

ALTERATIONS:
THE EFFECTS OF DIGITIZATION
ON THE STUDY OF
ACADEMIC COSTUME COLLECTIONS

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Alterations:
The Effects of Digitization on the Study of
Academic Costume Collections

A Thesis

Submitted to the Faculty

of

Drexel University

by

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in partial fulfillment of the

requirements for the degree

of

Master of Science in Arts Administration

December 2015

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ACKNOWLEDGEMENTS

I would like to thank Clare Sauro (Drexel University) for her generous advice as I developed the topic of this thesis, and for participating in an interview; and Dr. Karin J. Bohleke (Shippensburg University), Meghan Grossman Hansen (FIDM Museum), Marcella Milio Martin (Philadelphia University), Ingrid Mida (Ryerson University) and Tamsen Young (the Museum at FIT) for granting the additional interviews that made this thesis possible.

I would also like to thank Julie Goodman Hawkins and Cecelia Fitzgibbon for their academic and career advisement during my years in the Arts Administration program; Neville Vakharia for his thoughtful advisement of this thesis; Martha Lucy for her support while I prepared to begin my research; and Alison Lewis for welcoming me into her Library Science course on Special Collections and sparking my interest in collections management.

And finally, I would like to thank my husband, Matthew Sepielli, who was my partner in this endeavor, as he is in all others; and my parents, Steven and Lynn Ward, who found great amusement in my preoccupation with fashion while I was a child, yet always offer their unquestioning support in all of my pursuits.

TABLE OF CONTENTS

LIST OF FIGURES	v
ABSTRACT	vi
INTRODUCTION	1
METHODOLOGY	15
CHAPTER ONE – FINDINGS: DIGITIZATION AND PUBLIC ENGAGEMENT	17
CHAPTER TWO – FINDINGS: SOCIAL MEDIA AS DIGITIZATION	23
CHAPTER THREE – FINDINGS: DIGITIZATION AND COLLECTIONS MANAGEMENT	29
CHAPTER FOUR – FINDINGS: IMPLICATIONS FOR GARMENT CONSERVATION	33
CHAPTER FIVE – FINDINGS: THE DIGITIZED EXHIBITION	36
CONCLUSION	40
APPENDIX: INTERVIEW QUESTIONS	41
REFERENCES	42

LIST OF FIGURES

FIGURE 1 – EXAMPLE OF BEHIND THE SCENES PHOTOGRAPHY VIA INSTAGRAM	26
FIGURE 2 – EXAMPLE OF GARMENT DETAIL VIA INSTAGRAM	27
FIGURE 3 – EXAMPLE OF INFORMATIONAL BLOG POST	28

ABSTRACT

This thesis explores the effects of digitization on the study and exhibition of historic costume collections in colleges and universities. Based on interviews with key curatorial staff at six academic costume collections, I will argue that digitization, although expensive and time consuming, is essential to managing an academic costume collection and the associated outreach and education. Curators and collections staff who make their collections available online, either in the form of a catalogue database or more informally through social media, have greater intellectual control over their collections. They have the potential to reach more users in a broader geographic area and have more productive appointments with researchers. When sufficient digital photography is available, wear and tear of fragile collection items can be mitigated because the need to pull objects from storage is reduced. Producing digital photography also lays the groundwork for digital exhibitions and digital components to accompany physical exhibitions.

INTRODUCTION

The study of costume, while often historically dismissed as trivial in nature and only of interest to women, has recently become a source of widespread fascination. Blockbuster exhibitions at museums such as the Costume Institute of the Metropolitan Museum of Art, hit movies and television shows that provide an inside look into the fashion industry, and the do-it-yourself nature of publishing, where anyone with a digital camera and an internet connection can start a style blog, have all contributed to the elevated public interest in the history and theory of fashion. It's a subject relevant to fields as far-reaching as gender studies and material culture.

Art, history and cultural museums, as well as universities that offer design programs, often contain valuable source material for the study of fashion history. Items represented within historic costume collections include garments and accessories that have been preserved as historical artifacts. Such objects are fragile and difficult to display. Use of costume pieces as a primary source, especially within a teaching collection, typically involves touching and handling of the garments in order to understand their details and general construction. While such handling is bound to occur in alignment with the collection's mission, the resulting wear and tear must be balanced with the need to preserve the garments for future researchers to study.

Current economic conditions dictate that many museums and other visual art departments continue to be affected by budget cuts. Institutions are pulling funding and other resources, including staffing and exhibition space, from historic costume collections in

particular. Digitization efforts, while costly and sometimes overwhelming, are one method of increasing accessibility for users of these collections. Researchers are turning more often to the web to locate primary sources, and pieces that cannot be located online are therefore less likely to be found at all. While fashion design students, researchers and curators often need to examine a garment up close, handling it to find details such as seams and the texture of surface decorations, it is possible that curiosity-driven learners and those in the early stages of their research might be able to work from images alone.

The prospect of digitizing a historic costume collection offers a set of problems, one of which is the concern that the user might not fully experience a garment by viewing it online instead of in person. This is, of course, a concern common to the digitization of other art forms as well. However, costume differs from visual art, to take one example, in terms of intent: in general terms, most works of drawing, painting and sculpture were created to be viewed, whereas most garments were created to be worn. The problem of what is lost when a viewer sees a garment on a screen relates to a problem experienced by curators of physical costume exhibitions, who must contend with the reality that even in-person visitors will likely see the garment on a mannequin, and possibly behind glass, detached from its original purpose.

Alexandra Palmer broadly discusses this core problem in “Untouchable: Creating Desire and Knowledge in Museum Costume Collections” (2006). This article is not an investigation into digitization; rather, the author describes the problem of the in-person museum visitor, who understands fashion in terms of wearing and understands shopping in terms of touching and trying on. Reflecting on her own training and career as a curator of historic costume and remembering various exhibitions (curated by herself and others), she explores the issue of making a physical costume exhibition accessible to visitors who are not allowed to handle or

wear the garments. In detailing what makes for a successful exhibition, Palmer returns repeatedly to two main themes: the ongoing struggle between conservation concerns (preserving the garment) and curatorial concerns (exhibiting the garment), and the need for both historical accuracy and great visual results. In her experience: “The challenge is for curators and exhibition designers to move the visitor beyond a visual shopping excursion and to encourage them to look and think critically about what is on view” (2006, 57-58). Palmer concludes by describing her current research, a curatorial project that highlights garments alongside historical records of their design, forensic photographs detailing their conservation, and the time and cost associated with the process (2006).

Several researchers have studied the need for preservation of two-dimensional relics that illustrate and otherwise capture the history of fashion. These items are simpler to digitize than three-dimensional garments ever could be, but they set an important precedent in terms of the value of fashion artifacts and their digital surrogates.

