

William Nicholson's Reverse-Painted Glass Panels: Pathways to Access Through Collaborative, Stakeholder-Led Decision-Making

ABSTRACT

Three reverse glass paintings by William Nicholson demonstrate the artist's exploration of the medium during the 20th century. Comprising 50 individual panels, the paintings are the largest commission on glass by the artist and the only glass paintings by Nicholson in public ownership. In 2017, historical context and previous research were revisited to consider the future conservation of the Nicholson panels. This project investigated the suitability of a collaborative, stakeholder-led approach to improving access to these artworks, stored by the National Trust since 1958. Consisting of a questionnaire and interviews, a survey of stakeholders indicated support for conservation treatment and improved physical and digital access for the public. A custom, stakeholder-led decision-making framework was then implemented to reveal inappropriate environmental conditions, assess current condition, and inform storage and treatment options. This paper supports the value of identifying and collaborating with stakeholders and utilising stakeholder opinions for improving access to artworks.

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KEYWORDS

William Nicholson · Reverse glass painting · Value · Decision-making · Public access · Stakeholder collaboration · Survey

INTRODUCTION

William Nicholson and the panels

During the 20th century, William Nicholson's experimentation in the arts contributed significantly to the British art scene. Skillfully expressing the nuances of light, reflections, and shadows within his wealth of still lifes and landscapes, Nicholson was also a successful portraitist, theatre set designer, and book illustrator. Whilst the scale and artistic flair of Nicholson's art has previously been criticised in art historical discourse (Bowness 1967, 3), public

and media interest in his work has undergone a resurgence following an investigation of a still life believed to be by Nicholson for the BBC's 'Fake or Fortune' in 2018, providing an opportunity to highlight a wider breadth of his artworks (Illis 2018).

Nicholson's fascination with the atmospheric effects of light on reflective surfaces is exemplified by his reverse glass painting. In this ancient craft, paint layers are applied on the glass in reverse

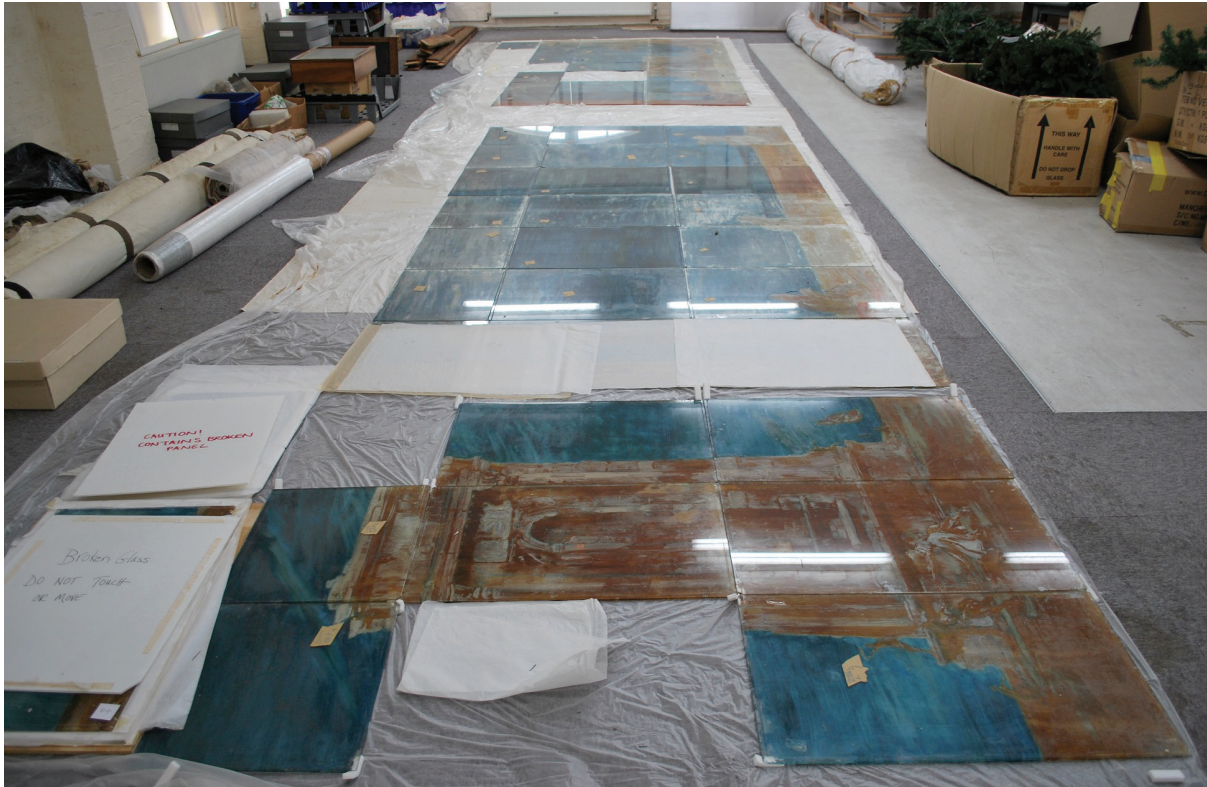


Figure 1. William Nicholson, *Architectural Fragment* (near), *Beach Scene* (center), and *Loggia with Figures* (far), 1913 CE, oil paint on glass, H 186.4 cm × W 141.5 cm, H 182.3 cm × W 353.6 cm, H 183.9 cm × W 338.6 cm. Petworth House, The National Trust · Copyright National Trust Images

