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# The Preservation of Photograph Albums: Making Cross-Disciplinary Decisions to Maximize Care

**GEORGIA SOUTHWORTH** is a rare book conservator who works both privately and on staff at The Metropolitan Museum of Art, as an Associate Conservator for books in the Photograph Conservation Department. She received her book and paper conservation training at Camberwell College of Arts, University of the Arts London, and has been working with The Met since 2005. Fascinated by the countless structures that allow books to function, her focus in the Photograph Conservation Department is on the preservation, research, and treatment of bound volumes, cased objects, and photograph albums. As a private conservator, she has worked on numerous grants, surveys, and projects with New York based cultural institutions, including The New York Botanical Garden, The New York Academy of Medicine, Columbia University, The Morgan Library & Museum, and the Yale Center for British Art.

Thotographs are held throughout museum, L library, and archive collections in numerous formats, from early cased objects, to loose photographic prints, to matted artworks, to those in bound volumes. The first photographs on paper were introduced to the world in 1839, and almost immediately were being mounted into books. Photograph albums have distinct preservation needs and their care must be approached cross-disciplinarily. Due to their hybrid nature photograph albums and photographically illustrated books must often be addressed by both a photograph conservator and a book conservator, always with the goal of minimal treatment intervention. Caring for bound photographic collections requires a holistic preservation approach that balances research, communication, and sometimes conservation treatment.



Fig. 1: Angel, Owen, [Follett Family Album of Children Costumed for a Fancy Dress Ball], ca. 1880. Cabinet card photograph album, 28.6 x 22.9 x 4.4 cm. The Metropolitan Museum of Art, Purchase, Joseph M. Cohen, William Talbott Hillman Foundation, Robert and Joyce Menschel Family Foundation, Robert D. and Virginia R. Joffe, Paula and Ira M. Resnick, and Maureen and Noel Testa Gifts, 2007 (2007.284)

Cultural institutions may employ a book conservator and/or a photograph conservator, though these professionals rarely work in the same conservation lab; a great many smaller institutions and libraries employ neither. Within museum collections, photographic holdings and their care regularly focus on spectacular highlights, and within rare book collections volumes of much greater age and value may dominate the preservation priorities. Yet, in recent decades there has been a rise in the curatorial and art historical interest in photograph albums, helping to flesh out our collective understanding of the private and more intimate settings in our shared cultural pasts. As more attention is paid to photograph albums, the preservation needs of these complicated objects are coming into further focus, as well.

The Metropolitan Museum of Art is privileged to host a book conservator within the Photograph Conservation Department (DPhC) which allows for these cross-disciplinary conversations and treatments. Georgia Southworth has been on staff part-time since 2007 conserving photograph albums, photographically illustrated books, and the

bindings of cased objects. With the access and experience this position provides, the goal is to begin to share insights and resources that will build upon the dialogue between the book and photograph conservation communities. Here, a short discussion of the hybrid nature of albums and their more common structures and preservation concerns will be followed by conservation treatment considerations, preservation parameters specific to these artworks, and a brief review of handling, storage, and material resources to help conservators and non-conservation caretakers ensure that these delicate objects, which are held across all manner of institutions, receive the preservation care they need.

Although albums and photographically illustrated books combine the preservation concerns of both volumes and photographs, the characteristics of these two distinct artforms may encroach upon and even exacerbate one another. The challenges introduced by albums are not unfamiliar to book, paper, and photograph conservators, but as noted, the overlap of these practitioners does not always occur within a single conservation lab or even institution, which can leave the responsible preservation care of these hybrid objects either to a single practitioner, a non-conservator caretaker, or to a contract conservator hired to address them. Both disciplines require focused training, so although working with photograph-based collections at The Met has taught Southworth a great deal about their history and preservation, she was not trained formally as a photograph conservator, and works very much in collaboration with colleagues in the DPhC to determine an object's individual needs. Finding collaborative ways to approach these concerns is not new. In 1999 the American Institute for Conservation (AIC) held a joint Book and Paper Group and Photograph Materials Group session at

the Annual AIC Conference to address the preservation of albums and scrapbooks. The postprints from that conference include a number of very valuable articles about album structures, survey approaches, and the ways their preservation concerns differ from traditionally bound volumes.