In “Style and Substance: Fashion in Twenty-First Century Research Libraries,” Lindsay M. King and Russell T. Clement examine the reasons that fashion resources belong in academic art libraries (2012). They identify the fashion-related resources appropriate for academic library collections, including reference books, scholarly journals, trade publications, consumer-oriented magazines, museum exhibition catalogs, and subscriptions to digital repositories of museum and runway photography. They also study faculty and student use of fashion-related resources, which range from historic African fashion photography to 19th-century fabric swatches, at Northwestern University Library, finding that the programs of study offered affect the types of resources that should be available. King and Clement conclude that due to the rise of interdisciplinary research (particularly in history, art history, material culture, sociology and

anthropology), the recent proliferation of types of fashion publications, and the broader interest in fashion research spurred by certain popular films, television shows, museum exhibitions and blogs, these fashion-related resources have become essential in university libraries (2012).

King and Clement do not discuss the digitization of these fashion resources, but others have broached the subject. Alexander John Kosztowny (2015) focuses on the preservation of trend forecasting books: the publications predicting which colors, fabrics and silhouettes will be popular in upcoming seasons, used by many fashion designers and retailers to plan their offerings accordingly. Kosztowny categorizes these books as ephemera, noting that they are meant for immediate rather than long-term use, yet argues that their preservation is worthwhile due to their value in documenting fashion history and material culture. He interviews individuals who either use trend forecasting books or might benefit from their preservation, including trend forecasters themselves as well as fashion designers, fashion school faculty members and librarians, and historic costume curators. As the results of these interviews vary wildly, Kosztowny goes on to discuss the benefits and drawbacks of saving physical copies of the books versus creating digital versions, concluding that while digitized versions are better than none at all, they are insufficient. He argues that the physical books have tactile qualities, such as fabric swatches and poms of colored thread, that are important in documenting the design process and that cannot be accurately reproduced in digital images (Kosztowny 2015).

The last several years have also brought a surge in efforts to preserve historical fashion magazines through the creation of digital repositories. In 2012, ProQuest collaborated with Condé Nast to digitize the entire history of *Vogue*. In "The *Vogue* Archive," Rebecca Vnuk reports on the hundreds of thousands of images, articles and advertisements dating back to 1892 that have been indexed and made searchable for ProQuest users (2012). Content is

available in the format of full magazine pages or interactive page spreads. Although Vnuk experienced search glitches, such as suggestion and autofill failures, she calls the archive a must for all public and academic libraries that collect fashion resources, citing its broad relevance to historic research (2012).

In 2013, ProQuest and Fairchild Fashion Media announced that they would build a digital archive of *Women's Wear Daily*, arguably the fashion industry's publication of record (PR Newswire). In 2014, portions of *Godey's Magazine*, the most popular American women's periodical of the mid-1800s, were made available online through HathiTrust (Pronovost). In 2015, ProQuest announced yet another such collaboration, this time planning to digitize the full archive of *Harper's Bazaar*, claiming that the project would aid research in areas ranging from art and design to gender and women's studies to marketing and business (PR Newswire).

One of the largest archives yet, Europeana Fashion, launched in 2013, according to Liza Foreman in an article for *The New York Times* (2013). In "Europe's Fashion History, Just a Click Away," Foreman describes the new portal's 100,000 digital resources – ranging from garments, exhibitions and runway shots to letters and newspaper articles as old as the 1700s – gathered from 22 of Europe's museums and institutions. The organizers of Europeana Fashion intend to have 700,000 records available by 2015, all searchable by item, date, designer or keyword. Coordinated by Fondazione Rinascimento Digitale, an Italian non-profit organization, and funded by the European Commission and participating institutions, the portal will be administered and updated by a Europeana Fashion Foundation after 2015 (Foreman 2013).

Recent efforts in fashion digitization are not limited to those with a strictly academic purpose. In "Valentino's Modern Museum," Eric Wilson reports for *The New York Times* on the Valentino Garavani Virtual Museum, a free desktop application that is meant to give design

students and the public access to the designer's archives (2011). Wilson discusses the app's creation as an alternative to a physical museum like the Gucci Museo in Florence, Italy, which opened in 2011. Valentino Garavani Virtual Museum offers the features of curators' dreams, such as rotating views, zooming capabilities, and the inclusion of design sketches and photographs of actual wearings. (It should be noted here that some museums, including the Metropolitan Museum of Art, focus deliberately on the designer and the garment and rarely include images of the garment on the wearer [Morena 2015].) Wilson reports on the designer's perspective on digitization: "Mr. Garavani himself said that while the experience of seeing his work on a computer screen might not compare to seeing it in person, 'it is fantastic for everybody to see what I did.'" Garavani, as reported by Wilson, alludes multiple times to the benefits of digital availability:

'A real museum in a city, whatever is the city, is something that in the first year or maybe three years, people will go and look at the dresses...But after a long time, political people may change, and maybe the museum doesn't exist anymore. Maybe the dresses are going to the Marchés aux Puces or Portobello, or I don't know where. It's much better to have a virtual museum, so people can see it all the time' (2011).

Not to be outdone, the Gucci Museo followed the opening of its Florence location in 2011 with the 2014 launch of an extensive digital archive of its exhibitions. Lisa Lockwood reports for *Women's Wear Daily* on the museum's digital offerings, which include its permanent exhibitions and an archive of past temporary exhibitions (2014). The viewer can walk through various "rooms" to see photos of garments and 360-degree views of the physical museum space, finding videos along the way (Lockwood 2014).

Another designer, Zandra Rhodes, has placed a vast archive of her work online, as reported by Emily Spivack for the *Smithsonian* (2013). Spivack writes that in a project with the University for the Creative Arts in England, Rhodes made more than 500 pieces from her various

collections and thousands of her sketches available to the public as the Zandra Rhodes Digital Study Collection. The collections, which can be browsed or searched, are meant to assist fashion students and to serve more broadly as a comprehensive archive of the designer's 50-year career (Spivack 2013).

As designers themselves advocate for digital repositories, costume curators have also been searching in recent years for ways to make the collections in their care widely available online. In "Digitized Historic Costume Collections: Inspiring the Future while Preserving the Past," curator Clare Sauro explores the problem of hands-on use of historic costume collections in museums and universities (2009). Teaching collections are extensively handled by fashion designers and design students, leading to deterioration that conflicts with the need to preserve the fragile garments for future generations of researchers. The author introduces digitization as a possible solution. Through independent study of the websites of selected collections (the Costume Institute at the Metropolitan Museum of Art, the Victoria and Albert Museum, the Powerhouse Museum, the Museum at FIT, the Dorothea June Grossbart Historic Costume Collection at Wayne State University, and the Drexel Historic Costume Collection), Sauro finds that digitization is promising, as it offers greater access to collections and opportunities for interaction. She highlights social tagging as one of the most exciting developments in the interactive features of digitized collections. She notes, however, that digitization is expensive and time consuming, especially for university collections with limited resources, and errors ranging from improperly dressed mannequins to incorrect metadata frequently occur (Sauro 2009).

