paper forensics

Conservator Emily O'Reilly discusses the work of forensic paper historian Peter Bower to argue that 'There is as much information in a piece of paper as there is on it'

As a paper conservator, I very often find myself more interested in documents as objects rather than for the information they hold. And, after attending a recent lecture, 'Fakes and Forgeries: the Art of Deception', presented by British forensic paper historian Peter Bower, I know I am not alone.

Museums, galleries, auction houses and police forces from around the world have consulted Bower to analyse paper for the purpose of dating, attributing identity and authentication. He began life as a paper-maker but soon realised his passion lay in *looking* at paper rather than *making* it. Bower's fascinating lecture began with his explanation of the nuances of paper, and what evidence can be found on the surface and buried deep within the fibres.

Traces of its manufacture can be found in the surface characteristics — not only the watermarks but also the impressions of the wires on which the sheet was formed. Using electron-scanning microscopes, fibres of linen, cotton and wood can be identified, as well as small amounts of smelts (crushed blue glass) used to whiten paper, and optical brighteners (only used since the 1950s).

↑ Typical example of 19th century watermark depicting Brittannia, to be found amongst correspondence in the Colonial Secretary's Papers

Bower has undertaken major historical and technical analyses of paper, including a study of its use by painters JMW Turner, John Constable and Thomas Gainsborough. He was also called in to investigate boxes of British banknotes, dredged up from the bottom of a lake in Austria, which were part of a Nazi counterfeiting project. The counterfeits were identified because of the difficulty of copying the depiction of Britannia in the watermark.

The most controversial case Peter Bower has contributed to involves the 'black diaries' allegedly written by Sir Roger Casement. Casement was a human rights campaigner, who was rewarded with a knighthood in 1911 for his consular reports from the Congo and Amazon which criticised the treatment of the local populations by their colonial rulers. He was later hanged as a traitor for planning the Dublin Easter rising of 1916 with the alleged aid of Germany and Irish Nationalists. High profile public figures, including the then Archbishop of Canterbury and George Bernard Shaw, spoke out in his defence, calling for clemency.

The campaign against Casement escalated after the appearance of sexually explicit diaries in which he detailed his life as a homosexual. The diary pages were distributed by the British authorities in a determined effort to damage his reputation at a time when homosexuality was still a criminal act. Scholars have argued for many years that the diaries were fabricated by the British government to discredit him. This suspicion was accentuated by the diaries being withheld from the public until 1959.

Many supporters have never seen the originals stored at the Public Records Office in Kew, London. They have only ever seen the microfilm version, which looks as if later entries were written in the lower section of the page. On Bower's investigation of the real thing, it was clear that the lower entries were created using the same ink and the same nib as the entries higher on the page, but that the ink had been altered when the lower edge of the diary became wet. The moisture had caused the ink to bleed and, so, look completely different in the black and white of a microfilm.

Microfilms are invaluable in imparting information to many people, but, as a case such as this shows, they can never completely replace the original. When paper documents are copied using microfilm and, more recently, digital technology, the original must be kept and preserved as a link and evidence to the past. If you know what to look for, the clues and traces of manufacture give just as much detail and information as the written evidence itself.

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The five Casement diaries are available to the public at the Public Record Office, Kew, London