

Murder in the archives: additions to the Sydney Smith Collection

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History & Humanities



Axes, knives, truncheons and several home-made weapons are some of the feature pieces of a newly deposited collection within the Royal College of Physicians of Edinburgh archive. This paper uses examples from this unusual collection, consisting of 40 weapons and over 400 glass slides, to demonstrate the significance and contribution it has to understanding late 19th- and early 20th-century forensic science and medicine in Scotland.

Previously belonging to the late Sir Sydney Smith, these objects and glass slides supplement the Sydney Smith paper collection that contains numerous casefiles spanning his career as a forensic practitioner both in Britain and internationally. The records from these collections offer the potential for understanding developments in early 20th-century forensic practices whilst highlighting some of Britain's macabre criminal history.

Keywords: archives, dark exhibitions, dark tourism, forensic medicine, forensic science, Sydney Smith

Financial and Competing Interests: RMC received a grant (AH/L503812/1) from the Arts and Humanities Research Council, via the Heritage Consortium, towards a Postgraduate Certificate in Heritage Research and ongoing PhD research. Funding was received from the Royal College of Physicians of Edinburgh for an internship.

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Introduction

Axes, knives, truncheons and several home-made weapons are some of the feature pieces of a recently deposited collection within the archives of the Royal College of Physicians Edinburgh (RCPE). The collection, formerly held by the late Sir Sydney Smith, Chair of Forensic Medicine at the University of Edinburgh, also contains several hundred glass negatives demonstrating various subdisciplines of forensic science dating from the early–mid 20th century. An initial review of the collection highlighted a number of intact evidence labels attached to some of the objects and labelled glass negatives, linking several of these images and objects to forensic investigations from the late 19th- and early-20th centuries. The following paper seeks to demonstrate the contents of the collection, highlighting its potential significance as a research tool and heritage resource, using select examples from the collection. In doing so it is hoped that this will encourage further engagement with ongoing impact.

The collection was brought to the College's attention in the early 1990s when it was advertised in an auction brochure of Bowness auctioneers DJ Manning. An existing collection of paper records detailing the life and forensic career of Sydney Smith had previously been deposited with the archives in the 1970s.¹ The College thought that the objects and images

would provide supplementary information to the criminal casefiles found in the paper records and it was the College's intent to purchase the material. However, the RCPE archives were unsuccessful in securing the collection at auction but maintained contact with the successful bidder and, after almost two decades, secured the deposition of the material in October 2016. The collection has now been fully catalogued, and, after some investigative work, several of the weapons and slides have been connected with their original cases as a precursor to potential further research.

Forensic medicine in the early 20th century

Forensic pathology is the investigation process of ascertaining the cause of death of an individual who died in suspicious circumstances. This is primarily achieved through postmortem examination of the body supplemented by analysis of additional evidence gathered from the body and/or the crime scene. The result is a contextual and evidence-based judgment from the presiding forensic pathologist.

In the late 19th century the forensic pathologist was usually identified as the first medical practitioner to arrive at a crime scene; these were not medico-legal specialists but rather investigators considered to be qualified based on their medical acumen and cognitive prowess. At crime scenes

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they would be observers, their area of expertise being the postmortem examination once the body was removed from the scene. However, the early 20th century saw a change in this role, with the rise of the qualified, specialist pathologist. This adapted role saw the forensic pathologist become engaged with both the crime scene and the mortuary. Bernard Spilsbury, an English forensic pathologist, has been most associated with the transformation of the role of the medico-legal expert.²

