ENHANCING GIFTS-IN-KIND ASSESSMENT AND PROCESSING WITH DIGITAL PHOTOGRAPHY
Abstract

Purpose - This paper explores the potential benefits of using digital photography in the evaluation of prospective donations of book collections.

Design/methodology/approach - The paper describes a methodology for creating a collection of images to preserve bibliographic information from large book donations where time and distance restrictions limit the ability to carry out a thorough investigation on-site. This image collection will assist in the initial assessment of the collection’s suitability for acceptance, documentation and creation of a gift list.

Findings – Using digital photography allows for relatively quick and comprehensive documentation to aid in the evaluation of large potential gift-in-kind donations. Additional benefits realized from acquiring digital images may include automation of gift list creation, publicity for the newly acquired collection, and enhancing exhibitions. This methodology utilizes readily available and affordable equipment that will likely be well within the resources of most libraries.

Originality/value - This paper offers practical advice on employing current and emerging digital technologies to assess and enhance gift-in-kind donations.

Article Type: Technical Report

Keywords: digital photography, gift-in-kind assessment, Web 2.0 technologies, collection development, special collections
Introduction.

Advances in technology offer new avenues in our professional practice of librarianship. The library and information science literature on digitization and digital photography typically pertains to access, preservation and promotion of collections materials. Rarely are these technologies referred to with regard to other aspects of librarianship. In this paper, we discuss the ways in which digital photography can be employed to build library collections. Specifically, we describe a methodology that employs digital photography to increase the efficiency of off-site gift-in-kind assessment. We will elaborate upon some unexpected opportunities for gift evaluation and post-acceptance processing provided by photographing title pages.

Much of the literature on digital cameras in the context of libraries discusses issues of mass digitization, access and preservation (e.g., Coyle, 2006; Hart, 1993; Kuan, 2009; Tanner, Munoz & Ros, 2009). There are reports of researchers using digital photography to document archival material during research visits (e.g., Trowbridge, 2007). However, to the best of our knowledge there is little or no literature pertaining to the use of digital photography specifically in gift-in-kind assessment and subsequent processing. In this paper, we use the terms gift-in-kind assessment or evaluation to mean the analysis of the collection by library staff as to the suitability of the materials for acceptance. This is differentiated from appraisal of the collection’s monetary value for issuing a tax receipt or for insurance purposes.

Gifts-in-kind can enrich a library's collection, and yet, donations are often a mixed blessing. Issues surrounding gift-in-kind donations have been discussed in depth (for a bibliography see Carrico, 1999) and comprehensive review of guidelines for gifts-in-kind is provided by Canevari de Paredes (2006). This literature highlights the need for thoughtful and
considered evaluation of a donation prior to acceptance. Circumstances surrounding donations are not always ideal for such an assessment to take place. Time constraints and geographic distance can make large and complex donations difficult to evaluate as a whole. And yet, library staff need to garner sufficient information about the collection to make a well-educated recommendation whether to accept the gift in whole, in part or perhaps not at all. Digital photography offers a solution. Digital images can capture document titles for the creation of an itemized list for report writing and, in the case of the gift's acceptance, to assist the external monetary appraisers in their work. To maximize efficiency, evaluation and documentation can be combined into one seamless process.

