Women in Tech: Examining the Moving Image Archiving Profession

by

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Introduction

This goal of this thesis is to examine the gendered division of labor with in technical work related to the moving image archiving profession. My study is premised on the fact that technical professions remain largely male-dominated and that women in the workplace contend with a variety of sexist behaviors and beliefs. What follows is a synthesis of research and data derived from interviews with forty professionals working with moving image archives or related organizations.

The premise that the field of moving image archiving in particular has serious concerns about the underrepresentation of women in its tech sector and barriers that inhibit women’s work and professional advancement is clearly validated by the Association of Moving Image Archivists (AMIA). The field’s central professional organization, AMIA continues to call attention to the problem. Its most recent annual conference highlighted a session entitled “Claiming Tech: Women, Technology, and the Spotlight.” Panelists at the November 10, 2016 event included mid-career professional women from the private sector (AV Preserve and The MediaPreserve), nonprofit cultural sector (Bay Area Video Coalition), higher education (UCLA Information Studies), and archives (Harvard Film Archive). The conference program description identifies the same issues and questions this thesis addresses.

While a large number of AMIA members are women, and many do “techie” work, we do not often see them leading the discussion, or being deferred to as experts. Female faces are often absent from the presentation side of our technological symposia. We want to find ways to encourage women in our field to become leaders, through presenting at technology-oriented events, writing for our periodicals, organizing events at our conference, or speaking up on the list-serv
and in public. This open discussion is an opportunity to investigate the problems we are facing, and to identify solutions. Why are women underrepresented? What can we do to change that? We believe an open forum will lead to creative thinking and problem solving, possibly a new network of support, and will shine the light of personal experience on a neglected topic.¹

This first portion of this thesis defines what the interviewee parameters were during this research, identifying their career titles, responsibilities, skill sets, and work place environments. This is to acknowledge that in the moving image archiving profession, the term ‘technical’ can mean a great many things, and can include a variety of skill sets. I discuss the types of institutions these professionals work for, as this can inform us about the work environment professionals have to navigate and inform as to different skill sets needed in various positions, regardless of job titles or descriptions.

Using sociological studies, demographic data, and published reports, the second section discusses the state of workplace gender (in)equality and evidence of sexism in the technical sector. This section will also contextualize and define the terms and concepts used to discuss the results of the interviews.

The third section will present the interview methodology, questions, and synthesis of the testimony. I summarize the responses to the fifteen questions asked of each interviewee and identify generalizable trends in responses that become evident when the data was assembled.

By 2017, several federal laws have been passed that attempt to restrict employer prejudice towards women. These laws, like the Equal Pay Act of 1963 and the Civil Rights Act of 1964, aim to make wage related gender discrimination and employment discrimination based on gender unlawful. As a consequence, overt and hostile sexism (in the West) is thought to be mostly tempered. The lack of regular hostile sexism, however, does not preclude the need to discuss the benevolent sexism and the discriminatory division of labor that does exist. Sexism is still sexism, no matter the form it takes.

Because of the limited scope of this research project, this thesis does not take into account other important issues, such as how a person of color or a member of the LGBT+ community may be affected by negative biases in workplace environments. Persons of color, especially women of color, are often affected by large socio-economic gaps and typically suffer more under established divisions of labor as they are more likely to find work in lower-paying, dangerous or degrading types of employment. To be a woman of color compounds the discrimination a person may experience. For example, while African American women statistically are more likely to have a higher degree of education than African American men, women are typically paid less than their male counterparts. In addition, members of the LGBT+ community and those who do not identify as strictly male or female can suffer from a myriad of discrimination as well. Members of this demographic

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2 Stutzman, Beth N. “I Think You’re Great! Now, Do My Laundry: The Interactions Between Benevolent Sexism, Gender Role Adherence and Relationship Satisfaction for Self-Identified Women in Heterosexual and Same Gender Relationships,” (Diss., Wright Institute, 2013), 3. ProQuest Dissertations no. 3581161.

are known to experience, for example, refusal of employment, verbal or physical harassment, and denial of benefits to a same-sex partner. Often, members that self-identify in this way practice self-exclusion from environments they may think are more likely to perpetrate this type of discrimination. If a member of the LGBT+ community is a person of color, they are statistically more likely to suffer from discrimination targeted at both facets of their minority status. If a woman is both a person of color and a member of the LGBT+ community, the discrimination is again compounded.\(^4\)

The work moving image archivists do contribute widely and directly to the cultural heritage and memory that society develops over time. What is remembered as ‘history’ is determined in part by the archivists who help preserve and provide access to the materials that have captured history in the making. While there have been many advancements, the reality is that in the year 2017 there is still a need for archives (and other collecting institutions) for minorities and under-represented communities: women’s archives, Black archives, Latinx archives, and LGBT+ archives are in existence and often operated from a place of sheer passion. These practices emerged from a lack of inclusion of different types of cultural histories and documents in established archives. Indeed, many women’s archives were initially conceptualized in the 1970s due to the fact that women’s lives and activities were not equally or acceptably being documented in traditional repositories. By marginalizing and othering communities, history and cultural understanding of their history can be irrevocably manipulated. If archivists had the purview to collect and document women’s work and place it in history, the need for separate women’s archives may no longer exist in the future.

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An authoritative 2004 survey of more than 5,000 archivists in the United States (hereafter A*CENSUS) found that 88% were white/Caucasian.\(^5\) While more women than men worked in archives by the 1980s, as I discuss later, the technical sector remains predominantly male, and diversity is lacking. (There is no data on the sexual orientation within the occupation.) If the gap between what Mason and Zanish-Belcher call “traditional repositories” and women’s archives can be extended to issues of race, ethnicity, and sexual orientation, then a large part of the world’s cultural memory is simply “missing from the historical record.”\(^6\) The main way to change this situation (in which minorities are not only marginalized within history, but within the archival profession) is to change the values by which archivists and institutions collect and preserve. Mason and Zanish-Belcher call for “raising the archival consciousness.” The most direct way to accomplish this incomprehensibly large feat is to populate the demographic of archivists with those people they so often undervalue and underserve. As moving images become more accessible to more people, the diversity of moving image archivists becomes increasingly important. The more diverse and equitable the makeup of the moving image profession is, the more the cultural history, knowledge, and understanding that is shared and passed on will be inclusive and accurate.

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Defining the Field

The moving image archiving profession is populated with a wide range of career paths, all with the goal of “preserving, restoring, and making accessible moving image heritage, including film, television, video, and digital formats.” While the contemporary profession can trace the majority of its historical roots to a few museums and archives in the 1930s developing film collections – the Museum of Modern Art, Cinémathèque française, and the British National Film Library among others – a moving image archivist in 2017 must have a wide breadth of knowledge not only of how to handle a myriad of audiovisual formats, but also how to preserve them, what their history is, how to curate those items, and how to provide access to such materials. The profession wasn’t considered fully formed until the late 1980s or early 1990s. Prior to the emergence of institutional and even commercial recognition of the worth of preserving their holdings, most occupations were restricted to a relatively small number of niche film preservation jobs, done by a disconnected group of people. This period in time also coincided with the field’s gradual merger with the disciplines of information management and the library sciences. In the twenty-first century, the profession has increasingly utilized digital tools and resources, making the emphasis on technology all the more pronounced.

Several types of institutions utilize workers with at least some of these skills. As information, storage, and materials become increasingly digital, career paths are becoming increasingly specialized. Film preservation jobs – especially lab positions such as timers and processing technicians – are becoming less common as film-to-film preservation is superseded by film-to-digital preservation. While the profession is divided on if the term ‘preservation’ can

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be applied to film-to-digital processes, the reality is that film-to-film preservation jobs are becoming increasingly niche. However, as more and more formats are created, and collections become more and more diverse, archivists who have a wider range of interdisciplinary skills across a plethora of formats will become more and more valuable not only to employers but also to the integrity of the collections themselves. In *Film Preservation: Competing Definitions of Value, Use, and Practice* (2007) Karen Gracy asserts that most students will not go on to preserve film itself, but rather to work with contemporary audiovisual objects and artworks and mixed collections.\(^9\)

Starting in the 1990s, a new wave of archivists began to obtain their educations through higher education, rather than on-the-job training.\(^{10}\) This has led to what could be perceived as a generational segregation of knowledge and job accessibility within the community. The Society of American Archivists 2004 A*CENSUS remains the most recent one of its level of thoroughness. The survey reported that 35% of workers in the profession hold at least one master’s degree. However, this distinction is broken up into age brackets: 64% of archivists under the age of 29 reported that graduate school was their main resource and education, as did 53% in the age bracket of 30 to 39. This indicates that a level of higher education is increasingly necessary to enter into the profession.\(\text{.}\) For those 50 and over working in archives, self-education and continuing education were cited as primary means of worker education. This statistical shift also suggests a change in the way information is taught and shared within the profession from generation to generation. While explicit knowledge is obtainable through standard educational practices, tacit types of knowledge require access to individuals with particular experiences of

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\(^{10}\) Walch, et al., *A*Census, 407.
pragmatic problem-solving or creative solutions.\textsuperscript{11} Such professionals may pass on their experience and knowledge on an ad hoc basis, a type of selective, informal mentoring.

A modern-day moving image archivist may find job opportunities in all kinds of institutions. Collecting institutions may include libraries (academic, research, private, or public), museums of all subject matters, or actual archives. These jobs have different titles from institution to institution while still requiring the same skill sets, or conversely, responsibilities may vary from institution to institution even if the advertised job title is identical. Most of these incongruences occur due to the different missions, scopes, hierarchies, or goals of each institution. Demographics of entire institutions or in specific job titles can vary widely. For reasons shaped by social structures, institutional histories, and other factors, work within the profession often remains gendered (e.g., librarians typically being female and video engineers typically male).\textsuperscript{12} Such division of labor continues to affect the core pool of workers each type of institution attracts and employs. Because of changing demographics, institutions having varying degrees of male-female divisions of labor -- and the amount of reported sexism experienced in the workplace can vary drastically.

The Association of Moving Image Archivists (AMIA) is the central professional organization in this field and therefore serves as the key entity in this study. AMIA includes the following employers as places moving image archivists may find work: commercial and corporate archives, university or college libraries, state and federal archives, museums, regional archives, historical societies, radio and television stations, research institutions, vendors of preservation services or hardware/software development, film and music festivals, advocacy

groups, performing arts organizations. AV archivists also find employment as freelance consultants or agents for individual collectors and other entities.

AMIA, which was founded in 1991, also categorizes types of jobs, and at what career level they are in the hierarchies found in most of the institutions mentioned above. They are, in order from lowest to highest: entry level positions, mid-level positions, specialist/engineer positions, and upper level positions. Though the information is presented in a tier-like format, the level of ‘specialist’ is termed distinctly. Even though it is sandwiched between the upper and mid-level positions, omitting the word level in conceptually isolates those positions, as if they should not be considered to be under the normal hierarchal purview. This suggests a type of broad professional attitude towards those departments or positions that affords them a certain amount of autonomy. If it is part of the professional culture to treat a subset of the career with this detached sort of inclusion and supervision, potential divisions in labor or knowledge within the professional community may manifest.

Entry-level jobs in the moving image archiving profession are typically advertised as ‘Processing Technician’, ‘Assistant Archivist’, or ‘Project Archivist’. This type of position, which can be full-time and permanent, is also just as likely to be grant funded. The nature of grant-funded positions are such that the position has a set end date and is highly specific as to the nature of the work or project. As with most entry-level jobs, these positions are tasked with the more menial, rudimentary, and labor intensive tasks out of the hierarchy. Workers accepting jobs of this nature are expected to, for example, prepare items for playback, catalog, rehouse, ship, prepare physical items for utilization, and create digital access files in their institutions. Without

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13 “So You Want to Be an Audiovisual Archivist.” AMIA Education Committee.
14 Jaffee, David. “Gender Inequality in Workplace Autonomy and Authority.” *Social Science Quarterly* 70.2 (1989): 376.
this type of job, most preservation would progress slowly, but this type of employee is responsible for few decisions having to do with issues other than those that are item specific.