Recent work by Ian Burney and Neil Pemberton has shown that throughout the first half of the 20th century in England there was a transition in the way that forensic medicine and other forensic subdisciplines interacted. This ultimately saw forensic medicine become one of multiple subdisciplines used in the investigation of crimes against the body, what Burney and Pemberton describe as a merging of 'forensics of bodies' with 'forensics of things'.² However, historical studies into an integrated forensic investigative practice from this period are few, with a high proportion of literature coming from practitioner accounts and biographical works of celebrated figures, such as Bernard Spilsbury and Sydney Smith.^{2,3} Comparatively, the process of integration appears to have occurred much earlier in Scotland. In this respect England has been identified as having lagged behind, not only Scotland, but also the rest of Europe.^{2,4} Indeed, Nicholas Duvall shows that forensic medicine had a strong institutional basis in Scotland, with forensics departments situated in both the Universities of Edinburgh and Glasgow engaged in forensic research and practice. Sydney Smith, amongst others, is identified as engaging in multiple forensic techniques, including blood stain analysis and ballistics, clearly demonstrating a move away from the 19th-century practice of forensic pathology towards a 'multifaceted discipline'.³

The Sydney Smith Collection provides an opportunity to explore forensic pathology, its relationship within the wider field of forensic science, and the changes in both forensic practice and teaching across the course of the early 20th century. Though Burney and Pemberton's work identifies forensic pathologists as significant actors within the continuum of the forensic science, it does not focus specifically on the development of forensic pathology as a discipline, they recognise that this is a 'history that deserves telling'.²

Sir Sydney Smith

Sir Sydney Smith was a renowned forensic practitioner in the early-mid 20th century who acted as a forensic expert on a number of high profile cases in Scotland, in England and internationally. His forensic cases have been well documented in the literature, and his extensive and well-documented career has become the source of a number of higher education theses.^{3,5}

The Sydney Smith paper collection, also held by the RCPE archives, includes a range of documentation that provided

the basis of a biographical sketch covering Smith's career in both education and research in forensic science and as a forensic expert.⁶ Joy Pitman notes that Smith's introduction into forensic medicine was more accidental than planned. As a native of New Zealand, Smith came to the University of Edinburgh to study medicine, in which he graduated in 1912. His first medical position was as a locum general practitioner in Fife; however, this was short lived and on seeking a position in ophthalmology at the university the Dean of Medicine, Harvey Littlejohn, persuaded Smith to become his assistant in forensic medicine. During these early days working with Littlejohn, who was also the chief police surgeon in Edinburgh, Smith attended a number of cases in which he was charged with the collection of adipocere samples, a waxy substance that forms following the decomposition of soft tissues, particularly in bodies that had been submerged in water for long periods.⁶

In 1914 Smith left Edinburgh to take up a post as Medical Officer of Health in New Zealand. Following this, he was briefly transferred to the New Zealand Army Medical Corps before returning to forensic medicine, taking up the position of Egyptian medico-legal expert in 1917; a role which also came with a lectureship at the University of Cairo. Smith held this position for the following 10 years, during which he became proficient at detecting arsenic poisoning, a prevalent form of murder at the time, and also produced pioneering work in ballistics. His work in ballistics contributed to a number of criminal cases, including the identification of the Sirdar's (The Commander and Chief of the Egyptian Army) assassins. During this time Smith maintained contact with his mentor Harvey Littlejohn and even consulted on one of his cases during a short holiday in Edinburgh in 1927. Following the death of Littlejohn later in 1927, Smith was offered the position of Chair of Forensic Medicine for which he returned to Edinburgh in 1928.⁶

During the following 30 years Smith acted as a forensic expert on behalf of both the prosecution and the defence on a range of criminal cases in England and Scotland. Reports, correspondence and casefiles from many of these are available in the Sydney Smith paper collection.¹ Furthermore, Smith documented much of his own career in his autobiographical work 'Mostly Murder'.⁷ The title leaves little question as to the theme of the autobiography as it recounts a number of cases Smith consulted on, from his early career working alongside Harvey Littlejohn to some of his most high-profile cases. The recently deposited collection brings a more illustrative and physical dimension to the cases recounted in these works and to the careers of Sydney Smith and Harvey Littlejohn.

