Research Article

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The Female Gaze? Postmodernism and the Search for Women in the Digitized Photographic Collections of Swedish Memory Institutions

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Abstract: Both the photograph and digitization are often defined as democratizing forces. But neither exists outside the system of power dynamics that structure art, history, and cultural heritage. This article uses postmodernist theorization of knowledge hierarchies in the archive developed by archival scholars Terry Cook and Joan Schwartz to examine the gendered nature of metadata and data connected to digitized photographic material available on the platforms of the three major Swedish memory institutions: the Royal Library, the Nordic Museum, and the National Archives. Given that digitized photographs require the addition of machine-readable data and metadata to be findable, this information demonstrates the extent to which digitization staffs have consciously thought about the visibility of gender in their online collections. The research questions of this article are thus twofold: (1) to what extent have Swedish memory institutions embraced a postmodern approach to the archive in their photography digitization projects, and (2) has this approach resulted in the greater visibility of women-oriented material? The findings indicate that Swedish institutions have adopted postmodernist thinking about archival flexibility to varying degrees, but none have thought thoroughly about increasing the visibility of woman-oriented material.

Keywords: digitization, gender, postmodernism, cultural heritage, photography

1 The Female Gaze? Postmodernism and the Search for Women in the Digitized Photographic Collections of Swedish Memory Institutions¹

Photographs are one of the most popular kinds of material online – and also, perhaps, the least well understood by users. From Instagram – the most rapidly growing social media platform – to the digitized material in academic repositories, photographs are popular because they are easy to produce, manipulate, and disseminate (Conway 2010, Sassoon 2004). The photograph is democratic. But is it really? Photography is a practice and a material type that moves between and often simultaneously inhabits the categories of art, advertising, government, science, and popular culture. Art photography and photographic journalism

¹ The phrase “the male gaze” was coined by Laura Mulvey as a way of understanding the gendered power dynamics of filmmaking, which have often reduced female persons to passive, decorative objects (Mulvey 1975).

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are still heavily male-dominated – less numerically than through a hierarchy that privileges male work in a variety of areas, including art, news, and business (Hernandez, 2018). The 2017 World Press Photo Exhibit showed 46 photographers, only five of whom were women (Wang, 2017).

These inequalities are reflected in the physical archive, and it remains to be seen to what extent new digital technologies facilitate a reimagining of systemic informational inequities. As research on the acceptance, classification, and organization practices of memory institutions has demonstrated, the collections of library, archive, and museum (LAM) institutions are traditionally structured in ways that make material attached to men more visible than material defined as female. With respect to photography, it is important whether digitizers understand and account for the historical dominance of male photographers within news, art, and fashion photography, as well as the gendered hierarchies reflected in photographic subject matter over the past century. Digitized collections can obscure or create space for seeing and questioning these gendered patterns.

Within a context of photographic overabundance and definitional fluidity, the meaning of the archive and its role as guardian of cultural heritage increases in importance. This digital landscape has accelerated the adoption of postmodernism as a tool for understanding and reshaping archival practice to reflect a more democratic breadth of material. This article uses an understanding of postmodernism as a potential tool for reshaping archival practice, as developed by archival theorists Terry Cook and Joan Schwartz. In their articles on the construction of knowledge regimes in the archives, Cook and Schwartz highlight the extent to which traditional archival classification and organization reproduces and naturalizes power and resource imbalances (Cook 2001; Cook & Schwartz 2002; Schwartz 1995; Schwartz 2000). Both authors propose the use of postmodern understandings of truth as a method of finding new perspectives around which archives might be ordered.

This is an approach that reflects theorization of the photograph. Susan Sontag was attuned to the ethical implications of photography, through which the messy everyday “becomes part of a system of information, fitted into schemes of classification and storage.... Reality as such is redefined—as an item for exhibition, as a record for scrutiny, as a target for surveillance” (Sontag 1977, p. 156). The same could be said for the act of digitizing, which is also a redefinition and reclassification of a reality for use in the digital environment. While ostensibly neutral and objective, these “schemes of classification and storage” also reflect choices about what reality to present. Digitizers make decisions about what classification systems to use and what contextual information to attach to individual photographs. These choices can obscure or highlight gendered aspects of a photograph, including its subject matter, its authorship, and the balances of power within which the image was created.

This article examines questions of gender within the context of the digital collections of the major Swedish memory institutions: The Royal Library, the National Archives, and the Nordic Museum. These three institutions – the institutions that define the standards for smaller Swedish libraries, archives, and museums – are still searching for a proper, thorough metadata system for photographic material, as evidenced by recent studies and the recent funding of a multi-year research project on the subject (Dahlgren & Snickers 2009; Pierce 2018). These are also the institutions best equipped to develop these guidelines for Sweden, since they have the most well-established digitization departments in the country.²

By investigating the availability, description, and visibility of women within the most developed digital collections in Sweden, this article examines to what extent Swedish digitization projects enable research

² Sweden’s cultural sector is highly centralized. Two of the three institutions chosen here represent the state’s appointed library and archival institutions and thus receive larger sums from the government for their activities, which include comparatively large digitization departments. The museum sector is the exception, remaining relatively decentralized, as well as divided by subject matter (historical and art museums exist separately, for instance). The state’s historical museum sector has a combined communications and digitalization department, meaning that its work is divided. The Nordic Museum has a unified approach to its materials and a more aggressive digitization program in place, especially when it comes to photographic material. See Dahlgren & Snickers 2009; Pierce 2018 for more information on the organization of these LAMs. Digitization researchers in the country often choose to partner with one or several of these three institutions because of their prominent position within the national digitalization field. All three organizations contribute to Digisam, an effort to coordinate digitization work in Sweden (Digisam 2016).

about the relationship between gender and photography. This investigation can tell us about the role of digitization in strengthening or deconstructing the gender imbalances traditionally built into physical collections housed at memory institutions, the institutions that define Sweden's collective cultural heritage. The research questions of this article are thus twofold: (1) to what extent have Swedish memory institutions embraced a postmodern approach to the archive in their photography digitization projects, and (2) has this approach resulted in the greater visibility of women-oriented material?