The bookbinding structures used for albums often differ significantly from those used in traditionally bound books. As in library or rare book collections, surveying and researching bindings and recreating photograph album styles helps build the knowledge necessary to inform proper care. All codex format volumes rely on numerous areas of movement to allow these objects to function. Understandably, at the time of manufacture the structure and the materials employed in a book's construction function as one and the volume opens well. The movement of inner and outer joints, the paper, and the sewing (or other spine structure) allow access to the contents. Critical, of course, is the continued mechanical endurance of these materials. Yet over time leather, adhesives, threads, and paper may inherently deteriorate on their own and suffer from external conditions - each component at a different rate. These structural breakdowns inhibit the function of the object, sometimes completely. Photographs, although historically created with very high-quality materials and developed on strong paper supports, may remain sensitive to light and to the chemistry of their immediate environments. As well, their surfaces are easily marked and must remain protected from any direct handling. In comparing the handling concerns of these two art disciplines, their needs can seem in direct contrast with each other: the volume only functions well while its movement is uncompromised, with the pages manipulated by hand; the photograph is healthiest when kept still and stable, untouched. Likewise, the book conservator must keep the bound object moving, while the photograph conservator must keep the photographic object still. The *photograph album*, of course, combines these two complicated artforms into one. Proper preservation care can be built on understanding the mechanics and the materials of this subset of bound volumes, including how the development of album structures followed the growth of the photographic industry, from the first photographs in 1839 up through the present.

Employed to house some combination of images, manuscript notations and printed text, albums serve as protective enclosures, as mechanisms to keep photographs flat, as carrying cases and display devices. Examined decades after their manufacture, some albums' bindings prove to have been a benefit to the photographs mounted in their pages, and also at times a detriment. Along with an understanding of the quality of the materials used at manufacture and that which is being asked of them in the function of the artwork, it is essential to be mindful of the method of attachment of the photographs. Each image is held in its location in a particular adhered overall, dabbed corners, hinged in with Japanese paper, slid into a pre-prepared recess in the leaf, edge-mounted, corners tucked through one or two slits in the support, held by paper or plastic photo corners, tipped in with a line of adhesive, guarded into place, even just intentionally loose, inserted into the textblock. Some newer album structures were sold with lines of adhesive and liftable plastic overlays, transparent plastic sleeves, or photo corners ready to receive snapshots. All of these methods of attachment may fail or inadvertently cause harm to the photographs or supports, and the handling or treatment of the object must be undertaken with the attachment method in mind.

The industrialization of production methods across all sectors during the 19th century changed the way businesses produced goods, and the shift toward mechanizing paper manufacture in particular revolutionized print and publication runs, from newspapers to novels to art. As demand for all printed matter increased, wood pulp was sourced as the main ingredient in paper slurries, replacing the less available linen, cotton and flax, and bleaching was introduced to brighten papers, offsetting the darker tone of wood pulp-based products. Photograph album structures across the 19th and 20th centuries were designed by innovative bookbinders to accommodate the various and changing processes that were being developed by photographers. Despite the creative solutions devised to pair the photograph with the book, industrially produced binding materials resulted in the reduced long-term quality of many products, including the adhesives, cloths, threads and leathers used in production bookbinding, as well as the papers used in the textblocks. Produced in great quantities as the photographic industry expanded, these albums often suffer the breakdown of the materials into which were mounted the high-quality photographs, leading to countless ethical considerations and structural decision-making on the part of the conservation team that is responsible for the artworks today.

Bookbinders accommodated the addition of the photographs into the pages of traditionally sewn books in various ways and altered the structures to account for the thickness of the new contents in manners similar to those employed to bind volumes with intaglio or woodblock prints. Initially, leaves were removed (fig. 2), folios were back-hooked and sections were sewn with compensation stubs, these stubs approximating the thickness of anticipated additional materials.



