Issues and Problems in Preservation of Heritage Materials – IS 432

UCLA Department of Information Studies
Spring Quarter 2012
Tues 5:30-9:00 pm, **unless otherwise indicated**
GSEIS 121, **unless otherwise indicated**

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if you need a response within 24 hours)
Office hours: Mondays, 12:30-3:30 pm, or by appointment
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Catalog Description:
Introduction to methods used to promote preservation and access to Special Collections of various media working within an institutional framework. Letter grading.

CCLE: https://ccle.ucla.edu/course/view/12S-INFSTD432-1

Class meetings:
April 3, 10, 17, 24
May 1, 8, 15, 22, 29
June 5
Final projects due June 12 (electronic submission is encouraged)

Course Objectives:
By the completion of this class students will:

- Become familiar with the diverse physical elements and formats of heritage materials.
- Understand how various materials change over time, and how environment and storage conditions and preservation interventions influence rates of deterioration.
- Explore how aspects of culture may inform or affect heritage preservation decisions.
- Understand the specific—and often conflicting—demands of preservation and access for collections in a variety of formats.
- Understand and be able to apply preservation planning methods such as needs assessments and surveys on multimedia collections.
- Discover—and contribute to!— research literature and practical resources for preservation.

Course Outline:

Just as those who manage heritage collections must balance the concrete issues of preservation with the abstract imperative to provide access to the materials in their care, this course will balance the practical, tactical aspects of preservation work with more abstract concepts and strategies. Each week, we'll spend about half the class time on something concrete—exploring a medium or category of materials and how it behaves from a preservation standpoint—and half the time on something more abstract, such as needs assessment or preservation ethics. Assignments and readings for each week will usually reflect this balance. Everyone's experience in this course will be improved by **your** having read **all** assigned texts and resources before class each week, and coming to class prepared to engage fully with the readings and your classmates.

Site visits and tours of preservation-oriented institutions and facilities in the greater Los Angeles area will expose you to informational resources, professional networks, and practical knowledge that will be of great use to you. Note that because our class meets in the evening, most of these tours will occur outside of the scheduled class time—either earlier in the day, or on another weekday afternoon. **Attending your choice of at least two of these scheduled visits is required.** Attending three or more is strongly encouraged; attending five or more will earn you extra credit.

There will also be a certain number of hands-on projects and demonstrations during class time this quarter. If you have mobility issues, fine motor skills impairment, or chemical sensitivities/allergies of any kind, please notify me **immediately** so that I can ensure everyone's safety during these learning experiences.

Week 1 (April 3)

Introduction and overview – Definition of terms – We begin with the book

What is preservation? – What is cultural heritage? – What is a book?

The book as tangible object – Anatomy and material components – Vulnerabilities –The book as a container of information – The paradox of preservation and access – What can we/could we/should we be trying to preserve?

Readings: Please complete before our first class meeting.

Baker, N. (2000, July 24). Deadline: The author's desperate bid to save America's past. *The New Yorker*, 42–61.

Nadal, J. (2009). Developing a preservation program for the UCLA Library. *Archival Products News*, *16*(1).

Week 2 (April 10)

Beyond the book: paper and its peculiarities – Preservation planning and administration

Organic chemistry and its relation to preservation – How carbon, hydrogen, oxygen, and nitrogen interact – What is PH and why does it matter? – Inherent vice – Paper and paper-like substances (vellum, parchment, papyrus) - Managing paper-based collections

Different kinds of fibers (wood, cotton, linen, silk) – How they look and how they act – Coated and uncoated papers – Handmade and machine-made papers

Readings:

Be sure to read the Baker and Nadal pieces from the previous week if you did not already do so. You may also wish to explore some of the responses to Baker's article, and his subsequent book *Double Fold*, from members of the archive, library, and conservation communities—the debate got pretty heated!

Association of Research Libraries. The Preservation Function in Research Libraries – September 15, 2009. (Webcast). http://www.arl.org/preserv/preservationwebcast/index.shtml. (Approx. 60 minutes)

Atwood, C. (1987). Japanese Folded Sheet Books: Construction, Materials and Conservation. *The Paper Conservator, 11*(1), 10-21.

Braun, T. J. (2007). An Alternative Technique for Applying Accession Numbers to Museum Artifacts. *Journal of the American Institute for Conservation, 46*(2), 91–104.

