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A Conservation Survey of Photographic Albums and Photographically Illustrated Books from the National Gallery of Canada

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A CONSERVATION SURVEY OF PHOTOGRAPH ALBUMS
AND PHOTOGRAPHICALLY ILLUSTRATED BOOKS
FROM THE NATIONAL GALLERY OF CANADA

by

Sarah Mortensen

Advanced Diploma, Applied Museum Studies, Algonquin College 2008
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An Applied Thesis Project

presented to Ryerson University and
The George Eastman House -
International Museum of Photography and Film

in partial fulfillment of the
requirements for the degree of

Master of Art in
Photographic Preservation and Collections Management

Toronto, Ontario, Canada, 2011
Rochester, New York, United States of America, 2011

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ABSTRACT

A Conservation Survey of Photographic Albums and Photographically Illustrated Books from the National Gallery of Canada
Masters of Arts
2011
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Photographic Preservation and Collections Management
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This applied thesis project demonstrates a methodology for a conservation survey of photographic albums and photographically illustrated books applied to the Photograph Collection of the National Gallery of Canada, in Ottawa, Ontario. The conservation survey captures basic descriptive and condition information and employs a priority classification system for treatment and housing recommendations for roughly one hundred and twenty bound structures in which there are mounted or inserted photographic prints. While the needs and requirements of conservation surveys are dependant on the history, scope and nature of individual collections, this thesis attempts to provide an example, or baseline, for the development of conservation surveys for similar collections or collections with similar needs. Additionally, this thesis presents a visual glossary that illustrates and serves as a reference for the identification of the leaf and binding structures of photographic albums and photographically illustrated books occurring most frequently in museum collections.

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First and foremost I must express my gratitude toward the staff at the National Gallery of Canada, particularly to John McElhone, Shawn Boisvert, and Jacqueline Warren, who have been nothing but supportive during the time I spent carrying out this task. They have taken time to respond to my questions and requests for collections materials. Without their assistance and authorization to access the collection, this applied thesis project would not have been possible. It was a unique privilege to spend time with the photograph albums and photographically illustrated books comprising this incredibly rich national collection. Again, I thank them for this opportunity.

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Finally, I must thank my family and friends for their tireless support over the course of my studies and during this thesis process. A special thanks to Rich, Velta, Ian and Lydia: you have always encouraged me to pursue my interests and have been instrumental in helping me to achieve my goals.

Sarah Mortensen
Ottawa, Ontario
August 2011

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LITERATURE REVIEW

In order to carry out this project, I identified several areas in which I needed to expand my knowledge. In general terms, the aim was to find material that clearly defined methods for planning and carrying out a conservation survey, as well as resources that give consideration to the necessary elements of a successful conservation survey of photographic albums and photographically illustrated books. Furthermore, it was necessary to gain greater comprehension of the structural elements of bound volumes, their preservation, and their conservation needs.

I began my investigations with the chapter entitled "Condition Reports, Treatment Proposals, and Collection Preservation Surveys" in Klaus Hendriks' book The Fundamentals of Photograph Preservation: A Study Guide. This chapter outlines and discusses the range of information that may be required for conservation survey reports. As the scope and content of surveys vary considerably, this section presents a series of survey elements and expands upon the types of information and conditions that should be recorded, accessed and noted in order to yield interpretable data. In addition to Hendriks' book, Bertrand Lavédrine's A Guide to the Preventive Conservation of Photograph Collections, contains a short section that addresses the process of determining survey sample selection and statistical methodologies for determining optimal sample size.

Aside from the above two text resources, the majority of the information I was able to obtain were documents and technical notes found on the Internet, journal articles, reports, and post-prints of papers presented at professional conferences.

A publication produced by Beth Patkus at the Northeast Document Conservation Centre (NEDCC) entitled *Assessing Preservation Needs: A Self-Survey Guide* is available through the NEDCC website.¹ This survey guide is divided into three main sections; each with subsections which further break down the survey process. Although Hendriks, Lavédrine and Patkus' guides are not exhaustive, they provide an overview of significant factors, which when kept in mind, should lead to useful observations.

¹ Beth Patkus, "Assessing Preservation Needs: A Self-Survey Guide."
www.nedcc.org/resources/downloads/apnssg.pdf

I was interested to learn about conservation surveys of photographic albums conducted by other institutions. In my pursuit of information on this subject I found a short report prepared by Conservator Lynn Curry and several published conference proceedings to be a valuable sources of information.

In December of 1990, Lynn Curry undertook a conservation survey of photograph albums at the National Gallery of Canada (NGC). This survey and the accompanying *Report of the Condition and Recommended Treatment Survey of the Photograph Album Collection of the National Gallery of Canada*, provided insight into the detailed treatment survey practices employed previously on a portion of the collection. In addition, this previous survey was helpful in determining a consistent system for condition classification.

Alan Donnithorne, Christopher Date and Susanne Ruf presented a paper entitled, *Why Survey Your Photograph Collection? An Example of the Collective Approach at the British Museum*, at the Centre for Photographic Conservation's first international conference in Windermere, England. This paper has been published in *The Imperfect Image; Photographs Their Past, Present and Future* (1992) and presents the survey carried out by the British Museum as a case study illustrating the way curatorial and conservation aspects of surveying can be combined in a constructive and gainful manner.

Several papers presented at the *27th Annual Meeting of the American Institute for Conservation (AIC)* in St. Louis, Missouri were compiled into a publication entitled *Conservation of Scrapbooks and Albums: Postprints of the Book and Paper Group/ Photographic Materials Group Joint Session* (2000).

During this meeting four papers were presented as part of an Interim Report on the Harry Ransom Humanities Research Centre (HRHRC) Photograph Album Survey. This survey project set out to address the conservation treatment and preservation housing needs of approximately 250 albums. The series of papers begins with Olivia Primanis' *Nineteenth-Century Photograph Albums: Structure, Condition and Treatments*. This paper presents an outline of the general parts and structure of a book and how book structure is changed in order to accommodate the addition of photographs. The paper addresses and describes

four major classes of nineteenth century album structures defined by the manner in which leaves of the text block are connected. Additionally, the forms of deterioration typical to each of these structure types are explored, along with their potential conservation and stabilization treatments.

Barbara Brown's *Photographs in Albums: Observations, Treatments, Comments and Some Survey Results* presents some general types of damage found in various examples of photographic processes due to their presence in various album types. Treatments and housing options that address some of these problems are presented as well as information regarding the general survey process, including the logistics of the project timeline and data management.

Meg Brown's *Developing a Conservation Survey Database for Photograph Albums* discusses the challenges of developing and standardizing the terminology and definitions for a survey. These three papers are followed by the *Glossary of Terms for the Photographic Album Survey*, and with examples of the original survey forms and the electronic survey form.

The AIC postprints also includes two articles by Richard Horton; *Historical Photo Albums and their Structures* and *Glossary of Terms Relating to Photo Albums*, both of which expand upon the material presented in the HRHRC papers. Additional materials that address the physical structure of bound albums include an article by Jane Rutherford, entitled *Victorian Album Structures*. This article not only facilitates the identification of various album structures and materials through examination of technical and material developments, but also addresses the historical and social background of albums and consequently assists treatment decisions.

I required further literature that would aid in the formulation of comprehensive and sound stabilization, treatment and housing options. Among the most useful materials I found on this subject are Greg Hill's *The Conservation of a Photographic Album at the National Archives of Canada*, Shereilyn Ogden's *Preservation Options for Scrapbooks and Album Formats*, and Gawain Weaver's *Capital Portraits: Conservation of the Topley Studio Index*.

These articles provide case studies and specific examples of conservation and treatment options, as well as the decision-making processes that lead to the resulting treatments. Technical notes and leaflets on the conservation treatment of bound materials and the preservation of scrapbooks and albums are available from the NEDCC and on the Library of Congress website. These resources provide more generalized information on these subjects.

In terms of providing options for housings and protective enclosures, Dee Psalia's [Design and Materials for Photographic Housings](#) and Margaret R. Brown's *Boxes for the Protection of Books: Their Design and Construction* provide very thorough descriptions, instructions and diagrams for a variety of housing designs.

While the focus of this applied thesis project is not to explore the history of the photographic album, printed materials on this topic including; Lucien Goldschmidt and Weston Naef's [The Truthful Lens](#), Martin Parr's [The Photobook: A History](#), and Gustavo Lozano's essay entitled *History and Conservation of Albums and Photographically Illustrated Books*, provide important information regarding the historical and social functions, as well as the informational, associational and artifactual value of these objects. This information should in turn be used to inform potential treatments and other preservation considerations of the albums surveyed in this applied project.

INTRODUCTION:

PHOTOGRAPHIC ALBUMS AND PHOTOGRAPHICALLY ILLUSTRATED BOOKS

The development and popularization of photography in the nineteenth century coincided with the increase in societal wealth and manufacturing capacity resulting from industrialization.² Enchantment with the medium grew quickly, and brought about a new outlet through which to capitalize on the human instinct to collect. Whether this motivation to collect stemmed from “connoisseurship, nostalgia, amusement, compulsion or even narcissism,”³ the practice of collecting and arranging prints and drawings in commonplace books, scrapbooks and albums had been in practice since the early sixteenth century.⁴ The bound format presentation of original photographs in an album or book was then a natural progression⁵ and was among the earliest and most successful methods for the dissemination of photography to a larger consumer audience.⁶

Generally speaking, a photographic album is defined as a unique collection of photographs assembled into an individually made blank book or a commercially produced album, while a photographically illustrated book is a volume containing photographs that has been published in an edition.⁷ Despite this seemingly simple differentiation, it is not always clear whether an album is unique object or an object produced in an edition.⁸ What defines these volumes as a photographic album or a photographically illustrated book is not determined solely in their materiality, rather, such designations are often more closely associated with the original concept under which they were created.⁹

² Jane Rutherston, “Victorian Album Structures,” *The Paper Conservator*, vol. 23 (1999): 14; Olivia Primanis, “Interim Report on the HRHRC Photograph Album Survey 1. Nineteenth-Century Photograph Album Structures, Condition and Treatments” in *Conservation of Scrapbooks and Albums* (Washington: AIC, 2000), 47.

