



## THE ARTIFACT, ITS CONTEXT AND THEIR NARRATIVE: MULTIDISCIPLINARY CONSERVATION IN HISTORIC HOUSE MUSEUMS

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### **Abstract**

Brodsworth Hall in Yorkshire was the subject of a major conservation and presentation project following its rescue by English Heritage in the 1990s. Twenty years on, the conservators and curators responsible for the house are beginning to question whether 'conserve-as-found', the overarching ethos, which has guided the presentation and conservation of the interiors and collections, is still valid. Recent research has demonstrated that some of the most fragile materials at Brodsworth are reaching the end of their lives. This paper examines the approaches taken to slow the decay and poses the question are they sustainable in the long term. Is it time for a radical re-think of the way Brodsworth is presented? The paper concludes that 'conserve-as-found' is still useful as a guiding principle but suggests it is inevitable that it will be more loosely applied, as original objects and interiors decay.

### **Keywords**

Conservation, preventive conservation, presentation, Victorian, country house, conserve-as-found, risk-management, English Heritage

## **Conserving and Presenting Brodsworth Hall: New Approaches for a Sustainable Future**

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Brodsworth Hall is often portrayed as a house which has stopped in time, forever held in a state of suspended animation following its rescue by English Heritage in the 1990s. Needless to say, Brodsworth is far from unchanged and it continues to evolve, decay and surprise us, presenting new challenges as time passes and our understanding of it grows. Twenty years on, we are beginning to question whether the 'conserve-as-found' approach still works interpretatively, and if it is sustainable in the long term. Despite attempts to halt the decay, the artifacts and interiors continue to deteriorate. We need to consider how, or indeed if, we can display and care for materials which are reaching the end of their life. With new research and new interpretative techniques, coupled with ever-increasing expectations from the public, we must also continue to explore new opportunities for visitors to experience historic houses. This paper examines the conservation and presentation of Brodsworth, and poses the question is it time for a radical rethink?



Fig. 1. Brodsworth Hall, Yorkshire. © English Heritage.

## Brodsworth Hall

Brodsworth Hall, in Yorkshire, was built in the 1860s, and its sumptuous interiors and furnishings are the epitome of middle-class Victorian taste. The house and its contents represent a way of life which was once commonplace across England. The eclectic collection ranges from Old Master paintings and fine sculpture to jam-jars and early plastic Tupperware and its significance lies in the insights it offers into the lives of its former inhabitants. Brodsworth's stories are those of a country house and its community playing a part in a much larger picture, both locally and nationally [Carr-Whitworth, 2009].

Remarkably, the house and its collection survived largely intact, and it has been described as the most complete surviving example of a Victorian country house in England [Girouard, 1985]. The initial impression this gives, of a place frozen in time, is misleading. Although it is true to say that much has survived, the Hall also bears witness to the challenges which have beset country houses since the late nineteenth century, as its owners updated, adapted, and at times abandoned parts of the house. By the end of the twentieth century, the family's fortunes had waned and Brodsworth was in a perilous state. Sylvia Grant-Dalton, the Hall's last resident, valiantly soldiered on but by the time of her death in 1988, Brodsworth's future hung in the balance. Finally, after two years of negotiations the Hall was given to English Heritage and the contents were acquired with a grant of £3.36 million from the National Heritage Memorial Fund.



Fig. 2. *The Library, Brodsworth Hall.* © English Heritage

## Methodologies in Practice

When English Heritage acquired Brodsworth Hall in 1990, it was in a severely decayed condition. It was one of a group of similar properties, along with Calke Abbey, Tyntesfield, Mr Straws House and Chastleton in England and Rouse Hill House in Australia, which were rescued around the end of the twentieth century. Often described as ‘time capsules’, they were subjected to more of an archaeological treatment, following the principle of ‘conserve-as-found’. There was no attempt to restore missing elements or to go back to a ‘defining moment’. Perhaps the most famous of these is Calke Abbey in Derbyshire, an early eighteenth century house rescued by the National Trust. There was a conscious decision to avoid the place looking newly conserved and it was the subject of much debate at the time. It was not universally admired and in Simon Jenkins’ opinion ‘the National Trust went mad. Every tonic bottle, every match box, every chipped cup and broken chair was catalogued, dusted, wrapped in plastic and stored before being put back exactly where it had been. Nothing - or rather everything - was to be disturbed’. He went on to say it was ‘not a time warp, just a house in need of a visit from the dustmen’ [Jenkins, 2003].



