TIP SHEET

Photographing Artefacts for Documentation (2017)



Photographing Artefacts for Documentation

Photographing artefacts is a key aspect of collections documentation (1). Good artefact images lend themselves to a host of important museum functions including artefact identification, condition reports, research requests, and digital content for exhibitions and social media. However, photographs must be of sufficient quality to address the needs of the museum (i.e. will the image be used exclusively in-house for identification? Will the public view the image at any time?). This must be done while balancing the resources available (i.e. equipment, time allowance, and skillset of photographers) (N1) with the type of artefacts being photographed.



Figure 1: An example of a typical set up for artefacts in relation to colour bar, scale etc.

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Studio Set-Up

Studio and camera set up will vary depending on the size, composition, and number of artefacts being photographed. However, some aspects of the studio set up will be included in most photographs:

- Neutral background
- Accession number
- Colour bar and measurement scale (location is interchangeable)
- Date

Backgrounds can come in all shapes and sizes based on the artefact being photographed. Sheets of fabric, rolls of paper, or pieces of coloured cardboard can all serve as useful backdrops depending on the size of the artefact being photographed. However, no matter what material is used, it must be clean, uniform in colour, wrinkle free and large enough that its edges cannot be seen when the artefact are being photographed.

A quick and simple solution for recording accession numbers and dates is to use dry-erase markers on wipe boards or laminated paper. Colour bars can be found online for relatively inexpensive prices, while a







Figure 2: Two simple backdrops. On the left, a set up using rolled paper for medium sized artefacts. On the right, a folding cardboard system used for small artefacts.

simple ruler can work as a scale (**N2**). Date and accession numbers can also be added to digital images by using a photograph editing program once the image has been transferred off of the camera and onto a computer.

Cameras

There are a host of camera and lighting options available, with choice determined by price limits and individual preference. However, a digital single-lens reflex (DSLR) camera with a standard (50 mm) lens should provide a good, general-purpose image (**N3**). Camera settings will vary depending on the brand or model being used, and on the photographer's level of experience. Searching online will provide many videos and tutorials for digital photography, including those for specific camera models. However, taking photographs with the automatic setting of a DSLR camera can still provide a high-quality image.

A set of two full spectrum fluorescent lights should be used in conjunction when photographing artefacts (**N4**). One, as a the main "key" light to illuminate the artefact and the other as a secondary "fill" light to help displace shadows.



Figure 3: Example of a lighting set up in relation to the camera and artefact, from the National Park Service Museum Handbook

Following the standards below to place the camera and lighting, and then adjusting them as needed for the best results, should help create good images:

> Place the camera at a distance where the artefact fills most of the view, and at a height slightly higher than the artefact



- Distance the key light at 6 feet and the fill light at 7 or 8 feet
- Angle the key light at 45° from the front of the artefact and the fill light at 60° to 70° from the front of the artefact
- Place the lights at a height high enough to hit the top surface and front of the artefact (2).

Photographing Different Types of Artefacts

Beyond standard 3-dimensional artefacts, there are several other types of artefacts that are typically found in museums. These might pose slightly different challenges and require altering typical studio set up. Briefly, this might include artefacts that are:

 Small or have fine details – using the macro setting of a DLSR will aid in creating a clear image. For tiny artefacts, a macro lens might be required, as it can better focus than a standard lens when held closer to artefacts.



Figure 4: Examples of photographs taken of a medium sized artefact. The photograph on the left was taken at eye level with the artefact, so there is no indication of its depth. Also, the date/accession number and colour bar/scale are set in front of the artefact, limiting the overall view and casting a shadow. These mistakes have been corrected in the photograph on the right.

- Two dimensional photographs can be taken straight on rather than at an above angle. If the artefacts's size and condition allow it, a highresolution scan is also a good option.
- Reflective reduce shine as much as possible by adjusting lighting and camera angle. Using a light tent helps significantly by filtering light evenly. Avoid capturing the image of the photographer and camera in the photograph!



Figure 5: Examples of photographs taken of a small artefact. The photograph on the left was taken without using the camera's macro setting, so the artefact's details are lost and a large "dead space" at the top has been created. By using the macro setting, these mistakes have been corrected in the photograph on the right. Also note that the date and accession number have been digitally added with the use of a photo editing program. This is an acceptable alternative to physical text.