**Technical Requirements**

While equipment for a mass digitization project alone can cost upwards of $150,000 (Coyle, 2006), the photography equipment necessary to document a potential gift collection can be minimal and can be achieved with relatively inexpensive digital cameras. The authors utilized a 2003 Canon G5 with articulated tilt/swivel screen. Although a digital SLR camera could be employed, we felt a compact point-and-shoot digital camera was ideal for both its size and for its inherently large depth of field (which increases the accuracy and consistency of focusing in this application). An equivalent camera currently costs about Cdn$520. In fact, any camera with an articulated view-finder screen would be suitable as it makes framing the image of the book easier for the camera operator. A tripod with an invertible centre column is also highly desirable for optimizing the camera’s position. An SLR camera, which is often larger and less likely to have an articulated screen, may be more difficult to position under the inverted tripod. These are the minimum requirements, although other equipment for consideration might include: a laptop, several sets of batteries or power supplies, extension cords and battery chargers.
The following describes our method for capturing digital images of items in a potential gift collection. Photography concentrated primarily on the title page. If the title page does not include sufficient bibliographic information, the verso should also be photographed. Additional photographs were taken of annotations, signatures or other attributes of interest. A librarian can note the condition, subject matter, target audience of the materials, as well as the presence of any ephemera, signatures and/or annotations. If available, internet access can assist in crosschecking library holdings and acquiring additional information about particular items, as needed. Linking the librarian’s notes to the appropriate digitized title page can be achieved by assigning a control number to each book title. This saves the note-taker the time consuming task of entering the book title, as well as avoiding confusions that might occur if there are multiple books of the same title within a collection or multiple photos of a single book (e.g., title page and a page with an annotation). Only a small subset of the books in the collection with quality issues or possessing special features required special documentation. While these notes could be made electronically, documentation by hand would suffice if a laptop is not available. Control numbers can be pre-printed on slips, ready for insertion into each book as it is handled. These numbers also help to document original order and approximate physical location, which may useful for some collections. When we photographed, each book the control number was clearly visible in each image for future reference (Plate 1).

---Take in Plate 1---

There are a number of factors that can affect image quality. Blur due to camera shake can be avoided if the camera is held securely by a tripod. In addition, an inexpensive remote control allowed the operator to focus and fire the shutter without disturbing the camera’s position prior to or during exposure. In our set-up, the camera was attached to a tripod with the center
column reversed and the tripod legs set to their lowest level (Plate 2). This enabled the camera to be attached below the tripod and facing the desktop. The relatively small leg span of the tripod allowed it to be set up on a desktop although it was also positioned on the floor when a desktop of suitable size was not available. The tilting and swiveling screen enabled the operator to view the screen comfortably while framing the book. Setting a manual exposure as slow as 1/2 to 1/15th of a second allows a smaller aperture thus ensuring a wider depth of field. A manual exposure setting of +1.5 EV ensures that white pages do not appear grey. If colour reproduction is not relevant to the assessment, it may be desirable to use the black-and-white setting to reduce file sizes. Many cameras also have a high contrast setting, which is beneficial when documenting textual items. For materials where colour information is important (e.g., colour plates), shooting in colour mode and conducting a quick white-balance check will assist in accurate colour reproduction. All models with an articulated view-finder will be capable of this functionality.

--Take in Plate 2--

Optional methods of storage and back up include transfer to a laptop, portable hard drive and/or USB memory stick. If there is an immediate need to share with colleagues at a distance, downloading to a laptop with internet access is the best choice. New SD memory card technology for cameras can automatically transfer images to a computer or web album as photographs are taken (e.g., Eye-Fi memory cards). While most digital cameras default to a resolution that is substantially higher than necessary for this application, setting a slightly lower resolution reduces storage requirements and data transfer times without detrimentally affecting image quality. However, if the images are to be used with optical character recognition software or for exhibition use, higher resolutions are favourable.
Digital Images in Assessment, Processing and Promotion

Once the collection has been imaged, digital images can be transferred, organized and immediately shared with colleagues using a variety of software tools. We recommend the use of a photo management and editing tool, such as Picasa (http://picasa.google.com/features.html). Picasa is easy to use but also powerful enough to process large numbers of photos while retaining the ability to render images quickly. The software installs quickly and is available as a free download from Google. The program allows the user to edit, reorganize and create virtual albums or subsets of an original collection stored on a Mac or PC. Picasa allows the user to create an on-line web album to share images. On-line albums can be made public or accessible by invitation only to authorized users, if greater security is desired.