Social tagging, as mentioned by Sauro, has been further researched as a possible tool for organizing digital museum repositories. In one such study, Cho Chung-Wen and co-authors

explore whether social tagging is effective in helping science museum website users to find, organize and manage digital resources (2012). Social tagging in this context is an interactive mechanism that allows the public to freely categorize images according to words or phrases of the users' own choosing, as well as to share personal opinions of these images. The authors built a social tagging platform on the National Taiwan Science Education Center's digital repository, then promoted a month-long activity encouraging visitors to use social tags. They also distributed a questionnaire to participants in the tagging activity, resulting in 86 usable responses. The authors find that social tagging improves user queries, as tags provide language familiar to the public that may not have occurred to curators. They also report that 85% of users agreed that social tags assisted them in their searches, and that social tags informed the search results in more than 40% of user queries (Chung-Wen et al 2012).

Among recent developments in costume digitization, Deena Campbell reports for *The New York Times* on an upgrade of the online offerings of the Museum at the Fashion Institute of Technology in New York, NY (2012). In 2012, the museum more than doubled the fashion and accessory items available for viewing on its website, a project made possible by the impending release of a photography-heavy book: as objects were photographed for the publication, these photographs were added to the museum's website. Campbell reports that as of that September, the museum planned to upload 50 additional objects to its digital repository each month, to add exhibitions from the last 15 years to its website, to create an online-only exhibition, and to integrate the museum's Pinterest account with its digitized collection. The museum also planned to add a social tagging element to its digitized collection, allowing users to create and share collections of images (Campbell 2012).

Ryerson University in Toronto, Canada is home to another collection whose digitization is fully underway. The university's curator, Ingrid Mida, describes the rationale behind her decision to embark on a digitization project, which she hopes will make the Ryerson Fashion Research Collection into an open and accessible resource for research (2013). As part of her research, Mida studied the websites of several prominent costume collections that have begun to digitize, including the Costume Institute at the Metropolitan Museum of Art, the Victoria and Albert Museum, the Museum at FIT, Kent State University Museum, the Drexel University Historic Costume Collection, and the Chicago History Museum's Costume & Textiles Collection. She notes: "Seeing a dress in a photo is a very different experience than examining the details of cut, construction and embellishment or searching for evidence of how the garment was worn, used or altered over time" (Mida 2013). However, she counters that digitizing is important due to the fragility of historic costume pieces and the subsequent need to handle them as little as possible, as well as the difficulty researchers can have in attempting to gain access to physical costume collections (Mida 2013).

Although my research is not intended to identify best practices for digitization, there are a handful of articles exploring the technical and logistical problems specific to digitizing costume collections. Jeff Trzeciak, Shawn McCann and Matthew Martin, all academic librarians, offer a technical guide to collection digitization (2006). In a case study of Digital Dress, a project of Wayne State University that brought together four Detroit-area costume collections for digitization, the authors focus on digitizing garments as an example that they hope can be applied in digitizing all types of three-dimensional museum objects. They discuss the challenges of incorporating four collections into one repository: each collection was to retain its own identity while also being searchable as part of the whole; the partners had to agree on a single

collection development policy based on the strengths of each collection as well as the objects' condition and historic significance; and shared copyright issues had to be addressed. In the process of this relatively early digitization project, the partners deemed multiple views and detail/interior photographs essential, and 360-degree rotational views superfluous to the study of the garments. They also chose to make low-resolution images free and publicly available, while high-resolution images would be stored for archival purposes and for user purchase, with each institution retaining the rights to images of its own pieces. Trzeciak and his co-authors detail their attempts to safeguard their photographs against data loss and the evolution of technology, and ultimately to promote long-term survival; they archive their images in multiple formats, including JPEG and TIFF, and duplicate each on DVD and a dedicated server. The authors also outline a method of evaluating the project, but do not provide results, stating that evaluation is ongoing (Trzeciak et al 2006).

In an article more deliberately specific to costume digitization, Abby Goodrum and Kathi Martin consider the users of Drexel University's historic costume collection (1999). As the authors considered undertaking the digitization of the Drexel Historic Costume Collection, they researched how they might determine appropriate levels of access for various users. Their nine-step analysis included identifying the populations to be served by the digitized collection, the needs of these users, and their access points. The authors interviewed students and faculty at Drexel's College of Media Arts & Design and sought feedback from fashion design educators at the 1998 meeting of the International Textile and Apparel Association. Then, they deployed a questionnaire to members of the user groups identified by their peers. They found that their main audiences were fashion and textile designers, design students, and scholars (defined as historians, archivists and design faculty). Based on their findings, they suggest that the "visual

surrogate” is not an adequate substitute for the actual costume piece, but is useful in deciding whether the costume piece warrants personal inspection (Goodrum and Martin 1999).

Diana Saiki also discusses her pursuit of best practices for digital images of costume pieces in "Featuring Clothing and Textile Collections Online" (2008). Saiki has analyzed the features of digital images on costume collection websites in order to develop best practices for displaying these images. Specifically, she wanted to study the ways that costume collections use digital images online, the ways that costume pieces are photographed, and the text that accompanies online images of costume pieces. The author accomplished her research by conducting content analyses of the websites of 57 costume and textile collections housed in universities (28%) and in museums (72%). She worked under the assumption that a digital image is akin to a replication piece, rather than a substitute for the original item. The author uses her findings to suggest that digitized costume pieces and databases are most useful as marketing tools and cannot replace the original objects in scholarly pursuits. She further suggests that costume collection websites should feature a small number of items rather than attempting to show every piece, and that photo enlargement capabilities, multiple views of the garment, and dress forms/mannequins are unnecessary (Saiki 2008).

In the realm of cataloguing, historic costume pieces present a specific problem. Marcia Lei Zeng describes her attempts to develop a cataloguing system for the historic costume holdings at the Kent State University Museum, and to evaluate whether existing standards for metadata were appropriate for a fashion collection (1999). The author selected 42 costume pieces from the collection and created three types of metadata for each: (1) the Anglo-American Cataloguing Rules in use with Machine-Readable Cataloguing (MARC) formats, (2) Dublin Core, and (3) the Visual Resources Association (VRA) Core Categories for Visual Resources. Upon

comparison of the three types of metadata, Zeng adopted a modified version of the VRA guidelines to catalogue the digitized costume collection. She found that MARC and Dublin Core are suited to documents and document-like objects rather than to garments (Zeng 1999).

In addition to the process-oriented literature, there is a broad, cross-disciplinary exploration of the digital image as an object worthy of preservation and study. In researching the digitization of books, Paul Conway examines digital surrogates as they relate to the original (2011). He aims to evaluate whether digitized materials have archival quality, noting that their quality (or lack thereof) can affect the trustworthiness of their holding institutions. He conducts an analysis of HathiTrust's content to develop metrics for archival quality, a term that has no legal definition. The author's findings establish methods of measuring error in digitized books at the data, page, and volume levels. Conway also presents standards for digitized books, which he states must be readable online, printable on demand, and searchable by text – ideas that are transferable to other types of collections (Conway 2011).