Fig. 3. The old kitchen, Brodsworth Hall, after conservation. © English Heritage.

The approach taken at Calke Abbey was the model which English Heritage adopted and developed for Brodsworth. The aim was to retain as much surviving material as possible and to allow the entire history of the house to be told. As our understanding grew, it was clear that Brodsworth retained evidence of the many interventions made by the family over the years, as their needs, and fortunes, changed. We decided that we should present the house largely as we had found it, including the undeniable effects of time and neglect, rather than to try to recapture the appearance of its earliest years.

The shocking condition of the building and the collections presented many challenges during the five-year research and conservation programme. Decades of inadequate maintenance had taken their toll and the building was subsiding, undermined by the local colliery. A temporary structure protected the whole building while the roof

and badly eroded limestone walls were repaired, and all the services replaced. Inside, painstaking work was required to clean and stabilise the decoration, as far as possible without renewing or recreating lost elements. As a result, the fragile interiors have a well-worn and dilapidated air.



Fig. 4. Exterior conservation in progress. © English Heritage

Prior to the building works, the collections were documented, packed up and moved off-site to a warehouse and a rolling programme of assessment and conservation treatment was initiated. The aim was to slow the process of decay and to make the objects stable enough to be shown to the public, not to restore them. Since opening the house to the public in 1995, English Heritage has implemented the latest practice in preventive conservation. Relative humidity is controlled by conservation heating using the historic wet radiator system in the house, augmented by portable electric radiators [Staniforth et al, 1984]. Light is controlled by the historic wooden shutters, new blinds and ultraviolet-absorbing window film. There is a rigorous housekeeping plan, delivered by two collections care assistants and insect pest monitoring is also undertaken. Fragile collections, particularly the textiles are surveyed once a year to identify where on-going repairs are required. In common with most historic houses, Brodsworth is ‘put to bed’ each winter, which gives an opportunity to check and clean every object.

In 2008 we moved to a two pronged approach partly based on risk management informed by research into natural aging and protection strategies, and partly on the analysis of collected environmental data. The conservator and conservation scientist are also now at the heart of the decision making process required to deliver sustainable solutions, working within interdisciplinary teams. The change of approach was driven by

the results of the Brodsworth Collections Risk and Condition Survey [Stanley, 2008]. This survey combined the results from an object condition assessment carried out on a 5 per cent random sample of the collection and a site wide risk assessment. The survey used an innovative methodology, which was developed to identify which risks were causing damage to the collection, or have the greatest potential to do so [Xavier-Rowe & Fry, 2011].

Risk Factors	Examples
Dust, dirt and handling	Dust on an object due to insufficient conservation housekeeping; physical damage due to inappropriate handling, such as chips, scratches or losses.
Light	Fading of dyes and paints, embrittlement.
Incorrect Humidity	Cracks, splits, distortion due to low and fluctuating relative humidity (RH); corrosion, mould growth due to high RH
Pests	Damage and soiling due to insect pests, birds, rodents and bats.
Display/Storage conditions	Tarnishing of silver due to inappropriate display case materials; crushing due to overcrowding in storage; Abrasion caused by an inappropriate support.
Documentation	Incomplete or missing documentation, no identifying number marked on an object. A lack of documentation for some objects, e.g. archaeology or natural history specimens can mean a loss of research value. This can be both symptomatic of poor collection care and may result in further neglect.
Disasters & Security	Fire, flood, theft or vandalism.
Inherent Deterioration.	Some materials deteriorate due largely to their composition rather than the conditions in which they are kept. Examples include photographic film and plastic.

Table 1: Risk Factors used by English Heritage

Risks were ranked, taking account of the significance of the collection and the percentage of objects in each location. The results showed that precedence should be given to implementing solutions within the main house rather than the barn, which is used as a store. Not surprisingly perhaps, the highest overall risk to the collection turned out to be from a disaster occurring at the Hall. This was a useful wake-up call and it highlighted the need to upgrade the integrated emergency planning at the site.

