## The conservation of textile linings and seal cords - with a little help from textile and painting conservation

## Solange Fitzgerald, The National Archives, UK

This project confronts the often varying and complex problems encountered in book and paper conservation: the need to establish a minimal conservation treatment solution that remains sympathetic to the original document. In this case, two objects were treated adopting and adapting textile and painting conservation techniques, which here have been successfully applied for in situ treatments on two archival paper and parchment documents with textile components:

•IR 130/41/22 - a nineteenth century Ordnance Survey, a paper map lined with linen, torn with big losses in the fabric

•E 24/18/1 – a sixteenth century parchment charter with a large wax pendant seal with silk braided cords, with the cords badly torn close to the wax seal

Both objects are part of the collections of the National Archives, the official archive for the UK government for England and Wales. They had been identified as being 'unfit for production', due to their fragile physical state after a condition survey completed in 2010. In order to make these documents accessible, the Collection Care Department systematically, and sometimes on demand, tackles the varied and often complex conservation challenges 'unfit' documents present.

With such fragile objects, it is expected that the treatment process from beginning to completion will be both testing and time consuming. However, it was apparent that the knowledge gained by the work could be disseminated further to help inform future treatments for similar works, including determining the choice of materials and housing options, and thereby benefit the wider profession.

As the traditional method of removing the original linen lining from the verso of paper maps would have severely affected IR 130/41/22 original structure, an in-situ treatment was devised from a method usually applied to cotton canvases in textile conservation: the thread by thread tear mending, a variation of the Heiber technique. The torn lining of IR 130/41/22 was repaired using this technique while using magnets. This proved to be a very effective minimal approach and in-situ treatment for repairing and stabilising the loose threads of fragile linen lining. This treatment method successfully provided the means to retain all elements of the original map while at the same time stabilising the map such as to allow it to be accessed, once again, by the public.

The damage associated with E 24/128/1, a sixteenth century parchment charter with a large wax pendant seal on degraded silk braided cords is a common problem within many collections. This provided the conservator with the challenge to retain the original structure of the silk cords while still attached to the seal and the parchment charter. All well considered and planned steps were followed in order to prepare the object for an external loan, making it safe for transport and exhibition.

The chosen treatment is an adaptation on the sewing cord repair of fifteenth century incunabula as published by Birgit Speta in 2003. In the case of the charter E 24/128/1 each of the original silk braided cords were partially broken and holding on only by individual silk threads. The treatment involved the addition and securing of new silk threads to the split original threads in order to stabilise the whole cord. For this, preliminary tests were undertaken in order to establish an appropriate choice of repair materials and repair procedures.

The threads were secured in place supported by new cotton and silk threads, the chosen adhesive Lascaux 498H provided strength and at the same time sufficient flexibility to allow for the threads to be re-braided and stabilise what remained of the original cord.

This method provided a way to retain all elements of the original silk cords while remaining attached to the parchment charter.

The treatment solutions for the map and the charter proved to be highly successful in making the objects once again accessible to the general public, whilst maintaining their historical structure.