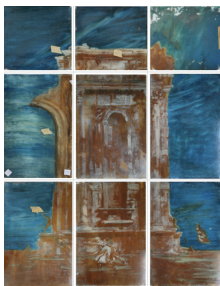
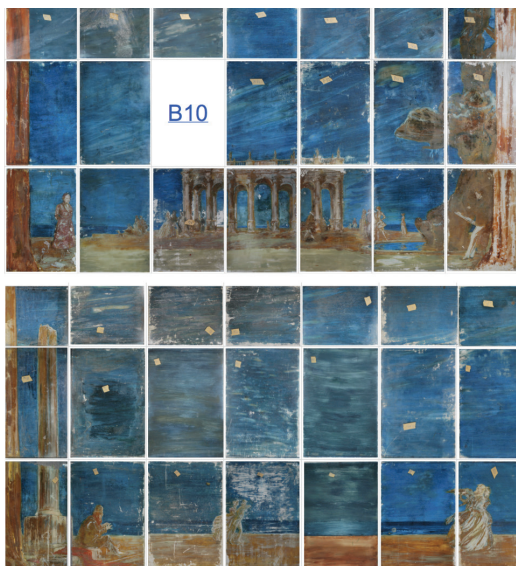


Figure 2. *Architectural Fragment* (above), *Loggia with Figures* (center), and *Beach Scene* (below) · Copyright National Trust Images



order, establishing highlights before building tone and background layers. The finished painting is then viewed through the transparent glass support. Nicholson created 11 known reverse glass paintings, seven of which survive, and publicly exhibited examples of his glass paintings at the International Society in October 1913 (Reed 2011, 251-582). The Nicholson panels stored by the National Trust are historically significant as the largest example of the artist's reverse glass paintings and of 20th-century British reverse glass paintings (Blewett 2004, 11) (Figure 1).

The acclaimed American playwright, Edward Knoblock, commissioned Nicholson to decorate the dining room walls of his Parisian apartment in August 1913 with four large reverse glass paintings upon 63 individual panels: *Architectural Fragment*, *Beach Scene*, *Loggia with Figures*, and *Enchanted Journey*. Knoblock and Nicholson had first met in the seaside village of Rottingdean, East Sussex. Nicholson lived beside the 11th-century church of St. Margaret, which was decorated with stained-glass windows crafted by William Morris in 1893



Figure 3. (left) William Nicholson at work in Edward Knoblock's apartment, Paris, France, 1913, with a preparatory cartoon of 'Loggia with Figures' on the wall before him · Courtesy of a Private Collection

Figure 4. (above) Loggia with Figures positioned in the anteroom of Beach House, Worthing, 1921 · Courtesy of Alfred E. Henson/Country Life Picture Library

from the designs of Edward Burne-Jones (Blakey 2008). In Rottingdean, Knoblock and Nicholson shared interests in the thriving theatre scene and scenic landscapes, which appear to have inspired the commission.

Utilising a limited palette of blue and ochre, Nicholson worked on the dining room floor of Knoblock's home in the *Palais Royal*, Paris, painting continuously across multiple glass panels (Knoblock 1939, 164-165) (Figure 2). He depicted costumed figures and monumental architecture along the seascapes of the four paintings, and portraits of Knoblock and Nicholson. When originally installed in Paris, the four paintings would have collectively measured approximately 10 m × 7 m. Each panel of the four paintings individually measures up to 73.7 cm × 50 cm and was set within a window-frame structure on the dining room walls (Reed 2011, 263) (Figure 3). The largest compositions, *Loggia with Figures* and *Beach Scene*, are flanked with painted curtains, contributing to the illusion of viewing the sea through four windows.

Knoblock returned to England to serve in the British Intelligence Service during the First World War. The Nicholson panels were relocated in 1919 to Knoblock's new home, Beach House, Worthing, overlooking the sea (Figure 4). Nicholson described the difficulty of moving the panels in a

letter to his son, artist Ben Nicholson (Nicholson 1914). Upon the sale of Beach House in 1923, *Enchanted Journey* was separated and is now in private ownership (Blewett 2004, 12). The three paintings that remained on the Worthing property were consequently stored by Worthing Museum between 1933 and 1937, prior to their purchase by Knoblock's friend, 3rd Viscount Lord Mersey, in 1953 for display at Bignor Park, West Sussex. In 1958, Lord Mersey gifted the three paintings to the National Trust, where they have since been stored and researched at Petworth House (Reed 2011, 260).

Materiality and previous research

To create the panels, Nicholson thickly applied oil paints in his distinctive style. Nicholson first used a resinous priming layer, a linseed oil binding medium, and a protein-based binder for blue pigments to speed up drying times (Blewett 2004, 17). Instability that occurs in reverse glass paintings results from the limited natural adhesion between the non-porous glass and the paint film. The drying process may also cause shrinking, cracking, and detachment of the paint film over time (Mckay 2015). Inappropriate relative humidity (RH) can accelerate physical deterioration of the paint and priming layers. In addition, photodegradation, discolouration,

and embrittlement can be caused by visible and ultraviolet (UV) light (Bretz 2008, 220; David 2009, 223). In relation to the Nicholson panels, degradation of the priming layers, paint loss, and cracks to glass panels were previously observed on *Loggia with Figures* and *Architectural Fragment* (Blewett 2005, 8; David 2009, 222-224; Sartorius 2008).