Teaching through pictures: glass negatives for education and research

Aside from his role as a forensic practitioner Sydney Smith was a dedicated educator and researcher. During his time in Egypt he published his first text book, for which he published a further five editions, alongside numerous journal articles.⁸

His work did not only target the academic community; in addition to traditional academic journals such as the *British Medical Journal*, Smith also published in a wide range of journals targeted at more practical professions such as the *Police Gazette* and the *Scottish Nurse*.⁶ His publications were supplemented with a number of public lectures on his research that covered an extensive range of topics.⁶ His engagement with lay, professional and academic audiences reflects Smith's eagerness to educate and share his research as a contribution to forensic medicine and science. This enthusiasm was also passed on to his students at the University of Edinburgh, with a number of tributes reflecting how well liked and respected he was; which is again shown with his election to Rector in 1954, for which there are records within his paper collection in the archives.^{1,6}

Within the recently deposited collection there are in excess of 450 glass negatives, which appear to have been a sizeable portion of Smith's research and teaching material. The negatives were mostly loose slides, some were labelled but the majority have been identified through examination of the image itself. A portion of larger slides were contained in a series of boxes. These had handwritten labels to indicate which aspect of forensic science or medicine – either as research or for teaching – they were associated with; all of the boxes were identified as belonging to Professor Sydney Smith. The glass negatives cover a wide range of themes from forensic science and medicine, including ballistics, spectroscopy of blood samples, and stages of putrefaction and decomposition; an example of these can be seen in Figure 1. Some of the more specific slides show images of poisonous flowers, samples of handwriting, fingerprints and hair samples, gunshot and burn wounds, and skeletal trauma.

Furthermore, the slides demonstrate many of Smith's research interests, both as an active practitioner and on a more personal level, and provide examples from his casework. Several slides include detailed statistical and illustrative data related to personal injury sustained from road traffic collisions due to alcohol, which has been noted as a particular interest of Smith's.⁶ There are also demonstrations of Smith's interest in the history of forensic science and medicine providing a more rounded view of him as a professional of the discipline; he published frequently on this subject.⁹ Examples of Smith's casework include an image of the victim, Chrissie Gall, from the case against Peter Queen. The associated casefile was also present within the archive and the case is one which is detailed in Smith's autobiography.^{7,10}

Peter Queen was arrested for the murder of Chrissie Gall in Glasgow in 1932. This was an unusual case of strangulation and asphyxiation, where the victim was found tied around the neck to the headboard of a bed; the slides associated with this case show the victim as she was found. The death was reported to the police by Queen, though there is some contention as to what occurred during the report. Queen claimed to have said, 'My wife is dead. Don't think I have

Figure 1 Glass negative with labelled box belonging to Sydney Smith. Image provides an example of magnified handwriting. Image from the RCPE Archives OBJ/OBJ/18/2/15



killed her', though the police officers he reported to disagreed with this saying they heard him state, 'I think I have killed my wife'.⁷ Though Chrissie Gall was reported to have attempted suicide on a number of previous occasions, Peter Queen was charged and found guilty of her murder. He was sentenced to death, but this was reduced to penal servitude for life following petitions by councillors, MPs and members of the Glasgow public.⁷ The associated slides show the deceased Chrissie Gall. Unfortunately, unlike the case against Peter Queen, the majority of the glass negatives that demonstrate forensic cases are largely unidentified and as such it is difficult to ascertain whether these are from amongst Smith's portfolio of cases or if the images were secured to provide illustrative examples of specific types of crime.

A further possible set of images from Smith's casework came in a box labelled 'Ruxton'. Smith's autobiography details his involvement in the case against Buck Ruxton, a doctor convicted and hanged for the murder of his common-law wife and their housemaid in 1935; there are associated paper files for this case within the collection.^{7,11} The images show trauma to a human skull and other parts of a skeleton. It is unclear if these are specifically connected with the 'Ruxton' investigation, though it is likely given the trauma demonstrated.

