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Fashion Forward: Digitizing Historical Dress in Theory and Practice

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Fashion Forward: Digitizing Historical Dress in Theory and Practice

An Honors Thesis

Presented to

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By

Grace Acton

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0. Introduction

Early in my time at Bates, I realized that my path did not fit neatly into any single discipline. My math interests were too hands-on and data-focused for the math major to be the correct path for me; my history interests were drawing me toward material culture and museum studies more than a single temporal or regional focus. I found my home in Digital and Computational Studies (DCS), an inherently interdisciplinary department, which, at the time I was selecting my course of study, did not have a major available. With the support of my fellow digital humanist, Professor Anelise Shrout, and our resident dress historian and material culturist, Professor Christine McDowell, I designed an independent interdisciplinary major in Digital Archives, drawing upon courses primarily in DCS and History, but also from Gender and Sexuality Studies and Theater.

Proposing an interdisciplinary major also means proposing a thesis topic as the culmination of your studies – a frightening prospect for a sophomore. However, when Prof. McDowell introduced me to a collection of historical clothing owned by the theater department, I knew that I had found my thesis project. I was surprised that this resource hadn't been utilized by students in the past, until I learned that the collection had never been cataloged or documented in any way. Of course people hadn't made use of these boxes of clothes: nobody knew what was in them. That became my mission: document the collection, and make it accessible to anyone looking to study dress history themselves.

Figure 0.1: Boxes of antique clothing in costume storage, September 2023

This is what the collection looked like when I began this project: a wall of bankers boxes labeled in Sharpie with the vague descriptor of "Antique Clothing." The contents were acquired over the course of decades through occasional donations by alumni and their families. Because donations were accepted through the Theater department, they weren't necessarily considered as archival material or historical artifacts. Many were altered to fit modern bodies and gained another life as theatrical costumes, eventually being set aside as "antiques" when they were in too poor of condition to wear onstage. Donations weren't accompanied by records, leaving us with a collection of mysteries: with few exceptions, we have no information on who made, wore, or donated any of these pieces. However, knowing that the majority of donations came from

Bates alumni, and based on the demographics of both Bates and Maine in the late nineteenth century, most of these clothes can be assumed to be from white, middle-class and wealthy women.[1] They probably purchased their clothes ready-made from catalogs and department stores, or worked with dressmakers, rather than sewing all of their garments themselves.[2] Even after all of the object study and documentation I conducted over the course of this year, it is still impossible to identify the makers and wearers behind this collection; I acknowledge that they will, unfortunately, remain a mystery.

Figure 0.2: Bates College Clothing Archive storage, February 2024

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[1] *Only a handful of garments in the collection are menswear, which I will discuss later.*
[2] Sofi Thanhauser, "A Brief History of Mass-Manufactured Clothing," Literary Hub, January 27, 2022, https://lithub.com/a-brief-history-of-mass-manufactured-clothing/.

Although their makers and wearers remain mysteries, the clothes themselves are not: they now comprise the Bates College Clothing Archive, the end product of this year of work. I have designed the Bates College Clothing Archive, or BCCA, to be a research collection. In structure, the collection is defined best as an archive, not a museum, although the lines between these disciplines are and have always been blurry.[3] Archives, although they are generally thought of as keepers of paper documents, are designed to preserve "documentary evidence of past events," which have continuing value for historical research.[4] Countless stories can be discovered through the marks of wear, construction and aesthetic details, and social contexts of historical dress, making garments excellent pieces of documentary evidence. Although the definition of "museum" is debated almost constantly, it is generally agreed that the defining characteristic of a museum is exhibition, not preservation. Eugene Dillenberg, a museum studies professor at Michigan State University, studied the definitions provided by major museum associations, including the American Alliance of Museums and International Council on Museums, and compiled a single definition of a museum: "An institution whose core function includes the presentation of public exhibits for the public good."[5] Exhibitions are not the primary goal of the BCCA; rather than developing an authoritative narrative to be absorbed by a public audience, I present the contents as resources for research, open to interpretation by individuals.

An Interdisciplinary Approach

The documentation practices of libraries, archives, and museums, as well as the traditions of dress historical study, have all contributed to my own approach. I also draw upon newer

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[3] Lisa M. Given and Lianne McTavish, "What's Old is New Again: The Reconvergence of Libraries, Archives, and Museums in the Digital Age," *The Library Quarterly* 80, no. 1 (January 2010).
[4] "What are Archives?" Society of American Archivists, https://www2.archivists.org/about-archives.
[5] Eugene Dillenberg, "What, if Anything, Is a Museum?" *Exhibitionist* (Spring 2011).

research in digital humanities, particularly regarding the shift of museum content to digital platforms within the last 15 years. Many of my sources are critiques of traditional museum practices, particularly with regard to issues of colonialism and racism in collecting. Hannah Turner's *Cataloguing Culture: Legacies of Colonialism in Museum Documentation* was particularly influential as I designed the BCCA database, as was Fiona Cameron and Helena Robinson's chapter, "Digital Knowledgescapes" in *Theorizing Digital Cultural Heritage: A Critical Discourse*. These authors encouraged me to question the museum structures that I have previously worked within while assisting with documentation projects at Maine Maritime Museum and the Bates College Museum of Art, ultimately leading me to create a custom database using Omeka S, rather than choosing a ready-made collections management system.

Processing manuals for archival materials were also important resources as I adapted object-focused museum documentation to fit an archives model. Frederic M. Miller's 1990 guide, *Arranging and Describing Archives and Manuscripts*, introduced me to the idea that archivists prioritize collective documentation over descriptions of individual items; Miller also emphasizes that "provenance is the fundamental principle of archival organization," which became an important guiding principle when I discovered that several items in the BCCA collection belonged to a single family.[6]

Although this project does not adhere to traditional museum documentation practices, at times it was necessary to consult museum reference materials, as well as dress history sources, in order to best preserve and document objects themselves. I frequently consulted the third edition of *Museum Registration Methods* for guidance on object storage and labeling. This reference

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[6] Frederic M. Miller, *Arranging and Describing Archives and Manuscripts* (Chicago, IL: Society of American Archivists, 1990), https://babel.hathitrust.org/cgi/pt?id=mdp.3901507144763&seq=10.

book also functioned as a primary source for the history of computerized documentation: published in 1979, the third edition of *Museum Registration Methods* contains advice for museums that are considering moving their records onto mainframe computers.[7] As I will discuss in Chapter 3, I used Angela Kipp's *Managing Previously Unmanaged Collections: A Practical Guide for Museums* – to my knowledge, the only published guide to wrangling completely undocumented collections – as a jumping off point to create my own process for documenting, deaccessioning, and rehousing the BCCA collection.[8] The anthology *Active Collections*, edited by Elizabeth Wood, Rainey Tisdale, and Trevor Jones, helped me get past the barrier of deaccessioning, especially after reading Gail Steketee's analysis of how collecting institutions reflect symptoms of hoarding disorder.[9] The Museum Textile Services website brought me to many sources on caring for textile objects, including the National Museums of Scotland's guide to labeling textiles.[10] Lastly, although I acknowledge the problems embedded in controlled vocabularies and standardized nomenclatures, I ultimately chose to use the Getty Art and Architecture thesaurus in my collections database as both a controlled vocabulary and a source for Linked Open Data, as I will discuss in Chapter 2.

Several sources designed for the library, archives, and museum field helped me to navigate the initially intimidating world of Linked Open Data. Seth van Hooland and Ruben Verborgh have created an accessible, informative guide in *Linked Data for Libraries, Archives, and Museums: How to clean, link and publish your metadata*. Likewise, *Linked Data for the*

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[7] Dorothy H. Dudley et al. *Museum Registration Methods* (Washington, DC: American Association of Museums, 1979).

[8] Angela Kipp, *Managing Previously Unmanaged Collections: A Practical Guide for Museums* (Lanham, MD: Rowman & Littlefield, 2016). https://ebookcentral.proquest.com/lib/bates/detail.action?docID=4503897

[9] Elizabeth Wood, Rainey Tisdale, and Trevor Jones, *Active Collections* (New York, NY: Routledge, 2018).

[10] "MTS Resources," Museum Textile Services, http://www.museumtextiles.com/resources.html.

"Labelling a textile object," National Museums Scotland, https://www.nms.ac.uk/about-us/our-services/training-and-guidance-for-museums/collections-care-training/object-labelling/labelling-a-textile-object/.

Perplexed Librarian by Scott Carlson, Cory Lampert, Darnelle Melvin, and Anne Washington helped clarify many of the acronyms and concepts of Linked Open Data.

A Multifaceted Project

Although this project does not put forward a curatorial vision or narrative of dress history, I had to make many authoritative choices while developing this collection. These decisions matter, and it is important that my reasoning be documented for transparency, and in order to guide the future use and development of this archive. This written portion of my thesis project documents the choices I have made in removing objects from the collection, rehousing the collection, and developing a database that represents the complexity of this collection. I also explain the reasoning behind these decisions, and assert my approach to both dress history and collections documentation: an inclusive dress history necessitates collecting clothes from all types of people, which must be studied in conversation with each other and with historical context, and such a collection requires data structures that facilitate connections between objects, people, and other collections.

The first chapter of this text reviews the field of dress history: how it has historically approached collecting and display, how dress history as an academic discipline differs from dress history in museums, and how the BCCA collection might support dress historical research moving forward.[11] Chapter 2 traces the history of museum collections documentation, starting with the European Renaissance *Kunstkammer* and moving through to modern digitized collections, focusing on the data structures that facilitated museums' exclusionary practices. This

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[11] *I use the term "dress history" throughout this project. Although some museums use the terms "costume history" or "fashion history", "dress history" is the accepted term for the academic field. The journal of the Costume Society of America is called* Dress, *the Association of Dress Historians publishes* The Journal of Dress History, *and one of the sources I referenced for my own dress historiography is* Dress History: New Directions in Theory and Practice.

chapter also explains how Linked Open Data gives museums a new way forward to a more inclusive approach to digital collections. In the third chapter, I discuss my own process for taking the BCCA collection from a shelf full of mystery boxes to a documented, properly housed physical archive, and analyze data on the contents of the collection. The fourth chapter explains the structure of the BCCA's digital archive, created using Omeka, and demonstrates the power of linked data through a case study. Finally, I provide recommendations for the future development and use of the collection, including both administrative actions and ideas for research that could draw upon the BCCA objects.

It is my hope that this is just the beginning of the Bates College Clothing Archive. There are countless stories waiting to be told through these clothes. Although I have structured the database with historical research in mind, this is not the only purpose possible for the BCCA collection. I encourage future students to use the BCCA for whatever aspect excites them, whether it be historical research, dress reconstructions and recreations, textile conservation training, or exhibition design. This is a resource waiting to be used – go use it.

Mission Statement

The [Bates College Clothing Archive (BCCA)](#) is a publicly accessible resource for students,

scholars, and enthusiasts seeking and contributing historical clothing to support dress history

research, reproduction, and exhibition.

1.   Approaching the Field of Dress History

Dress history is still a developing field; in comparison to other lenses of material culture study, such as archaeology and anthropology, dress history is relatively new. As such, the field is not internally consistent. While some dress historians and academics are pushing the field in new, inclusive directions, the majority of public-facing dress history work – particularly museum exhibits and social media content -- focuses on the couture and luxury niche. At a time when dress history has boomed in popularity on YouTube, Instagram, and TikTok, it's vital to recognize the biases of the field, and assert that the Bates College Clothing Archive will strive for inclusivity in its dress history collecting, research, and display practices.

Like museums themselves, European dress history developed during the Renaissance out of a fascination for all things "exotic" and elite – two themes that persist in dress history curation.[1] During the nineteenth century, dress history publications, largely consisting of advertising materials and object descriptions compiled by male authors, found their market niche: middle- and upper-class women of western Europe and the United States.[2] Into the twentieth century, the majority of dress history publications and exhibitions focused on descriptions of luxury and "oriental" clothing, written by men (or the rare well-connected woman, like Mary Margaret, Countess of Wilton) for wealthy female enthusiasts.[3]

The public-facing side of dress history continues to court this same demographic, focusing primarily on individual, extraordinary garments and designers – fashion for fashion's sake. As dress historian Lou Taylor said in *Establishing Dress History*, "There is no doubt that

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[1] Lou Taylor, *Establishing Dress History* (Manchester, UK and New York, NY: Manchester University Press, 2004), 5.
[2] Taylor, 37.
[3] Taylor, 37.
Taylor, 4.

today the most popular publications are the glamorous accounts of the work of the famous couturiers. It seems as if 90 percent of books on dress at the start of the new millennium are about the clothes of the two or three hundred women who can afford these garments."[4] The fascination with individual couture designers is not only an issue in publishing, but in curation as well: in 2023, there were major exhibits on Karl Lagerfeld (Met Costume Institute), Gabrielle "Coco" Chanel (Victoria and Albert Museum), Alexander McQueen (National Gallery of Victoria), Iris van Herpen (Musée des Arts Décoratifs), and Christian Dior (Museum of Contemporary Art in Tokyo).[5] Likewise, the most popular historical dress YouTubers and social media personalities focus on recreations of extravagant designs; it seems that nearly every popular "CosTube" creator has made a replica of a House of Worth gown or an outfit from a famous portrait.[6]

The Met Costume Institute

Nowhere is the emphasis on couture and luxury more visible than at the most well-known institution of western dress history: the Metropolitan Museum of Art Costume Institute. The Costume Institute, conceived originally as an independent Museum of Costume Art in 1937, became a curatorial department within the Met Museum in 1959.[7] The Costume Institute

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[4] Taylor, 5.

[5] Danielle Wightman-Stone, "10 Fashion Exhibition to See in 2023," FashionUnited, January 6, 2023, https://fashionunited.com/news/culture/10-fashion-exhibitions-to-see-in-2023/2023010651546.

[6] Bernadette Banner (@bernadettebanner), Instagram Post, July 18, 2020. *John Singer Sargent* Madame X *gown recreation.*
Bernadette Banner (@bernadettebanner), Instagram post, December 3, 2018. *Jacques-Louis David* Portrait of a Young Woman in White *gown recreation.*
Angela Clayton (@angelacostumery), Instagram post, July 26, 2020. *Worth gown recreation.*
Cynthia Settje (@redthreaded), Instagram post, December 14, 2023. *Worth gown recreation.*
Cathy Hay, "1902 Worth Oak Leaf Dress," Flickr album, October 4, 2013. *Worth gown recreation.*
The issue is not that these individual creators have chosen to recreate these particular garments, it is that they are the most visible ambassadors of this field, and create the impression that luxury fashion is all that dress history should focus on.

[7] "The Costume Institute," The Metropolitan Museum of Art, https://www.metmuseum.org/about-the-met/collection-areas/the-costume-institute.

identifies itself as collecting "the world's foremost holdings of American fashion from the late nineteenth to the mid-twentieth century," also describing itself as "the largest and most comprehensive costume collection in the world, offering an unrivaled timeline of Western fashion history."[8] When the Costume Institute says "American" and "Western," they mean white. Native American dress, including garments by contemporary makers, is held by the American Wing or the Michael C. Rockefeller Wing -- not the Costume Institute.[9]

Western, white fashion is visibly the priority of the Costume Institute. More precisely, their collection and exhibits focus on *high fashion*, European and American couture designers with major name recognition, and do not attempt to give viewers a picture of everyday dress in the past – severely limiting this supposedly "unrivaled" collection.

Even when the focus of the Costume Institute's annual exhibition is not on western couture designers, their subjects are always viewed through the lens of western luxury fashion. The 2015 Costume Institute exhibition *China: Through the Looking Glass*, a collaboration between the Costume Institute and the Met's Department of Asian Art, was framed around the aesthetics and the broad *idea* of China, rarely including fashion objects by Chinese designers and makers themselves. This approach recalls the eighteenth and nineteenth century fascination with

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[8] "The Costume Institute."

[9] Unidentified Lakota/Teton Sioux Maker, "Dress," The American Wing, Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/751512.

Jodi Archambault, "Woman's Dress and Accessories," The American Wing, Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/644324.

Unidentified Sioux (Teton) Maker, "Woman's Dress," The Michael C. Rockefeller Wing, Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/318347.

Unidentified Western Apache Maker, "Ceremonial Robe," The Michael C. Rockefeller Wing, Metropolitan Museum of Art, https://www.metmuseum.org/art/collection/search/318353.

The Michael C. Rockefeller Wing houses "Ancient American Art," but the Western Apache Ceremonial Robe and Sioux Dress cited above are both dated to 1880. Calling these objects "ancient" diminishes very recent Native American histories and perpetuates the erasure of living Indigenous people.

Nida Khan, "Editorial: Indigenous Erasure and the Fight for Recognition," Public Broadcasting Service, April 19, 2022, https://www.pbs.org/wnet/exploring-hate/2022/04/19/editorial-indigenous-erasure-and-the-fight-for-recognition/.

chinoiserie, which Taylor, quoting John McKenzie, defines as "the construction of an imaginary Orient to satisfy a western vision of human elegance and refinement within a natural and architectural world of extreme delicacy."[10] Like historical *chinoiserie*, the Met exhibit encouraged visitors to think of the high-fashion designs, displayed alongside Chinese decorative arts objects, as simply aesthetic marvels; as Holland Cotter wrote in his review for the *New York Times,* "The wall texts and catalog allude to troubling histories but advise us to avoid politically correct thinking. Fashion isn't the place to get serious about such things. Yes, it creates and perpetuates stereotypes, on every side. But it's all about harmless surface and shine. Relax and enjoy. Feast your eyes."[11] Wellesley College student Lia Wang extrapolated further on this issue in her review of the exhibition for *GenerAsians*, arguing that the Met was, in fact, creating *chinoiserie*:

> "You cannot separate fashion from culture, especially Chinese fashion and culture. Traditional fashion, which is what Western designers were inspired by, is inherently cultural because of its role in Chinese society and aesthetics. You cannot simply remove culture from fashion, which is what some Western designers tried to do when emulating Chinese aesthetics, simply creating chinoiserie instead."[12]

The interwoven issues of cultural appropriation, representation, and inspiration continue to confound museum curators and dress historians, especially since 2020. Much has been written on the subject of diversifying and decolonizing museum spaces in the past three years, but few

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[10] Taylor, 17-18.

[11] Holland Cotter, "Review: In 'China: Through the Looking Glass,' Eastern Culture Meets Western Fashion," *New York Times*, May 7, 2015, https://www.nytimes.com/2015/05/08/arts/design/review-in-china-through-the-looking-glass-eastern-culture-meets-western-fashion.html.

[12] Lia Wang, "'China: Through the Looking Glass': An Embrace of Fantasy," *GenerAsians* (Wellesley, MA: Wellesley College, 2015), https://cs.wellesley.edu/~lianka110/beta/article2.html#:~:text=There%20is%20always%20more%20dialogue,of%20fashion%20design%20that%20is.

major fashion exhibitions have addressed racism head-on.[13] Even the Met's current exhibit,

Women Dressing Women – described as "comically overdue" by reviewer Alaina Demopoulos –

largely fails to embrace the intersectionality needed to really shake up dress history curation,

featuring mostly evening wear by famous white designers.[14]

Object Study: Motivations and Missteps

While dress history curation is fairly consistent in its focus on aesthetic and exclusivity,

the academic field is far more varied. Dress historical research techniques and best practices

were built on studies of collections of related objects, often working outside the high-fashion

canon. In contrast to the public-facing museum exhibits and showcase books of luxury items,

dress history researchers of the twentieth century introduced research practices grounded in

connections between objects and histories of gender, class, and labor. The field's early leaders –

Doris Langley Moore, Anne Buck, and Janet Arnold – based their work in object study, but,

vitally, incorporated many garments into their projects, allowing them to make discoveries about

trends that are impossible when working with single garments. Working in the 1950s, Anne

Buck disrupted the field's traditional focus on high-end clothing, and is noted as being "just as

interested in servants' dress, farmers' smocks or the head shawls of mill girls."[15] Her multi-

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[13] *A brief selection of works on decolonizing museums, many of which were brought to my attention by Professor Erin Nolan through her course, Decolonizing the Museum:*
Amy Lonetree, *Decolonizing Museums: Representing Native America in National and Tribal Museums* (Chapel Hill, NC: University of North Carolina Press, 2012)
 Eve Tuck and K. Wayne Yang, "Decolonization is not a metaphor," *Decolonization: Indigeneity, Education & Society* 1, no. 1 (2012)
Stuart Frost, "A Bastion of Colonialism: Public Perceptions of the British Museum and its Relationship to Empire," *Third Text* 33, no. 4-5 (2019).
[14] Alaina Demopoulos, "Women Dressing Women review: it felt like a screening of the Barbie movie," *The Guardian*, December 20, 2023, https://www.theguardian.com/us-news/2023/dec/20/women-dressing-women-metropolitan-museum-fashion-exhibit#:~:text=Women%20Dressing%20Women%20is%20an,more%20ambitiously%20for%20the%20future..
[15] Taylor, 62.

object studies, which she combined with archival research, were foundational to the modern best-practices of dress historical research. Also revolutionary was Janet Arnold's willingness to collect and study damaged and altered garments, which museums refused to accept.[16] Arnold recognized that altered garments had the potential to say more about how people used and interacted with their clothes; decades later, additional research by Amanda Vickery supported Arnold's theory of reuse, confirming that eighteenth century women across social classes recycled and remodeled their clothes.[17] Also taking a broader view toward trends over individual objects, Doris Langley Moore dispelled myths and stereotypes about nineteenth century fashion. Studying numerous garments from the mid-nineteenth century along with domestic magazines enabled Langley Moore to take a stance against the myth of tight-lacing, writing, "As for the seventeen-inch waist, though everybody's mother or grandmother is said to have had one, I have never come across a single specimen."[18] These foundational dress historians all drew upon numerous garments, worn by people of varying economic status, and supplemented study of the clothes themselves with archival research.

Although the academic field of dress history was founded on these multi-object studies, we often see prolonged interest, both public and academic, in single, extraordinary garments. There is merit to studying individual objects, especially in the pursuit of understanding historical garment construction. However, individual objects that receive considerable research attention are, most often, exceptions, rather than representations of overall trends, and the public presentation of these studies neglect to include historical context. For example, the 1785 Isabella MacTavish Fraser wedding gown from Scotland has been a topic of continual interest for dress

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[16] Taylor, 62.
[17] Taylor, 62.
[18] Taylor, 59.

historians, due to its unique position as the only known pre-1800 extant example of a woman's tartan gown.[19] In June 2019, following a year of research, a team of eighteenth-century dressmaking experts recreated the gown over the course of a weekend at the National Museum of Scotland. Their experience of recreating the garment revealed many "curious construction features throughout the original dress," as well as building an understanding of the "collaboration that clearly took place between maker and wearer during the construction of the original gown."[20] Some insights gained from the Isabella Project, such as construction techniques and fabric analysis, can be applied to the study of other extant gowns; but, because there are no comparable extant objects, it is difficult to ascertain whether it can really be representative of women's dress from the time period and region.

Studies of individual dresses, especially those which are intended for a non-academic audience, often ignore the broader implications of the garment in question, decontextualizing the garment from its history and focusing purely on aesthetics and garment construction. One such problematic project is Cathy Hay's attempted recreation of the Jean-Phillipe Worth Peacock Dress, worn by Lady Mary Curzon in 1903 as Vicereine of India.[21] Hay, documenting her process through (now-deleted) YouTube videos, took viewers with her as she studied the Peacock Dress in person at Kedleston Hall in Derbyshire, England, created a pattern based on other gowns by the House of Worth, and tried to recreate the Zardozi embroidery that makes the Peacock Dress so distinctive.[22]

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[19] "The Isabella Project," Timesmith Dress History. https://www.timesmith.co.uk/isabella-project
[20] Rebecca Olds, et al., "The Isabella MacTavish Fraser Gown - Pattern & Construction" (American Duchess Inc., 2019), 1.
"The Isabella Project."
[21] "Lady Curzon's Peacock Dress," Textile Research Center, May 5, 2017, https://trc-leiden.nl/trc-needles/individual-textiles-and-textile-types/secular-ceremonies-and-rituals/lady-curzons-peacock-dress.
[22] "The Peacock Dress 107881," National Trust Collections, https://www.nationaltrustcollections.org.uk/object/107881.