2 A Woman's Place Is in the Archive? Using Postmodernism to Reassess and Gender Memory Institution Practices, Digitization, and the Photograph

Archivry has long been defined as a set of neutral set of acts by both archivists and users of these materials. The practice of accepting donations, organizing materials, culling the unimportant, and writing finding aids has long been understood by archival professionals as a bureaucratic process that should reify existent hierarchies (if these hierarchies are considered in the first place). The papers of wealthy families, the church, and the state dictated the practices of the first archives, cementing a highly hierarchical archival structure that reinforced the stability, cohesion, and importance of these institutions. As archivry professionalized and training was absorbed by universities, staff at libraries, museums, and archives adopted the practice and philosophy of diplomatics, which translates everyday materials into archival documents by confirming their authenticity and ability to represent historical, contextual truth (Schwartz 1995). As archival theorist Catherine Hobbs has noted, even personal archives have been absorbed into the same "collective, corporate, formalized record-keeping system" (Hobbs 2001, p. 127).

This is hardly a value-free approach to cultural heritage. The historical dominance of wealthy white men within powerful families, organizations, and governments ensures their greater visibility in the archive, while obscuring the roles of less well-positioned groups. As a result, archival collections sit at the center of numerous conflicts over colonialism and systematic oppression of minorities; as geographer Cheryl McEwan puts it, "[i]ndividuals and nations are seeking to overcome their traumatic legacies through the establishment of historical truth and the creation of collective memory" (McEwan 2003, p. 740). It is this legacy that drives the current push to develop independent archives for minority groups and collect new forms of primary material that can counterbalance the weight (both literal and figurative) of traditional archival material, which oppressed groups often understand as an instrument for reifying oppression (Cook & Schwartz 2002).

Critics of traditional methods of archivry have embraced postmodernism as a tool for, as archival theorist Terry Cook puts it, "shattering metanarratives – and the concepts, language, history, and archives upon which they are based" (Cook 2001, p. 24). The development of new approaches to the archive are grounded primarily in the ideas of Michel Foucault and Jacques Derrida, both of whom drew attention to and explored the power dynamics embedded in the organization of truth, what counts as history, and the archive itself. This is an approach that requires an understanding of archivists as "performers in the drama of memory-making" rather than passive keepers of archival material, as archival theorists Terry Cook and Joanna Schwartz describe (Cook & Schwartz 2002, p. 172). Feminist theorists like Judith Butler have further developed these ideas, advocating a feminist disruption of traditional knowledge regimes (Butler 1999).

A postmodernist approach would mean that Swedish institutions are facilitating the empowerment of minority or historically disempowered groups by increasing the visibility of their histories within the context of national cultural heritage (Huvila 2014). This is not simply a project to make visible a linear and singular history of previously invisible groups, however. Building on these theorizations of history and the archives, this article employs Derrida's deconstructionist approach to the archive as a starting point for an activist archivry that acknowledges the multiple and contradictory histories of categories like "woman" and "female". The article's approach thus connects Cook's described "shattering" of "metanarratives" to digitization's ability to create new entry points into archival collections through the application of extensive metadata that allows for flexible, multidirectional searching through and across collections.

Unsettling older archival systems organized hierarchically and linearly is a big project. In particular, material on women is often so buried in the collections of memory institutions that it is difficult to find, even with a well-developed finding aid. New tools are required. Enhanced metadata attached to individual digitized documents is one of several solutions currently in use in memory institutions. Some organizations like the National Archives in the United Kingdom have chosen to compile a separate finding aid for material on women's history (The National Archives). This lack of findability has also produced a wave of scholarship on pioneering new techniques for using the archives, from the close reading of overlooked documents written by women (one of the most famous being Laurel Thatcher Ulrich's *A Midwife's Tale*) to historian Sherry J. Katz's "researching around" method for triangulating between voluminous, contradictory sources (Katz 2010, p. 91). And some scholars have looked for silences in the archives, examining who is not heard and what these absences mean for the collective memory of oppressed groups (Carter 2006).

Sweden has seen similar efforts to identify collections organized around women, research across or in between collections, and push the archivist community to think more actively about archival practice. This project is still, however, in its infancy. KvinnSam, the national women's archives, was founded in 1958. Since then, a few theses and dissertations have examined how visible women are in archives outside the boundaries of KvinnSam (Blomqvist 2017; Jansdotter 2017). A recent digitization project has attempted to rectify persisting inequalities in historical research and writing by creating a searchable female biographical index (The Swedish Women's Biographical Lexicon). These studies are not as numerous as those examining the gendered nature of archival systems in other countries (Huvila 2014). It is not clear whether this gap in research represents an archival landscape in which research on women is not difficult or a more general lack of understanding of how gender can influence the structure and content of collections housed at memory institutions.

