

# Keynote Address: The Place for New Tools in Forensic Philately

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## INTRODUCTION

This paper relates to my realization, reinforced by my access to the developments at the British Library for the conservation and preservation of rare documents, that certain philatelic problems could be better solved or understood by the quantitative methods traditionally associated with the physical sciences than by the taxonomical methods traditionally associated with the biological sciences. In 2001, I worked with University College London on a project to use spectrographic analysis to study the very rare (and valuable) “Post Office” Mauritius stamps of 1847, developing definitive information about the inks used and establishing a basis for a similar study in 2002 that evaluated the 1851–1852 so-called Grinnell Missionary stamps of Hawaii.

My views and observations on the expertization in conjunction with the recent development of advanced methods (some of which will be discussed in detail in the papers presented) for performing various analyses on postage stamps and other postal matter are largely based on supporting the Expert Committee of the Royal Philatelic Society London. It should be noted that it is not the purview of the Institute for Analytical Philately, Inc., the Smithsonian National Postal Museum, or the British Library to provide expertization services.

## A NEW BEGINNING

It is almost impossible to overestimate the importance of the First International Symposium on Analytical Methods in Philately held in November 2012 at the Smithsonian National Postal Museum, Washington, D.C. This event was organized by the Institute for Analytical Philately, Inc. As the institute is comparatively new, having been established in 2009, its first public meeting is a key opportunity to establish its credentials along with a number of principles that will set the scene for the future.

I am pleased to have had the opportunity to present the keynote address, and I intend to touch on several important aspects of analytical philately and its application to expertization. While a taxonomical analysis, associated with the “English school” of philately, may easily afford the detection of “bogus” issues, quantitative analysis for the detection of forgeries, associated with the “French school,” has long been hampered by the cost and availability of appropriate technologies. But, to a certain extent, that is no longer the case because over the last decade the availability and ease of use of nondestructive analytical equipment has grown while its cost has decreased dramatically. Some

of this equipment is now within the grasp of major museums and expertizing bodies and can be used to disclose sophisticated forgeries.

In the earliest days of philately, the English school emphasized the postage stamp design, ignoring differences in paper, shade, perforation, watermark, etc. The French school required some close study and some tools, beginning with the magnifying glass. Later came accurate measurement, perforation gauges, and watermark fluid. More high tech methods occurred when ultraviolet light was deployed to detect alterations or the removal of postal markings. During the 1960s, Cheavin (1885–1968) used X-rays to detect altered stamps (Cheavin, 1950). In recent years it has been suggested that he was also making the altered stamps about which he wrote.

My involvement with more advanced analytical methods dates from 2001 when the British Library started working with Professor Clark and his student colleagues at University College London (Clark, 1999). They were examining pigments on manuscripts and early printed books, maps, and other paper artifacts by Raman spectroscopy.

One project was to look at the inks on Mauritius 1847 1d and 2d “Post Office” issue (see Figure 1 for one of the five known covers with the 1d stamp) and of the 1858–1862 Britannia issue using examples in the Tapling Collection.<sup>1</sup> We were able to determine the pigments involved (Chaplin et al., 2004) and thus established a standard against which others can be judged (and

have been judged, for the 1847 issue) by the Expert Committee of the Royal Philatelic Society London.

During 2002 I became involved in the question of the expertization of the Hawaii 1851–1852 Grinnell Missionary stamps. Earlier examinations had proved inconclusive (Chaplin et al., 2002), but, using Raman spectroscopy to compare the stamps in the Tapling Collection, known by their provenance to be genuine (Figure 2), with the Grinnell examples that were the property of the Shattuck family, the Expert Committee of the Royal Philatelic Society London determined that the Grinnells were forgeries (Pearson, 2006).

I have since been involved in other Raman work with Professor Clark, and in due course a paper about aspects of the Chalon issues of New Zealand will appear.

Analytical philately is the use of chemical, physical, mathematical, or other quantitative scientific methods to establish the facts in any philatelic matter. The facts, or evidence, are examined, with the end result of establishing the truth about a theory, the color, or the genuineness of a philatelic item. This may not be so easy.

The expertization of philatelic material has always been of the first importance. Publications on the detection of forgeries began to appear in the 1860s. Expertization took an organizational advance when in 1894 the Philatelic Society, London—now the Royal Philatelic Society London—formed the first expert committee. I have come to see such committees as “the



FIGURE 1. The Post Office Mauritius issue of 1847 (the Tapling Collection, Courtesy British Library).



FIGURE 2. The Hawaiian Missionary stamps of 1851 (the Tapling Collection, Courtesy British Library).

courts of law” in philately, and, while they only give opinions, they represent the best we have in establishing the truth.

If committees or expertizers are the philatelic courts of law, what standard of proof is required for a clear verdict? Does science offer absolute proof? Can an argument of probabilities prove sufficient? What are the possibilities of misinterpretation? Perhaps this symposium will help to answer some of these questions.

Philatelic expertization is probably at something of a crossroads as new technologies have become available for the application of scientific methods. The identification of shades, a longtime problem, might be much improved. (I think that the visual discrimination of shades of color is insufficient without an analysis of the pigments and their prospects for change.) With the need of expertizers to embrace scientific analysis, will single experts, common in continental Europe, still be able to function with what might be the new standards of evidence? I have suggested in a paper (Beech, 2008) that perhaps in the near future an expert certificate should be

- an opinion as to genuineness;
- a record of its provenance (for sufficient rarities); and
- a record of any treatments used in conservation, with a full photographic record and a record of any special scientific analyses, such as examinations by colorimetric methods and Raman spectroscopy.

If items submitted for opinion need any subsequent scientific analysis, who will do the work and how will it be paid for? How will those who run expertizing organizations be confident

of scientific advice? As with the expertization of the Hawaii 1851–1852 Grinnell stamps by the Expert Committee of the Royal Philatelic Society London in 2006, some text in addition to a certificate simply stating “genuine” or “forgery” will be required. It must provide the evidence and technical details, if only for such scientific work to be repeated independently.

## CONCLUSIONS

Much opinion today is based on evidence of earlier technologies, which the author’s Grinnell work showed were not sufficient to distinguish the status of the Tapling and Grinnell Hawaiian Missionaries. The challenge to expertizers is to have a good understanding of the new techniques of science. The philatelic expertizer must have a good understanding of taxonomical and quantitative methods and the philatelic background of the items under consideration. But how is experience to be balanced with science? It seems clear scientific methods have much to offer, with this symposium being a clear learning ground, but we must use judgment in arriving at our final determinations.

## NOTE

1. The Tapling Collection was formed by the wealthy Victorian businessman Thomas Key Tapling, MP. It was bequeathed on his early death at the age of 35 in 1891. The collection is unrivalled in that it is the only major one formed during the nineteenth century that is still intact and contains almost all issues of postage stamps and postal stationery as well as most of the rarities issued up to 1890;

see <http://www.bl.uk/reshelp/findhelprestype/philatelic/philateliccollections/articles/articleapling/articlestapling.html> (accessed 1 November 2012).

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