquín L. Gómez-Pantoja Fernández-Salguero  
(1953–2020)



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## Foreword

Isabel Velázquez Soriano and David Espinosa Espinosa

*Epigraphy in the Digital Age. Opportunities and Challenges in the Recording, Analysis and Dissemination of Inscriptions* originates from the International Conference ‘El patrimonio epigráfico en la era digital: Documentación, análisis y socialización’ (Madrid, 20–21 June 2019), organized by the Complutense University of Madrid and the University of Santiago de Compostela. Its goal was to join, share and discuss the experiences gained in recent times concerning the application of digital technologies in the recording, analysis and dissemination of inscriptions. To that end, thanks to the funds provided by the research projects ‘Red digital para un milenio de documentación epigráfica en Museos y Archivos de la Comunidad de Madrid’ (DOCEMUS-CM, S2015/HUM-3377) and ‘*Epigraphica 3.0: Hacia la creación y diseño de un corpus digital de inscripciones latinas de la provincia de Ourense*’ (ED481D2017/013), as well as the research groups ‘Ciudades Romanas’ (UCM/930692) and ‘Síncrisis. Investigación en formas culturales’ (GI-1919), Isabel Velázquez Soriano, David Espinosa Espinosa, María Rosario Hernando Sobrino and Estela García Fernández invited around 50 scholars (epigraphists, philologists, historians, archaeologists, and engineers) to deal with the most recent digital practices in Epigraphy from an interdisciplinary approach.

Taking the meaningful results of such international conference as a starting point, a book about epigraphic research based on digital and computational tools was planned in order to bring together and compare the outcomes of both well-established projects and newer ones, so as to establish a comprehensive view according to the most innovative trends in investigation. To do this, without losing sight of an interdisciplinary approach, 21 contributions have been gathered together, involving 38 scholars. In this manner, the book offers a breeding ground based on very different previous experiences and providing common research questions, methodologies, practical solutions, and significant results. To make referencing easier, the contents are divided into three thematic sections: 1) Preliminary issues, 2) Digital Recording and Analysis Techniques in Epigraphy, and 3) Computational Epigraphy and Digital Dissemination. Therefore, *Epigraphy in the Digital Age. Opportunities and Challenges in the Recording, Analysis and Dissemination of Inscriptions* is intended more as a starting point than as a definitive point of arrival in terms of so-called ‘digital epigraphy’.

As the reader will observe within this book, digital epigraphy over the last decade is characterized by a wide range of digital methods and computer developments which have opened a huge field of possibilities for the recording, analysis, and sharing of epigraphic information. SfM Photogrammetry, Reflectance Transformation Imaging (RTI), Digital Image Modelling, and, more recently, Machine Learning applied to the automated restoration of epigraphic texts, offer a considerable number of opportunities in the recording and analysis of inscriptions, making the reading of many ‘illegible’ texts easier and more precise. On the other hand, open-access databases and EpiDoc TEI-XML have opened up new and efficient ways in the storage, dissemination, and reuse of epigraphic information, especially indicated in cases of an enormous quantity of data. However, digital epigraphy faces from the beginning some important challenges, such as the harmonisation, integration, and interoperability among databases, and, in more recent times, the adoption of Linked Open Data (LOD), both related to specific machine-readable language. In order to overcome these and other problems, several collaborative communities have emerged to provide helpful answers to the needs of epigraphists and general users, leading also to joint research projects in this field, i.e. the well-known EAGLE project – *Europeana Network of Ancient Greek and Latin Epigraphy*, *The Digital Classicist*, and, more recently, *Epigraphy.info. A Collaborative Environment for Digital Epigraphy*.

Despite advances in the digitisation of the epigraphic praxis in recent years, particularly with regard to the processing of digital images, the ‘digital revolution’ came to epigraphy at the end of the 1960s, specifically at the University of Western Australia, where Prof. John Jory and Prof. Dennis Moore supervised the recording of the approximately 40,000 texts included in the 6th volume of the *CIL* to create a Keyword-In-Context Index. As a result of the many digital epigraphic projects (with different approaches and methodologies) emerging since then, it quickly became clear that a coordination of effort was necessary for the sake of harmonization and interoperability of the epigraphic information. This awareness materialised in 2003, when an international federation of digital epigraphic databases was promoted by Prof. Silvio Panciera within the framework of *Association Internationale d’Epigraphie Grecque et Latine* (AIEGL) / *Electronic Archive of Greek and Latin Epigraphy* (EAGLE). Thus, for the first

time, epigraphic information coming from different databases (*Epigraphische Datenbank Heidelberg*, *Epigraphic Database Roma*, *Epigraphic Database Bari*, and later *Hispania Epigraphica Online*) was openly accessed through a single website, according to standards of harmonisation and interoperability.

Indeed, the application of digital technologies in epigraphy has pushed the boundaries of epigraphic knowledge both in qualitative and quantitative terms, especially regarding accessibility and ‘knowability’ of inscriptions. However, beyond their ‘revolutionary’ possibilities and impact, it is important not to make such digital means and practices an end in itself, avoiding missing the epigraphists’ comprehensive training and undermining the thoroughness and reliability of interdisciplinary epigraphic methodology. In this respect, digital and computational tools should not be allowed to replace the traditional skills and techniques of epigraphists, much less to undermine the focus of epigraphy, i.e. the understanding of epigraphic texts, the interpretation of the inscribed objects on which such texts were written, and their historical contextualisation. There is little point in having experience working on computer programming and digital image modelling if the necessary training in philology and history is lacking. Therefore, the application of digital and computational technologies in

epigraphy, which has to be always based on a clear and reasoned research plan from particular problems and final goals, is a remarkable achievement to help make the work of epigraphists, philologists and historians quicker and easier. But such applications must be critically undertaken, in terms of valuable assistance, in order to obtain exhaustive autopsies of inscriptions, an enriched and reusable edition of the epigraphic texts, and a complete historical and philological study.

Finally, the editors and contributors to *Epigraphy in the Digital Age. Opportunities and Challenges in the Recording, Analysis and Dissemination of Inscriptions* wish to dedicate this book *in memoriam* Prof. Joaquín L. Gómez-Pantoja Fernández-Salguero (1953–2020), who attended the international conference in Madrid in 2019, and contributed a chapter here – “‘Rough-and-Ready’: 3D Models Rescuing some Roman Inscriptions from *Lusitania*’ (along with Ignacio Triguero). As a true pioneer of digital epigraphy in Spain, it is well known that he devoted a significant part of his life to the running of the epigraphic database *Hispania Epigraphica Online* (HEpOL) (which joined the EAGLE consortium in 2009), as well as to the study of the Roman inscriptions from the *conventus Cluniensis*, *conventus Emeritensis* and *Complutum* (Alcalá de Henares). All of us hope that the contents of this book pay a deserved tribute to his genius and work.