The practice of digitization perhaps offers the best chance to overcome historic problems with the relatively low findability of material on women and gender more generally in Sweden – or so digitization theorists would have us believe. In this literature, digitization is portrayed as demanding a reassessment of the value and meaning of individual documents, allowing for thinking not just within but across collections. L. P. Nordland has examined how a document assumes new identities and new meanings as it is "interpreted, reinterpreted, and represented at different points in time" (Nordland 2004, p. 154). Digitization multiplies these possibilities; as Dahlström et al. (2012) notes, this process involves re-contextualizing a document in a "new environment of practices" as well as amongst other digital documents (p. 466). In other words, without directly referencing postmodernism, digitization scholars place a postmodern understanding of cultural heritage at the center of digitization theory and practice (see, for example, Besser 2002; Conway 2010; Hirtle 2002). This is the advantage that enhanced metadata has over other approaches to opening up collections. With thorough, interoperable metadata, each and every document becomes an entry point into not just a single or a series of collections, but into any given topic, which has not one but multiple histories.

The ability to structure collections and describe documents to enable search outside the confines of traditional archival hierarchies offers new opportunities for a reassessment of traditional LAM collection practices. Gender imbalances must be part of this conversation, and LAM professionals must integrate a sophisticated understanding of how to reframe women, gender, and sexuality in the archive into new practices if memory institutions want to correct historic power differences in the archive. Otherwise, as historian Ana Baeza Ruiz has argued, unthinkingly reproducing the structure of and rules governing collections strengthens gender hierarchies in memory institutions and in the scholarship based on these collections (Baeza Ruiz 2018). And as the discourse surrounding photography has demonstrated, democratic rhetoric does not automatically result in practices that are mindful of and takes steps to correct male dominance in the archive.

The digitized photograph is arguably the best place to see whether there has been a reassessment of women's place in the archive. The invention of photography was itself revolutionary, a new way of producing, understanding, and organizing memory (Lanham 1993). Mirroring the democracy-based arguments for digitization, calls for increased use of photographs in research emphasize this material's potential for rectifying the overrepresentation and organization around elite white men in traditional archives (Note 2011,

p. 89). Photographs are often depicted as a democratic medium and historically better suited to and capable of documenting groups that are underrepresented in the archives (Cronin 2002). They are also, argues Joan Schwartz, naturally predisposed to encourage postmodern thinking: “the archival world cannot ignore the lessons of postmodern thinking about photographs – about the relationship between facts and meaning, between reality and representation” (Schwartz 2000, p. 38).

Yet historically, photography’s approach to women and their representation has mirrored inequalities other fields. For every Dorothea Lange, there are a dozen men just as famous; Lange was one of just three women of the 13 total photographers employed by the Farm Security Administration documentary project. These imbalances are equally if not more visible in other branches of photography (Young 2015). Women photographers are more likely to fade into obscurity or fail to receive attention until after their deaths. The discovery and subsequent postmortem success of photographers like Vivian Maier has led to a discussion of how scholars have often interpreted artistic women from working-class backgrounds and/or afflicted by trauma or mental illness as problems to be solved, with legacies to be saved (Bannos 2017; Lichter-Marck 2014). Regardless of whether photography is classified as art or historical object, the material is always subject to a gendered understanding of its importance.

Further, despite cautions from visual theorists like Rudolf Arnholm that “the comprehension of photographic pictures cannot be taken for granted” (Arnholm 1969, p. 309), photographs have received little attention in archival practice education, often relegated to the strange category of “special media” composed of all non-textual materials (Schwartz 1995, p. 57). Many digitization guides instruct staff to prioritize and build their digital library around materials that already generate substantial interest, sometimes reinforcing the less visible and thus underused materials relating to women.³ And current metadata schemas and practices are often created around and for these initial materials. Yet for many institutions, it was the obvious popularity and flexibility of photographs that led to a digitization of a variety of materials, forcing a confrontation with the problems inherent in fitting photographs into existing systems of information. Is the need to increase the visibility of all kinds of women in the archive being considered as new descriptive and categorizing practices develop?

3 Gendering Digital Documents Is a Choice: The Problem of Translating the Photograph’s Mutability into the Digital Context

Photographs are famously flexible, refusing older, textually-based systems of categorization. Getty archivist Tracey Schuster has observed that though it is common to treat photographic material as a reflection of reality, the truth is that all photographs represent a partial, manipulated reality (Schuster in Peabody 2006). The history of photography is a history of coming to terms with the photograph as ambiguous. Photographs have been created for various purposes by artists, scientists, government bureaucrats, documentarians, and historians; these are items shaped not only by a photographer’s artistic vision or documentary goal but by the cultural, technological, and institutional context in which the material is created. Memory institutions have, in their capacity as classifying, preserving, and access-providing organs, worked to parse and order these complications through the creation and application of descriptive data and metadata to individual photographs and groups of items.