Jobs titled listed as ‘Consultant’, ‘Curator’, ‘Archivist’, ‘Vault Manager’, or ‘Cataloger’ tend to be in the mid-level bracket, as employers typically try to fill these positions with individuals who have more management experience than those who would be appropriate for an entry-level job. Often, at this point in a professional’s career, workers have selected and focused on a specific aspect of moving image preservation and taken it as their specialty. These focuses include programming, coordinating preservation projects, or collection acquisitions. By AMIA’s classification, few jobs within this mid-level category would necessarily use technical skill sets as their primary application of knowledge on a day-to-day basis. The title of Archivist is the one exception, because AMIA tends to segregate occupations that require a highly technical collection of skill sets into their third category of job types, Specialist/Engineers.

The Association of Moving Image Archivists defines a ‘Specialist’ or ‘Engineer’ as being a position defined by the specialization in a particular skill. These skills traverse the types of formats that exist, ranging from positions like ‘Digital Asset Manager’ to someone who works in photochemical printing or color timing. Other careers include specializations in sound preservation, video preservation, database management, and digital restoration. When considering the way AMIA has isolated the careers that primarily use highly technical skill sets, it is important to discuss why, and if, such singling out is warranted. Certainly no one type of career path within the profession can be claimed as more important than any other. Additionally, unlike the clear and understandable Entry, Mid, and Upper hierarchy, the exclusion of the Engineer category in this conceptual type of food chain leaves prospective employees with no

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15 “So You Want to Be an Audiovisual Archivist.” AMIA Education Committee.
clear way to enter said occupations. The exclusion almost ‘others’ this type of occupation, which can discourage prospective employees from pursuing advanced technical training.

Upper-level positions, both the rarest and best paying, populate the top tiers of hierarchy in the profession. Titles of ‘President’, ‘Director’, or ‘Manager’ are listed by AMIA as being part of this tier, and make the distinction that these roles are most often found in large archives, or preservation and restoration companies, where the infrastructure and funding are large enough for there to be a distinction between the Upper and Mid-level tiers of the hierarchy. People on this level of job responsibility can also be CEOs of their own private companies, often working as a consultation firm.

It is important to note that audio preservation is an important facet of a moving image archivist’s work, but this career path is also often considered a separate occupation. The Association for Recorded Sound Collections (ARSC) exists as a parallel professional association. In a 2010 report sponsored by the National Recording Preservation Board of the Library of Congress, a different hierarchical layout is articulated – Audio Archivist, Audio Preservation Manager, and Audio Preservation Engineer. All three are more technically focused than the average job requirement covered by the Entry, Mid, and Upper level job positions the average moving image archivist would be considered qualified for.\textsuperscript{16} Because statistically - and by a wide margin\textsuperscript{17} - most sound engineers are male, female moving image archivists may experience difficulties when pursuing this type of knowledge, even as it specifically pertains to their job.

The Association of Moving Image Archivists also tracked job postings between 2014 and mid-2015 in a brief attempt to survey salary ranges. This, to date, appears to be the most


\textsuperscript{17} Havens, Lyndsey. “Women Roar Onstage but Barely Exist in the Sound Booth.”
comprehensive estimate on the average salary range by professional level in any capacity for moving image archivists specifically. The A*CENSUS reported on all salaries for their respondents – Society of American Archivists members – but did not break down salary by position or type of materials respondents worked with. In 2015, AMIA found that entry-level positions provided salaries ranging from $30,000 to 50,000, with mid-level falling anywhere in the large range of $40k to $100k annually. Interestingly, AMIA also reported that upper-level jobs tended to occupy the $50-100k range. These type of numbers suggest that there is a lack of standardization of pay within the profession, which could be for any reason from the large number of positions in nonprofit archives to the cultural undervaluing of the moving image archiving occupation. While the Mid and Upper level pay ranges certainly have high ceilings, AMIA also notes that most archivist positions will fall below an annual salary of $50k, for two reasons. First, statistically more entry- and mid-level positions are available than upper-level, as is with nearly any occupation, and second, many types of institutions that employ moving image archivists tend to be of smaller size, and have limited resources.

Technical Skill Sets

All moving image archivists are guided by the same creed that dictates the five types of skill subsets that a person can pursue and cultivate career growth around. These subsets fall under the umbrella of Access, Conservation, Curation, Preservation, and Restoration. Because requirements fluctuate from job to job, based on varying institution needs, some job titles may differ within the profession while actually having remarkably similar responsibilities. Conversely, job titles may be identical but have entirely different responsibilities. For example,

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18 “So You Want to be an Audiovisual Archivist.” AMIA Education Committee.
the position of Digital Archivist at one institution may have different priorities, responsibilities, and workflows than a Digital Archivist of a neighboring institution. Increasingly, with digital technologies advancing, and as numerous formats rotate in and out of favor and use, responsibilities in a position may increase and change over time. Because of this, while higher education is now the normal entry level requirement for the profession, all archivists should expect to pursue some form of continuing education as a necessary requirement to stay relevant within the profession and keep pace with their position’s ever changing responsibilities.

The specific scope of a position is often dictated by the employing institution’s size and the available funding that has been allotted to the archivist’s given department. While not all small institutions lack adequate funding for the appropriate care of their materials, and often large institutions will underfund such efforts due to a lack of monetary value placed on their holdings, there is a general pattern that moving image archivists working in larger institutions also tend to have access to a broader and deeper base of resources, whether that be by way of funding or institutional network connections. The more specialized a job is, the less interdisciplinary skills are required for eligibility; but fewer specialized positions exist in the profession overall. Because of this, the average moving image archivist will require a broad multidisciplinary skill set, simply to be able to carry out their day to day responsibilities. The level of specialization that some positions require are dictated by an institution’s needs, and the type of skill sets that are dictated by institution needs determines what hierarchy exists within the workplace, and what type of materials that the institution holds.

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How the Profession Stacks Up

Because the moving image archiving profession is relatively new, little data has been collected with regards to the demographic makeup of the field. Due to this lack of data and knowledge about the profession, this section sketches the state of the occupation using several sources. The first is a 2004 A*CENSUS, published in 2006 by the Society of American Archivists, which surveyed its members. This is the only study of its kind, and is the most recent one, albeit outdated at the time of this thesis. To compensate for this, data on the moving image archiving profession’s occupational ‘sisters’ – Science, Engineering, and Technology careers, Library Science careers, and media Production careers – has been drawn in. Between the four, one can begin to assemble an idea of what the profession at hand may demographically look like, and what the states of (in)equality throughout the profession may be.

The A*CENSUS

In the 1950s, women made up 33% of the total workforce in the general Archival occupation.20 By 2004, the archiving profession at large consisted of nearly the exact inverse – 65% of the SAA A*Census respondents were female, while 35% were male. No comparable survey has been done with audiovisual archivist responses specifically, but the A*Census reported that 40.3% of respondents worked with moving image records. Academic institutions employed 49.5% of those respondents, 26.9% worked for the government, 43.8% for non-profit institutions, and exactly half worked in for-profit archives. Of their respondents who worked with moving image, 45% were male and 39% were female.

Of those demographics, the percentages of men and women who worked at institutions

with moving images were subcategorized into: Academic, Government Agency, Nonprofit Organization, For-Profit Organization. Of the men that worked with moving images, 56.9% worked in Academic institutions, 30% worked in government institutions, 52.8% worked for a non-profit organization, and 57.1% worked for a for-profit organization. Of the female archivists who worked with moving images, 47.7% worked for an Academic institution, 25.1% worked for a government agency, 41.3% worked for a non-profit organization, and 51.4% worked for a for-profit organization. While this is a general SAA census, 74.4% respondents to the census also listed the Association of Moving Image Archivists as a primary organization affiliation. At the time of the census, in all age brackets over twenty-five, men made a mean annual salary of ten thousand dollars – 15% more - than their women counterparts did, even though the women in this case outnumbered the remainder of the sample pool by nearly a thousand people.21

**Occupational Trends**

In 2016, the National Center for Women & Information Technology conducted a study entitled *Women in Tech: The Facts*. This study examined women’s contemporary experience in SET (science, engineering, and technology) companies, using the word ‘technology’ in a broad context throughout the report to mean “computing and computing-related professions.” Only 25% of these types of occupations were held by women. White women make up 16% of the SEM occupational workforce, Asian women 5%, with African American and Latina women making only 3% and 1% of the workforce, respectively. In fact, in computing occupations, women’s representation has fallen off by 11% since 1991, when women’s representation reached a record high in the occupation. When broken down into specific career paths, women’s

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representation grows increasingly sparse. While 51% of ‘Operations Research Analysts’ are 51% women, ‘Database Administrators’ are 38% women, and 34% of ‘Computer Analysts’ are women, all other career paths within the computing occupations fall to a demographic representation below 30%. Most important for consideration regarding skills applicable to digital archiving is that only 21% of computer programmers are women, 18% of software developers, and 26% of computer support specialists. Of these women who do find employment, 56% of those in technology occupations quit their jobs after approximately twelve years. Roughly half of those who quit also leave the profession. This contrasts sharply with the national average of only 20% of women leaving their jobs over a thirty-year span.

The *Women in Tech* study examines why such a large percentage of the women in the SET workforce leave their jobs, and also definitively report that the reason is not related to family. Instead, most of the women who leave their jobs do so because of negative workplace experiences. Most women in technical roles report not being able to access core roles in projects, making it difficult to providing meaningful contributions within their workplace and career. This is statistically reinforced when observing the number of United States information technology patents: 87.4% of all patents in 2012 were attributed to all-male teams. Mixed-gendered teams accounted for 10.5%, while female-only teams accounted for a mere 2.1% of all 603,192 patents awarded in 2012. Female patenting has only risen 6.1% since 1980.  

Generally, women in technical careers report lower job satisfaction rates and report that roughly 1 in 3 women who are in the SET occupation feel as though their career has stalled. African American women report the highest stall rates – 48% - but all ethnic breakdowns report at least 32% of their demographic feeling stalled within their occupation. In 2014, the Center for

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Talent Innovation said that younger SET women “simply don’t see a future in the field” and are “jumping ship while they can.” If they needed any defense, the report gives them one: women find it difficult to advance into leadership positions, very few women are board members in any capacity, and approximately one in 3 people at the “C-Suite level” of executive administration in the technical occupations simply do not believe or acknowledge that women are underrepresented on any level.23

Similar to the moving image archiving profession, a master’s degree is now accepted to be an entry-level requirement for the Library Science profession, for which an overwhelming 80% hold an MLS or other master’s degree. The American Library Association’s most recent demographic data was generated in early 2017. As of January 9, the survey had garnered 37,666 responses (74% of ALA members). Of the responses to the report, entitled 2017 ALA Demographic Study, 81% identified as female and 19% identified as male. Nearly identical to the archivist demographics on race, ALA members were 87% white. The remaining percentages are as follows: African American 4.4%, Asian 3.6%, American Indians 1.2%, and 4% of respondents self-identified as Other.24 These statistics are similar to those reported by the SAA in 2004, and indicate that a lack of diversity is a real and serious issue within the profession.