Figure 6: Examples of photographs taken of a reflective artefact. The photograph on the left shows glare on the artefact's top third (and although difficult to see in this image, the photographer can also be seen in the glare's centre!). By adjusting the lighting, the glare in the photograph on the right has been reduced (and the photographer is gone) while still maintaining good overall lighting.

Types of Photographs

There are many types of artefact photograph that a museum may choose to take in addition to a standard, full-view "artefact ID photo" used for cataloguing. These might include:

- Obverse/reverse shots if an artefact is not uniform in shape or composition, photographing multiple sides is recommended in order to capture its full appearance.
- Condition shots shows an artefact's state before and after a conservation treatment, or as a visual aid to highlight an artefact's current state of deterioration on a given date (3).
- Detail shots highlight small areas of importance, rather than the artefact as a whole. This can include maker's marks and labels, manufacturing

techniques, and text. The camera's macro setting would be used here.

 Reproduction shots – for public viewing and do not contain any cataloguing tools (i.e. accession number or measurement scale).
These images can be reproduced for exhibitions, publications, etc.

Types of Files

Once a digital photograph has been taken, the museum must determine how to save the file. There are many types of digital photograph formats, but two of the most common are TIFFs and JPEGs.

When creating a master, or preservation file for museum records (i.e. catalogue records, condition reports) electronic photographs should be saved as TIFFs files because they retain their quality over longer periods of time when compared to JPEGs. JPEGs are smaller electronic files than TIFFs, and are therefore better used for circulation (i.e. research, social media), however they degrade much more quickly than TIFFs so are not appropriate as long term copies (4).

When saving electronic files, standardized naming conventions should be used that incorporate the photographed artefact's accession number as part of the file name. For example, artefact number 2017.12.12 a-b would have an ID photograph name of: 2017.12.12A-B (with a "TIFF" file extension). Any additional photographs of the artefact can be specified in the name of the file (i.e. 2017.12.12A-detail.tif or 2017.12.12.B-recto.tif).

As with other digital records, it is highly recommended that artefact photograph files be regularly backed-up on external hard drives, which are ideally stored at a safe, off-site location. How often back-ups are completed will depend on how often files are being added or updated, but weekly or monthly schedules are common practice.

Conclusion

High-quality artefact photographs are a key component of collections documentation, and can have many secondary benefits. The digital age allows for excellent photographs to be taken inhouse by people of varying experience levels, and for photographs to be easily attached to database records, exhibit plans, and social media updates.

However, in order to maximize the benefit of these photographs, it is important to discuss how the images will be used by the museum, understand what resources are available before starting a new photograph project, and how the photographs (either hardcopy or digital) will be safely maintained over the longterm.

For More Information, See:

 Museums Association of Saskatchewan, Standards for Saskatchewan Museums, Fourth Edition, (Museums Association of Saskatchewan, 2010), 54.

(2) National Park Service, NPS MuseumHandbook, Part II: Museum Records,"Appendix K: Photography",(https://www.nps.gov/museum/publications/MHII/mh2appk.pdf) (2000)

(3) Museums Association of Saskatchewan,
Collections Documentation Manual for
Saskatchewan Museums, (Museums
Association of Saskatchewan, 2014)

(4) Kathleen Brosseau, Mylène Choquette, and Louise Renaud, "Digitization Standards for the Canadian Museum of Civilization Corporation",

(http://museumsassn.bc.ca/wpcontent/uploads /2015/01/smcc_numerisationcmcc_digitization-eng.pdf) (March 2006)

Additional Reference:

Association of Nova Scotia Museums, "Photography Kit Equipment Manual", (http://www.ansm.ns.ca/downloadfiles/file/180-photography-kit-equipmentmanual-pdf.html), (September 20, 2012)

Note:

N1 Carefully consider what the photographs will be used for in the present and, potentially, in the future before embarking on a large-scale photography project.

N2 Conveniently, combination colour bars/measurement scales can also be purchased.

N3 In "Digitization Standards for the Canadian Museum of Civilization Corporation" a camera capable of 3000 pixels for the longest measurement (8 x 10, 300 ppi) is recommended.

N4 Tungsten lights are another option; however they emit a large amount of heat.

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