This parsing is difficult and can diminish the flexibility of photographic material. Photographs have often lived somewhere between the categories of art and historical document, in part because, as photographic archival theorist Joan Schwartz has observed, this material tends to be understood as “discrete decontextualized moments” rather than images defined by their large context and, thus, best understood in relation to other documents (Schwartz 1995, p. 63). Without a context, the photographic

³ See, for example, “Sofies’s toolbox” (2015), an online digitization project toolbox, which lists amongst its “very important” selection criteria the need for digitization to “provide easier and wider access for high interest materials”. The toolbox pdf is available at <https://tttdigi.files.wordpress.com/2015/10/toolboxttt20151030.pdf> (accessed 12 Nov 2018). General selection trends are reviewed in Zhang & Gourley 2014, p. 19-30).

document is defined solely by its housing institution – a photograph is art if it resides in the collections of an art museum, but the same photograph relocated to a government archive becomes history. This context of default has obscured a remarkable passing of the buck. Archivists have more often than not looked to curators to define a material they are not trained to “read”; meanwhile, the legitimacy of photography as an art form is still questioned amongst art museum curators (Schwartz 1995; Baxter 2003). The end result is collective neglect of photographic material – material very prone to rapid physical degradation and therefore in need of acute need of digitization for preservation reasons (Mollenhauer & Droleskey 1984; for levels of deterioration considered by SEPIADES, see Klijn 2003, p. 201).

Current theorists of the photograph have attempted to work against this dramatic simplification of photographs, which have always bridged disciplinary boundaries and been resistant to fixed classification. This scholarship has tended towards a deconstruction of photographic material, with an emphasis on the layers of meaning contained in single items. W. T. J. Mitchell distinguishes between a picture, defined as “a material object, a thing you can break or burn” and an image, or “what appears in a picture and what survives its destruction – in memory, in narrative, and in copies and traces in other media” (Mitchell 1995, p. 16). Photographic theorist Roger Scruton has argued that photographic meaning exists on three planes: (1) intentional object (the artist’s vision); (2) represented object (how a viewer understands the item); and (3) material object (referring to the item’s physicality) (Scruton 1981, p. 580). Perhaps because of their definition of the photograph as a discrete object whose meaning is negotiated between creator and viewer(s), these breakdowns rarely mention the importance of gendered considerations.

There is more discussion of these topics in research on the integration of photographic context into photographic description. Art historian Anna Dahlgren argues for an understanding of the photograph as an object with layers of meaning, including physical attributes, subject matter, and the broader historical and technological context in which the image was created (Dahlgren 2009). Cataloging theorist Susan Leigh Star’s concept of “boundary objects” includes consideration of: (1) an item’s “interpretive flexibility”: (2) the flexible context in which the item resides, and (3) the relationships between more or less detailed descriptions of the items, as individual materials and as a group (Star 2010, p. 602). Employing this framework, archival theorist Geoffrey Yeo notes that the application of this approach to photographs is appropriate because of their variety and stats as “nonprototypical” (Yeo 2008, p. 131).

These are archival theories of the photograph that, to some extent, take for granted that memory institutions have already adopted and implemented postmodernist archival theory in everyday practice. In an effort to avoid flattening photographic material, Joan Schwartz advocates applying “archival thinking” to photography, which for her means firmly placing photographic items within a supple “functional context” that accounts for change over time, as a photograph is interpreted and reinterpreted, used and reused (Schwartz 1995, p. 63). This language mimics that of digitization theorists, who see multiplying contexts for all individual documents as a natural byproduct of the digitization process. Yet the totality of these layers of meaning have not always been recognized by LAM professionals, who tend to prioritize “function and context” within systems built primarily for textual matter (Schwartz 1995).

This range of definitional and descriptive complications is, at first glance, insurmountable, even with newly created rules for photographic descriptive metadata (IPTC Photo Metadata Working Group 2017). The complicated, multiple, and fluid nature of a photograph’s identity – what it is, where it came from, its meaning – makes the medium very difficult for archivists, librarians, and digitization staff. As photographs are digitized and made available online, new studies demonstrate that digitization has often occurred without thinking through the particular kind of document a photograph is. Photographic theorist Joanna Sassoon asks whether collections of digitized photographs are just databanks of images or something more, each grouping providing meaning determined by context and interdependence both within the collection and with other collections within and outside of the housing institution (Sassoon 2004, p. 204).

It is not yet clear the extent to which these recommendations have been implemented, within software employed in digital image cataloguing or within the everyday practices of memory institutions. What research on memory institutions, including those in Sweden, has demonstrated is that this focus – drawing the public to online resources through the digitization of high demand materials – privileges male photographers, especially those who have worked for news agencies and are thus far better known

than their female counterparts (Darian-Smith 2016; Pierce 2018). This pattern follows the afore-mentioned imperative to first digitize well-known material that is most likely to attract attention from digital library patrons.

These issues multiply during the actual process of digitization. As with the acceptance of only certain collections fitting institutional guidelines and mission statements, digitization requires a culling from broad materials. If, as another archival theorist Terry Cook has argued, professionals at memory institutions work “actively” in “shaping societal memory”, this is a decidedly politically and ethically freighted set of decisions (Cook 2001, p. 29). As with any other kind of material, the right photographic documents must be chosen to fulfil this potential for greater representation. Additionally, the absence of female representation is rendered invisible if the sex of photographers and their subjects is not recorded and attached to photographic material. In other words, any gendered biases in the material are only visible if the digitizing institution is staffed with people trained to look for such biases.

The memory institutions that house the item cannot control digital materials to the same degree as their physical counterparts. The positioning of physical items within larger collections forces a user to confront some kind of context for individual documents. Yes, traditional archival structures render women far less visible than men. But when a relevant photographic document is found, its “interpretive flexibility” (again in the words of Star) can be interpreted through its relationships to other material. Not so with digital documents, which often exist outside of the organized bounds of the curated collection. Photography digitization offers a window into more general problems with how to create digital materials that are not detached from their contexts.