Equality between genders is also an issue in the MLS professions. According to a 1999 ALA report, while 61% of Library Directors are female they are paid $4.5k to $10k a year less than their male counterparts of the rank. Academic institutions have the closest pay gap. Female library directors average yearly salary of $58,202, whereas male library directors average $62,961. Public libraries, however, have a more alarming wage gap: female library director’s

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23 Ashcraft, Women in Tech, 17.
make an average of $64,549 a year while their male counterparts make an average of $75,383, a difference of nearly $11k a year. Considering that women make up the majority of library directors, this is statically significant and counterintuitive, raising red flags.²⁵

Other occupations that moving image archivists may borrow skill sets or knowledge bases from are that of the film and television production occupations. Two studies, *The Celluloid Report* and *Boxed In* (for film and television respectively) have tracked women’s representation for nineteen years in the respective occupations. On screen, women’s representation was much higher than those who worked behind the scenes. In television, women made up 27% of all individuals working as creators, directors, writers, producers, executive producers, editors, and directors of photography. *The Celluloid Report* found that only 19% of behind the scenes workers in the film industry were women. Both *Boxed In* and *The Celluloid Report* only report these ‘above the line’ jobs due to such low representation in the more technical jobs, such as grip, gaffer, production sound mixer, or camera operator.²⁶

In both fields, women showed best representation in producing roles, making up 39% of television producers in 2015 and 26% of producers of the top 250 films of 2015. The following percentages are in descending order of representation in order of television and then film roles: editors: 20% and 22%; executive producers: 24% and 20%; writers: 29% and 11%; directors: 12% and 9%; and cinematographers: 3% and 6%. Finally, in the top 250 films of 2015, a third of all productions had zero or only one woman in these roles.

When the library science occupations and production occupations are juxtaposed, a

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pattern emerges in keeping with the national trend: women’s wages are lower in the fields they demographically dominate, and women occupy a small majority of jobs that are high paying, as ‘above the line’ types of jobs in the production occupations typically do.

**Women in the Workplace**

Much has been written on women’s experiences in the workplace. This section exists to contextualize the moving image archiving profession against the overall view of the general work force. No comprehensive survey or study has been conducted on the moving image archiving profession. The following section strives to articulate the landscape of the moving image archival profession by contrasting national data with SAA census data and by providing a view of what occupations the profession draws from, such as engineering, computer sciences, media production, and library science. In order to contextualize the issues that confront women and men within the tech sector and the archival profession, we must understand the whole of the American workplace. Under what social and economic conditions do people work and how have those changed in recent history?
National Trends

The past 54 years have shown modest improvement for women’s labor opportunities in the United States. Since 1963, women’s labor force participation is up by 53%. This in part is due to population growth, but in 2012, 57% of American women were active participants in the labor force, versus 38% in 1963. In 1938, the first piece of legislation that helped protect women’s labor rights was passed, the Fair Labor Standards Act. The 1960s and 1970s showed the most growth in legislation towards equal labor rights: in 1961, the President’s Commission on the Status of Women was initiated, in 1963 the Equal Pay Act was passed, followed by the Civil Rights Act of 1964, and, in 1967, President Johnson’s Executive Order 11375, which made discrimination illegal on the basis of sex in hiring and employment in both the United States federal workforce and by contractors associated with the government.  

Title IX of the Education Amendments was passed in 1972 and the Pregnancy Discrimination Act in 1978. These set the baseline for minority equal rights in the workplace, and while they have been amended and changed heavily since, they are important to the progress that has been made. Since 1978, only four pieces of legislation addressing these issues have been passed. In the 1990s, the Civil Rights Act of 1991 and the Family and Medical Leave Act in 1993. In 2009, the Lilly Ledbetter Fair Pay Act and in 2010 the Patient Protection and Affordable Care Act became law, though this last piece of legislation is currently in congressional jeopardy. Despite these initiatives to promote equality for working women, the average woman still only makes 78 cents to the dollar that men make. They hold the majority of low wage jobs, whereas men have the majority of positions the

Department of Labor classifies as “high paying”. More positively, the number of mothers participating in the work force has grown by 30% since 1962. This percentage is again partially due to population growth, but in 2012, 70.4% of mothers participated in the labor force, which is a significant jump from fifty years ago when the percent of mothers who worked topped out at 54.5%. This can be traced to the number of women who have made educational gains over the past fifty years and their increasing access to higher education. In 1962, only 47.5% of women had completed high school and a miniscule 6.7% had completed at least four years of college. In 2012, 88% had attained their high school diploma, and the amount of women who had a bachelor’s degree had risen to 30.6%.

The United States Department of Labor indicates that only 26% of employees in math and computer occupations are women. Reporting on their most recent study from 2014 data, the department documents that women’s top three occupations are still ‘Registered Nurses’, ‘Elementary and Middle School Teachers’, and ‘Secretaries and Administrative Assistants’, exceeding all of the other occupations by double the amount of reported workers. The occupation that comes closest to having equal pay between genders is ‘office clerk.’ Women earn 94.6% of what men do, but this occupation also falls below the national average for weekly earnings. In occupations above this median weekly earning, women’s earnings ratios drop drastically from the former percentage. Female financial managers earn 67.4% of what their male counterparts do, and on average, women with advanced degrees brought home around five hundred dollars less per week than their male peers.

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Historically women tend to enter white collar, male dominated occupations, rather than blue collar male dominated ones.\textsuperscript{32} Ironically, then, the gender pay gap is actually negatively affected in direct correlation as to how much education a worker has. Women without their high school diploma earn $106 less on average per week than men with similar educational background. Men with a high school diploma earn $211 more than their women peers. A bachelor’s degree commands $284 more per week for men than women. Women with advanced degrees – what the Department of Labor classifies as ‘people with master’s, professional, and doctoral degrees’ – earn $1,185 per week to the male’s $1,630.\textsuperscript{33} Thus, the worst offenders for the gender pay gap are those occupations that are considered to be ‘white collar’. A reason for this may be that these types of higher-paying, white collar jobs typically demand less flexible and longer hours. Research has shown that when workers in these types of jobs want flexibility, they are penalized in the workplace.\textsuperscript{34}

Women are generally underrepresented at all levels of the national work force, making up 47\% of the total United States full-time laborers in 2015. Compare this to 1948, when women made up 29\% of the labor force.\textsuperscript{35} Studies have shown that women also tend to make up the bulk of lower-level jobs. Technology, energy, manufacturing, and entertainment industries are notorious for low levels of women’s representation in all levels of their occupations, failing to attract women to even entry-level positions. However, the healthcare, banking, retail, 

\hspace{1cm}\textsuperscript{32} Miller, Claire Cain. “As Women Take Over a Male-Dominated Field, the Pay Drops.” \textit{New York Times}, 18 Mar. 2016.  
\textsuperscript{33} Women’s Bureau. “Earnings Charts 1-18.” Chart 11: Women’s median weekly earnings by educational attainment, race, and by Hispanic or Latino ethnicity, 2014.  
\texttt{https://www.dol.gov/wb/stats/facts_over_time.htm#labor}. 
information services, asset management, and consumer goods industries populate over half of their entry-level jobs with women. Women’s representation in higher levels, however, drops off sharply. At each level of advancement – Manager, Director, VP, SVP, and the C-Suite of top executives – women’s representation increasingly falls off about ten percent. In all of the upper echelon of corporate America, no industry can claim to have even 30% women’s representation. The technology industries boast 19% of their C-Suite level to be women, but the asset management and manufacturing industries feature just 14% and 13%, respectively. \[36\]

As of 2014, women earned a median annual salary that measured only 78.6% of men’s. By 2017, this earnings ratio had only risen to 80%. Women’s mean annual earnings have only increased 19.5% in the past fifty years, when women earned 59.1% of what men typically did. \[37\] Indeed, there has actually been very little growth of women’s weekly earnings ratio to men since 2000, with a rise of no more than 5%. \[38\] In addition to simply being paid less than men, statistically women are also highly likely to engage in unpaid labor when compared to their male counterparts. Women are 53% more likely to participate in childcare than men, and 39% more likely than men to perform household chores. In 2015, private industry only reported that 12% of their labor force had access to paid family leave, and a smaller 10% of the same demographic reported receiving child care assistance from their employer. Combined with the wage gap, and how much more likely women are to spend time doing unpaid work, women’s finances can suffer vastly disproportionate to men’s, due to eroding wage-earning potential from

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disproportionate time constraints.\textsuperscript{39}

Across the United States, what is considered to be a basic ‘livable wage’ for a family with two parents and two children ranges from $49,114 in Morristown, Tennessee, all the way to $106,493 for families in the Washington, DC area. The median in this range, for a town like Des Moines, Iowa, is $63,741. By this figure, a family -- if assumed to work a very high 50 out of 52 weeks out of the year -- would have to bring in weekly median earnings of $1,274. For a single person with no children in the same city, the annual livable wage is marked at $26,830 (or about $536 a week). The federally designated poverty line, however, remains at an annual cap of $24,008 ($480 a week), far below even the lowest modest living standard in the nation. Those who work full-time earning the federal minimum wage only reach an annual salary of $15,080.\textsuperscript{40} This highlights alarming trends about the minimum wage and those who are impoverished (who also most often are people of color); it also has troubling implications for women.

While women make up 57\% of workers that the US Bureau of Labor Statistics calls ‘Professional’ and ‘Service’ occupations, they also tend to have low levels of representation within high paying occupations, but make up a large share of employees in low paying job. For example, while women who work as Maids & Housekeeping Cleaners make 99 cents to every dollar a man makes and women make up 89\% of this occupation, the median weekly earnings for both sexes is $401 dollars. This calculates to an annual wage of about $20,050. Not only is this occupation about $4,000 under the poverty line, but women are more affected. Other occupations like this include some connected to archival work. Within the “Education, Training, & Library” sector (median wage is $953/week), three out of four workers are women; but they earn only 79

cents to for every dollar paid to men.

The disparity of earned wages continues to grow when considering ‘high paying’ jobs. For example, in ‘Architecture & Engineering’ (where there is some intersection with AV archival tech positions), women are only 15% of the profession and earn 81 cents to every dollar earned by men. ‘Computer & Mathematical’ boasts the highest pay in this category, with women 26% of the workforce but again making only 82 centers on the male dollar.\(^{41}\)

All in all, it is a simple fact that men occupy most ‘high paying’ jobs. The Third Way, an organization that labels itself “a centrist think tank”, published a 2016 study that interpreted Department of Labor generated data. *A Dollar Short: What’s Holding Back Women From Equal Pay?* among other things, consolidates what the DOL classifies as the top 30 jobs in the Top Earnings Decile as well as the 30 jobs that fill out the Bottom Earnings Decile. A remarkable trend emerges from the data. Out of the 30 Jobs from the Top Earnings Decile, 26 (or 86%) are male dominated. Most of these jobs see male representation at 75-80%. The earnings from range from $71,906 to more than $105,000. Conversely, 23 out of the 30 jobs (76%) in the DOL Bottom Earnings Decile are predominantly female, again at an average rate, across those 30 occupations, of about 80%. The earnings for these range between $18,000 and $26,000. The Third Way report also confirmed that the median weekly earnings in the jobs in the Top Earnings Decile was $962, and that weekly median earnings fell off 21% in the 30 jobs represented in the Bottom Earnings Decile. Not only are women consistently paid less, they work in occupations that are under paid. Also of note, even in these underpaid jobs – jobs that often pay below the

poverty level – women are still paid less, on the dollar, than their male co-workers.⁴²