³ Rutherston, 14.

⁴ Gustavo Lozano, “History and Conservation of Albums and Photographically Illustrated Books,” Andrew W. Mellon, Advanced Residency in Photograph Conservation, George Eastman House, 2007: 9; Rutherston, 14.

⁵ Mary Wootton, Terry Boone and Andrew Robb, “The Structure’s the Thing, Problems in the Repair of Nineteenth-Century Stiff-Paged Photograph Albums” in *Conservation of Scrapbooks and Albums* (Washington: AIC, 2000), 37.

⁶ Alexandra Bothelho. “A Report on the Photo Album Condition Assessment Survey for the International Museum of Photography and Film at George Eastman House.” Advanced Residency Program in Photograph Conservation, George Eastman House, 1997, 1.

⁷ See Lozano, 1-2; Rutherston, 15; and Martin Parr and Gerry Badger (2004).

⁸ Lucien Goldschmit and Weston Naef. *The Truthful Lens: A Survey of the Photographically Illustrated Book, 1844-1914*, (New York: The Grolier Club, 1980), 10.

⁹ Lozano, 2.

That being said, photographic albums and books illustrated with photographic prints substantiate the growth and development of early paper photography and related processes,¹⁰ as well as the social and cultural contexts of the times in which they were created.¹¹ As a result, the last thirty years have seen photographic albums and photographically illustrated books feature prominently as topics of discussion in scholarly research in the history of photography, material culture studies, and also in conservation research.

Of the materials collected and organized by cultural institutions, photographic albums and photographically illustrated books are among the materials that have seen the heaviest use during their lifetime. Due to the role of these bound structures as containers, they are functioning objects subject to wear and tear, frequent handling, poor storage, and many other abuses.¹² Even under the most ideal of circumstances, photographic albums and photographically illustrated books often experience deterioration caused by the nature of the objects themselves.¹³ This occurrence; termed 'inherent vice,' describes inherent weaknesses in the chemical or physical structure of an object¹⁴ caused by a number of factors ranging from the breakdown of poor quality binding materials used in the construction of the volume, or weakening or structural failure due to stress placed on the binding by inserted materials. The threat of loss of content through deterioration of these structures has garnered widespread awareness in the last several decades,¹⁵ and has prompted a growing interest in the complex challenge of determining the preservation and conservation needs of these composite objects.

Agreement from across the field of preservation and conservation has yielded several meetings and published articles addressing the importance of intellectual control of

¹⁰ Bothelho, 1.

¹¹ Lozano, 15-18.

¹² Beth Patkus, "Assessing Preservation Needs: A Self-Survey Guide." (Andover, Massachusetts: Northeast Document Conservation Centre, 2003), 1.

¹³ Shereilyn Ogden, "Preservation Options for Scrapbooks and Album Formats," in *The 1991 Book and Paper Annual*, no.10 (1991), 149.

¹⁴ Patkus, 1.

¹⁵ Rutherford, 14.

collections.¹⁶ This includes having a better understanding of binding and mounting structures, as well as the materials used in the production of bound volumes containing photographic prints. Familiarity with the operating characteristics of various binding structures, and knowledge pertaining to the ways in which they deteriorate, are essential in informing the conservators choice of repair techniques and stabilization treatments in order to mitigate further damages.¹⁷

THE COLLECTION CONSERVATION SURVEY PROJECT

All collecting institutions have an obligation to provide the best stewardship possible to the objects and information resources in their collections. Collection surveys are often the first step in assessing a collection for both short-term and long-term preservation planning purposes.¹⁸ Condition assessments are integral in establishing priorities for collections care and typically address conservation treatments, rehousing and appropriate storage conditions. With that said, the aim of this applied thesis project is to demonstrate a methodology of a conservation survey of bound structures in which there are mounted photographic prints that are held in the Photographs Collection of the National Gallery of Canada (NGC), in Ottawa, Ontario.

Following a summer internship within the Restoration and Conservation Laboratory at the NGC, consultations with Photographs Conservator John McElhone revealed a need to reassess the photographic album collection. Commitment to this project, including access to the collections materials was confirmed from the Photographs Collection, including Documentation Officers, Shawn Boisvert and Jacqueline Warren, Curator, Ann Thomas and Assistant Curator, Lori Pauli.

Preliminary discussions surrounding the requirements of a collection condition survey revealed that a contracted book conservator, Lynn Curry, had completed a conservation

¹⁶ Beth Patkus, "Assessing Preservation Needs: A Self-Survey Guide." (Andover, Massachusetts: Northeast Document Conservation Centre, 2003), 5.

¹⁷ Primanis, 47.

¹⁸ Patkus, 2.

survey of seventy-four albums in December of 1990. The intention of that survey was to provide the basis for planning future treatments and to provide information on the general state of preservation of the album collection.¹⁹

There were several reasons to resurvey the NGC's photographic album collection. Firstly, as twenty-one years had elapsed since the 1990 survey it was desired to once again assess the collection's general state of preservation, as well as, to monitor known deterioration issues. Secondly, it was necessary to determine the number of albums that have since undergone their proposed treatments, and thirdly, it was believed that a number of albums had not been assessed and as a result the 1990 survey was neither a complete item-by-item assessment nor was it necessarily a statistical representation of the overall collection.²⁰ An additional objective of the current conservation survey is the consolidation of information sources relevant to the structures, conditions, housings, and use of interleaving materials within individual volumes comprising the photographic album collection.

Proceeding from the above motivations, the conservation survey is designed to clearly articulate information regarding the current scope and condition of the collection and to provide a clearer picture of the collection's state of preservation and conservation priorities. Specific goals of the conservation survey are as follows:

1. Assess the general state of preservation of the photograph album and photographically illustrated book collection held within the National Gallery of

¹⁹ Lynn Curry, "Report of the Condition and Recommended Treatment Survey of the Photograph Album Collection at the National Gallery of Canada" (1991). Lynn Curry's conservation survey will be discussed in detail in a later section of this paper.

²⁰ Conservators and preservation professionals routinely undertake several different types of surveys; a general 'preservation planning survey' identifies overall preservation goals and priorities for a repository. It differs from a 'collection condition survey' in that it does not normally provide an assessment of the condition of individual objects. A collection condition survey can take the form of an 'item-by-item survey,' in which every item in a collection is assessed, or it can take the form of a 'statistical survey' that looks at a sample of material and provides data about the condition of that particular subset of the institution's collections. See Bertrand Lavedrine, *A Guide to the Preventive Conservation of Photograph Collections*. (Los Angeles, California: Getty Conservation Institute. 2003), 122-123; Klaus Hendriks, *Fundamentals of Photograph Conservation: A Study Guide*, (Toronto: Lungus Publications, 1991), 499-505 and Patkus, 1-8 for further information regarding surveys.

Canada's Photographs Collection,²¹ with specific regard to the binding, leaves and mounted photographs.

2. Determine the number of conservation treatments completed since 1990.
3. Assign priority classification for treatment and recommendations for treatment, if required.
4. Assess the range and condition of album housings and interleaving materials.
5. Assign priority classification for re-housing and recommendations for re-housing, if required.
6. Create a visual glossary of photographic album and photographically illustrated book structures. The intention of this visual glossary is to illustrate various types of binding structures and to serve as a reference for their identification.

It is important to note that the purpose of this collection condition survey is not to address environmental control and monitoring, disaster preparedness, security, or reformatting practices.²² The collections of the National Gallery of Canada are held in a collections storage facility with an established preservation program and are maintained under strictly monitored environmental standards.

²¹ The preservation survey does not include bound structures containing photographic prints from the collections of the Canadian Museum of Contemporary Photography (CMCP).

²² See Patkus (2003), Lavédrine (2003).

METHODOLOGY:

LOGISTICS OF THE SURVEY

Once the conservation survey goals were established the first step in planning the survey was to determine the collection's size. Fortunately, the majority of the NGC's holdings are catalogued and it was possible, with the help of Shawn Boisvert, to populate a list of artifacts with the object title of 'album' from the NGC's Museum Information Management System (MIMSY) collections database. This initial query yielded a working list of ninety-one albums. This approximate number of ninety-one albums allowed for some decisions to be made regarding the type and methodology of the survey to be implemented.

This number would facilitate an item-by-item survey rather than a survey based on a randomized or statistically representative sample, and would allow for specific information, rather than general information, to be obtained regarding individual albums. However, this initial number changed. Upon reflection it was deemed beneficial to expand the breadth of the survey to include photographically illustrated books reallocated from the NGC's library collection beginning in the 1970's in large part by the Gallery's founding curator of photography James Borcoman.²³

Following this reexamination, the size of the collection was found to be in excess of one hundred eighty-five volumes. Constraints due to time and access would not permit the execution of a complete item-by-item survey for a collection on this scale, thus a method of sampling had to be implemented. After further discussion it was agreed that the priority of this conservation survey would be the assessment of the bound volumes that had not been examined 20 years prior. Albums surveyed in 1990 would be reassessed if time and access permitted, and previously collected data would be incorporated into the current survey database to consolidate information sources regarding state of preservation of the collection as a whole. Additionally, it was decided that albums broken into individual plates would be excluded from the survey and it was acknowledged that it would not be

²³ James Borcoman is the Curator Emeritus of Photographs for the National Gallery of Canada is responsible for first establishing the museum's collection of contemporary and historical photography in 1967. As curator until 1994, Borcoman has played a major role shaping the museum's present day holdings, which include almost 20,000 photographs.

possible to assess albums currently on display, on loan or part of traveling exhibitions. This yielded a final total of ninety-nine volumes and justified proceeding with the original proposal of an item-by-item survey.

