

Warning Concerning Copyright Restrictions:

The Copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproduction of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not be used for any purpose other than private study, scholarship or research. If electronic transmission of reserve material is used for purposes in excess of what constitutes "fair use", that user may be liable for copyright infringement.

Citation:

Rekut, Ala. "Material Literacy: Reading Records as Material Culture," in Proceedings of the First International Conference on the History of records and Archives (I-CHORA), October 2-4, 2003. Toronto, Canada. 2003: University of Toronto, pp. 11-29.

Copyright:

[University of Toronto] [2003]

Ala Rekrut
Archives of Manitoba,
Winnipeg, Manitoba, Canada

Material Literacy: Reading Records as Material Culture

Abstract: While initially created as products of a communication process, records are also physical manifestations of the choices of their custodians through time. The physical characteristics and evidence embedded in records have both physical and meta-physical origins and uses. As custodians, archives actively change this evidence through physical and intellectual mediations. Awareness of records as material culture is required before the value of physical evidence can be recognized and evaluated as a primary source of contextual evidence, thereby enriching the preservation of the meaning of the records.

Introduction

Many archivists have called for a greater awareness of critical work in related cultural disciplines in order to come to a fuller understanding of the creation, use and significance of records through time. This paper links some ideas from archival literature with modern conservation¹ and museological theory and practice, and focuses on human-readable records² as material culture - as physical manifestations of the culture(s) that produced and used them. The value of material aspects of records as a source for contextual information has received little attention in archival studies. Improved material literacy can be a means to enrich the preservation of meaning in records and in archives.

Who has never written a love letter? There is always some selection of favourite writing tool, special paper colour, texture, size; we may even select a postage stamp from among several of the same denomination. We are aware that we will be judged by our choices and are concerned about the impression we make. Even in choosing a published card, we look for the right combination of image, graphic style and text to reflect ourselves in relation to the recipient.

Tom Nesmith has noted that "our understanding of reality is powerfully shaped by the particular forms and media of communications in which we are immersed, and by our efforts to transmit ideas and experiences with them. [W]e know what we know through the lens of communication, with all its strengths, biases and limitations."³ Records are created by individuals and organizations within a society as a means of communicating with the future, whether immediate or more distant. "All records," according to Terry Cook, "...bear evidence to some degree of their creator's acts and transactions, thoughts and feelings..."⁴ Others have written that records are "object[s] related to a communication process"⁵ and they are intended for a particular audience.⁶ As creators we know our material choices are significant, but do we become blind to these choices professionally?

Choices in Creation

From the range of materials and techniques available to them, creators will select those which meet their needs. In a simple manuscript letter from the late 19th century, for example, the words we read are written in ink, supported on paper. The ink will be composed of one or more colourants so it will be visible, one or more adhesives so it will stick to the paper, and a solvent so it can go on as a liquid before drying. The ink may contain additional materials to alter properties such as its thickness, glossiness, light fastness and smell. Some formulations will be commercially patented, some will be home made; particular formulations may historically appear in regions, or along trade routes, or within specific professions.

The paper that supports the written text may have been hand formed or machine fanned. Plant fibres from diverse sources may be present - the 19th century was a time of great experimentation with alternatives to the traditional linen, cotton and hemp fibres. During fabrication the fibres were suspended in a liquid - mostly water, but other liquids and solids may have been added to manipulate the manufacturing properties, such as pulping speed. After the sheet has been fanned and dried, its surfaces may receive further treatment to prepare it for the target market. The resulting paper sheet will have a specific thickness, opacity, colour, texture, smoothness and manufacturer's markings.

The ink will be applied to the paper with a tool such as a reed, brush, cut quill or steel nib. All these tools must work with the ink to allow it to flow over a practical distance at a practical rate. The shape and size of the ink reservoir will be adjusted and maintained to control the width and length of the line produced. We can no longer see the mark-making tool, but it may be identified by the way lines swell and diminish, the evenness with which the ink is deposited, or the impression of the point on the paper surface.

Some scholars have discussed a creator's material choices in their research. Claire Bustarret has looked in detail at the practices of some French writers, noting that "Some of them ... make a point of enhancing their active and intimate involvement with the material aspect of the creative activity, especially as concerns paper. ... A writer is liable to develop meaningful habits..., not only in choosing the paper, but in using the writing surface, as well as in folding, cutting or gluing it."⁷ The creative choices of individuals working within creating authorities may be more circumscribed. Some records must be created following particular procedures, standards or other controls on the form of the creation of the records to ensure their authenticity or trustworthiness,⁸ but opportunities for individual choices such as ink colour, thickness, font type and size often remain.