Jan Marontate explores the preservation of non-traditional works of art, making points that are relevant here because the validity of the digital image as an art object is addressed (2005). Marontate discusses issues of permanence raised by recent technical practices in the visual arts, including digital artworks, time-based media, variable media, and contingent objects. She provides a theoretical background regarding the art object, which is not always representative of the creative act, and suggests solutions for preserving the creative act. Her observations are drawn from fieldwork, archival research, and interviews with artists and arts administrators about the preservation challenges presented by contemporary art-making practices. The author proposes that art technicians and conservators be empowered to make curatorial decisions throughout the preservation process, creating new art objects as needed,

but acknowledges that museum hierarchies will resist such a change. She encourages arts professionals to adopt new attitudes about reproduction or emulation in place of the original work of art (Marontate 2005).

Jill Morena delves into this question as it relates specifically to historic costume collections through extensive independent study of a few of the garments offered online by the Metropolitan Museum of Art and the Victoria and Albert Museum (2015). Morena explores the arguments for and against the digital reproduction of the physical object, specifically the garment, as an object in its own right, arguing that digital repositories “have the potential to restore unique time and place to the object or garment (2015, 89).” She proposes that the reproduction, referenced throughout as “the digital garment,” can provide the viewer with the item’s context and historical significance as readily as an in-person viewing of the garment itself in a gallery or museum. Examples include photographs that include background views of curators, their offices, or the act of dressing a form; photographs that depict wear and tear versus those that are stylized and meant to reflect an item’s beauty while minimizing its imperfections; photographs taken on various mannequins over time that illustrate the evolution of curatorial choices in garment display; or even photographs of correspondence between the garment’s donor and the museum. None of these images alone is really neutral or objective, nor is it more truthful than the others. However, Morena argues that displaying any available images together provides a more complete look at the object’s entire history, which includes its wear by the original owner(s), its acquisition by a museum, its conservation and storage, and the curatorial choices made on its behalf (2015).

Costume curators use digital aids in additional and inventive ways, as evidenced by an article by Stuart Frost, a gallery educator at the Victoria & Albert Museum in London, England

who wrote about museum visitors' fascination with the conservation process (2009). He advocates for the use of the museum website as a way for visitors to understand, possibly through short films or digital animation, how conservation techniques have affected the appearance of a given object. He also recounts an instance in which the museum's senior textile conservator set out to create an accurate reproduction of an ancient Egyptian tunic that museum visitors could try on. Real tapestry appliques were too expensive, but the conservator worked with a contractor to digitally print a reproduction of the fabric, helping to link the reproduction and the original tunic in visitors' minds (Frost 2009).

Throughout this thesis, I will argue that digitization is essential to raising interest in a costume collection. I have found that collections made available online, either through formal databases, through social media, or through both of these methods, have the potential to be used more widely than collections that have not been digitized; that digitization is a tool for internal collections management; that digitization can alleviate certain conservation concerns; and that digital photography can help to make digital exhibition components possible. In these ways, digitizing a costume collection can make access possible for users who would not have otherwise been able to view the garments, and can extend the lives of garments and entire exhibitions for future generations of users.

METHODOLOGY

To accomplish my research, I conducted interviews with key curatorial staff members at six academically based costume collections in the United States and Canada, all of whom have undertaken digitization projects of various size, scope and stage of completion. I held an in-person interview with Clare Sauro, curator of the Robert and Penny Fox Historic Costume Collection at Drexel University in Philadelphia, Pennsylvania. I also held phone interviews with Dr. Karin J. Bohleke, director of the Fashion Archives and Museum at Shippensburg University in Shippensburg, Pennsylvania; Meghan Grossman Hansen, registrar for the FIDM Museum at the Fashion Institute of Design & Merchandising in Los Angeles, California; Marcella Milio Martin, curator of the Textile and Costume Collection at Philadelphia University in Philadelphia, Pennsylvania; and Tamsen Young, digital media and strategic initiatives manager at the Museum at FIT of the Fashion Institute of Technology in New York, New York. Finally, I conducted an interview via email with Ingrid Mida, collection coordinator and acting curator of the Ryerson Fashion Research Collection at Ryerson University in Toronto, Canada

I prepared five questions for these interviews (see appendix). I asked all five questions of all six interviewees to give the interviews structure and to allow for comparison between their responses, but also encouraged the interviewees to discuss the projects and issues surrounding digitization that they considered most important. I recorded and transcribed the five interviews that took place either in person or over the phone, and saved a record of the email interview.

Among the limitations of this study was its exclusive focus on costume collections within academic settings. Similar collections in museum settings were not investigated. I did not contact every academic costume collection in North America; rather, I limited my study to six samples. I chose these institutions upon learning that their curatorial staff members are actively working on digitization projects and are therefore in a position to offer insight into the results of such projects. In addition to these six institutions, I had hoped to include Kent State University, whose costume collection already has a strong digital presence; however, members of the curatorial staff did not respond to interview requests.

Additionally, I limited my study to the effects of digitization on the ways that costume collections are used, including for hands-on research and for public exhibition – a topic that is not yet included in the literature on the subject. I did not explore the best methods of digitizing costume collections, nor did I address the issues that arise as curators attempt to classify costume pieces in a searchable manner. Further, I have not attempted to offer insight into the software and systems available for use in digital cataloging.

CHAPTER ONE – FINDINGS: DIGITIZATION AND PUBLIC ENGAGEMENT

The central question I sought to answer involves the effects of digitization on public engagement. In reviewing the literature, I found numerous philosophical questions on the value of digital photographs of collections items: do photographs replace the need to see the physical object? Are the photographs, themselves, valuable in their own right and therefore worthy of preservation and study? When it comes to garments, whose primary purpose was to be worn (as compared to most works of visual art, whose primary purpose was to be viewed), does the digital photograph take the viewer yet another step further from the intended experience: the wearing of the garment?

In her 2015 article, Jill Morena argues that a collection of digital photographs of an object, when presented together, can actually provide a fuller picture of the object and its history than an in-person viewing possibly could:

In the digital database record, the different iterations of the animated garment through photography for exhibition or publication, as well as more practical images capturing the physical attributes of the garment for the purposes of care and documentation, can be retained and discovered by the viewer. The ability to see all of these images at once provides a unique visual trajectory of the lifetime of the object, its changes in appearance and structure, in interpretation, and its history within or across institutions (2015, 93).

While Morena makes a case for digitization in terms of its own inherent value, my question was whether a digitization project might lead to a larger following for a given collection: would the online availability of more photographs and information attract more visitors and researchers to come and see the collections in person? Or, might some visitors view

the photographs and information they find online as an acceptable substitute for seeing the garments in person, thereby causing a drop in visitation? I had hoped to find the former idea to be prevalent: that public access is always a good thing for a collection. Five of the six curators I spoke with are emphatically in agreement, while the sixth provided a neutral assessment. Excerpts from their responses during our conversations are provided in the following pages.

