

**‘Most I saw were very dirty, some very ragged
and all of very coarse cloth’:
The Conservation of the Nineteenth-Century
Student Gown in the Hunterian, University of Glasgow**

By Karen Thompson, Sally-Anne Coupar and Julie Benner

The nineteenth-century student gown in the collection of the Hunterian¹ is rare and of considerable importance. Although it had been on display in the museum in the past, the gown was kept in storage for many years until its significance was recognized by Dr Neil K. Dickson, FBS, a former member of the Academic Dress Committee at the University of Glasgow, and an expert in this area.² He describes the gown thus: ‘It is a red gown of very coarse cloth. It is short, and has three buttons at the top of the front. The sleeves are cape-like and shorter than the gown. It has a collar, rather like a modern shirt collar, but underneath it a broader collar that extends over the shoulders (which gives it a very monastic appearance). The broader collar is scalloped with two points to the front and several to the back. Ribs run to the points. It has two inside pockets near the top. This gown is similar to the illustration “A Glasgow Student. About the year 1844” that forms the frontispiece to David Murray, *Memories of the Old College of Glasgow* (Fig. 1),³ except that the shirt-like collar looks smaller than that in the illustration.’⁴

The scarlet gown, known as the *toga*, worn by students of Humanity, Greek and Philosophy, has been in use since the beginning of the seventeenth century.⁵ It was not accompanied by an academic cap; around the mid-nineteenth century, when this gown was worn, the fashion was for older students to wear silk top hats, as shown in the illustration (Fig. 1). Although some students had gowns made by their tailors, which were of good quality and made from fine cloth, many students chose to purchase used robes from Hadden and Burnet, the two booksellers in High Street opposite the College, who sold both old and new gowns. Murray notes that ‘... there was a desire amongst some of the younger students to appear older than their years and with this object they donned gowns which had already

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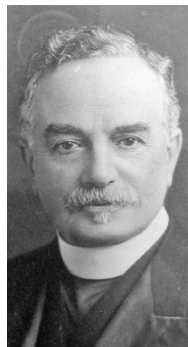
1 Hunterian Accession Number C.1986.49

2 His paper covers the complete history of Glasgow academic dress. ‘Tradition and Humour: The Academic Dress of the University of Glasgow’, *TBS*, 12 (2012), pp. 10–35.

3 Glasgow: Jackson, Wylie and Co., 1927.

4 We are most grateful for the generosity of Neil Dickson in allowing us to quote from his unpublished research.

5 David Murray, *Memories of the Old College of Glasgow: Some Chapters in the History of the University* (Glasgow: Jackson, Wylie & Co., 1927), p. 473.



LEFT: FIG. 1
Illustration 'A
Glasgow
Student. About
the year 1844'.
FIG. 2 The Revd
William Dickie.

seen years of service'.⁶ It seems that this vogue eventually reached epidemic proportions. A visitor to the Old College reported: 'The habit of the students gave me surprise. They wear scarlet gowns, reaching only to their knees. Most I saw were very dirty, some very ragged and all of very coarse cloth'.⁷

The gown was donated to the University of Glasgow⁸ by Dr R. P. Gillespie⁹ and was worn by his great-grand-uncle, the Revd William Dickie (Fig. 2). Dickie became minister of Dowanhill Parish Church and was awarded an honorary Doctor of Divinity. Dr R. P. Gillespie's son, Prof. Alastair Gillespie, and his wife Judith, have a memoir written by Dickie that includes a detailed description of his student

years. He enrolled at the Old College in 1870 when the University of Glasgow moved to its current location at Gilmorehill which centred around the neo-gothic main building designed by Sir George Gilbert Scott.¹⁰ In his 'Memoirs', Dickie states that he wore the gown in 1870, but it was actually his father's gown, and his father had worn it when a student in the 1850s.¹¹

Dickie studied under William Thomson (Lord Kelvin), one of the most famous lecturers at the University and Glasgow's greatest scientist. Prof Thomson 'dispensed with his own gown after his first or second lecture and did not insist on the students wearing theirs although a few did so'.¹² Dickie describes his experience of the great man in his memoirs: 'Although many of us did not learn much in Sir William's class, it was a liberal education to come into contact with such a master-mind. His talk to the class was a series of ellipses which one who moved on a similar plane of knowledge might have supplied, but which we, the uninitiated, could not. He flew across our sky like a comet; but it was something to have seen it'.¹³

⁶ Murray, p. 477.