Choice of materials and techniques is often linked to the function of the document. James O'Toole has noted that as Western Europe moved from an oral society to a literate one, drafts of records start appearing in cheap and deliberately impermanent forms.⁹ Lois Olcott Price has considered how architects working in the United States chose papers "to balance the function, cost and durability required for each phase of the draughting process." In the 19th century paper manufacturers responded to the increased demands of architects, who regularly worked with writing, drawing and wrapping papers, by developing wide ranges of modified specialized papers, including gridded and coloured tracing papers.¹⁰

Barbara Craig has looked at the distribution of labour and responsibilities at the British Treasury and at the kinds of record forms extant.¹¹ She has described how "written communications" were numbered, filed and "jacketed" to record "directions, notes, and minutes" and to keep the records clean and in order. She discusses the shifting use of loose and bound letterpress copies of outgoing letters and the adoption of new systems of arrangement linked to new forms of records, such as indexes on file cards.¹² Here the use of specific materials and technology is directly linked to systems of organization for internal business communication.

In 1885 a letter was written in black, probably carbon-based, ink on machine laid paper, watermarked: "Molino Mexicano/Papel de Hilo". The single sheet of paper was folded in half and the text was applied as four pages, book-wise. Once the letter was completed, the paper was folded in half again, possibly to go into an envelope for mailing, or to be tucked into a pocket for hand-delivery, or perhaps it was folded this additional time after it was received.

An understanding of the range of technology choices available to the creator is required before the significance of the choices can be understood. In this case the creator almost certainly did not have a choice of ink or paper, and may not even have been allowed to sharpen his quill with a pen knife, for it was written by Louis Riel¹³ shortly before his execution; the absence of choice can also carry meaning. Paper from a Mexican source is unexpected in the Regina Jail— is it something Riel brought into prison with him, something a friend supplied, the standard paper allowed to inmates at that jail, or at all federal jails? Is it similar to or different from what the guards and clerks used for writing reports? How do the materials and their application compare to Riel's other letters to his wife? Are there clues about Canadian trade with Mexico, or about hierarchies within prison communities? The technology of the record's creation provokes questions, but cannot provide answers in isolation.¹⁴

Modifications after Creation

Once created a record will start to change as a result of the deterioration generally attributed to "Time": light, pollution, heat and humidity. Each material present in the record—papers, adhesives, colourants, inks, textiles, binding—will deteriorate according to its own chemical and mechanical properties. While nothing lasts forever and these deterioration processes are natural, they can usually be accelerated or decelerated through human intervention.¹⁵ The type and level of deterioration present in the record provides evidence of previous care and use by custodians.¹⁶ The Riel letter has abrasion and tears from repeated folding and unfolding—this is not a letter that was read and forgotten. Surface dirt is light and no discolouration is apparent—the letter was probably stored somewhere dry and dark, with its weight supported—perhaps within a book, or in a box with similar flat objects. This suggests it has not suffered from neglect.

In other examples, patterns of light damage may indicate records which have been singled out for display. Light fading and dust deposition may suggest certain orientations of binders on a shelf, which may help in reconstructing an organization system. The combination of pinpricks and insect droppings may indicate a navigation chart was tacked

to the wall, while pinpricks and cup ring stains may suggest the chart was tacked to a table.

Records can also be physically altered though physical additions and deletions by the creator or by subsequent custodians. Are additions and notations written using contemporary or later technologies –in iron gall ink, purple coloured ink, felt-tipped marker? Does something appear to have been erased with a vinyl or rubber eraser, or rubbed out with bread; have ink lines been scraped out or painted over? Is a mending material contemporary or more recent? Is a seal missing? An understanding of all the technologies present may be required to establish the sequence and relative dates of the changes. Through these interventions the custodians engage in additional acts of creation –adding or deleting elements to create something different –another communication. In the Riel letter a thin blue mirror image appears on the reverse of the signature, as if the signature had been traced through blue carbon paper and the paper had been turned the wrong way round, perhaps because the user was unfamiliar with this technology; under magnification in raking light two impressions imperfectly follow the signature. Certainly Riel's signature had value to his followers –perhaps someone found some personal connection in tracing his signature, a tangible witness to his existence. Less poetically, perhaps the signature was copied onto another item to increase its value through association with Riel.

The creator or custodian may also pre-select what they feel to be of value, or which records may transmit a desired message. Susan Pearce has suggested that collections may be a projection of identity, manipulated by collectors and donors, and gives an example of how the widow of Thomas Hardy selected, distributed and interpreted her husband's papers and property.¹⁷ In discussing personal archives Catherine Hobbs echoes similar thoughts about how individuals may actively construct their "self".¹⁸

All of a record's custodians have an influence on its physical characteristics; the continuing physical presence and the physical condition of the record may reflect the significance of the record for successive custodians. Ian Hodkinson has suggested reasons for changes in significance including deterioration, passing fashion, or subsequent acquisition of spiritual or historical significance. He suggests cultural property is "in a continual state of physical and metaphysical flux which changes [its] significance to the particular society that is interacting with [it] at any given moment in history."¹⁹ David Lowenthal has remarked, "A sword begins as a warrior's weapon; after his death it may be transformed into a sacred object for ceremonial use; taken as loot it becomes a token of wealth and a souvenir of conquest; ultimately it is found by archaeologists and put on display. But only its previous retention for military, sacred, and treasure purposes enabled a sword to survive to the museum stage, while less valued objects have rusted, rotted, and vanished from view."²⁰ Evidence of changes to a record are part of the history of that record, and the past and present choices of creators and custodians may have a substantial impact on interpretations of the record.