This unique lack of automatically-generated context is why the application of correct and extensive metadata is essential for any digitized document. It is this information – divided into administrative, descriptive, and structural – that ensure that material is easily located by a user. Gender metadata is essential to many kinds of research, even when material is text-based. The HathiTrust digital library added gender metadata to its material in order to facilitate research on gendered language patterns and other kinds of text analysis made possible with digital technologies (Peng et al. 2014). The work of adding like metadata to photography is even more complicated, since there are no words to mine, image recognition software is still in development, and there have been communication and coordination problems between digital image researchers and practitioners (Enser 2008). Yet research has demonstrated that developing thorough metadata schemes that account for gender and sexuality can raise the visibility of and knowledge about groups amongst both digitizers and users (Park et al. 2008).

Despite its centrality, the adding of data and metadata to photographic material is a time-consuming process that in which most institutions cannot invest heavily. Klijn and de Lusenet describe item-level description of photographic material as “in most cases impossible simply because of the amount of work it involves”. Their cost breakdown is specific and daunting: “cataloguing a collection of 536,000 photographs on item level would require about 30,000 working days, which means approximately 136 years of continuous cataloguing” (Klijn & de Lusenet, 2004, p. 9). These costs are partially the result of the multitude of metadata standards, which can be difficult to choose between and apply, especially in the case of photographs, which bridge the classification divide between art object and historical text (Park et al. 2008, p. 721).

Further, metadata relating to the sex and gender of authors is often difficult to obtain, pushing it down the list of metadata prioritized by information digitization teams. The HathiTrust project required extraction of bibliographic metadata from MARC records; staff paired this information with a number of web sources that identified the sex of names, including censuses and baby name websites. Still, 443 of the 13,001 extracted names could not be paired with a gender and required individual look-up, and the problem of aliases (i.e., George Sand) required manual review of the entire list, eventually resulting in the pairing of 78.9 percent of HathiTrust author names with a gender (Peng et al, 2014). Making digitized photographic material related to women findable is clearly a difficult project for all institutions. The question then is whether LAMs see the problem at all and, if they do not, whether the postmodernist digitization project can, in and of itself, destabilize the physical archive’s hierarchies and increase the visibility of a large, varied group of women represented in the collections of memory institutions.

4 The Swedish Case

Empirical evidence on digitized photographic material from the Royal Library of Sweden (KB), the Nordic Museum (NM), and the National Archives of Sweden (Riksarkivet) was gathered using the databases provided on or linked to from the homepages of these institutions. These systems should be the best way to find this material, since digitizers at these institutions are most familiar and work with the software developers who produce the platforms on which digital items are stored. Given this coordination, the metadata attached to individual items should be most accessible through the sites of the relevant institutions. Previous work on the metadata and data attached to digitized photographic items at these institutions reveal a general dearth of data and metadata; consistent information includes authorship, dating, and item categorization specific to the institution itself (Pierce 2018).

Search terms employed are the English and Swedish words for woman (“kvinna” and “kvinn*”), women (“kvinnor”), female (“kvinnlig”), and girl (“tjej”), as well as lesbian (“lesbisk”) and sexual (“sexuell”) in order to cover female sexuality. These search terms have been employed in tandem with filters for digitized photographic documents. Additional germane metadata tags suggested in the process of search have been documented. As a result, this article deals specifically with what a search for women in digitized photography collections would look like – another researcher with different priorities might happen upon female-centered photography using different search terms. Broader infrastructural context for the digitized collections of each of these institutions can be found in Pierce 2018, though specifics are reiterated here when deemed relevant for this specific study.

A short description of metadata patterns for photographic material from these institutions is pertinent here. According to an earlier analysis, the main difference in how Swedish LAMs contextualize photographic material is the extent of the data and metadata (Pierce 2018). The National Archives has the least machine-readable text surrounding its digitized photographs. The institution always provides a title, year, the archival identification code, and collection (archive and series) context. The National Library consistently contextualizes photographic material with a title, photographer, archival identification code, and dating, while occasionally adding additional data that highlights the material nature of the physical photograph. The Nordic Museum attaches more descriptive data and metadata to individual images (beyond the standard title, photographer/creator, and year). Here, digital items are more often surrounded with extensive descriptive and administrative text in both data and metadata form, including interoperable keywords and links.

The material the Royal Library selects from is, in terms of the information available, tilted against representation of women as authors or subjects of photographs. There are four routes to finding digitized photograph from the library: (1) a photography help page, (2) pages for selected collections, (3) Libris (the national search engine for Swedish libraries), and (4) Regina (KB’s internal search engine). The help page offers pdf files listing the photography collections at the institution, making it possible to estimate what portion of the material on or by women has actually been digitized.

There are 106 photography collections at the library’s photographic collection inventory. Of these materials, four specifically mention containing photographs of women as a group (for example, the club for Swedish women involved in public works, or Svenska kvinnor i offentlig verksamhet – fotografisk samling), while 16 are organized around female photographers, three are shared collections (often taken by a married couple), and 15 contain photographs of at least one woman (some involving families or weddings). This gendered information can be obtained only by reading through finding aids and deducing from names which materials might be created by or contain images of women. A search in the digitized portrait card catalogue for women (searching with “kvinn*”) returned 85 images.