After her own attempt at the highly specialized gold wire embroidery was unsuccessful, Hay

contracted the labor to an embroidery company in India, at the cost of £6,800.[23] By outsourcing

this extremely skilled labor, and neglecting to name the craftspeople she worked with, Hay

perpetuated the imperialism inherent in the original gown. Rebecca Onken's words about the

original Peacock Dress are just as relevant to the recreation: "The zardozi work remains

unnamed; the weavers who created it are made faceless, people who are merely meant to be

administrated and exploited."[24] The Peacock Dress is a garment worthy of critical analysis, not

because of its beauty or construction, but because of its connection to British colonial rule in

India and the construction of a British fantasy of Indian aesthetics – a connection that was not

acknowledged by Hay until Indian-American seamstress and YouTuber Nami Sparrow published

a video asking Hay to stop recreating the dress because of its symbolism of British domination

over India.[25] Any dress history study, especially studies of garments that invoke orientalist

aesthetics or were created through exploitation of colonized and minoritized populations, must

address the context in which they were produced and the implications of their wear; otherwise,

they simply perpetuate the symbolism and problems of the original garments.

"All That is Gold: Recreating the Peacock Dress," The Costume Society, June 8, 2020,
https://costumesociety.org.uk/blog/post/all-that-is-gold-recreating-the-peacock-dress.
Image Copyright: National Trust and David Brunetti. Image removed for publication per the Terms and Conditions of the National Trust website (https://www.nationaltrustcollections.org.uk/terms-conditions).
[23] "All That is Gold…"
[24] Rebecca Onken, "The Peacock Dress: The Language of British Imperialism in India, 1899-1905," *Armstrong Undergraduate Journal of History* 12, no. 1 (January 2022),
https://armstronghistoryjournal.wordpress.com/2022/01/07/the-peacock-dress-the-language-of-british-imperialism-in-india-1899-1905/.
[25] Onken, "The Peacock Dress…
Nami Sparrow, "The Peacock Dress is Problematic || don't make it," YouTube, September 19, 2021,
https://youtu.be/mYxRBRYxWo8?si=BGaUViN3CbO_xEWr.

Deprioritizing Aesthetic Excellence

The expectation that dress history should prioritize extraordinary objects is not an inevitability, it is the product of choices made by collectors and curators. As Taylor points out, our options for dress history are limited by the "selective/hierarchical status of material culture," in which people are more likely to collect, conserve, and display more fashionable and expensive clothing.[26] In his contribution to "A Questionnaire on Decolonization", Steven Nelson urges museum professionals to question, or even reject, the notion of aesthetic supremacy: "To decolonize means always asking 'whose?' when confronted with colleagues who use abstract notions of 'taste' and 'aesthetic excellence' to devalue work they either don't like or don't understand."[27] More often than not, the fashion that is deemed aesthetically superior is simply the fashion that the most privileged people of western society were wearing at any given point in time; in order to improve the field and tell a more complete story of dress, we must think beyond aesthetics and single, extraordinary objects.

When aesthetic supremacy is rejected or deprioritized, there is an impulse among curators to instead prioritize exceptional provenance. Think, for example, of the First Ladies exhibit at the Smithsonian National Museum of American History; this extremely popular exhibit is filled with dresses worn to presidential inaugurations, state dinners, and ambassadorial receptions.[28] The

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[26] Jonathan Faiers, "Dress Thinking: Disciplines and Indisciplinarity," *Dress History: New Directions in Theory and Practice* (London: Bloomsbury Academic, 2015), paragraph 22. https://www.bloomsburyfashioncentral.com/encyclopedia-chapter?docid=b-9781474240536&tocid=b-9781474240536-chapter1&pdfid=9781474240536.ch-001.pdf

[27] Steven Nelson, author, Huey Copeland, Hal Foster, David Joelit, and Pamela M. Lee, eds., "A Questionnaire on Decolonization," *October* 174 (Fall 2020), 89. https://doi.org/10.1162/octo_a_00410

[28] "The First Ladies," National Museum of American History, Smithsonian Institution, https://americanhistory.si.edu/explore/exhibitions/first-ladies.

association of these objects with famous leaders and important events, and, ultimately, power is what motivates their display.

Not all provenance-focused exhibitions are focused exclusively on the dress choices of elites, and provenance can be a valuable guiding theme for a dress history exhibition. Provenance is an important form of connection between objects. For example, the exhibit *Northern Threads: Two Centuries of Dress at Maine Historical Society* highlighted objects with connections to the state of Maine.[29] The core objects of the Northern Threads exhibit could all be traced to Maine, although the display was supplemented by objects without clear provenance as additional examples of the topics the curators chose to highlight within the display. The theme which guided this exhibit was not based on these objects being connected to powerful or famous individuals, although in many cases, the fact that the wearer was famous in their time is what motivated the museum to preserve or highlight the object's provenance. Despite the status of the wearers, the focus of the exhibit was on these garments' connections to the state of Maine, whether they had been made here or worn here, and contextualized the objects in the place and time of their creation.

Clothing is an embodiment of history. It has the ability to enrich the experience of learning about a person in a way that words often cannot. However, exhibits which place value on provenance often overlook the maker in favor of the wearer, disguising or diminishing the connection between creator and creation. The foremost example of this problem, other than the Peacock Dress, is the case of Ann Lowe, the Black designer and dressmaker who created Jackie Kennedy's wedding dress, in addition to countless other designs for high-profile white clients

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[29] "Northern Threads: Two Centuries of Dress at Maine Historical Society, Parts I & II," Maine Historical Society, https://www.mainehistory.org/all-exhibitions/northern-threads-exhibition/.

during the twentieth century.[30] The Kennedy wedding dress became iconic almost immediately following the highly-publicized Bouvier-Kennedy wedding; however, in 1961, when she was interviewed by the *Ladies' Home Journal*, Mrs. Kennedy denied Lowe credit, ascribing it to an unnamed "colored woman dressmaker."[31] The recent rediscovery of Lowe and her work has largely been a project by Black fashion historians, including Lois K. Alexander Lane of the Black Fashion Museum and Elaine Nichols of the National Museum of African American History and Culture.[32] Finally, in 2023, Lowe was brought to international attention with the opening of *Ann Lowe: American Couturier*, an exhibit at the Winterthur Museum in Delaware.[33] While I am glad that Lowe has finally gotten her due, it makes the problem of invisible labor all the more apparent. How many other makers have been rendered invisible by the fashion industry and the dress history field?

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[30] Judith Therman, "Ann Lowe's Barrier-Breaking Mid-Century Couture," The New Yorker, March 22, 2021, https://www.newyorker.com/magazine/2021/03/29/ann-lowes-barrier-breaking-mid-century-couture.
[31] Therman.
[32] Therman.
[33] "Ann Lowe: American Couturier," Winterthur Museum, Garden, and Library, https://www.winterthur.org/ann-lowe-american-couturier/

Few objects in the Bates College Clothing Archive are so aesthetically remarkable or have such extraordinary provenance that they would catch the eye of a traditional collector or curator; they are not "museum-worthy", in the traditional sense. This does not restrict the utility of the collection – in fact, it provides an opportunity to reject curatorial tradition entirely. The BCCA is most effective as a research collection, with documentation strategies that emphasize connections between objects over individual excellence. Although, as discussed in the Introduction, there is little provenance available for most BCCA objects, any information we have on makers and wearers will be included in object records as an additional way to connect objects to each other. In Chapter 4, I will provide an example of how objects can be linked to each other through provenance, using a collection of clothing owned by the family of Bates Dean of Faculty Harry Rowe as an example. Through a publicly-accessible digital archive, students and researchers will be able to discover their own links between objects, and craft conclusions by examining many objects along their chosen theme. Although the collection can certainly be used for exhibitions, as I will discuss in my Recommendations chapter, the goal of the digital archive is to allow users to explore the collection on their own, with the physical objects available for additional study in pursuit of dress history research.

2. Bringing Collections into the Digital Age

Choices made in documenting a collection are as influential to the use of that collection as choices made in accessioning objects and curating exhibits. However, documentation, and the decisions behind records-keeping practices, are rarely made visible to the public. Until recently, museums' full collections were not available to the public, limiting viewership to the objects on display at any given time. Object records were for internal use only, meant to control the movement and use of objects within the institution. When museums started to publish their full catalogs online, it fundamentally changed how the public engages with the collection: anyone with an Internet connection could access detailed records for objects beyond those on display physically. Those records, following museum tradition and practices, weren't designed to allow outsiders – non-experts, students, or even average museum visitors – to freely explore a collection without a curator's oversight.

This is because museums *document*, rather than *catalog,* their collections. In 2009, two librarians, Gabriela Zoller and Katie DeMarsh, led an effort to overhaul the Albright-Knox Art Gallery's data methods.[1] Coming from Library and Information Science backgrounds, Zoller and DeMarsh found that museum data is handled very differently than library or archives data. They argued that the library practice of *cataloging* differs from museum *documentation* because the goal of cataloging goes beyond providing information about individual objects; rather, cataloging seeks to connect records to each other, facilitating searches and discoveries.[2] This difference is rooted in the histories and traditions of these two institutions. Library data handling, beginning

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[1] Gabriella Zoller and Katie DeMarsh, "For the Record: Museum Cataloging from a Library and Information Science Perspective," *Art Documentation* 32, no. 1 (2013), 59.
Zoller and DeMarsh, 56-57.
[2] Zoller and DeMarsh, 56-57.

with Antonio Panizzi's cataloging system for the British Museum's library in the 1830s, is

motivated by an interest in helping the public discover new information.[3] In 1836, Panizzi wrote,

> "I want the poor student to have the same means of indulging his learned curiosity, of following his rational pursuits, of consulting the same authorities, of fathoming the most intricate inquiry as the richest man in the kingdom…and I contend that the government is bound to give him the most liberal and unlimited assistance in this respect."[4]

Expanding Panizzi's cataloging system into topic-specific shelving, Melvil Dewey made it

possible for a visitor to any library to find what they were looking for without prior knowledge

of the library's layout by grouping books into standardized thematic sections.[5]

In contrast, museums seek to separate out the most notable of objects, and display only

those objects to the public. In museums, and especially in dress history, objects are made worthy

of display and study *because* they are different or exceptional, and this is reflected in

documentation strategies that obfuscate connections between objects. This limits research and

display possibilities, as well as the public's ability to engage with material culture. To maximize

the effectiveness of object collections, the objects must be freed from their long-standing silos,

and be documented in structures that facilitate connectivity and free interpretation.

A Brief History of Museum Collections

To understand collections documentation, it is important to understand the histories of

museum collections themselves. Although *museum* derives from the Greek *mouseion*, a term

used "to describe a temple of the muses, particularly the primarily philosophical institution (or

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[3] Matthew Battles, *Library* (New York, NY: W.W. Norton & Co., Inc, 2003), 129-131.
Mohinder Partap Satija, *The Theory and Practice of the Dewey Decimal Classification System* (San Diego, CA: Elsevier Science & Technology, 2013), 1-4.
https://ebookcentral.proquest.com/lib/bates/detail.action?docID=1575007
[4] Battles, 131.
[5] Battles, 141.

place of contemplation and teaching) that existed in the third century BCE in ancient

Alexandria," the modern museum collection derives from the *Kunstkammer,* the cabinets of

curiosities of medieval and Renaissance Europe.[6] As cabinets of curiosities grew in scale and

popularity during the sixteenth and seventeenth centuries, collecting practices became

inseparable from conquest. These collections were focused on extraordinary and exotic objects,

acquired at great cost and often through violence against indigenous peoples in the Americas,

Asia, and Africa; as Vanessa Whittington wrote in her 2021 paper on decolonizing museum

practices, "As institutions that arose during the European age of imperial expansion to glorify

and display the achievements of empire, museums have historically been deeply implicated in

the colonial enterprise."[7] One of the earliest systems for categorizing a collection, published in

1565 by Samuel Quiccheberg, provided organizational strategies specifically for artifacts of

colonization, including categories for "military excursions and conflicts", skeletons, "weapons of

other nations and unusual weapons", and "foreign garb".[8]

 During the Enlightenment, the focus of collecting moved away from "curiosities", but

maintained an emphasis on exceptional objects.[9] It was during this time, also, that the contents of

cabinets of curiosities, apothecary collections, and early museums were given order and structure

according to ideas of empirical reasoning.[10] The Enlightenment saw the first published museum

catalogs, like those of Athanasius Kircher (published in 1678) and John Tradescant the Younger

6 John E. Simmons, *Museums: A History* (Lanham, MD: Rowman & Littlefield, 2016), 1.
https://ebookcentral.proquest.com/lib/bates/detail.action?docID=4525003
7 Vanessa Whittington, "Decolonising the museum? Dilemmas, possibilities, alternatives," Culture Unbound 13, no.
2 (2021), 250. https://doi.org/10.3384/cu.3296
8 Milan Popadić, "The beginnings of museology," Muzeológia a Kultúrne Dedičstvo 8, no. 2 (2020), 8. DOI:
10.46284/mkd.2020.8.2.1
Simmons, 70.
[9] Simmons, 94.
[10] Fiona Cameron and Helena Robinson, "Digital Knowledgescapes," *Theorizing Digital Cultural Heritage: A Critical Discourse* (Cambridge, MA: The MIT Press, 2007).

(published in 1656).[11] The Tradescant Catalog offers a view into how categorization changed since Quiccheberg's classification system. Tradescant used a two-tiered system of classification, with categories and subcategories; for example, Section VII "Fructus Exotici, Materialls [sic] of Dyers and Painters" included five subsections, which sorted the materials by the color they produced.[12] Organizational strategies continued to develop and become more complicated during the ensuing decades, exemplified by the three-tiered system of the 1681 Royal Society catalog.[13] These increasingly elaborate organizational systems divided objects based, ultimately, on arbitrary categorizations, which would go on to inform the division of museums themselves along thematic lines in the nineteenth century. The British Museum went through a series of departmental divisions starting in 1836 with a separation into Printed Books, Manuscripts, and Natural and Artificial Production; these would split into more specific subcategories over the course of the century. Each developed their own distinct cataloging and documentation methods -- preventing connections between objects, as well as links from objects to texts.[14] Likewise, the transformation of the Louvre from a private royal gallery to a public museum occurred alongside a division of the artwork into national schools, which later facilitated removals of certain departments, including Far Eastern Art, that were deemed to be out of sync with the Louvre's narrative of western civilization's cultural development – the inevitable end product of an organizational system based in violent colonial collecting.[15]

The Louvre led the way for public art museums in the eighteenth and nineteenth centuries to organize their collections and exhibits around grand historical narratives. Collections became

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[11] Simmons, 102-103.
[12] Simmons, 104-105.
[13] Simmons, 129-131.
[14] Simmons, 162.
[15] Carol Duncan, "From the Princely Gallery to the Public Art Museum," *Civilizing Rituals: Inside Public Art Museums* (London, UK and New York, NY: Routledge, 1995), 33.

focused on "heritage, embodied in the forms and objects of the 'past', especially those which were considered unusual in contemporary society," with these objects acting as evidence in this "empirical" approach to history.[16] In *Theorizing Digital Cultural Heritage*, Fiona Cameron and Helena Robinson write,

> "From the mid-nineteenth century, it was the practice of museums to impose a universal ordering structure based on empirical reasoning, to objects in their collections, and these tendencies, evidenced in complex taxonomies and the emphasis on the so-called objective analysis of objects, still persist in a variety of forms in many organizations. Here, a definitive meaning of the past is deemed to lie dormant in material objects, and can be exposed through empirical forms of observation, description, and measurement. In the end, one predetermined interpretation of an object emerges usurping all others."[17]

In turn, museum documentation sought to standardize and organize this evidence in the form of data, highlighting differences between objects in order to make exceptional objects more easily findable. In the introduction to *Cataloguing Culture*, Hannah Turner argues that in museum documentation, similarity and difference were not opposites, but together "enabled early ethnologists both to group objects collected from the field that shared similar characteristics and to establish series of these objects based on their differences."[18] In documentation, objects were assigned descriptions like "primitive", "exotic", and "barbarian", othering the cultural output of colonized nations and supporting a hierarchy of civilizations with Europe at the top.[19]

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[16] Popadić, 10.
Hannah Turner, *Cataloguing Culture: Legacies of Colonialism in Museum Documentation* (Vancouver, BC: University of British Columbia Press, 2020), 11.
[17] Cameron and Robinson, 169-170.
[18] Turner, 11.
[19] Chao Tayiana, "Use of derogatory, racist and harmful language," Digital Benin, 7 November 2022, https://digitalbenin.org/documentation/use-of-derogatory-racist-and-harmful-language.
The Digital Benin project has an excellent table of recommendations for how to deal with racist, harmful, and outdated terminology in museum documentation. As I will discuss later, many museums have not re-documented objects with colonial histories, and their object metadata still contains harmful terms. Some argue that these descriptions should be maintained in order to address problematic history, but the Digital Benin team have argued that these terms should be removed in the interest of preventing harm. They have chosen to keep some outdated, but less harmful terms, such as "primitive," in their database, but attach a tag to each instance of such words in order to make it clear to users that these words are not acceptable. More offensive terms, especially racialized terms, are removed.

Following the European move toward public museums, new museums popped up in most U.S. cities during the nineteenth century, with the Smithsonian Institution opening in 1846, the American Museum of Natural History in New York in 1869, and Chicago's Field Museum in 1894.[20] As these museums grew their collections, new organizational practices became necessary to facilitate exhibitions and control which objects and narratives were presented to the public. During the second half of the nineteenth century, it became popular for museums to maintain two separate collections – one for public exhibition and one for private study by professional researchers – literally hiding the majority of museum collections from public view.[21] Collections became even more hidden from public view in the early twentieth century: in 1900, William Matthew Flinders Petrie proposed the creation of an off-site, purpose-built collections storage facility for major London museums.[22] Off-site storage not only hid, but physically removed, portions of collections from potentially related objects.

These massive collections required a means of keeping track of their objects, and found their solution in library practice: card catalogs. Card catalogs, in contrast to the earlier practice of catalog books, are well suited to actively growing and evolving collections because new entries can easily be added.[23] The Metropolitan Museum of Art in New York led the charge toward card catalogs, creating not one, but two card catalogs, one organized by department classifications and the other by a subject index.[24] Accession numbers were assigned at the time of acquisition and were entirely independent from any catalog information, so as to maintain continuity of object

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[20] Simmons, 140-144.
[21] Simmons, 152-153.
[22] Simmons, 183.
[23] Marcia Cottis Harty, Marica Vilcek, and Brice Rhyne, "Cataloguing in the Metropolitan Museum of Art, with a Note on Adaptations for Small Museums," *Museum Registration Methods,* 3 (Washington, D.C.: American Association of Museums, 1979), 220.
[24] Harty et. al., 220-221.

identification, while photographic documentation, included on catalog cards, allowed objects to be identified without highly detailed descriptions.[25] These organizational strategies let museum staff and researchers explore the collection in a limited capacity by pulling multiple records that shared some characteristic, making it somewhat closer to Zoller and DeMarsh's definition of "cataloging" than previous forms of museum documentation.[26]

The Digitization Marathon

The movement to digital records keeping in museums has been slow, inconsistent, and strongly influenced by analog record formats. In 1967, a group of computer-minded museum professionals in the greater New York City area founded the Museum Computer Network (MCN) with the goal of creating computerized collections management systems.[27] Founding MCN leader Everitt Ellin, perhaps anticipating questions about why museums would digitize records, wrote in 1969 that museums "must be prepared to distinguish between their traditional function in gathering and preserving the objects significant to our civilization and their more recently acquired responsibility to marshal and disseminate the information pertaining to those collections."[28] Among the founding MCN group was Dr. Jack Heller, a computer scientist at New York University's Institute for Computer Research in the Humanities, who had recently created a program suite called the General Retrieval and Information Processor for Humanities Oriented Studies (GRIPHOS).[29] The earliest MCN meetings focused on how Heller's work could

[25] Simmons, 183.
Harty et al, 220.
[26] Zoller and DeMarsh, 54-70.
[27] Marla Misunas and Richard Urban, "A Brief History of the Museum Computer Network," Museum Computer Network (August 2007), https://mcnassets.sfo3.digitaloceanspaces.com/wp-content/uploads/2020/11/01164432/History-of-MCN.pdf, 1.
[28] Paul F. Marty and Castle U. Kim, "Trending MCN: Fifty Years of Museum Computing Conferences and Community," *Curator* 63, no. 2 (April 2020), https://search.ebscohost.com/login.aspx?direct=true&db=vth&AN=143357592&site=ehost-live, 194.
[29] Misunas and Urban, 1.

be applied to museum collections and internal data; in 1966, the Metropolitan Museum of Art

had started working with Heller to create an electronic index of the Met Bulletin, but meetings

with the museum's registrar William D. Wilkerson revealed the challenges of documenting

museum collections. The MCN's principal goal, at its founding, was to develop a data dictionary

that "would accommodate the diverse methods used to describe museum collections."[30] The

resulting tagged record format, which created separate records for objects, artist biographies, and

reference citations, allowed museum object records to work with GRIPHOS, but also required

that museums alter their data to fit this standardized structure.[31]

Although MCN members were aware of impending issues due to the incompatibility of

GRIPHOS with non-IBM hardware starting in the late 1970s, the 1979 3rd Edition of *Museum*

Registration Methods contains a chapter on record computerization (written by MCN President

David Vance), which focuses heavily on the use of GRIPHOS. The instructions for using

GRIPHOS reveals similarities between this record-keeping format and the earlier card catalogs:

> "Datasets within a data base may be of many kinds, but two are of special importance in
> museum work. One is a catalogue file, a dataset in which each record contains the unique
> identification (eg., accession number) of something described plus all the recorded data
> about that something… The second type of file that is important in museums is an
> inverted index file, similar to a book index. The subject of each record is an index term
> (e.g., MATERIAL: ivory), while its content is a list of the serial numbers of all records
> containing that item. A catalogue record names something and lists its attributes.
> Conversely, an inverted record names an attribute and lists all the things that share it."[32]

Compare this description with the description of the Met's Subject Index card catalog from the

same edition of *Museum Registration Methods*:

[30] Misunas and Urban, 2.
[31] Misunas and Urban, 2.
[32] David Vance, "Computers and Registration: A Definition of Terms," *Museum Registration Methods*, 3
(Washington, D.C.: American Association of Museums, 1979), 314.

"A subject index presents facts about an object that are not apparent from the classification system. The subject index is prepared by the staff of the Catalogue Department and is maintained in a separate file. This file contains entries for artists and makers, subject matter, title, ex-collections, and provenance, arranged alphabetically. Each of these entries will lead the inquirer to the cards for the object in the main catalogue."[33]

The GRIPHOS inverted record is the same as the card catalog's Subject Index, with the important distinction being that Heller's program now facilitated faster search and retrieval; with very little editing or reformatting, a card catalog could be converted into a database.

Easy conversion from paper to computerized records was appealing in the early years of collections digitization, as indicated by Robert G. Chenhall's 1978 article "Making Collections Available for Research", published in the Council for Museum Anthropology newsletter. Chenhall celebrates the Field Museum's progress in computerizing 300,000 object records, noting multiple times that they were able to do so at a cost of just two or three cents per object.[34] He goes on to explain the Field's approach:

"What the Field Museum did was to convert previously-existing catalog books into a computer file so that multiple listings could be prepared for use in controlling the inventory during a move to new quarters. For this purpose, the information on each record in the catalog books…could be recorded as computer input **without any review or editing**. For inventory purposes the only information each record must contain is some unique identifier such an accession number or a registration number, and some minimal wording to describe the object."[35]

It is notable, and troubling, that Chenhall's highly positive review of the Field's system includes the fact that records could be converted "without any review or editing."[36] To this day, the legacies of earlier records are present in many collections management systems, as records

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[33] Harty, Vilcek, and Rhyne, 221.
[34] Robert G. Chenhall, "Making Collections Available for Research," *Council for Museum Anthropology Newsletter* 2, no. 3 (April 1978), https://doi.org/10.1525/mua.1978.2.3.14, 14.
[35] Chenhall (1978), 14. *Bolding mine.*
[36] Chenhall (1978), 14.

continue to be transferred from database to database without additional review. In *Cataloguing*

Culture, Hannah Turner details how the lack of review in records computerization perpetuated

the use of colonial, racist, and simply inaccurate terminology in the collections database for the

National Museum of Natural History (NMNH). When the NMNH initially digitized their

collections into their first database, SELGEM (<u>Sel</u>f <u>Ge</u>nerating <u>M</u>aster), in the early 1970s, the

work was outsourced to a data entry company, who copied underlined information on catalog

cards into the new system.[37] Although the underlined cards remain, it is unclear who did the

underlining; in other words, there is no record of *who* decided what data would be imported into

the new system, including whether that person was a content expert or not.[38] Additionally, the

Museum's Department of Anthropology instituted a rule that "no changes were to be made on

the catalogue cards, and only the information that was on the cards was to be entered into the

computer, **without any revision**."[39] Although this was likely done to maintain provenance for

the information, it also meant that any errors, misspellings, or missing data would be perpetuated

in the computer system.