Modifications and Mediations in Archives

As one in a series of custodians of a record, archives staff also make choices based on contemporary ideas of the significance of that record, filtered through personal

and professional theories and values. Archives physically mediate records in a variety of ways beginning with relocation of the records from the previous custodian's storage area to the archives' work and storage areas. Some records will be culled and destroyed or returned to the donor. To suit the storage choices of the archives, the final selection may be boxed or re-boxed; two dimensional records may be foldered or re-foldered, folded or unfolded, rolled or unrolled; bound records may be disbound. Records may be rearranged to interfile previously separated material or to separate out certain records to be further processed by another specialty area within the archives. The rate of chemical deterioration of the records may be slowed by housing them in "archival quality" storage enclosures and storing them in cool, dry environments.

Improving preservation and accessibility may motivate archives to physically change records, but these interventions also actively change the context of the record, as evidence of previous custodians' relationships to the record may be discarded and the archives' values take precedence. The quality and condition of the previous custodian's storage location and fixtures and of the organization of the storage area, may provide insights into organizational changes, attitude toward records management, pressures of space or shifting financial circumstances. Organizing devices such as colour coded folders, slip-cases and ring binders, suggest different ways of keeping order than loose pages in file folders. For business records, for example, decorative elements on bindings, ornate wooden filing cabinets, and whether a recordkeeping system was visible to clients, are indications of the value and meaning of the records to the organization and of their intended impression on clients: instilling confidence through visible signs of order, neatness, economy and prosperity. Archives' researchers wait in research rooms for records to be brought to them -neatly arranged in specialized and uniform boxes and folders, or sheathed in chemically stable plastics. The colours of "archival" supplies are light and neutral, the forms uniform and utilitarian -clinical, orderly, dispassionate and unbiased. As custodians we desire to project an image of competent stewardship to our clients too.²¹

The purchase of the Riel letter at auction was well-covered by the media. Shortly after arrival it was examined by an Archives conservator and treated to stabilize tears, then matted and framed for public display at an Archives Open House a week later. A preservation-quality photocopy was made for research use; the original was encapsulated and access restricted.

Choosing which records have value, which information within the records has value, and which physical characteristics and evidence to retain or alter, is another part of archival mediation of records. "Intrinsic value" is usually defined in the archival literature as "qualities and characteristics that make the records in their original physical format the only archivally acceptable form for preservation."²² "Records with intrinsic' value are normally those records that have a physical form that might be the topic of study; for example, they may reflect a technological change; possess unusual aesthetic or artistic quality; have unique or curious physical features, like wax seals and watermarks; be of a certain age that makes them unique as a documentary source; be useful for exhibitions; be of questionable authenticity, date, or authorship; contain a direct association with a historically significant person or event; or have direct significance as legal documentation for the establishment and continuing operation of an institution."²³

The physical properties of records are only valued for their secondary aesthetic, specimen or associative reasons and not as a primary source of information about the creation and use of the records themselves.

In order to see evidence of care for records, indications of their roles and value and shifts in their status –tangible evidence of intangible events in the history of the records –we need to systematically look for that evidence. Choosing which information to record and make available regarding physical properties of the records, as well as physical changes to the records during our custodianship, is another way in which archives intellectually mediate the records.

Diplomatic analysis has been used to develop "an understanding of administrative actions and the functions generating them." The extrinsic elements of documentary form have been identified by Luciana Duranti as: "the material make up and external appearance of the object", that is, "the medium, the script, the language, the special signs, the seals and the annotations".²⁴ In my (admittedly limited) reading of diplomatics, the link between the tangible qualities of records and their functions is recognized and valued. Materials and record-making technology are specified for attention, and consideration of the sequence of application of materials and/or of alterations to the records, and of the physical relationship to surrounding materials appears to be within the spirit of the analysis. However, physical evidence of care by custodians or changes in the functions of the records after their creation is not considered.