The innate issues of scale and material condition have driven research and future planning for the panels since their arrival in the care of the National Trust. In 2003, conservator Morwenna Blewett's investigations of *Architectural Fragment* and *Loggia with Figures* concluded that past environmental and storage conditions had impacted the painted surface (Blewett 2005, 10). In 2008, Jessica David built on initial consolidation tests by Blewett to establish successful consolidation treatments of the paint by brush and ultrasonic mister with 10 percent Regalrez RT 1094 in Shellsol RT D40 (David 2009, 230). Twelve panels from *Architectural Fragment* and *Loggia with Figures*, including the two portraits, were treated at the Hamilton Kerr Institute by David and Andrea Sartorius (David 2009, 230; Sartorius 2008, 2-4). Limited resources and space for display had halted a proposed conservation program by the National Trust in 2011, which had planned to include retouching trials and public engagement. A 2017 M.A. research project for West Dean College in collaboration with the National Trust hoped to augment previous studies on condition, revisit public engagement, and facilitate improved access.

Approaches to access

For this project, access was considered via a dual approach: physical access and conceptual access. This approach aimed to investigate practical issues of storage, current material and environmental conditions, alongside conceptual developments regarding stakeholder opinions and the contextual significance surrounding the Nicholson panels. In addition to history and materiality, an artwork's contextual significance, that is, how and why an artwork is considered of value to a range of stakeholders in the present day, can inform notions of accessibility.

In recent times, the conservation field has utilised a people-based approach to conservation decision-making, one in which the stakeholder voice has

been broadened to include the wider public. For example, the Maori Hinemihi project at Clandon Park and the redecoration of Kelmarsh Hall adopted comprehensive, people-based approaches, engaging communities, identifying stakeholder values, and improving access to these buildings (Sully 2003, 53-56; Kelmarsh Hall and Gardens 2012). Unlike historic properties and artworks visible in public collections, the Nicholson panels have not been publicly accessible due to their material fragility. To formulate a stakeholder-led action plan for improved access, a process of stakeholder identification and collaboration was initiated.

Stakeholder survey

A literature review and historical research identified stakeholders with varying degrees of interest and influence. Invested communities were defined, including regular visitors to art galleries, museum professionals, and the Rottingdean Preservation Society, alongside the general public. Subsequently, research methods of a stakeholder questionnaire, individual interviews, and group interviews were employed.

The questionnaire collected results via random sampling and stratified sampling to gather opinions from an equal number of 'informed' and 'unfamiliar' stakeholders, those with and those without interest in arts and heritage collections. The inclusion of randomly selected participants aimed to maintain objectivity and reduce unconscious bias (Christodoulaki and Sloggett 2016, 355). The final questionnaire was designed with Google Forms, incorporating feedback from pilot testing with standardised language, explanation of terminology, and broad ranges for multiple choice answers, including 'I don't know' and 'Other'. The questions focused on themes relating to the artist, condition, treatment, access, and value, based on respondents' opinions on introductory images of the panels.

The questionnaire was distributed for stratified sampling via email, flyers, ConsDistList, and ICOM-CC forum. Random sampling took place in Chichester, West Sussex, approaching members of the public, with responses inputted via an iPad (Figure 5).ⁱ The online questionnaire showed three pages of images of the panels followed by 15 questions with formats of multiple-choice and

Likert scales to clearly indicate respondents' standpoints, quantitatively analysed in Google Sheets. Responses to prompts for 'Additional comments' for each question were evaluated in the qualitative research software NVivo. The anonymous survey did not require demographic details of age, gender, or location; however, data pertaining to profession and frequency of visiting art and heritage collections identified 'informed' and 'unfamiliar' participants.

Results

The final questionnaire was completed by 168 participants, 84 considered 'informed' and 84 'unfamiliar'. Five random sampling sessions were conducted in May and June 2017, resulting in 20 percent of 168 participants being randomly selected. Of all participants, 67.9 percent visited arts and heritage collections occasionally or regularly, with 70.9 percent seeing reverse glass paintings in these collections rarely or occasionally; 75 percent of participants had not heard of William Nicholson.

Interpretation of the condition of the panels was limited to the available images in the questionnaire, yet a clear result was obtained from the stakeholder survey showing 94.6 percent of respondents believed the artworks were damaged in some way. Participants were then asked to select from a list of statements regarding the condition of the panels, most frequently choosing

Glass Paintings Survey

Thank you for participating in this survey, which forms part of an MA student research project in object conservation. Your participation will aid the completion of this project and further knowledge in this area.

You are asked to answer 15 questions. You may not need to answer all of the questions, depending on your answers to certain questions. You may move back and forth between the pages of this survey without losing your input.

Please answer the questions by yourself and if you require assistance or clarification, please contact the distributor of the survey in person or via email (sophie.croft@westdean.org.uk).

This survey does not require previous knowledge of glass paintings, but is focused on your personal opinion regarding material condition, treatment, access and value of the artworks.

After question four, you will be shown seven images of the three glass paintings by the artist William Nicholson, made in 1913. Each painting consists of multiple glass panels on which paint is applied to the reverse side of the glass. Please look at the images carefully.

Disclaimer: Information and personal details inputted within this survey will be kept strictly confidential and will be used solely for the purpose of this research project.



Figure 5. The questionnaire designed and distributed for the stakeholder survey

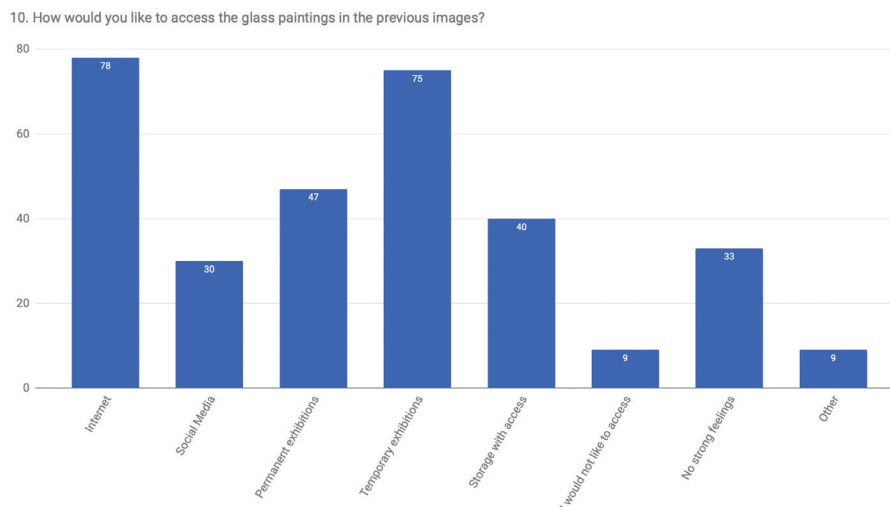


Figure 6. Responses to question ten: How would you like to access the glass paintings in the previous images?