Buis (1991) recommends that in order to be desirable, materials should show some of the following attributes: be aligned with the library’s mission statement, adhere to the library’s collection development policies, be of local historical importance, have research potential, be in high demand and/or be appropriate for inclusion in a Special Collection. Not only must the collection meet these guidelines but pragmatic issues with regard to space, processing and overlap of the gift-in-kind with existing library holdings must be considered. Therefore, various stakeholders, including subject specialist librarians, technical services personnel, administration and research faculty are likely to be involved. The online album makes the complete “collection” available to all parties, thereby facilitating collaborative decision-making.

Once the decision has been made to accept the gift or portions of the gift, the digital images of title pages and versos enable staff to create an accurate gift list to accompany the gift agreement, which independent appraisers often reference during the monetary appraisal of the gift. Although the images may be used for the task of manually transcribing a bibliographic list,
parts of this time-consuming process may actually be circumvented using optical character recognition (OCR) software. OCR converts the digitized title pages from a graphical representation (i.e., pixels) to editable and searchable text for easy insertion into a spreadsheet or text document. Studies have examined OCR accuracy (e.g., Tanner, Munoz & Ros, 2009) and utility for extraction of metadata (e.g., Lu, Kahle, Wang & Lee, 2008) in mass digitization projects. Our application is small scale and amenable to current technologies. We experimented with two applications capable of OCR; Adobe Acrobat Pro and Abby Fine Reader. Both applications provided usable results although there were slight variations in outcomes.

Digital images can also offer opportunities for exhibitions, donor recognition and the creation or enhancement of online resources after the collection has been accepted. As an example, we are creating promotional posters featuring a collage of title page images, and a web page with links to the Picasa web album to aid in discovery and exploration of the new collection. Certain images may be displayed on the library’s home page to promote the launch of the collection to the university community. Many donors appreciate recognition and are gratified when the library is able to create a web page and/or links to images of their gifts for public viewing. With little additional effort, the digital title pages can be re-purposed in online exhibitions, physical exhibitions, blogs, and other library web pages to promote the GIK. Images of signatures, annotations and ephemera may provide important contextual information, adding research value to the displays.

**Emerging Technologies**

Technologies that have only recently become available to the average consumer could inspire innovative, and possibly less cumbersome, methods of gift assessment. For example, list creation and subsequent assessment of potential gifts may be streamlined by new smart phone
applications (apps). This type of software for the identification and listing of books through ISBNs, UPC codes and book cover images is currently available for some smart phones. At present, most of these apps are designed for the iPhone. These apps utilize the phone's built-in camera to immediately link to online information about a book that has just been photographed. The apps differ in what information is required to link to the book online: Redlaser uses barcodes; myBooks and iBookshelf use barcodes or manual input of ISBN's; SnapTell Explorer is able to use an image of the book cover, rather than requiring an image of the ISBN or barcode.

In the process of using these apps to identify books in a collection, a database is created on the mobile device. From this database, an annotated booklist can be emailed from the smartphone to those responsible for assessment of the potential gift collection. This technology may be best suited to collections of more recent publications, which are more likely to have their barcodes, ISBNs or book covers linked to online booksellers from which these apps harvest their data. Although these are promising technologies, at present smartphones are not sufficiently robust for large volume applications nor do they acquire images of high enough quality for exhibition purposes.

**Conclusions**

The use of digital photography is a useful tool in the initial assessment of a potential gift collection and in the subsequent creation of the gift list. Moreover, images can be repurposed in ways that gratify donors by promoting the discovery and use of the gift collections. Harnessing digital imaging technology with the power of internet resources (e.g., iPhone technology) has the potential to streamline the work involved in acquiring gift-in-kind collections and open new opportunities. These emerging applications for mobile devices that marry digital photography with data harvesting may be adapted to improve library practice. In conclusion, our experience
using digital photography in a gift-in-kind assessment suggests that this is a practical methodology that can enhance collection development practices.
REFERENCES


Plate Captions

Plate 1. An example of an image of a title page with the control number clearly visible.

Plate 2. Camera set up. The camera was inverted beneath tripod to allow books to be placed on a flat surface for photography.