Ultimately, on a national level, women’s work is simply and demonstrably valued less -- regardless of education, occupation, or performance. This claim is supported by the findings sociologists in the 2009 study “Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 U.S. Census Data.” Once women enter into an occupation previously controlled by a majority of male workers, the wage for both sexes tends to drop. When women begin working in a job, the authors show, the job is generally regarded as being less intrinsically important to society. It is assumed to require less skill or knowledge. When tracked over time, the same study found, this phenomenon was not simply because women pick low paying and less interesting jobs, but because employers are deciding, at some point after the women enter the profession, to lower wages. To be able to prove this, researchers Paula England, Asaf Levanon, and Paul Allison assessed occupations that had changed from predominately male to predominately female. The field of Recreation – either in parks or camp institutions – showed a decline of 57% in regards to median hourly wage. The same phenomenon occurred when women started to become designers at an increased rate – wages fell 34%. Housekeeping wages, over time, fell 21% while biologists fell 18%. The study also found the opposite occurred to occupations that, over time, become male dominated.⁴³ Computer programming, now predominately male, was once considered menial and tedious work, carried out mostly by women in the career’s conception in the late 1940s. The ENIAC (Electronic Numerical Integrator and Computer) is regarded to be the world’s first electronic digital computer. It was

commissioned by the US Army,\textsuperscript{44} which hired six female employees to serve solely as the ENIAC’s computer programmers.\textsuperscript{45} In 1967, \textit{Cosmopolitan} ran an article that encouraged women to pursue a career in computer programming, and even quoted Dr. Grace Hopper (a programmer who worked for the same ENIAC computer) as saying: “It’s just like planning a dinner. You have to plan ahead and schedule everything so it’s ready when you need it. Programming requires patience and the ability to handle detail. Women are ‘naturals’ at computer programming.”\textsuperscript{46}

At the time of the article, however, the profession had already made shifts towards a demographic masculinization. As male programmers sought to increase the standing by which the public regarded their field, this set off a domino effect that made the occupation increasingly difficult for women to enter. Because higher entry-level educational requirements were being established, professional associations were formed, and computer industry advertisement campaigns that deliberately and directly linked women staffers to human error and inefficiency, women’s representation within the occupation had fallen off to 37% by 1985 and 18% in the mid 2010s.\textsuperscript{47} As such, the occupation experienced both a surge in public respect and the occupation’s wages began to skyrocket.\textsuperscript{48}

Other ways women’s work is quantifiably measurable as valued less than men’s include how a woman’s age and ethnicity may affect her earnings. When compared to her male counterparts, a woman’s earning potential peaks from 35 to 44 years old. Women 16-19 make

\textsuperscript{47} Drink, “Researcher Reveals.”
\textsuperscript{48} Miller, “As Women Take Over a Male-Dominated Field.”
about $357 a week, women who are 20-24 years old make about $468 a week, and female laborers 25 to 34 years of age tend to make $679 a week. The Department of Labor, reports, however, that in the ages of 35 to 64 years of age, a women’s earnings plateau at $780. This contrasts sharply from men, who continue see rising earnings until age 64, when they take home $1,021 a week, a subtle growth from the $964 that 35 to 44 years old men in the United States tend to earn. Men 25 to 34 tend to earn $76 more weekly than women in the same age bracket. Men 65 years or older earn $942 weekly; women average only $740, exemplifying how fewer financial options older women have as they approach retirement.\footnote{Women’s Bureau. “Earnings Charts 1-18.” Chart 12: Median weekly earnings by age and sex, 2014.}

All of the factors above are magnified for women of color. According to data collected by the US Census in 2015, while women overall were earning 80 cents on the dollar paid to men, African American women only earn 66% of what white men earn. Hispanic women earn even less, being paid only 59 cents to every while male’s earned dollar.\footnote{Liner, \textit{A Dollar Short}, 2.} According to research by the National Women’s Law Center in 2014, roughly a third of both African American women andLatinas reported problems paying rent or mortgages on time, versus the 20% of white women that reported the same. Roughly 30% of both Latinas and African American women also reported having a ‘difficult’ or ‘very difficult’ time providing food for their families due to lack of funds. A white man is considered to be a ‘low-wage earner’ for his ethnicity if he brings home an annual income of $35,000. However, when Latinas or African American women were classified as low-wage earners for their ethnicity, the reported average annual income did not even surpass the poverty line. Even in low-paying occupations, men consistently out-earn
women, but women of color are almost always the most severely affected.  

Terms for understanding sexism, gender discrimination, and bias

To help us understand and interpret the experiences reported by moving image archivists and those in its tech sector, we have a rich literature documenting and analyzing the more general experiences we now refer to by particular terminology. This section is used to orient the reader to terms and situations relevant to this research. As its title suggests, the in-depth National Center for Women and Information Technology’s 2016 report Women in Tech remains an important and up-to-date source for anyone studying these issues. It was key in conceptualizing what follows.

The American workplace has changed drastically for women since the 1960s. Significant strides forward have been made in anti-discrimination policies and recognition of women’s rights. While hostile sexism in the workplace is largely frowned upon, the reality is that women do not experience the same workplace environment or privileges that their male counterparts do. As many of the archivists I interviewed attest, implicit bias against women occurs daily, especially in male-dominated workplace environments, including the technology and entertainment industries.  

The National Center for State Courts defines implicit bias as “the bias in behavior and/or judgment that results from subtle cognitive processes that often operate at a level below conscious awareness and without intentional control.” This should be understood to be a distinct concept from an explicit bias, which are “the attitude or beliefs that one endorses at a conscious

52 Ashcraft, Women in Tech, 21.
level.” Psychologists use these terms to describe and explain human behavior. Implicit bias can affect a worker’s professional life in two ways: day-to-day interactions and institutional glass ceilings. People start forming implicit biases when they are children, absorbing pre-established cultural schema for nearly everything in life – people, activities, objects, and systems. As Women in Tech puts it, implicit biases shape their tolerances for the world, dictating what each person finds acceptable, like what a ‘good technician’ looks like, or how a ‘good manager’ should act.

These implicit biases can cause people to misinterpret other people’s actions and behaviors. For example, women who negotiate for raises are 30% more likely to receive open criticism for their ‘too aggressive’ or ‘bossy’ behavior when compared to men who exhibit the same behavior in the same environments. Women who do not negotiate for promotions are 67% less likely to receive criticism regarding their behavior.

Two examples of explicit and implicit biases that will be used regularly to explain the findings of the interviews conducted during the course of this paper’s research are hostile sexism and benevolent sexism, respectively. When the term ‘sexism’ is used in conversation, the average person will think of cases of hostile sexism first. This type of sexism is manifested by overtly angry behaviors and aggression, verbal or otherwise, towards women, who are often seen as trying to control men by means of sexual advances or feminist ideology. At first glance, this type of sexism would be assumed to be more damaging to its recipients, but this is not the case. Benevolent sexism appears to be that of a positive attitude towards women because of the lack of

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54 Ashcraft, Women in Tech, 21.

55 Yee, Women in the Workplace 2016, 12.
malice behind it, but stereotypes women into being figures who are warm, but incompetent and weak, requiring men’s assistance. Paternalism, while not a necessary attribute for classification, is also a frequent feature of benevolent sexist behaviors. Most of these types of behaviors, if noticed at all, are classified as ‘harmless’, and allowed to continue. In fact, most people inaccurately predict the damaging effects of hostile sexism too intensely, while undervaluing the negative effects that benevolent sexism may play. Because hostile sexism is so easy to identify, it is easier to address and eliminate than the usually well-meaning benevolent sexism. In fact, claims women make about experienced benevolent sexism can lead to intensifying negative encounters with male supervisors and colleagues, as men are highly likely to perceive instances with such benevolent sexism as a non-issue.  

In a 2007 study, benevolent sexism was tied to impaired cognitive performance. Women were subjected to three different types of behaviors during a job hiring simulation – non-sexist (to serve as the control), benevolently sexist, and hostilely sexist. In the hostile situation, the employment recruiter complained about having to hire female workers, how women were the ‘weaker sex’, and tended to be upset easily. In contrast, the employment recruiter utilized benevolent sexist remarks like ‘we knew the new hire could be a woman, and don’t worry, we know we have to help’. Interestingly, those subjected to the benevolent sexism suffered impaired cognitive performance when compared to those in the hostile sexism and non-sexist behavioral groups. Because benevolent sexism mixes praise with the implicit suggestion that women are inferior to men, no clear line of causation can be drawn to one particular source. This causes triggers self-doubt in women who experience this type of sexism. In hostile situations, women

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were simply able to attribute the speaker’s claims to his sexism, and move on without mental intrusion, which is why they tested equivalent to the control group. The type of mental intrusions that the women exposed to benevolent sexism experienced is known to diminish a person’s working memory, which is used in most daily activities. Benevolent sexism, then, can be directly related to a decrease in worker performance.

Additionally, benevolent sexism increases the chance that female workers conform to gender stereotypes and settle for the low status role they have been provided. Women who prescribe more to the concepts of benevolent sexism – like those who have ‘knight in shining armor’ fantasies – are also less likely to look for career advancements or pay raises. When experiencing patronizing or paternalistic behavior, women again suffer cognitive impairment from the mental intrusion. For example, both men and women in low status jobs tend to respond angrily to praise from superiors, but the anger women feel from such patronization can be connected to impaired workplace performance. A study in 2005 subjected men and women to the same patronizing conditions and measured those effects by subjecting the workers to a test shortly after. Women who had been patronized experienced a dip in test scores, whereas all men and the women in the control group did not.

In technology and computing companies, the Women in Tech report identifies how women in the occupation are specifically affected by the implicit biases in their day-to-day work lives. Gender (or color) invisibility, stereotype threats, tokenism, and microinequities are terms and concepts that result from the implicit biases made up from each employee in any given

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workplace. When a place of employment is controlled by any type of demographic majority, the
instances of implicit biases snowball on each other, coming from many different sources, and
culminates can foster an inhospitable environment that pushes workers to search for alternative
modes of employment. While these everyday interactions and instances can be linked to any
minority – gender, ethnicity, sexuality, etc. – for the purposes of this research project, any further
terminology will be restricted to the application and discussion of the women’s experience in the
workplace. It is important to note that these are still implicit biases, and not of any conscious
intention or ill will. This factor, however, also makes the status quo more amorphous and
complicated to change.59

Gender invisibility occurs in the workplace when employees – frequently manifested by
those in hiring positions --- make statements or choices that are well-intentioned in an effort to
combat prejudice and provide equal treatment to all employees. Though well intentioned, this
blindness actually furthers the inequalities faced by women in the workplace. If the society at
large was as gender blind as some employers claimed to be, gender invisibility would be
irrelevant. As it is, however, women are underrepresented in most occupations, are treated
differently than male counterparts, are typically compensated less for the same work, have less
opportunity to engage in meaningful work, and are promoted less. By being gender blind, and
treating ‘everyone the same’, inequalities in the workplace are never rectified. This is not to
advocate for special treatment of any demographic, but instead the ability to carry out one’s
workplace duties without compounded pressure or roadblocks.