Regarding the search engines, the Royal Library makes materials collectively searchable within its search engines, across text, photograph, and object. Using Regina to search for digitalized materials for photographs of or by women produced 84 images. The majority of these are daguerreotypes from the collections of female photographers, picturing women. The metadata for material is not extensive and most often, like the material from an earlier study of KB’s digitized photographs (Pierce 2018), focuses on names, years, and other information that is not easily searched for information on gender. The female visiting cards

are also the one gender-specific digitized collection with a separate page of featured content (“Kvinnliga visitkortsfotografer”). The visiting cards are categorized as female because they were used primarily by women, but the collection represents male and female subjects relatively equally. The materials have not been made interoperable, allowing the user to move outside the curated page to similar items in the library’s online collection.

There is also a link to materials available through Libris via the help page. The material available via this link is extensive (3,731 images) but is difficult to narrow to female-related materials using the available search categories. Women are well-represented within the initial results, which are dominated by female visiting cards. The easiest option is to use the righthand sidebar to select female photographers. Since these options are ordered by collection size; women are in spots 11 (Bertha Valerius, 43 photographs), 12 (Selma Jacobsson, 41 photographs), 19 (Maria Tesch, 24 photographs), and 20 (Lina Jonn, 23 photographs). Of the 50 photographers listed, ten are women.

The National Archives are organized rigidly, using archival principles and hierarchies that make finding material on women, gender, and sexuality more difficult. There is one search portal (the digital researcher’s room) that can be used for accessing digitized material. Archives organized around issues of gender and sexuality tend to be those of organizations, government investigations, and other like collections. The user must look through digitized items one-by-one. The problem is then locating photographic material within these collections – or knowing if there is any photographic material from the outset. As noted in a previous analysis, the word “fotografi” (photograph) identifies numerous results, many of which are the textual materials of photography studios rather than digitized photographs (Pierce 2018, p. 29).

The searcher can also start with archival collections organized around photography. Here, it is difficult to find like material even if a photograph of or by a woman is located, since the metadata and data are not available as interoperable links that bind topics or authors together. And unfortunately, the one collection labeled “Fotosamlingarna” (Photography collections) is actually a collection label for a group of photographs within the “Krigsarkivet” or War Archive and, unsurprising given the subject matter, is dominated by materials by and featuring men. However, compared to finding female subjects, locating material created by female photographers is even more difficult, requiring hours of work searching on-by-one through the available collections.

Finding one piece of material is not necessarily helpful for finding like items. The data and metadata attached to individual items and larger groups of material includes the collection to which the item belongs, the National Archive’s own item code, a short descriptive title, a date, and sometimes extra descriptive information on markings and other physical characteristics. This information is not interoperable, preventing the user from moving easily between the thematic branches of an archive. If locating female-centered photography is the goal, working with the physical collections would often be easier than working with the digital.

Photographic materials digitized by the Nordic Museum are the most voluminous of the three institutions examined here; the museum houses over six million photographs. Materials are available through (1) the museum’s own pages; (2) the DigitaltMuseum (Digital museum) platform; (3) the KulturNav platform; (4) Wikipedia; and (5) Flickr. The featured collections on the museum’s own pages are organized around photographers, mostly male (two of the 19 listed are women), though eleven of the photographers’ collections contain at least one photograph of a woman. There are also curated pages organized around subjects of major interest to gender researchers, most importantly a set of pages on Sweden as the People’s Home (“folkhemmet”), comprising a photographic history of the welfare state with sub-theme pages including pages on clothing, communications, and the elderly. The structure of the Flickr page is similar in these regards, with curated collections organized around projects or themes.

The bulk of digitized photographic material is made available via the aggregated site DigitaltMuseum.⁴ DigitaltMuseum is designed for to facilitate searching for gendered photographic content. Specified topical metadata includes woman (“kvinna”, returning 10,809 items), man (“man”, returning 9,800 items), girl

⁴ The site collects material from 64 Swedish cultural history museums of varying sizes and focuses. I have looked only at material digitized and maintained by the Nordic Museum.

(“flicka”, returning 2,544 items), boy (“pojke”, returning 2,330 items), and other gendered materials like women’s clothing (“damkläder”, returning 6,844 items). These searches can then be specified further, by adding extra topics to narrow the search results. It is, however, difficult to sort between born-digital photographs and digitized analog photography. A search for material on sexuality (“sexualitet/erotik”) yields seven photographs, five of which are of naked women, produced as erotica. There is also a group of four photographs that have been tagged lesbian (“lesbisk”), and these are the only relevant photographs returned in a search for homosexual (“homosexual” and “gay”). Research on material related to women is significantly easier than research on sexual minorities given the data and metadata practices at the Nordic Museum.

Searching for female photographers using DigitaltMuseum is a time-consuming process. In order to search for female photographers, the best route is another aggregated database, KulturNav. This site facilitates searches for female creators and subjects of photography, with linked data facilitating searches across platforms (most pertinently here and persistent links to DigitaltMuseum). Materials from the Nordic Museum are only produced with English search terms; while “lesbian”, “kvinna”, “lesbisk”, “gay” and “homosexual” did not lead to any digitized material from the museum, “woman” returns 1,202 results, 929 of which are collections organized around female photographers. It is difficult to sift out woman-centered material that has been digitized by the Nordic Museum specifically, given that the museum is responsible for the registry of Swedish photographers, regardless of where their materials are housed. A manual analysis of the 1,202 results yields 188 with linked data, 103 of which are entries for female photographers, and 13 of which are linked to photographs digitized by the museum.⁵ While this may seem like a gigantic paring down, the major advantage of the KulturNav system is the linked data, connecting digitized material across institutional boundaries and thus expanding research opportunities.