Calipr, A Collections needs assessment instrument for preservation planning, http://sunsite.berkeley.edu/CALIPR/

Carrlee, E. (2003). Does Low-Temperature Pest Management Cause Damage? Literature Review and Observational Study of Ethnographic Artifacts. *Journal of the American Institute for Conservation, 42*(2), 141–166.

Columbia University Libraries, Special Collections Materials Survey Instrument, http://www.columbia.edu/cu/lweb/services/preservation/surveyTools.html

Taylor, J. (2005). An Integrated Approach to Risk Assessments and Condition Surveys. *Journal of the American Institute for Conservation, 44*(2), 127–141.

Toledo, F., & Price, C. (1998). A Note on Tropical, Hot, and Humid Museums. *Journal of Conservation and Museum Studies, 4*(0). Online: http://www.jcms-journal.com/article/view/jcms.4983/14

Week 3 (April 17)

(Non-photographic) printing and coloring processes common in heritage collections – Disaster planning, preparedness, and response (part 1)

Industrial printing methods (lithography, offset, typeset) – Art printing methods (lithography, silkscreen, etching, engraving, mezzotint) – Paint, pastel, pencil, and their problems

Hands-on: Up close and personal with printed matter

Readings:

Dicus, D. H. (2000). One Response to a Collection-Wide Mold Outbreak: How Bad Can It Be: How Good Can It Get? *Journal of the American Institute for Conservation, 39*(1), 85–105.

Ellis, S. (2000). Disaster Recovery at the University of Alberta, or, Every Flood Has a Silver Lining. *Journal of the American Institute for Conservation, 39*(1), 117–126.

Florian, M.-L. E. (2000). Aseptic Technique: A Goal to Strive for in Collection Recovery of Moldy Archival Materials and Artifacts. *Journal of the American Institute for Conservation, 39*(1), 107–115.

Murphy, C. (1998). The Treatment of an Odilon Redon Chine Collé Lithograph, "L'Art Celeste." *Journal of the American Institute for Conservation, 37*(3), 272–281.

Rusch, S., & Herro, H. (2000). Midnight in the Garden of Soggy and Damp: The New Year's Eve Disaster at the Virginia Historical Society. *Journal of the American Institute for Conservation, 39*(1), 127–134.

Untch, K., Bassett, J., Goodman, N., Harvey, D., Hawks, C., Hutchins, J., Parkin, H. M., et al. (2000). Introduction: Disaster Preparedness, Response, and Recovery Special Issue. *Journal of the American Institute for Conservation*, *39*(1), 1.

Vernallis, K. (1999). The Loss of Meaning in Faded Color Photographs. *Journal of the American Institute for Conservation*, *38*(3), 459–476.

Week 4 (April 24)

Photographic and photochemical processes – Disaster planning, preparedness, and response (part 2)

Basic principles of photography – A brief history of photographic processes – Prints, negatives, etc.

Hands-on: Making cyanotypes

Homework: Fiber interactions (packets distributed in class)

Readings:

Adelstein, P. Z., Bigourdan, J. L., & Reilly, J. M. (1997). Moisture relationships of photographic film. *Journal of the American Institute for Conservation*, 193–206.

Brooks, M. M., & Eastop, D. (2006). Matter out of Place: Paradigms for Analyzing Textile Cleaning. *Journal of the American Institute for Conservation*, *45*(3), 171–181.

Burge, D. M., Reilly, J. M., & Nishimura, D. W. (2002). Effects of Enclosure Papers and Paperboards Containing Lignins on Photographic Image Stability. *Journal of the American Institute for Conservation*, *41*(3), 279–290.

Fischer, M. (2011). 5.1 A Short guide to Film Base photographic Materials: Identification, Care, and Duplication. Retrieved from http://www.nedcc.org/resources/leaflets/5Photographs/pdfs/nedcc-leaflet%2051.pdf

Lavédrine, B. (2003). *A Guide to the Preventive Conservation of Photograph Collections*. Los Angeles: Getty Conservation Institute. Read Chapter 1: The Vulnerability of Photographs (pp. 3-29) and Basic Vocabulary (pp. 247-259).

Lavédrine, B. (2009). *Photographs of the Past: Process and Preservation*. Los Angeles: Getty Conservation Institute. Read Chapter 9: Types of Deterioration and Influencing Factors (pp. 272-311).