    The lack of oversight and revision in these early systems made the databases minimally

effective as tools for establishing connections between artifacts. Chenhall was aware of this

issue, writing,

> "Standardization is necessary because a computer is only capable of performing tasks
> such as searching and sorting in a mechanical or routine, rote manner. Records pertaining
> to artifacts which are alike in any respect, i.e., which are considered as belonging to the
> same class according to some attribute or combination of attributes, must contain some of
> the exact same words (or other symbols) or they cannot be retrieved from the computer

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[37] David Bridge, "SELGEM: The Data Structure," Smithsonian Institution (July 20, 2016), https://si-siris.blogspot.com/2016/07/selgem-data-structure.html.
Turner, 164.
[38] Turner, 164.
[39] Turner, 166. *Bolding mine.*

file as a sub-set. **Editing of the individual records before they are entered into the computer file is necessary in order to achieve the standardization that is demanded by the operation of the computer.**"[40]

Standardized terms were necessary to the function of GRIPHOS, SELGEM, and other early collections management systems, which relied on index files to connect object records to each other; misspellings or alternative names severely limited the utility of these new databases. Although the early goal of the MCN was simply to create a database that would work for museum records, their mission soon became to improve the usability of these records. In the same 1978 article, Chenhall acknowledged that simply moving files into a computer was not enough:

> "This kind of record can be converted to computer form rapidly but it will still contain the same data that it did as a manual record, nothing more. The fact of putting it into a computer does not make it a better record in any way. It is simply stored in a different form, a form that allows it to be more readily sorted and reproduced."[41]

Moving into the 1980s, the goal of the MCN focused less on developing institution-specific software, especially as mainframe computers were replaced by more affordable minicomputers and Personal Computers (PCs), and towards developing standards for file formats and data structures that would facilitate information sharing between databases.

In 1988, the MCN launched the Computer Interchange of Museum Information (CIMI) Initiative, with the goal of creating common formats for computerized documentation. The CIMI Standards Framework report from 1993 acknowledges many issues stemming from inconsistencies in computerized records. In addition to recognizing the lack of shareability

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[40] Chenhall (1978), 15. *Bolding mine.*
It's curious that within the same three-page article, Chenhall admires the Field Museum system, which in order to be efficient and cost-effective does not revise or standardize its entries, and then advocates for editing and standardization as integral parts of the digitization process.
[41] Chenhall (1978), 14.

between institutions and the need to include new types of media in databases, the authors of the

CIMI report write,

> "Museums must also be concerned with whether computerized documentation they painstakingly build up around their collections will be **accessible and meaningful to anyone else long after the original collectors of it - and the systems they worked with - have vanished**. Therefore, they need to be able to move the data from one vendor's system to another, because of system obsolescence and because multiple applications within the museum will require access to the same information."[42]

The issue of data standardization was not new to the Galleries, Libraries, Archives, and

Museums (GLAM) field; as Bearman and Perkins acknowledged, the library and archives

communities were already highly involved with national and international standards bodies

before CIMI was established.[43] Museums, however, were neither involved in the creation of

bibliographic or data standards, nor were they adopting these standards en masse.

Standardizing Documentation

The focus of the museum registration field in the 1980s was on standardizing

documentation through content, rather than through data structures. As early as 1975, database

systems included authority files, which limited input data to approved spellings and terminology.

For example, the Flora North America Data Bank, built using IBM's Generalized Information

System (GIS), used six authority files to control their input data, including files for ecological

vocabulary, type definitions, biographies of Data Bank contributors and authors who had named

plants, species names, and synonyms of scientific names used in taxonomies.[44] Although these

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[42] David Bearman and John Perkins, *Standards Framework for the Computer Interchange of Museum Information* (Silver Spring, MD: Museum Computer Network, 1993), https://cool.culturalheritage.org/byorg/cimi/cimifram.html#appa. *Bolding mine*.

[43] Bearman and Perkins.

[44] *Generalized Information System (GIS) is not to be confused with the modern usage of GIS, a Geographic Information System.*

institution- and topic-specific controlled vocabularies improved the databases of individual

museums, they did not solve the problem of interoperability between databases.

Chenhall presented one solution to this problem in 1978, when he published the first

edition of *Nomenclature for Museum Cataloging: A System for Classifying Man-Made Objects*,

which sought to provide a single hierarchical taxonomy for naming museum objects.

Nomenclature was first revised in 1988, then again in 2010, and a third time in 2015.[45]

Nomenclature 4.0 moved the vocabulary securely into the digital age, becoming accessible

online in 2018, and it is now able to be continuously updated in this digital format.[46] The original

Nomenclature structure was a ten-category system with three hierarchical levels, which grouped

objects based on their functional context.[47] These categories are based on three fundamental

ways that objects interact with people and the environment:

> "1. They shelter us from the environment;
>
> 2. They act on the environment;
>
> 3. They comment on the environment."[48]

Each of these categories are divided into subcategories based on the objects' functions, then

further into additional categories; in its current format, *Nomenclature* utilizes a six-level

hierarchical structure. Using the *Nomenclature* system, all objects should, theoretically, be able

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Robert G. Chenhall, *Museum Cataloging in the Computer Age* (Nashville, TN: American Association for State and Local History, 1975), 202-206.

[45] "About Nomenclature," *Nomenclature for Museum Cataloging*, https://page.nomenclature.info/apropos-about.app?lang=en.

[46] "About Nomenclature."

[47] Heather Dunn and Paul Bourcier, "Nomenclature for Museum Cataloging," *Knowledge Organization* 47, no. 2 (2020), https://web.archive.org/web/20220312051726id_/https://www.nomos-elibrary.de/10.5771/0943-7444-2020-2-183.pdf, 183-184.

[48] Dunn and Bourcier, 188.

to be assigned a single, standardized term; for objects that don't fit in a functional context, there is the "unclassifiable objects" category.[49]

There are countless situations in which single, standardized terms are incapable of properly naming objects. In my experience of using *Nomenclature* in a history museum context, it is not always possible to find a single term to describe an object, because objects are multivalent: they have multiple functions, meanings, and interpretations. For example, the shipboard medicine chests, and medicine bottles in particular, at Maine Maritime Museum were very challenging to catalog using *Nomenclature*.[50] The bottles could be considered as medical equipment, but not all of them had apothecary labels or evidence that they had contained medicines, and all of them were also used in a distinctly maritime context. Would they be defined better by their possible medical function, or their nautical context? Or should they simply be categorized with glassware, which can originate from many different contexts?

Other controlled vocabularies have been developed to give additional descriptors to objects. The Getty Research Institute has published several, more focused vocabularies, starting with the Art and Architecture Thesaurus (AAT). The initial design of the AAT was directed by a coalition of library directors and architects, including Toni Peterson, Dora Crouch, and Pat Molholt, in the late 1970s, but the Getty has managed editorial work since 1983.[51] The AAT was followed by the Union List of Artist Names (ULAN) in 1984, and the Thesaurus of Geographic Names (TGN) in 1987.[52] These three vocabularies are now known collectively as the Getty

[49] Dunn and Bourcier, 189.
[50] "Sea Medicine Chest," Maine Maritime Museum, https://maritimeme.catalogaccess.com/objects/6442.
[51] "About the AAT," *Art & Architecture Thesaurus Online*, J. Paul Getty Trust, March 5, 2023, https://www.getty.edu/research/tools/vocabularies/aat/about.html
[52] "About the ULAN," *Union List of Artist Names Online*, J. Paul Getty Trust, March 5, 2023, https://www.getty.edu/research/tools/vocabularies/ulan/about.html.
"About the TGN," *Getty Thesaurus of Geographic Names Online*, J. Paul Getty Trust, March 5, 2023, https://www.getty.edu/research/tools/vocabularies/tgn/about.html

Vocabularies, and were combined under a single department when work began on the TGN in 1987.[53] While *Nomenclature* focuses solely on the issue of naming objects, the Getty Vocabularies provide additional terms to facilitate cataloging of visual art, such as standardized artist names from ULAN, materials, styles, cultures, and techniques from AAT, and place names and coordinates from TGN.[54]

Although standardized information is largely viewed as a positive move for museums due to increasingly usable data, standardized vocabularies can also perpetuate inaccuracies and outdated terminology, and become complicated when accepted terms change. Chenhall's 1978 article gives an example of the challenges of working with ethnographic collections when the "correct" term is continuously in flux:

> "If someone undertakes research concerned with the artifacts (or technology or behavior patterns) of the Hopi Indians – he might remember that forty years ago this tribe was frequently called the Moqui Indians…he would thus search the attribute of cultural affiliation according to both of the terms, HOPI and MOQUI. But he could easily forget that the alternative spelling, MOKI, was also commonly used in days gone by. As a result, the size of the sample and, possibly, the validity of the entire research project could be severely limited."[55]

Chenhall does not ponder the possibility that this hypothetical researcher would be Hopi and use the Hopi language to search for artifacts – a multilingual approach that having single "authoritative" terms does not facilitate when those authoritative terms are created by white institutions. Turner notes several related issues at the National Museum of Natural History, which, throughout the 1980s, attempted to standardize its naming conventions by using broader

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[53] "About the TGN."
[54] "About the AAT."
"About the ULAN."
"About the TGN."
[55] Chenhall (1978), 15.

index headings to capture more objects under a single term. Within a decade this approach was creating its own set of problems, as indicated by a 1996 staff memo by Candace Greene of the Department of Anthropology:

> "First, [the index term] was created with almost exclusive reliance upon the object name as entered into the database. These names are often ambiguous or even misleading and the index cannot improve upon that without individual object research. Second, our data structure makes no provision for a hierarchical classification. Therefore, a choice always had to be made between grouping things under larger functional terms or retaining more specific, meaningful terms and increasing the number of entries under which one must search to be certain of catching all possible examples of an object type."[56]

Greene's concerns, like many of the motivating factors behind standardizing object description, could not be alleviated simply by creating standards for the content of data fields: museum documentation systems needed new data structures that would allow for multiple terms to describe each object.

Museum Data Structures

Several groups formed during the 1990s with the goal of improving both the structure and content of museum and archival databases. One of the most influential of these working groups was the Dublin Core Metadata Initiative (DCMI), which first met in Dublin, Ohio in 1995.[57] The output of the DCMI was the Dublin Core metadata elements; although the DCMI initially intended for this list of elements to be used in describing documents, the fields are broad enough to be used in the description of museum objects as well. The Dublin Core includes traditional metadata fields like Title and Creator, but also makes space for Subject information (often pulled from controlled vocabularies) and unambiguous Identifiers, like accession numbers or ISBN

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[56] Candace Greene, memo, June 1996, in Turner, *Cataloguing Culture* (2020), 154.
[57] Claudio Gnoli, *Introduction to Knowledge Organization* (London, UK: Facet Publishing, 2020), 93.

numbers. The Dublin Core standard has additional flexibility because fields can be used multiple times, as long as the database software in use has this capability; for example, if an object has multiple Identifiers, such as both an internal accession number and a universal ISBN number, then the dcterms::Identifier field can be repeated in order to include both of these values.[58]

Although Dublin Core is very popular, several other approaches to metadata structuring have also been developed, some specifically for museum objects. The Categories for the Description of Works of Art (CDWA) standard, a result of the Art Information Task Force (AITF) and funded by the J. Paul Getty Trust and the National Endowment for the Humanities, was formulated contemporaneously with the Dublin Core, but is specifically for works of art, architecture, and objects – not written material.[59] Unlike other metadata schemas, CDWA differentiates between "display fields", which are meant for human users to read and which do not draw from controlled vocabularies, and "indexing fields", which use controlled vocabularies to facilitate computer retrieval of information.[60] The Machine-Readable Cataloging (MARC) format is the inverse of CDWA, having been designed for written material and not objects. MARC is now most frequently used in the standardized MARC21 format, published in 1999, which merged the USMARC (American) and CAN/MARC (Canadian) formats.[61] MARC bibliographic records have many overlapping fields with other metadata standards, such as title, author, subject, and description, but also provide book-specific fields for Library of Congress Control Numbers, ISBNs, and edition numbers.[62]

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[58] Gnoli, 93-95.

[59] "Introduction," *Categories for the Description of Works of Art*, Getty Institute, https://www.getty.edu/research/publications/electronic_publications/cdwa/introduction.html.

[60] "Introduction," *Categories for the Description of Works of Art*.

[61] Network Development and MARC Standards Office, "MARC21: Harmonized USMARC and CAN/MARC," Library of Congress, October 22, 1998, https://www.loc.gov/marc/annmarc21.html.

[62] "Understanding MARC," Library of Congress, October 27, 2009, https://www.loc.gov/marc/umb/um01to06.html.

Cataloging Cultural Objects (CCO), published by the American Library Association in 2006, differs from the previously discussed systems in its treatment of objects and images of the object as separate items, requiring different types of description.[63] In practice, CCO is more of a guide to object description and cataloging rather than a distinct data structure or vocabulary; the creators of CCO describe the system as a "complement or partner to AACR," referring to the book-centric *Anglo-American Cataloguing Rules*.[64] One of the key principles of CCO is to "Use established metadata standards, such as the *VRA Core Categories* or *Categories for the Description of Works of Art*," which leads to a question: how do these various metadata schemas relate to each other?

Fortunately, the Getty Foundation developed the Metadata Standards Crosswalk in order to answer this question.[65] The Crosswalk provides equivalent metadata elements across 15 different metadata standards, including the aforementioned Dublin Core, CDWA, MARC, and CCO. Although museums do not have a single, standardized data framework, the Metadata Standards Crosswalk has provided a solution to the problem that motivated the MCN to found Computer Interchange of Museum Information (CIMI) group in 1988. Information is now able to be moved from one Collections Management System (CMS) to another, even if the systems use different metadata standards – a common issue when there are dozens of commercially available CMS options to choose from.

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[63] Murtha Baca, Particia Harpring, Elisa Lanzi, Linda McRae, and Ann Whiteside, *Cataloging Cultural Objects: A Guide to Describing Cultural Works and Their Images* (Chicago, IL: American Library Association, 2006). https://static1.squarespace.com/static/64839bcb007bd907faf40da2/t/648682731ae85c00320c7d13/1686536835929/CatalogingCulturalObjectsFullv2.pdf.

[64] Baca et al., 2.

[65] "Metadata Standards Crosswalk," J. Paul Getty Trust, https://www.getty.edu/research/publications/electronic_publications/intrometadata/crosswalks.html.

The capability to move data from one system to another is an important development, but no database is effective if it does not facilitate object discovery and knowledge sharing. While data became more standardized in the 1990s and early 2000s, public-facing museum websites rarely made this data fully available to the public. Even when catalogs were publicly-viewable, the data attached to objects were not designed to connect those objects to each other. In 2007, Fiona Cameron and Helena Robinson noted that,

> "Most museums now contextualize collections according to themes as essays, quantitative data, and digital images…this, while espousing the historical context of collections – the creation and use of an object and the provision of supporting material such as images and documents – **largely fails to include a sustained consideration of user needs, nor does it exploit the inherent plural meanings embedded in collections, although the technical capacity to achieve this exists.** Rather than being sources from databases, much of this information and multimedia content operates as a selection of items curated as an online exhibition via a Web interface."[66]

Even in 2024, many museum Internet presences still have this static form, which, despite the educational value of articles and exhibits, minimizes the effectiveness of collections as sites for connectivity. The Maine Memory Network, for example, organizes Maine Historical Society collections into thematic articles, including the Historic Clothing Collection and Early Maine Photography.[67] These static digital exhibits, or articles with embedded photographs, position the museum as an authoritative knowledge-keeper. Because objects are used as evidence in a singular narrative, viewers are not encouraged to consider the many potential meanings the object could have. Instead, they must rely on the curator or article-writer to make those decisions for them, removing the agency of viewers in their own exploration of a collection.

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[66] Cameron and Robinson, "Digital Knowledgescapes," 174. *Bolding mine.*
[67] Maine Memory Network, Maine Historical Society, https://www.mainememory.net/.

Standardized documentation, unfortunately, facilitates these singular narratives. The storage limitations of early punch cards made registrars boil down information to single, authoritative terms; the rich descriptions and multiple voices present on handwritten catalog cards had to be squished in order to be digitized. Lucie Carreau and Imogen Gunn beautifully summarize this issue in the context of the Museum of Archaeology and Anthropology at Cambridge University:

> "Comments in different hands at different times were entered into a single field, often muddled and difficult to disentangle. By the time MAA's database was publicly available online for the first time in 1998, the multiplicity of voices compiled over decades had been flattened into a monolithic and apparently up-to-date institutional voice."[68]

Ramesh Srinivasan, Robin Boast, Jonathan Furner, and Katherine M. Becvar, writing in 2008, take this point even further, arguing that standardization has obfuscated the meanings of objects:

> "All this standardization is in the name of access—the goal is interoperability between vast and diverse collections. Through standardized fields of information, controlled descriptions, and even terminological thesauri, **the core instrumental meanings of museum objects are being distilled in the name of universal access**."[69]

These authors also note that museum accreditation is based, in part, on museums' ability to perform standardization, with the American Museum Association (AMA) and UK Museum Accreditation Scheme requiring museums to adhere to the aforementioned metadata standards.[70]

Notably, museum accreditation in the United States, although it expects museums to standardize their data, does not ask museums to interrogate how that standardization upholds colonial or racist beliefs and terminology. The American Alliance of Museums (AAM)

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[68] Lucie Carreau and Imogen Gunn, "Moving On: Rethinking Practice and Transforming Data at the Museum of Archaeology and Anthropology, University of Cambridge," *Collections*, published online February 27, 2024, https://doi.org/10.1177/15501906241234943.

[69] Ramesh Srinivasan et al., "Digital Musuems and Diverse Cultural Knowledges: Moving Past the Traditional Catalog," *The Information Society,* 25 (2009), DOI: 10.1080/01972240903028714, 268. *Bolding mine.*

[70] Srinivasan et al., 268.

Accreditation, "the museum field's mark of distinction since 1971," makes no requirement for museums to update outdated terminology in their consideration of collections documentation policies. The "Collections" section of the *AAM Code of Ethics for Museums* dictates that the museum ensures that "collections in its custody are lawfully held, protected, secure, unencumbered, cared for and preserved," and that "the unique and special nature of human remains and funerary and sacred objects is recognized as the basis of all decisions concerning such collections," but never directly names issues of colonialism.[71] In 2022, the AAM published the *Excellence in DEAI Report*, which likewise did not address collections as sites of bias; the *Report* did recommend that the AAM consider the connection between DEAI and collections going forward, including these questions: "Who decides on what is to be collected or deaccessioned? What are the basic principles for incorporating community voices into collections policies? How can DEAI principles be applied to who is able to access and use collections?"[72] However, I have seen no consideration from the AAM on how collections documentation, specifically, can better address issues of race, power, and colonialism.

It is particularly frustrating that museums aren't encouraged to interrogate traditional documentation practices because indigenous-led archival projects are paving the way for improved documentation. The Mukurtu Collections Management System (CMS) project, developed at the Center for Digital Scholarship and Curation at Washington State University in collaboration with indigenous communities, embeds indigenous community practices into museum documentation.[73] Mukurtu's Cultural Protocols function allows collecting institutions

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[71] "AAM Code of Ethics for Museums," American Alliance of Museums, amended 2000, https://www.aam-us.org/programs/ethics-standards-and-professional-practices/code-of-ethics-for-museums/.
[72] Lonnie Bunch, Elizabeth Pierce, et al., *Excellence in DEAI* (American Alliance of Museums, 2022), https://www.aam-us.org/wp-content/uploads/2022/07/AAM-Excellence-in-DEAI-Report.pdf, 25.
[73] "Our Mission," Mukurtu, https://mukurtu.org/about/.

and indigenous groups to control access to the collection based on community values: users create accounts and, depending on community-determined criteria, are given viewing and/or editing privileges for different categories of objects. In the case of the Mukurtu Wumpurrarni-kari Archive, only elders were able to view and edit sacred materials, and objects with gender-specific ritual uses could only be accessed by users of the appropriate gender.[74] Mukurtu, unlike a more traditional CMS, allows for multiple records to be attached to a single object, making space for narratives and traditional knowledge contributions from multiple perspectives.[75] Although Mukurtu was designed specifically for indigenous communities, the principles underlying its structure would enrich the database of any object collection.

Linked Open Data

Linked Open Data (LOD) provides museums with a broadly applicable tool to expand object documentation between singular narratives, and connect objects to each other both within and across institutions. In 2013, a group of scholars from the Pratt Institute School of Library Information Science argued that,

> "LOD gives LAMs [Libraries, Archives, and Museums] the opportunity to set their collections free from silos and place them in multiple contexts by pairing them with different LOD sets from around the world. Essentially, LOD allows users to interrelate communication artifacts without needing the interpretation of an archivist, curator or librarian."[76]

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[74] Kimberly Christen, Alex Merrill, and Michael Wynne, "A Community of Relations: Mukurtu Hubs and Spokes," *D-Lib Magazine* 23, no. 5/6 (May/June 2017), https://doi.org/10.1045/may2017-christen.

[75] "Our Mission," Mukurtu, https://mukurtu.org/about/.

[76] Julia Marden et al., "Linked Open Data for Cultural Heritage: Evolution of an Information Technology," *SIGDOC '13: Proceedings of the 31st ACM International Conference on Design of Communication*, September 2013. https://doi.org/10.1145/2507065.2507103

There are many acronyms used while discussing LOD – for convenience, I have compiled some of them into a chart:

Table 2.1: Linked Open Data Acronyms

Acronym	Meaning
LOD	Linked Open Data
URI	Universal Resource Identifier
URL	Universal Resource Locator
RDF	Resource Description Framework
SPARQL	SPARQL Protocol and RDF Query Language
XML	Extensible Markup Language
HTTP	Hypertext Transfer Protocol
CMS	Collections Management System

Although these acronyms make LOD seem complicated, the basic idea is simple: make statements about how one thing interacts with another thing.[77] Although LOD is an extremely broad principle, in practice it usually takes the form of *RDF triples*, a data structure which consists of a subject, a predicate, and an object. The subject is one resource (such as an object, person, event, or vocabulary term), the object is another resource, and the predicate is some connection between these two resources.[78] For example, to document that a particular man's

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[77] Seth van Hooland and Ruben Verborgh, *Linked Data for Libraries, Archives and Museums: How to Clean, Link and Publish Your Metadata* (London, UK: Facet Publishing, 2014),
[78] Van Hooland and Verborgh, 44.

waistcoat in the Bates College Clothing Archive is made of silk, an RDF triple would consist of subject (the object, BCCA2023.11.07), predicate ("made of"), and object (silk).[79] The RDF triple can be thought of as a table with three columns:

Table 2.2: RDF Example

Subject *Resource #1*	**Predicate** *Connector*	**Object** *Resource #2*
BCCA2023.11.07	Is made of	Silk

Omeka is an open-source Collections Management System (CMS) that facilitates linked object records, which is why I have chosen it to be the CMS for the Bates College Clothing Archive. Within a single Omeka database, items can refer to one another, and can act as metadata entries within an object record. For example, I, Grace Acton, cataloged the aforementioned man's waistcoat. In the Omeka object record, the metadata element "Cataloged By" links to a record of me, which in turn is linked to many other objects that I cataloged. Conceptually, this is similar to a relational tables model, as illustrated below:

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[79] "Waistcoats (garments)," Bates College Clothing Archive, February 26, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/134#lg=1&slide=0.
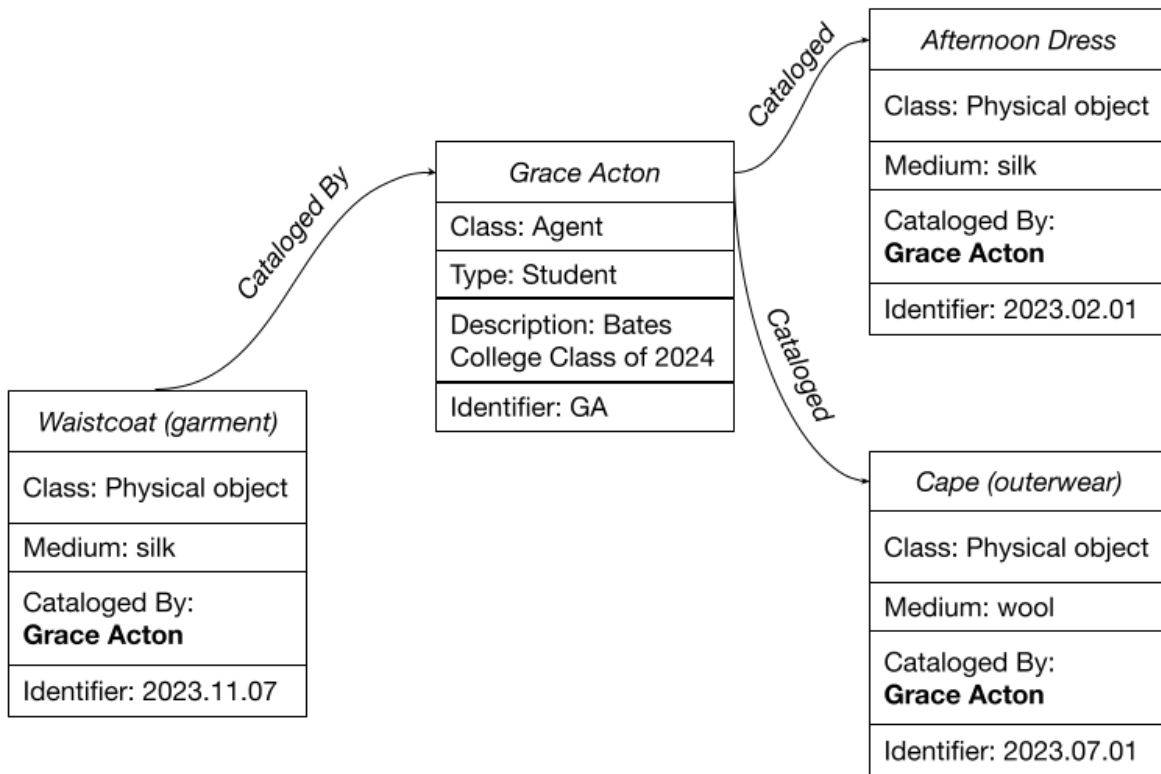
Figure 2.1: Connecting objects by cataloger

However, LOD in Omeka also allows connections between resources in different

databases. In order to link objects to resources from outside of a single database, we follow four

basic principles designed by Tim Berners-Lee in 2006.[80]

Berners-Lee Linked Data Principles

1. Use URIs as names for things.
2. Use HTTP URIs so that people can look up those names.
3. When someone looks up a URI, provide useful information, using standards (RDF, SPARQL).
4. Include links to other URIs so that they can discover more things.