When people are fearful of acting in ways that may be seen as confirming to negative
stereotypes about their particular demographic, they are experiencing the phenomenon that is

59 Ashcraft, Women in Tech, 22.
referred to as a **stereotype threat**. This concept was first introduced by a 1995 study that examined the test scores of African American and white students – when the students were told that the tests were being scored, African American students scored lower than white students. The same students were later told they were taking an ungraded test, and differences in performance disappeared. This same concept can be applied when comparing men and women: when presented with the same test, women underperformed their male counterparts when confronted with the stereotype threat that men clearly and consistently scored higher than their female counterparts on ‘logical-mathematical tasks’. For the group of women in the control condition, where participants were told that women and men actually didn’t test any differently, women performed without any impairment or differences in test performance.\(^{60}\) Further, women workers will often forego mentioning instances of benevolent sexism, for fear of stereotype threat. Because women are often labeled as ‘dramatic’ or more likely to ‘overreact’, and because their male colleagues are much less likely to recognize benevolent forms of sexism as legitimate, voicing issues or trying to communicate discomfort with a sexist experience is seen as a risk. Often, in situations like these, women employees will simply prefer to stay silent over pursuing a solution. Thus, by internalizing the episode of discrimination, the effects of the sexism on the worker’s psyche last longer, diminish the capacity for working memory, and decrease worker performance over a longer timeframe.\(^{61}\)

Other mental intrusions that cause performance impairment without falling into a specific and classifiable phenomenon may be called **microinequities**. For women, these micro aggressions are cumulative and subtly repeated negative messages. Like the impact of stereotype

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threat, microinequities are used to discourage and devalue, interfere with working memory, and can impact employee performance. Because of their intrinsic nature, which is often rooted in aspects of human communication like non-verbal signals, dismissive looks and gestures, and a condescending tone of voice. For women, this can manifest itself in several different ways. For example, often supervisors will not recognize an idea initially, only to accept the idea from another male employee not too long after. Often, in interviews, a job recruiter will refer to the ideal candidate as a ‘he’ when talking about the position, despite interviewing a woman for the position at the time. At job fairs, vendors will often be seen enthusiastically greeting men, but do not expect women to approach the booth, or to know much about the subject at hand. Women are not the only demographic that experiences microinequities – examples include people of color being mistaken for one another in a workplace, or LGBTQ workers not having the freedom to discuss their families that heteronormative workers experience. These types of microaggressions in the workplace cause employees to underperform, withdraw from their peers, and ultimately seek other employment. This type of turnover conservatively costs corporate America $64 billion dollars a year, according to Women in Tech, and disproportionately affects workers from underrepresented groups.\textsuperscript{62}

When a workplace is predominantly made up of one demographic group, tokenism is likely to form. This phenomenon occurs when a particular identity group in a workplace is only represented by one or two individuals, resulting in those individuals being expected to be representative of the entire demographic. Warning signs of potential tokenism in an organization occur in job advertisements expressing a strong desire for women (or other minorities) applicants, or being demonstrative of the organization’s commitment to diversity simply by

\textsuperscript{62} Ashcraft, \textit{Women in Tech}, 22.
selecting diverse or minority candidates. Body count should never be taken as a measure of the lack of sexism or diversity in a workplace environment. Other warning signs include workplaces or individuals that ask workers to be a representative or ‘speak for’, or are asked to be the face of client relations with the worker’s given demographic. Additionally, the implementation of tokenism in hiring practices actually has been reported to hurt efforts to diversify the workplace and hinder other efforts of the token demographic. Often times, workplaces seek to promote an individual of an underrepresented group, specifically because of their diverse attributes. This often puts individuals in roles of responsibility that they are not professionally yet equipped for, and sets up employees to fail.\textsuperscript{63}

In the workplace, a woman’s occupational advancement or mobility may be affected by what are referred to as ‘Double Binds’. While they can be used by anyone in power to exert control over those without power, the specific effects women experience in the workplace from double binds can be broken down into five common subcategories or concepts. While psychologists have labeled this type of phenomena as a double bind, the term ‘Catch-22’ can also be used to reference the socially constructed categorizing mechanisms that have a debilitating effect on women. Double binds are often contradictory in nature, as they typically pair two opposing, pervasive stereotypes about women, which often results in women being restricted to subordinate roles as they set up women for failure, due to the impossibility of fulfilling both expectations of the double bind. Ultimately, the double bind is defined by unrealizable expectations, self-fulfilling prophecies, and double standards. The following five binds are sourced directly from Annalisa Marie Wirth’s doctoral dissertation “Women and Leadership: Overcoming Old Obstacles, Exploring New Opportunities” (2005). Wirth borrows heavily from

\textsuperscript{63}Ashcraft, \textit{Women in Tech}, 24.

One type of classifiable double bind is referred to by contemporary psychologists as the *Silence/Shame Bind*. The self-fulfilling prophecy aspect of the double bind makes this subcategory unique in that a constructed – false – reality creates new behaviors in those affected, which in turn makes the false reality actually become true. This Silence/Shame bind criticizes women for the failure to act on or do something that their demographic has been societally forbidden or prohibited from doing or carrying out. Historically, there was a long span of time when women were prohibited from speaking in public space – in turn, they were criticized for failing to produce ‘great’ oratory. This type of shame, in turn, often stifles growth contrary to the stereotype, and therefore reinforces it – in this case, stifling women’s oratory achievements, a reality that is affected contemporarily. For a modern example, as Wirth puts it, one only needs to look women’s representation in the upper echelon of corporate America and government. Rarely are women given opportunities to attain high levels of leadership, but are often criticized for failing to be competent leaders, or even leaders at all.

The *Femininity/Competence Bind* even furthers the aforementioned bind by asserting that women cannot be considered both feminine and competent at the same time. Because women are often only considered feminine when they are in the younger stages of their life, as they gain competency – as women age – they may then begin to be considered competent, but at the expense of their perceived femininity. This double bind creates unrealistic expectations, and the double standard is a burden on a woman’s career advancement. As women gain, over time, knowledge and experience, they can never exercise these skills or hierarchal positions to their fullest extent – the exchange of femininity for competency ensures that in the workplace, women
will be socially penalized for the failure to live up to the stereotypical idea of what a woman should be.

As Wirth argues, the Aging/Invisibility Bind works in the inverse way that the Femininity/Competency Bind does by getting its power from the double standard created by the assertion that men age well and become more and more refined as they progress on in years, attaining wisdom and power while also asserting that women merely wrinkle and become irritable during menopause and cease to have any use thereafter. This assertion, that women exist for men’s use and enjoyment, is a sexist one. While in their youth, women’s competency is challenged and doubted, and their behavior written off as bitchy because of hormonal fluctuations, as they age, they are written off sooner and more prevalently than men. Societally, men’s attractiveness can be influenced by a number of factors, like social status and personality as well as physical appearance, whereas women’s primarily is based in sexual attractiveness. Because human sexual attractiveness is associated with youth and women’s appeal does not have social standing or personality to metaphorically prop itself up on, it is considered to be worth less and diminish faster. This may be why women experience an earnings plateau once they reach the age of 35, whereas men continue to earn increasing amounts until they are 65. Regardless, this lack of perceived appeal leads to an invisibility in the workplace, making any attempted career growth or negotiations more problematic and difficult.

When masculinity is the standard by which all people are measured as successful or capable, it forces a no-win situation where women are forced into a Sameness/Difference Bind. It is an intrinsic fact that men are not women and women are not men, but when only one gender is measured against the other, any deviations from the contrived norm serve to other both women

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as a whole and femininity as a concept. As a result, women in society, media, and pop culture are treated as defective in terms of biological and cognitive functions (for example, the stereotype of women’s brains being smaller than men’s), and are judged more harshly for their pursuit of personal interests, like the double standard by which women and men are perceived to neglect their families in efforts to advance their career. The more women exhibit traits that are stereotypically thought of as masculine, they also lose. While deviating from the norm - masculinity - is seen as being less desirable, women who are perceived as having masculine traits are typically criticized for this as well and their failure to be an acceptable type of woman.

Leadership is a skill that requires assertive personality traits like autonomy, independent opinions, and making active choices. These traits in modern day society are also often condemned when exhibited, and women who employ these tactics or have these personality traits are often seen as undesirable or unacceptable.

The final bind that is classified as a subcategory by psychologists with consistency is that of the Womb/Brain Bind. This dichotomous phenomenon occurs when women are regarded as having to choose between their womb (having children or maintaining a family) and their brain (pursuing a career), under the assumption that both cannot function simultaneously. In this bind, one choice is presented by society, media, and religion as the correct choice, and the other as an incorrect and condemnable choice. While modern society has moved from this type of extreme being the reality, in contemporary times this bind presents itself in gender roles, such as tying a woman’s identity to the welfare of her children and the cleanliness of the home. Even in marriage vows, the phrase ‘man and wife’ demonstrates the woman’s altered societal identity while the man’s remains the same. This allows a man to go undefined by his family or relationship, whereas a woman can not. As women have looked to advance their careers over the
past fifty years, this has lead to the rise in two specific psychological phenomena - role conflict and role overload. Role conflict refers to the psychological stress experienced when women must try to accomplish incompatible expectations. Role overload is experienced when women experience stress related to the obvious hardships of meeting such impossible demands. Both typically occur when modern women in the workplace attempt to balance their family life with work life - twice the load that men are typically expected to balance.65

To describe perpetrated sexism without articulating the various responses from the same women the offense was committed is to describe an action without its complementary reaction. When talking about the types of sexism faced in the interviews conducted for this thesis, it is also important to be able to talk about how respondents deal and react to sexism. In order to do so in any depth, some terms must be defined and articulated.

This collection of terms is by no means exhaustive when talking about the types of responses and behaviors women have in response to sexist stimuli, but instead has been formed to specifically talk about the issues that came up about the moving image archival profession through the interviews conducted under the purview of this thesis. By setting up the framework now, these concepts can be discussed in a more fluid manner in the later analysis.

When relaying accounts of perpetrated sexism, either observed or experienced, women tend to default to three modes of discussion: detached reporting, enraged acknowledgement, and troubled belief. Detached reporting occurs when those who have experienced sexism relay their account of the encounter in an unemotional and reserved fashion. However, due to the emotional response that sexism usually provokes in those it has been perpetrated against, this was not always possible or reasonable. This type of interview – detached reporting – was encouraged for

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this particular thesis at first to avoid the stereotype threat that women often over exaggerate their accounts. Women who use the detached reporting approach most commonly have only experienced sexism on a third party level, but not first hand. Other times, the approach is used when talking about broad and systemic issues related to sexism, rather than specific instances. The other types of responses in the face of sexism are much more outspoken, as their names would suggest, and both provide far more awareness and condemnation to sexist issues when compared to detached reporting. As the names would suggest, enraged acknowledgement is when women respond to sexism with an intensity, like anger and disgust so clearly convey. This type of reaction is usually found in response to a case of hostile sexism. For women who can acknowledge and are aware of benevolent sexism as it is perpetrated against them, troubled disbelief is more common. Troubled disbelief helps researchers easily reference the type of attitude that is manifested when women have an incredulous or amazed reaction to sexism directed towards them. Often times, this sexism is of less perceived consequence than the type that provokes enraged acknowledgement, is subtler, and is often also classifiable as benevolent sexism.66

When recounting these interviews, in retrospect, women can articulate their responses to sexism and detail the purposeful actions they take to combat those effects. Sometimes those actions are targeted at a specific instance, but can be a general effort to ‘do their part.’ Defining these types of domino responses enables the further and more elaborate analysis of the data collected from interview respondents without being encumbered with definitions.

Often, when confronted with a sexist situation, women will retroactively report of experiencing what is referred to as a regretful response. This is the self-expression of

disappointment in the interviewee’s immediate reaction to a past instance of discrimination targeted at the respondent’s gender, and how they would respond differently, given the chance to react again. Studies illustrate that women who discuss having a regretful response also correlate with having few female mentors to emulate or seek advice from. Women who share their regretful response with other women encourage positive and proactive behavior, and promote less regretful behaviors in when confronted with sexist behavior in the future.