Fig. 2: Traditionally sewn album with leaves removed to accommodate addition of photographs to textblock. Author's study collection object

Photographers continually advanced their work and by the mid- to late-1850s the albumen silver print was the most widely used photographic process. Printed on very thin paper, these photographs tended to curl dramatically if left unrestrained, and in an effort to counter this effect they were mounted onto secondary supports, either into the leaves of an album or with growing popularity, onto individual rigid cardboard supports, as with the carte de visite (100mm x 64mm), and later the larger cabinet card (165mm x 108mm). Cartes de visite and cabinet cards were included in albums by being inserted into board-weight rigid leaves, rather than being pasted into the pages of a traditionally or side-sewn album. The following objects from The Met's collections example a few of the more common album structures and provide evidence of the manner in which their hybrid natures can exacerbate preservation challenges.

Emma Charlotte Dillwyn Llewelyn's Album (figs. 3 and 4) was produced between 1853 and 1856. The album is half-bound in red leather with marbled paper sides, and the textblock consists of sections of wove paper, sewn through the folds, with potentially light sensitive photographs mounted throughout on

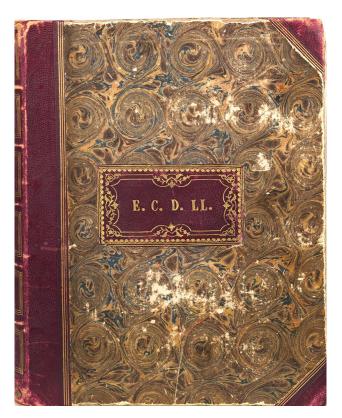


Fig. 3: Llewelyn, John Dillwyn, [Emma Charlotte Dillwyn Llewelyn's Album], 1853-1856. Album with salted paper and albumen silver prints.  $28.8 \times 22.3 \times 3$  cm. The Metropolitan Museum of Art, Gilman Collection, Gift of The Howard Gilman Foundation, 2005 (2005.100.382 (1-85)

the rectos of the page openings. It contains 128 salted paper prints and albumen silver prints made from both paper and glass negatives, and the majority of the very thin photographs are attached to the album pages with adhesive along just their four edges, leaving the central portions of the photographs loose. A number of the photographs lack the tips of their corners which appear to have been snipped away prior to the images being added into the volume, but there is little information about the photographs' lives prior to being mounted in the album. As well, some of the images have faded where the adhesive applied to the verso has affected the image material, warranting further study. The opening action of this bound album, with its sections sewn through the folds and its flexible leaves, is typical for the style of



Fig. 4: Llewelyn, John Dillwyn, [Emma Charlotte Dillwyn Llewelyn's Album], 1853-1856. Image of "Theresa", edge discoloration from attachment adhesive around the edges of the print

binding, and its continued success relies upon the sewing, the linings of the spine, and the drape of the paper that makes up the textblock. As move the leaves, so follow the delicate photographs. In this case, the actions that allow the book to function smoothly may themselves pose a risk to the thin edge-mounted artworks, both causing their planar deformation and increased risk of tearing when the pages are turned, and placing strain on the adhesives that hold the photographs in place.

Unable to accommodate photographs mounted to rigid supports, sewn structures were joined by guarded leaf structures, which followed the invention of the carte de visite, noted above. Consisting of an albumen silver print adhered overall to a thick paper card, the carte de visite was introduced and patented in



Fig. 5: Primary hinge guarded leaf structure, from tail. Osborn's Gallery, Charleston, SC [The Evacuation of Fort Sumter], 1861. 12.6 × 9.4 × 2.5 cm. The Metropolitan Museum of Art, Gilman Collection, Museum Purchase, 2005 (2005.100.1174.1-.16)



Fig. 6: Secondary hinge guarded leaf structure, from tail. Harvey, Emily Clare, [The Harvey Album], 1868. 23.8 x 19.4 x 3.8 cm. The Metropolitan Museum of Art, Purchase, The Horace W. Goldsmith Foundation Gift, through Joyce and Robert Menschel, 1998 (1998.166)