The second step in planning the conservation survey was the development of the survey form and database, followed by the creation of guidelines describing the manner in which to record data in individual database fields. The survey guidelines are discussed in detail, beginning on page 16 of this paper.

Once the database was established the survey itself was carried out through onsite examination at the NGC over three separate week long periods during the winter of 2011; Monday, February 21st through Friday, February 25th; Monday, March 14th through Friday, March 18th; and Monday, April 11th through Friday April 15th. Arrangements were made with Shawn Boisvert and Jacqueline Warren to ensure access to collections material and the assistance of Louise Chenier was instrumental in reserving the use of the NGC's Prints, Drawings and Photographs Study Room in which to carry out the survey.

DEVELOPMENT OF THE SURVEY FORM AND DATABASE

As the needs of individual collections vary from institution to institution there is no universal approach to designing and implementing a conservation survey.²⁴ Just as with the conservation treatment of albums, approaches taken by professionals in the field toward surveys have been discussed in conservation literature, but the literature does not provide a definitive methodology for the assessment of photograph albums and photographically illustrated books. Published articles do, however, provide a resource for reflection and consideration of potential approaches and methodologies.

Beginning with the literature survey, the aim was to identify examples of practices employed by the preservation and conservation community, including published materials that generally address and define the methods for planning and carrying out a condition

²⁴ Lavédrine, 122.

survey, as well as, resources that give consideration to the necessary elements of a successful conservation survey of bound volumes containing photographic prints. Furthermore, through the literature review it was possible to obtain information that addresses the structural elements of photographic albums and photographically illustrated books, as well as their operating characteristics, and any typical structure specific deterioration.²⁵

In conjunction with the institutional requirements established through dialog with John McElhone, these resources were used as a guide to create and implement the conservation survey. The goal was to create a computer based survey database in which to record basic identification, descriptive and condition information that would assist in determining the collection's preservation, conservation treatment, and re-housing priorities. Microsoft Excel was selected as it is simple and easy to use, has universal accessibility across operating systems, has the ability to search, analyze and make reports from data, and it supports the potential migration of data into MIMSY.²⁶ In order to ensure continued access to the completed survey database a hard copy has been printed and a digital copy has been made on a USB flash drive. Both formats have been submitted to the Restoration and Conservation Laboratory at the NGC.

The survey database is organized into six main sections. The first section consists of four columns that record "tombstone" information: Accession Number, Artist/ Maker, Title and Date Made. The second, and largest section, contains the next fourteen columns detailing basic descriptive and material characteristics: Object Name, Production Type, Binding Structure, Album Leaf Connection, Text Edge Treatment, Cover Decoration and/or Design Feature, Endbands, Endsheets, Number of Leaves, Leaf Materials and Media, Leaf Opening, Number of Photographs, Photographic Medium or Process, and Orientation of Photographs. The third section consists of four columns that record measurements in centimeters: Overall Height, Overall Width, Overall Depth and Width Open. The fourth section is comprised of nine columns that record basic condition information: 1990

²⁵ See Richard Horton, "Historical Photo Albums and Their Structures," in *Conservation of Scrapbooks and Albums* (Washington: AIC, 2000), 13-20; Meg Brown, "Interim Report on the HRHRC Photograph Album Survey 4. Harry Ransom Humanities Research Centre Glossary of Terms for the Photograph Album Survey" in *Conservation of Scrapbooks and Albums* (Washington: AIC, 2000), 89-92; and Primanis, 50-60.

²⁶ The National Gallery of Canada's Museum Information Management System.

Treatment Level (if applicable), Previous Treatments (if any), 2011 Treatment Level, Condition of Volume's Covers and Binding, Condition of Volume's Leaves and Connections, Condition of Photographs, Attachment of Photograph to Leaf, Interleaving Material, and Recommendation for Treatment (if any). The fifth section addresses the condition of housings: Priority Classification for Rehousing, Description of Present Housing and Recommendations for Rehousing (if any). The sixth and final section contains three columns for miscellaneous information: Additional Notes, Storage Location and Image File Names.

Not only will this survey benefit conservation staff at the NGC, the information garnered from this survey will be of value to the Photographs Collection's Curatorial and Collections Management staff. Additionally, it is hoped that this thesis will serve as a useful reference tool for outside institutions faced with the task of conducting similar conservation surveys.

Finally, as each individual photographic album and photographically illustrated book was examined photographs were made using a handheld point-and-shoot Panasonic Lumix LX3 camera. The photographs were taken for reference purposes, capturing views of the closed volume from the binding edge at the base of the spine, and open to show album leaf connection to the binding. The result is a visual glossary of binding structures most frequently employed, and is intended to serve as a reference for their identification. The Visual Glossary begins on page 91 of this paper.

THE 1990 PHOTOGRAPH ALBUM SURVEY
AND THE CLASSIFICATION OF CONDITION AND PRIORITY FOR TREATMENT

A previous survey completed by book conservator Lynn Curry in December of 1990 was undertaken at the time of the collections' move into its current storage location in the NGC's Curatorial Wing. The survey took the form of detailed object level checklists that provided the basis for future treatments. They included detailed treatment proposals required to bring individual albums as close as possible to their original condition.²⁷ In total seventy-four albums were examined and a 'Required Treatment Record' was completed for each album.

As part of the 'Required Treatment Record' each album was given a letter code of A, B, C, or D, which represents the treatment priority based on its general state of preservation. The codes were defined as follows:

A	Immediate treatment required	C	Future treatment required
B	Treatment required prior to exhibition	D	No treatment required

Code A indicates that immediate treatment is required to prevent further irreversible damage, code B indicates that treatment is required prior to the albums inclusion in exhibition, travelling or handling, code C indicates that treatment at some future date or treatment simply for aesthetic purposes would suffice, and code D indicates that no treatment is required.

The letter code was assigned to each record along with a numeric code; 0, 1, 2, or 3, depending on the level of treatment it required. The codes were defined as follows:

0	No treatment required	2	Considerable treatment required
1	Minimal treatment required	3	Full treatment required

²⁷ Curry, 1991.

Code 0 represents albums that require no treatment, code 1 represents treatments that require minimal skill and time to complete, code 2 represents treatments that require more skill and time to complete, and code 3 represents treatments that require a high degree of skill and invested time to complete.

Following these definitions an album with a code A3 would require immediate full treatment while an album with a code C1 would require minimal treatment in future.

As the decision was made to include the previously surveyed albums only if time and access permitted, the case was made to adopt the treatment level and priority code system devised by Lynn Curry in order to fulfill the survey objective of consolidating information resources. Additionally, this decision allowed for consistency in the conservation assessment across the collection as a whole.

Unlike the 1990 survey, this collection condition survey does not provide treatment proposals detailing the method in which to carry out stabilization or conservation treatments on individual objects. Instead this survey details the condition and notes repairs that need to be made. Specific treatment details will need to be determined by a conservator.

SURVEY GUIDELINES:

DESCRIPTION OF DATABASE FIELDS AND METHOD OF RECORDING DATA

The need for standardization and continuity of language in a data recording system is of utmost importance to ensure universal understanding of the collected information. The following section will serve as the guidelines for the completion of the NGC Photographic Album and Photographically Illustrated Book Conservation Survey Form. The aim of this guide is to present a set of practical and general recommendations that can be adapted to the needs of many different types of bound structures within photographic collections. Additionally, this portion of the thesis will address and define the common elements and types of photographic album and photographically illustrated book binding structures, leaf structures and leaf connections.

The formulation of the Guidelines section of paper was informed by several sources. For further reading see those listed at the end of this chapter.

Section 1: Identification

For the purpose of this conservation survey the vast majority of the identification data was acquired directly from the NGC's Collections Management System, *MIMSY*.

Accession Number:

Use the 'PSC' (Photograph Study Collection) alphanumeric accession numbers or the five-digit numeric accession assigned to each volume. Individual photograph numbers follow the five-digit accession numbers and appear as .1-#. Generally, the volume's accession number is applied in graphite inside the front cover of the album or book, while individual photograph numbers appear on the verso of each album leaf or directly beneath mounted photographic prints. PSC accession numbers appear as PSC.##.### .1-#; year, lot, and item as determined by sequential appearance within the volume. Five-digit accession numbers appear as #####.1-#. In the case that a volume has both an alphanumeric accession number and a five-digit numeric accession number, give both.

Maker/ Artist:

Give the name of the photographer, artist, draftsman, printmaker, publisher or compiler if possible. Give last name first, and when possible give first name(s) following a comma (.). List all known makers separating individuals with a semicolon followed by a blank space (;).

In the absence of a known maker, give "unknown." Include the nationality of "unknown" makers if the nationality can be identified, i.e. American, British, French, or Italian, etc. Include the period in which the "unknown" maker produced the works if it can be identified, i.e. early-nineteenth century, mid-nineteenth century, or late-nineteenth century, etc.

Title:

Give the complete known title of the work as it appears on the title page. In the absence of a title page give the complete title of the work as it appears on the cover or spine. In the absence of a known title, give a descriptive title in parentheses, ().