The Wikipedia material provides textual context for photographic materials. The link to collections from the NM website provides a page with a list of grouped materials, with the number of images (both digitized photographs and other digitized images like paintings and drawings) provided in parentheses. The categories tend to be broad, and much information is under the heading “check” (1,008 items) and “needing categorization (place)” (260 items), indicating that metadata application is ongoing. Categories tend to be built around (1) a time period or (2) subject matter, with fashion and clothing photography dominating. There is one link to seven photographs by Swedish photographer Nina Heins, who works at the Nordic Museum (her photographs are of Nordic Museum materials). Heins’ page contains a link to the Wikipedia category “Female photographers from Sweden”, a list of 37 women with linked material.

5 In Search of Women: The Swedish Case in Context

Nordic Museum digitization professional Kajsa Hartig has observed that, in the Swedish context, “[t]here has never been [...] clarity about either the purpose or status of photograph collections” (Hartig 2014, p. 226). Swedish memory institutions have only recently begun to systematically deconstruct and understand the photograph as object, technology, and bearer of information (be it cultural, technological, historic, and so on). In this way, Swedish memory institutions merge with the longstanding history of classifying and archiving institutions blind to their construction of a singular “natural order”, as elucidated by classification specialists Susan Leigh Star and Geoffrey Bowker (2000, p. 48).

The job of providing robust descriptive metadata that can provide digital photographs with context has clearly been seen within Swedish memory institutions as too time- and resource-consuming, a job for tomorrow. Preservation of images has, as a result, superseded preservation of other meaningful layers of photographic material, resulting in collections of digitized photographs that, in the context of a search for material related to women, are difficult to parse effectively. Without tackling the tangled politics of metadata, these institutions effectively reinforce a longstanding hierarchical archival structure that not only hides women and gendered history but also posits history as a set of cohesive historical contexts.

⁵ Most often, the linked data places the photographer within the context of (1) a family’s collection or (2) a specific place.

As a result, Swedish LAMs fit perfectly Derrida's argument that the archive is constructed to create and subsequently forget that it has created memory itself through destruction of some items and the preservation of others (Derrida 1996).

It is unclear whether Swedish memory institutions understand their role in this process. Looking at project output, digitization appears to represent one more arena in which older selection and classification methods and standards are applied, rather than offering an opportunity to question outright what cultural heritage is and why it is organized and labeled in certain ways. Memory institutions would do well to adopt DigitaltMuseum's drop-down suggested search terms approach, which clarifies for the user which keywords will produce results. These drop-down menus make the classification processes of memory institutions somewhat more visible (though far from perfectly transparent). But a full representation of the multiplicity of identities that a document can have, as advocated by Nordlund (2004) and others, would require more extensive metadata and an understanding of metadata production as fundamentally activist in nature, a set of political choices that effectively loosen the hierarchical control over historical memory currently held by memory institutions (see also Dahlgren 2009; Hartig 2014; Klijn & Lusenet 2004; Pierce 2018).

Increasing links between digitized photographs and a variety of other materials is also key, making a digitized document accessible via a number of different search term channels that effectively undermine power imbalances embedded in older archival structures. Information technology scholar Peter G. B. Enser describes four different cataloguing attributes for images: (1) biographical, (2) subject matter, (3) physical characteristics, and (4) relationships to other materials (Enser 2008, p. 8). The Nordic Museum uses a combination of platforms built around the photograph as object or cultural artifact (DigitaltMuseum), the photographer as artist (KulturNav), and the photograph as historical text (Wikipedia) at least in theory allow the Nordic Museum to cover the multiple layers of photographic meaning described in photographic archival theory (Dahlgren 2009; Mitchell 1995; Schwartz 1995; Scruton 1981). These linkages are a step towards placing digitized materials in a multiplicity of contexts; a good comparison is the National Archive's siloing of materials within rigid collections that impose a top-down perspective on users.

Memory institutions "have traditionally been key players in the process of stabilization, seeking to preserve the one permissible meaning of a record by ensuring that it can only be contextualized in one way, to 'prevent records ... from unravelling into promiscuous textuality'" (Hardiman 2009, p. 29, citing Brothman 1999, p. 78). This tendency is most certainly visible in the digitized photographic collections of Swedish memory institutions which, as identified in Pierce (2018), seem afflicted by a reluctance to link digitized photographic material to digitized text. All institutions considered here tend to treat digitized photographs as distinct in form rather than content – but photographs are not searchable in the same way as textual material, and creating classification walls between types of material serves to reduce the ability to follow thematic threads through digitized content. Disconnected from other kinds of more searchable materials and defined by their physical form, photographs are defined even more rigidly by the descriptive metadata applied by the digitizing institution.

The curated Nordic Museum and National Library collections that feature women further reify these barriers – leading to what Derrida's calls the "patriarchive" (Derrida 1996, p. 36), in which gendered archival practices narrow and fix the meaning of gender and sex. There is clearly a much greater quantity of digitized photographic material featuring women as subjects in comparison with the material produced by female photographers (a continuation or updating of trends pointed out by the Guerilla Girls). But without metadata tagging the sex of individuals featured in material, digitized photographs must be gone through one-by-one, using other descriptive material to narrow the search. Given the greater ubiquity of metadata relating to typically feminized aspects of private life, the researcher might understandably resort to traditional female-dominated areas of study, using data and metadata on the home, weddings, clothing, and other items. This is much the same effect that women-oriented finding aids might have – given the wealth of information and the opacity of LAM principles for organizing cultural heritage materials.