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[80] Van Hooland and Verborgh, 45-46.

The important distinction between Berners-Lee's principles and the more generalized concept of RDF triples is the use of HTTP URIs, specifically HTTP UR<u>L</u>s. A URI can be any statement that identifies a unique object anywhere in the universe. "BCCA2023.11.07" is a URI: there is only one object in the world that is Bates College Clothing Archive Object #2023.11.07.[81] However, if one were to type BCCA2023.11.07 into an Internet browser, it would not know how to interpret that information. HTTP URLs are designed for Internet browsers to be able to locate that resource; hence, they are <u>U</u>niform <u>R</u>esource **Locators**, rather than simply identifiers.[82]

Many of the aforementioned controlled vocabularies have made themselves available as Open Data; the Getty has made all of their controlled vocabularies, including the AAT, ULAN, and TGN, available through a SPARQL endpoint.[83] Each entry in the Getty vocabularies has a unique identifier, in the form of a URL that directs to a page in the SPARQL endpoint. To take our previous example of the man's waistcoat further, we can link our object (BCCA2023.11.07) to the Getty Art and Architecture Thesaurus entry for "silk (textile)", which has the URL vocab.getty.edu/aat/300243428, with the predicate "dcterms::Medium" (an element from the Dublin Core metadata schema).

What this looks like in practice in Omeka is a hypertext link to the Getty AAT SPARQL endpoint page for "silk (textile)". Theoretically, if Getty's SPARQL endpoint actually showed every RDF triple that used each of its AAT terms, our BCCA2023.11.07 entry would be linked from the SPARQL endpoint, along with every other object that used this AAT term in its documentation. However, this isn't available at this time, probably due to the sheer number of

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[81] "Waistcoats (garments)," Bates College Clothing Archive, February 26, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/134#lg=1&slide=0.

[82] Van Hooland and Verborgh, 46.

[83] *Getty Vocabularies: LOD*, vocab.getty.edu.

objects that would reference any given term in the AAT. However, linking to the Getty AAT

entry for each medium, and using Getty AAT URIs as names for objects, gives users

opportunities to learn more about objects by referencing these thesaurus entries. Additionally,

restricting name and medium information to AAT values also functions like a more traditional

controlled vocabulary; this facilitates searching within the Omeka database, as all objects in the

same category or with the same medium have identical values for those elements. Unlike earlier

collections management systems, which only allowed a single field for each metadata element,

Omeka allows multiple values to be assigned to each metadata element. Object data is enriched

by multiple descriptors, but these values are still standardized to make indexing and searching

possible.

Returning to our example of BCCA2023.11.07, we can model the structure of its Omeka
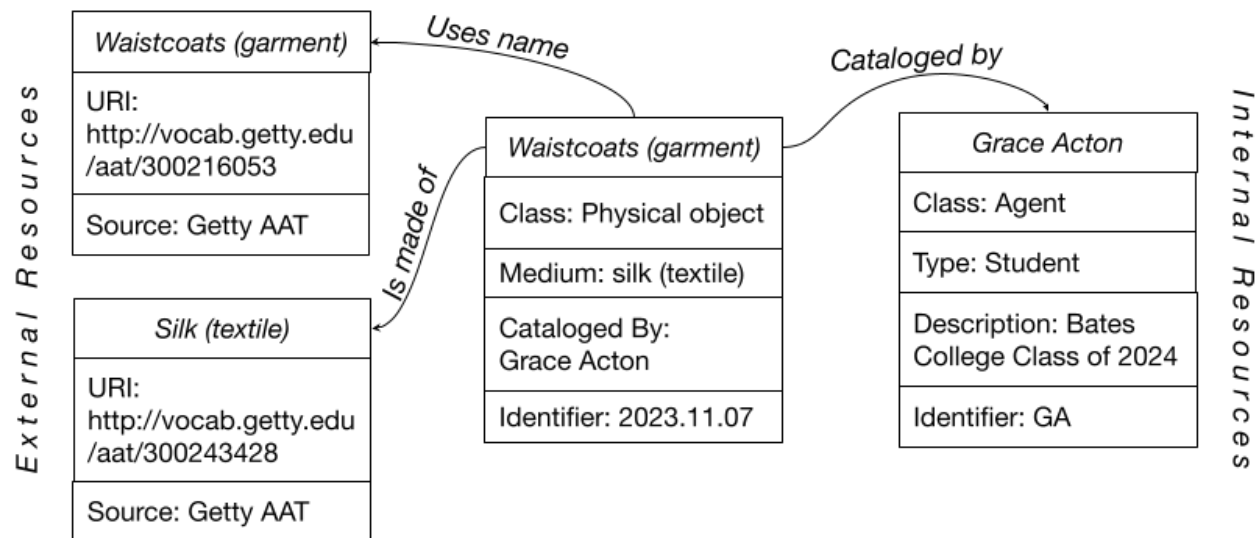
entry and the pages it references:

Figure 2.2: Object metadata links (simplified)

Each of these resources, in turn, reference other resources, creating a rich web of information that connects objects, agents, and descriptors to each other. Far more links are possible between objects, especially if provenance information is available, as I will discuss in Chapter 4. With the understanding of how museum documentation has traditionally restricted objects and perpetuated inequalities, Linked Open Data and Collections Management Systems that allow for linked object records provide a new, more inclusive way forward for object collections, including the Bates College Clothing Archive.

3.   Developing the Bates College Clothing Archive

Figure 3.1: Boxes of antique clothing in costume storage, September 2023

Where do you begin with a completely uncataloged collection? When facing this wall full

of mystery boxes, it was tempting to pick a selection of boxes to use for this project, create a

process for documenting that random subset, and write a guide for the future processing of the

remaining items. However, that would not be proper stewardship of the collection; a

documentation practice must be applicable to the *entire* collection. It is impossible to make

decisions about a collection without knowing what that collection contains – all of the data

structures and documentation techniques I discussed in the previous chapter mean nothing if

there is no data on the collection to begin with. Before making any decisions, I needed a full

accounting of what the collection contained; then, I could responsibly deaccession, rehouse, and document objects, and record my decisions for future stewards of the collection.

Where to Begin?

In my research, I found only one published work on wrangling an unmanaged collection: the aptly-titled *Managing Previously Unmanaged Collections: A Practical Guide for Museums* by Angela Kipp. Early in this guide, Kipp warns against the temptation to begin with a seemingly manageable portion of the collection, writing, "As long as you haven't got an overview of all the items, you run into the danger of accessioning something that you have in better condition and/or with a whole story around it somewhere else."[1] At the beginning of this project, there were several, extremely basic questions that needed to be answered, and far more urgent needs than object-level documentation: How many boxes are there? How many objects? How are the objects distributed and where are they located? Are these objects safe from damage in their current storage, or do they need to be relocated?

Kipp advises collections managers to approach a mystery collection through sorting.[2] Kipp's recommendation is that the collection be sorted according to size if there are objects that would require handling aids or machinery to move, by material if objects need different housing conditions, and, most straightforwardly, by subject.[3] Logistically, this sorting process occurs through packing and unpacking objects in boxes based on constantly shifting categories; Kipp describes this as working in "waves".[4]

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[1] Angela Kipp, *Managing Previously Unmanaged Collections: A Practical Guide for Museums* (Lanham, MD: Rowman & Littlefield, 2016), 56.
[2] *I must note that this book is the only published guide to dealing with an uncataloged, unmanaged collection that I was able to find; it has pros and cons, which I will discuss in detail in order to guide future efforts.*
[3] Kipp, 62.
[4] Kipp, 65-66.

Although this approach may be favorable for certain types of unintentionally acquired collections, such as the contents of extant historic houses, there are several issues that make this an ineffective, if not potentially disastrous, strategy for the Bates College Clothing Archive collection. A 2018 review of Kipp's book by Christina Burlow makes note of the fact that "the methods outlined in this book do not follow strict best practices of museum studies," particularly when it comes to object handling and storage.[5] Additionally, because Kipp recommends viewing the unmanaged collection as objects with the capability of being added to an existing collection, rather than as a collection in itself, she has no process for documenting which objects are *removed* from the collection. This is a reality of the work of small museums and community organizations: it is not always possible to follow best practices, and it is often better to do something, imperfectly, than to let objects languish. However, following best practices for object handling and documentation is vital for historic textiles, which are easily damaged by movement and improper storage.

Kipp's recommendation to sort and re-box in waves is particularly problematic. Repeated handling is both risky and time-consuming for textiles, which must be carefully folded and unfolded to avoid damage. Beyond the issues of object handling, this method does not adequately address the data collection needs of an uncataloged collection, and introduces risk to the process. The "waves" approach is essentially an act of constantly restructuring data, reminiscent of library organization before Dewey Decimal Classification.[6] The entire purpose of sorting, or, as I propose, *surveying* the collection, is to get an overview *before* deciding on a data

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[5] Christina Burlow, "Managing Previously Unmanaged Collections: A Practical Guide for Museums," Review of Managing Previously Unmanaged Collections: A Practical Guide for Museums by Angela Kipp, *History News* 73, no. 3 (Summer 2018). https://www.jstor.org/stable/26974989

[6] Mohinder Partap Satija, *The Theory and Practice of the Dewey Decimal Classification System* (San Diego, CA: Elsevier Science & Technology, 2013), 2. https://ebookcentral.proquest.com/lib/bates/detail.action?docID=1575007

structure. Unpacking and repacking objects also makes them harder to locate, requires additional

space and storage materials, and, as Kipp herself warns, creates the "danger of destroying

correlations between objects."[7] This process is simply not applicable to the Bates College

Clothing Archive; in the absence of other guides to unmanaged collections, I had to develop my

own approach to surveying the collection.

Guiding the Survey

To guide the initial survey, and to keep data collection consistent for all objects, I

designed a tracking sheet. Each box was assigned an identifying number, which provided a

solution to the issue of keeping track of object locations; this number was recorded on the

tracking sheet for the box, as well as being written clearly on the side of the box. Every object

was recorded on its corresponding box's tracking sheet; objects were assigned their own number

within the box, starting with 1 and continuing until all objects in the box were identified.

Following best practices from *Museum Registration Methods*, the box and object numbers

informed the accession numbering scheme for the collection, with box numbers taking the place

of the traditional "accession within the year" component of identification numbers.[8] The final

format of accession numbers is as follows: *Year.BoxNumber.ObjectNumber.*[9]

For each object, I recorded a preliminary condition assessment, assigning a rating of

Excellent, Good, Fair, or Poor; objects with severe damage were immediately removed from

their box after being recorded on the tracking sheet, and placed on a designated "Deaccession

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[7] Kipp, 66.

[8] Dorothy H. Dudley et al., *Museum Registration Methods,* 3rd ed. (Washington, DC: American Association of Museums, 1979), 26-27.

[9] *For future accessions, the middle number can revert to the traditional "accession within the year" identifier. I used this approach for the items which were documented during 2024, as there were multiple, small boxes donated by a single family, which needed to be considered as one accession in order to maintain this connection.*

Shelf". Final decisions on deaccessioning were made in collaboration with Prof. McDowell, as I will discuss shortly. I also assigned each object a garment type, and wrote a brief description for future identification purposes. Lastly, I determined approximate dates for each garment. Dating is an imprecise process, and, due to the number of objects being processed I could not spend long on each garment; thus, all dates are approximations based mostly on silhouette, proportions, and fabric type.[10]

All of this information was recorded by hand, in pencil, on physical, paper tracking sheets; although this added transcription work to the process, paper sheets could immediately act as manifests in boxes, and recording information by hand reduced the risk of accidentally deleting information about objects. Even objects which were immediately deaccessioned were recorded in the survey, and their records will be included in the collections database for internal use. Below is a copy of the tracking sheet format:

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[10] *Some objects have more precise dates thanks to our consultation with Jacqueline Field, a textile historian who has worked with Maine Historical Society.*

BOX NUMBER			DATE INVENTORIED	
INVENTORIED BY			CATEGORIES REPRESENTED	

OBJECT #	CONDITION (E/G/F/P)	DESCRIPTION	APPROXIMATE DATE

Figure 3.2: Tracking Sheet Template

This survey documented objects in a way that eliminated the need to attach labels to every single object. Identification labels are usually considered a necessity in museum registration, as it is crucial that all objects are able to be identified independently from their location.[11] However, object labeling for textiles is a time consuming, labor-intensive task: the current best practice is to write the object's accession number on a piece of cotton tape or Tyvek, then sew the tag to an inconspicuous part of the interior of the garment using cotton thread and a very thin sharp or ballpoint needle.[12] It was not possible, given the time and labor available to this project, to label every garment in the collection; thus, our initial documentation method needed space for robust object descriptions.

Object Photography Part 1: Basic Documentation

After the initial survey, I added photographic documentation to the process, beginning with overhead photos. Overhead photographs, although not as sophisticated as photographs taken of the objects mounted on mannequins, have largely eliminated the need for long object descriptions, as objects can be matched with their accession number using the photographs. However, due to time constraints, it was not possible to photograph every single object; objects whose physical descriptions could possibly match another object were prioritized for photography. For example, "sheer black skirt with pleats" could be describing either BCCA2023.03.06 or BCCA2023.07.04, so both of these objects were photographed, but "bright pink taffeta bodice with tan chiffon overlay" could only be BCCA2023.12.10, and thus did not

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[11] Dudley et al., *Museum Registration Methods*, 46.
[12] Anne Ennes, Maeve O'Shea, and Kyle Bryner, "Conserve O Gram 16/6: Labeling Textiles in Museum Collections," *Conserve O Grams* (National Park Service, 2023). https://www.nps.gov/articles/000/conserve-o-gram-16-6-labeling-textiles.htm
Gina Nicole Delfino, "Recommendations for Applying Accession Numbers to Museum Objects: Part 1," *Minnesota History Interpreter* (St. Paul, MN: Minnesota Historical Society, May 2000), 3. https://www.mnhs.org/sites/default/files/lhs/techtalk/techtalkmay2000.pdf

require a photograph.[13] I was able to take overhead photos of roughly half of the collection, including some objects which were ultimately deaccessioned. These overhead photos complement object descriptions; in some cases, it is far easier to identify an object from its photo, rather than from the short description.[14]

Figure 3.3: BCCA2023.07.04

Figure 3.4: BCCA2023.03.06

Deaccessioning

The survey process also acted as a first round of deaccessioning, and documented which objects were removed from the collection. In contrast to Kipp's method, in which the unmanaged collection is viewed as objects with the potential to be accessioned into a collection, I chose to regard the contents of the BCCA as already accessioned, and make decisions, in collaboration

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[13] "Pleated skirts," Bates College Clothing Archive, February 21, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/51#lg=1&slide=0.

"Pleated skirts," Bates College Clothing Archive, February 23, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/101#lg=1&slide=0.

"Bodices," Bates College Clothing Archive, February 27, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/148.

with Prof. McDowell, about what to remove.[15] Research-focused collections, such as ours, have different priorities than collections destined for exhibition. Whereas a museum or historical society often does not save duplicate objects, having multiple similar objects in a dress collection creates opportunities for in-depth study of their differences in patterning, construction, and aesthetics.[16] Objects with major condition issues needed to be addressed immediately, and the opportunity to do so, while documenting what the object was, was a necessity in the survey process. Other objects would also need to go in order to refine the collection, as encouraged by two principles in the "Manifesto for Active History Museum Collections": collections must either advance the mission or they must go, and some objects support the mission better than other – not based on monetary value or rarity, but based on the stories they tell and the ideas they illuminate.[17] Objects that were so heavily altered as to be unrecognizable are not beneficial research tools; however, objects with minor modifications, such as a zipper at center back or a shortened hem, which are otherwise in their original form, are valid study pieces. Sometimes, alterations themselves provide interesting avenues for research, such as in the work of Janet Arnold, discussed in Chapter 1.

Deaccessioning can easily become a complicated, emotional process for a collection's stewards. Social work scholar Gail Steketee posits that museums and other collecting institutions sometimes reflect the symptoms of Hoarding Disorder, with a tendency toward excessive acquisitions and difficulty in parting with items; according to Steketee, "[deaccessioning] guidelines retain a strong focus on the museum's mission in determining when to acquire new items and deaccessioning existing ones, but unfortunately, the guidelines also appear to

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[15] Kipp, 56.
[16] Kipp, 58.
[17] Trevor Jones and Rainey Tisdale, "A Manifesto for Active History Museum Collections," in *Active Collections*, ed. Elizabeth Wood, Rainey Tisdale, and Trevor Jones (New York, NY: Routledge, 2018), 7-8.

encourage avoidance and inactivity in deaccessioning."[18] Given that the deaccessioning process requires great care and deliberation, it is vital that any guidelines created in the interest of facilitating deaccessioning actually be made clear and unambiguous.

With the need for momentum in deaccessioning in mind, the first step in making decisions about what objects to remove from the collection was to assess the condition of each garment. There is no educational incentive to save garments that are so decomposed or fragile that they are unable to be handled in pursuit of research. Additionally, some garments in this collection have been altered for theatrical wear, drastically altering their original shapes, aesthetics, and states of preservation. I have compiled these considerations, along with other sources of damage to garments, into a rubric, which separates condition into three distinct categories: discoloration, seam and design integrity, and fabric integrity.

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[18] Gail Steketee, "Hoarding and Museum Collections," in *Active Collections*, ed. Elizabeth Wood, Rainey Tisdale, and Trevor Jones (New York, NY: Routledge, 2018), 7-8.

Table 3.1: Condition Reporting Rubric

	Excellent (5)	**Good** (4/3)	**Fair** (2)	**Poor** (1/0)
Discoloration	Garment shows little sign of wear. Discoloration is limited to gentle fading of overall garment or slight armpit discoloration. No visible staining on outer fabric or lining.	Garment shows typical signs of wear, including overall fading, armpit discoloration, and small stains on outer fabric or lining.	Garment shows signs of significant wear. Uneven fading, significant armpit discoloration, and small stains throughout. Stains do not cover large portions of the garment, even if they appear throughout.	Garment shows signs of significant wear or damage. Discoloration has damaged the overall appearance of the garment, including large stains, intentional alteration of fabric color (by dyeing or painting), and burn marks.
Seam + Design Integrity	All seams are intact and do not show straining or thread rot. Any later modifications are easily removed to bring the garment back to its original state without damage to the fabric or seams.	All seams are intact, but show some straining. Later modifications are unable to be reversed, but can be hidden.	Some seams are damaged or show significant straining to the fabric. Later modifications are unable to be reversed and have permanently altered the appearance of the garment. Modern closures have been added.	Seams are significantly damaged. Later modifications have drastically changed the appearance of the garment. Modern closures have been added. Portions of the garment appear to be missing.
Fabric Integrity	No rips, tears, or holes. Fabric does not shed when handled.	Rips, tears, and/or holes are small and not seen when garment is worn. Fabric does not shed when handled. No shattered silk.	Some rips/tears/holes are visible, even when the garment is worn. Fabric sheds when handled. Evidence of silk shattering, either in lining or outer fabric.	Significant damage to fabric. Shattered silk on outer fabric. Fabric shows signs of pests or mold infestation. Garment poses a risk to other garments.

After considering which grade the object will receive in each condition category, all points are added, and the overall garment is assessed according to this scale:

Table 3.2: Condition Reporting Grade Scale

Grade	Points
Excellent	14+
Good	9 - 13
Fair	4 - 8
Poor *(immediately consider for deaccessioning)*	0 - 3

Not every object requires a detailed condition assessment; for the majority of objects, a few small tears or minor discoloration garners "Good", seam damage bumps them down to "Fair", and major damage results in "Poor". However, creating a condition assessment rubric was necessary for objects with more complex condition issues, and should be used moving forward to assess new acquisitions, before making final decisions on whether they are appropriate additions to the collection.

As a case study and example of how and when to use this rubric, I conducted an in-depth examination of BCCA2023.11.07, a man's vest or waistcoat in purple and silver silk brocade with a cotton or linen lining and polished cotton back.[19] The date of this piece is unknown, but we have estimated that it was created around 1840 due to the overall proportions and evidence of padding in the upper torso.[20] This object shows uneven discoloration of the exterior fabric. Sections of the vest front that are covered by lapels have remained relatively free of staining and fading, but the majority of the garment shows significant discoloration. The preserved section of the textile contrasts the large discolored sections, and allows us to see

Figure 3.6: Exterior fabric discoloration

just how damaged the silk is on the vest front. There is minimal staining on the interior of the garment, limited to a few small, tan to brown stains on the lining near the front opening. Due to the significant damage of the exterior fabric, this object is placed in the Poor category for discoloration, but, because the preserved sections allow us to study the original textile, it receives a score of 1 point rather than zero points.

Figure 3.5: Interior staining

The vest shows no evidence of later additions, and has seen few modifications or alterations. The waistcoat has a back cinch with no buckle; it is possible that the buckle was removed for reuse on another garment, or, alternatively, the waistcoat was meant to tie in the back.

Figure 3.7: Back cinch with no buckle

Figure 3.8: Repaired center back seam

There is no evidence of straining on the cinch piece, but the center back seam has been repaired using a hand-sewn backstitch. The stitches are large, but even, and done in a dark brown thread to match the exterior fabric of the back of the vest. The lining and exterior fabric are both fraying at this center back seam, likely as a result of the seam being under strain and then tearing. There is no sign of alterations to

the cut or fit of the garment. Because of the damage to the center back seam, this object is placed in the Fair category for Seam and Design Integrity, receiving 2 points.

The waistcoat's outer fabric shows significant signs of wear. Notably, this garment does not have any silk shattering, providing further evidence that the fabric was produced in the first half of the nineteenth century, before the introduction of metal salts that cause silk shattering.[21] Instead, the fabric is deteriorated in isolated locations on the garment, most notably around the pockets; this deterioration is not likely to worsen over time

Figure 3.9: Fabric deterioration around buttons and pockets

as the garment ages, as it is from the original wearing of the garment and the frequent use of its pockets. There is additional wear around the edges of the front pieces, and at the neck. These are all consistent with normal, if frequent, use of a garment. There is no evidence of abnormal wear on the lining or back of the garment, other than the fraying at the center back seam. Because the fabric deterioration is visible even when the garment is worn, this waistcoat must be placed in the category of Fair, and receives 2 points. In total, the waistcoat has received 5 points, putting it in the overall category of Fair condition. Although this piece has many condition issues, it is a strong component of the BCCA collection. It expands the temporal coverage of the collection,

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[21] Julie Benner, "Conserving Shattered Silk in an Early 20th Century Souvenir Ribbon Quilt," Denver Art Museum, September 25, 2014. https://www.denverartmuseum.org/en/blog/conserving-shattered-silk-early-20th-century-souvenir-ribbon-quilt.
"The Silk Shatter Shaker Bonnet," The Conservation Center, July 28, 2016.
https://www.theconservationcenter.com/articles/2016/7/28/the-silk-shatter-shaker-bonnet

likely having been made before 1850. Clothing collections, including the BCCA, are strongly

gendered: women's clothing is collected far more frequently than menswear. This is one of a

very small number of menswear pieces in the collection, making it even more important to

preserve in the interest of inclusivity in the collection.

