

Dr. Gareth Beale
Research Fellow
Centre for Digital Heritage
E-mail: gareth.beale@york.ac.uk



Research Summary

Dr Gareth Beale is a Research Fellow at the Centre for Digital Heritage at the University of York. His role is divided between the development of his own research projects and the development of collaborative research across the institutions and departments which comprise the Centre for Digital Heritage.

Gareth's PhD research (completed in late 2013) was co-supervised by Dr Graeme Earl at the University of Southampton and Prof. Andrew Wallace-Hadrill at the University of Cambridge/ The Herculaneum Conservation Project. The research focused on the use of 3D light simulation as a method for interpreting and visualising Roman painted statuary.

Research interests predominantly relate to the use of digital technologies (particularly imaging) in heritage research. He is particularly interested in the role which digital technologies play in the development of new forms of disciplinary practice within archaeology, history and heritage. Dr Beale has significant experience and expertise in the field of digital imaging having worked for several years as a practitioner and researcher in this area.

In addition to his interest in the technical and scientific elements of archaeological imaging Dr Beale is also actively engaged in research which explores the methodological impact of innovative forms of imaging practice upon archaeological and heritage fieldwork practice. As co-director of the Basing House Project, The Re-Reading the British Memorial Project and the European Rock Art project he is dedicated to furthering the role of imaging and image analysis as key tools for knowledge creation.

Dr Beale is currently involved in the development of several Horizon 2020 funding bids in collaboration with a range of international research partners.

Current Research Projects

Co-Director

Basing House Project

April 2013 – On-going

- I co-direct fieldwork project at Basing House in Hampshire. The project is run in collaboration with the University of Southampton, Hampshire County Council and Basingstoke Archaeology and History Society.
- The project trained 21 students and 20 volunteers in excavation and in the use of digital technology for archaeological documentation including laser scanning, photogrammetry, computational photography and geophysics.
- The excavation is run as a research project with a strong emphasis on education and community outreach. All participants were involved in exhibition design and public engagement activities.
- Participants were encouraged to contribute to a blog which can be found here: <http://basinghousecat.wordpress.com/>

Co-Director

Re-Reading The British Memorial Project

January 2012 – On-going

- The Re-Reading the British Memorial project is a community archaeology project working at a national level which aims to train local history groups in the use of cutting edge but low cost digital documentation techniques for the recording of memorials.
- The project has been developed in collaboration with and benefitted from the financial support of national heritage organisations including Wessex Archaeology and the Churches Conservation trust.
- The project has been awarded University of Southampton funding for equipment and fieldwork.
- The scope of the work has expanded rapidly and now incorporates a network of community groups across England.

Co-Director

European Rock Art Project

April 2014- On-going

- The European Rock Art Project is a British Academy funded project which seeks to assess the methodological potential of computational photography techniques for the study of European Paleolithic rock art.
- The project is a collaboration between the Centre for Digital Heritage at the University of York and researchers at the University of Southampton (Alistair Pike, David Wheatley, Marta Diaz-Guardamino and Nicole Beale)

Recent Publications

Earl, G., V. Porcelli, C. Papadopoulos, G. Beale, M. Harrison, H. Pagi, & S. Keay (in press), "Formal and Informal Analysis of Rendered Space: The Basilica Portuense" In A. Bevan & M. Lake (eds), *Computational Approaches to Archaeological Spaces*

Beale, G. N. Beale, L. Minkin & I. Dawson (2013), *Making Digital: Visual Approaches to the Digital Humanities*. K. Ng, J. Bowen, & S. McDaid (eds) *Electronic Visualisation and the Arts 2013* British Computer Society, London (240-255)

Beale, G., S. Hitchcock, H. Pagi, R. Boardman, G. Earl (2013), *Supporting Data Management for 3D and Raster Data: Lessons Learned from the Datapool Project*. P. Burns (ed) *Archiving 2013; Proceedings of the Society for Imaging Science and Technology Archiving Conference 2013*. IS&T, Springfield (255-258)

Beale, G. (2012), *Visualising Discourse: An Approach to Archaeological Uncertainty. Interpretation and Reconstruction of the Grandi Magazzini di Settimio Severo at Portus, Italy*. J. Erzsébet, F. Redő & V. Szeverényi (eds) 2012. *On the Road to Reconstructing the Past. Computer Applications and Quantitative Methods in Archaeology. Proceedings of the 36th International Conference*. Budapest 2008. *Archaeolingua*, Budapest (46-52)

Beale, G. & N. Beale (2012), *Re-Reading the British Memorial: A Collaborative Documentation Project*. Presented at the *Computer Applications and Quantitative Methods in Archaeology Conference*, Southampton UK, 2012

Earl, G., V. Porcelli, C. Papadopoulos, G. Beale, M. Harrison, H. Pagi & S. Keay (2012), *Formal and informal analysis of rendered space: the basilica Portuense*. In A. Bevan & M. Lake (eds.) *Computational Approaches to Archaeology*. London, GB, UCL Press