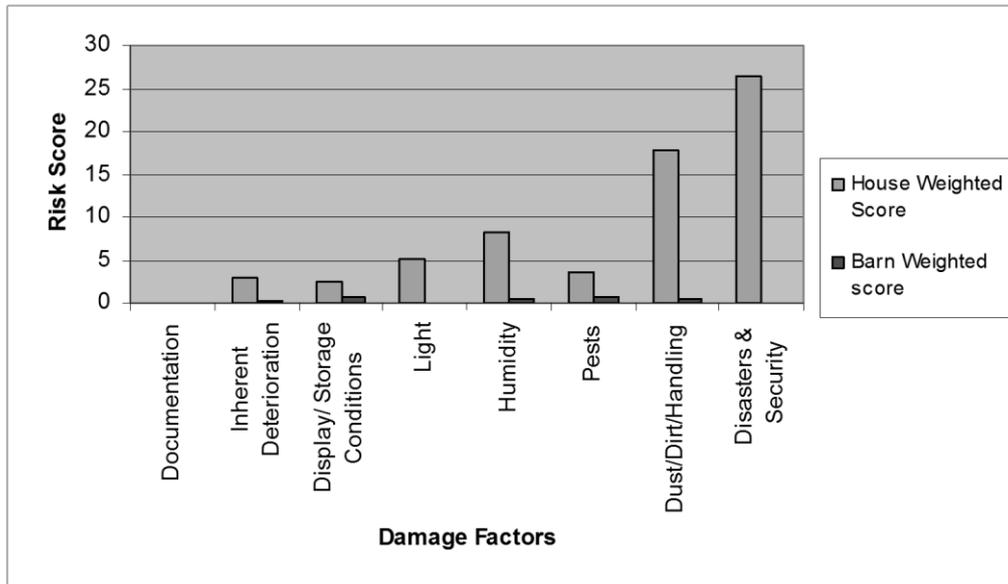


Fig. 5. Brodsworth Hall risk scores 2008

Damage from dust, dirt and handling was the next highest risk to the collection. Dust, is not only visually unattractive, it can also cause damage over a period of time, depending on how damp the environmental conditions are. Relative humidity (RH) consistently above 80 per cent will cause dust to rapidly adhere to surfaces making it harder to remove [Brimblecombe et al, 2009]. Regular and thorough cleaning of objects, whilst keeping dust levels down, also dramatically reduces insect pest activity [Xavier-Rowe, 2011].

The risk from incorrect humidity levels, whilst ranked third highest in the 2008 survey, is becoming more of a concern as analysis of environmental data and materials science research has revealed new information relating to the threat it poses to the collection. At Brodsworth, RH is controlled through the use of conservation heating linked to humidistats. Each room has RH and temperature sensors linked to a Building Management System (BMS) which controls the radiators. There is no method of increasing humidity levels or cooling temperatures in summer. Relative humidity varies throughout the property and some rooms can rise to 70 per cent in summer, resulting in occasional mould outbreaks, whilst in others the RH drops below 40 per cent.

The BMS humidistat sensors have proved to be incapable of accurately reflecting the conditions surrounding the collection as they are fixed at high level [Thickett et al, 2012]. A move to mobile telemetric humidistat and thermostat sensors controlling the BMS heating system is currently being investigated at Brodsworth. The introduction of dehumidifier/humidifier units is also being considered. They use less energy and a combination of heating, de-humidification and humidification may also overcome the main drawback of conservation heating, the slow response time.

During the shoulder months the rooms can be cold, leading to complaints from site staff and radiators being

adjusted to comfort levels. This on-going challenge highlights the need to balance the conditions for objects and people. Local heat sources positioned where stewards are stationed is a potential solution and it is also important to ensure that volunteers, staff and visitors understand why temperatures are controlled.



Fig. 6. Damage caused by water ingress. © English Heritage.