Mohr, P. A. (2000). The Treasury Building Fire of 1996: Protecting Cultural Resources in a Nonmuseum Environment. *Journal of the American Institute for Conservation*, *39*(1), 57–63.

Norman, K. (2000). The Retrieval of Kuwait National Museum's Collections from Iraq: An Assessment of the Operation and Lessons Learned. *Journal of the American Institute for Conservation*, *39*(1), 135–146.

Reilly, J. (1993). *IPI Storage Guide for Acetate Film* (p. 24). Image Permanence Institute. Retrieved from https://www.imagepermanenceinstitute.org/webfm_send/299.

Reilly, J. (1998). *The Storage Guide for Color Photographic Materials*. University of the State of New York, New York State Education Department, New York State Library, the New York State Program for the Conservation and Preservation of Library Research Materials. Retrieved from https://www.imagepermanenceinstitute.org/webfm_send/517.

Week 5 (May 1)

Textiles and fiber media – Evolving aspects of conservation practice

Fibers and their characteristics (animal, plant, synthetic) – Fabric constructions (weaving, knitting, felting) – How and where fibers and textiles are used – Textile conservation methods

Hands-on: Interaction of dyes, colorants, and fibers – Felting animal fibers

Readings:

Evenson, J., & Crews, P. C. (2005). The Effects of Light Exposure and Heat-Aging on Selected Quilting Products Containing Adhesives. *Journal of the American Institute for Conservation, 44*(1), 27–38.

Schmalz, S. R. (1999). When Patching Is Impractical: Nontraditional Compensation for Loss in a Quilt. *Journal of the American Institute for Conservation, 38*(3), 385–393.

Austin, M., Firnhaber, N., Goldberg, L., Hansen, G., & Magee, C. (2005). The Legacy of Anthropology Collections Care at the National Museum of Natural History. *Journal of the American Institute for Conservation, 44*(3), 185–202.

(Read also *Errata*: The Legacy of Anthropology Collections Care at the National Museum of Natural History. (2006).*Journal of the American Institute for Conservation, 45*(3).)

Brooks, M. M., & Eastop, D. (2006). Matter out of Place: Paradigms for Analyzing Textile Cleaning. *Journal of the American Institute for Conservation, 45*(3), 171–181.

Greene, V. (2006). Using Case Studies to Examine the Decision-Making Process for Cleaning Ethnographic Objects. *Journal of the American Institute for Conservation, 45*(3), 183–199.

Introduction: Towards a Clean Slate: Current Thoughts on the Responsibility, Philosophy, Practices, and Controversies of Cleaning Cultural Property. (2006). *Journal of the American Institute for Conservation, 45*(3), 163–164.

Johnson, J. S., Heald, S., Mchugh, K., Brown, E., & Kaminitz, M. (2005). Practical Aspects of Consultation With Communities. *Journal of the American Institute for Conservation, 44*(3), 203–215.

Portell, J. D. (2003). Prior Repairs: When Should They Be Preserved? *Journal of the American Institute for Conservation, 42*(2), 363–380.

Rhyne, C. S. (2006). Clean Art? *Journal of the American Institute for Conservation, 45*(3), 165–170.

Rotroff, S. I. (2001). Archaeologists on Conservation: How Codes of Archaeological Ethics and Professional Standards Treat Conservation. *Journal of the American Institute for Conservation, 40*(2), 137–146.

Week 6 (May 8)

Audiovisual media, part 1: Recorded sound – Digital representation of cultural heritage

What is sound made of? – Preserving a waveform – Pitch, tone, and frequency – Kinds of sound (music, noise, language)

Carriers for sound recordings – Recognizing damage and decay in sound recordings – Looking at digital audio files – And what about the box it came in?

Readings:

Play video segments 2 & 3 from http://www.ccaha.org/education/videos. (45 minutes)

Read the 11 papers presented at the 2003 "Sound Savings: Preserving Audio Collections" conference, as well as the transcript of the final panel session on education and research agendas for audio preservation. Online: http://www.arl.org/preserv/preservationwebcast/index.shtml.