Analyzing Object Data

After the initial survey was complete, I input the basic information about all of the

garments, including objects that were immediately deaccessioned, into a spreadsheet. The survey

revealed that, including deaccessioned objects, the collection contained 187 garments, ranging in

date from 1840 to 1940. When objects that were deaccessioned, returned to owners, or returned

to theatrical costume storage are removed, the final collection contains 156 items. In order to

determine themes and connections across objects, I conducted an analysis of the data using R.[22]

First, I created a histogram of the objects' approximate dates of creation to determine the

temporal distribution of the collection.

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[22] *This analysis does not include objects that have been deaccessioned, returned to faculty, or returned to theatrical costume stock.*
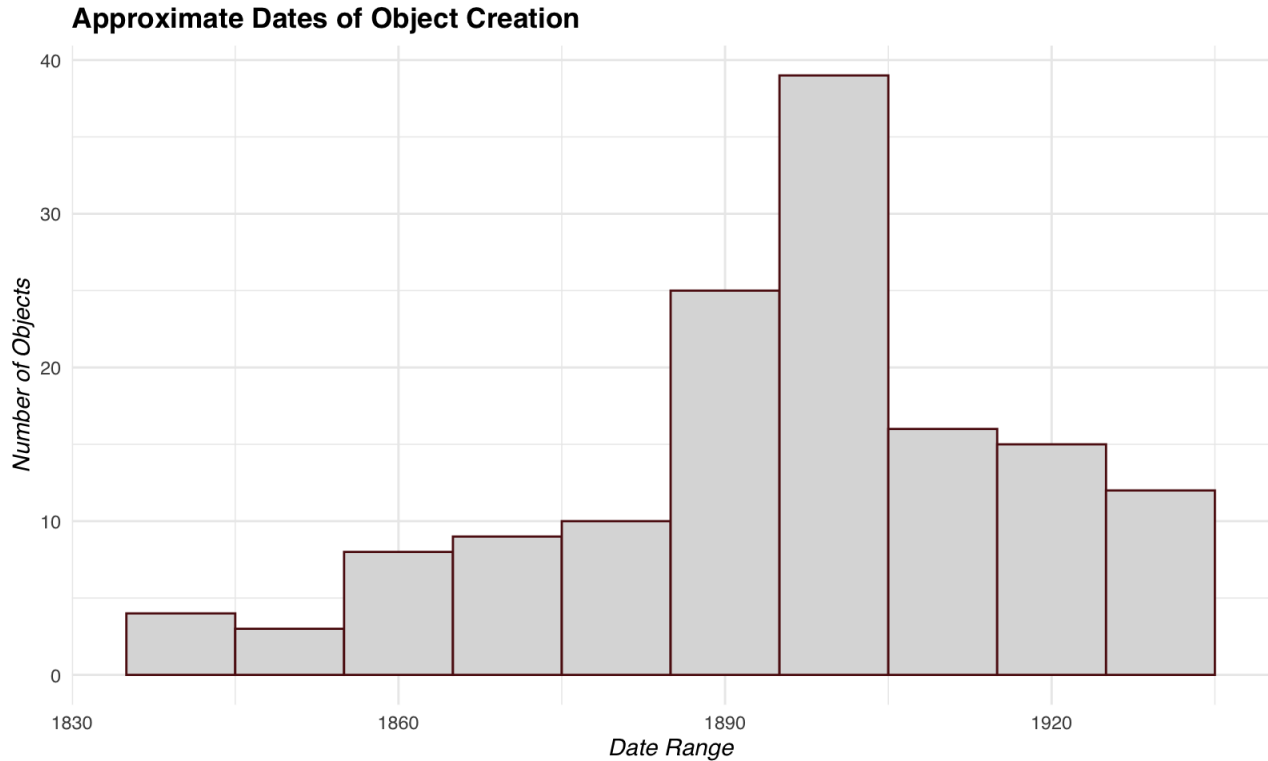
Figure 3.10: Histogram of Object Ages

The histogram forms a moderately left-skewed bell curve centered around 1900. The earliest

object, a man's waistcoat, dates to 1840, estimated based on the presence of padding in the upper

chest.[23] The latest objects are a series of 1930s dresses, although this could be expanded with

additional accessions from the Theater department costume collection.[24] Although the skew is to

the left, there are no outliers, as multiple garments are from the 1840-1850 date range.

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[23] Jacqueline Field (textile historian), in conversation with Grace Acton and Christine McDowell, February 9, 2024.

[24] *Two garments (a matching bodice and skirt) were determined by me and Prof. McDowell to be a modern reproduction of a c. 1880 gown, and were assigned a production date of 2000, making them, technically, the latest garments in the collection. However, this ensemble has been returned to theatrical costume storage, and was not considered in this analysis. In my Recommendations section, I will discuss the potential to accession objects currently considered as theatrical costumes, but which are highly unlikely to be worn on stage due to age.*
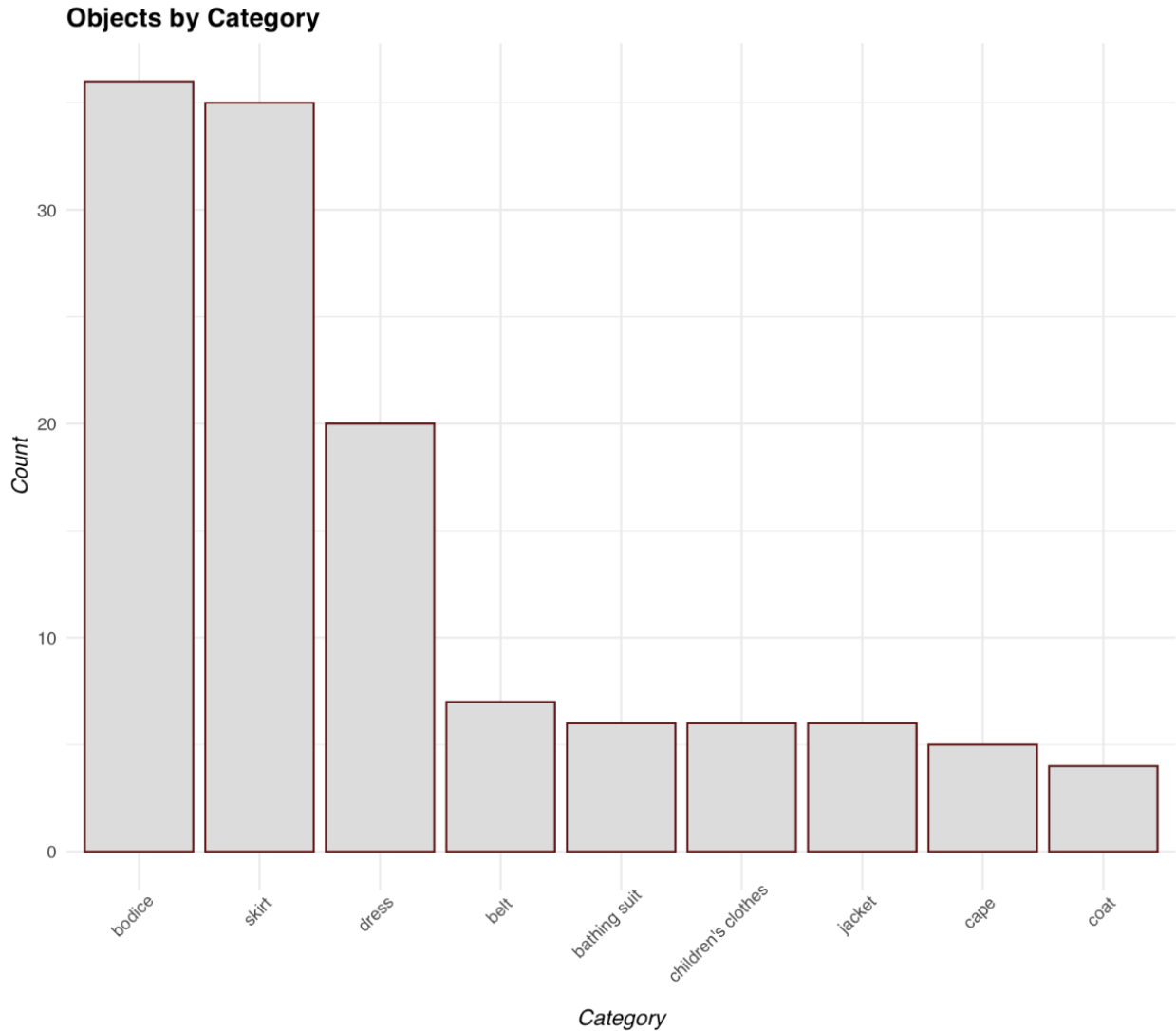
Objects by Category

Figure 3.11: Object counts by category

Examining object categories, we see considerable diversity in the collection. The most common object types are bodices (36 objects), skirts (35 objects), and dresses (20 objects). Outerwear, which fits into multiple subcategories, including coats, capes, and jackets, has 18 objects in total. The bar graph above is limited to the nine most common categories for the purpose of clarity, but in total, there are over 30 different object types in the collection.

Although there are relatively few objects dated before 1870, this time period

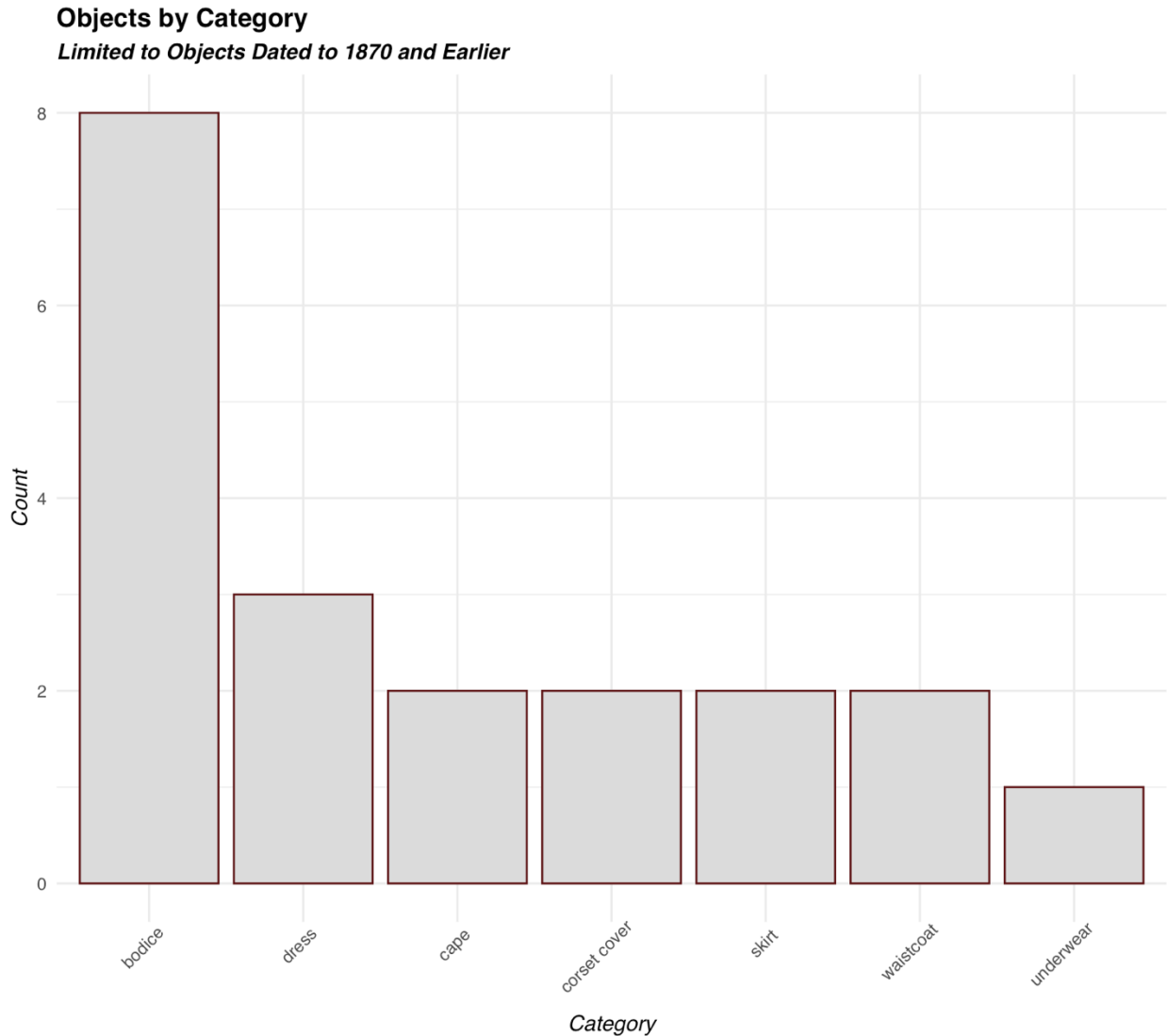encompasses a similarly diverse range of object types, as seen in the bar graph below.

Objects by Category
Limited to Objects Dated to 1870 and Earlier

Figure 3.12: Object counts by category, 1870 and earlier

Notably, this time period features two of three menswear objects in the collection, both

waistcoats from circa 1840-1850.[25] Additionally, we have multiple types of undergarments from

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[25] *The third menswear item is a Chinese jacket, dated by Jacqueline Field to the early twentieth century.*
"Jackets (short coats)," Bates College Clothing Archive, February 21, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/39#lg=1&slide=1.

the time period, including corset covers and a highly unusual pair of bloomers.[26] Because of the

wide variety of object types from this relatively narrow time period, it is well-suited to a study or

exhibit, similar to *Needle and Thread* at Old Sturbridge Village; I will discuss this further in my

Recommendations section.

To glean a fuller picture of the archive's strengths and weaknesses, I created a heatmap

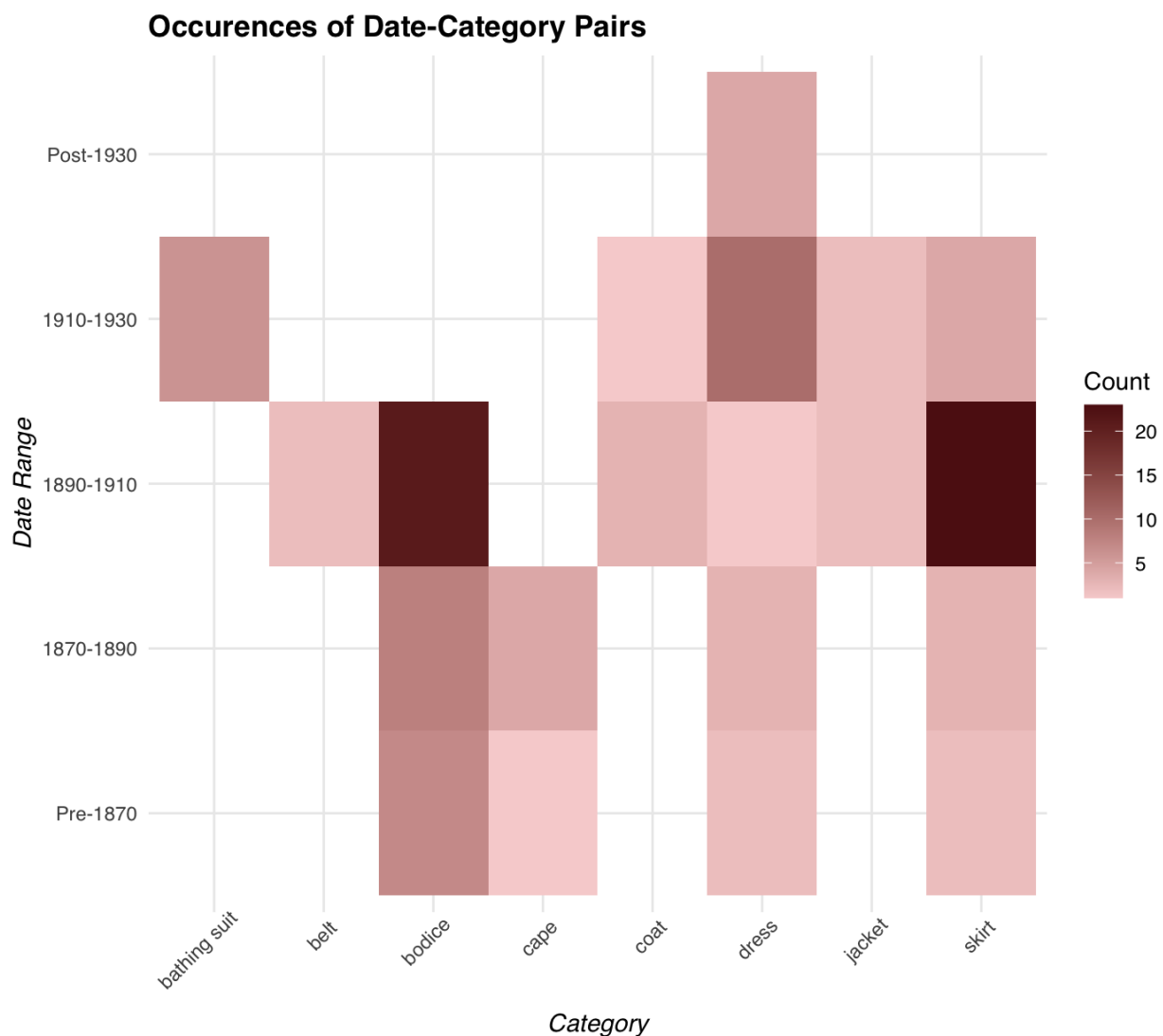visualization of date-category pairs.

Occurences of Date-Category Pairs

Figure 3.13: Heatmap of date-category pairs

[26] "Bloomers," Bates College Clothing Archive, March 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/310#lg=1&slide=0.

As the heatmap indicates, skirts dating from 1890 to 1910 are the single most common date-category pairing, followed by bodices from the same time period. The heatmap also reveals that the content of the BCCA reflects overall trends in women's clothing; after the turn of the twentieth century, separate bodices and skirts were replaced by single garments – dresses. The three major categories of outerwear – capes, coats, and jackets – also show an interesting trend, but may be reflecting the difficulty of dating certain pieces. Capes have maintained the same general shape for centuries, forcing us to rely on minor construction differences and alternative indicators of age, such as trims and fabric choices, in order to date garments. More research is needed to better determine the dates of the outerwear in the collection. However, with the current estimations of dates, we see that capes generally went out of fashion just before the turn of the century; as skirt shapes became less voluminous in the last decade of the nineteenth century, longer and more fitted outerwear, namely coats, became a more viable option.

Object Moves

Best practice for textile storage, when hanging storage is not feasible due to space or object condition, is to house garments in acid-free storage boxes, and to separate objects using acid-free tissue paper.[27] Thanks to the Ellen Seeling Fund and the Student Research Fund, I had a roughly $800 budget to spend on appropriate storage supplies: large textile-size archival boxes, smaller archival bankers boxes for accessories, and acid-free tissue to separate objects and pad out folds. The entire collection, distributed across 23 boxes, fits into existing shelving space in theatrical costume storage.

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[27] "Choosing the Best Storage Materials," Museum Textile Services, http://www.museumtextiles.com/uploads/7/8/9/0/7890082/choosing_storage_materials.pdf.

An archival approach to collections management dictates that maintaining connections between objects is of the utmost importance; archivists organize records in a way that reflects "an organic unity in which the whole is greater than the sum of its parts."[28] Because nineteenth century women's clothing ensembles are often comprised of multiple coordinated items, and objects can be grouped according to many different themes, this archival sentiment of "unity" is highly applicable to managing a historic dress collection. While rehousing the Bates College Clothing Archive, I prioritized maintaining – and rediscovering – connections between objects. Sometimes, it was sensible to continue storing objects together if they had been in the same box previously; in some cases, which I will discuss shortly, the level of cohesion among the objects in a given box provide evidence that, at some point in the past, someone else made conscious choices about how to organize the collection. However, it did not always make sense to keep objects together just because they had been stored together previously. Garments are multivalent objects: "objects that lend themselves to multiple points of view."[29] As such, they have multiple traits that can indicate different sorts of connections among objects, which in turn inform organizational strategies that are grounded in connectivity. For example, a different collections manager may value temporal connections, and choose to organize boxes in such a way that objects from the same time period are housed together. Another perspective may group objects based on material, and plan storage based on fiber type (wool with wool, cotton with cotton, etc.). In the case of this collection, it made sense to group objects by garment type as much as possible: bodices are stored with bodices, skirts with skirts. In the cases of complete ensembles, all pieces are stored together. The initial survey of the collection discovered that some bodice-

[28] Fredric M. Miller, *Arranging and Describing Archives and Manuscripts* (Chicago, IL: Society of American Archivists, 1990), https://hdl.handle.net/2027/mdp.39015071447638.

[29] Benjamin Filene, "Things in Flux: Collecting in the Constructivist Museum," in *Active Collections*, ed. Elizabeth Wood, Rainey Tisdale, and Trevor Jones (New York, NY: Routledge, 2018), 135.

skirt ensembles had been separated, and stored in separate boxes; if such a survey had not been

conducted, and objects had simply been moved from box to box without a zoomed-out

perspective, these objects would never have been reunited. There was also a collection of objects

owned and donated by a single family, which needed to be stored together in order to maintain

the connections between objects; I will discuss this collection further in Chapter 4.

Rehousing Organizational Priorities

In order of prioritization, and with examples.

1. Objects created together.
Bodice-skirt ensembles, such as BCCA2023.14.02 and BCCA2023.14.03.

2. Objects with shared provenance.
Garments worn by the same person, such as BCCA2024.03.05 and BCCA2024.03.11, both worn by Hope Chandler Rowe.