Ingrid Mida (Ryerson University) tried two years ago to provide public access to the Ryerson Fashion Research Collection using Omeka, a free, open-source platform. She made progress with the help of students and volunteers, but when funding was cut, the digitization project became impossible. All information about the collection is currently stored in a spreadsheet on her computer as she looks for alternatives. During our correspondence, Mida wrote: "I think having photos and information online is critical to access and leads to more visits. Since I revived a dormant collection, I have been trying to communicate the wealth of riches that are here and it is impossible without some kind of web presence." She also sees the value for researchers:

[Digitization] would let the user figure out whether or not it was worth coming for a research visit. As it is now, they have to email me and tell me their research question and I have to identify which items to pull out for them. On occasion this serves them better because people do not always know what to ask for and I can guide them through it, but I simply do not have enough time to service everyone's questions promptly. And of course, some people are simply intimidated by the process of having to ask.

Marcella Milio Martin (Philadelphia University) agreed that a digital repository is helpful to researchers who are preparing for a visit, and is never a detriment to visitorship. The Textile and Costume Collection at Philadelphia University currently has 9,000 textile swatches available to the public online via a service called Tapestry, funded by the Barra Foundation in 2012. Some costume pieces are available via Artstor, a non-profit digital library resource, to the Philadelphia

University community only. Martin is planning to conduct research and take high-quality photographs of each object before making the database records available to the public. When asked whether online images could substitute for the experience of seeing a garment in person, she replied:

I absolutely don't think so. I think that digital collections are useful to narrow your search when you're researching something and it would help people to know what's available in the collection and to guide them as they're preparing their research, but in terms of e-museums or virtual museums, I remember when Valentino had that e-museum, the virtual museum that they created. It was a beautiful concept and it was interesting but I think I opened it once after I downloaded it and never again, because you just cannot, in my opinion, you cannot replace actually seeing an object with an image.

Meghan Grossman Hansen (FIDM Museum) agreed with Mida and Martin regarding the value of digitization to researchers. At this point, the FIDM Museum has only 250 of its 15,000 objects available online. This was accomplished using Canto Cumulus, a digital asset management system that was originally purchased to digitize the museum's collection of runway photographs. Hansen is implementing PastPerfect, a widely used museum database software package, to digitize the museum's costume pieces. She cited a brief, informal survey that she conducted via the Registrars Committee of the American Alliance of Museums (RCAAM) listserv when she was choosing a database. Hansen used the listserv to survey her colleagues in museums and academia regarding the outcomes in terms of research appointments. She told me: "Pretty much everybody agreed that they had better, more effective research appointments with researchers and they had more outreach – there were just overall more appointments once they launched their websites."

Regarding the concern that users might find what they need online and look no further, Hansen said:

Our curators feel that a picture is not going to replace the experience of physically looking at the object in person. If a researcher is really interested in material culture, or if a curator is planning an exhibition, they're going to probably need to see that object in person. There's probably going to be details about it they can't get out of the catalog record that they see online. But, the pure fact that they can see the rest of our collection ahead of time and make a list of what they want to see – it helps us do our jobs. When researchers contact us with a really vague request – our policy is ten objects for an hour appointment for outside researchers. If they aren't very clear on what they want to look at, they may not see that specific thing that really would make their project come together. Having the researcher take the time to browse through our collection will make their one hour more fruitful, I think, then it might have been."

Clare Sauro (Drexel University) agrees that digitization is essential to researchers. The Robert and Penny Fox Historic Costume Collection at Drexel University recently received a gift of \$1 million and was renamed in honor of the donors. With this funding, Sauro has been able to hire a staff member to coordinate an impending digitization project. Sauro has also chosen and purchased software from The Museum System (TMS) for the creation of a database. The software is currently in the process of customization to suit the collection, while also meeting Drexel's extensive security requirements. Sauro's plan is to create digitized versions of objects that will be highly detailed and interactive, such that some researchers might be able to use them exclusively:

The technology that people expect when they go shopping, like when you go to the Gap, you can do this with your finger [motions] on your touch screen and enlarge it and spin it – knock on wood, we should be able to do that. I want to see it happen... People expect more now. With the phones, with the iPad, with the touch screens, people expect more interactive information. That is really important to us. The way people research has changed. The way people browse – it's a completely different world than it was ten years ago. In the past, museum databases could feel standoffish. I want it to have the correct content, but I want it to be engaging.

Sauro has experienced a great increase in the interest in her collection, but finds that staffing and time limitations make it impossible right now to meet the needs of everyone who would like to visit. She sees online offerings as a way to help with unmet demand:

In some ways, digitizing the collection allows us to share without having to physically bring in tour groups, which are draining. They are exhausting for the person giving the tour. You have to monitor the people coming in. There are space issues, there are safety issues... If a class wants to come see something, myself or Monica, the collections manager, has to make a selection, they have to pull the selection, they have to handle all the objects, they have to field the questions. For a half an hour, 45-minute visit, there's at least an hour of prep work on either side. There's only so many hours in the day. The interest and the demand for getting into the collection is much greater than what we can give.

Of the five curators who agreed that online access is essential, three are so determined to make digital images available online that they are currently releasing photographs that are less than perfect in quality. Hansen (FIDM Museum) describes the problem, and her solution, as such:

We've decided that...we are going to release images that are not professionally photographed. If you go to the Metropolitan Museum's database, you'll see a lot of documentary shots of an object, a garment or shoes or purse or something like that on a table against a gray background. That's the kind of thing we're going to be releasing when we don't have a better photograph available. And, we will gradually upgrade the photos that are available as we get photographs at a higher quality, with appropriate lighting and so forth. But, the amount of time it takes to do that is not feasible for us at this point. So, our priority is access through the internet.

Dr. Karin Bohleke (Shippensburg University), who calls her current images "diagnostics," is using the same process of releasing any available photograph immediately into her PastPerfect database system. Her reasoning is that a purely diagnostic photograph, taken quickly by herself or a volunteer for non-display purposes, is better than no photograph at all. She, too, will replace those she considers lower quality as professional photographs are taken.

Sauro (Drexel University) has similar plans, with the additional consideration of conservation needs. She also references the Metropolitan Museum's collection:

There are things that just not healthy enough, not strong enough, to go on a form. If you look at the database at the Metropolitan, they have things that are just photographed laying down. That's just what it is. That's as good as it's going to get. We want to make sure that we're mindful of conservation needs. I've seen things photographed where it's

like, 'Oh, that's really not on the right form, that's getting stressed.' I want to do away with that. We want to make sure no one can say, 'They don't take care of their collection.'

Of all six curators I interviewed, the sole dissenter to the idea that online access drives visitation was Tamsen Young (Museum at FIT). To date, the Museum at FIT has made 1,000 of its 50,000 objects available online using eMuseum, an offering of The Museum System (TMS). While Young does not think online access has a negative effect on visitation, she strongly believes that attendance is unrelated to her museum's online offerings.

With five interview participants in agreement, it is likely that many curators see digitization, or making objects from a collection available to the public through online repositories, as a way to increase interest in their collections and to drive visitors to seek out opportunities to view the physical objects. Online offerings do not seem to dissuade researchers and other potential visitors from visiting the collections in person; rather, they are a tool for raising awareness of a collection's holdings and helping researchers to determine which items they would like to inspect more closely.

