

The British Library's Vulnerable Collection Items Project

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Abstract

The British Library embarked on a project in 2007 to better protect collection materials considered vulnerable. Following thefts of maps contained within books, a methodology was developed to firmly identify the unique copies of rare and valuable British Library holdings, using a range of security photography and copy-specific descriptive metadata. The outcome of the project not only served to improve the security of the selected maps, but by revealing these hidden collections, access to and knowledge of them is enhanced.

Key Words: map libraries; security; rare books; cataloguing; digitisation; map thefts; digital fingerprint; watermarks

Background

Over a number of years, the American map dealer E. Forbes Smiley III took advantage of his own expert knowledge of maps and atlases to steal extremely valuable maps from multiple institutions that included the British Library (BL). He used specialist knowledge acquired over decades of practice as a dealer, and carto-bibliographies of early printed maps of the world and of the Americas, to identify valuable maps. At the time of his arrest, the BL had already identified him as a suspect. The subsequent investigation acted as a catalyst to launch the project described here.

Several elements made Smiley's prosecution challenging. The task of identifying and recovering the three maps that the BL believed that Forbes Smiley had stolen proved to be extremely difficult. This was due to the absence of condition descriptions of the BL's copies and the lack of images of sufficient quality to enable identification of distinguishing features.

The Project

The Vulnerable Items Project evolved in the spring and summer of 2007 as a protective measure to improve the BL's ability to prove its ownership were similar thefts to occur in future. The primary objective was to find a methodology that would provide the highest possible level of identification for such valuable materials that would ideally prove applicable and useful to other collections held by the BL.

It became evident that photographing the maps and capturing accompanying descriptive metadata would be an effective method of proceeding. Each map was individually catalogued in the library system, recording standard bibliographic information as well as condition descriptions, and this was then linked to both data about the book in which the map was held, and to the image itself.

In the early summer of 2007, two project curators were hired, including a cataloguer to create such records and a map specialist to provide detailed copy-specific information for each map that would aid in identifying particular distinguishing features. The content of this condition note included: the

location of the map in the volume; description of paper, including location of watermarks or inequalities; printing, noting strength of impression, bleeding, offsetting, or plate marks; damage, such as stains, wormholes, tears, and repair work; or other markings including colouring or annotations.

At the same time, the maps were photographed at extremely high resolution to show both the map image and the volume, including how the material lay in the volumes, both folded and unfolded. Each map was subjected to two digital techniques — the first a direct-light digital shot and, the second, a back-light digital shot. Digital backlighting adds a new dimension to collection security; the ability to reveal hidden identifiers embedded in a collection item has huge implication for collection security and holds the key to the identification of disputed collection items. The digital fingerprint reveals unique information not visible to the naked eye or in direct front-light photography. The most revealing images proved to be backlit shots which showed exactly how, in a specific case, the map image lay on the paper in relation to watermarks, chain lines, stains, insect infestation and other paper defects which (unlike the colouring, stamps and size of the maps) could not be altered by a potential thief. The use of digital backlighting technique as a security measure is a new security tool to enhance the traditional approach of cataloguing and ownership marking.

The high-resolution files were stored to a secure store as the project 'master' files. Additionally, a low-resolution access image was created for storage and linking in the library system. Like the master files, they are named according to the maps' unique identifiers, i.e. the system number of the bibliographic record. These images are added manually to each of the records, thereby going through another process of checking to ensure the number and record match. Images may be viewed in the staff interface of the library system, with the description and the image appearing side-by-side.

Outcomes

This is a niche approach to collection security, and while not feasible for mass digitisation, the targeted response combining production of bibliographic and condition descriptions with security photography was ideal for this small group of materials at the highest risk of theft. A project methodology was

developed and tested and the following tasks successfully completed over a relatively short operational period of nine months:

- selected 3,126 rare pre-1700 maps of the world and of the Americas;
- ownership marked 2,596 maps;
- catalogued 3,126 maps using ILS functionality to link existing printed books records with a newly-created child bibliographical record;
- produced 12,000 digital images ALEPH Digital Asset Module (ADAM);
- attached 3,126 low-resolution jpegs to the analytic bibliographic records using the ALEPH Digital Asset Module (ADAM);
- developed security-photographic protocols;
- developed a digital fingerprint of a map with a non-invasive backlit image;
- designed workflow and quality assurance procedures;
- developed an intermediate storage provision (until the digital assets are ingested into the Digital Library), which includes ILS for storage of the descriptive metadata, searching and access to the records and low resolution digital image.

In more general terms, a better awareness has been gained of the BL's holdings of these formerly unknown treasures. A body of reliable data has also been assembled which is of sufficient quality to distinguish one example of the same map from another with near absolute certainty should they happen to be stolen in the future. It is likely that such detailed examination of early maps could also prove of great long-term bibliographical research value.

The methodology will be further tested over the coming months in a second phase.

The exercise, involving close and harmonious collaboration between colleagues from several different sections of the British Library, may be of interest to other libraries which face similar problems.