The variety shown within the slides, as a combination of Smith's practice as a forensic expert, research interests

Figure 2 Wooden knife sheath taken as evidence in the case against James Brown Marr for the murder of Mary Ann Mills, November 1928. Image from the RCPE Archives OBJ/OBJ/18/1/18



and possible teaching material, demonstrates the diversity of his experience and knowledge within this field. The first half of the 20th century in England, as outlined by Burney and Pemberton, saw a changing dynamic in the way forensic pathology interacted with crime scene investigation, whereby the 'forensics of bodies' became a part of the larger investigative framework of the 'forensic of things'.² Sydney Smith's collection of glass negatives provides a remarkable window into the incorporation of 'forensics of things' into his teaching. Indeed, it further adds to the picture of early 20th-century forensic medicine and practice from both a Scottish and forensic pathology perspective.

The material culture of forensic investigations

Forty objects associated with forensic investigations make for an imposing and tangible addition to the Sydney Smith archive. These allow for further exploration into various forensic practices that were employed by pathologists during the course of a criminal investigation. Furthermore, as physical evidence of crimes these also encourage an emotive response to such investigations, providing a more complex view of forensic practices. Using newspaper and archival records it has been possible to link both Smith and his mentor Harvey Littlejohn with several of the objects, allowing these to be explored in greater detail.

As previously noted, there are evidence labels attached to many of the objects from the original investigations. Several of these are preprinted labels, completed to detail the case they were associated with, the date they were taken, the address from which they were seized and any other additional information, such as witness names. Using this information, it is possible to link some of the objects with newspaper articles connected with the investigation and subsequent trial. An example of this is a cylindrical wooden tube with an attached piece of cord shown in Figure 2. The attached label identifies this as a knife sheath with attached cord, taken as evidence in the case against James Brown Marr in November 1928.¹² Marr was arrested for the murder of his colleague Mary Ann Mills who was found dead at their place of occupation, a framing workshop on Rose Street, Edinburgh. Short articles covering the trial of this case were identified in *The Scotsman*, 19 February 1929, and *The Aberdeen Press and Journal*, 20 February 1929, but a second article in *The Scotsman*, 20 February 1929, provides the greatest detail of the evidence given. The article indicates a plea of insanity was put forth by the defendant and outlines the evidence provided in support of this. It also records the final verdict of culpable homicide.¹³ Smith's role in this case is unclear as he is not named in the newspaper articles; still, the identification of the knife sheath within the collection and the date of the case provide some circumstantial evidence of his connection to the case.

Through tracing the information from the evidence labels it was possible to identify that several of the weapons pre-date Smith's career in forensic medicine and at least one, a metal bar and piece of wooden cane, connected to the case against Clementina Cameron in 1868, can be associated with Smith's mentor, Harvey Littlejohn.^{14,15} Unfortunately, none of the weapons could be definitively linked to Smith's paper records, though many of those without labels may be associated with some of these. Indeed, using the information taken from the evidence labels and crossreferencing this with records from the High Court of Judiciary and Lord Advocates Department held by the National Records of Scotland, Edinburgh, it has been possible to link some of the weapons to cases for which Smith acted as a forensic expert.

The case against John Maxwell Muir is an example of this. Within the collection is the short-handled axe shown in Figure 3, identified from its label as being associated with this case.¹⁶ The label records the date of the incident as 19 January 1933 and that the axe was found in the coal cellar of the accused's house in Dumfries. Muir was charged with the murder of his wife after her body was discovered in their home. Samples of flooring and material from the house along with items of Muir's clothing stained with blood were taken as evidence. The axe was located in the coal cellar following a search of the premises by police, and the police surgeon later identified hairs caught in the wooden handle in addition to blood that was staining both the head of the axe and its handle.¹⁷ This case was traceable through newspaper archives and High Court of Judiciary records. Within the records there are two reports made by Sydney

Smith in his capacity as an external forensic expert. Smith had not been present at the crime scene but was consulted later concerning the injuries sustained by the victim, the role of the axe in causing these, and in ascertaining if blood found at the crime scene and on Muir's clothing belonged to the victim. A second set of records pertaining to the appeal case of Muir provides a copy of the original court proceedings in which Smith gave testimony.