The uncontrolled environment in the house during the latter part of the twentieth century had a particularly detrimental effect on the Victorian silk furnishings. In view of this, we wanted to ascertain the optimum environment for increasing the life of these fragile textiles. The research, which focused on improving preventive conservation of historic silks on open display, came up with some sobering conclusions [Luxford et al, 2010]. The key finding suggested that the long term effects of temperature and humidity appear to be more critical for silks, than light. Therefore, RH levels should be kept low (between 30 and 50 per cent), temperatures should also be kept low (every reduction of ten degrees will double life-expectancy) and, if dyes are stable, the light levels can be raised. This research also predicted that silk could be expected to survive for 250 years at 20 degrees and 50 per cent RH. At 75 per cent RH and 24 degrees the life-expectancy would fall to 125 years. This poses a serious concern for Brodsworth. If we combine historic conditions with current achievable conditions, we have to face the fact that the silks are close to the end of their life. With the predicted rise in temperatures relating to climate change the justification for continued investment in remedial treatment and environmental control is open to question [Lankester & Brimblecombe, 2012].



Fig. 7. Silk furnishings after conservation. © English Heritage.

Another fundamental issue is that other parts of the collection generally require a higher RH than silk, neatly illustrating the complex challenge of displaying mixed objects in historic buildings. The long term care priorities will ultimately be driven by the significance of the objects and interiors, a collaborative decision making process by the conservator and curator. To make more accurate predictions relating to the rate of deterioration, we need data collected over long periods of time. RH and temperature have been systematically recorded for 12 years at Brodsworth. If we knew what conditions the collections have experienced over the past 150 years, judgements could be made as to how vulnerable materials are today and what conservation strategies to employ. Progress has been made towards developing a methodology linking past environmental conditions and damage to objects through the analysis of historic archives with a view to predicting how objects may deteriorate in the future [Cassar & Taylor, 2004].

Light registered as low risk to the collections at Brodsworth. Extensive fading had occurred during the twentieth century when traditional housekeeping practices ceased but now, shutters, blinds, UV-absorbing window film and case covers are used to control the annual light dose. Research by Nottingham Trent University using a micro-fading spectrometer to conduct in situ tests on light sensitive materials provides a method for determining which dyes or colours are especially light sensitive [Liang et al, 2011]. This information is used to develop light protection strategies, based on an assessment of risk.

When Brodsworth was acquired the extent of pest infestation was extreme. However, the risk from insect pests scored low in the 2008 survey which is a direct result of the Integrated Pest Management (IPM) programme which identifies potential issues early. IPM is managed centrally with support and training provided to property staff. Predictions relating to climate change suggest that insect activity is likely to increase and data gathered over the past 10 years by English Heritage supports this [Xavier-Rowe & Lauder, 2011]. The risk of damage from inherent deterioration, storage and display conditions and lack of documentation scored very low.

Whilst the results can only be used as an overview to guide further investigation, combining the evidence of condition and significance with the causes of damage, provides a much clearer steer on prioritising resources as part of a collections care plan.

	<b>Risk</b>	<b>Location</b>	<b>Solutions</b>	<b>Est. Cost</b>	<b>Lead.</b>	<b>Urgency</b>
1	Disasters & Security	House	Update disaster plan	£400	Property Manager	Urgent
			Update salvage plan	£0	Curator	Urgent
			Specify and purchase equipment	£5,000	Conservator	Urgent
			Identify salvage area	£0	Curator	Urgent
2	Dust/Dirt/ Handling	House	Increase CCA staff hours	£2,000	Head of Collections	Urgent
			Improve sealing of cases	£300	Conservation Scientist	Urgent
3	Humidity	House	Talk to staff to prevent over riding system	£0	Conservator & Property Manager	Urgent
			Monitor system to see effectiveness of BMS and adjust as necessary	£0	Estates/Con Scientist	Urgent
4	Light	House	Check detection system is up to date	£0	Conservation Scientist	1-2 years
5	Pests	House	Improve sealing of windows	£10,000	Estates	Short term
			Investigate methods to stop cluster flies	£0	Conservator	Short term
			Improve rodent trapping	£500	Estates	Short term
			Investigate methods preventing rodent ingress	£0	Estates	Short term
6	Display/Storage	House	Replace felt in silver safe	£300	Con. Scientist & Conservator	Short term
			Replace fabric inside display case	£300	Con. Scientist & Conservator	Short term
<b>Total budget</b>				<b>£18,800</b>		

Table 2: Collections care action plan

Looking forward, if we are to improve the life expectancy of collections at Brodsworth, we must gain a better understanding of the aging of historic materials. We have started with investigating the most fragile materials to determine the optimum achievable conditions within an historic building. This evidence will then support the introduction of effective mitigation strategies.