When women confront the challenging situations that sexist situations create in their lives, they use the experience to be able to more easily recognize and combat future sexist situations women in the workplace find themselves in. Like regretful response, women’s expression and vocalization of the character building techniques they develop in the face of adversity is empowering to their women peers. Ultimately, women who engage in this strategy typically approach negative situations and experiences and attempt to spin them into positive ones. As disapproving of this type of sexist behaviors women can be, and as positive as the results of character building can be, this type of coping mechanism also tends to let the perpetrator free without holding them accountable for their sexist offense. If character building is pursued successfully, most of the women who implement this type of strategy wish to impart to other women that the most important thing about sexism is the opportunity to face adversity and learn from it.67 When using this type of coping mechanism, it is important to note that without implementation of this knowledge towards rectifying the issue following sexist encounter or instance of gender-related discrimination, this coping mechanism will largely be inconsequential. However, it is important to mention that women who implement this type of strategy are typically less damaged by instances of sexism than those who use more aggressive tactics against

discrimination. By focusing on the positive, less time is spent ruminating on the discrimination inflicted on them, and less working memory is used, thereby minimizing cognitive impairment. Despite the fact that negative psychological effects while using this tactic are minimized, this is still no defense for sexist or discriminatory acts. Just because women have found a way to preserve their mental integrity in direct defiance to being treated in a subversive way compared to their male colleagues is no grounds to perpetrate or ignore such behaviors.

*Defiant empowerment* is the term applied to the bold and obvious behavioral changes and decisions made when women are confronted with a sexist situation. This type of framing strategy is used socially to condemn the sexist behavior, but to also assert a woman’s autonomy while ensuring that the offending behavior isn’t repeated. In the workplace, this type of tactic is usually perceived to be intense and rebellious, and as violation of typical female stereotypes. Often this action, if not unjustly and heavily disciplined, removes power from the offending agent while restoring it to the woman the sexist behavior has been inflicted upon. While relatively rare, due to the assertive confidence, when women observe this behavior for female colleagues in the workplace, their own autonomy is often emboldened by proxy.

*Assertive interpretation* is slightly different from defiant empowerment, in that while the tactic proactively addresses and condemn the discriminatory transgression, it attempts to do it without the brazen quality that the former has. Women who employ this tactic have found the self-motivation to educate the person responsible for the offense with confidence, but typically do so with less intimidation than those who implement defiant empowerment. While still reclaiming their agency and preventing – ideally – the sexist behavior from occurring again, the lack of intimidation serves to prevent any negative impacts from befalling her career in the workplace. Because of the inoffensive way the woman deals with her transgressor, in an often
stereotypically feminine style, no irreversible or irreparable damage is inflicted on the relationship and her career moves on unencumbered.

A woman can be classified as a *change agent* when she uses and understands her position at her place of work to assert her power or influence to prohibit sexist behaviors or environments from forming. This framing strategy is used to specifically refer to when women actively and consciously promote equal treatment of women and uses her position to attempt to influence others to do the same. This, in the workplace, is most effective when implemented by women working at the senior levels of an organization. As the years progress, and sexism has changed from hostile to benevolent, the tactics women must employ will change in the pursuit of establishing unbiased treatment towards women, but the momentum gained from these efforts do promise exponential progress.

Benevolent sexism, as was previously discussed, can be hard to identify. This inability to place blame for a sexist act is explained by *interpretative uncertainty*. Women’s awareness of three factors - the ambiguity of benevolent sexism, how statistically women are criticized for addressing a problem within the workplace, and how little men are likely to recognize acts of benevolent sexism as relevant or true – results in this type of expression. When women express interpretative uncertainty, they are expressing their doubt as to whether they have interpreted a situation as a sexist one or not. Because of the three previous reasons described, women use this tactic to provide room for forgiveness to those around them in the workplace. By expressing that the situation or behavior could have been sexist, but also could have been cause by something else, women are proactively seeking to avoid being labeled as bitchy, petty, or dramatic. Despite the conservative nature by which these women choose to express their experiences, they do so often out of the moral responsibility they feel for expressing the negative effects sexism often
Positive reversal occurs when women, understanding they have been through a sexist experience or encounter, communicate the happenstance through a positive light. This is an active transformation, and women who employ this tactic often use irony or humor to build camaraderie with their fellow female co-workers over a negative experience. This type of tactic reports on surprisingly positive results of gender discrimination, rather than negative ones. For example, when working in a sexist environment, a pregnant woman may report that her male colleagues may insist on carrying everything for her. While this is still a sexist—albeit arguably medically beneficial for some pregnancies—behavior, when women communicate this type of ironic positivity to other women in the workplace, their bond or working report is not only typically strengthened, but can exemplify and showcase social progress.

Finally, the term post-feminist distancing refers to the phenomena when a woman, especially in the workplace, consciously distances herself from any expression of feminist issues or any discomfort from experienced gender discrimination. Often this is done to avoid being vilified within the workplace by those with sexist attitudes or anti-feminist beliefs. It is a way to avoid attracting negative attention. This type of behavior is typically pursued because women believe it will prevent their work and careers from being encumbered, like being kept from important projects, promotions, or recognition of work. This tactic is employed most often in workplaces that have little female representation. While not always the case, such domains can be fraught with pitfalls for a person, if labeled a feminist (which in some segments of the general population is still regarded in a negative light), and the women who employ post-feminist distancing must recognize this and make the active choice—often a very difficult choice—between their careers and the treatment they receive. The women who employ this tactic most
successfully are those who can travel through their career unimpeded and can offer—often undetected by the workplace at large—help to other women in their workplace, as well. It is important to clarify that this type of strategy is a conscious and often political one, and not merely the result of a woman’s lack of awareness to the discrimination they face. Women who employ post-feminist distancing experience gender discrimination, are aware of it, and make the political and strategic choice to metaphorically fly under the radar as a survival mechanism for their career.68

Interviews and Data Sets

Method and Process

My interviews with professional moving image archivists followed conventional research protocols for establishing the privacy, confidentially, consent, and anonymity of each person who agreed to participate. The thirty-six people who were interviewed (in person or via telephone) each consented to an audio recording of our conversation. The others opted to respond to questions in writing, via private email. Their personal names and the names of the organizations for which they work are not used, guaranteeing them anonymity, which allowed them to speak candidly. Any remarks or job titles that might potentially make them identifiable were not used.

Karen F. Gracy’s book Film Preservation: Competing Definitions of Value, Use, and Practice, published by the Society of American Archivists in 2007, served as a model for this research. She conducted field research in archives and laboratories, interviewing dozens of preservationists. As in my study, she needed to allow interviewees to be candid about potentially

sensitive workplace experiences. I followed her method and attitude. She writes: “At all stages of this research, I made every attempt to protect the confidentiality and anonymity of participants. . . . [I] omitted job details where they might be considered identifiers” (227). Also, the aforementioned Wirth dissertation followed the same protocol. Of her twenty-six interviews with professional women she notes: “All interviews were confidential, with participants remaining anonymous, and audio-taped. Each audio-recording was subsequently transcribed and used as primary data.” This thesis follows suit.

Interviewees were initially approached by email, which briefly described the project as “a thesis aimed at examining the division of labor in archives, with a particular focus on women who work in technical career fields.” Out of the 52 ‘first contact’ emails sent, 40 interview answers were successfully gathered. Audio files of in-person or phone interviews were created at the time of the interview. This enabled the flow of conversation between the interviewer and interviewee and allows for different or more comprehensive interpretation in future points of the research process.

The interview questionnaire consisted of fifteen items developed with the intent to not influence interviewee testimony in any way. By asking the same set of questions about each professional’s career and their perspectives on the profession, some data becomes quantifiable (e.g., replies of yes or no) and qualitative comparisons more valid. In addition, patterns emerge based on that data can be observed and documented, even if not explicitly derived from the prepared questions. This allows for a more articulated and detailed account of a little discussed or acknowledged social dynamic in the specialized field of AV archiving, requiring multi-disciplined skill sets from its professionals. Because the goal of the research is to reveal in what social dynamics some professionals must conduct their work, no verbatim quotes are needed.
Some interviewees expressed concern for their employment because of the research subject matter, but consented to participate because the study assured them they would remain anonymous. Therefore, every effort has been made to ensure the integrity of this anonymity and confidentiality.

It is important to note the interviews were conducted in a manner that fostered a sort of detached reporting, on the side of the interviewer as well as interviewee. This style of reporting was considered an important one to Harriet Martineau, one of the first recognized women sociologists, who strove to be objective as possible during her studies.\(^6\) While there is a large amount of literature devoted to the concept of objectivity and its impossibility,\(^7\) this approach was adopted as a defense to criticism aimed at autobiographical research, or what is colloquially known as “me-search.”\(^8\) I included none of my own personal experiences in the research data.

Below follows a list of job titles held by interviewees. (Note: To protect anonymity, any identifying phrases or job titles that might be identifiable with particular individuals or organizations have been removed or translated into a generic equivalent.) All work, or have worked, with moving images directly. They restricted their testimony to workplace activities. The majority worked in technical careers or had a resume built on jobs in the technical fields. All interviewees worked in the United States.

Job titles include: administrative aide, archivist (digital archivist, senior archivist), associate director, audiovisual archivist, CEO, collection specialist, consultant (senior


consultant), digital asset manager, digital collection manager, digital conversion specialist, digitization specialist (for film, for moving images), director of media preservation, film collections manager, film preservation department head, founder of the archive, IT specialist, lab supervisor, librarian, manager (of archives, of study centers), managing director, mass digitization coordinator, media conservator, media preservation supervisor, moving image preservationist, preservation specialist, program manager, project director, project manager, and technician.

Additionally, it is important to note that not all questions were asked with the intent of drawing data only or primarily from the straightforward interpretation of the question. For example, Question 9 -- “To what extent are you aware of women who worked in the moving-image archival profession before you entered it” -- is used more as a barometer for women’s representation and exposure in the profession measured over time, rather than only identifying the role models of interviewees.

The first three questions contextualize and provide perspective for each interviewee’s testimony while also generating demographic data that will allow trends about the moving image archival profession to emerge without an explicit line of questioning.
Interview Statistics

Phone Interviews – 30
In Person Interviews - 5
Total Number Recorded Hours – 20
Total Returned Questionnaires - 5
Total of No Responses - 40

Question 1: What education and training did you have before working in the field?

68% master’s degree
7.5% bachelor’s degree
7.5% pursuing or had doctorate-level education
17% no formal education or on-the-job training

Asking this question can be used to track the prevalence of higher education among interviewees. The results are more significant than this straightforward type of reporting – when compared against the types of careers interviewees work in currently, trends emerge that outline the differences in the amount of formal training required for different careers within the profession. This tracks fairly consistently with the findings reported on the A*Census, as discussed above, accounting for the ten years of change and influx of new workers in the profession using higher education as an entry point.

Of the respondents who had advanced degrees, 40% had careers that required both digital and analog skill sets. A third used only digital archiving skills, while a quarter worked only in analog. These findings are fairly unsurprising, given the shift in technology and digital
applications within the profession in recent years, which has provided more jobs.

Question 2: Was your first job obtained by networking or rote application process?

Just over 75% of respondents said they got their first position by networking, while not quite 25% of them got it via application.

37% of respondents had careers in digital technology
29% in analog technology
34% of respondents had careers that involved both skill sets

This type of data can be used to see the hiring trends in different career subsets. While this question was intended to investigate instances of networking in the types of occupations using specific skill sets, the results illuminate more than previously hypothesized about the profession as a whole. This statistic becomes especially relevant when considering that a majority of job providers and job seekers turn to same-gender contacts for assistance in either filling an empty position or finding a job for themselves. Because a portion of jobs in the profession provide on-the-job training that is not available in any other way, it is possible that segregation of knowledge from groups within the career field occurs.

Question 3: What path has your career taken?