3. Objects of the same category.
Bodices, such as the contents of Box 1A.1.

After I filled a box, I identified it by its shelf and box number, and created a label that listed all

contents of the box. If I had a photograph of an object, I used it on the box label; if not, a short

object description is used for identification. For objects with clear connections to other objects, I

included this information on the label, as seen in the example label below:

SHELF: **1D**		BOX: **1**		INVENTORY DATE:	

Greenish-tan skirt with vertical ruffle trim	Greenish-tan bodice with red velet trim		Pink skirt with abstract print and ruffles	Pink bodice with abstract print
Set with 2023.12.04	Set with 2023.06.07	Set with 2023.14.04, 2023.14.07	Set with 2023.14.03	Set with 2023.14.02
2023.06.07	2023.12.04	2023.14.01	2023.14.02	2023.14.03

		Teal skirt with navy trim and cream/brown plaid panels	Teal bodice with navy trim and cream/brown plaid panels	
Set with 2023.14.01, 2023.14.07	Set with 2023.14.01, 2023.14.04	Set with 2023.14.12	Set with 2023.14.11	Set with 2023.14.15
2023.14.04	2023.14.07	2023.14.11	2023.14.12	2023.14.14

Figure 3.14: Label for box 1D.1

The following visualization shows the movement of objects from their original boxes to their final destinations; paths which only had a single instance have been removed to make the visualization more legible. The thickness and color of each arrow indicates the relative frequency of this movement path; the thicker and darker the arrow, the more objects moved along that path. The color of the new boxes indicate the relative number of garments in each box.[30] There are three destinations for objects that are no longer included in the collection, which are indicated by gray rectangles; "COSTUMES" indicates modern reproductions that were returned to theatrical costume stock, "CHRIS" indicates objects that belong to Professor Christine McDowell, which had accidentally been stored with the college-owned objects, and "DEACC" indicates objects that have been deaccessioned.[31]

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[30] *All boxes with a ".3" suffix are small boxes, while boxes with ".1" and ".2" suffixes are large textile boxes.*
[31] *We're still in the process of finding a home for deaccessioned objects. It is our goal to find an artist who is interested in working with antique textiles. Additionally, we'll be creating a touchable historic textile library as a resource for future students.*
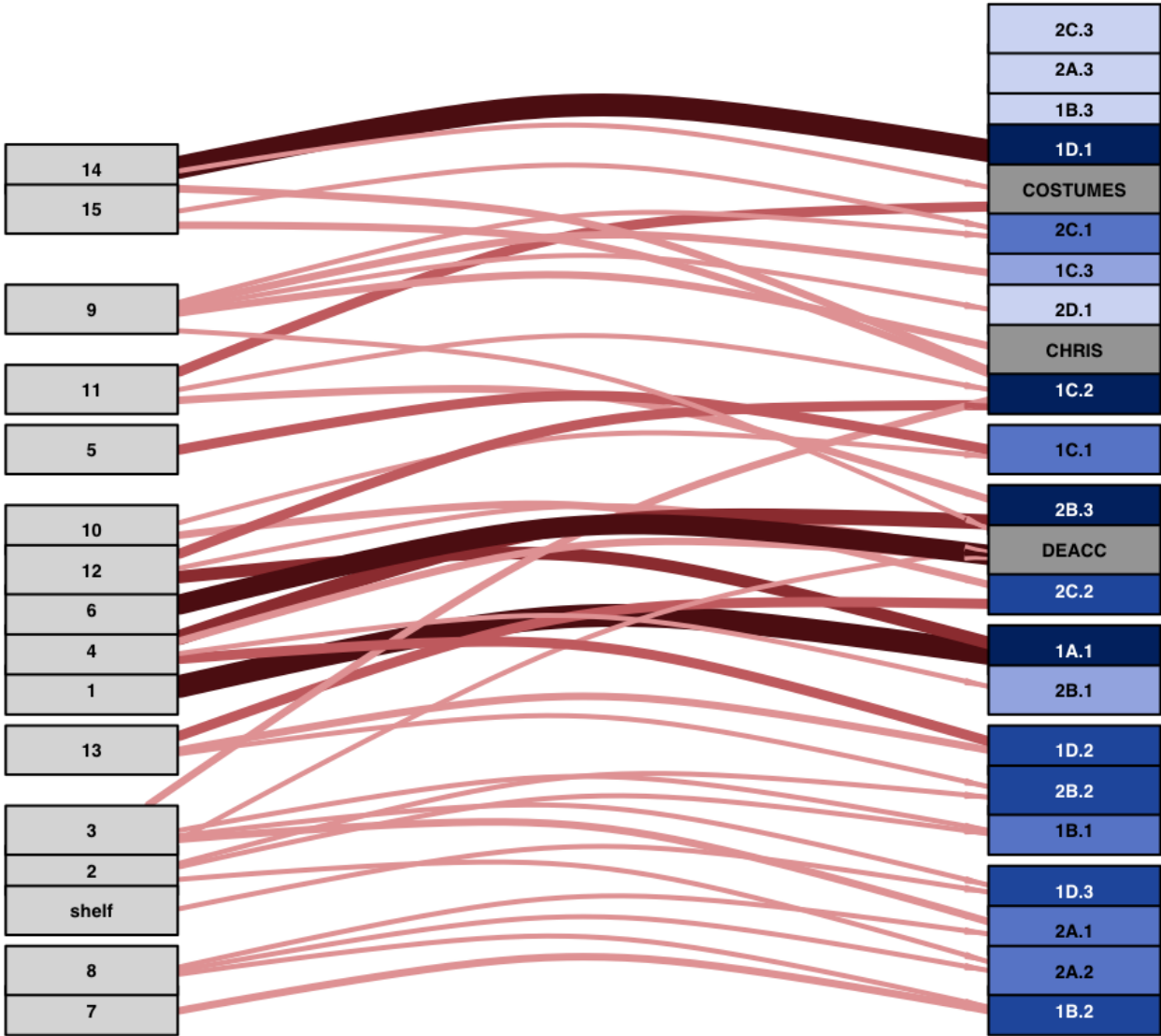
Object Moves

Figure 3.15: Movement of objects from original box to final destination

The first strong line in the visualization is between boxes 14 and 1D.1; box 14 contained four complete bodice-skirt ensembles, one of which also included a matching belt, dating between 1885 and 1900. These ensembles needed to continue to be stored together to maintain the connections between objects; additionally, it was sensible to continue to store all of these objects together, as they have the overarching connection of being bodice-skirt ensembles. Thus, 9 objects were moved from 14 to 1D.1, where they were joined by a newly reunited bodice-skirt set; this bodice (BCCA2023.12.04) and skirt (BCCA2023.06.07) had been stored in separate boxes, and it was not until all objects had been surveyed that it became clear that they were made of the exact same green-gray silk taffeta.[32]

Another very strong line appears between boxes 1 and 1A.1. Nearly every object from box 1 was moved to 1A.1, the exceptions being a velvet cape (BCCA2023.01.04) and a cream silk skirt (BCCA2023.01.07).[33] These objects did not have any clear connections to the other box 1 objects, which were all bodices, and thus were more sensibly stored elsewhere. The skirt found a home with other skirts, while the cape, due to issues with fabric shedding, was stored in its own separate box.

The final noteworthy connection in this visualization is between box 6 and the deaccession category. 8 out of 16 objects (50%) from box 6 ended up being deaccessioned. Many of these objects were pieces of theatrical costumes, such as a panel from a Greek-inspired tunic (BCCA2023.06.11), a 1920s-inspired polyester slip (BCCA2023.06.09), and an 1890s

[32] "Bodices," Bates College Clothing Archive, February 26, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/142.
"Skirts (garments)," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/88.
[33] "Capes (outerwear)," Bates College Clothing Archive, February 21, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/28.
"Skirts (garments), Bates College Clothing Archive, February 21, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/31#lg=1&slide=0.

bodice with extensive modern alterations (BCCA2023.06.02); it is understandable that these objects were stored together, as they were theatrical in nature, but no longer appropriate for wear on stage.[34] However, several other objects in box 6 were not altered for the stage, but were in extremely poor condition. A blue silk coat with a Parisian designer label (BCCA2023.06.04), likely the most expensive object in the collection at the time of its creation, had such severe silk shattering that it could hardly be handled.[35] Likewise, a 1930s cocktail dress (BCCA2023.06.10) was shedding sequins, posing a risk to other garments in the box.[36] The fact that so many objects from this box needed to be deaccessioned indicates that, perhaps, a previous steward of the collection intentionally stored objects in poor condition together, providing evidence that, at one time, someone was responsible for organizing the collection.

Now that the collection has been assessed and rehoused, objects are secure and ready to be documented more completely. The next chapter will detail the development of a collections management system and public-facing collections presence for the BCCA, based on the research priorities discussed in Chapter 1 and the data structures outlined in Chapter 2.

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[34] "Costume components," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/92.
"Slips (underwear)," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/90.
"Bodices," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/83.
[35] "Jackets (short coats)," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/85.
[36] "Cocktail dresses," Bates College Clothing Archive, February 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/91.

4. Building a Digital Collections Presence

The Bates College Clothing Archive is accessible beyond its physical presence on the Bates campus through a digital archive, created using the Omeka S collections management system. This database is fully explorable by the public through linked object records, allowing users to discover connections between objects and develop their own interpretations, as demonstrated by the Rowe Family Collection: a set of garments and accessories belonging to the family of Harry W. Rowe, a 1912 Bates graduate and the college's first Dean of Faculty.

Designing an Omeka Database

Before we explore the web of connectivity created by the Rowe Family Collection, it is important to understand the structure of the BCCA database. I have chosen Omeka S as the Collections Management System (CMS) for the Bates College Clothing Archive because of its flexibility and opportunities for customization. Omeka S is built on the idea of connectivity on many levels. A single Omeka S collection can be utilized by multiple public-facing sites, facilitating multiple interpretations of objects – unlike traditional documentation and digital exhibit practices, as discussed in previous chapters. Within the Omeka S collection, objects can be connected to each other, as well as to other resources on the web.[1]

The base data unit in Omeka S is the **item**. Omeka can accommodate multiple types of items in the same archive; in the BCCA Omeka archive, items include physical objects held in the BCCA (and objects that have been deaccessioned), archival material such as notes and box labels, and people who are involved in the BCCA in any way. I, Grace Acton, have an Omeka

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[1] "Explore," Omeka S, Digital Scholar, omeka.org/s/explore/ .

item that represents me, but so does every object in the collection, as well as people like Hope

Chandler Rowe, who formerly owned garments now held by the BCCA.

Item records are collections of metadata for a given item. In Omeka S, metadata fields

can be pulled from multiple metadata schemas. Administrators can import any metadata

vocabulary from the Linked Open Vocabularies project, hosted by the Ontology Engineering

Group at Madrid Polytechnic University (Universidad Politécnica de Madrid). These are *not*

controlled vocabularies; controlled vocabularies, or authority files, are lists of accepted terms

used to describe items.[2] Metadata vocabularies, also known as *ontologies*, are collections of

metadata fields designed for specific types of items. There are highly specific ontologies for air

traffic data, beverages, and comic books, but also broader ones, like the Dublin Core Metadata

Terms.[3] For the purposes of the BCCA, I have imported the Dublin Core Metadata Terms, the

Bibliographic Ontology, Friend of a Friend, and the Holding Ontology.[4] Each metadata

vocabulary is assigned a unique prefix, which is used to identify which vocabulary a given

metadata field is from.

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[2] "Vocabularies," Omeka S User Manual, Digital Scholar, omeka.org/s/docs/user-manual/content/vocabularies.
[3] "Vocabs," Linked Open Vocabularies, Ontology Engineering Group, Universidad Politécnica de Madrid, https://lov.linkeddata.es/dataset/lov/.
[4] Carsten Klee and Jakob Voß, *Holding Ontology*, version 0.1.2+35, 8 December 2015, http://dini-ag-kim.github.io/holding-ontology/holding.html#introduction.
DCMI Usage Board, *DCMI Metadata Terms*, January 20, 2020, https://www.dublincore.org/specifications/dublin-core/dcmi-terms/#section-1.
Dan Brickley and Libby Miller, *FOAF Vocabulary Specification 0.99*, Paddington Edition, January 14, 2014, http://xmlns.com/foaf/spec/.
Bruce D'Arcus and Frédéric Giasson, *The Bibliographic Ontology,* May 11, 2016, https://www.dublincore.org/specifications/bibo/bibo/

Table 4.1: Vocabulary Prefixes

Vocabulary Prefixes	
Bibliographic Ontology	bibo
Dublin Core	dcterms
Friend of a Friend	foaf
Holding Ontology	holding

To keep item documentation consistent, an Omeka administrator can create Resource

Templates, which are the sets of required and suggested metadata fields for a given type of item.

Unlike the Linked Open Vocabularies, these are internal to an Omeka collection, and can pull

from multiple vocabularies in order to best describe a given item type. Omeka allows metadata

fields in a Resource Template to be given site-specific names and descriptions to better guide

documentation. Some of the Dublin Core elements are extremely broad, such as Date (any date

associated with the item) and Relation (any other thing related to the item). By giving these

elements more specific descriptors, their uses can be narrowed, reducing confusion between the

purposes of different metadata fields while cataloging. Resource Templates can also specify a

Dublin Core Class, which identifies the format of the item that a record documents. Options for

Classes include the Dublin Core Types, such as Physical Object, Collection, and Still Image, as

well as certain other terms, including Agent: "A resource that acts or has the power to act."[5] In

the BCCA Omeka archive, I have created a Resource Template for the Dublin Core Classes of

Physical Object, Agent, and Provenance Statement. For each of these object types, I have

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[5] "Section 6: Classes," *DCMI Metadata Terms*, https://www.dublincore.org/specifications/dublin-core/dcmi-terms/#section-7.

decided which metadata fields are necessary to document an item; however, if an object requires additional fields, these can be added during the documentation process for that specific object.

The other function of resource templates is to set requirements for data type for specific metadata fields. Some metadata fields have multiple appropriate data types; however, others require a specific data type in order to be effective descriptors. For example, the Title and Medium fields need to draw from a controlled vocabulary in order to facilitate searches and indexing. By setting the data type of these metadata fields to Value Suggest: Getty Art and Architecture Thesaurus, Omeka will connect that field, via the Value Suggest module, to the AAT controlled vocabulary. When filling in the item record, the cataloger uses a search box in the metadata field to find an appropriate AAT term; after the term is selected, Omeka auto-populates the URI for that term, linking the object to the AAT's Linked Open Data presence. Other fields must link to internal Omeka items. For example, the "Cataloged By" field should link to the item record for the person or people (Class: Agent) who participated in the documentation of the object.

The following table represents the Resource Template I designed for physical objects.

Table 4.2: Resource Template Example

Dublin Core Class: Physical Object			
Metadata Field	**BCCA Name**	**Data Type(s)**	**Purpose**
dcterms:Identifier	Accession Number	Text (Numeric)	The unique identifier given to each object in the archive.
dcterms:Title	Title	Getty AAT URI	URI that links to Getty AAT term that names the object.
dcterms:Description	Description	Text	Brief description of the object.
dcterms:Medium	Medium	Getty AAT URI	URI that links to Getty AAT term that describes what the object is made of.
dcterms:Temporal	Temporal Coverage	Text	Approximate date of the object.
dcterms:Provenance	Provenance	Text, Omeka Item	Any information on previous ownership of the object.
holding:collectedBy	Cataloged By	Omeka Item	Omeka item for the person who filled in the Omeka documentation for this object.
holding:heldBy	Held By	Omeka Item	Institution that currently holds the item.
dcterms:AccrualMethod	Accrual Method	Text	How the item came to be owned by Bates College.
dcterms:Created	Date of Record Creation	Text	Date that this Omeka item description was created.
dcterms:Relation	Relation	Omeka Item	Other objects directly related to this object.
dcterms:Date	Deaccession Date	Text	Date that the object was deaccessioned.
dcterms:Extent	Extent	Text	Write "Deaccessioned" in this field if the object has been deaccessioned.
holding:label	Box Number	Text	Identifier of box that the object is now housed in.
dcterms:Contributor	Known Wearer(s)	Omeka Item	People known to have worn the item.

Item records in Omeka can include different media types, including photographs. Photos of objects vary in their utility based on the type of photography available. Overhead photos of entire objects give users a general sense of the objects' appearance, such as fabric texture and color. Photos of garments on mannequins give a much better impression of the objects' appearance; foundation layers can be added to create a period-appropriate silhouette, and multiple angles can be viewed for each object. Compare the two photos of BCCA2023.03.13, below.[6]

BCCA2023.03.13

Figure 4.1: Comparison of overhead and mannequin photos.

The overall appearance of the cape is captured by the overhead photo. All of the major traits of the cape – its matte, dark green fabric, decorative closure, and fringe trim are all clearly visible. However, the actual shape and structure of the garment is captured much better in the mannequin

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[6] "Capes (outerwear)," Bates College Clothing Archive, February 21, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/59#lg=1&slide=0.

photo. It would be possible to look at the overhead photo and not know that this cape had

sleeves, while the sleeves are evident once the object is put on a human-shaped form. Not all

objects, however, can safely be mounted on a mannequin for photography purposes. Some

historical garments are too fragile, or simply too small, to fit on modern mannequins, which are

designed to a particular set of human proportions. Museums and archives with larger budgets are

able to make mannequins to the sizes and proportions of historical garments, but this is an

expensive and time-consuming process that is not feasible for a small study collection like the

BCCA. Additionally, mannequin-mounted photography is time consuming; dressing a

mannequin to properly support the silhouette of a historical garment can require multiple layers

of undergarments (assuming that the collecting institution has access to petticoats, skirt supports,

and padding), and the historical garment itself must be carefully added to the mannequin to avoid

damage. For simple documentation purposes, overhead photos are perfectly adequate. It was not

possible to photograph every single garment in the BCCA collection, but all objects that were

photographed have images in their item record to Omeka.

Connection in Practice: Linked Data in Omeka

As discussed in Chapter 2, Linked Open Data (LOD) is a data structure that facilitates

connections between data points anywhere in the universe; LOD can be conceptual, or put into

practice by using RDF triples and the Berners-Lee Linked Data Principles to connect resources

through the Internet. I chose Omeka S as the CMS for the BCCA not only because of its

flexibility, but also because LOD is embedded in the structure of the platform. Looking at the

Resource Template table above, one can see that metadata fields can accept multiple data types,

including Omeka Items and Universal Resource Identifiers (URIs). These two data types

facilitate linked records. When an Omeka Item has another Omeka Item as the value for a metadata field, the item record represents this value as a hyperlink followed by a box icon. If a metadata field has a URI as its value, it is simply a hyperlink. Essentially, if the linked resource is within the same Omeka archive, it will be followed by the box icon, and if it is external it will not.

A Case Study in Connectivity

Now that we have established the structure of the BCCA Omeka archive, let us examine an object that exemplifies the power of linking object records: Hope Chandler Rowe's rose-colored lace dress (BCCA2024.03.05). Below is a screenshot of the Omeka record for this object.

Figure 4.2: Omeka object record for BCCA2024.03.5

As you can see, several metadata fields in this item record contain hyperlinks to other Omeka

items, as well as to external resources.[7] The diagram below models these connections,

demonstrating the web-like structure of Linked Open Data. In this diagram, external resources

are shaded in light blue. Hyperlinks in metadata are represented by red text, mirroring the Omeka

screenshot above. Any text followed by a square (□) are resources from within the Omeka

archive, including other objects, provenance documentation, and agents. I have abbreviated the

metadata of each item for the sake of space and clarity, but will note that if all metadata fields

were included, this web would have even more connections. The arrows between objects are

labeled with the metadata element that acts as the predicate in each RDF triple.

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[7] *This is the internal view of this object record. All of this information is available on the public-facing object record, but the formatting of the public page made it impossible to screenshot the entire object record. Thus, I used the internal record.*
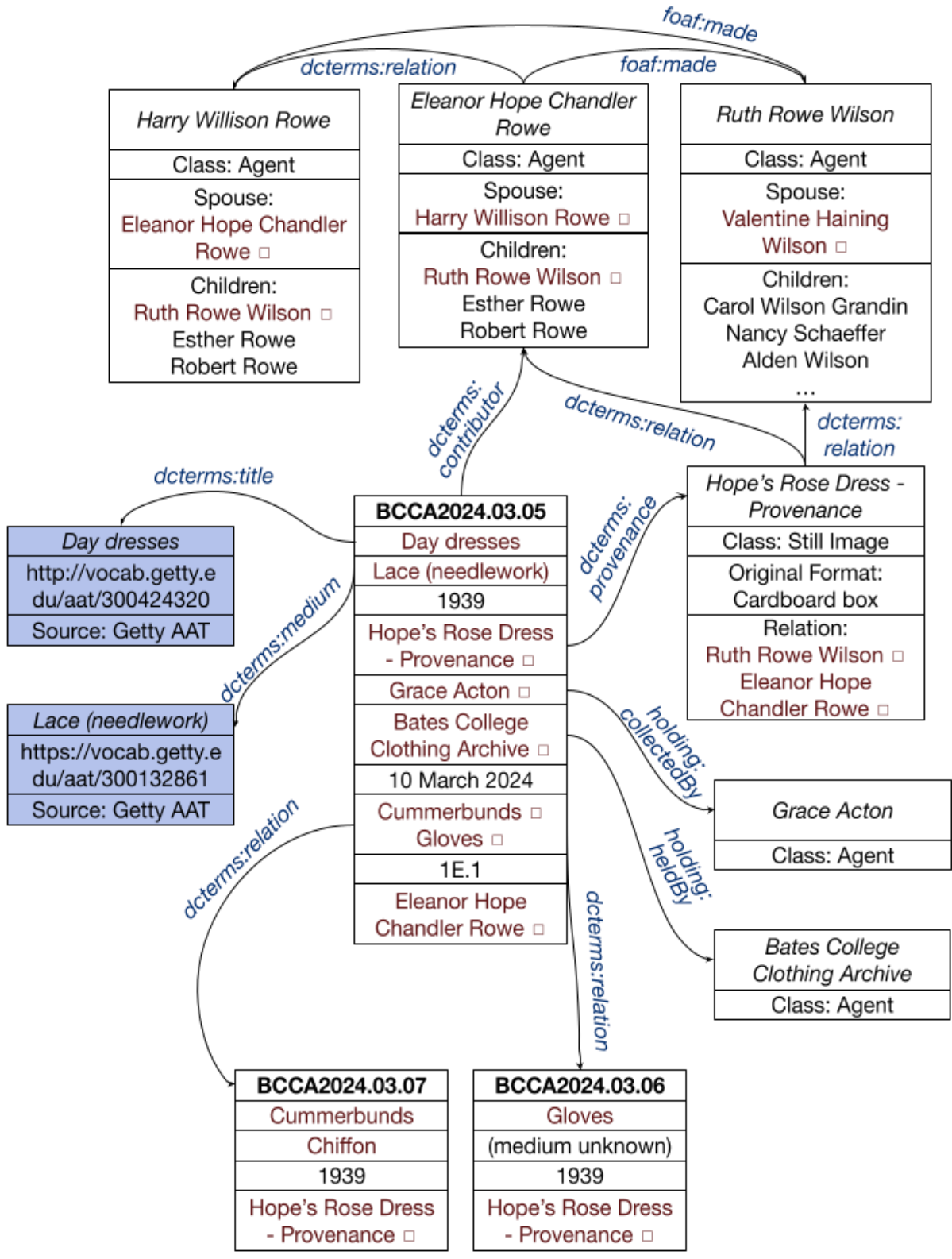
Figure 4.3: Diagram of item links

Because Omeka makes space for records not only of traditional museum materials (objects, provenance documents), but also of people, this object record is connected to many Agents who have interacted with it. Hope Chandler Rowe is most obviously connected to the garment as its wearer, but it is also connected to her husband, Harry Rowe, and their daughter, Ruth Rowe Wilson, by virtue of the fact that Hope chose to wear this dress to Ruth's wedding. On the Omeka site, clicking the "Eleanor Hope Chandler Rowe" hyperlink brings you to a record of Hope, with biographical information like the dates of her birth, marriage, and death, and the names of her spouse and children. This page also contains a list of all other object records that list her as a known wearer or contributor, with hyperlinks to those object records. A user can learn about Hope through the many garments she wore, and, if they are curious to learn more about her, they can use her biographical information to find her in resources like the Ancestry database and Muskie Archives. I encourage users to make their own discoveries, using the BCCA database as a starting point.

However, I also acknowledge that Hope Chandler Rowe is not a known historical figure, and, although her husband is relatively well-known within the Bates community, it can be difficult to find information about her. For that reason, I have included a brief biographical sketch of the Rowe family below, including my own interpretation of what their clothes tell us about them. I am choosing to not include this in the Omeka database, because I want users to be free to draw their own conclusions and interpretations from the objects; however, because this work will eventually be available through SCARAB, I will be able to link to it from the Omeka site.

Harry Willison Rowe and Hope Chandler
in the Bates College Class of 1912 Yearbook

Figure 4.4: Yearbook photos of Harry Rowe and Hope Chandler

Eleanor **Hope** Chandler, born in Presque Isle in 1887, matriculated with the Bates

College Class of 1912. She did not complete her studies, leaving the college at the end of her

freshman year; she was included in the Class of 1912 yearbook as a Quondam Member, and

indicated that her intended occupation was teaching.[1] While at Bates, she met her classmate and

future husband, Harry Willison Rowe, of Mercer, Maine.[2] Not much is known about Hope and

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[1] *The Mirror*, Bates College, 1912, https://archive.org/details/mirror191200unse/page/n127/mode/2up.
[2] "Harry Willison Rowe," Maine, U.S. Birth Records, 1715-1922, Ancestry Library, https://www.ancestrylibrary.com/discoveryui-content/view/319435:1960?tid=&pid=&queryId=196cc363-149f-4e28-a308-8886576a36ee&_phsrc=ufD31&_phstart=successSource.

Harry's courtship, or Hope's activities between her departure from Bates and her marriage to Harry. However, in the Class of 1912 yearbook, Harry's page says, "Congratulations are due Harry. Oh no, not *that* yet. We refer to his job as Field Secretary of Christian Endeavor," indicating that perhaps Hope and Harry were engaged by the time Harry graduated.[3]

The two were married on September 2, 1913, at Hope's family home in Presque Isle. An account of the wedding published in the *Bangor Daily News* contains the following description of the couple's attire: "The bride wore a beautiful dress of lace and peau de chene [sic] and carried an artistic shower bouquet of brides roses. Her long tulle veil was gracefully draped. The groom wore the conventional black."[4] Along with her lace dress and tulle veil, we know that Hope either made or purchased two sets of undergarments for the occasion, which were later donated to Bates in a box labeled "Hope's Wedding Underwear."[5] The first set, a chemise with matching drawers in fine white cotton, is embellished with Hope's monogram, "EHC".[6] The other, also consisting of a chemise and drawers, is of white linen, with cutwork embroidery.[7] A tulle veil, matching the description from the *Bangor Daily News*, is also part of the BCCA collection.[8]

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[3] *The Mirror* (Lewiston, ME: Bates College, 1912).
[4] *The Bangor Daily News*, September 4, 1913, https://www.newspapers.com/image/662036814/?terms=hope%20chandler%2C%20harry%20rowe%2C%20marriage&match=1.
[5] "Hope's Wedding Underwear – Provenance," Bates College Clothing Archive, March 23, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/373#lg=1&slide=0.
[6] "Chemises (underwear)," Bates College Clothing Archive, March 10, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/191#lg=1&slide=0.
"Drawers (underpants)," Bates College Clothing Archive, March 10, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/192#lg=1&slide=0.
[7] "Chemises (underwear)," Bates College Clothing Archive, March 10, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/193#lg=1&slide=0.
"Drawers (underpants)," Bates College Clothing Archive, March 10, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/194#lg=1&slide=0.
[8] "Wedding veils," Bates College Clothing Archive, March 10, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/195.