## Presentation and Interpretation

The presentation of Brodsworth was, and continues to be, a collaborative enterprise drawing on curatorial, interpretation and conservation expertise, driven by the needs of our audiences and the collection. The approach was as dispassionate as possible but questions of visual balance emerged frequently as objects responded differently to treatment and it was impossible to avoid making subjective aesthetic judgements. Practical considerations had to be addressed too. Inevitably, compromises were made to enable the house to be opened to the public and to function as a visitor attraction. Ticketing and toilets were, sensibly housed in new buildings in the grounds but the shop, offices and café were shoe-horned into the service wing.

The most striking introductions to the house were the replica carpets in the main thoroughfares where the original carpets were most damaged. Partly practical and partly interpretative, they allow visitors to experience the grand circulation spaces without the visual intrusion of barriers. Elsewhere, visitors are guided through the rooms along drugget runways bounded by ropes. Research into the condition of the carpet fibres under the druggets, which are made of wool with a polyester felt underlay, concluded that no significant damage is being caused to the carpets confirming that the carpet protection is working [Tetley, 2012]. However, although the colours and materials were carefully chosen to be sympathetic, they remain very intrusive. Despite this drawback, they seem to be the only way to allow free-flow visitor movement. There has been a campaign recently to remove barriers from historic houses. The jury is out on the long term implications of a ‘no-ropes’ policy but we do not feel it is appropriate for Brodsworth’s fragile interiors.



Fig. 8. Ropes and druggets at Brodsworth Hall. © English Heritage.

Low light levels are a constant cause of complaint. To mitigate this, tinted window film, which reduces UV and visible light, has been successfully used, allowing some blinds to be lifted and giving views of the landscape. Vulnerable upholstery is protected from light and dust using replica case covers, following an historical precedent. We have also introduced replica chintz curtains in the bedrooms to reduce light levels, another shift away from the ‘conserve-as-found’ principle.

The historic rooms are presented without permanent interpretation. We rely on volunteer room stewards to engage with visitors and answer questions. There is a guidebook and permanent exhibitions about the family and the servants. Temporary exhibitions focussing on various themes and highlighting particular aspects of the collection in the house are regularly programmed. These generate repeat visits and PR opportunities as well providing a catalyst and output for new research. Audience research suggests that visitors are broadly appreciative of the presentational approach.

Research underpins all our work at Brodsworth and we have been part of the Yorkshire Country Houses Partnership, a unique collaborative research venture between the University of York and ten historic houses, since it was founded in 1999. The Partnership brings together curatorial and academic expertise and undertakes coordinated research which is made available through seminars, publications and exhibitions. The next major initiative, ‘The Country House in Time of War’ will explore the impact of war on country houses across Europe.

The great presentational innovation of Tynesfield was that the National Trust kept the house open during the repair work, making it visible to the public, treating every aspect of the development as an opportunity for learning and engagement. At Brodsworth the initial conservation was carried out behind closed doors but more recently we have started to involve the public in all aspects of our work. Some conservation is programmed while we are open for visitors to see and we have volunteer teams working with the conservator and the curator. Volunteers have been pivotal in the creation of a remarkable oral history archive and servants database. It was this initiative which demonstrated that research has the potential to be a much more interactive and reciprocally beneficial process, through which people’s thoughts can be recognised and valued in our understanding and interpretation of the past. This approach is opening up new possibilities for us to engage with the public, establishing the house as an active and meaningful cultural resource for the local community.

## Conclusion

Country houses rarely, if ever, stand still in time and much as we would sometimes like to, we cannot halt the passage of time or its detrimental effects. As we look to the future and more objects reach the end of their lives, difficult curatorial decisions will need to be made about what to ‘let go’ and whether to display objects which are literally falling to pieces.

As for a radical re-think of the way Brodsworth is presented, the consensus is that ‘conserve-as-found’ is still useful as a guiding principle but it seems inevitable that it will be more loosely applied in the future as we are forced to introduce more replicas or perhaps equivalent historic objects, as the original ones decay. New methodologies will also be essential for focussing conservation resources, based on a greater understanding of materials and environmental data, coupled with assessments of risk and significance.

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