Institution: University of Lincoln

Unit of Assessment: 34 Art & Design

Title of case study: Informing the Decoration, Renovation and Understanding of Historic Buildings through Architectural Paint Research

1. Summary of the impact

Crick Smith Conservation conducts architectural paint research for external clients: internationally renowned historic properties, museums and commercial enterprises. The application of knowledge gained from this research sustains and enriches our cultural heritage and in turn improves the economic prosperity of the sector through improved cultural tourism, access to investment and increased visitor numbers. Direct beneficiaries include conservators, institutions that manage heritage properties and visitors that benefit from good research and well-presented sites. In supporting heritage organisations to reinstate authentic interior schemes, our high quality research has also improved their visibility and success in gaining grant applications.

2. Underpinning research

Establishing the appearance of a historic interior decorative scheme is often very complex due to the layers of subsequent redecoration, and other alterations made by the owners of a property over time. Crick Smith's central methodology is the removal of paint samples, which are then mounted in cross section in a clear casting resin and the surfaces polished back to reveal the stratigraphy in a cross section of the accumulated paint layers. Samples are viewed under a high-powered binocular microscope under various light sources, which provides data about the physical make-up of the paint. When this data is then cross-referenced with documented historic samples in the National Archive for Historic Decoration, and underpinning textual data from available literature, Crick Smith are able to arrive at an accurate assessment of the nature of the original decorative surface and the context in which the site was originally utilized and characterised.

The following gives an overview of four research sites in which the methodology for mapping and cross-referencing the science, historic data and application was utilized:

1. Since 1995 Ian Crick Smith and Michael Crick Smith have acted as consultants to English Heritage in relation to Kenwood House. The extent of the survival of Robert Adam’s original schemes, and how they compared to the surviving original plans and proposals, was unknown. Paint stratigraphy uncovered a far more elaborate interior decorative history throughout the period of the house and deliberately contrasting treatments on the exterior of the north and south facades. Research on The Great Stair provided evidence of the extent of the survival of Robert Adam’s original scheme of 1770, the additions to this scheme in the 1790s, and the impact of seven subsequent schemes. Research on the Service Wing Colonnade showed that an early nineteenth-century scheme had extensively repaired and replaced much of the original fabric, but that upper areas of the column shafts retained areas of the original paint schemes.

2. Between 2009 and 2011 Ian Crick Smith, Michael Crick Smith and Paul Croft carried out interior and exterior architectural paint research on Elizabeth Gaskell's House, 18 Plymouth Grove, Manchester. This research established the exterior and interior schemes during the occupancy of the author, and provided detailed advice on the nature of the proposed reinstatement of the scheme.

3. During 2011, Paul Croft, Ian Crick Smith and Michael Crick Smith used paint stratigraphy to uncover physical evidence of the original decorative scheme of a series of structures in a historically significant leisure park: King's Gardens Southport. The research allowed Sefton Council to construct a credible funding bid to restore and repair the Gardens in a sensitive manner that respected the historic design while providing facilities for today’s users. The bid resulted in an award of over £4 million from Heritage Lottery Fund.
4. In 2011 Paul Croft conducted architectural paint research on the extant decorative scheme at the Church of St. James the Less, New Mills, Derbyshire. Paint stratigraphy showed that a decorative scheme of c. 1880 lay under layers of modern decoration. Sections of the earlier scheme were then revealed and subsequently the original scheme was completely reinstated on one wall.

3. References to the research

3. Crick Smith Conservation, 'Research and Investigation and Reinstatement of the early decorative scheme at the Church of St. James the Less, New Mills, Derbyshire'

4. Details of the impact

The understanding and reinstatement of historic interiors
Reports written by Crick Smith establish a unique type of material evidence that can be used to establish the nature of historic decorative schemes. Without this evidence, most properties seeking to reinstate historic interior schemes would be acting on a highly speculative basis - too conjectural to be credible for historians or funding bodies. In essence the material analysis allows a level of certainty about the original scheme impossible without this analysis. Ian Crick Smith, Michael Crick Smith and Paul Croft advise clients during the progress of a project, often submitting interim reports and preliminary research findings, through this process they influence the direction of the projects as well as providing a summary of the research in a final report. Below are some examples of how their research is undertaken and used across the sector.