statements of ‘broken glass’, ‘loss of paint’, and ‘missing parts’. When asked if the paintings required treatment, 78.6 percent of respondents believed they did. A follow-up question asked participants to select a number between one and nine, one representing minimal treatment and stabilisation and nine representing a full restoration. Five was most commonly selected, and an interquartile range of four to seven suggested a moderate treatment. Similar to the selection of condition statements, stakeholders were asked to select treatment options, most often choosing ‘repair of broken glass’, ‘reattachment of flaking or detached paint’, ‘cleaning with a dry brush’, ‘safe storage’, and ‘stabilisation of mould growth’. In-painting, cleaning with solvents, and application of background layers behind the glass were less commonly chosen.

Participants were asked to identify ways in which they would like to access the glass paintings (Figure 6). The ‘internet’ was most commonly selected, followed by ‘temporary’ exhibitions. In the following question, 71.3 percent of respondents wished to learn more about the panels. The next set of questions related to six values: ‘Image and Pictorial content’, ‘Historical value’, ‘Material value’, ‘Contextual value’, ‘Narrative value’, and ‘Community value’. Participants assigned numeric values of importance, one being unimportant and five being highly important. This showcased a mid to high interquartile range between 3.0 to 5.0 for all values, with preference for ‘Historical value’ and ‘Image and Pictorial content’. The traditional skill and educational value of the panels were also highlighted by stakeholders in the additional comments section. When asked whether the glass paintings were ‘valuable’, 53.6 percent of respondents believed they were and 41.7 percent did not know. This split result could indicate various interpretations of the word ‘valuable’, such as monetary value.

Face-to-face interviews recorded open-ended responses and additional questions. Interviewees included Nicholson’s family members, collections management professionals, University of Sussex Museum Curating Masters students, and non-users of arts and heritage collections, identified during random sampling in the pilot survey. Stakeholder interview results drew similar conclusions to the questionnaire. Participants believed the panels were damaged to some extent

and selected a moderate to minimal intervention. Curatorial students spoke of reversibility and the authenticity of loss and breaks. Interviewees suggested ‘free-standing’ exhibition displays, storage with clear labelling, condition documentation, and a database with public access. A significant conclusion derived from interviews was the importance of the panels’ ‘completeness’, valuing the artwork in its totality in contrast to separating the portraits within *Loggia with Figures*. Through questionnaire and interviews, stakeholders strongly indicated the historical merit of the three paintings and the value of a low-intervention conservation treatment to enable digitisation and future exhibition.

STAKEHOLDER-LED DECISION-MAKING

With gathered stakeholder opinions on value, condition, treatment, and access, routes for conservation decision-making could be formulated. Decision-making frameworks provide a pragmatic approach to define and solve problems through a visual model. In conservation, decision-making models have systematically assisted multi-faceted projects, incorporating key stakeholder review stages and availability of resources. Examples of decision-making frameworks from The Burra Charter, Chris Caple, Randall Mason, and the National Trust Spidergram, were examined for their suitability (Australia ICOMOS Incorporated 2013; Mason 2002, 6; Caple 2000, 41; Lithgow 2008, 184).

A custom decision-making framework

A custom decision-making model was developed for the Nicholson panels to integrate the stakeholder voice in each stage towards improved physical and conceptual access (Figure 7). The examination of aforementioned models inspired the linear format of a custom model with an intelligible progression from value assessment to treatment options. Colour-coded opinion metrics were integrated with detailed results of all stakeholder opinions regarding value, condition, treatment, and access. The National Trust condition code system was incorporated within the custom model, with stakeholder ideas for access of a condition database, associated paper labels, and an updated Statement of Significance, also detailing individual condition codes for