Give the title in its original language. In accordance with NGC naming conventions the first letter of each word in a known English title is capitalized with the exception of conjunctions; only the first letter of the first word in descriptive titles is capitalized. Avoid periods at the end of all titles.

Date Made:

Date Made refers to the date a photographic album was compiled or the date a photographically illustrated book was published. Give the date compiled or date published if known. Use circa 'c.' rather than 'circa' or 'ca.' The 'c' is not capitalized. If the date is unknown, give "unknown."

If there is any uncertainty regarding a date, use the following phrasing. Otherwise, use the format day/month/year.

c. 1867	approximate date
1867 ?	probable date
189-	decade certain
19--	century certain
197-?	probable decade
19--?	probable century
before 1867	terminal date
after 1867	terminal date
1892 or 1893	one date or another certain
between 1912 and 1930	range of dates known; use only for 20 years or less

Section 2: Description and Materials

Object name:

As per NGC naming conventions, use "Album" or "Book" or "Periodical" as required.

Production:

Record the album, book or periodical's production type using "One-off," "Commercial," "Edition," or "Artist Book."

Commercial: any blank book or album produced by a commercial company, stationer, or bindery. Multiple albums identical in variety likely exist but the mounted photographs and inserted matter are likely unique (Brown).

One-off: a unique photograph album or photographically illustrated book bound to the buyer's specifications (Brown).

Edition: any photograph album or photographically illustrated book produced identically in multiple copies. This includes premade albums containing mounted photographic prints at the time of purchase or publication. Edition albums and edition photographically illustrated books typically have a title page or other printed indication that it was bound or published as part of an edition (Brown).

Artist Book: an album or book produced by an artist with the intention of showcasing their work. Typically artist books are produced as part of an edition.

Binding Structure:

Albums are made from a variety of materials that often relate to their period of production. This field consists of a four-part evaluation. Firstly, describe the manner in which the boards or covers are connected to the text block. Use "Case Bound," "Laced-in Binding," "Mechanical Binding, Side Sewn," "Mechanical Binding, Stapled," "Mechanical Binding, Coil Bound," "Mechanical Binding, Screw Posts," "Broken into Plates," or "Unbound."

Make note if covers are separate from text block, if spine is detached, or if any part of the covers or spine is missing. Ensure to repeat this note in the Condition Section within the "Condition of Volume Cover and Binding" field. If the binding has been dismantled and text block has been retained use "Unbound." If binding has been dismantled and only the photographic material has been retained, use "Broken into Plates."

Case Bound: a bound structure with a cover that was made separately and attached to the text block by the endsheets, sewing supports or mull. Case bound volumes typically feature hard covers.

Laced-in Binding: a bound structure in which hard cover boards are attached to the text block by passing the bands or cords, on which the book is sewn, through holes punched or cut into the boards. This method of binding is also known as "in-board binding" and volumes bound in this manner typically feature hard covers and raised bands on the spine and outer joints of spine.

Adhesive Binding: a method of securing loose leaves or folios into a solid text block that is attached to the cover and spine by means of an adhesive rather than by means of sewing or stitching. Adhesive binding is typically used for soft cover books and is also known as “perfect binding.” This method of binding lends itself well to low-priced mass production. It is the form of binding commonly used for paperback novels.

Mechanical Binding, Side Sewn: a method of securing single loose leaves or signatures with thread, cord or cloth ribbon, near the binding edge, from front to back through the entire thickness of the text block.

Mechanical Binding, Stapled: a method of securing single loose leaves or signatures using a punch-and-bind system in which metal staples bind the text block. Staple placement can be through the margin of leaves, or along the gutter edge of signatures. It is the form of binding commonly used for comic books and magazines.

Mechanical Binding, Coil Bound: a method of securing single loose leaves or signatures using a punch-and-bind system that uses a plastic or metal spiral wire that is wound through punched holes along the binding edge. It is the form of binding commonly used for school notebooks and note pads.

Mechanical Binding, Screw Posts: a method of securing single loose leaves or signatures using a punch-and-bind system that uses metal screw posts. Screw posts typically have two heads; one is fastened to a full-length post that is drilled and tapped with a thread, the other attached to a shorter post, which is threaded and inserted into the full-length post. Metal screw posts are also sometimes referred to as “Chicago posts.” The posts are inserted through drilled or punched holes near the binding edge, from front to back through the entire thickness of the text block.

Secondly, record the technique, color or pattern and type of material covering or constituting the boards, i.e. “Cloth,” “Leather,” “Paper,” “Parchment,” “Vellum,” etc.

Define leather bindings as either “Quarter Bound,” Half Bound,” “Three Quarter Bound” or “Full Bound.” In the cases of quarter bound or half bound volumes indicate the type of material used to cover the remainder of the boards.

Quarter bound: a binding having the spine and a small part of the sides, approximately one-eighth the width of the boards, covered in leather material.

Half bound: a binding having the spine and part of the sides over one-fourth the width of the boards, and corners, covered in leather material.

Three Quarter Bound: a binding having the spine and part of the sides, as well as enlarged corners, covered in leather. The leather extends almost to the corners on the sides, covering a larger area of the boards than in half binding.

Full bound: a book that is covered entirely with any one material. In a strict sense, the term is applied only to leather bindings.

Thirdly, indicate the spine structure as being “Rounded,” or “Flat,” and either “Hollow Backed,” or “Tight Backed.” If present, indicate the number of raised bands.

Flat Spine: a spine that has not been rounded and backed before the boards are attached to the text block. Typically, volumes with flat spines do not have raised bands.

Rounded Spine: a spine that has been shaped into a convex arc.

Hollow Backed: a binding that has a space between the spine of the text block and the spine of the cover. The covering material is attached at the joints, or is a one-piece cover in the style of a case binding.

Tight Backed: a binding in which the covering material is attached directly to the spine.²⁸

²⁸ Due to the inflexibility of the spine the leaves of the book tend not to lay flat by themselves. In addition, the tight back causes the spine to flex every time the book is opened, which can cause cracking of the spine covering material and damage to gold tooling on the spine.

Fourthly, record any board edge treatments, i.e. “beveled,” or “rounded corners,” etc. Record the presence of any paper wrappers, dust jackets, or slipcases, etc.

Examples of the appearance of entries in this field include:

- Laced-in binding, rust half leather and cloth, tight backed, rounded spine with 5 raised bands
- Case bound in green cloth, straight hollow backed spine, boards have beveled edge
- Mechanical binding, stapled, in red plush paper, green vinyl slip cover
- Case bound in blue cloth, book cloth spine covering is detached from case

Album Leaf Structure and Connections:

The construction of leaves and the method of connecting the leaves to the cover further define the album structure. This field consists of a two-part evaluation. Firstly, record the general structure or construction of the photographic album or photographically illustrated book’s leaves, and secondly, describe the manner in which the leaves are connected to one another to form the text block. Note that some of the elements that define the binding structure and/or leaf structure are an important part of leaf connections; as a result there may be some repetition in the terminology.

Compensation stubs or guards: a leaf structure in which “Stubs” or “Guards,” i.e. strips of paper, card, paperboard or folded strips of paper or cloth approximately one inch (2.5 cm) in width are adhered along the binding edge of leaves. These compensation stubs or guards reduce stress on the spine by adding to the leaf connection a thickness equivalent to that of the material to be inserted in the photographic album or photographically illustrated book (Brown).

Folded leaf construction: a leaf structure without stubs or guards that are folded into folios or signatures (Brown).

Guarded leaf construction with stubs: a leaf structure in which two leaves, each with their own stubs, are connected to one another by a paper, cloth or a leather guard. Additional guards may be adhered around the two leaves, and the resulting two-leaf units are then sewn or adhered to other two-leaf units to form a text block. This leaf structure is very commonly used for cartes-de-visites and cabinet card photograph albums (Brown).

Guarded leaf construction without stubs: a leaf structure identical to the “Guarded leaf construction with stubs,” but without stubs (Brown).

Returning guard: a leaf structure in which sheets of paper wider than the width of the text block are used as leaves. Sheets of paper are folded to the desired leaf width creating a hook-like fold, i.e. the returning guard, through which the leaves are sewn together (Brown).

Single leaf construction with stubs: a leaf structure in which a typically heavier weight paper or paperboard leaf is attached to a stub using a strip of paper or cloth (Brown). The gap between the leaf and stub allow for the leaf to lay flat when the volume is opened (Roberts and Etherington).

Single leaf construction without stubs: a leaf structure in which typically lighter text weight paper constitute the leaves in the text block (Brown). Generally this leaf structure is found in loose-leaf bindings (Roberts and Etherington).

Single leaf construction with attached compensation guard: a leaf structure in which a length of paper or cloth is adhered along the binding edge and is folded back and forth onto itself thus constituting a guard (Brown).

Use the following terms to describe album leaf connections:

Accordion: a binding consisting of one continuous piece of paper, or several smaller sheets of paper that have been attached to form a continuous sheet, which has been folded

into page sized leaves like an accordion (Brown).

Adhesive: a binding consisting of single leaves that have been connected to the spine simply by means of adhesive (Roberts and Etherington).

Guarded structures: a binding structure in which the leaves are connected or hinged to one another with guards made of cloth, leather or paper. A guard is connected to verso of one leaf along the binding edge and is connected to the recto of the following leaf, thus connecting all the leaves in the text block (Roberts and Etherington).

Guarded structures with pre-cut mats: a binding structure identical to the Guarded Structure, but with pre-cut mats in which to mount either cartes-de-visite, cabinet cards or a combination of both formats (Roberts and Etherington).