⁷ Murray, p. 476.

⁸ Transferred to the Hunterian from the University of Glasgow Robing Room in 1986.

⁹ Robert T. Hutcheson, "Both Decent and Usefull"—Academic Dress in the University', *College Courant*, 55 (Martinmas 1975), pp. 13-15.

¹⁰ 'The University as a building was not quite finished then. The rooms were very bare.' William Dickie, 'Memoirs' (unpublished manuscript, courtesy of Professor Alastair Gillespie and Judith Gillespie), p. 103.

¹¹ This is what enables us to date the gown. By 1870 the design of student gowns had changed (personal communication with Neil Dickson).

¹² Murray, p. 478.

¹³ Dickie, p. 103.



LEFT: FIG. 3 Gown front before conservation showing dirt.



RIGHT: FIG. 4 Inside before conservation showing dirt and bands of discoloration.

The gown had survived remarkably intact over the years, but to ensure its future long-term preservation, it was sent for conservation to the University of Glasgow's Centre for Textile Conservation and Technical Art History. The University runs a two-year post-graduate conservation programme that teaches students the professional, practical and research skills necessary to work to preserve such historic textiles. Textile Conservation is a multi-disciplinary field combining scientific analysis and a knowledge of textile history and construction techniques (such as weaving, knitting, felting etc.) with the practical skills necessary to carry out conservation treatments.¹⁴ The project was undertaken by a student conservator as her final practical project. This conservation project involved effective collaboration between conservators, curators and scientists.

The first task of the conservator was to closely examine the gown in order to gain an understanding of its construction and condition, which would determine the most appropriate approach to conservation. This detailed study provided the conservator a further opportunity to learn more about the gown and its history that would also contribute to its preservation and interpretation. Three main construction elements were identified: scarlet fulled wool fabric making up the main body of the garment as described by Dickson, inner breast pockets of undyed cotton, and twill-woven fine wool binding used to finish the edges (Fig. 3).¹⁵ All of the outer edges of the main fabric were finished with this binding, including sleeves, collar, and the front opening of the gown, with the exception of the bottom edge,

¹⁴ Further details of the programme can be found at <<http://www.gla.ac.uk/postgraduate/taught/textileconservation/>>, accessed 26 July 2013.

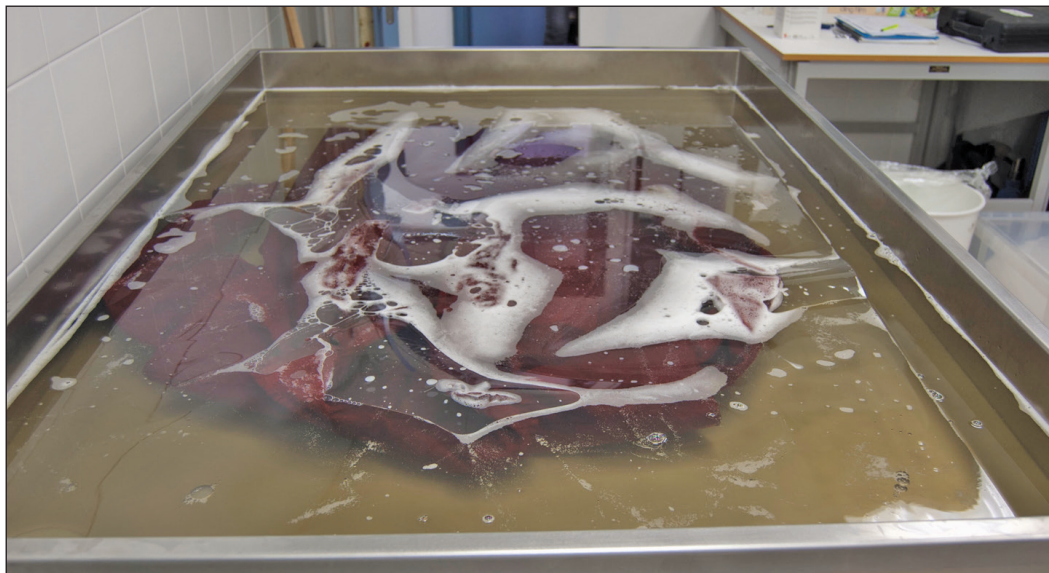
¹⁵ Fibre analysis was performed on small samples of each construction element using light transmission microscopy to identify composition.