NICHOLSON PANELS DECISION-MAKING MODEL

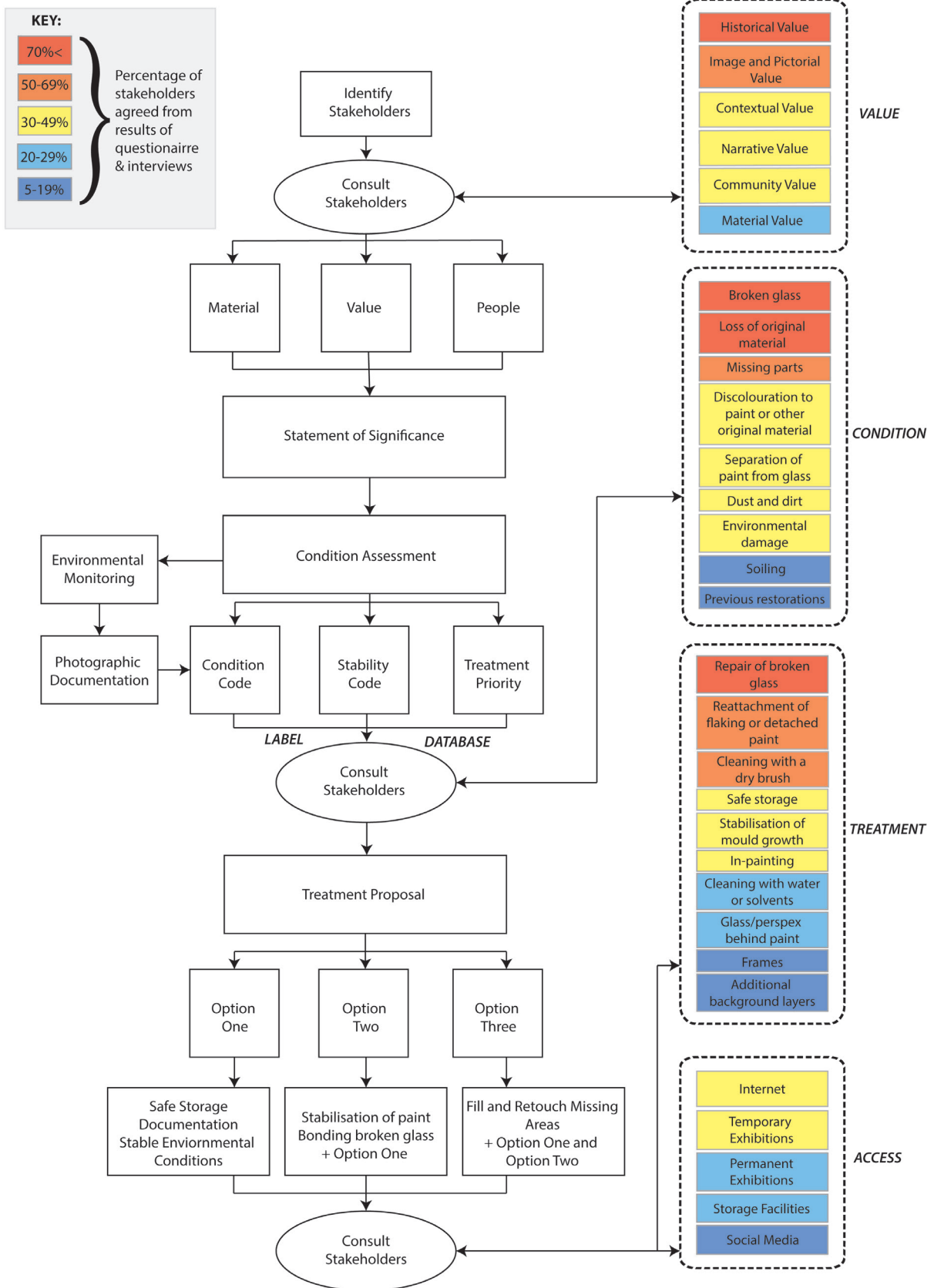


Figure 7. The custom decision-making model for improving access to the Nicholson panels

2017 CONDITION SUMMARY MATRIX

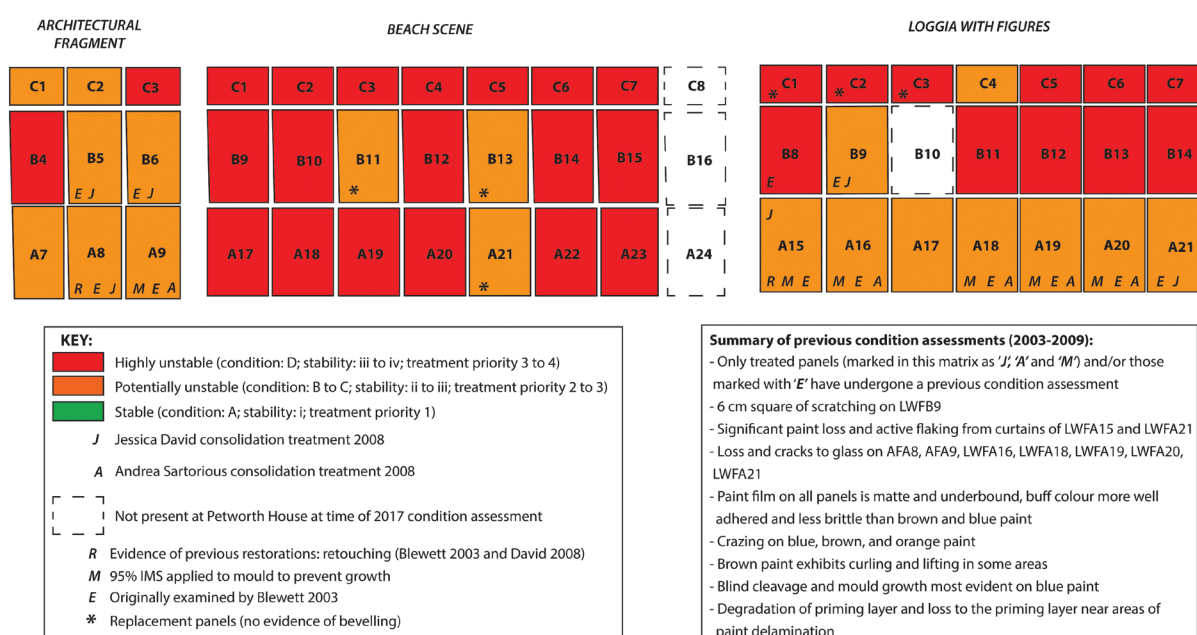


Figure 8. A condition summary matrix compiling the current condition and previous research

panels. The House and Collections Manager at Petworth House selected the custom model for implementation, which aligned with the organisation’s decision-making criteria.