Smith's role in the Muir case was to identify if the blood found on the axe was human blood and, more specifically, that of the victim. The detection of different blood groups and of different antigen profiles within blood had been discovered at the turn of the 20th century and was quickly adopted by forensic science as a means of comparing blood from a crime scene to that of a victim.¹⁸ Smith employed this analysis in the Muir case to prove that blood found on the axe, at the crime scene and on the clothing worn by Muir was that of the victim. Furthermore, Smith confirmed that the hairs taken from the wooden portion of the axe matched 'in all details' to the sample taken from the victim; these would have been compared microscopically to identify similarities in colour, structure and cuticular traits between the hair taken from the axe to those taken from the victim.¹⁹ A reconstruction of the skull was also undertaken by Smith, and in his evidence he notes that significant cracking and shattering of the bone was observable. When questioned further Smith acknowledged that the resultant injuries would have been caused by some considerable force and that the reconstruction of the skull showed that the axe fitted exactly with the injuries.¹⁷ John Maxwell Muir was found guilty of the murder of his wife and was sentenced to death. However, following an appeal his sentence was reduced to culpable homicide and a sentence of penal servitude for life was given.

The weapons are a baseline from which several of Smith's and Littlejohn's cases can be investigated to provide insight into late 19th and early 20th-century forensics. Numerous weapons within the collection have only partial labels attached or have no corresponding information, which, due to time constraints, have not been studied in any depth. However, these along with several of the labelled weapons offer great scope for future research.

The Sydney Smith Collection: a heritage resource

The examples outlined above provide a glimpse into the potential that the Sydney Smith Collection holds as a research tool and as a wider heritage resource for educational purposes. The combination of glass negatives, paper records and objects make it possible to explore a range of research questions and themes, including, but by no means limited to, the temporal trends in the role of the forensic pathologist in Scotland over the course of the late 19th and early 20th centuries; changes in approach to education in forensic science; the integration of forensic sciences with forensic medicine and how this fits into the wider framework of forensic investigation across the UK; or, more specifically, Smith's research interests and contributions

Figure 3 Short-handled axe taken as evidence in the case against John Maxwell Muir for the murder of his wife, January 1933. Image from the RCPE Archives OBJ/OBJ/18/1/32



to the field as a significant player. Furthermore, there is scope for impact within modern day forensics. Burney and Pemberton have recently identified the practice of using the past as a means of challenging forensic modernity. This challenge is set from the view that DNA evidence is slowly replacing other forensic subdisciplines to the detriment of an overall forensic investigation, and that by looking at the interaction of these subdisciplines in the past it will be possible to form a more rigorous forensic investigative process for the present day.² They argue that a combined forensic science, as a combined process of subdisciplines, did not come into being until the 1930s in England. An analysis of the objects from the Sydney Smith archive, and their contextual background information, suggests that this was not the case in Scotland and that collaboration began earlier here than it did in England. The potential impact on present day forensics from the study of past practice, in addition to the research possibilities identified from a historical standpoint, further highlight the significance of this unusual set of records. This potential is already becoming apparent within the RCPE archives through a number of research requests from members of the academic community.

In addition to academic research, the collection holds scope as a heritage resource – a collection of historical significance on early 20th-century forensic practices. The material culture lends

itself to public display as exhibition material for educational purposes. Public interest in the material has already been established through two sold-out public engagement talks held at the RCPE entitled 'Deadly Nightshade: The Darker Side of Edinburgh's Medical Past'.²⁰ The RCPE are currently in the preliminary stages of planning a further Crime Scene Investigation event and an exhibition, both of which will feature the objects from the Sydney Smith Collection. However, the nature of the collection should not go unmentioned. The Sydney Smith Collection, particularly the objects, are predominantly associated with criminal and murder investigations and as such fall within the broader heritage and tourist landscape of what has become known as dark tourism.²¹