CHAPTER TWO – FINDINGS: SOCIAL MEDIA AS DIGITIZATION

At the start of this project, I held a certain mental image of what a digitized collection would look like. I pictured a dedicated database linked from each organization's website. The user would either browse or search through the records, finding professionally photographed collection objects and relevant factual information about each item. While this type of database may be an end goal for many curators, it turned out to be a rather narrow view of what digitization can actually encompass.

Four of the six curators I interviewed brought their social media efforts, unprompted, into the conversation. The other two were more than happy, when asked, to discuss social media as a vehicle for outreach. Social media is free to use, although the time it takes to create content can be substantial. It is fully accessible and widely used by researchers, fashion devotees and the general public. The curators I spoke with held up these posts (e.g., Facebook, Instagram or Tumblr), tweets (Twitter) and pins (Pinterest) as examples of how they are working digitally to make their collections known. Digital photography is, of course, an essential part of this process. However, the photographs used for social media purposes are broader in scope than what might be considered appropriate to include in a cataloging database.

Clare Sauro (Drexel University) and her staff are very active on social media; they were recently named by the Costume Society (based in the United Kingdom) as the second of ten costume history Instagram accounts to watch. Her social media philosophy relates to the mission of her collection: "We really feel that this is a way to build a reputation of being a good

collection, a quality collection, that isn't too scary. I mean, the fact that we are in a research environment at a university – I think we have an obligation to share information. I mean, I *know* that. I know that's the purpose of this collection. It's educational. So, we should be out there."

The Instagram account for the Fox Historic Costume Collection at Drexel University is a lush and informative look at costume history and the processes behind storing, conserving, dressing and exhibiting such fragile items. One image shows Sauro contemplating a Fortuny ensemble on a dress form (figure 1), while another is a close-up of a garment whose fascinating material resembles rainbow-colored pipe cleaners woven through chainmail, clearly meant to leave the viewer wanting to see the entire garment at the upcoming *Immortal Beauty* exhibition (figure 2).

Dr. Karin Bohleke (Shippensburg University) has an active Facebook page for her collection. Her museum closed to the public in 2010 due to unmet ADA accessibility requirements. She has since moved the collection into a new facility. She will mount an exhibition in the coming year, and the collection is still open by appointment in the meantime. However, she cites Facebook as an essential part of how she has kept interest in the collection alive during this transitional period.

Meghan Grossman Hansen (FIDM Museum) believes that her collection's online presence, though currently limited to 250 objects, has been instrumental in the growth of interest in the collection: "Our research interest has increased a lot. There are donations; we receive a lot more cold calls and interest in our collection from students at various schools and plenty more loan requests from other institutions because of that presence online. It's made a big difference, for sure."

Hansen's institution has a prolific blog:

It's a way of curating; it's a way of guiding your visitor – your *online* visitor – to something of interest. I think people really love behind-the-scenes and to learn what our jobs are, and what we do for exhibition planning and that sort of thing. It's a really great way of getting some more human information out to people. It changed everything for us, I would say. It was huge to have a blog and to have that educational outlet that we didn't have... It's given our museum collection a much larger presence than it had before 2009.

As an example, Hansen mentioned a Marlene Dietrich gown in FIDM Museum's collection that was loaned to the Skirball Cultural Center in Los Angeles, California for an exhibition, which was so successful that the gown is now part of a traveling exhibition that will make four additional stops. The FIDM Museum blog has featured behind-the-scenes content, such as what it looks like to pack and ship such a fragile and important gown (figure 3).

Costume curators are using social media, including blogs, Facebook, Instagram and Pinterest, as a stand-in for formal digital collections, as a database is much more costly and time-consuming to create. This is not a permanent solution, but it allows a collection to engage with the public while a database is being created. Social media is, of course, not equivalent to a database in that it does not present every garment in a collection in any systematic way, nor does it provide all of the factual information available about each garment that is featured. However, it has a spontaneous, behind-the-scenes nature that allows collections staff to communicate freely about the life of the garment: both currently in the collection, and throughout its history.



FIGURE 1: A behind-the-scenes look at Claire Sauro (Drexel University) contemplating a Fortuny ensemble on Instagram (https://instagram.com/fox_historic_costume/).



FIGURE 2: An Instagram teaser for an upcoming Fox Historic Costume Collection exhibition, *Immortal Beauty* (https://instagram.com/fox_historic_costume/).



Photo courtesy Skirball Cultural Center

Just as Dietrich's dress once circled the globe to entertain troops fighting World War II, it is leaving Los Angeles once more to tell the story of German-speaking exiles and émigrés who fled Nazi Europe and subsequently shaped Hollywood's Golden Age. The mode of travel may not be movie-star glamorous, but these careful preparations ensure that the beautiful and fragile gown will to speak to future generations with equal eloquence.

FIGURE 3: A FIDM Museum blog post depicting the packing and shipping of a Marlene Dietrich gown and its accompaniments (<http://blog.fidmmuseum.org/museum/marlene-dietrich/>)

CHAPTER THREE – FINDINGS: DIGITIZATION AND COLLECTIONS MANAGEMENT

I started this project with the expectation that digitization was primarily for the benefit of a collection's users: those seeking access to the garments, whether online only or as preparation for in-person research. I quickly learned, however, that capturing images of collection objects has another essential purpose. As Jill Morena states in her 2015 article, referenced earlier in this thesis, "At its most basic collection management function, database photos are valuable for museum staff and can allow for quick identification of an item and result in minimal or zero handling of the garment in responding to internal or external research queries."

Four of the six curators I spoke with explained how the process of capturing digital images is helpful in terms of their own work.

When Dr. Karin Bohleke (Shippensburg University) assumed her position in 2007, no digital photography had been done for her collection. She started from scratch with the purchase of a digital camera and PastPerfect software, a widely used museum collection management package offering capabilities for internal collections management as well as public database options. With no information on inventory available to her, Bohleke embarked on her digitization project as a way of gaining what she called "intellectual control" of the collection:

What I decided to do for the short run is – the photos we had been taking for inventory are just diagnostics, and sometimes they're not all that great, but it's enough that you can match the object and the picture. But as objects go on exhibit and are photographed professionally, I have subsequently gone back in and we have swapped out the diagnostic images for the professional ones.

Bohleke is also faced with the requirement that her museum must become financially self-sustaining within five years, so she has identified high-resolution, professional quality photography as a potential source of revenue. Her research indicates that other costume collections offer their photographs to those seeking images for scholarly publications at costs ranging from \$0 to \$100 or more. Bohleke currently has no set price and simply asks authors to make the donations that they can afford, but she plans to develop a policy that will make high-quality photographs into a revenue stream, which will become part of her plan for her collection's financial sustainability.