Loose leaf side sewn: a binding structure in which leaves are secured with thread, cord or cloth ribbon, through drilled holes near the binding edge, from front to back through the entire thickness of the text block (Roberts and Etherington).

Mechanical Binding, Stapled: a binding structure in which leaves are secured with metal staples near the binding edge, from front to back through the entire thickness of the text block (Roberts and Etherington).

Mechanical Binding, Coil Bound: a binding structure in which leaves are secured using a punch-and-bind system that uses a plastic or metal spiral wire that is wound through punched holes along the binding edge (Roberts and Etherington).

Mechanical Binding, Screw Posts: a binding structure in which leaves are secured using punch-and-bind system in which metal posts are inserted through drilled or punched holes near the binding edge, from front to back through the entire thickness of the text block (Roberts and Etherington).

Sewn: a binding structure in which leaves are secured using any type of sewing using thread or cord which is passed through punched holes or grooves cut in the binding edge of signatures (Roberts and Etherington).

Text Edge Treatment:

If present, record any text edge treatments, using “colored, (identify color),” “speckled, (identify color),” “gilt”, “marbled”, “gauffered,” or “none.”

Note that “gilt” refers to gold gilding only, if the text edge has been treated with silver leaf, record as “colored, silver.” The term “gauffered” refers to edge treatment that is usually gilded and decorated further with heated finishing tools or rolls that indent small repeating patterns in to the text block edge (Roberts and Etherington). If the volume has no text edge treatment, use “none.”

Cover Decoration and/or Design Feature:

This is a free text field in which to record general information about the characteristics and techniques used in cover decoration and/or design features.

Decoration techniques include the following:

Embossed: a design or lettering technique characterized by a high raised surface made by means of a metal die and cotton or papier-maché counter die, a fly embossing machine, or a blocking press, generally by employing both heat and pressure. (Brown).

Tooled: a design or lettering technique characterized by an impressed surface made by means of heated tools, pallets, rolls, fillets, or combinations of one or more of these tools. The impressions are either gilt with gold leaf (gold tooled) or left blind (blind tooled) and are typically not colored with the possible exception of darkening with carbon. (Brown).

Printed: a design or lettering technique achieved through any printing process including letterpress, intaglio, lithography or silkscreen (Brown).

Stamped: a design or lettering technique characterized by a slightly raised surface made by means of engraved cylinders, generally by employing both heat and pressure. The impression can be blind (blind stamped) or colored using printing inks. (Brown).

Decoration may include some or a combination of some of the following, note the technique employed in applying the decoration as "Embossed," "Tooled," "Printed," or "Stamped."

Title: a decorative feature including the name of the photographic album or photographically illustrated book on the covers or spine (Brown).

Borders: a design around the edges of the covers, frequently enclosing one or more other cover decoration (Brown).

Line: Either single, double or triple fillet lines used in the decoration of the covers. Lines can appear as gold, blind or colored (Brown).

Panels: a decoration on the spine that consists of single, double or triple fillet lines used to create rectangles. Panels can appear as gold, blind or colored (Brown).

Patterns: any repeating design used to decorate the covers or spine (Brown).

Finally, note the presence of any hardware on photographic album or photographically illustrated book covers, including metal or porcelain studs, metal ornaments or medallions, straps, clasps, or hooks, etc.

Endbands:

Record the style, colour and the shape of the endbands support. Describe endband style as either "sewn," "machine made," "paper," "leather," etc. If possible describe the endband's support; "round," or "square," and note the colour(s) of the endband's thread or cord.

i.e. Sewn, white, blue, brown thread, square support.

If no endbands are present, give "none." If an endband is missing, indicate that the upper or lower endband is lost respectively.

i.e. Machine made, red and yellow thread, lower endband is lost.

Endsheets:

Record the structure, color or pattern, and type of material constituting the endsheets. Use the terms "Folded Leaf," or "Single Leaf" to describe the structure of the endsheets. Note the color or whether the endsheets are "Marbled" or "Moiré," etc. The term moiré refers to a rippled or wavy pattern; typically silk fabric, which has been subjected to heat and pressure rollers. Note the endsheet material as either "Cloth" or "Paper." Paper endsheets can be described as "Machine-made," "Hand-made," "Laid," or "Wove," etc.

Folded Leaf: an endsheet structure made of one folded sheet of paper. The pastedown is adhered to the inside of the board and the flyleaf portion of the sheet of paper is tipped to the following leaf (Brown).

Single Leaf: an endsheet structure that uses separate leaves for the pastedown and flyleaf. The pastedown and flyleaf are connected with a cloth or leather hinge. In the case of single leaf endsheet structures, note the hinge material following the endsheet material, i.e. single structure, green wove paper, hinged with cloth (Brown).

Number of Leaves:

The total number of individual leaves that make up the text block. A leaf is defined as one of the units resulting from folding a sheet of paper, etc., into a folio or signature. To further clarify, one leaf consists of two pages, one on each side.

Leaf Material and Media:

This is a free text field in which to record general information about the characteristics of the album leaves with regards to color or pattern, approximate weight and material, and printed media and decoration.

Use the following general descriptive terms to characterize leaves within the text block; "Text weight paper," "Newsprint," "Glossy paper," "Onion-skin tissue," "Laid-pattern paper" or "Dolly-rollpaper,"²⁹ "Wove paper," "Heavy laid-pattern paper," "Heavy wove paper," "Japan paper," "Thin card," and "Heavy card," etc. Indicate if leaves have a laminate structure, i.e. are faced with paper, or if leaves have pre-cut window mats.

Indicate the presence of printed text, handwritten captions, pasted on paper labels containing text, colored borders etc., and record the media, i.e. "black ink," "blue ink," "bronze ink," "graphite," etc.,

Leaf Opening:

Record the widest angle the cover of the photographic album or photographically illustrated book can be opened without damaging the joint, use either 90, 135 or 180 degrees.

²⁹ As photograph albums and photographically illustrated books postdate the use of laid screens for handmade paper, papers that show laid lines will have had that pattern impressed in them using a "dolly-roll" as part of their machine made manufacture.

Number of Photographs:

Record the total number of mounted or loose photographs within a photographic album or photographically illustrated book.

Photographic Medium /Process:

Describe the process used to produce the photographic print. Primary supports for photographic processes are assumed to be paper; therefore it is not necessary to describe the primary support. In the case that a photographic print has very clearly not been made on a paper support, consult the photographic conservator.

Use the following photographic print process naming conventions:

"Albumen Silver," "Bromoil," "Carbon," "Cyanotype," "Ferrotypes," "Gelatin Silver POP," "Gelatin Silver DOP," "Gum," "Platinum," "Salted Paper," etc.

Use the following photomechanical print process naming conventions:

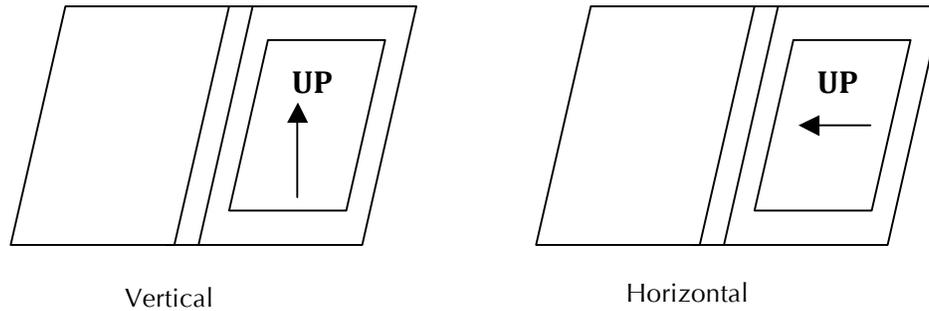
"Collotype," "Halftone, black and white," "Halftone, Color," "Heliotype," "Photogravure," "Photolithograph," "Offset Lithograph," "Woodburytype," etc.

List all photographic processes present within an individual photographic album or photographically illustrated book separated by a comma (.). Indicate the presence of over painted photographs using the designation "with applied color" following the photographic process name and a comma, i.e. "Albumen Silver, with applied color." If a proprietary name is printed on or near the mounted or inserted photographic print, record the name of the process in this field.

Orientation:

Record the orientation of the mounted works within the photographic album or photographically illustrated book as vertical and/or horizontal. Orientation is determined by the position of works in relation to the binding edge.

Figure. 1



In addition to noting if photographs are vertically and/or horizontally oriented, indicate whether the volume does or does not require turning in order to properly view mounted photographs in relation to both other photographs or text.

- i.e. Vertical, does not require turning
- Vertical, requires turning
- Horizontal, does not require turning
- Horizontal, requires turning
- Vertical and horizontal, does not require turning
- Vertical and horizontal, requires turning

Section 3: Measurements

Give measurements as overall album height (H), width (W) and depth (D) in centimeters. Measure the overall width of the album when open; open album to approximate mid-point providing support as required. Where there is a range of dimensions, give only the maximum. Give measurements to nearest millimeter. (0.1 cm)

Section 4: Condition

1990 Treatment Level:

If applicable, record the alphanumeric treatment code assigned to an album in the 1990 conservation survey of photographic albums by Book Conservator Lynn Curry. The treatment code is located at the upper right hand side of the "Required Treatment Record."

2011 Treatment Level:

Assign a condition classification code designating the photographic album or photographically illustrated book's priority for treatment based on the fields "Condition of the Volume's Covers and Binding," "Condition of Volume's Leaves and Connections," and "Condition of Photographs."

Use the alphanumeric classification system for condition and priority for treatment as described in detail on page 14 of this thesis.