Paris in 1854 by André Adolphe Eugène Disdéri. The introduction of these cartes, smaller in format and more affordable to produce and purchase, helped to democratize photography by allowing a broader demographic to have their images taken, to own their own cartes and albums, and to curate them for private enjoyment. Carte de visite albums, and

beginning in the 1860s, the larger format cabinet card albums, are found in great numbers across institution and personal collections. Though there are numerous variations in their structural details, the primary hinge album and the secondary hinge album with board stubs are two very recognizable styles. Comprising the textblock, the leaves of guarded leaf albums each consist of a board from which has been excised a recess just larger than the object to be inserted. Paper facings are adhered to both sides of the board, each of which serves as a device to frame the image beneath and as an overmat to keep the carte de visite or cabinet card in position. In albums with primary hinges, the leaves are joined one to the next with cloth or paper guards, adhered underneath the facing papers of the conjugate pages at each opening (fig. 5). In albums with secondary hinges, the board or folded cloth stubs are sewn or adhered together at the spine edge, with the board leaf then guarded to the stub (fig. 6). In both the primary and secondary hinge guarded leaf albums, the opening action relies on the continued fold endurance of the guards that hold the textblock together, rather than on the thread, spine liners, paper drape, adhesives, or other traditional methods of opening support utilized by bookbinders over the centuries. Photographs on their rigid supports are slid into position in the leaves either from the tail, or through a slit in the page front, to sit back-to-back in the recess cut from the board, each object's recto then matted for the viewer underneath the paper facing. The design of these albums allows for relatively straightforward insertion of a photograph, but they are not conducive to changing the order of prints by removing and reinserting them, which often results in damage to both the delicate images as they are slid in and out of the specifically designed recesses, and to the paper facings.



Fig. 7: Jackson, Ambrose; Stacy's Photographic Carte de Visite, Publisher, [Carte-de-visite Album of Central Park Views], 1860s. 15.4 × 13.4 × 3.9 cm. The Metropolitan Museum of Art, Bequest of Herbert Mitchell, 2008 (2015.400.199)

The Carte-de-visite Album of Central Park Views (figs. 7 and 8), with cartes produced in the 1860s by Stacy's Photographic Carte de Visite and gouache and varnish paintings by American artist Ambrose Jackson, is filled with images of New York City's newest treasure at the time, Central Park. The first and perhaps most famous park in the United States, Central Park was constructed between 1857-1863, years that coincided with an explosion in the popularity of the carte de visite. The Carte-devisite Album of Central Park Views is bound in full maroon leather, with a blind raised pattern on front and back boards, and two brass clasps at the fore-edge that swing from the back to the front board. The guarded leaf structure of this album's textblock is constructed with folded compensation stubs made from cloth, the extension of which serves to attach the stiff leaves of the book block at the secondary hinges.

Numerous preservation challenges lurk in the pages of guarded leaf albums. The aforementioned concerns about 19<sup>th</sup> century papers, leathers, and adhesives must be considered, as the degradation patterns of these



Fig. 8: Jackson, Ambrose; Stacy's Photographic Carte de Visite, Publisher, [Carte-de-visite Album of Central Park Views], 1860s. Paper facing lifting away from board

materials put handling and the function of the binding at risk. Cloth guards and facing papers lift away from the boards as adhesives fail. Efforts to remove and reinsert the cartes may dent their corners, and tear or cause creases in the aging papers. The textblocks, made of matboard, adhesives, paper, cloth guards and photographs, are heavy for their size and larger albums can succumb to gravity, essentially pulling their textblocks out of their squares, and then their bindings, when stored vertically as they often lack the rounding and backing of the spine to help support them on the bookshelf.

The single sheets of the small side-sewn volume [Album from the Archive of the French Medium Henri Matthouillot] from 1920-1938 (fig. 9), are bound with a cord laced through two holes that extend through the cover and the textblock. Gelatin silver prints are mounted overall, recto and verso throughout, adjacent to lengthy manuscript ink notations written on slips of paper. A very simple structure, its



Fig. 9: Unknown, [Album from the Archive of the French Medium Henri Matthouillot], 1920-1938. Side sewn album with gelatin silver prints and manuscript descriptions. 11 x 7.9 x 1.5 cm. The Metropolitan Museum of Art, Gilman Collection, Gift of The Howard Gilman Foundation, 2005 (2005.100.383.2)

continued function relies on the fiber strength of the textblock paper, and the continued fold endurance of the leaves and cloth spine covering, where all of the opening action occurs. The gelatin silver photographs in this album are quite stable, but they are mounted side by side with their descriptions and when the volume is closed, the adhesives and the inks rest in contact with the conjugate photographs' surfaces. The loosely side-sewn structure offers limited planar stability for the album, and the user must be careful to avoid allowing the delicate and glossy surfaces of the photographs to rub against one another or the mounted annotations. With prints adhered almost to the fore-edges on each verso, the user risks touching the faces of the photographs in turning the leaves unless aware of the layout before handling. This is a good example of when to include handling instructions on the protective enclosure labeling.