Following the custom decision-making model, the collected stakeholder opinions and historical research were incorporated into a ‘Statement of Significance’ following National Trust guidelines. The Statement of Significance serves as a formalised document for the Nicholson panels that aids conservation planning by defining historical and current contextual meaning, material condition, and future conservation requirements.

Condition

In 2017, the 50 panels were assessed in collaboration with paintings conservation student, Marine Andrieux. During the assessment, detailed photographs of both sides of the panels were taken and later compiled into a condition summary diagram and database of condition, stability, and treatment priority data (Figure 8). The assigned condition, stability, and treatment codes were also added to individual labels beside each of the panels in the store room.

The condition survey documented the instability of a number of panels. *Beach Scene* showed the most significant evidence of active flaking, paint detachment, and four different types of mould. The mould growth appears to have developed across the ochre paint, whereas Blewett (2003, 53) noted black circles of mould and white material confined to the blue and brown paint. Mechanical damage included large breaks to two panels from *Architectural Fragment*, significant scratches to the painted surfaces, and small losses and cracks to the panels.

The previous consolidation treatment with 10 percent Regalrez 1094 in Shellsol D40 on *Architectural Fragment* and *Loggia with Figures* appeared stable without discolouration. Significantly, poorer paint adhesion and advanced deterioration was visible on non-treated panels, indicating the success of the consolidation treatments performed in 2007 and 2008. Comparing previous research to current condition identified three missing panels from *Beach Scene* and one from *Loggia with Figures*. Furthermore, seven panels from the three paintings were confirmed as replacements created during the Bignor Park installation, notably without the

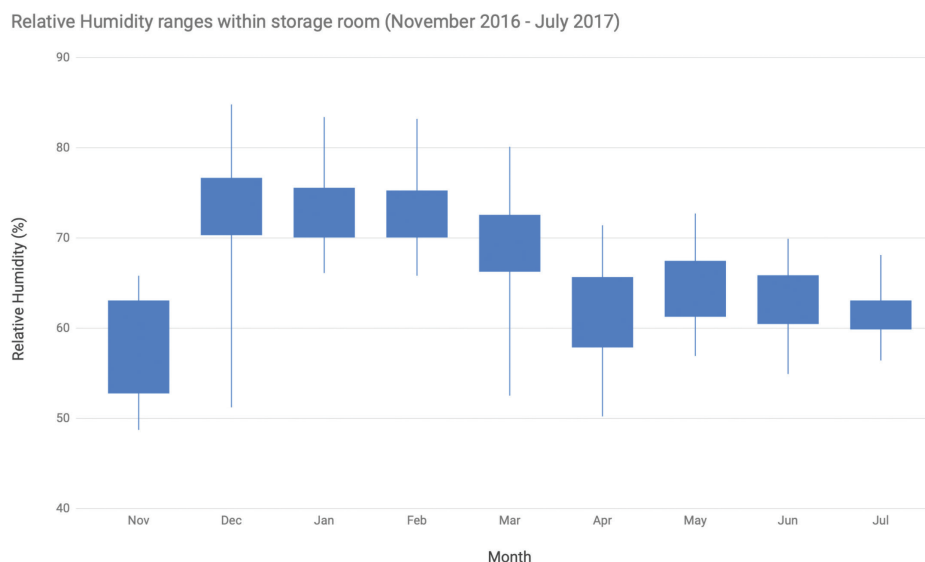


Figure 9. Relative humidity by month in the storage room of the Nicholson panels from November 2016 to July 2017

bevelled edges characteristic of the original panels (Blewett 2003, 45). The three replacement panels from *Loggia with Figures* had suffered extensive water damage with paint delamination and detachment.

Environmental monitoring

Over a nine-month period in 2017, an environmental monitoring programme was undertaken to assess the suitability of conditions in the store room and inform storage recommendations. The RH and temperature were monitored by two Tinytag Ultra 2 TGU-4500 instruments. Environmental conditions in the storage room fell outside of the Canadian Conservation Institute’s recommended range of 40 to 60 percent RH, 85 percent of the time (Mckay 2015). From November 2016 to July 2017, RH ranged from 48.7 to 84.8 percent (Figure 9), whilst temperature ranged from 4.2 °C to 26.2 °C. The average RH in the storage room almost certainly promotes mould growth and may relate to the increased presence of mould on the panels.

An ELSEC 764 UV+ Monitor was used to measure the visible light in lux and the proportion of UV in the ambient radiation in microwatts per lumen in the store room with the lights on over the course of one day. At 15 locations across the panels, measurements were taken at four specified times on one day. These results were not representative

of the average light intensity throughout the year but demonstrated the maximum light levels the panels experience in the store room. Visible and UV radiation levels exceeded recommendations of maximum levels of 200 lux and 75 $\mu\text{W}/\text{lm}$, ranging from 220 to 449 lux and 74 to 102 $\mu\text{W}/\text{lm}$. In August 2017, the compiled environmental and condition data led to the National Trust installing RH and temperature stand-alone monitors in the store room.

Storage and treatment

The condition of individual panels was reflected in the custom decision-making framework by presenting three different treatment options to be selected for each panel. ‘Treatment Option One’ of the decision-making model includes safe storage, documentation, and stable environmental conditions, identified as important preventative options by stakeholders. ‘Treatment Option Two’ adds bonding broken glass and stabilising paint, reflecting the two remedial treatment options selected most often by stakeholders. ‘Treatment Option Three’ includes in-painting and filling areas of loss to the glass. Treatment recommendations compiled in this project suggested a conservation program that applies ‘Treatment Option One’ to all panels. ‘Treatment Option Two’ will be necessary for the objects’ future display.