Jones, G. (1998). Problems encountered in the preservation of record jackets [Imagery, photographs and notes]. *Archival Products News, 6*(4). Retrieved from http://www.archival.com/newsletters/apnewsvol6no4.pdf

Week 7 (May 15)

Audiovisual media, part 2: Film

What is film? – How motion pictures work – What they're made of – Identifying nitrate and safety stocks – Identifying soundtracks and audio elements – Black-and-white and color processes -

Film technologies and the land grab in the 35mm frame

Hands-on: Handling and projecting 16mm film; Looking at lenticular

Readings:

Image Permanence Institute. (2010). Knowing and Protecting Motion Picture Film Poster. Online: https://www.imagepermanenceinstitute.org/imaging/film-poster.

National Film Preservation Foundation (U.S.). (2004). *The Film Preservation Guide: The Basics for Archives, Libraries, and Museums*. San Francisco, Calif.: National Film Preservation Foundation.

Association of Moving Image Archivists. (n.d.) Guidelines, Manuals, Q&As and Fact Sheets. Online: http://www.amianet.org/resources/resources.php.

Week 8 (May 22)

Audiovisual media, part 3: Video (tape, digital, and optical media) – Contemporary mixed-media works

What is video and why is it different from film? – What video is made of – Carriers and encoding – Machine-dependent media

Hands-on: Dismantling and re-assembling VHS cassettes

Readings:

Baldwin, A. M. (1999). The Wayward Paper Object: Artist's Intent, Technical Analysis, and Treatment of a 1966 Robert Rauschenberg Diptych. *Journal of the American Institute for Conservation*, *38*(3), 411–428.

Barger, M. E. (2008). A Delicate Balance: Packing, Handling, and Installation of Ephemeral Works by Eva Hesse. *Journal of the American Institute for Conservation*, *47*(1), 27–40.

Bishop, M. H. (2001). Evolving Exemplary Pluralism: Steve McQueen's "Deadpan" and Eija-Liisa Ahtila's "Anne, Aki and God"-Two Case Studies for Conserving Technology-Based Installation Art. *Journal of the American Institute for Conservation*, *40*(3), 179–191.

Jimenez, M., & Messier, P. (2001). Introduction [Special issue on electronic media conservation]. *Journal of the American Institute for Conservation*, *40*(3), 177–178.

Laurenson, P. (2001). Developing Strategies for the Conservation of Installations Incorporating Time-Based Media with Reference to Gary Hill's "Between Cinema and a Hard Place." *Journal of the American Institute for Conservation*, *40*(3), 259–266.

Nagy, E., & Adamsons, K. (2007). Saving Judd's "Untitled 1964:" Revival of a Galvanized Steel Single Stack Sculpture with Red Nitrocellulose Paint. *Journal of the American Institute for Conservation*, *46*(3), 245–261.

Real, W. A. (2001). Toward Guidelines for Practice in the Preservation and Documentation of Technology-Based Installation Art. *Journal of the American Institute for Conservation*, *40*(3), 211–231.

Week 9 (May 29)

Far-out stuff – Thoughtful approaches to emergent challenges

Evaluating intangible qualities and affordances of various and items – What constitutes "the work" – Further discussion of the role of artist intent and contemporary documentation – Using our best judgment

Working with hair, skin, bones, nails, horns, and teeth

Readings:

Buenger, N. (2004). Connective Tissues: Ethical Guidelines for Biohistorical Research. *Journal of the American Institute for Conservation*, *43*(3), 227–236.

Dirksen, V. (1997). The Degradation and Conservation of Leather. *Journal of Conservation and Museum Studies*, *3*(0). Online: http://www.jcms-journal.com/article/view/jcms.3972

Kronthal, L. (2001). Conservation of Chinese Shadow Figures: Investigations into Their Manufacture, Storage, and Treatment. *Journal of the American Institute for Conservation*, *40*(1), 1–14.

Fulton, S. E., & Rossi-Wilcox, S. M. (2008). Harvard's Glass Flowers: A Case Study in Traveling a Fragile Collection. *Journal of the American Institute for Conservation*, *47*(1), 15–26.

Kerschner, R. L., & Ravenel, N. (2006). Here We go 'Round Again: Cleaning Linseed Oil from Carousel Animals at the Shelburne Museum. *Journal of the American Institute for Conservation*, *45*(3), 201–210.

Nichols, K., Elgar, J., & Gausch, K. (2007). Illuminating the Way: Conservation of Two Japanese Paper Lanterns. *Journal of the American Institute for Conservation*, *46*(2), 123–136.