An album titled *Girls I Have Known* from 1916-1917, is a personal memory book made by a teenage boy, discussing and documenting characteristics of his school-mates. Dan Rochford, the album's maker, worked into a common blank stationer's notebook, which

has rounded corners, lack of squares, and pre-numbered pages.

The thin paper of the textblock is folded in sections and machine sewn and the textblock is hung into the linen-covered boards with the endpapers. The whole was then trimmed as a unit, leaving the edges of the boards raw. The artist added photographs, along with personal notes, type-written surveys, magazine clippings, drawings, and various other ephemeral materials. The sheer quantity and diversity of inclusions makes handling and display difficult, and the challenge of accessing the complete contents of a single opening spread is increased with the condition of each addition. Although the volume opens well, access relies on the continued efficacy of the various adhesives and the endurance of the folded inclusions, both of which must be carefully considered in relation to the years the album was constructed.

The albums discussed here each present their own set of challenges, and the inclusion of the physically and chemically sensitive photographs adds a nuanced layer to their preservation. When adhered just around their edges, thin and potentially light sensitive salted paper and albumen prints are put at risk by the action of turning the pages, as well as by their proximity to 19th century papers and adhesives. The removal and re-insertion of cartes de visite into aging albums increases the risk of handling damage to both the photographs and the album pages. Side-sewn albums without spine support may not provide the planar stability necessary to prevent conjugately-mounted photographs from rubbing against one another. Personal scrapbooks or albums can develop various handling concerns not found in volumes without additional inserted content. Photograph album structures from across the decades of the 20th century, such as post bindings, spiral bound albums, ring binders and plastic comb

bindings, introduce unstable plastics and adhesives that can damage the mounted photographs as they degrade.

### **Conservation Treatment**

Conserving photograph albums involves making decisions about how best to keep these dynamic objects functioning, while bearing in mind the particular preservation concerns discussed above. Maintaining the various moving parts of an album often requires stabilizing the existing material or replacing an original aspect of an album, and invariably, ethical questions arise in each treatment plan. Should a leather outer joint be replaced with new leather which will, based on its acidic nature, break down over time? Is it appropriate to introduce a different material to the structure, despite being a departure from the original design? If the sewing threads are broken in one part of a volume, should the entire book be resewn, though the treatment is more invasive? If photographs have detached from the pages, should the conservator use a different, but more reliable method of reattachment? How can manuscript captioning below a photograph be preserved if the paper on which it is written is inherently so weak that the photograph is separating from the page? How does the conservator wrestle with the pervasive issue of photographs made with stable materials that are kept in proximity to poorer quality papers and adhesives while striving to retain the integrity of the album as a singular object? These are among the various ethical considerations that enter into the treatment plans for albums.

In weighing possible treatment options, one should approach the process by considering the most vulnerable aspect of the album, whether it be the covering materials, the adhesives used for attachment, the photographic process, or

the light sensitivity of the mounted images. With in-situ treatment of the photographs in a particularly delicate structure, the book and photograph conservators work together to set the volume up in a supported manner to allow for safe treatment. Determining whether to retain, remove or replace interleaving papers, and the decisions about treatment adhesives and housing materials are taken with the delicacy of the photographic material in mind. Cross-disciplinary communication encourages both book and photograph conservators to consider artwork sensitivities outside of their main disciplines, and usually more communication up front results in better longer term preservation of the objects.

### Preservation

Providing protective enclosures for albums made from Heritage® or other similarly tested board (fig. 10), (rather than housing them in cloth-covered drop spine boxes), ensuring that storage and exhibition materials have passed the Oddy test and Photographic Activity Test, and maintaining a stable environment during storage, research, and display will result in



Fig. 10: Heritage® board protective enclosures for volumes containing photographs

the most effective long-term preservation of photograph-based artworks. Preservation efforts may be enhanced through well-placed education and advocacy, including providing handling sessions for new staff and fellows and reaching out periodically to registrars and curatorial teams to review these protocols. Welcoming visitors to the lab, whether students or potential donors, regularly results in new insights and excitement about the practices involved in the long-term care of art collections. In closing, provided below is a list of some housing and storage recommendations, handling guidelines, and the names of a small number of materials and vendors that supply them, with the hope that these will be useful in furthering the collaborative work undertaken by the book and photograph conservation communities.