Archival literature appears to reveal little other discussion of systematic examination of the physical characteristics of records except in the context of physical description and case studies employing textual scholarship.²⁵ Archival description is the main way in which researchers access information about records. The overall principles which inform the *General International Standard Archival Description (ISAD (G))*, *Rules for Archival Description (RAD)* and the *Canadian-US Taskforce on Archival Description (CUSTARD)* are generally intended to "promote the understanding of [archival] materials by documenting their context, content and structure."²⁶ The use of information from material evidence is not precluded, but *ISAD(G)* and *RAD* specify description of physical aspects of records only within sections identified as "Physical characteristics and technical requirements" and "Physical Description," respectively. In *ISAD(G)* this section falls under the "Conditions of Access and Use Area", rather than the "Context Area" or "Content and Structure Area". In *RAD* no equivalent "Text Description" area or "Image Description" area is indicated. The location and limitations of the physical description information isolates the physical aspects of the records from the context of their creation and custodial history and directs consideration of the physical properties of records as static objects rather than as a dynamic tangible manifestation of social communication. The structure does not support recording what the physical evidence is and why it is significant –what it can tell us about the history of the records, their creators and custodians, over time.

Terry Cook has suggested that we shift focus from seeing the record as a physical object to a "conceptual data 'object,' controlled by metadata, that virtually combines content, context, and structure to provide evidence of some creator activity or function."²⁷ Physical properties are part of contextual metadata of human-readable records.

The description for the Riel letter currently in use at the Archives of Manitoba

predates the adoption of *RAD*; the physical evidence within the letter is represented as: "original", "4 pages". The Purchase and Acquisition file, which is not open to researchers, includes mainly correspondence related to the auction lots, purchase arrangements and media coverage.

Meaning, Literacy and Material Culture

Meaning is not created until a user engages with the material culture.²⁸ In our research rooms we can witness the powerful relationship between researchers and the material past, especially where a personal connection can be made through names, signatures or images. Most people value opportunities for physical contact with items touched by a person significant to them, or items from their own past, such as school records. "[P]hysical relics remain directly available to our senses,"²⁹ and compress the past and present without the mediating element of photography, or a computer screen or of a transcription. The physical properties of records are a tangible site for interpretation of information from text, images, appearance, texture, smell, and historical context. In discussing the planned destruction of the originals of microfilmed Ontario land deeds, Carolyn Heald reported the resulting controversy in the heritage community as an indicator of deeper emotional and social ties to records as historic artifacts:

"Primarily, one must understand the content in context: i.e., the words or images embedded within their documentary expression. The whole problem comes down to whether archivists are providers of information or the guardians of the cultural transmitters of information. ... If we are information providers, then content preservation will be seen as a good thing; if we are guardians of cultural artifacts, then it can only be seen as a necessary evil at best"³⁰

The personal communication between Louis and Marguerite Riel became a family treasure, then a commodity -we know it was sold through auction at least twice. It later became a cultural and political symbol for the Métis community and its "repatriation" became a priority for the Government of Manitoba, whereupon the Archives used it as a publicity tool. At the Archives it has been set apart from ordinary researcher contact through the access restriction. The meaning of this item shifts and changes because of the mainly intangible creative acts of its custodians, communicating their messages without changing a word of Riel's text.

We know that oral communication includes cultural clues for reading and decoding messages -if we could only read a transcription of an audiotape we would know we were missing part of the communication. Pitch, tone, speed, placement of pauses can indicate a speaker's emotional state or attitude toward the subject matter in an aural record; why would we assume any fewer non-textual communications in a written record? The loss of this metadata obstructs some communication and results in the loss of some meaning.

Joan Schwartz has written eloquently about the systemic marginalization of photographic records within archivy.³¹ In a logocentric system the graphic is difficult to read -but I will go further and suggest that where text is present the rest of the artifact is

usually marginalized and that inadequate visual literacy and material literacy limits understanding of textual records. Every textual record is also a non-textual record - a visible and material manifestation, not only of image and/or text, but of culture.

"Bound records that are too large to fit in the deepest drawers, or with deteriorated bindings, can be rebound in post-binding format... The record is not altered at any time during this process."³² This passage appears in a relatively recent manual of archival management without any suggestion that the archivist assess and record the information the binding might provide about the creators and custodians of the records; or describe the materials, labels and annotations prior to discarding it; or consider the binding as part of the metadata of the textual information within. For the author, the binding is clearly not part of the record but perhaps merely a temporary protective device, now inconvenient and therefore extraneous.

James O'Toole has remarked that "It is a bias of literate people such as ourselves to suppose that records, books, manuscripts and other materials mean only what the words in them say. Closer examination reminds us that there is usually more to the story than that, that layers of meaning - practical, symbolic, cultural - are embedded in record making and the records made."³³ This is as true for the material aspects as for the textual ones; material literacy is required to recognize and evaluate the physical evidence within records.

Summary

Records and the means to produce them are all around us. Overwhelmed by the sheer volume of the records we create, manage and consult, we risk underestimating the cultural choices that they manifest. Hugh Taylor has suggested that archives may take the artifactual nature of the records so often "for granted, perhaps because we see the documents we handle as simply providing reliable information in support of other material culture, and therefore materially 'invisible'."³⁴

Records are material culture; they are created as dynamic products of communication processes. Once created they start changing, physically and metaphysically. This paper has attempted to follow a examination and documentation sequence common in conservation, beginning with identifying the structure and material components of the record, then attempting to understand the process of their deterioration. Understanding the potential significance of the physical evidence requires an understanding of the culture(s) that produced, cared for and used the record. It is impossible to preserve either physical evidence or meaning unchanged, but the physical information and related meaning can be preserved through enhanced documentation of the physical states, interventions, uses and changes through time.