The research carried out by Ian and Michael Crick Smith at Kenwood House was an integral part of English Heritage's decision making process, suggested new ways of establishing reversible reinstated decorative schemes and allowed historians to understand the external finishes that Robert Adam applied to his buildings. They developed a methodology for recreating the sanded exterior finish and then advised contractors on reinstating the scheme and advised as to the success of trial finishes. Ian and Michael Crick Smith advised English Heritage on how to make new decorative schemes reversible. As well as producing documentation, Ian and Michael Crick Smith were invited to attend Project Team meetings that influenced the way that English Heritage carried out the project. As a direct result of this research the 'Deal Staircase' and the South Front Rooms were redecorated according to a scheme of 1815-17 by William Atkinson, as the research demonstrated that the Robert Adam's interiors could not be recovered due to extensive subsequent alteration. This restoration will be the subject of a series of articles published in the English Heritage Member's Magazine, one specifically describing Crick Smith's contribution. The results of the research were described by Jeremy Ashbee as 'radical and unexpected' and as such likely to influence English Heritage's approach to future projects this is unconfirmed as yet due to the recent completion of this project.

Research carried out by Ian and Michael Crick Smith on Elizabeth Gaskell's House has formed the basis of a major project that aims to recreate the appearance of the building during the author's occupancy. The authenticity of the interior is crucial to the credibility of the scheme, as Gaskell is celebrated for the way that she uses interiors to characterise her fictional creations. A report in early 2009 established the exterior colour, since reinstated. A series of reports established the decorative finishes of the windows and joinery, interior decorative finishes and wallpapers and the
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In June 2012 the Heritage Lottery Fund awarded the Manchester Buildings Trust a grant of £1.85 million to reinstate the interiors, an application based on this research. In 2013 Crick Smith were further engaged as consultants to advise on the quality of the reinstated decorative finishes and Jim Cheshire and Michael Crick Smith co-wrote an article detailing how the paint research could be related to literary and biographic research, thus enhancing the ability of members of the Gaskell Society to understand the process of restoration and its historiographical basis.

In 2012, Sefton Council was successful in its application for over £4 million from Heritage Lottery Fund (HLF) to restore and repair the King's Gardens Southport in 'a sensitive manner that respects their historic design whilst providing facilities for today's users': their ability to recreate the historic design was a direct result of this research. A specific objective was 'to restore all the surviving heritage buildings, ornamental features and remove inappropriate later changes to reinstate the original design coherence': the identification of an authentic and coherent scheme was a direct result of this research. In both these ways Crick Smith's research added authenticity and credibility to this major regeneration project.

The research relating to Church of St. James the Less, New Mills, Derbyshire. This research concluded that a decorative scheme of c. 1880 lay under layers of modern decoration. Authentic paint research was a requirement of the preliminary HLF bid, Crick Smith's research provided this evidence and the phase 2 HLF bid was successful, resulting in a grant of £717,000. Crick Smith were then commissioned to reveal sections of the earlier scheme and to reinstate the original scheme in its entirety on one wall. The church is now a successful heritage centre that exemplifies a respect for historic fabric while enabling a contemporary role for the building, the recovery of the original scheme by Crick Smith was a vital part in determining the character of the new centre.

5. Sources to corroborate the impact

1. Susan Jenkins, "All Gingerbread, filigraine, and fan painting: 'Fashion and Function, the Decoration of the Library at Kenwood'" forthcoming in Consuming the Country House [article written by Senior Curator, English Heritage partly based on Crick Smith reports].


7. Alan Lake, 'The Restoration of King's Gardens, Southport, How Historic Paint Analysis was used to Inform the Heritage Lottery Funded Project' - letter from the project manager.