Philip Stone describes 'dark exhibitions' as, 'those exhibitions and sites which essentially blend the product design to reflect education and potential learning opportunities ... [they] offer products which revolve around death, suffering or the macabre'.²² The nature of this form of heritage, however, raises ethical questions over the ways in which these subject matters are presented to the public, whether this be for the purposes of tourism, public engagement or learning.²² Duncan Light outlines the main arguments of ethical debate for such exhibitions and tourist sites. He notes that these fall into three key areas: firstly, the suggestion that commodification of dark heritage can lead to distorted or misrepresented history or historical events; secondly, that the educational value can be diminished through an emphasis on entertainment or spectacle; and finally, that there are concerns of authenticity of what is presented.²¹ The Sydney Smith Collection provides a significant contribution to the study of forensic science history in the early 20th century, with appropriate learning objectives the archive has the educational capacity to be of great interest to a wider public audience. However, given the nature of the material, it does hold the potential to become a spectacle erring towards the glorification or romanticising of murder. By using the objects and contextualising information from the investigations they are associated with as a means of demonstrating themes and practices within the wider framework of forensic science, it is possible to maintain an ethical and authentic portrayal of the collection akin to comparative dark exhibitions.

In both nature and content, this collection is comparable to a number of other 'dark heritage' exhibitions and museum collections that focus on themes associated with death, forensic medicine and the macabre.^{21,22} Scotland Yard's Museum of Crime, dubbed the 'Black Museum', tells the stories of numerous criminal cases, using these to focus on aspects of forensic and criminal history such as illegal abortion and espionage, through an array of exhibited objects that are comparable to those from the Sydney Smith Collection.^{23,24} The Black Museum is not a permanent museum, it was open for a period of time as a ticketed event in 2015, however, it does loan out its exhibitions to other museums.²⁵ In 2015 the Wellcome Trust ran the 'Forensics: The anatomy of crime' exhibition that explored aspects of the history, science and art of forensic medicine.²⁶ Much like the Black Museum and the material culture from the

Sydney Smith Collection, the exhibition utilised original evidence, archival and photographic material, and forensic instruments and specimens to look at both developments in forensic medical investigations across time and geographic location. Where these exhibitions have focussed on historical forensic practices, alternate exhibitions, such as those in the University of Edinburgh Anatomy Museum and King's College London's Gordon Museum of Pathology, demonstrate a range of pathological specimens from forensic medicine broadening the theme of forensic medicine to incorporate biological material.^{27,28} Though exhibitions focussed on pathology are not directly comparable to the Sydney Smith Collection they serve as further evidence of the historical significance and learning outcomes that can come from public exhibitions on forensic medicine and science, and on those individuals who were central to the development of what we consider to be modern forensic practice.

Conclusion

This paper has sought to demonstrate the potential offered by the Sydney Smith Collection and in doing so invite researchers to delve deeper into the archive to further explore the breadth of information it contains. The collection has been fully catalogued and any discernible connections made between the new material and the original paper files during the research phases of this project have been added to the archives online catalogue. In addition to the RCPE archive's online catalogue, the new RCPE 'Artefacts Online' database has now also been launched and contains images and a brief description of all 40 weapons from the Sydney Smith Collection.²⁹

The combination of the original Sydney Smith paper collection and the newly deposited collection of glass slides and objects provides a significant contribution to early 20th-century forensics and gives more depth into the career of a renowned forensic scientist. Where the history of forensic pathology has largely been reliant on biographical and autobiographical texts from key contemporary practitioners, the objects from the Sydney Smith Collection, and their associated contextual information, offer an evidence-based approach to the study of contemporary forensic pathology. As such, these could provide the groundwork for a true history of forensic pathology in Scotland as a comparison to English practices, separate from the likely sensationalised accounts provided through biographical works. Indeed, as a collection the Sydney Smith papers and objects could have a significant impact on the history of early forensic pathology and more broadly on the historiography of early 20th-century forensic science. 

Acknowledgements

I would like to extend my thanks to the RCPE Archives for the opportunity to work with the Sydney Smith Collection, especially Daisy Cunynghame, Iain Milne and Estela Dukan. I would also like to credit Iain Milne for the images that supplement this paper. Finally, I would like to thank Dr Rosemary Wall, Daisy Cunynghame and the anonymous reviewers for their comments on previous versions of this paper, their insight was greatly appreciated.

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