Figure 4.5: Hope's monogram on her wedding chemise

In 1914, Harry was hired as the Secretary to the Bates chapter of the Young Men's Christian Association (YMCA), which kicked off a 44 year career in the Bates College administration.[9] After a series of positions, including Bursar, Alumni Secretary, and Assistant to President Clifton Dagget Gray, Harry was appointed to be the college's first Dean of Faculty in 1946.[10] Although we don't know much about Hope's time at Bates, she is often mentioned in event write-ups in *The Bates Student* as a guest or chaperone.

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[9] "Harry W. Rowe papers," Edmund S. Muskie Archives and Special Collections Library, Bates College, https://bates-archives.libraryhost.com/repositories/2/resources/16

[10] "Harry W. Rowe papers."

Photographs in Harry's scrapbook, held by Muskie Archives, show Hope acting alongside other faculty members' wives in a skit. Although the photo is not dated, the presence of Neva Gray, wife of President Gray, indicates that the photo must be from between 1920 and 1944 – Gray's tenure as president.[11]

Figure 4.6:Bates College faculty wives in a skit, ca. 1920-1944

In this image, all of the women are in clothing ensembles from the late nineteenth and early twentieth centuries, distinctly out of fashion by the time of Gray's presidency. Hope wears a white blouse with voluminous sleeves and a long plaid skirt; Neva Gray appears to be wearing a mid-nineteenth century paisley shawl, while Ruth McGown and Sally Lawrence are wearing blouses typical of the turn of the century. Sally Lawrence's skirt bears a striking resemblance to BCCA2023.13.09, with its distinctive shamrock-shaped ribbon loops.[12] It's likely that these costumes were created from passed-down family clothing, altered and mix-and-matched by the women to create a theatrical appearance. Among the Rowe Family collection in the BCCA is a late-nineteenth century ensemble, consisting of a bodice, skirt lining, and cap. This set was packaged with a note which says, "Black satin lining of Frank Lancaster's grand-mother's dress – Hope used the black lace."[13] Perhaps she used the lace for a theatrical costume, an outfit of her own, or to trim her children's clothes: Hope and Harry had three children: Ruth, born in 1914, followed by Robert in 1916 and Esther in 1917.

Figure 4.7: Black crepe skirt with shamrock-shaped ribbon trim

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[12] "Skirts (garments)," Bates College Clothing Archive, March 22, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/322#lg=1&slide=0.

[13] "Black Satin Set – Provenance," Bates College Clothing Archive, March 5, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/159#lg=1&slide=0.
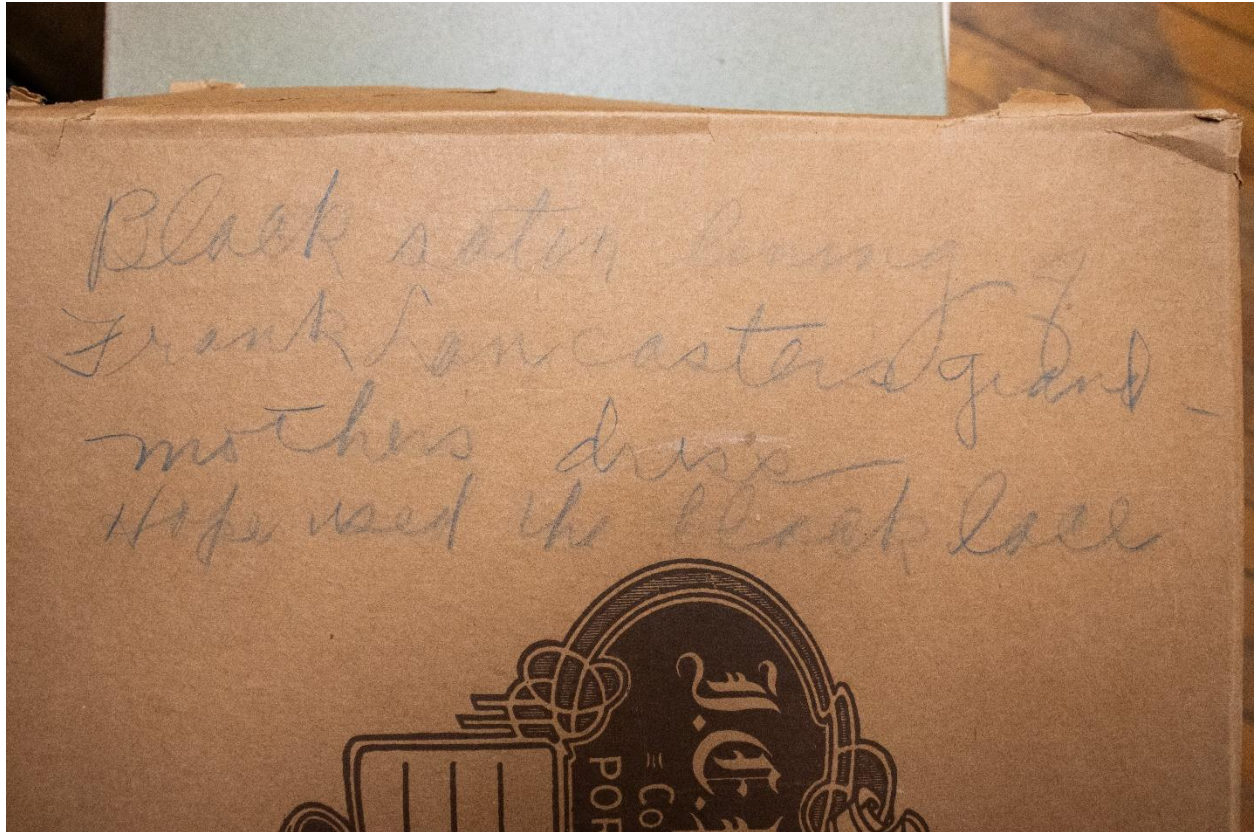
Figure 4.8: Cardboard box used to store the black satin skirt and bodice

Hope seems to have shared her husband's penchant for saving scraps, as recalled by Don

Hill, Bates Class of 1981:

"I found that not much ever went to waste at Dean Rowe's home. Like many of his generation, he saved every National Geographic issue and owned complete collections of several other periodicals. He saved scraps of bread, cake, and other such stuff in a special place in the big chest freezer. These became the fundamental ingredients for his annual batch of brown bread."[14]

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[14] Don Hill, "Your Page: Regarding Harry," *Bates Magazine*, July 1, 2009, https://www.bates.edu/news/2009/07/01/your-page-regarding-harry/.

Harry's scrappy tendencies were possibly motivated, in part, by his enthusiasm for history. He was an avid collector of Batesiana, as well as a passionate genealogist of his own family history. Upon his retirement in 1958, Harry became the college's first unofficial archivist and historian.

Hope's version of this scrappiness extended to her children's clothing. Not only did she salvage the black lace from Frank Lancaster's great-grandmother's skirt, she also seems to have converted a nineteenth century petticoat into a dress worn by her daughters as young children. This garment was

Figure 4.9: Sticker label on a child's white cotton dress

donated with a label saying that the skirt part was originally a petticoat belonging to a Frank (or Franny?) Foster.[15] The box labeled "Little dresses + other clothes of Ruth's or Esther's" also contained a gingham tunic and shorts set, a pair of pink cotton trousers, and a smock dress with a duck print – all simple, but charming, children's clothes.

In 1932, Ruth Rowe, Hope and Harry's eldest, matriculated at Bates, when her father was serving as both Alumni Secretary and Assistant to the President.[16] She was highly involved in

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[15] "Child's Dress – Provenance," Bates College Clothing Archive, March 5, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/169#lg=1&slide=0.
16 *The Mirror* (Lewiston, ME: Bates College, 1933).

campus life, as a reporter for the *Student*, a debater, member of the Winter Carnival committee, choir singer, and President of the Young Women's Christian Association (YWCA).[17] In December 1935, she was chosen as a delegate to an international convention of the Student Volunteer Movement, alongside her future husband, Valentine Wilson, Bates Class of 1938.[18] Ruth and Val were frequently noted to be in attendance at the same social events throughout Ruth's senior year, even drawing the attention of the *Student*'s gossip writer:

> "Your Uncle has a gleaming desire to speak a mindful upon all and sundry…but having found that your Uncle's lightest and most harmless whip can be interpreted as a flogging…he will merely try brushing away flys from that horse, gossip. And come to mention such, let it never be thought there can by flys on our hitherto untouchables…what we mean of course, was the conduct of Ruth Rowe and Valley Wilson at Carnival hop…right on the dance floor…as somebody put it, disgraceful."[19]

On January 6, 1938, Ruth and Val's engagement was announced in the *Student*, during Val's senior year. Their wedding took place on August 25, 1939, in Gomes Chapel. According to the Meriden, Connecticut *Journal*, Ruth wore, "a sheer white butterfly gown with lace bodice and train and full-length veil."[20] Although she was not mentioned in the newspaper write-up of her daughter's wedding, Hope wore the tea length dress of rose-colored lace, accessorized with a coordinating chiffon cummerbund and lilac knit gloves – which was eventually donated to Bates, with documentation that Hope wore the ensemble to Ruth's wedding.[21]

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[17] *The Mirror* (Lewiston, ME: Bates College, 1936).

[18] "Twelve Students Make X-Mas Trip to Indianapolis," *The Bates Student*, December 11, 1935, https://archive.org/details/Bates_Student_1935/page/n65/mode/2up?q=%22ruth+rowe%22.

[19] "Pepys Thru the Keyhole," *The Bates Student*, February 19, 1936, https://archive.org/details/Bates_Student_1935/page/n89/mode/2up?q=%22ruth+rowe%22.

[20] "Secretary Weds," *Journal* (Meriden, CT), August 28, 1939, https://www.newspapers.com/image/676466872/?fcfToken=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJmcmVlLXZpZXctaWQiOjY3NjQ2Njg3MiwiaWF0IjoxNzEwMjA2ODU3LCJleHAiOjE3MTAyOTMyNTd9.SKl_tCyh9m9S-Awr6-0LoDgFum45OsJGYlMeayqmTbQ.

[21] "Hope's Rose Dress – Provenance," Bates College Clothing Archive, March 5, 2024, https://clothingarchive.bates-catapult.net/s/bcca/item/156#lg=1&slide=0.

Harry and Hope continued to live in Lewiston, just off of the Bates campus, until they passed – Hope in 1972, and Harry in 1980. In his eulogy for Harry, Harold W. Richardson read from a letter he received from Harry, in which he wrote:

> "Now, November 13 emerged as one of the red letter days in the calendar for me. Until this time my birthday got scant attention. **Hope, however, was from a family that had a strong sense of kinship.** They never failed to remember family birthdays, wedding anniversaries, and other important family events. Because of you, my family, my life has been gladdened by your many remembrances of me...Happy birthday to me!"[22]

Beyond good archival practice, maintaining the connections between the clothes owned by this family feels like a fitting tribute to Hope and Harry, people who valued connectivity. Clothes, which tell us so much about their wearers' habits and behaviors, also act as connectors between people. Whichever member of the Rowe family ultimately donated these clothes to Bates clearly shared this value: of all of the garments in the collection, these are some of the only items to arrive with information about who wore them.

The story of the Rowe Family I outlined above is my own interpretation of the objects in the BCCA and archival information I have gleaned from newspapers, yearbooks, and the Harry Rowe collection at Muskie Archives. It is also a testament to the power of good documentation: if the donor had not included explanatory notes on the boxes containing these clothes, and if I had not preserved these notes and shipping labels by photographing the boxes before rehousing their contents, I would have never discovered the connections between these objects, their owners, and Bates.

Hope's dress was too small to fit on a mannequin for photography, and an overhead photo does not do it justice. I hope that in the future, someone can find a smaller mannequin and photograph this garment.

[22] Harold W. Richardson, "Eulogy for Harry W. Rowe," Harry W. Rowe Papers, Edmund S. Muskie Archives and Special Collections Library, Bates College. *Bolding mine*.

The Effect of Linked Data: Why this all matters.

Creating a data and presentation strategy that links objects not only to controlled vocabularies, but also to other objects and people, encourages users to explore the archive independently. As discussed in Chapter 2, the majority of museum web presences have taken the form of "digital exhibits", which intersperse curatorial text with photographs of objects. When objects are presented in this manner, users are passive observers; they are told or shown what the object means in a single context. Objects are not linked directly to each other, they are linked to a narrative.

Connecting objects directly to each other, based on shared provenance, age, material, or object type, and allowing users to follow those connections *on their own* frees the object from the curator's authority. Users are encouraged to think about the objects and their possible meanings, in reference to other objects. This is not to say that users should be given no information about objects: the metadata that make up item records provide a base level of object description, which contextualizes the object in a historical time period, provides information about what the object is made out of and how it was constructed, and specifics of the object's provenance. It is the *interpretation* of the object – what it signifies about its wearer, maker, and time period, and, most importantly, how it relates to other objects in the collection – that is up to the viewer.

Recommendations for the Future

My thesis project may be drawing to a close, but this is not the conclusion of the BCCA. There are countless projects and learning experiences that this collection can support, but it also has stewardship needs to ensure its longevity as a physical and digital resource. I have compiled several of my recommendations here, beginning with administrative actions that will improve the collection and solidify it as an enduring resource.

Administrative Actions

1. <u>Improve documentation of individual objects.</u>

   All of the objects have item records in Omeka. However, I did not have much time to spend on each object, leaving many of them with very short descriptions and basic categorizations for materials. In order to maximize the utility of this database, I recommend spending more time on the metadata for each object. The database would most strongly benefit from more specific object names and dates. However, identifying fabric weaves would be a straightforward way to create more specific connections between objects; currently, many objects are just identified by fiber content (silk, wool, cotton, etc.), so groups based on medium are not very helpful for research purposes.

2. <u>Develop a collections policy.</u>

   If the BCCA is to grow or refine its collection going forward, it will be necessary to define a collections policy, outlining the scope and priorities for the collection and mechanisms for acquiring new objects and deaccessioning existing ones. The American Alliance of Museums (AAM) has a guide to developing a collections management policy,

as does the UK Collections Trust.[1] It is particularly important for this policy document to include who actually owns the collection – Bates College as a whole, or the Department of Theater and Dance in specific? Based on this, who should be included in decision-making for acquisitions and deaccessions? Additionally, does the collection need to be insured? These are all questions that need to be answered to preserve the collection moving forward.

3. Label the remaining garments.

Labeling objects is a valuable way to ensure that objects are identifiable and locatable for future research. Currently, a combination of photographic documentation and item descriptions are necessary to match objects with their accession numbers; it would be much easier to identify objects if their accession numbers were physically attached. However, as I discussed in Chapter 3, labeling historical garments is a time consuming process: I was only able to add labels to about 10 garments, total, over the course of this project. The materials for labeling (unbleached twill tape, cotton thread, and pens) are already available in the BCCA storage space, and the process is straightforward for anyone comfortable with hand sewing. For resources on how best to label garments, I recommend the Minnesota Historical Society and the National Museums of Scotland.[2]

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[1] *Developing a Collections Management Policy* (Arlington, VA: American Alliance of Museums, 2012), https://www.aam-us.org/wp-content/uploads/2018/01/developing-a-cmp-final.pdf.
"Collections development policy," Collections Trust UK, https://collectionstrust.org.uk/accreditation/managing-collections/holding-and-developing-collections/collections-development-policy/.
[2] Gina Nicole Delfino, "Recommendations for Applying Accession Numbers to Museum Objects: Part 1," *Minnesota History Interpreter,* May 2000, https://www.mnhs.org/sites/default/files/lhs/techtalk/techtalkmay2000.pdf.
"Labelling a textile object," National Museums Scotland, https://www.nms.ac.uk/about-us/our-services/training-and-guidance-for-museums/collections-care-training/object-labelling/labelling-a-textile-object/.

4. <u>Continue photographing garments.</u>

Even though aesthetics are not the priority of this collection, having more complete photos of objects would be helpful to future researchers using the collection. Currently, not all objects can fit on even the smallest mannequin available through the Department of Theater and Dance Costume Shop, including Hope Chandler Rowe's rose-colored dress; in order to take mannequin-mounted photos of *every* object, specialized forms would need to be acquired or created. However, there are plenty of objects that will fit on the adjustable dress form provided by Carol Farrell, and I highly recommend continuing to utilize the Bates Digital Media Studios photography equipment moving forward.[3]

5. <u>Ensure the continuity of the digital archive.</u>

The Omeka S site is currently hosted through Bates Catapult, using a domain linked to Professor McDowell's Bates credentials. Although this is effective currently, it is not a permanent hosting solution; when Prof. McDowell's Bates email is eventually retired, or if Catapult is ever discontinued, the website will be lost. The best solution to this problem would be to host the BCCA website through an existing Bates web platform, such as the Muskie Archives digital repository.

6. <u>Consider accessioning objects from the theatrical costume collection.</u>

In addition to the objects that were already set aside as "antiques," the Theater department costume collection contains several antique and vintage items that are no longer appropriate to wear on stage. These items are stored in the "Good Room" in costume storage, already removing them from consideration for costuming theater

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[3] "Digital Media Studios," Bates College, https://www.bates.edu/digital-media/.

productions. If future stewards of the BCCA collection would like to add to its holdings and expand its date range into the 1930s and 1940s, they should consider adding garments currently housed in the Good Room.

Research and Exhibits

As I discussed previously, there are countless connections that can be found between these objects, and the purpose of the public-facing Omeka platform is to allow people to make these connections themselves. However, I have identified several themes and topics that I did not have time to investigate myself, which I think would make excellent research projects for future students interested in working with the collection.

1. Connective Theme: Date

   Maintaining a narrow date range but studying diverse objects gives a holistic sense of the status of dress at a given point in time. The Old Sturbridge Village exhibit *Needle & Thread: The Art and Skill of Clothing an Early 19th-Century Family* takes this approach. The exhibit, in keeping with the interpretive mission of Old Sturbridge Village, is limited in time period to the 1830s, but incorporates a broad variety of objects: garments and undergarments for men, women, and children, laundry machines, irons, sewing tools, and accessories.[4] This curatorial strategy provides a picture not of high fashion or aesthetic trends, but of clothing and sewing as part of life. It also encourages exploration beyond the traditional focus of dress history on upper-class women's wear; by placing women's clothing in conversation with men's and children's garments, one can study how these

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[4] "Misson & Narrative," Old Sturbridge Village, https://www.osv.org/about/mission-narrative/.
Rebecca Beall, "Needle & Thread: The Skill and Art of Clothing an Early 19th Century Family," Old Sturbridge Village, September 22, 2022, video, https://youtu.be/bjRYXUmho64?si=bkocWF03hMWVGxgA.

different genders and age categories interacted with each other. Men's fashion often

influences women's fashion, and approaches to dressing children are often inspired by

the popular fashions for adults. Viewing a broad range of clothes from a single point in

time inspires comparison across age and gender, and allows the viewer a more complete

picture of life in the past. In the BCCA, there are multiple time periods that could

facilitate this study technique, but I would be particularly drawn to the 1860s, for which

we have undergarments, complete ensembles, and outerwear. The context of the Civil

War would provide a particularly fascinating historical context to place clothing in. The

1920s, likewise, would provide many objects to study as well as a somewhat tumultuous

historical backdrop.

2. Connective Theme: Object Type

If object type remains consistent, broadening the time period presents the opportunity to

explore evolutions in silhouette, aesthetic, and their connections to cultural and

technological shifts. Jessica Glassock exemplified this approach in her series of essays on

silhouette and support garments for the Met Costume Institute website. Starting with the

late seventeenth century mantua, Glassock draws upon the Met's extensive collection of

women's gowns and their corresponding foundation garments, including skirt supports

and corsetry, to trace the fashionable female silhouette through the 1980s.[5] This research

is highly important to the museological and art-historical applications of dress history; by

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[5] Jessica Glassock, "Eighteenth-Century Silhouette and Support," Heilbrunn Timeline of Art History, Metropolitan Museum of Art, October 2004, https://www.metmuseum.org/toah/hd/18sil/hd_18sil.htm.
Jessica Glassock, "Nineteenth-Century Silhouette and Support," Heilbrunn Timeline of Art History, Metropolitan Museum of Art, October 2004, https://www.metmuseum.org/toah/hd/18sil/hd_19sil.htm.
Jessica Glassock, "Twentieth-Century Silhouette and Support," Heilbrunn Timeline of Art History, Metropolitan Museum of Art, October 2004, https://www.metmuseum.org/toah/hd/20sil/hd_20sil.htm.

identifying changes in silhouette, it becomes far easier to properly date extant clothing

and artwork. This longer view of historical dress is even more effective when combined

with archival research and historical contextualization, allowing clothes to be examined

and considered as part of overarching trends, both sartorial and social. The changes in

silhouette seen during the twentieth century, in particular, are directly related to major

historical events; for example, fabric rationing during World War II led to shorter, less

voluminous skirts, simultaneous with a mass entrance of women into the workforce that

made trousers acceptable women's wear.[6] Major changes in fashion are also often tied to

technological developments, such as the patenting of the steel-boned cage crinoline in

1856, which was able to support wider skirts than the previous style of layered

petticoats.[7] This approach is also highly accessible to a mass audience. Broad trends are

easier to notice than minute changes in aesthetic details, especially if the chosen time

period spans a relatively long period of time – even an untrained eye can see the

difference between an eighteenth century pannier and an 1870s bustle. The BCCA

collection of women's outerwear, which spans at least 50 years, would be an excellent

candidate for this type of study.

3. Connective Theme: Silk Production

During my consultation with Jacqueline Field, we discussed the topic of silk production

at length. Ms. Field has done considerable research in this area, and would be an

[6] Jessie Kratz, "Shorter Skirts and Shoulder Pads: How World War II Changed Women's Fashion," *Pieces of History*, The National Archives, September 8, 2014, https://prologue.blogs.archives.gov/2014/09/08/shorter-skirts-and-shoulder-pads-how-world-war-ii-changed-womens-fashion/.
[7] "Understanding Underwear: The Victorian Crinoline," European Fashion Heritage Association, February 14, 2020, https://fashionheritage.eu/understanding-underwear-the-crinoline/#:~:text=The%20steel%2Dhooped%20cage%20crinolines,every%20social%20standing%20and%20class.

excellent resource for someone interested in pursuing this topic further. The BCCA

collection provides examples of silk produced in multiple regions: east Asia, Europe, and

the United States. After discussing the histories of silk production in these different areas

with Ms. Field, I was able to feel tangible differences between silk that was produced in

the US and silk produced elsewhere, because American silk manufacturers prioritized

quantity over quality; American silk from the late nineteenth and early twentieth

centuries was treated with chemicals to make it feel heavier, which ultimately caused the

"shattering" pattern of decomposition. The BCCA collection also includes many

examples of silk with distinctive woven patterns, such as BCCA2023.01.06, which has a

paisley pattern within its black and cream stripes, BCCA2023.11.07, the man's waistcoat

examined in Chapter 3 with a purple and silver woven pattern, and BCCA2023.01.10,

which has tiny purple and green squares woven into a black background. This is a

particularly appropriate theme given Bates College's connection to the textile industry in

Maine through our namesake, Benjamin Bates, and could inspire a collaboration with the

Maine Museum of Innovation, Learning, and Labor.

It has been a joy to work with this collection, and to see it transform from a mass of

mystery boxes into a legitimate, useful archive. Beyond any of my administrative or curatorial

visions for the future of the collection, I have one hope: that people will use this collection as a

resource for whatever project they envision.

Bibliography

"AAM Code of Ethics for Museums." American Alliance of Museums. Amended 2000.

 https://www.aam-us.org/programs/ethics-standards-and-professional-practices/code-of-

 ethics-for-museums/.