Perkins, B. N. (2003). The De-Electrification and Re-Electrification of Historic Lighting Fixtures at Winterthur Museum. *Journal of the American Institute for Conservation*, *42*(3), 457–451.

Welsh, F. S. (2004). Investigation, Analysis, and Authentication of Historic Wallpaper Fragments. *Journal of the American Institute for Conservation*, *43*(1), 91–110.

Week 10 (June 5):

Student research presentations

Assignments and Grading:

Short papers on materials and techniques (3 papers, 10% each, total 30% of grade)
For these short papers, you must visit at least one museum, archive, or special collection in the greater Los Angeles Area. Look at the gallery labels, wall texts, or catalog entries, and find an item or items currently on display (or accessible for viewing, in the case of special collections) that incorporates a material, process, or phenomenon with which you are unfamiliar.

This might be a substance (ex: casein, polycarbonate resin), a technique (mouth-blown glass, ormolu, marquetry), or a kind of deterioration, damage, or aging (foxing, oxidization, vinegar syndrome, delamination)—but it should be something that intrigues you and about which you'd actually like to learn more. For each of your three selections, complete and turn in one "Exploring New Materials" worksheet.

Research project and presentation (50% of grade)
Your final research project/paper will address some aspect of preservation in a heritage materials collection. The exact topic is up to you, but should be submitted and approved by the instructor no later than the third week of classes (April 17). Some sample paper topics include:

- Preserving evidence of use (for artifacts such as clothing, masks, costumes, furniture, tools, etc.)
- Balancing access and preservation needs for specific materials, or in a specific context
- Preservation challenges for modern materials and bindings
- Evaluating research resources, information needs for preserving specific category(s) of material
- Documentation of treatments and restorations
- The concept of "reversibility" and its importance to preservation practice
- Effectiveness of digitization and digital surrogates for access and research use of specific media
- Needs assessment of a specific collection or sub-collection

Papers should be 12-15 pages in length, plus bibliography.

Class participation, readings, and hands-on activities (10% of grade)

Site visits to preservation facilities, homework assignments (10% of grade)
Site visits and tours of preservation facilities in the greater Los Angeles area will be scheduled throughout the quarter. You must attend **at least two** of these (see note on p. 2).

Guidelines for written materials:

- Please submit all assignments in hard-copy *and* electronic format (.pdf, .doc, or .docx).
- Papers should be double-spaced, paginated, and should include your name, the date, and the course number on the first page.
- Spelling, grammar, and punctuation should reflect your graduate-level writing abilities. PLEASE proofread your papers—or better yet, have someone else proof them—before turning them in!
- Use consistent and correct formatting for all citations; include URLs for electronic resources.
- Endnotes and in-text citations are preferred to footnotes for bibliographic references.

Paul Banks: **10 Laws of Conservation**

Multiplication and dispersal increase chances for survival of information

Books and documents deteriorate all the time

Deterioration is irreversible

Use causes wear

No one can have access to a document that no longer exists

The physical medium of a document contains information

Authenticity cannot be restored

No reproduction can contain all the information contained in the original

Conservation treatment is interpretation

No treatment is entirely reversible

john cage: some rules for students and teachers

RULE ONE: Find a place you trust, and then try trusting it for awhile.

RULE TWO: General duties of a student - pull everything out of your teacher; pull everything out of your fellow students.

RULE THREE: General duties of a teacher - pull everything out of your students.

RULE FOUR: Consider everything an experiment.

RULE FIVE: be self-disciplined - this means finding someone wise or smart and choosing to follow them. To be disciplined is to follow in a good way. To be self-disciplined is to follow in a better way.

RULE SIX: Nothing is a mistake. There's no win and no fail, there's only make.

RULE SEVEN: The only rule is work. If you work it will lead to something. It's the people who do all of the work all of the time who eventually catch on to things.

RULE EIGHT: Don't try to create and analyze at the same time. They're different processes.

RULE NINE: Be happy whenever you can manage it. Enjoy yourself. It's lighter than you think.

RULE TEN: "We're breaking all the rules. Even our own rules. And how do we do that? By leaving plenty of room for X quantities." (John Cage)

HINTS: Always be around. Come or go to everything. Always go to classes. Read anything you can get your hands on. Look at movies carefully, often. Save everything - it might come in handy later.

(From http://www.alisant.net/cca/sitespecific/cage.html)