## Housing and storage recommendations

- Most photographs should be stored at cooler or colder temperatures
- Photographs and bookbinding materials are light sensitive
- Environmental conditions in galleries 50%RH / 70°F (21°C)
- Housing materials should pass Oddy test
  \*each new batch tested
- Housing materials should pass Photographic Activity Test (P.A.T.)
- Enclosures of Heritage® board or other conservation quality material
- Micro-climate housings will slow down Temperature and RH fluctuations
- House and store heavy or unstable albums flat, on folio shelving
- Label housings with any handling instructions, warnings
- Include maximum safe opening angle instructions on housings
- Provide handling instructions for more complicated housing designs

## Handling guidelines

- Handle albums with gloves
- If volume is housed vertically on shelf, do not remove by headcap
- Be mindful of the condition of covering materials
- Lift an album up, do not slide it, and place it in new location
- Open album slowly to avoid draw and lifting of endpapers
- Use book supports or angled cradles to support open albums
- Adjust cradling support and opening angle to accommodate various openings
- Avoid flexing photographs with the movement of the album pages
- Handle only the outer margins of the textblock leaves
- Be aware of interleaving, and loose or detaching photographs
- Allow no photos or interleaving to slip into the gutter or become creased
- Examine album with photograph and book conservator
- Build cradle specific to the opening page spread and support the squares during exhibition
- Housing materials should pass Oddy test
  \*each new batch tested
- Housing materials should pass Photographic Activity Test (P.A.T.)
- Strap leaves gently with polyethylene to keep open during exhibition
- Albums may appear robust even when in poor condition
- Consider exhibiting facsimiles if albums absolutely may not be exhibited
- Before permitting exhibition, understand an album's limitations

## **Housing Materials**

- Heritage® Archival Corrugated Board
- Mylar® Polyester
- Polyethylene Strap
- Four flap enclosures
- Photo-Tex paper
- Tyvek®

# **Suppliers**

- Talas
- Archival Products
- University Products
- Creation Baumann
- MasterPak
- Benchmark

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### References

- Adamopoulou, A. 2012. Same albums, different treatment approaches: The conservation of two photographic albums from the first modern Olympic Games in Athens, 1896. *Postprints*. 7th AICCM Book, Paper and Photographic Materials Symposium. Brisbane, Australia. AICCM: 13-20.
- AIC. 2000. Conservation of scrapbooks and albums. Postprints of the Book and Paper Group and Photographic Materials Group Joint Session at the 27th Annual Meeting of the American Institute for Conservation of Historic and

- Artistic Works. June 11, 1999. St. Louis, Missouri. Washington DC: AIC.
- Asser, E. N. 2014. Photo Albums: The Development of bookbinding constructions between 1840 and 1940. *Journal of Paper Conservation* 15(4): 13-19.
- Clarke, B. 1992. Some Observations on the Development of Albums Containing Photographs and Aspects of their Deterioration. *Postprints from The Imperfect Image: Photographs, their Past, Present and Future.* Windermere Centre for Photographic Conservation. 69-77.
- Etherington, D. and M. Roberts. 1982. Bookbinding and the Conservation of Books: A Dictionary of Descriptive Terminology. Washington, DC: Library of Congress, US Government Printing Office.
- Lavedrine, Bertrand. 2009. *Photographs of the past, process and preservation*. Los Angeles: The Getty Conservation Institute.
- Lavedrine, Bertrand. 2003. A guide to the preventive conservation of photograph collections. Los Angeles: The Getty Conservation Institute.
- Norris, D. H. and J. J. Gutierrez. 2010. *Issues in the conservation of photographs*. Los Angeles, CA: Getty Publications.
- Primanis, O. 1999. The design of a photo album structure with removable leaves. *The Book and Paper Group Annual* 17: 83-94.
- Rutherston, J. 1999. Victorian album structures. *Paper Conservator* 23: 13-25.