Clare Sauro (Drexel University) shared that choosing a database, The Museum System (TMS), and getting it up and running to her specifications and those of her collection's other stakeholders, including the Drexel Libraries and university President John Fry, has been a longer-term challenge than she had hoped. Her collection recently received a \$1 million gift from Robert and Penny Fox and was renamed accordingly. Sauro said, "Before, we had no money, so our options were very limited. We didn't have a lot of choices. With the Fox funding, the money's not unlimited. It's not enough to digitize the whole collection, but certainly, we now have options. And we now have stakeholders in our success."

Along with options, this gift has brought increased oversight and responsibility. President Fry is invested in the collection's success from a visibility and stewardship standpoint. Sauro has been in talks with the university's library, which is hoping to eventually create a central portal for all collections records at the university. She therefore chose a database that has the ability to "talk" to the library's system and potentially be "harvested" for a central portal in the future. She also hired an additional staff member who is a historian and a professional photographer; he will manage the digitization project as soon as it can be started. However,

Drexel has extensive technical and security requirements for this software and is still working with TMS to finalize the version Sauro and her staff will use. In the meantime, they are dressing and photographing garments that will be shown in their exhibition, *Immortal Beauty*, on view October 2 through December 12, 2015, and plan to repurpose those photographs when their collections management database is ready.

Meghan Grossman Hansen (FIDM Museum) is using also using digital photographs internally, for inventory purposes, but in a slightly different way:

For internal use, we use images in our database instead of descriptions at this stage because we are actively acquiring and we haven't had staff available to completely describe every piece that arrives here. So, we're relying heavily on digital images to use as reference markers until we have volunteer or staff time to fill in the blanks. It was a tough decision on my part because without a full, complete description in the database, it's not as searchable as I would like, but for internal purposes it's been really crucial to have the digital images.

Hansen uses Canto Cumulus, which she originally purchased for the digitization of FIDM's collection of 185,000 fashion runway photographs. She is now using the same system to catalogue all of her institution's digital holdings.

In her 2013 post on Worn Through, a blog focused on academic and cross-disciplinary discussions of dress and fashion, Ingrid Mida (Ryerson University) described an initial digitization project that occurred while she moved her collection, a challenge that Bohleke has also experienced. Mida wrote, "Up until this point, most of what is in the collection is in a file in my brain since the database is corrupted and unusable" (2013). During our interview, Mida told me that she had made great progress on her cataloguing and digitization project using Omeka, an open-source platform:

I had a beta site running and it was so easy to use. It would have allowed search of the entire collection via the library portal using any type of key word – like searching for a book. For example, if you wanted to know what items designed by Dior were in the

collection, you could simply type in Dior and everything with the Dior label in the collection – from shoes, to clothes, to images would come up.

However, funding was cut. With this project on hold and the Omeka site not currently available, Mida has had to revert to a free but less accessible and less informative method of cataloging: “At the moment, our collection catalogue lives on an excel spreadsheet on my computer.”

It is clear that digitization, while unquestionably important for user access to a collection, is also of great value to curators, collection managers and registrars. An extensive archive of digital photography allows collections staff to keep track of their inventories; access garments electronically when they, themselves, have simple questions about the objects; collaborate with other collections, including libraries, in efforts to share their collections with researchers; and potentially generate revenue in support of their holdings through the sale of digital photographs for publication purposes. Digitization projects are fraught with challenges: they require extensive staff time, as well as large sums of money to purchase databases, photography equipment, and possibly even professional photography services. However, the curators interviewed for this study are working to overcome these obstacles, as they feel digitization is essential to their own collections management work, as well as for public access.

CHAPTER FOUR – FINDINGS: IMPLICATIONS FOR GARMENT CONSERVATION

The question of conservation as it relates to digitization struck me as the second side of the same coin: can digital images replace an in-person examination of a garment? Most curators I spoke with believe it cannot. However, I wondered if it is possible, regardless, that digitizing could lead to less handling, and subsequently less damage to the collection objects. If a researcher might be able to view detailed images of a garment instead of viewing and possibly handling the garment itself, could that ever be enough to satisfy his or her needs? This is an area in which there was potential for an academic collection to differ hugely from a museum collection, in that university collections are often intended for hands-on study; some universities even maintain separate study collections for the express purpose of being handled by students and faculty.

Clare Sauro (Drexel University) believes that the availability of digital images of garments is great from a conservation standpoint. She discussed this potentiality in her 2009 article, referenced earlier in this thesis, citing the availability of high-quality digital images as a potential solution to the problem of excessive handling. During our conversation, she reiterated this idea: “You want to be accessible, but you have to be mindful of the wear and tear on the collection and the limitations of your own time,” she said. Speaking of her plans for her online collection, she continued, “There’s going to be a 360 spin and there’s going to be the ability to zero in. A lot of people might be able to get everything they need from that.”

Sauro noted that the academic nature of her collection means that some wear and tear on certain items is to be expected: “I’m not saying the handlers are evil; that’s the point of the

collection: it's to educate, it's to learn from, it's to be inspired, but finding a balance between the two is crucial."

Meghan Grossman Hansen (FIDM Museum) agrees, to a point, but has a slightly different take on potential outcomes. At FIDM Museum, visitors and researchers are generally not allowed to touch any objects from the permanent collection (FIDM is one of the institutions that offers a separate study collection for students to handle). Even so, when a researcher comes in to see one or more garments, the collections manager pulls them from storage. The manager is present during each research appointment to help with inquiries. Closures may be opened so that the inside is visible; measurements may be taken. In these regards, handling does happen every time, regardless of the policy that visitors should not touch collection items.

In terms of managing the collection internally, Hansen believes digitization is helpful in reducing handling. If an item is adequately photographed, the museum staff does not need to take it out of storage every time a question arises. However, she explained that because making collection objects available online increases interest and awareness, it is possible that digitization could actually have the effect of increasing handling: more researchers will request appointments, and more institutions will request objects on loan. She provided this example:

We have this dress worn by Marlene Dietrich in the '40s, a performance dress and something she wore in a film later, and because we're known for, because we have a presence on the blog for Marlene Dietrich pieces, a curator contacted us from the Skirball Cultural Center for their exhibition and we loaned that dress to them. Their exhibition was very popular and now they're booking a traveling exhibition with that piece. We're really happy to have that particular dress out there because it's so important and so iconic, but again, it's going to be dressed four more times.

Essentially, more public awareness of a collection can have the eventual effect of more use and more wear and tear on the garments. While it is certainly possible to turn down requests, Hansen emphasized that raising awareness and loaning out items are essential to the

mission of her institution: "You have to weigh the pros and cons. It's a really important part of their story that they're telling with the exhibition, it's a really well done exhibition, and we did everything we could to mitigate the impact on the object. But it is going to impact it. That's the nature of costume and textiles."

CHAPTER FIVE – FINDINGS: THE DIGITIZED EXHIBITION

As institutions endeavor to make their collection objects available to a wider audience, it seemed to me that they might also choose to make entire exhibitions online as well – either digitized versions of their physical exhibitions, or entirely original content created specifically for the digital world. It seemed, as well, that producing digital images of collection objects and organizing them online for cataloging purposes might lay the groundwork for these exhibitions. The results of my research on this topic were varied, but indicated that academic costume curators would like to move in this direction (if they have not already).