29% of respondents had been in the profession less than 5 years
34% for 5 to 15 years
32% for more than 15 years

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32% of respondents worked in settings categorized as academic
22% government
34% non-profit
12% for-profit

This question gauges the rate at which advancement within the profession is possible. Conversationally, the question was also used to generate more points of discussion about the depth of interviewees skill sets, the types of institutions they have experience with, what type of social dynamics they have had to work within, and how long they have worked in the profession. Noting the types institutions enables possible trends to be established between reported instances of sexism and the type of workplace environment. Correlation is certainly not causation, but interviewees at particular institutions mentioned specific instances of sexist acts or sentiments towards themselves or colleagues, whereas other interviewees working at different types of institutions – especially academic and non-profit – reported experiencing instances of sexism the least. This proved to be a large enough pattern to discuss below in the Trends section.

Question 4: Would you agree with the statement that: men and women are treated differently in the technical career paths of the moving image archival profession?

A substantial majority of 88% agreed. Of those, 53% responded ‘Yes’ unequivocally. The others said ‘Yes’ but provided immediate qualifying statements.

This question is the start of the interview that pertains directly to the division of labor and any sexism that may result from workplace dynamics, often caused by an uneven distribution of male-female personnel within a professional environment. Some respondents asked for
clarification as to what implication, if any, was being asked when using the word *differently*. Interviewees were asked to respond according to whether they had seen any changes in treatment from gender to gender, not to the quality by which the genders were treated. The types of qualitative statements often accompanying a ‘Yes’ answer were tracked for a specific reason. Often times, respondents would rush to state that the situation wasn’t as bad as it could be, or indicated they were unsure if the experienced difference in treatment was intentional or conscious, as if intended to minimize the effects their testimony. This interpretative uncertainty is often a result of experiencing benevolent sexism, making this ‘Yes and’ type of response important to quantify.

*Question 5:* If so, in what ways are they treated differently? What examples come to mind?

Only two people (5%) offered positive examples, while the others (95%) gave examples of sexist treatment.

This question is posed to help identify the ways in which men and women are treated differently. The term ‘sexism’ was not defined. How people respond to this word, and how they personally define it can vary widely. By having interviewees simply elaborate on the situations and behaviors they have observed in workplaces, their testimony remains uncolored by the interview process. The amount and type of answers were expansive enough to require elaboration in the *Trends* section.

*Question 6:* Have the numbers of women you’ve worked with since starting your career changed over time? If so, how would you describe the fluctuation?

Two thirds said the number of women they worked with had increased. Half of those
worked in jobs that required more digital and computer literacy.

The remaining third of respondents said the number of women in the workplace was at a steady plateau. Of those, 43% worked in jobs that required mostly analog skill sets.

This line of inquiry is used to examine any improved or diminished ability to enter into the technological career paths of the profession. While this is an optimistic response in terms of women’s representation within the occupation, there are concerns as to wage changes due to the increasing feminization of the occupation. As mentioned previously, when women enter an occupation, the wage drops for both genders. While in recent years, archiving has been thought of as predominately female, historically this has not always been the case, and continued feminization in one portion of the occupation is a potential pitfall for this type of scenario, especially as the demand for digital archivists grows. It is also important to note that while 64% of interviewees said they saw an increase in female employees, nearly all also stated they saw the largest influx of women employees in occupations drawing primarily or solely from digital skill sets. As one interviewee remarked: “The command line has been the great equalizer.”

*Question 7:* [For women]: How has your gender affected your work life in both your profession and workplace? [For men]: How have you seen a woman’s gender affect her profession and workplace?

73% reported negative effects

22% no effect

5% positive effects

This question was intended to allow interviewees the opportunity to elaborate on how they perceive gender has impacted their – or their female coworkers’ – ability to carry out
workplace duties. Note: this question is not asked immediately after Question 5 on purpose. Interviewees were often timid discussing workplace dynamics at the start of the interview. By using Question 6 as a buffer – switching away from the interviewee’s personal experiences – it serves to disengage the interviewee’s defenses, and allow for a more relaxed and elaborate response to Question 7. Some interviewees were not as timid, and didn’t necessarily benefit from the buffer question, but the order was preserved for consistency. Because Question 5 is posed as a general question, this question hoped to illicit specific responses about their personal experiences. Conversationally, interviewees typically had much more to say in response to this question. This was not only due to the focus on the self and specific experiences, but rather because Question 6 served as a type of incubation time after the interviewees were asked Question 5. As with Question 5, the specifics that were discussed in this section were processed and coded into five conceptual categories.

*Question 8*: How many women do you work with or around currently that are in technical career paths?

Half said they worked with one or no women. The others worked with two or more.

Of those who worked with 2+:

43% of respondents worked at a non-profit institution

29% in a library-type institution

24% government institution

19% for-profit institution

This question is used for two purposes: first, to observe the prevalence of female
employment in different types of institutions, and second to create data on how isolated positions in the profession can be -- and how often respondents mention isolation, physical or social. Workplace isolation, while inherent to some types of jobs, is also a common experience that women in non-traditional careers report. It is a sign of sexism, and can have an impact on the amount of performance pressure workers experience.\textsuperscript{73} Because many institutions may only have one or two archivists, isolation, in this profession, is not a clear indicator of a sexist situation. Therefore the isolation phenomenon will be more relevant in larger institutions that employ moving image archivists. A quarter of respondents reported they experienced isolation. Of those, 60% indicated negative effects from this isolation.

\textit{Question 9:} To what extent were you aware of women who worked in the moving image archival profession before you entered it? Did it inform on your education or career any?

- 56% of respondents had no answer
- 32% of respondents provided one name
- 12% of respondents provided 2+ names

This line of inquiry is used to gauge how much exposure and representation female professionals have had within the professional community throughout time. The high response of ‘no answer’ indicates a lack of women’s representation within the professional community at large. This is also reflected by statistics amassed for the aforementioned “Claiming Tech” panel at the 2016 Association of the Moving Image Archivist conference. To measure women’s exposure in the professional field, archivist Kara Van Malssen looked at various symposiums and conferences that have been held with some regularity, and how many women at these events spoke in a formal, expert capacity. In 2016, at the international meeting known as the Joint Tech

Symposium (JTS), only 15% of speakers were female; The Reel Thing Technical Symposium (RTTS), 17%; and the conference of the Society of Motion Picture and Television Engineers (SMPTE) 13%.

However not all representation is so low. AMIA’s Digital Asset Symposium featured women as 43% of its speakers in 2016. Yet this one anomaly does not change the fact that underrepresentation is an issue for women in this technical profession. This is especially apparent at events like the AMIA conference’s Hack Day, which AMIA describes as “A hack day or hackathon is an event that brings together computer technologists and practitioners for an intense period of problem solving through computer programming.” Here attendance is collaborative and open, rather than populated by invitation, and women’s representation is up to 55%. While this is an event that relies primarily on computer programming skill sets, and not analog media skill sets, it proves the point that there are not simply less women interested in this type of activity and work. Because speaker representation at the SMPTE and JTS and the RTTS are dictated by who is invited to speak at panels, and Hack Day is not, it is clear that rather than less women being interested in technical roles, they are simply being provided less opportunity to have a professional voice.

**Question 10:** Is there a division of labor in the technical career paths of the moving image archival profession?

More than four out of five said yes. Of those, more than half (53%) specified that jobs dealing mostly with analog technical skills were most affected by gendered division of labor.

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This question is used to gauge how professionals view gender distribution in the career path at hand. Sexism in the workplace can certainly take place without any division of labor, perceived or otherwise, and a heavily gendered workplace, one way or another, does not necessarily mean it is also a sexist one. The high rate of a ‘Yes’ answer indicates barriers to women entering the technical career paths. This can come from hiring biases as well as self-exclusion, as many women who were interviewed, despite the reality, often feel under qualified to the standards presented in job posting or advertisements. During the course of the interview process, some managers or employers spoke directly to this, and often mentioned how wonderfully qualified their employee was for the position. Later, upon interviewing the aforementioned employee, they expressed anxiety and self-doubt when recalling the application process, and expected someone ‘more qualified’ to get the position. In fact, this became so consistently mentioned by interviewees that this phenomenon deserves further inquiry.

**Question 11:** Are any other career paths affected by a division of labor?

Three quarters said yes. Those respondents most often (61% of the time) identified cataloging as the archival specialization affected. A third identified administration. Others (11%) said they were unsure.

This question was intended to observe any other divisions of labor that may occur in the profession not covered by the focus of the thesis. When respondents identified as recognizing another division of labor within the profession, they were asked to identify what type of career path they were thinking of. Of those that answered with cataloging, they spoke to the lack of male workers within the career path, across institutions. When respondents answered with seeing a division of labor within administrative positions, interviewees noticed a lack of female figures
in managerial or directorial roles.

*Question 12:* Do you have any impression of why this division of labor exists?

- 37% of respondents had no answer
- 34% of respondents referenced STEM careers
- 27% referenced video engineering
- 15% projection
- 15% film production

The moving image archiving profession has an interdisciplinary history due to the multitude of skills adapted from other careers and professions. Though related by a single mission and purpose – to care, preserve, and provide access to moving image materials – each niche of the profession draws from skill sets and knowledge from other disciplines. Often these careers also draw from the labor force of their sister professions. These workers typically bring with them a history of their respective career’s social expectations, norms, and stigmas.

*Question 13:* What could be done contemporarily to address this division of labor?

More than two thirds (68%) mentioned the need for more robust community support. Of those respondents:

- 61% mentioned the formation of community groups for support and advocacy
- 46% change agent tactics
- 44% more technically focused curriculum in higher education
- 36% workshops and communities sponsored by AMIA
- 15% of respondents mentioned change in generational demographic occupying
administrative jobs

This question was asked in order to generate professional feedback as how to make recommendations to dissolve the division of labor in technical careers of the moving image archiving profession. Most respondents mentioned continuing educational support on new concepts, skills, and tools, whether that be while students pursue their master’s degrees, sponsored by the profession’s association, or simply formed unofficially between peers. Some respondents simply stated that change in administrative perspective would drastically change the perspective of the person who would be in charge of hiring. With over half of the archival workforce coming from ages 50 and up in 2004, and considering Generation X’s oldest members in 2017 only 52 years old, some generational tensions start to become noticeable throughout this type of testimony. Because these age demographics also identified on-the-job training as their primary source of knowledge, and workers in the profession from ages of twenty-five to thirty-nine rate graduate school as their primary source of training – the oldest Millennial is thirty-six – the passage of knowledge may partially depend on these cross-generational tensions being resolved to some degree. With 45% of the archival workforce due to retire within the next 19 years, and 20.7% due to retire within the next nine years, this tension should cause the profession at large some modicum of concern.

Question 14: Do you know any women of notable achievement or craftsmanship that is lacking

Walch, et al., A*Census, 324.
the notoriety she deserves when compared to her male contemporaries?

39% of respondents had no answer

24% of respondents had one name

37% of respondents had 2+ names

Of respondents with no answer, 31% said this was because the figure was already well known.

Of respondents who had an answer, 48% mentioned the same name. Of the respondents who mentioned the same name, 75% cited a former professor.

Two things are answered by this question: how frequently women are considered to be experts in the profession, and, given that higher education is a dependable track into the profession, how empowering same-gendered representation can be for a student’s learning. For the occupation to be so highly “feminized” yet have such split representation is problematic.

While this question was not explicitly asked, nearly all respondents could and did identify male counterparts. This was used to contextualize the term ‘notoriety’ by interviewees, by referring to a contemporary male figure in the profession that is already well known and respected.

**Question 15**: Is there anyone else you believe I should talk to?

Only 20% answered affirmatively. This question did not contribute to any type of data set. The question was instead used for networking and for built-in good will when approaching prospective interviewees. Anecdotally, interviewees referred by previous respondents seemed less hesitant to agree to an interview, and also appeared to be outgoing conversationally, providing more elaborate answers.