Records in their original forms can be powerful communications between generations and cultures. David Lowenthal has remarked "Memory, history, and relics offer routes to the past best traversed in combination. Each route requires the others for the journey to be significant and credible. Relics trigger recollection, which history affirms and extends backward in time. History in isolation is barren and lifeless; relics mean only what history and memory convey."³⁵ Recognizing records as material culture enriches the ability of archives to meet the three challenges posed by David Bearman: to

select the record (and shape heritage); to preserve the record (and shape memory); and to "assure use of cultural evidence in the continuing construction of the culture."³⁶

Endnotes

¹ This term will follow the usage within the conservation profession: "The purpose of conservation is to study, record, retain and restore the culturally significant qualities of the cultural property as embodied in its physical and chemical nature, with the least possible intervention. Conservation includes the following: examination, documentation, preventive conservation, preservation, treatment, restoration and reconstruction." The Canadian Association for Conservation of Cultural Property (CAC) and of the Canadian Association of Professional Conservators, *Code of Ethics and Guidance for Practice of the Canadian Association for Conservation of Cultural Property and of the Canadian Association of Professional Conservators*, 3d ed. (Ottawa: CAC and CACP, 2000), p. 13. Also available at <<http://www.cac-accr.ca/Jecode.pdf>>.

² Space and personal familiarity prevent the consideration of machine-readable records, such as sound, moving image and electronic records.

³ Tom Nesmith, "Seeing Archives: Postmodernism and the Changing Intellectual Place of Archives," *The American Archivist* 65 (Spring/Summer 2002), p. 29.

⁴ Terry Cook, "Beyond the Screen: The Records Continuum and Archival Cultural Heritage", (paper presented at the Australian Society of Archivists conference, Melbourne, 18 August, 2000), p. 6; available from <<http://www.mybestdocs.coml>>;_accessed July 19, 2003.

⁵ Martine Cardin, "Archives in 3D," *Archivaria* 51(Spring 2001), p. 127.

⁶ See also Ciaran B. Trace, "What is Recorded is Never Simply 'What Happened': Record Keeping in Modern Organizational Culture," *Archival Science* 2 (2002), p. 155. Based on a study of police records and law enforcement literature, Trace also notes that "records are not necessarily (or only) technical artifacts, but designed to produce an effect; form, size, and purpose of records are influenced by the intended audience".

⁷ Claire Bustanet, "Paper Evidence and the Interpretation of the Creative Process in Modern Literary Manuscripts," in *Looking at Paper: Evidence & Interpretation: Symposium Proceedings, Toronto 1999*, ed. John Slavin *et al.* (Ottawa: Canadian Conservation Institute, 2001), p. 88 & 89. Bustanet gives examples of writers who carefully crafted their manuscripts "those who used the same paper consistently, experimented with different qualities and sizes, or used different types and sizes of paper for different purposes.

⁸ See Tom Belton, "By Whose Warrant? Analyzing Documentary Form and Procedure," *Archivaria* 41 (Spring 1996), pp. 206-220; Heather MacNeil, "Trusting Records in a Postmodern World," *Archivaria* 51(Spring 2001), pp. 36-47; Nancy Bartlett, "Diplomatics for Photographic Images: Academic Exoticism?," *The American Archivist* 59 (Fall 1996), pp. 486-494. On p. 489, Bartlett notes that the controls may also be used for propaganda or deceptive restorations and may be tainted by corruption.

⁹ James O'Toole, "On the Idea of Permanence," *The American Archivist* (Winter 1989), p. 13.

¹⁰ Lois Olcott Price, "From Sketch to Presentation: A Study of Drawing, Tracing and Specialty Papers Used by American Architects," in *Looking at Paper*, pp. 82-87.

¹¹ Barbara Craig, "Rethinking Formal Knowledge and its Practices in the Organization: The British Treasury's Register Between 1900 and 1950," *Archival Science* 2 (2002), 111-136.

¹² *Ibid.*, p. 120. "The use of cards for indexes and for other types of record keeping increased during the First World War, despite opposition to them by the Treasury. However, cards had achieved a formidable reputation by 1919 and were seen to be harbingers of modernity." (p. 126) In "The Introduction of Copying Devices into the British Civil Service, 1877-1889," in *The Archival Imagination: Essays in Honour of Hugh A. Taylor*, ed. Barbara Craig (Ottawa: Association of Canadian Archivists, 1992), pp. 105-133, Craig observes the adoption of new business technologies by various departments and the resulting adjustments to office practices, including the increase in division of labour, the increase in the

number of record-making materials and technologies in use, as well as the change in attitude to documents when multiple copies became easily available.