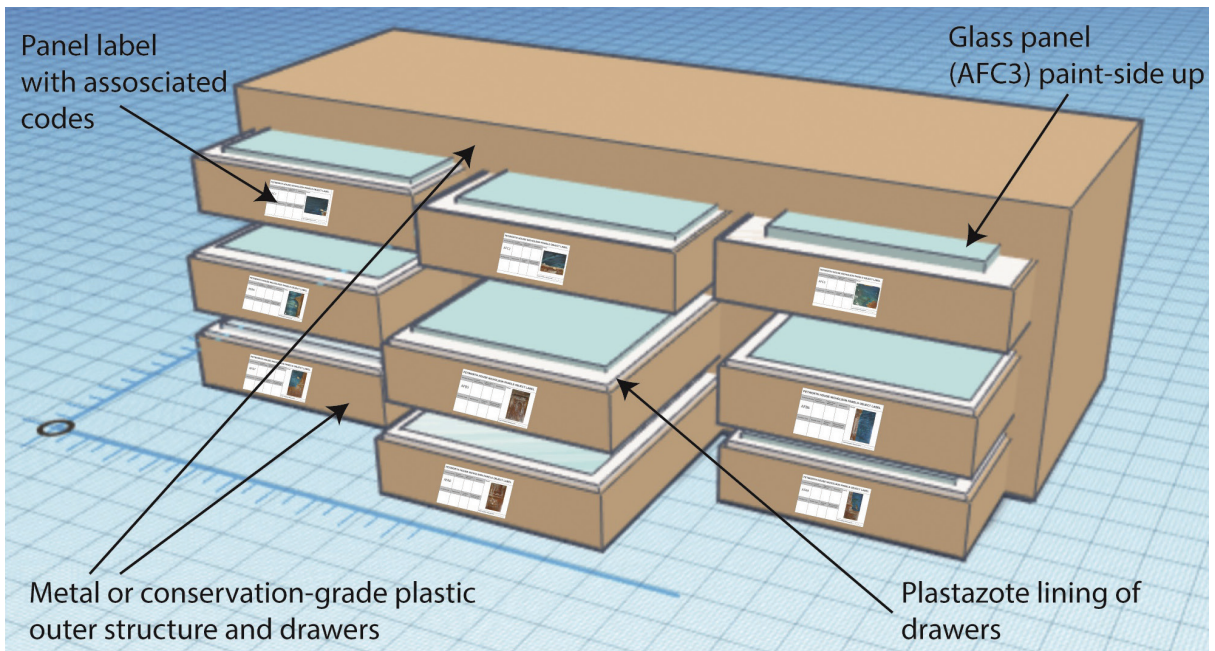


Figure 10. Design for a custom storage unit with drawers measured to each painted panel

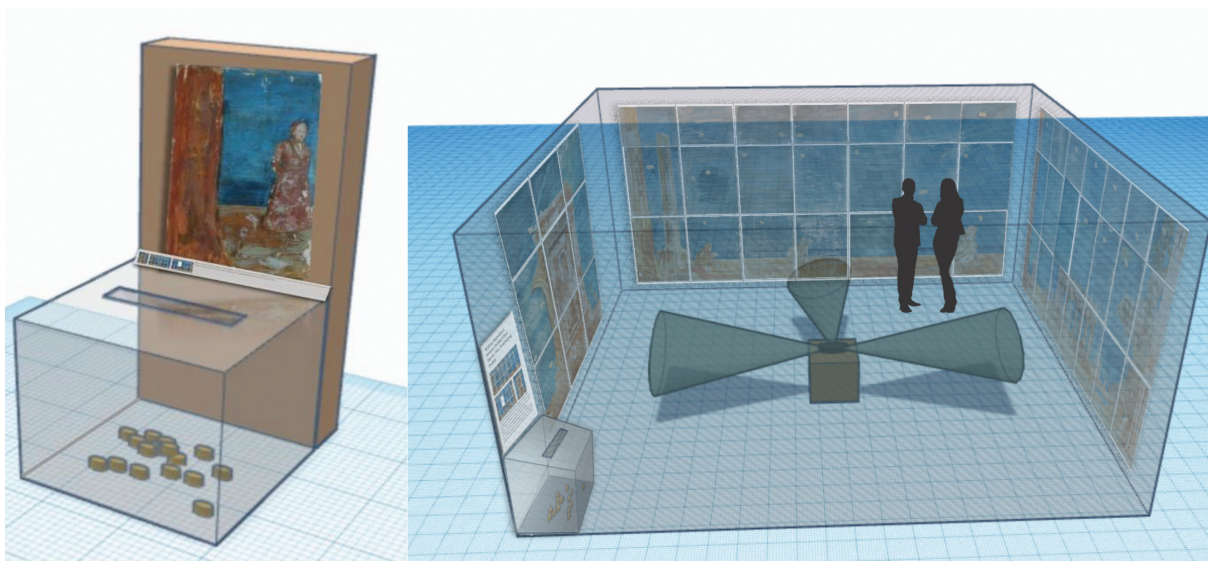


Figure 11. Visualisations of proposed display for a single panel or photographic projections in an exhibition space

Following the results of the condition assessment and environmental monitoring, a number of storage options were proposed. In 2017, the 50 reverse-painted glass panels were stored paint-side down on polyethylene plastic sheeting, each panel elevated from the sheeting by Plastazote polyethylene foam blocks along the edges of the panels. A number of storage solutions were researched and presented to the National Trust during this project, including conservation grade, polypropylene boxes upon archival racking, structurally-enhanced archival boxes, archival metal cabinets, or a custom storage solution. Custom options ranged from individual storage containers with layers of Correx polypropylene board to made-to-measure cabinets with individual frames for safer handling of the panels (Figure 10). To fundraise for storage and treatment of these large-scale, multimedia works, photographic projections in an immersive exhibition space or the temporary display of a single, stabilised panel may be utilised to promote further public engagement (Figure 11).