Priority of treatment:

Level of treatment required:

A	Immediate treatment required	0	No treatment required
B	Treatment required prior to exhibition	1	Minimal treatment required
C	Future treatment required	2	Considerable treatment required
D	No treatment required	3	Full treatment required

Condition of Covers and Binding:

This is a free text field in which to provide general remarks regarding the current condition of the photographic album or photographically illustrated book's covers and binding structure.³⁰

³⁰ Refer to Primanis, 51-60; Brown, 86-89.

First, assign a general condition term: "Excellent," "Good," "Fair," or "Poor."

Excellent	No significant damage. ³¹
Good	Minimal and minor damage, mechanical or chemical in nature.
Fair	Multiple minor damages or a single severe damage, chemical and/or mechanical.
Poor	Severe or numerous damages, chemical and/or mechanical.

Mechanical damage: any type of physical deterioration resulting from poor storage conditions, careless handling, improper repairs and insect or rodent damage.³²

Chemical damage: any type of chemical deterioration resulting from poor processing procedures, atmospheric pollution, poor storage conditions and inappropriate enclosure materials, general careless handling (i.e. evidence of fingerprints), and in some cases, biological attack (mould, fungus, etc.) Chemical damage also refers to the inherent instability of certain types of materials either used in the objects construction or materials used in conservation treatments,³³ such as red rot deterioration of leather covering materials.

Then note any tears, losses, presence of and severity of surface dirt or accretions, fading, staining, discoloration, creases, gouges, abrasions, desiccation or embrittlement, red rot, water damage or tide lines, or planar distortion, etc., to the covering materials and boards, caps of spine, outer and inner joints of spine, and to the corners and edges of boards.

Condition of Leaves and Connections:

This is a free text field in which to provide general remarks regarding the current condition of the photographic album or photographically illustrated book's leaves and the connections of the leaves to the binding³⁴. First, assign a general condition term;

³¹ Original corrective spot toning may be present on photographs.

³² Kendriks, 490.

³³ Ibid.

³⁴ Refer to Brown, 89-92.

“Excellent,” “Good,” “Fair,” or “Poor,” then note any tears, losses, presence of and severity of surface dirt or accretions, fading, staining, discoloration, cracks, creases, gouges, abrasions, desiccation or embrittlement, water damage or tide lines, mould damage, cockling or planar distortion, fraying of guards or hinges, separation of guards, hinges or stubs, detachment of leaves from the bound structure, etc.

Condition of Photographs:

This is a free text field in which to provide general remarks regarding the current condition of the inserted and mounted photographic prints, their supports and attachment to the album leaf. First, assign a general condition term; “Excellent,” “Good,” “Fair,” or “Poor,” then note any tears, losses, presence of and severity of surface dirt or accretions, fading, staining, discoloration, oxidation or silver mirroring, cracks, creases, scratches, abrasions, etc. Note if photographs are separating from leaves or if photographs have detached completely from leaves.³⁵

Attachment of Photograph to Leaf:

Record the method in which photographs are attached to the leaves of the photographic album or photographically illustrated book. Use the following terms; “Adhered overall,” “Printed directly on leaves,” “Mounted in pre-cut windows,” “Photo-corners,” “Adhered partially along edge(s),” or “Adhered at corners.”

Note if photographs have been attached to both the recto and verso of leaves and note the presence of any secondary supports or secondary mounting materials between the photograph’s primary support and the leaf.

Interleaving Material:

If present, record the type of interleaving material within the photographic album or photographically illustrated book, i.e. “Glassine,” “Laid-pattern Interleaving Tissue,”

³⁵ Refer to Kendriks, 486-498 for information regarding the completion of condition reports for photographs.

“Wove Interleaving Tissue,” “Micro-Chamber Interleaving Paper,” “Renaissance Paper,” “Original bound-in tissue,” etc.

Note if there is a combination of interleaving materials or if interleaving is incomplete. If no interleaving material is present, give “None.”

Recommendation for Treatment:

This is a free text field in which to provide general recommendations for stabilization, treatment and repair of damages noted to a photographic album or photographically illustrated book’s cover and binding, leaves and connections and mounted or inserted photographs.

Recommendations may include: surface cleaning covers, dressing leather, treatment and consolidation of red rot, removal of adhesive tape, labels or residue, infilling losses to covering materials, retouching covering materials, consolidating lifted areas of covering materials, repairing outer or inner joints of spine, repairs to spine, repairs to caps of spine, repairs to corners and/or edges of boards, repairs to endbands, repairs to endsheets, repairs to sewing or resewing binding, reattaching text block to covers, dismantling text block, surface cleaning leaves, repairing tears to leaves, stain removal, removal or replacement of interleaving, infilling areas of loss, securing loose leaves or photographs, surface cleaning, repairing or providing additional protective housing materials.

Recommendations for treatment will vary but should be reflective of the condition issues and damages reported in the condition fields.

Section 5: Housings

Priority Classification for Rehousing:

Assign one of the following priority classifications for the photographic album or photographically illustrated book's current housing:

Not required	Not a priority. Current protective housing is satisfactory.
Desirable	Low priority. Some form of protective enclosure is present, however, current housing could be improved.
Necessary	High priority. No protective housing is present or current housing is heavily soiled or damaged.

Description of Present Housing:

Record the type or describe the photograph album or photographically illustrated book's present housing, i.e. "Ready-made", or "Solander box," "Custom made Phase Box," "Custom made clam shell box," "Custom made cloth covered slip case," "Mat board slip case," "Mylar sleeve," "Mylar envelope," "Mylar wrapper," "Paper wrapper," "Paper envelope," "Archival paper envelope," "Cardboard box," etc.

If the photographic album or photographically illustrated book is not available during the time of survey, give "Undetermined." If there is no current housing, give "None."

Recommendations for Rehousing:

Provide a brief recommendation for rehousing if required, including disposal of non-archival housing materials, boxing of current protective enclosure, or construction of a custom protective housing.

Section 6: Miscellaneous

Additional Notes:

Use this field to record additional notes, if any, i.e. special considerations for handling or display, edition number, library call number, etc.

Storage Location:

Record the exact storage location of the photographic album or photographically illustrated book within the photographic storage vault.

Image File Names:

Overall object photographs were taken for identification purposes. Photographs were taken of the foot of each volume's spine in order to illustrate the binding structure and attachment of album leaves within the text block; these images were made while the album remained closed. Additional images were taken in some cases to further illustrate the connections between leaves and the binding; these images show the album in an opened position.

Image file names have been assigned the corresponding identification number of the photographic album or photographically illustrated book. Annotate the image file names alphabetically, where 'a' represents an overall photograph, 'b' represents a photograph taken from the foot spine, and 'c' represents a photograph illustrating the connection of leaves to binding, i.e. PSC85:222:1-12a, PSC85:222:1-12b, PSC85:222:1-12c, etc.

FURTHER READINGS AND REFERENCES

Brown, Margaret. "Glossary of Terms for the Photograph Album Survey." In *Conservation of Scrapbooks and Album's*. 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, 85-92. Washington: AIC, 2000.

Conservation Online. "Conservation online dictionary of descriptive terminology for Bookbinding and the Conservation of books." March 11, 2011.
<http://www.cool.conservation-us.org/don/don.html>

Horton, Richard. "Glossary of Terms Relating to Photo Albums." In *Conservation of Scrapbooks and Album's*. 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, 85-92. Washington: AIC, 2000.

-----, "Historical Photo Albums in their Structures." In *Conservation of Scrapbooks and Album's*. 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, 85-92. Washington: AIC, 2000.

Image Permanence Institute. "Graphics Atlas." 2011. <http://www.graphicsatlas.org/>

Primanis, Olivia. "Nineteenth-Century Photograph Albums: Structure, Condition and Treatments." *Conservation of Scrapbooks and Album's*. 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, 83-94. Washington: AIC, 2000.

Reilly, James M. *Care and Identification of 19th-Century Photographic Prints*. Rochester, New York: Eastman Kodak Company, 1986.

Rutherston, Jane. "Victorian Album Structures." *Paper Conservator* 23 (1999): 13-25.

CONCLUSIONS:

GENERAL SCOPE AND NATURE OF THE COLLECTION

The National Gallery of Canada's collection of photographic albums and photographically illustrated books covers over a century's worth of photographic innovation and visual production. The collection includes 160 nineteenth century works (accounting for approximately 86% of the total collection) and includes many important historical photographs taken by some of the most celebrated photographers from the history of the medium. However, the collection is not limited to a historical narrative, as the collection contains 26 twentieth century works (accounting for approximately 14% of the total collection) by contemporary artists and photographers. Works in the collection range from the William Henry Fox Talbot's 1845 *Sun Pictures in Scotland*, to Elliott Ross' 1984 *Spleen* (after Baudelaire), see appendix 1.

This rich national collection enables the traditional chronological convention of the study of the photographic medium and the great practitioners of the photographic canon. The collection contains works that illustrate the evolution of photographic technology, processes and aesthetic trends, and contains works illustrating a number of subjects and themes typical to historic and fine art collections. They include but are not limited to; Victorian values as seen through portraiture; the desire to codify and document the natural world as well as the increasingly industrialized urban environment through picturesque landscapes, domestic scenes, and architectural studies; issues and preoccupations of the times such as the plight of the poor, social reform, imperial power and the colonization of exotic lands as seen through travel views, educational campaigns, propaganda, and ethnographic and anthropological studies, etc.