¹³ Metis leader Louis Riel is still a controversial figure in Canadian history. Riel headed a provisional government which negotiated for Manitoba's entry into Confederation, but was exiled for his role in the 1869 Red River Uprising. He returned to Canada to lead the 1885 Northwest Rebellion in Saskatchewan. Considered a hero or martyr by many, Riel was hung as a traitor on November 16, 1885.

¹⁴ Archives of Manitoba, Louis Riel, P5563 f.12.

¹⁵ Stefan Michalski, "Time's Effect on Paintings" in *Shared Responsibility: Proceedings of a Seminar for Curators and Conservators*, eds. Barbara Ramsay-Jolicoeur and Ian Wainright (Ottawa: National Gallery of Canada, 1990), pp. 39-52. For a discussion of changing views of agents of deterioration over time see also Ian Hodkinson, "Man's Effect on Paintings" in *Shared Responsibility*, pp. 54-68.

¹⁶ By custodians I mean those who care for records in any capacity, however active or passive, from the time of creation to the present.

¹⁷ Susan M. Pearce, *Museums, Objects, and Collections: A Cultural Study* (Washington, D.C.: Smithsonian Institution Press, 1993), pp. 63, 200.

¹⁸ Catherine Hobbs, "The Character of Personal Archives: Reflections of the Value of Records of Individuals," *Archivaria* 52 (Fall 2001), pp. 129-130. Claire Bustarret notes that what a researcher sees is only a partial set of records which may have been selected by the creator or subsequent custodians according to their own appreciation, in "Paper Evidence", in *Looking at Paper*, 88-94.

¹⁹ Ian Hodkinson, "Man's Effect on Paintings" in *Shared Responsibility*, p. 59.

²⁰ David Lowenthal, *The Past is a Foreign Country* (Cambridge: Cambridge University Press, 1985; reprint 1997), p. 289. This example is discussed in depth by Susan Peace in Chapter 2 of *Museums, Objects, and Collections*.

²¹ Similar ideas are found in Joan M. Schwartz and Terry Cook, "Archives, Records, and Power: The Making of Modern Memory" *Archival Science* 2 (2002), p. 6: "the blind are leading the blind, in both directions: scholars using archives without realizing the heavy layers of intervention and meaning coded into the records by their creators and by the archivists long before any box is opened in the research room, and archivists treating their archives without much sensitivity to the large footprints they are themselves leaving on the archival record." See also Brien Brothman, "Orders of Value: Probing the Theoretical Terms of Archival Practice," *Archivaria* 32 (Summer 1991), p. 86.

²² National Archives and Records Service, *Intrinsic Value in Archival Material*, Staff Information Paper 21 (1982), as appears in National Association of Government Archives and Records Administrators (NAGARA) *Guide & Resources For Archival Strategic Preservation Planning (GRASP) Manual* (Atlanta: NAGARA, 1990), p. 421.

²³ Richard J. Cox, *Managing Institutional Archives: Foundational Principles and Practices*, (New York: Greenwood Library Management Collection, 1992), p. 59.

²⁴ Luciana Duranti, "Diplomatics: New Uses for an Old Science (part V)," *Archivaria* 32 (Summer 1991), pp. 6-7.

²⁵ Codicological approaches have been described by Germaine Warkentin in examining the authorship and provenance of a manuscript purported to be by Pierre Radisson in "Radisson's Voyages and their Manuscripts," *Archivaria* 48 (Fall 1999), pp. 199-222, and Claire Bustarret has described the use of paper analysis as a tool of genetic criticism for the study of handwritten literary drafts in "Paper Evidence," in *Looking at Paper*, 88-94. This approach appears mainly limited to the interpretation of what has already been selected for retention in archives.

²⁶ Canadian-US Taskforce on Archival Description, *The Canadian-US Taskforce on Archival Description Statement of Principles*, April 2002, p. 1; available at <http://www.cdncouncilarchives.ca/archdesreport..principles.pdt.>>; accessed July 19, 2003.

²⁷ Teny Cook, "Archival Science and Postmodernism: New Formulations for Old Concepts," *Archival Science* 1 (2001) and available from <http://www.mybestdocs.coml>>, p. 11; accessed July 19, 2003.

²⁸ Pearce, *Museums, Objects, and Collections*, p. 219.

²⁹ Lowenthal, *The Past is a Foreign Country*, p. 245.

³⁰ Carolyn Heald, "Are We Collecting the 'Right Stuff?," *Archivaria* 40 (Fall 1995), p. 186. Nicholson Baker has provoked similar emotional responses regarding the microfilming and subsequent destruction of newspapers and books in *Double Fold: Libraries and the Assault on Paper* (New York: Random House, 2001).

