Mould Store: Exploring the Preservation of the former Spode Factory's Post-Industrial Heritage through Digital Technologies

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World renowned for its perfection of Bone China and underglaze blue printing techniques, the historic Spode Works in Stoke-on-Trent was one of the few ceramic manufactories in Britain to have operated continuously on its original site until the company ceased trading in 2008 [1]. In 1987 the legacy of this factory was assigned to the Spode Museum Trust, which currently houses many artefacts associated with the reproduction of the company's vast design archive spanning over two centuries. Yet, prior to the factory's closure there was an oversight not to accession the majority of factory's historic moulds due to their perceived value and the sheer space required to house such material. As 'by-products' of ceramic manufacture, moulds are rarely valued or preserved for prosperity; the 'finished' ceramic artefact has always taken priority over those objects associated with labour of mass-production. Yet as tools that revolutionised the mechanical reproduction of decorative and functional artefacts, they can illuminate the evolution of important technological and stylistic changes in design and industry that remain relatively under-researched. As the former Spode site is currently in the process of regeneration and its buildings repurposed, only a small percentage of this material has been recommended for retention, with the remainder at risk of disposal.

Apart from the time pressures from agencies wishing to regenerate the site, the challenges that exist for the potential documentation of such a sheer volume of material, led to a feasibility study being conducted by a team of interdisciplinary academics in July 2018. The aim of this study was to determine the most appropriate tools for the scanning process and devise an effective workflow system to minimise cost and time. A core sample of mould typologies, materials and technologies from c1850 onwards, were 3D scanned based upon moulds selected for retention by Stoke-on-Trent City Councils Archaeology Service. In the event of pending disposal, digitisation can preserve the shape of an artefact for prosperity, and if needs be, facilitate the physical reproduction of both negative and 'positive' ceramic shapes.

This session will present work-in-progress, detailing the digital documentation of the ceramic moulds using 3D technologies. The final aim of the project is to archive a large selection of moulds typologies based upon factors such as '*age, uniqueness, and value in terms of technological developments and the production process'*. To further understanding into the complexities of industrial craft practices, the resultant dataset also aims to elucidate material and craft knowledge embodied within such objects. The re-imagining of this data through a contemporary artistic response, that integrates the use of digital technology and traditional know-how will also be discussed.

This collaborative project is in conjunction with Bucks New University, University of Brighton, University College London and Spode Museum Trust.

Biographies

Prof. Neil Brownsword, Professor of Ceramics, Staffordshire University

Neil Brownsword is an artist, researcher and educator who holds Professorial positions in ceramics at Staffordshire University and University of Bergen. Brownsword's practice examines the legacy of globalisation in relation to Stoke-on-Trent's ceramic manufacturing sector, and the impact this has had upon people, place and traditional skills. His work is represented in public/private collections internationally, including the Victoria and Albert Museum, Korea Ceramic Foundation and the Yingee Ceramic Museum, Taiwan. In 2009 he was awarded the 'One Off Award' at the inaugural British

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[1] Spode branded wares continue to be made at the Portmeirion factory.

Ceramic Biennial, and the Grand Prize at the Gyeonggi International Ceramic Biennale, South Korea in 2015.

Prof. Tim Weyrich, Professor of Visual Computing, University College London

Tim Weyrich is Professor of Visual Computing at the Department of Computer Science, University College London, Deputy Director of the UCL Centre for Digital Humanities and member of the Steering Board of the Eurographics Workshop on Graphics and Cultural Heritage amongst others. While a computer graphics and computer vision researcher by trade, Tim has a long-standing track record in putting his background in appearance modelling, 3D reconstruction and multi-modal imaging into the service of computational reconstruction and analysis of heritage objects, working with memory institutions and excavations around the world.

Dr. Karina Rodriguez Echavarria, Principal Lecturer, University of Brighton

Karina Rodriguez Echavarria is a Principal Lecturer at the School of Computing, Engineering and Mathematics at the University of Brighton and member of the Centre for Secure, Intelligent and Usable Systems. She has an interdisciplinary background in computer science and cultural heritage and leads various projects and initiatives in this interdisciplinary area. Her research interests include the development and application of computational technologies for the digitisation of objects and environments; as well as their physical reproduction using digital fabrication.