SURVEY FINDINGS

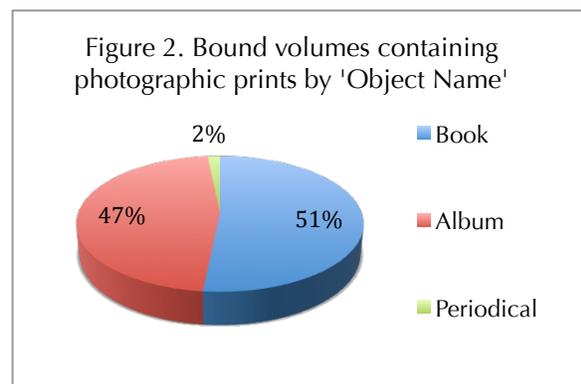
From the working list of ninety-nine photographic albums and photographically illustrated books, ten volumes (five photographic albums and five photographically illustrated books) were not surveyed as they were on display, broken into plates, or not accessible during the time the survey took place.

Six albums surveyed in 1990 were not included in this survey as they were not located. Twenty albums surveyed in 1990 were reexamined as part of this survey project. Treatment records for forty-eight albums surveyed in 1990 were transcribed into the survey database produced as a result of this collection condition survey project.

In total, 126 volumes were examined; thirty-two photographic albums, ninety-two photographically illustrated books, and three periodicals (see figure 2).

Including transcribed data from the forty-eight albums examined in the 1990 survey, the survey database produced as a result of this collection condition survey project contains information concerning the state of preservation for the total of 186 bound volumes in which there are mounted or inserted photographic prints (see table 1; figure 5); eighty-seven photographic albums (see table 2; figure 6); ninety-six photographically illustrated books (see table 3; figure 7); and three periodicals (see table 4; figure 8).

A total of approximately 4610 mounted or inserted photographic prints are held within this collection.



Photographic albums and photographically illustrated books should be interleaved as required, especially if the bound volume contains; platinum or platinum toned photographs,³⁶ glossy photographs with highly reflective surfaces,³⁷ leaves are decorated with bronze inks or powders,³⁸ improperly processed photographs, or embrittled, acidic or highly colored leaves.³⁹ However, the decision to introduce interleaving material into a bound structure can present difficulties and should be given careful consideration on an item-by-item basis. Interleaving tissues invariably add thickness to the text block and in some cases may strain or even cause irreversible damage to the binding structure.

The collection condition survey found that twenty-three volumes (sixteen photographic albums and seven photographically illustrated books) contained an inserted interleaving material (i.e. laid-pattern or wove interleaving tissue, micro-chamber paper, or Renaissance paper); twenty-six volumes (one photographic album and twenty-five photographically illustrated books) contained original bound in interleaving materials (i.e. glassine, onion skin tissue); thirteen volumes (four photographic albums and nine photographically illustrated books) contained a combination of interleaving materials or are incompletely interleaved; sixty-seven volumes (fourteen photograph albums, fifty photographically illustrated books and three periodicals) were without or require new interleaving material; and the current state of interleaving is undetermined for fifty-seven volumes (fifty-two photographic albums and five photographically illustrated books) as they were either unavailable at the time of the survey, broken into plates or examined as part of the 1990 survey (see figure 3).

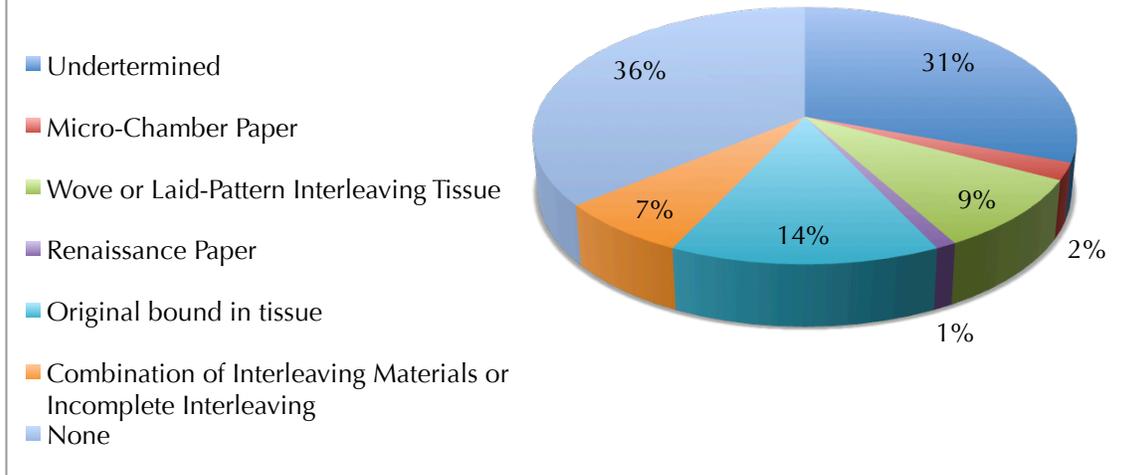
³⁶ Platinum catalyses cellulose deterioration, as a result photographic prints housed in direct contact with platinum image material may be irreversibly stained. See Debra Hess Norris, "Preservation Planning for Diverse Photographic Holdings," in *Issues in the conservation of photographs*, ed. Debra Hess Norris and Jennifer Jae Gutierrez (Los Angeles: Getty Conservation Institute, 2010), 583.

³⁷ Photographs with a glossy coating are easily abraded, *Ibid.*

³⁸ Bronze powders, composed of copper and zinc, were often used for gilt borders and ornamentation and can cause oxidization and fading of silver photographic images, *Ibid.*

³⁹ Residual chemicals from photographic processing, or chemicals resulting deterioration processes from may cause image deterioration, *Ibid.*

Figure 3. Interleaving Materials



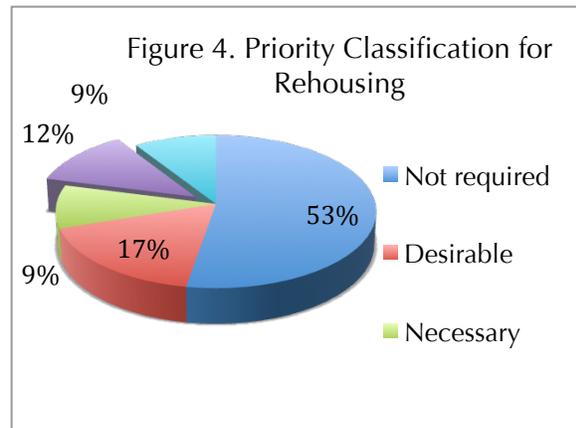
Photographic albums and photographically illustrated books should be housed individually in boxes in order to provide protection from damages resulting from handling, as well as dirt, dust and airborne pollutants. Whenever possible they should be stored flat in order to minimize potential strain on the spine, hinges and sewing, due to the weight of the leaves and inserted materials.⁴⁰

A total of ninety-eight volumes (thirty-one photographic albums, sixty-five photographically illustrated books, and two periodicals) were found not to be a priority for rehousing as they are currently satisfactorily stored within protective enclosures or housings; thirty-two volumes (twenty photographic albums and twelve photographically illustrated books) were found to be a low priority for rehousing, as some form of protective enclosure is present, however, the current housing could be improved; seventeen volumes (two photographic albums, fourteen photographically illustrated books, and one periodical) were found to be a high priority for rehousing as no protective housing is present or the current housing is heavily soiled or damaged; twenty-two albums were found to have been flagged as a high priority for rehousing in 1990. As these albums were not examined in this collection condition survey, the state of their current housing should be assessed in order to ensure they have been appropriately housed since 1990 survey. The current state of the housing for seventeen volumes (twelve photographic albums and five photographically

⁴⁰ Norris, 582.

illustrated books) is undetermined as they were either unavailable at the time of the survey, or examined as part of the 1990 survey (see figure 4).

Refer to the “Recommendation for Rehousing” field in the collection condition survey database for details regarding the recommendations made for the rehousing of these volumes. Recommendations typically included rehousing in ready-made boxes or the construction of custom made Phase boxes.



A total of fourteen volumes (one photographic album and thirteen photographically illustrated books) were found to have active red rot and must be stabilized. Red rot is an irreversible type of deterioration of the surface of tanned leather occurring when certain tannins degrade to a fine powder. Red rot is characterized by a reddish, powdery surface that crumbles to the touch, and is made worse by handling⁴¹ (see appendix 11).

A total of twelve photographic albums were found to have undergone conservation treatments as proposed in the 1990 conservation survey (see appendix 12).

⁴¹ Conservation Online, <http://www.cool.conservation-us.org/don/dt/dt2800.html>

GENERAL RECOMMENDATIONS

In conclusion, the condition assessments and recommended treatments resulting from this conservation survey should be used by the conservator in combination with a physical evaluation of individual photographic albums and photographically illustrated books in order to determine detailed treatment proposals.

The classification of condition and priority for treatment assigned to individual photographic albums and photographically illustrated books as a result of this conservation survey are reflective of the condition of the bound volume. Priority for treatment may be reordered on the basis of curatorial priority, exhibition scheduling or loan, etc.

Protective housings and interleaving comprised of acid-free unbuffered materials should be provided for any photographic album or photographically illustrated book not currently housed in a protective enclosure or appropriately interleaved.