³¹ Most notably in Joan M. Schwartz, "Coming to Tennes with Photographs: Descriptive Standards, Linguistic 'Othering', and the Margins of Archivy," *Archivaria* 54 (Fall 2002), pp.142-171.

³² John A. Dyer, "Managing Cartographic and Architectural Records," in *Managing Archives and Archival Institutions*, ed. James Gregory Bradsher (London: Mansell Publishing, 1988; Chicago: University of Chicago Press, 1991), p. 101.

³³ James O'Toole, "Cortes's Notary: The Symbolic Power of Records," *Archival Science* 2 (2002), p. 58. Hugh Taylor made a similar comment in "'Heritage' Revisited: Documents as Artifacts in the Context of Museums and Material Culture," *Archivaria* 40 (Fall 1995), p. 9: "because literacy objectifies and detaches us from what we read, information becomes almost rootless, floating away from the artifact in which it was anchored."

³⁴ Hugh Taylor, "'Heritage' Revisited", p. 9. More recently, in "What is Recorded is Never Simply 'What Happened'", p. 159, Ciaran Trace has remarked: "It is perhaps the record's very embeddedness in what appear to be routine processes and mundane practices that creates this difficulty. The record has become naturalized and thus invisible, an assumed backdrop rather than active agent."

³⁵Lowenthal, *The Past is a Foreign Country*, p. 249.

³⁶ David Bearman, *Archival Methods*, Archives and Museum Informatics Technical Report no.9, (Pittsburgh: Archives & Museum Informatics, 1989; reprinted 1991), p. 2.

Bibliography

Bartlett, Nancy. "Diplomatics for Photographic Images: Academic Exoticism?," *The American Archivist* 59 (Fall 1996), 486-494.

Bearman, David. *Archival Methods*. Archives and Museum Informatics Technical Report no.9. Pittsburgh: Archives & Museum Informatics, 1989; reprinted 1991.

Belton, Tom. "By Whose Warrant? Analyzing Documentary Form and Procedure," *Archivaria* 41 (Spring 1996),206-220.

Bradsher, James Gregory, ed. *Managing Archives and Archival Institutions*. London: Mansell Publishing, 1988; Chicago: University of Chicago Press, 1991.

Brothman, Brien. "The Past that Archives Keep: Memory, History, and the Preservation of Archival Records." *Archivaria* 51 (Spring 2001), 48-80.

. "Orders of Value: Probing the Theoretical Terms of Archival Practice," *Archivaria* 32 (Summer 1991), 78-100.

Bustarret, Claire. "Paper Evidence and the Interpretation of the Creative Process in Modern Literary Manuscripts." In *Looking at Paper: Evidence & Interpretation: Symposium Proceedings, Toronto 1999*, ed. John Slavin *et al.*, 88-94. Ottawa: Canadian Conservation Institute, 2001.

Canadian Association for Conservation of Cultural Property (CAC) and of the Canadian Association of Professional Conservators. *Code of Ethics and Guidance for Practice of the Canadian Association for Conservation of Cultural Property and*

- of the Canadian Association of Professional Conservators, 3d ed. Ottawa: CAC and CACP, 2000. Also available at <<http://www.cac-accr.ca/ecode.pdf>>.
- Canadian Council of Archives. *Rules for Archival Description*. Available at <<http://www.cdncouncilarchives.ca/archdesrules.html>>; accessed Aug 14,2003.
- Canadian-US Taskforce on Archival Description. *The Canadian-US Taskforce on Archival Description Statement of Principles*, April 2002. Available at <<http://www.cdncouncilarchives.ca/archdesreport-principles.pdt>>; accessed July 19,2003.
- Cardin, Martine. "Archives in 3D," *Archivaria* 51 (Spring 2001), 112-134.
- Clavir, Miriam. *Preserving What's Valued: Museums, Conservation, and First Nations*. Vancouver, Toronto: UBC Press, 2002.
- Cook, Terry. "Archival Science and Postmodernism: New Formulations for Old Concepts." *Archival Science* 1 (2001),3-24.
- , "Beyond the Screen: The Records Continuum and Archival Cultural Heritage". Paper presented at the Australian Society of Archivists conference, Melbourne, 18 August, 2000). Available from <<http://www.mybestdocs.com/>>; accessed July 19,2003.
- . "Fashionable Nonsense of Professional Rebirth: Postmodernism and the Practice of Archives." *Archivaria* 51 (Spring, 2001), 14-35.
- Cox, Richard J. *Managing Institutional Archives: Foundational Principles and Practices*. New York: Greenwood Library Management Collection, 1992.
- Craig, Barbara. "The Introduction of Copying Devices into the British Civil Service, 1877-1889." In *The Archival Imagination: Essays in Honour of Hugh A. Taylor*, ed. Barbara Craig., 105-133. Ottawa: Association of Canadian Archivists, 1992.
- , "Rethinking Formal Knowledge and its Practices in the Organization: The British Treasury's Register Between 1900 and 1950," *Archival Science* 2 (2002), 111-136.
- Duranti, Luciana. "Diplomatics: New Uses for an Old Science (part V)," *Archivaria* 32 (Summer 1991), 6-24.
- Heald, Carolyn. "Are We Collecting the 'Right Stuff?," *Archivaria* 40 (Fall1995), p. 186.
- Hobbs, Catherine. "The Character of Personal Archives: Reflections of the Value of Records of Individuals," *Archivaria* 52 (Fall 2001), 129-130.
- Hodkinson, Ian. "Man's Effect on Paintings." In *Shared Responsibility: Proceedings of a Seminar for Curators and Conservators*, eds. Barbara Ramsay-Jolicoeur and Ian Wainright, 54-68. Ottawa: National Gallery of Canada, 1990.