**Trends**
Through the course of the conducted interviews, the majority of the testimony given regarding varying levels of discrimination reported from professionals in the moving image archiving professional community was strikingly similar and repeated from testimony to testimony. Overall, there were only five separate accounts of experienced or witnessed hostile sexism, and two accounts of explicit sexual harassment. While this is a sharp contrast to the reality of women’s workplace experiences from those of the 1960s,81 this fact is also not unexpected. Instances of benevolent sexism, however, were reported rampantly by interviewees, regardless of gender. The following are the trends that were discussed most frequently and by the overwhelming majority of respondents testifying that men and women were treated differently in the technical career roles of the moving image archiving community.

Proof of Knowledge and Dismissal: Nearly all interviewees noted that women seemed to always have to initially prove the extent of their knowledge and mastery in the profession before being taken seriously. When asked about this phenomena, all male interviewees noted that they did not have such hurdles to jump. For some women, this treatment was reported to last up to the first five years they worked for their employer. Additionally, most women reported surprise or astonishment from their coworkers or employers when demonstrating technical proficiency, or were even assumed to not hold a technical occupation. Even when working as supervisors or owning a business, women reported that people not involved in their day to day work lives typically assumed they were an administrative assistant or office worker.

Often times, interviewees would report that a woman’s coworker(s) often doubted a woman’s word or determination of a problem. For example, one interviewee recounted an experience where, upon telling their System Administrator about a problem, the System Admin

proceeded to show the female employee how to ‘troubleshoot’ and ‘solve’ the problem, even after the female employee had followed the same troubleshooting procedure. The System Administrator also could not solve the issue the female employee was having, and was surprised when they experienced the same problem reported by the female employee, failing to fix the issue. This type of testimony was reported by several interviewees, both male and female. Additionally, one male employee recounted seeing a similar situation play out in front of him between his coworkers - one female and one male – and reported that until he stepped in to vouch for his female coworker, the male coworker simply did not believe the issue his female coworker had reported existed at all. Yet another interviewee succinctly reported: “When a woman has a problem with a machine, it is assumed to be user error. When a man has a problem with a machine, the machine is assumed to be malfunctioning.” The most extreme cases of these recounted examples usually were caused by men who would be considered older members of the Gen X generation or classified as Baby Boomers.

Generational Understanding: Sharp trends regarding differences in attitudes about sexism emerged along generational divides. All interviewees could be categorized as being a member of one of three generations: Millennials, Gen Xers, or Baby Boomers. Baby Boomers generally operated from the understanding that ‘sexism’ was restricted to that of the behaviors classifiable as hostile sexism, and found benevolent sexism to be somewhat dismissible as a problem or barrier. The members of this generation also typically struggled to find the language to vocalize their experiences with sexism. Yet they exhibited the strongest Change Agent tactics, even if not always conscious, and tended to also show Positive Reversal reactions. One female interviewee was quoted with saying: “You had to put up with a certain amount [of sexism] just to get anywhere.” Because of the high amounts of hostile sexism that a woman who entered the
work force in the 1960s or 1970s faced, these respondents seem to have developed defensive mental perspectives, allowing them to be the least affected – according to their testimonies - by benevolent sexism on a day to day basis.

Members of the Gen X generation typically reported recognizing benevolent sexist behaviors but also generally underestimated the effects of them, and consciously sought to ignore them, as the Baby Boomers reported. They also often remarked that the Millennial generation exhibited Enraged Acknowledgement behaviors in response to sexism, and also expressed that this type of response usually did more harm than good for the Millennial. Detached Reporting was common for Generation X, but they also tended to exhibit some Change Agent tactics. This group was the most likely to report Regretful Response, as a large number also mentioned personal regret for ignoring a sexist experience rather than drawing attention to the offensive behavior and making their displeasure known at the time.

The Millennial generation was by far the most vocal and verbose in their articulation of witnessed and experienced sexism out of all three considered. They frequently used or reported using Troubled Disbelief, Enraged Acknowledgement, and Interpretative Uncertainty. Interviewees that were part of this generation also reported higher instances of experienced benevolent sexism than the other two generations combined, despite the gender of the interviewee that recounted the example.

*Workplace Environments:* Through the course of the interviews, it became apparent that the type of institutions moving image archivists typically work at could be broken down into two basic subcategories – ‘For-profit and Government’ type environments and ‘Non-profit, Academic or Library’ type environments – when considering the amount and severity of sexist encounters amongst interviewees. When working in or with people in these For-profit or
Government types of environments, interviewees were more likely to recount experiences of discrimination first hand, and far fewer women were reported to be technicians in these fields. Even when not employed in these environments, when professionals had to interface with workers in these places of employment, interviewees frequently recounted accounts of first hand discrimination, most often and especially with mass digitization vendors.

However, interviewees who worked in a Non-profit, Academic, or Library (NAL) type setting reported far less instances of sexism, witnessed or experienced. In general, interviewees who worked for long stretches of their career in these types of environments used Detached Reporting; most women in these types of environments talked about discrimination from a third party point of view. Women were also reported to be more likely to be managers in these settings. Because woman leadership often drives down cases of gender discrimination, and these types of environments are typically predominately female, it is not surprising for interviewees employed in these settings to report less instances of sexism.

There was no specific trend as to those reported feeling isolated between the two subcategories, but isolation in NAL work environments was typically due to department size rather than social dynamics. While some of these types of organizations may only have one archivist, very few workers reported feeling deliberately socially isolated. However, those working in the For-profit or Government type of environments typically reported feelings of social isolation in the workplace. This usually involved being overlooked within the workplace – female interviewees working in these types of environments reported instances of not being allowed to present projects they had lead at conferences or symposiums, or not being consulted about departmental needs or institutional changes, even though all of their male colleagues had been consulted. One female interviewee even reported that two of her male colleagues simply
did not fulfill half of their job responsibilities. Even though their supervisor knew that the
women in the same department were doing their colleagues’ work to compensate – in an effort to
sustain the level of production required by the institution, not to prevent their male colleagues
from suffering any disciplinary action – the supervisor never made their colleagues fulfill the
complete responsibilities of the job they were being paid to do.

*Ageism*: Interviewees, primarily women, often reported first-hand accounts of ageism.
This term is usually used to refer to age related discrimination towards those who are elderly, as
coinined by researcher Robert Butler in 1969, but truly is defined as discrimination by one age
group against another age group.82 Women up to the age of 40 reported being perceived as ‘too
young’ to possibly be an expert or know enough to be successful in their careers. Women above
40 also tended to report that they were perceived as being ‘too old’ to have a thorough
understanding of newer technologies. Conversely, male interviewees as young as the age of 26
reported very little instances of being perceived as ‘too young’ to have expertise and the
necessary aptitude to fulfill their job’s responsibilities. Most interviewees, regardless of gender,
reported that young women were finding a foothold in digital preservation careers, and while this
is encouraging, it is also a cause for concern, as it opens up to potential for wage decreases (as
the feminization of an occupation has been previously discussed to do).

*Attitudes Exhibited*: All women reported insecurities regarding technical expertise. Often,
on upon vocalizing these insecurities, women also reported that their coworkers and supervisors
took this admission of insecurity or doubt to mean that their technical skill sets and knowledge
were inconsistent or sub-par. Where this type of insecurity comes from, which most women
admitted to not seeing vocalized by their male colleagues, can only be speculated upon. What is

relevant, however, is that nearly all female interviewees expressed the same phenomena without any prompting by the interviewer. All male interviewees did not express this type of insecurity, even when specifically asked about the concept. In this way, most women are measuring their own expertise against the perceived confidence of others. In fact, nearly all women who expressed insecurity also expressed it explicitly about troubleshooting with any type of machine or materials. This is somewhat counterintuitive because knowledge – something all female interviewees feared they didn’t have enough of – is gained by troubleshooting. Troubleshooting is inherently intertwined with the concept that failure is part of advancement. Because so many interviewees confessed anxieties around perceived failure, the anxieties around troubleshooting are not particularly surprising. Learning to accept this concept – that failure when troubleshooting is actually advancement and knowledge gained – will serve to abate anxieties associated with troubleshooting.

When discussing ways to overcome these anxieties, women often recounted moments of empowerment through being able to compare and contrast their experiences against other women’s, watching other women work through a problem, actively pursuing and practicing troubleshooting, and having women educators in technical classes. This often made a lasting impact on how confident with experimentation the student went on to be in their professional life and how encumbered they were by their perception of their own weaknesses. Women who felt isolated typically voiced more concerns about failure and overestimated gaps in their knowledge base and skill sets.
Conclusion

The research conducted for this thesis is congruent with the general consensus of scientific findings regarding gender discrimination in the workplace. Unfortunately, this parallel of findings is not an optimistic one. While it appears to be the first look at the moving image archiving profession through the lens of discrimination, for the situation to be assessed and described fully, a more robust and thorough would have to be pursued. Certainly, this study has limitations and should not be taken as a comprehensive one, or as one that identifies all of the problems and issues that affect the profession. Because of the scope of this project, much of what can be discovered by this line of inquiry is still unearthed. This thesis neglects to gather data about pay between genders, and in order for laborers in the profession to comprehensively understand the occupation they work in, a census of the moving image archiving profession should be conducted by a non-partial committee or organization, not just one regarding type of occupation.

Further, this thesis fails to touch on any other type of diversity issue in any detail, such as the lack of ethnic diversity in the field or the status of the LGBT community within the profession. Additionally, this thesis, due to its small scope, only operates on the gender binary spectrum, and as such, fails to adequately represent anyone who does not identify as cisgender. This is an incredibly important facet to consider as minority such as these suffer compounded and varied types of discrimination from all corners of their lives. The moving image archiving profession is predominately white, as most archivists are, according to the findings of the A*Census. No data on sexual orientation or gender identity was also gathered by this survey, so it is impossible to do anything other than postulate representation for these minorities in the moving image archiving profession. The Association for Moving Image Archivist published its
first Statement on Diversity, Inclusion, and Equity in March 2017. It closes with: “AMIA also understands diversity to encompass the following socio-economic factors, and works to create an inclusive, equitable and responsive environment for all of our members and colleagues, the holdings we manage, and the publics we serve: Age, Class, Dis/ability, Ethnicity, Familial Responsibility, Gender Identity, Immigration/Citizen Status, Income, Language, Perceptive Abilities, Political Affiliation, Physical and Mental Health, Race, Region/Geography, Religion, Sexual Preference, Veteran status.”

The moving image archiving profession is one endowed with responsibility into the fabric of its inherent nature. The cultural history that the laborers of the profession are tasked with maintaining and preserving on a daily basis are crucial to the historical memory of the societies they live in. George Santayana is quoted with writing “Those who cannot remember the past are condemned to repeat it” and if this notion is accurate, in the increasingly digital world we live in, the moving images saved by this profession’s workers will become even more and more crucial to the history of not simply the United States, but the world. Diversity representation amongst the profession, then, is crucial towards the formation of an accurate and balanced historical record. Though the phrase “history is written by the victor” is a diluted way of communicating the idea, implicit biases about one’s identity can often influence what is recorded, in the context of what history is considered to ‘officially’ be. This relationship between the saver and the object or material being saved is a crucial rational, though not the only reason, minority archives are still a necessary feature in today’s society.

With this responsibility in mind, a more thorough representation and diverse working population within the profession is a necessity. For the profession at large to ignore this issue is

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paramount to writing a false history; for the profession to address it is a moral and professional imperative.
Sources Consulted


Lynch, Mary Jo. “Library Directors: Gender and Salary.” American Library Association website,


Stutzman, Beth N. “I Think You’re Great! Now, Do My Laundry: The Interactions Between Benevolent Sexism, Gender Role Adherence and Relationship Satisfaction for Self-Identified Women in Heterosexual and Same Gender Relationships,” Diss., Wright Institute, 2013.