All treatments should be carried out by a skilled professional, using appropriate materials and techniques, to return individual photographic albums and photographically illustrated books to a state as close as possible to their original known condition, while adhering to the Code of Ethics and Guidance for Practice of the Canadian Association for Conservation of Cultural Property and of the Canadian Association of Professional Conservators.⁴²

⁴² "Code of Ethics and Guidance for Practice of the Canadian Association for Conservation of Cultural Property and of the Canadian Association of Professional Conservators," CAC, www.cac-accr.ca/pdf/ecode.pdf

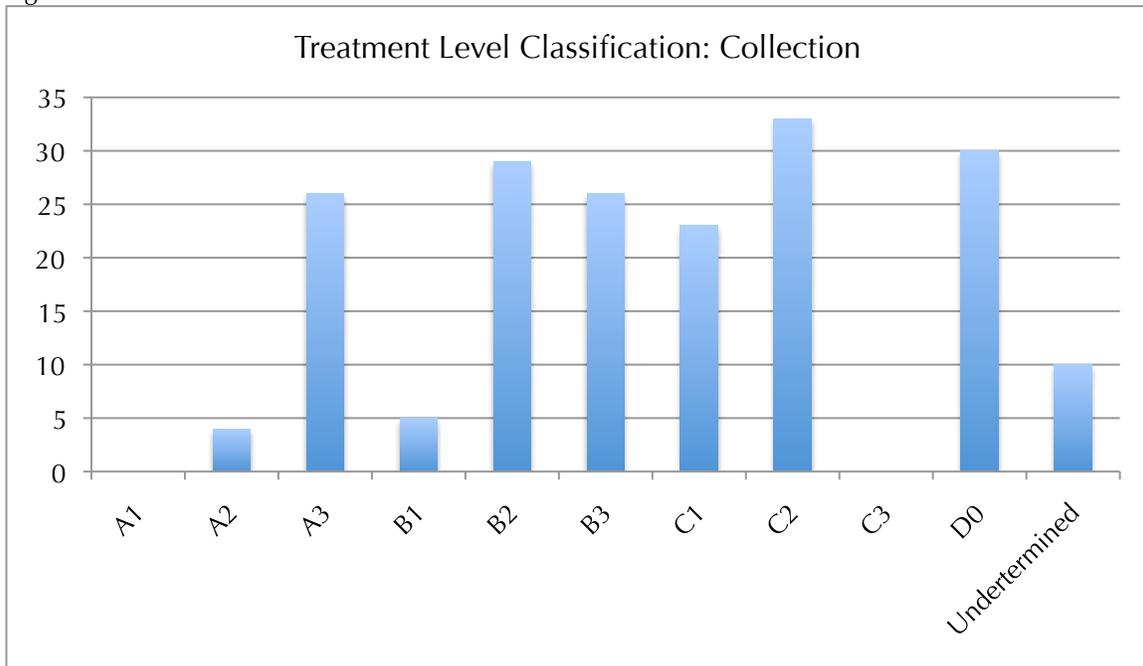
The following figures address general state of preservation of the photograph albums, photographically illustrated books and periodicals held in the National Gallery of Canada's Photograph Collection by treatment level classification.

TOTAL COLLECTION

Table 1.

	A Immediate treatment	B Treatment prior to exhibition	C Future treatment	D No treatment	Undetermined	Total
0 No treatment				30		30
1 Minimal treatment		5	23			28
2 Considerable treatment	4	29	33			66
3 Full treatment	26	26				52
Undetermined					10	10
Total	30	60	56	30	10	186

Figure 5.

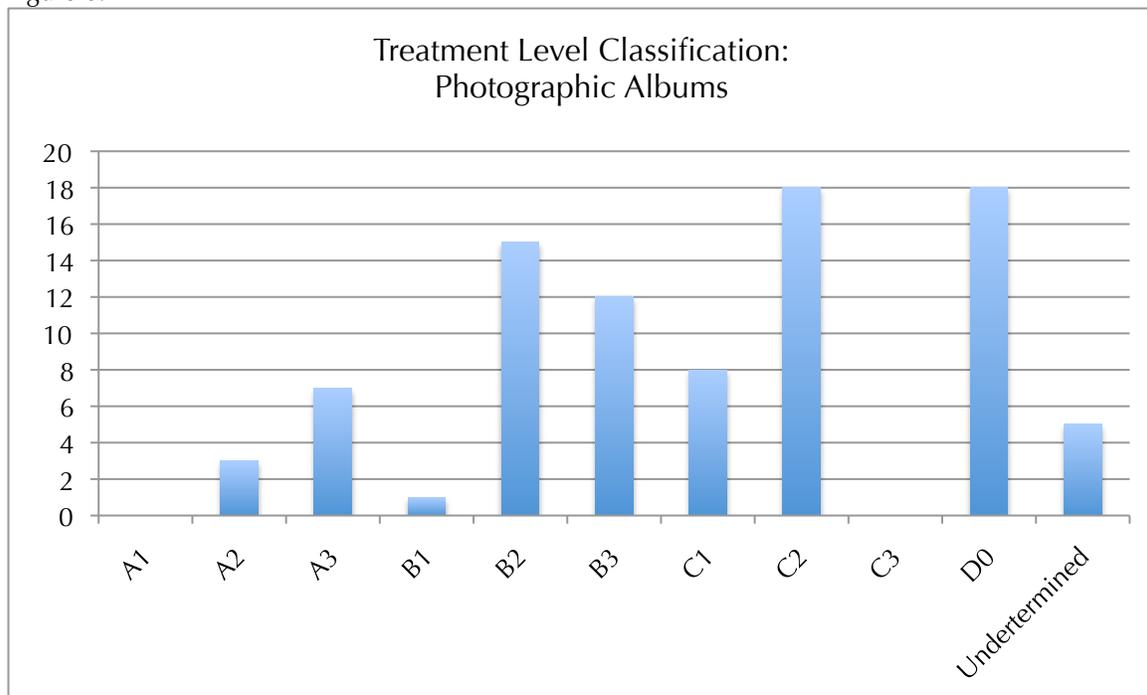


PHOTOGRAPHIC ALBUMS

Table 2.

	A Immediate treatment	B Treatment prior to exhibition	C Future treatment	D No treatment	Undetermined	Total
0 No treatment				18		18
1 Minimal treatment		1	8			9
2 Considerable treatment	3	15	18			36
3 Full treatment	7	12				19
Undetermined					5	5
Total	10	28	26	19	5	87

Figure 6.

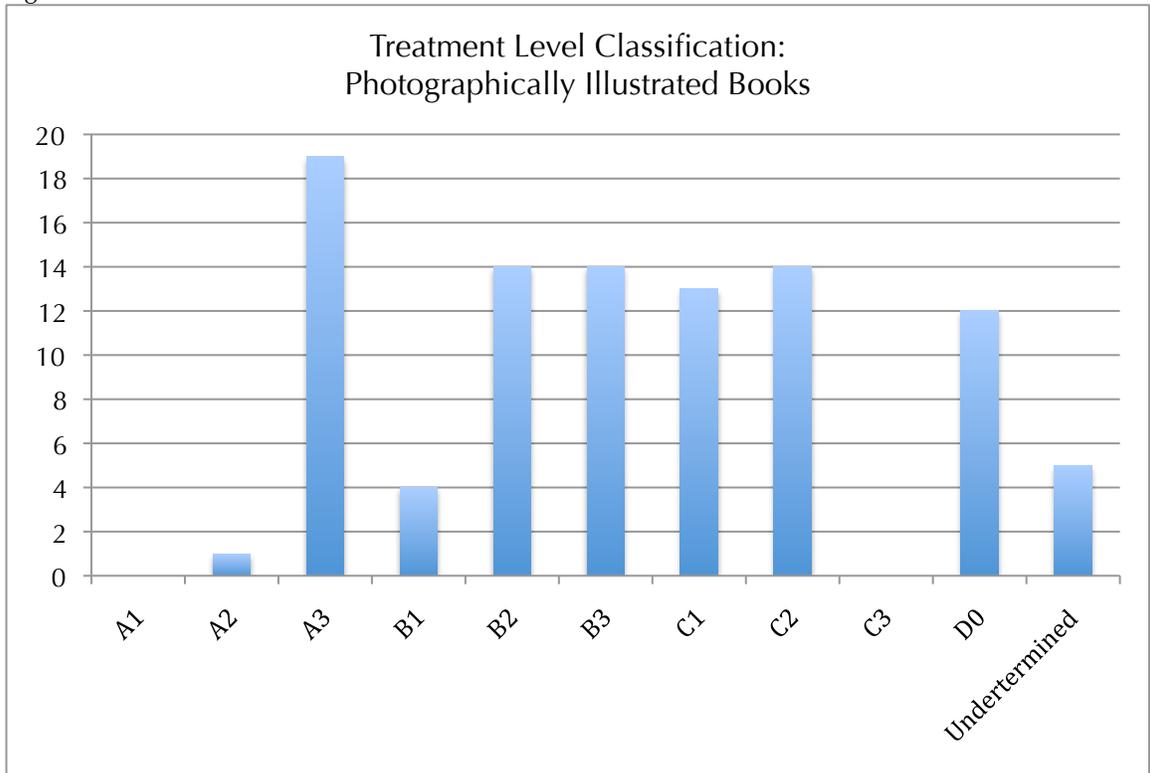


PHOTOGRAPHICALLY ILLUSTRATED BOOKS

Table 3.

	A Immediate treatment	B Treatment prior to exhibition	C Future treatment	D No treatment	Undetermined	Total
0 No treatment				13		13
1 Minimal treatment		4	12			16
2 Considerable treatment	1	14	14			29
3 Full treatment	19	14				33
Undetermined					5	5
Total	20	32	26	12	5	96

Figure 7.



PERIODICALS

Table 4.

	A Immediate treatment	B Treatment prior to exhibition	C Future treatment	D No treatment	Undetermined	Total
0 No treatment						0
1 Minimal treatment			2			2
2 Considerable treatment			1			1
3 Full treatment						0
Undetermined						0
Total	0	0	3	0	0	3

Figure 8.