- International Council on Archives. *ISAD(G): General International Standard Archival Description*, 2d ed., adopted by the Committee on Descriptive Standards, Stockholm, Sweden, 19-22 September, 1999. Available at <http://www.ica.org/biblio/cds/isad~_2e.pdf>; accessed Aug 12,2003.
- Lowenthal, David. *The Past is a Foreign Country*. Cambridge: Cambridge University Press, 1985; reprint 1997.
- Lubar, Steven. "Information Culture and the Archival Record." *The American Archivist* 62 (Spring 1999), 10-22.
- MacNeil, Heather. "Trusting Records in a Postmodern World," *Archivaria* 51(Spring 2001),36-47.
- Michalski, Stephan. "Time's Effect on Paintings." In *Shared Responsibility: Proceedings of a Seminar for Curators and Conservators*, eds. Barbara Ramsay-Jolicoeur and Ian Wainright, 39-52. Ottawa: National Gallery of Canada, 1990.
- Millar, Laura. "The Death of the Fonds and the Resurrection of Provenance: Archival Context in Space and Time." *Archivaria* 53 (Spring 2002), 1-15.
- National Archives and Records Service. *Intrinsic Value in Archival Material*. Staff Information Paper 21, 1982. As appears in National Association of Government Archives and Records Administrators (NAGARA) *Guide & Resources For Archival Strategic Preservation Planning (GRASP) Manual*, 421- 426. Atlanta: NAGARA, 1990.
- Nesmith, Tom. "Seeing Archives: Postmodernism and the Changing Intellectual Place of Archives," *The American Archivist* 65 (Spring/Summer 2002), 24-41.
- . "Still Fuzzy, But More Accurate: Some Thoughts of the "Ghosts" of Archival Theory." *Archivaria* 47 (Spring 1999), 136-150
- Olcott Price, Lois. "From Sketch to Presentation: A Study of Drawing, Tracing and Specialty Papers Used by American Architects." In *Looking at Paper: Evidence & Interpretation: Symposium Proceedings, Toronto 1999*, ed. John Slavin *et al.*, 82-87. Ottawa:. Canadian Conservation Institute, 2001.
- O'Toole, James. "Cortes's Notary: The Symbolic Power of Records," *Archival Science* 2 (2002), p. 45-61.
- . "On the Idea of Permanence," *The American Archivist* (Winter 1989), 10-25.
- Pearce, Susan M. *Museums, Objects, and Collections: A Cultural Study*. Washington, D.C.: Smithsonian Institution Press, 1993.
- Schwartz, Joan M. "Coming to Terms with Photographs: Descriptive Standards, Linguistic 'Othering', and the Margins of Archiviv." *Archivaria* 54 (Fall 2002), 142-171.

- . "We Make Our Tools and Our Tools Make Us: Lessons for Photographs for the Practice, Politics, and Poetics of Diplomatics." *Archivaria* 40 (Fall, 1995), 40-74.
- , and Terry Cook, "Archives, Records, and Power: The Making of Modern Memory" *Archival Science* 2 (2002), 1-19.
- Taylor, Hugh. "'Heritage' Revisited: Documents as Artifacts in the Context of Museums and Material Culture," *Archivaria* 40 (Fall 1995), 8-20.
- Thompson, Michael. *Rubbish Theory: The Creation and Destruction of Value*. Oxford: Oxford University Press, 1979.
- Trace, Ciaran B. "What is Recorded is Never Simply 'What Happened': Record Keeping in Modern Organizational Culture," *Archival Science* 2 (2002), 137-159.
- Tyacke, Sarah. "Archives in a Wider World: The Culture and Politics of Archives." *Archivaria* 52 (Fall 2001), 1-25.
- Vemallis, Kayley, "The Loss of Meaning in Faded Color Photographs." *Journal of the American Institute for Conservation* 38 (1999), 459-476.
- Warkentin, Germaine. "Radisson's Voyages and their Manuscripts," *Archivaria* 48 (Fall 1999), 199-222.