In sum, these materials are related to women's lives, but their findability does not fulfill the postmodern promise of using digitization to upend the traditional structure of the archive in order demonstrate the historical instability of sex and gender categories. In other words, what is needed is a radical deconstruction of the document in the postmodernist tradition, in order to make visible the ambiguities and contradictions

of femininity and womanhood through time. The ubiquity of women in photographs is hard to measure precisely given metadata patterns, which privilege authorship and dating while failing to consistently include gender-related information in subject descriptions. There is, in other words, a mismatch between where women are and where digitizers look when gathering relevant information to include in metadata fields. Swedish LAM staff are clearly not thinking consciously about the need to make a variety of women (not just women in fashion and in the home) more visible, findable, and researchable within the context of these new digitized collections. In not considering the gendered ramifications of their work, digital collections reinforce normative assumptions about where to look to find historical material on women.

6 Conclusion

There is a lot of activist archival work left to be done with regards to highlighting the multiplicity of women in photography. Digitization offers unprecedented opportunities for disseminating the work of women in photography, as artists, creators, and subjects, as demonstrated by the HathiTrust project (Peng et al. 2014). However, if digitization staff do not actively consider women and gender during the digitization process, we run the risk of reinforcing older gendered hierarchies that still govern archival hierarchies. The digitized documents studied here demonstrate a significant narrowing and streamlining of concepts like “woman” and “female” – it is only certain versions of these categories that are findable, and images returned first are most likely to reflect precisely that picture of women’s history that feminist scholars have been challenging since the 1990s (Butler 1999).

Understanding documents housed by LAMs in entirely new and innovative ways sits at the heart of digitization theory and practice, according to multiple theorists (Hirtle 2002). Some scholars posit that practicing digitization will alter how LAMs understand their role in society (Given & McTavish 2010). Paul Conway has observed, however, that digitizing institutions often fail to fully embrace the possibilities of this new process. Digitization should offer something new and more accessible; digitizers should not merely replicate material (Conway 2010). In this vision, fulfilling the promise of digitization means actively deconstructing the metanarratives of history and consciously placing historically marginalized groups at the center of digitization practice, placing digitization firmly at the center of the postmodern reappraisal of the archive.

Given that so much of the language surrounding and supporting digitization seems to naturalize postmodernist approaches to digital materials, the variety of approaches taken by Swedish memory institutions is striking. The National Archives have carefully reproduced and in many ways strengthened the rigidity of archival hierarchies in their digitized material, clearly rejecting the postmodernist critique of the traditional archive. Meanwhile, both the Royal Library and the Nordic Museum have made efforts to complicate the relationships individual items have with other materials. The Nordic Museum has perhaps gone the furthest, extending a digitized photograph’s associations across materials and platforms in a way that places the item in a context outside the museum itself, in a set of online worlds of information.

Yet none of these organizations has adopted a postmodern understanding of the archive in a digital context that prizes a radical deconstruction of archival structures within the metadata of digitized materials. Such a shift might lead to what Geoffrey Bowker describes as “an exploration both of the archive as a bounded, linear, and hierarchical, and of the archive as established along the trails which mark experience” (Bowker 2010, p. 213). This is a project that digitizers must consciously begin. Digitization, while postmodern in its rhetoric, does not automatically lead to the greater visibility of material on women and gender, nor to a multiplicity of understandings of these categories. Rethinking of archival structure has until now superseded rethinking of what materials are selected for digitization. Swedish LAMs are actively pursuing the development of metadata guidelines for digitized photographic material. There are currently multiple, sometimes incomplete guides in use (Hartig 2014, p. 228). There are ongoing debates about how to linguistically represent the divide between picture and photograph in Swedish (Digisam 2016, p. 49, 86). What this particular analysis highlights is the need for the inclusion of sex, gender, and sexuality vocabulary in these guidelines.

These findings have broader meaning within the context of the ongoing debate about digitization as a tool of democracy. An examination of women's marginalization within today's ever-expanding selection of digital material can tell us something about how digitization's democratic possibilities are being undercut by the belief that digitization is inherently a democratizing process. As Bowker and Blom (2017) note, women are hardly the only group to fare poorly in the digital collections of memory institutions, where (as elsewhere) gendered, ethnic, and class hierarchies are interwoven and mutually reinforcing (p. 68). Research on the findability of material featuring or made by other marginalized groups is necessary for the creation of a set of digitization best practices that can counteract visibility imbalances in digital collections – a correction that would help to rectify historic imbalances within the physical collections that make up a nation's cultural heritage.

More research is needed on female representation and the accessibility of women's history in current collections, as a precursor to the development of new metadata approaches that facilitate cross-collection research on women, gender, and sexuality. Of particular interest and difficulty are how issues of gender performance and sexuality can and should be built into metadata. This article has also touched briefly upon issues of sexuality and the reinforcement of a specific kind of male gaze. This is grazing the surface of a vast ocean. How to represent sexuality and gender fluidity in descriptive metadata for digitized photographs is both very interesting and very under-researched, despite the current vogue of photographers like Robert Mapplethorpe and David Wojnarowicz, who overtly sought to challenge the boundaries of normative gender and sexuality. Gender and sexual fluidity are not new phenomena, but finding non-conformity requires creativity in the archive and considerable skill with gender theory. More work must be done before we understand whether and how digitization and new methods of descriptive metadata can help us to overcome categorization and organization practices that obscure the historical fluidity of gender and sex.

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