"About Nomenclature." *Nomenclature for Museum Cataloging.*

 https://page.nomenclature.info/apropos-about.app?lang=en.

"About the AAT." *Art & Architecture Thesaurus Online*. J. Paul Getty Trust. Updated March 5,

 2023. https://www.getty.edu/research/tools/vocabularies/aat/about.html

"About the TGN." *Getty Thesaurus of Geographic Names Online*. J. Paul Getty Trust. Updated

 March 5, 2023. https://www.getty.edu/research/tools/vocabularies/tgn/about.html

"About the ULAN." *Union List of Artist Names Online*. J. Paul Getty Trust. Updated March 5,

 2023. https://www.getty.edu/research/tools/vocabularies/ulan/about.html.

"All That is Gold: Recreating the Peacock Dress." The Costume Society. June 8, 2020.

 https://costumesociety.org.uk/blog/post/all-that-is-gold-recreating-the-peacock-dress

"The American Wing." The Metropolitan Museum of Art.

 https://www.metmuseum.org/about-the-met/collection-areas/the-american-wing.

"Ancient American Art in the Michael C. Rockefeller Wing." The Metropolitan Museum of Art.

 https://www.metmuseum.org/about-the-met/collection-areas/ancient-american-art.

"Ann Lowe: American Couturier." Winterthur Museum, Garden, and Library.

 https://www.winterthur.org/ann-lowe-american-couturier/

Baca, Murtha, Patricia Harpring, Elisa Lanzi, Linda McRae, and Ann Whiteside. *Cataloging*

 Cultural Objects: A Guide to Describing Cultural Works and Their Images. Chicago, IL:

 American Library Association, 2006.

https://static1.squarespace.com/static/64839bcb007bd907faf40da2/t/648682731ae85c003

20c7d13/1686536835929/CatalogingCulturalObjectsFullv2.pdf.

The Bangor Daily News. September 4, 1913.

https://www.newspapers.com/image/662036814/?terms=hope%20chandler%2C%20harry

%20rowe%2C%20marriage&match=1

Battles, Matthew. *Library*. New York, NY: W.W. Norton & Co., Inc., 2003.

Beall, Rebecca. "Needle & Thread: The Skill and Art of Clothing an Early 19th Century

Family." Old Sturbridge Village, YouTube. September 22, 2022.

https://youtu.be/bjRYXUmho64?si=bkocWF03hMWVGxgA

Bearman, David and John Perkins. *Standards Framework for the Computer Interchange of

Museum Information*. Silver Spring, MD: Museum Computer Network, 1993.

https://cool.culturalheritage.org/byorg/cimi/cimifram.html#appa.

Benner, Julie. "Conserving Shattered Silk in an Early 20th Century Souvenir Ribbon Quilt."

Denver Art Museum, September 25, 2014.

https://www.denverartmuseum.org/en/blog/conserving-shattered-silk-early-20th-century-

souvenir-ribbon-quilt

Blueher, William. "The Library Catalog Gets a Makeover." The Metropolitan Museum of Art,

August 4, 2021.

https://www.metmuseum.org/perspectives/articles/2021/8/library-database-maintenan

ce

Bridge, David. "SELGEM: The Data Structure." Smithsonian Institution. July 20, 2016.

https://si-siris.blogspot.com/2016/07/selgem-data-structure.html.

Brickley, Dan and Libby Miller. *FOAF Vocabulary Specification 0.99*. Paddington Edition.

January 14, 2014. http://xmlns.com/foaf/spec/.

Bunch, Lonnie, Elizabeth Pierce, Paul Backhouse, Amy Bartow-Melia, Rod Bigelow, Alison

Brown, Carole Charnow, Kippen de Alba Chu, Miki García, William Harris, Irene

Hirano, Patricia Mooradian, Victoria Ramirez, and Belinda Tate. *Excellence in DEAI.*

American Alliance of Museums, 2022. https://www.aam-us.org/wp-

content/uploads/2022/07/AAM-Excellence-in-DEAI-Report.pdf.

Burlow, Christina. "Managing Previously Unmanaged Collections: A Practical Guide for

Museums." Review of *Managing Previously Unmanaged Collections: A Practical Guide*

for Museums by Angela Kipp. *History News* 73, no. 3 (Summer 2018).

https://www.jstor.org/stable/26974989

Cameron, Fiona and Sarah Kenderdine, editors. *Theorizing Digital Cultural Heritage: A Critical*

Discourse. Cambridge, MA: The MIT Press, 2007.

Carlson, Scott, Cory Lampert, Darnelle Melvin, and Anne Washington. *Linked Data for the*

Perplexed Librarian. Chicago, IL: American Library Association, 2020. ProQuest EBook

Central. https://ebookcentral.proquest.com/lib/bates/detail.action?docID=6167567

Carreau, Lucie and Imogen Gunn. "Moving On: Rethinking Practice and Transforming Data at

the Museum of Archaeology and Anthropology, University of Cambridge." *Collections*.

Published online February 27, 2024. https://doi.org/10.1177/15501906241234943.

Chenhall, Robert G. "Making Collections Available for Research." *Council for Museum*

Anthropology Newsletter 2, no. 3 (April 1978). https://doi.org/10.1525/mua.1978.2.3.14

Chenhall, Robert G. *Museum Cataloguing in the Computer Age.* Nashville, TN: American

Association for State and Local History, 1975.

"Choosing the Best Storage Materials." Museum Textile Services.

http://www.museumtextiles.com/uploads/7/8/9/0/7890082/choosing_storage_materials.pdf

Christen, Kimberly, Alex Merrill, and Michael Wynne. "A Community of Relations: Mukurtu Hubs and Spokes." *D-Lib Magazine* 23, no. 5/6 (May/June 2017). https://doi.org/10.1045/may2017-christen.

"Clifton D. Gray." *150 Years*. Bates College. https://www.bates.edu/150-years/bates-greats/clifton-d-gray/

"Collections development policy." Collections Trust UK. https://collectionstrust.org.uk/accreditation/managing-collections/holding-and-developing-collections/collections-development-policy/.

Corona, Lara. "Museology and Communication Within the Virtual Museum." *Ulakbilge* (Türkiye) 8, no. 44 (2020). DOI: 10.7816/ulakbilge-08-44-01

"The Costume Institute." The Metropolitan Museum of Art. https://www.metmuseum.org/about-the-met/collection-areas/the-costume-institute

Cotter, Holland. "Review: In 'China: Through the Looking Glass,' Eastern Culture Meets Western Fashion." *New York Times*. May 7, 2015. https://www.nytimes.com/2015/05/08/arts/design/review-in-china-through-the-looking-glass-eastern-culture-meets-western-fashion.html

Copeland, Huey, Hal Foster, David Joselit, Pamela M. Lee, editors. "A Questionnaire on Decolonization." *October* 174 (2020). https://doi.org/10.1162/octo_a_00410

D'Arcus, Bruce and Frédéric Giasson. *The Bibliographic Ontology*. May 11, 2016. https://www.dublincore.org/specifications/bibo/bibo/

DCMI Usage Board. *DCMI Metadata Terms*. January 20, 2020.

https://www.dublincore.org/specifications/dublin-core/dcmi-terms/#section-1.

Delfino, Gina Nicole. "Recommendations for Applying Accession Numbers to Museum

Objects: Part 1." *Minnesota History Interpreter*, May 2000.

https://www.mnhs.org/sites/default/files/lhs/techtalk/techtalkmay2000.pdf.

Demopoulos, Alaina. "Women Dressing Women review: it felt like a screening of the Barbie

movie." *The Guardian*. December 20, 2023. https://www.theguardian.com/us-

news/2023/dec/20/women-dressing-women-metropolitan-museum-fashion-

exhibit#:~:text=Women%20Dressing%20Women%20is%20an,more%20ambitiously%20

for%20the%20future.

Developing a Collections Management Policy. Arlington, VA: American Alliance of Museums,

2012. https://www.aam-us.org/wp-content/uploads/2018/01/developing-a-cmp-final.pdf.

"Digital Media Studios." Bates College. https://www.bates.edu/digital-media/.

Dillenberg, Eugene. "What, if Anything, is a Museum?" *Exhibitionist* 30, no. 1 (Spring 2011).

https://web.archive.org/web/20160804112109/https://www.name-

aam.org/uploads/downloadables/EXH.spg_11/EXHIBITIONIST%20Spring%20Dillenbu

rg_2011%203-22-11.pdf

Dudley, Dorothy H., Irma Bezold Wilkinson, Huntington T. Block, Geraldine Bruckner, Richard

D. Buck, Elizabeth L. Burnham, William A. Burns, Riva Castleman, Holly M. Chaffee,

Robert G. Chenhall, et al. *Museum Registration Methods*. Washington, DC: American

Association of Museums, 1979.

Duncan, Carol. "From the Princely Gallery to the Public Art Museum." *Civilizing Rituals:*

Inside Public Art Museums. London, UK and New York, NY: Routledge, 1995.

Dunn, Heather and Paul Bourcier. "Nomenclature for Museum Cataloging." *Knowledge*

Organization 47, no. 2 (2020).

> https://web.archive.org/web/20220312051726id_/https://www.nomos-elibrary.de/10.5771/0943-7444-2020-2-183.pdf

Ennes, Anne, Maeve O'Shea, and Kyle Bryner. "Conserve O Gram 16/6: Labeling Textiles in

> Museum Collections." Washington, DC: National Park Service, 2023.

> https://www.nps.gov/articles/000/conserve-o-gram-16-6-labeling-textiles.htm

"Explore." Omeka S. Digital Scholar. omeka.org/s/explore/

Faiers, Jonathan. *Dress History: New Directions in Theory and Practice.* London, UK:

> Bloomsbury Academic, 2015. https://www.bloomsburyfashioncentral.com/encyclopedia-chapter?docid=b-9781474240536&tocid=b-9781474240536-chapter1&pdfid=9781474240536.ch-001.pdf

"The First Ladies." National Museum of American History. Smithsonian Institution.

> https://americanhistory.si.edu/explore/exhibitions/first-ladies

Frost, Stuart. "A Bastion of Colonialism: Public Perceptions of the British Museum and its

> Relationship to Empire." *Third Text* 33, no. 4-5 (2019).

Fultz, Tamara. "The Path to Standardization at Thomas J. Watson Library." The Metropolitan

> Museum of Art, August 19, 2020.

> https://www.metmuseum.org/blogs/in-circulation/2020/path-to-standardization

Glassock, Jessica. "Eighteenth-Century Silhouette and Support." *Heilbrunn Timeline of Art*

> *History*, Metropolitan Museum of Art. October 2004.

> https://www.metmuseum.org/toah/hd/18sil/hd_18sil.htm

Glassock, Jessica. "Nineteenth-Century Silhouette and Support." *Heilbrunn Timeline of Art*

History, Metropolitan Museum of Art. October 2004.

https://www.metmuseum.org/toah/hd/18sil/hd_18sil.htm

Glassock, Jessica. "Twentieth-Century Silhouette and Support." *Heilbrunn Timeline of Art*

History, Metropolitan Museum of Art. October 2004.

https://www.metmuseum.org/toah/hd/18sil/hd_18sil.htm

Given, Lisa M. and Lianne McTavish. "What's Old is New Again: The Reconvergence of

Libraries, Archives, and Museums in the Digital Age." *The Library Quarterly* 80, no. 1

(January 2010).

Gnoli, Claudio. *Introduction to Knowledge Organization*. London, UK: Facet Publishing, 2020.

"Harry W. Rowe Papers." Edmund S. Muskie Archives and Special Collections Library. Bates

College. https://bates-archives.libraryhost.com/repositories/2/resources/16

"Harry Willison Rowe." Maine, U.S. Birth Records, 1715-1922. Ancestry Library.

https://www.ancestrylibrary.com/discoveryui-

content/view/319435:1960?tid=&pid=&queryId=196cc363-149f-4e28-a308-

8886576a36ee&_phsrc=ufD31&_phstart=successSource.

Hart, Dana. "Cabinet Fever." Metropolitan Museum of Art, November 18, 2015.

https://www.metmuseum.org/blogs/in-circulation/2015/card-catalogues

Harty, Marcia, Marica Vilcek, and Brice Rhyne. "Cataloguing in the Metropolitan Museum of

Art, with a Note on Adaptations for Small Museums." *Museum Registration Methods*, 3.

Washington, D.C.: American Association of Museums, 1979.

Hill, Don. "Your Page: Regarding Harry." *Bates Magazine*. July 1, 2009.

https://www.bates.edu/news/2009/07/01/your-page-regarding-harry/

"Introduction." *Categories for the Description of Works of Art.* J. Paul Getty Institute. June 2,

2022.

https://www.getty.edu/research/publications/electronic_publications/cdwa/introduction.ht
ml

"The Isabella Project." Timesmith Dress History. https://www.timesmith.co.uk/isabella-project

Khan, Nida. "Editorial: Indigenous Erasure and the Fight for Recognition." Public Broadcasting

Service, April 19, 2022. https://www.pbs.org/wnet/exploring-hate/2022/04/19/editorial-
indigenous-erasure-and-the-fight-for-recognition/.

Kipp, Angela. *Managing Previously Unmanaged Collections: A Practical Guide for Museums*.

Lanham, MD: Rowman & Littlefield, 2016. ProQuest EBook

Central. https://ebookcentral.proquest.com/lib/bates/detail.action?docID=4503897

Klee, Carsten and Jakob Voß. *Holding Ontology*. Version 0.1.2+35. 8 December 2015.

http://dini-ag-kim.github.io/holding-ontology/holding.html#introduction.

Kratz, Jessie. "Shorter Skirts and Shoulder Pads: How World War II Changed Women's

Fashion." *Pieces of History.* The National Archives. September 8, 2014.

https://prologue.blogs.archives.gov/2014/09/08/shorter-skirts-and-shoulder-pads-how-
world-war-ii-changed-womens-fashion/.

 "Labelling a textile object." National Museums Scotland.

https://www.nms.ac.uk/about-us/our-services/training-and-guidance-for-
museums/collections-care-training/object-labelling/labelling-a-textile-object/.

"Lady Curzon's Peacock Dress." Textile Research Center. May 5, 2017.

https://trc-leiden.nl/trc-needles/individual-textiles-and-textile-types/secular-ceremonies-
and-rituals/lady-curzons-peacock-dress

Lonetree, Amy. *Decolonizing Museums: Representing Native America in National and Tribal*

Museums. Chapel Hill, NC: University of North Carolina Press, 2012.

Marden, Julia, Carolyn Li-Madeo, Noreen Whysel, and Jeff Edelstein. "Linked Open Data for

Cultural Heritage: Evolution of an Information Technology." *SIGDOC '13: Proceedings*

of the 31st ACM International Conference on Design of Communication, September

2013. https://doi.org/10.1145/2507065.2507103

Marty, Paul F. "Museum websites and museum visitors: digital museum resources and their

use." *Museum Management and Curatorship* 23, no. 1 (2008).

https://doi.org/10.1080/09647770701865410.

Marty, Paul F. and Castle U. Kim. "Trending MCN: Fifty Years of Museum Computing

Conferences and Community." *Curator* 63, no. 2 (2020). DOI: 10.1111/cura.12355

Mayrand, Pierre. "The new museology proclaimed." *Museum* 148, no. 4 (1985).

https://unesdoc.unesco.org/ark:/48223/pf0000068373.locale=en

Meyer, Andrea and Benedicte Savoy. *The Museum is Open: Towards a Transnational History*

of Museums 1750-1940. Berlin, Germany and Boston, MA: Walter de Gruyter GmbH,

2013. ProQuest EBook Central.

https://ebookcentral.proquest.com/lib/bates/detail.action?docID=1130397

Miller, Frederic M. *Arranging and Describing Archives and Manuscripts*. Chicago, IL: Society

of American Archivists, 1990.

https://babel.hathitrust.org/cgi/pt?id=mdp.39015071447638&seq=10.

The Mirror. Lewiston, ME: Bates College. 1912.

https://archive.org/details/mirror191200unse/mode/2up.

The Mirror. Lewiston, ME: Bates College. 1933.

https://archive.org/details/mirror193300unse/mode/2up.

The Mirror. Lewiston, ME: Bates College. 1936.

>   https://archive.org/details/mirror193600unse/mode/2up.

The Mirror. Lewiston, ME: Bates College. 1938.

>   https://archive.org/details/mirror193800unse/mode/2up.

"Misson & Narrative." Old Sturbridge Village. https://www.osv.org/about/mission-narrative/

Misunas, Marla and Richard Urban. "A Brief History of the Museum Computer Network."

>   Museum Computer Network. August 2007.

>   https://mcnassets.sfo3.digitaloceanspaces.com/wp-

>   content/uploads/2020/11/01164432/History-of-MCN.pdf

"MTS Resources." Museum Textile Services. http://www.museumtextiles.com/resources.html.

Network Development and MARC Standards Office. "MARC21: Harmonized USMARC and

>   CAN/MARC." Library of Congress. October 22, 1998.

>   https://www.loc.gov/marc/annmarc21.html

Olds, Rebecca, Lauren Stowell, Abby Cox, Peryn Westerhoff Nyman, Katy Stockwell,

>   Alexandra Bruce, Georgia Gough, Flora Macleod Swietlicki, Clare Campbell, Chas

>   Whatmore, and Simon Lees. "The Isabella Mactavish Fraser Gown – Pattern &

>   Construction." American Duchess Inc., 2019. PDF.

>   https://www.americanduchess.com/cdn/shop/files/Isabella_Mactavish_Fraser_Gown_Patt

>   ern.pdf?v=9450798453909004513

Onken, Rebecca. "The Peacock Dress: The Language of British Imperialism in India, 1899-

>   1905." *Armstrong Undergraduate Journal of History* 12, no. 1 (January 2022).

>   https://armstronghistoryjournal.wordpress.com/2022/01/07/the-peacock-dress-the-

>   language-of-british-imperialism-in-india-1899-1905/

"Our Mission." Mukurtu CMS. https://mukurtu.org/about/

"Northern Threads: Two centuries of dress at Maine Historical Society." *Maine Memory*

    Network, Maine Historical Society.

      http://historicclothing.mainememory.net/page/5026/display%3Fpage=1.html

"The Peacock Dress 107881." National Trust Collections.

      https://www.nationaltrustcollections.org.uk/object/107881

"Pepys Thru the Keyhole." *The Bates Student*. February 19, 1936.

      https://archive.org/details/Bates_Student_1935/page/n89/mode/2up?q=%22ruth+rowe%2

      2.

Popadić, Milan. "The beginnings of museology." *Muzeológia a Kultúrne Dedičstvo* 8, no. 2

    (2020). DOI: 10.46284/mkd.2020.8.2.1

Richardson, Harold W. "Eulogy for Harry W. Rowe." Harry W. Rowe Papers. Edmund S.

    Muskie Archives and Special Collections Library. Bates College.

Satija, Mohinder Partap. *The Theory and Practice of the Dewey Decimal Classification System*.

    San Diego, CA: Elsevier Science & Technology, 2013. ProQuest EBook Central.

      https://ebookcentral.proquest.com/lib/bates/detail.action?docID=1575007

"Secretary Weds." *Journal* (Meriden, CT). August 28, 1939.

      https://www.newspapers.com/image/676466872/?fcfToken=eyJhbGciOiJIUzI1NiIsInR5c

      CI6IkpXVCJ9.eyJmcmVlLXZpZXctaWQiOjY3NjQ2Njg3MiwiaWF0IjoxNzEwMjA2O

      DU3LCJleHAiOjE3MTAyOTMyNTd9.SKl_tCyh9m9S-Awr6-

      0LoDgFum45OsJGYlMeayqmTbQ

"The Silk Shatter Shaker Bonnet." The Conservation Center, July 28, 2016.

      https://www.theconservationcenter.com/articles/2016/7/28/the-silk-shatter-shaker-bon

net

Simmons, John E. *Museums: A History*. Lanham, MD: Rowman & Littlefield, 2016. ProQuest

    EBook Central.

    https://ebookcentral.proquest.com/lib/bates/detail.action?docID=4525003

Sparrow, Nami. "The Peacock Dress is Problematic || don't make it." YouTube. September 19,

    2021. https://youtu.be/mYxRBRYxWo8?si=BGaUViN3CbO_xEWr

Srinivasan, Ramesh, Robin Boast, Jonathan Furner, and Katherine M. Becvar. "Digital

    Museums and Diverse Cultural Knowledges: Moving Past the Traditional Catalog." *The*

    Information Society 25, no. 4 (2009). https://doi.org/10.1080/01972240903028714

Taormina, Francesca and Sara Bonini Baraldi. "Museums and digital technology: a literature

    review on organizational issues." *European Planning Studies* 30, no. 9 (2022).

    https://doi.org/10.1080/09654313.2021.2023110

Tayiana, Chao. "Use of derogatory, racist and harmful language." Digital Benin. 7 November

    2022. https://digitalbenin.org/documentation/use-of-derogatory-racist-and-harmful-

    language.

Taylor, Lou. *Establishing Dress History.* Manchester, UK and New York, NY: Manchester

    University Press, 2004.

Thanhauser, Sofi. "A Brief History of Mass-Manufactured Clothing." Literary Hub. January 27,

    2022. https://lithub.com/a-brief-history-of-mass-manufactured-clothing/.

Therman, Judith. "Ann Lowe's Barrier-Breaking Mid-Century Couture." *The New Yorker*.

    March 22, 2021. https://www.newyorker.com/magazine/2021/03/29/ann-lowes-barrier-

    breaking-mid-century-couture

Tuck, Eve and K. Wayne Yang. "Decolonization is not a metaphor." *Decolonization:*

Indigeneity, Education, and Society 1, no. 1 (2012).

Turner, Hannah. *Cataloguing Culture: Legacies of Colonialism in Museum Documentation*.

Vancouver, BC: University of British Columbia Press, 2020.

"Twelve Students Make X-Mas Trip to Indianapolis." *The Bates Student*. December 11, 1935.

https://archive.org/details/Bates_Student_1935/page/n65/mode/2up?q=%22ruth+rowe%2

2.

"Understanding MARC." Library of Congress. October 27, 2009.

https://www.loc.gov/marc/umb/um01to06.html

"Understanding Underwear: The Victorian Crinoline." European Fashion Heritage Association.

February 14, 2020. https://fashionheritage.eu/understanding-underwear-the-

crinoline/#:~:text=The%20steel%2Dhooped%20cage%20crinolines,every%20social%20

standing%20and%20class

Van Hooland, Seth and Ruben Verborgh. *Linked Data for Libraries, Archives and Museums:*

How to clean, link and publish your metadata. London, UK: Facet Publishing, 2014.

ProQuest Ebook Central.

https://ebookcentral.proquest.com/lib/bates/detail.action?docID=1993231

Vance, David. "Computers and Registration: A Definition of Terms." *Museum Registration*

Methods, 3. Washington, D.C.: American Association of Museums, 1979.

"Vocabs." Linked Open Vocabularies. Ontology Engineering Group, Universidad Politécnica de

Madrid. https://lov.linkeddata.es/dataset/lov/.

"Vocabularies." *Omeka S User Manual*. Digital Scholar.

omeka.org/s/docs/user-manual/content/vocabularies

"Understanding Underwear: The Victorian Crinoline." European Fashion Heritage Association.

February 14, 2020. https://fashionheritage.eu/understanding-underwear-the-

crinoline/#:~:text=The%20steel%2Dhooped%20cage%20crinolines,every%20social%20

standing%20and%20class

Wang, Lia. "'China: Through the Looking Glass': An Embrace of Fantasy." *GenerAsians*.

Wellesley, MA: Wellesley College, 2015.

https://cs.wellesley.edu/~lianka110/beta/article2.html#:~:text=There%20is%20always%2

0more%20dialogue,of%20fashion%20design%20that%20is

"What are Archives?" Society of American Archivists.

https://www2.archivists.org/about-archives.

Whittington, Vanessa. "Decolonising the museum? Dilemmas, possibilities, alternatives."

Culture Unbound 13, no. 2 (2021). https://doi.org/10.3384/cu.3296

Wightman-Stone, Danielle. "10 Fashion Exhibitions to See in 2023." *FashionUnited*. January 6,

2023. https://fashionunited.com/news/culture/10-fashion-exhibitions-to-see-in-

2023/2023010651546

Wood, Elizabeth, Rainey Tisdale, and Trevor Jones. *Active Collections*. New York, NY:

Routledge, 2018.

Zoller, Gabriela and Katie DeMarsh. "For the Record: Museum Cataloging from a Library and

Information Science Perspective." *Art Documentation* 32, no. 1 (2013).

https://www.jstor.org/stable/10.1086/669989