which had been left unhemmed and unfinished. The conservator was not able to determine whether this had been the original construction of the gown or the result of later alteration. However, it did appear unusual that the bottom edge had not been hemmed or covered with the binding as was found on all the other outer edges, showing an inconsistency in the construction. As mentioned earlier, the gown had been worn by two generations of the Dickie family, so it is possible that the gown had been altered in length for the different wearers, as it was customary for such gowns to be worn just below the knee and this may indicate that the lower edge had been cut or altered. It would be interesting to compare this with other gowns of the period to see how the hems were finished.

Close examination of the condition of the fabrics can also provide information about an object's history. Structurally, the gown was in good condition. All elements were relatively undamaged and intact, with the exception of some loss in the proper right armhole which required stabilisation. Loss and damage to armholes is common in pieces of historic costume, as these areas undergo stress and strain during use. The major condition to be addressed was the overall soiling of the gown. Though still quite vibrant in colour, comparison of the gown in exposed areas to protected areas (under buttons and just inside fabric folds) revealed a significant difference between the original vibrant red and the current colour, which appeared to be the result of a combination of soiling and fading. The soiling gave the gown a dark grey cast distributed throughout, in some places unevenly. One interesting aspect of the discoloration that occurred on the bottom third of the gown was that it had distinct bands of discoloration. This pattern of discoloration from the soiling was consistent with the gown having once been turned up and hemmed to make it shorter, which may be further evidence of the use by a different wearer (Fig. 4).

Removal of soils which may damage fibres or detract from the appearance or interpretation of historic textiles is an oft-addressed issue in textile conservation. Conservators must strike a balance between removing contaminants that may accelerate deterioration and preserving material which is essential to the understanding or interpretation of the object, or that may be relevant to other research. In the case of the gown, the soiling was thought to have accrued over time largely as a result of airborne pollution, in particular soot from the burning of coal which had deposited over the life of the object particularly throughout the nineteenth century. The gown's use by Dickie and his father through the 1850s and 1870s means it would have been exposed to such pollutants. However, this type of soiling can create potentially acidic conditions which can pose a threat to long-term preservation of historic wool fibres.¹⁶ The pH (a scale which measures how acidic or alkaline a substance is) was measured on the gown and was found to be acidic. There was evidence of shedding of wool fibres, which indicated they were degrading. In this case, the soiling was considered a major contributor to the gown's deterioration. After much discussion between conservator and curator, it was decided it was necessary to remove the soiling to preserve the gown, even though the soiling was considered historically important, as it provided evidence of the gown's use. Detailed documentation and photography now provide a permanent record of the soiling and the condition of the gown before conservation.

16 N. S. Baer, 'Effects of acidification on artifacts in archives and museums', *Acidification and its policy implications: proceedings of an international conference held in Amsterdam, May 5-9, 1986* (Amsterdam: Elsevier, 1986), p. 226.



ABOVE: FIG. 5 Dirt released into the water is evident during cleaning.
RIGHT: FIG. 6 Monitoring the pH.

In order to remove the soiling, cleaning of the gown was proposed. It was cleaned initially with low-powered vacuum suction to remove the dust and loose particulate dirt. This was followed by wet cleaning to remove the ingrained soiling. Textile conservators wet clean objects in a way that is far gentler than traditional wet cleaning methods, often using softened water heated to no higher than room temperature with detergents that will not deposit additives.

They also tend to clean objects when lying flat, ensuring that handling is kept to a minimum to prevent damage, as fibres are more susceptible to breakage when wet (Figs 5 and 6). To prepare for wet cleaning the vulnerable damaged area at the proper right armhole was supported before immersion by sandwiching it between layers of nylon net secured with temporary stitches to be removed after wet cleaning. The gown was then immersed in a solution of water and conservation grade detergent and gently sponged to encourage soil release.





ABOVE: FIG. 7 Wearer's right (proper right) armhole showing damage and alteration of sleeve setting.

BELOW: FIG. 8 Wearer's right armhole after support and correction of sleeve setting.





FIG. 9 Front of gown after conservation.