In 2019, stakeholder values, consultation, and collaboration continue to aid conservation decision-making. The National Trust is now working closely with the Rottingdean Preservation Society to consider storage and treatment options for facilitating the future display of the panels in Rottingdean. Display in The Grange Museum in Rottingdean, Nicholson's former home, would reconnect the panels within their historical context.

CONCLUSION

The Nicholson panels reveal the ingenuity and capabilities of this 20th-century artist. In 2019, the panels illustrate the challenges of improving access to large-scale artworks in public collections that require substantial resources. The pursuit of improved access has been possible through holistic and collaborative conservation approaches.

This approach to conservation decision-making has involved the input of a broad range of stakeholders, with 168 questionnaire participants contributing to understanding the objects' current contextual significance. With the majority of participants wishing to access the panels, public consciousness of these artworks

provided impetus for delivering improved access to the Nicholson panels. A custom decision-making framework examined the unstable material condition and unsuitable environmental conditions, leading to allocation of resources and recommendations for storage and less interventive treatment options. The historical, contextual, and contemporary significance of the works has also been comprehensively documented through this approach.

This project illustrates the importance of re-examining artworks with broader stakeholder input when approaching immediate and long-term conservation planning. The nature of a conservation project that focuses on dynamic concepts of value and access is that the evaluation of these concepts will be subject to change and should be regularly reviewed. Seeking out expansive stakeholder groups has initiated consultation between the National Trust and the Rottingdean Preservation Society. Ongoing consultation with diverse and inclusive stakeholder groups should further physical and conceptual access to the Nicholson panels for posterity.

NOTES

¹ Chichester High Street was chosen as the random sampling location because of Nicholson's association with Sussex and after employing a successful pilot survey. Chichester is also home to Pallant House Gallery, which holds examples of Nicholson's work and had proposed a 2018 exhibition of his work. A refusal log was kept, indicating a success rate of random sampling of 10 percent.

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REFERENCES

Australia ICOMOS Incorporated. 2013. *The Burra charter: The Australia ICOMOS charter for places of cultural significance*. <http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf> (accessed 27 February 2017).

- Blakey, M. 2008. Parish Church of St Margaret Rottingdean: A Guide. Unpublished guidebook.
- Blewett, M. 2003. William Nicholson's reverse painted glass panels: An investigation into the provenance, materials, techniques and future conservation of the Knoblock commission. Final Year project, The Courtauld Institute, United Kingdom.
- Blewett, M. 2004. The materials and techniques of twentieth-century reverse-painted glass panels: An investigation of William Nicholson's Knoblock commission. *The Conservator* 28: 11-19.
- Blewett, M. 2005. Consolidation issues and treatment strategies for delaminating layers on reverse glass painting: A literature review and case study. *The Picture Restorer* 28: 5-11.
- Bowness, A. 1967. *William Nicholson*. Bolton: Tillostons Ltd.
- Bretz, S., U. Baumer, H. Stege, J. von Miller, and D. von Kerssenbrock-Krosigk. 2008. A German house altar from the sixteenth century: Conservation and research of reverse paintings on glass. *Studies in Conservation* 53(4): 209-224.
- Caple, C. 2000. *Conservation skills: Judgement, method, and decision making*. Hove: Psychology Press.
- Christodoulaki, M. and R. Sloggett. 2016. Reporting on a survey of peer-reviewed publishing in cultural materials conservation: Perceptions, preferences, and decision-making. *Studies in Conservation* 62(6): 354-370.
- David, J. 2009. Case study: The treatment of six reverse paintings on glass from William Nicholson's Loggia with Figures and Architectural Fragment. *Journal of the Institute of Conservation* 32(2): 219-232.
- Illis, N., dir. 12 August 2018. Nicholson. *Fake or Fortune?* Television series episode. London: BBC Productions.
- Kelmarsh Hall and Gardens. 2012. The great debate: How to present the Great Hall of Kelmarsh Hall. <http://www.kelmarsh.com/AboutUs/News/tabid/97/ID/5/The-Great-Debate-How-to-Present-the-Great-Hall-of-Kelmarsh-Hall.aspx> (accessed 26 February 2017).
- Knoblock, E. 1939. *Round the room: An autobiography*. London: Chapman and Hall Ltd.
- Lithgow, K. 2008. Prioritizing access in the conservation of National Trust collections. *Studies in Conservation* 53(1): 178-185.
- Mason, R. 2002. Assessing values in conservation planning: Methodological issues and choices. In *Assessing the Values of Cultural Heritage*, ed. M. De La Torre, 5-30. Los Angeles: The Getty Conservation Institute.
- Mckay, H. 2015. Care of paintings on ivory, metal and glass. *CCI Notes* 10/14. Ottawa: Canadian Conservation Institute. <http://canada.pch.gc.ca/eng/1439925170573> (accessed 20 July 2016).
- Nicholson, W. 11 February 1914. Letter to Ben Nicholson. Tate Archive, United Kingdom.
- Reed, P. 2011 *William Nicholson: Catalogue raisonné of the oil paintings*. London: Modern Art Press Ltd.
- Sartorius, A. 2008. William Nicholson. Six glass panels. Treatment report, Whittlesford: The Hamilton Kerr Institute, United Kingdom.
- Sully, D. 2003. Conservation in context: A Maori meeting house in Surrey. *Archaeology International* 7: 53-56.