Of the institutions I contacted, the Museum at FIT has made the most progress in terms of online exhibition content. Tamsen Young described its strategy as such:

Our digital strategy...includes producing a unique exhibition website for every exhibition that we do so that people can dig a little deeper than just a standard webpage with some copy and pictures. We usually include videos that may have been produced for the exhibit or are just related to the exhibit subject, external links, sometimes a lesson plan for educators. There might be a timeline; there's usually installation photos of the exhibit itself so you get a sense of the walk-through of the exhibit. We embed social media, which combines all our feeds in one place so people can read about what people are saying...and then usually a press page to link to the press on the exhibit.

Although the Museum at FIT offers a robust website alongside each of their exhibitions, and although Young told me that original, online-only exhibitions might be possible, the digital department (currently Young and one part-time staff member) does not have time at this point. Instead, they devote resources to digital elements that appear in their gallery space, such as a map of the world that is part of a *Global Fashion Capitals* exhibition. The map is projected on

the wall of the gallery and highlights world cities, with an animation for each that shows street style and/or runway photography originating in that city. Additionally:

We created a Pinterest board for the exhibition, posting fashion from all the cities, both represented in the exhibition and not, but just to show fashion weeks in different cities around the globe. And then we created a Google map with all the fashion weeks that are happening throughout the course of 2015 to show how extensive international fashion weeks have now become. Those are the kinds of additional digital content we will create in relationship to an exhibition.

Meghan Grossman Hansen (FIDM Museum) cited the exhibition websites launched by the Museum at FIT as an example of what she hopes her institution can attain. She hopes to have a strong online presence for an exhibition she is planning for 2018, and she also plans to create pages for the FIDM Museum's past exhibitions, many of which were short-lived and not seen by as many visitors as she would have liked. Hansen cited the process of photographing collection objects as a main hurdle in creating this type of content. As more objects are photographed and archived, more website content will be possible.

Clare Sauro (Drexel University) is in the early stages of moving the Robert and Penny Fox Collection in this direction as well. At the time of our conversation, Sauro was preparing for the collection's first major exhibition, *Immortal Beauty*. She was planning to include an online component to that exhibition. She specified that it would be a teaser rather than the full exhibition, but she hoped to have 360-degree image capabilities by that time.

Sauro, like Young, spoke of additional digital content to be located in-gallery rather than on the exhibition's website:

We are also planning to have iPads in the gallery with a modified version of what would be online: again, more detailed images, the ability to zoom and swirl it around, because that is what people complain about in the galleries. They want to see the back. They want to see the details. Conservation dictates they can't. If we have the photography going all the way around and the ability on the touch screen to zoom in and hold it then

we think that will satisfy that itch, and create something more engaging than the standard exhibition.

Sauro also revealed an innovative way she has used digital capabilities, much like the instance at the Smithsonian described by Stuart Frost, referenced earlier in this thesis, in which a curator used digital printing to help her make a replica of a fragile, ancient tunic (2009). Sauro purchased a suit for the *Immortal Beauty* exhibition and then learned that the dealer had lost one of its buttons. She worked with Drexel's hybrid lab to 3-D print a new button for the suit, noting: "It took a while, and it's not for permanent use. It's a temporary fix for exhibition purposes. But, it's a really great use of technology for a practical purpose. I'd like to do more projects like that."

By contrast, two curators told me that they actually do not mount physical exhibitions at all, so online exhibitions would be a logical step to take. However, both also cited a lack of staff time for such initiatives.

Ingrid Mida (Ryerson University) does not have exhibition space dedicated to her collection. Instead, she mounts small vignettes in her collection's photography studio or in glass display cases in the hallway. She does not consider these displays to be exhibitions in the traditional sense; rather, they are a way for her to display specific artifacts for a narrow purpose. For example, she did this for the 2015 meeting of the International Council of Museums Costume Committee in Toronto in September of 2015. When asked if she would consider online-only exhibitions, she replied: "I think that online exhibitions would be ideal – especially since they can be shared across the world. Wish I had the time."

Likewise, Marcella Milio Martin (Philadelphia University) lamented her collection's lack of gallery space, as its former space has been largely repurposed as classroom and study space.

She currently has no plans to exhibit her collection beyond some very small, on-campus exhibitions. Therefore, she feels that online exhibitions would make the most sense for her institution as a way to show its collection without actually needing to stage an exhibition in its physical space. However, this is still hypothetical, as she has not yet attempted to create an online exhibition.

Only Karin Bohleke (Shippensburg University) disagreed with the premise that an online presence is likely to attract visitors to the physical exhibition. In terms of accompanying online components, she reported that she provides “sneak previews” on Facebook and in the exhibition advertising: “So, there is a photography element available to people as we get ready, but I don’t give away the whole exhibit, because if you do that, then people have no reason to come, do they?”

These interviews led me to believe that curators find online exhibitions and online exhibition components to be valuable, whether or not they, themselves, currently have the time to devote to such projects. For curators who mount physical exhibitions, online exhibitions serve the purposes of igniting public interest in upcoming exhibitions, preserving past exhibitions, and providing content that could not be exhibited in-gallery. For curators unable to mount physical exhibitions, online exhibitions could offer the opportunity to show collections in innovative ways.

CONCLUSION

Clare Sauro (Drexel University) told me, “I think people have a tendency to chase technology because it’s sexy. I don’t have time for sexy. We have so much to do. We have to really be mindful of our resources and the ultimate goal of the collection...our goal is to get as much of the collection catalogued and online as possible, and share it with a wider audience.”

My interviews with six academic costume curators have proven that digitization, although expensive and time-consuming, is essential to managing an academic costume collection and the associated outreach and education. Curators and collections staff who make their collections available online, either in the form of a catalogue database or more informally through social media, have greater intellectual control over their collections. They have the potential to reach more users in a broader geographic area, and to have more productive appointments with researchers. When sufficient digital photography is available, wear and tear of fragile collection items can be mitigated because the need to pull objects from storage is reduced. Producing digital photography also lays the groundwork for digital exhibitions and digital components to accompany physical exhibitions.

This research has the potential to be relevant to curators and collections staff who work with costume items as well as with other historic artifacts and visual art objects. More research into costume digitization from the user experience standpoint would be helpful in determining the effects of digitization projects on researchers, exhibition visitors and casual users.

APPENDIX: INTERVIEW QUESTIONS

These questions were posed during each of the six interviews conducted during this study:

1. How far along are you in your digitization project? What percentage of your collection has been digitized?
2. In your experience, does the availability of more photos and information online affect the number of visitors who come to see the collection in person?
3. Do you let visitors touch the garments in any circumstances? Do you think the availability of digitized versions can alleviate any conservation concerns?
4. How might digitization affect your exhibition strategy? Do you have an interest in creating original, online-only exhibitions, or online components to accompany physical exhibitions?
5. How does social media factor into your digital strategy?

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