FIG. 10 Back of gown after conservation.

Soiling readily released into the wash solution, quickly turning it a yellowish brown (Fig. 5). A total of two baths and nine separate rinses were performed over a span of several hours to ensure that all soils released were removed along with any residue of detergent. The pH was monitored throughout the process and was raised to a near neutral level by the end of the cleaning process (Fig. 6). During the cleaning, it was possible to detect the release of a distinct odour thought to be naphthalene, a compound which would have been used in the past to deter pests, which tends to be released into the atmosphere when in contact with water. Fumes from naphthalene can be quite toxic. The safety of the conservator is paramount so it was necessary to use a vapour respirator from that point on while tending the wash-bath.

After cleaning and air-drying, the gown's colour had been enhanced, reviving the tone of the scarlet considerably, though not removing the discoloration entirely. The passing of time can cause soils to become so far ingrained into fibres that they can no longer be separated from the fibres themselves. Still, the removal of the soil appeared to have improved the condition and appearance of the gown. It is notable that even the soil that was removed was also considered of interest and has sparked a new research project. The project aims to develop novel methodology that allows a detailed analysis of the dirt on historic textiles and what this dirt can tell about the history of historic textiles. Understanding the nature of the soiling will inform the choices a conservator makes to aim to ensure an object's long-term preservation whilst taking into account its historical significance. It will involve collaboration between scientists, curators and historians, bringing together cutting-edge advances in material sciences to allow identification of dirt on historic textiles at the molecular level. Of particular interest are polyaromatic hydrocarbons and soot particles relating to industrial pollution such as that found on the student gown. The project is still in its infancy but further details can be found on the University website.¹⁷

In order that the gown can be safely displayed in the future, stabilisation of the damaged and holed areas was also required as a part of its conservation. The area of loss in the proper right armhole was patched with a wool fabric of a similar weight and drape as the original to provide support.¹⁸ This wool was custom-dyed at the Centre to match the scarlet colour closely. Supporting the loss in the armhole required the removal of some previous repair stitching; again before this was done curator and conservator consulted to determine whether this should be removed. The repair stitching, done in thread of a colour similar to the original, appeared hastily done, and did not effectively support the armhole for undergoing future handling, access or display. Handling of costumes, including dressing on a mannequin or form, can place stress on armholes which may easily contribute to damage and loss. It may have been quickly stitched in order to facilitate hanging storage prior to coming to the Hunterian, but was now literally holding the armhole together by a thread. It appeared that the repair had also reversed the orientation of the original sleeve construction, which was apparently untouched on the opposite armhole (Fig. 7). Some of the repair

¹⁷ See <<http://www.gla.ac.uk/subjects/historyofart/research>>, accessed 26 July 2013.

¹⁸ The aim of the stabilisation was to support the damaged area so that it was less vulnerable to further loss or damage. The conservation support was less noticeable from a distance so as not to distract from the object but could be seen when closely examined to make it evident that it was a later repair. Further reading on current conservation practice and factors that inform approaches to treatment can be found in Lennard and Ewer.

stitches were therefore removed in order to patch and secure the sleeve in a stable construction that reflected what was thought to be the original design (Fig. 8).

Once completed, the conserved gown was returned to the Hunterian Collection (Figs. 9 and 10). The results of the gown's treatment achieved the aims set out for its conservation. In addition, the exchange of information between conservators, curators and scientists during the project contributed greatly to the understanding of the gown, its materials, and its history.

The story of the gown, its discovery by Neil Dickson, its comparative rarity and its conservation journey has attracted interest from many people, including the BBC featuring on Reporting Scotland.¹⁹ When the Hunterian gains a larger store with increased exhibition space in 2015, it is hoped that the gown can be displayed again and that for the first time in many years, visitors to the museum can learn its story.

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The Hunterian is the legacy of Dr William Hunter, a pioneering obstetrician and teacher with a passion for collecting. When he died in 1783, he left his vast collection to the University, along with the money to create a suitable museum. The Hunterian first opened more than 200 years ago, in 1807, and today is rated as one of the top five museums in Scotland because of the scale, range and national significance of its collections. It is owned by the University of Glasgow.

¹⁹ See <<http://www.bbc.co.uk/news/uk-scotland-18061961>>, accessed 20 June 2013.