Ariel Hahn
an MLIS portfolio

~*~*~*~*~*~*~*~*~

University of California, Los Angeles
Department of Information Studies
Advisor ~ Dr. Miriam Posner
Spring 2019

Table of Contents

50 Word Statement

Contemporary public librarianship is fraught with precarity. As more of the workforce is relegated to part-time and temporary positions, our field grows increasingly unstable and workers become more vulnerable to workplace trauma. Since precarity-based trauma is a collective issue, contending with these questions is best done by looking outside of the field and embracing an ethos of collective healing.

A Collective Effort :
Healing, Trauma, and Precarity in Public Librarianship

Spring 2019

This essay was adapted from a final course paper written for Professor David Shorter's "Healing, Ritual, and Transformation" in the Department of World Arts and Cultures. The class took place in Winter 2019 and was a cross-cultural exploration of healing practices. Our coursework and discussions aimed to destabilize preconceived assumptions about care outside of Western medicine, the scientific authorities that inform societal understandings of the body and health, the role of healers in a variety of culturally-specific contexts, and healing outside of object-oriented epistemologies.

Introduction

Public libraries are in the midst of a transformation wherein the majority of new labor opportunities are both precarious and traumatic. In response, I argue that looking at these issues through the lens of collective healing, alongside theories of radical empathy and a feminist ethics of care, facilitates movement building and encourages community responsibility. Examining the precarity of present labor conditions, and naming them as trauma, frames current questions about the future of library work in a more serious light. Collective healing, then, functions as a potential salve to this longstanding, possibly unending issue that threatens to upend the profession. My intent with this project is to encourage library workers, administrators, and graduate library programs to engage with issues of precarity in tangible ways so as to mitigate harm in the present and find solutions to eliminate it throughout the field in the future.[1]

In order to explore these questions, I will examine the rise of trauma, direct and indirect, in the library and how it impacts workers, citing precarity as a form of trauma. I will then shift my argument to establish the value of collective healing, care, and community building for the ever-evolving world of public librarianship. To conclude, I will suggest additional paths for further scholarly inquiry as well as practical questions to explore while engaging in library work.

---

[1] In earlier explorations of this topic, I mapped the origins of the public library alongside more recent cultural and political threadlines, factoring in neoliberalism and the ways in which libraries have absorbed social services that were previously tended to by other government-funded organizations. While doing so, I also linked the historic feminization of librarianship to this present crisis in traumatic labor, thereby grounding gender bias as explanation for why assumptions of care-related duties are easily relegated to library workers.

Establishing Precarity as Trauma

Frontline public library work is traumatic in multifaceted ways. Traditional day-to-day service tasks and unwritten external job duties, many of which relate directly to harm reduction, often put library workers at risk for burnout, post-traumatic stress disorder, depression, and anxiety.[2] Discussions of trauma vis-à-vis harm reduction are relatively common in a great deal of contemporary library scholarship. Other forms of trauma, however, are less frequently discussed or examined through the same critical lens. An additional result of the rise of neoliberalism and the Great Recession of 2008, employment precarity and an overinvestment in contingent, part-time, or temporary labor, I argue, has become another form of trauma experienced by library workers. Trauma refers to an"emotionally harmful or life-threatening" experience or series of events "that has lasting adverse effects on the individual's functioning and mental, physical, emotional, social, or spiritual well-being."[3] Unlike frontline trauma, both direct and indirect, that comes from working with patrons who lack adequate care or resources, labor precarity in both libraries and archives is less acknowledged by popular media and internally reinforced through things like temporary term-based diversity fellowships[4] and unpaid internships.[5] Similar to the expansive mental health

---

[2] Anne Ford, "Other Duties as Assigned: Front-line librarians on the constant pressure to do more," *American Libraries Magazine*, last modified January 2 2019, https://americanlibrariesmagazine.org/2019/01/02/ mission-creep-other-duties-as-assigned/.
[3] Samantha Blanco, "A Trauma-Informed Approach To Libraries," (Los Angeles, 2018), 3-4.
[4] April Hathcock, "Why Don't You Want To Keep Us?," *At the Intersection*, last modified January 1, 2019, https://aprilhathcock.wordpress.com/2019/01/18/why-dont-you-want-to-keep-us/.
[5] Karly Wildenhaus, "Wages for Intern Work: Denormalizing Unpaid Positions in Archives and Libraries," in "Evidences, Implications, and Critical Interrogations of Neoliberalism in Information Studies," eds. Marika Cifor and Jamie A. Lee. Special issue, *Journal of Critical Library and Information Studies* 2, no. 1 (2019).

ramifications of, for example, administering Narcan[6], labor precarity and resulting experiences of poverty cause undue trauma that may manifest directly in the body or through things like post-traumatic stress disorder.[7] Though labor precarity is a direct result of broader external factors like a lack of fiscal community investment in libraries, this phenomenon, unlike the above-mentioned issues related to social-service responsibilities, is perpetuated and upheld internally by library management and administration.

In "Wages for Intern Work: Denormalizing Unpaid Positions in Archives and Libraries," Karly Wildenhaus links precarity with the guilt, shame, and anxiety often felt by unpaid interns in information work. She asserts that, "precarity refers to an overall tendency towards less secure and more temporary jobs and the subsequent increase in exploitation and alienation of workers."[8] This alienation, in tandem with the above mentioned emotional responses, is a critical part of the problem as reliance on precarious employment is often tied to management's intentional avoidance as well as our "very inability to talk about it."[9] Networks of isolation are created throughout information workplaces as though our precarity is something of our own making rather than a systemic, institutionally-driven manifestation. This hybrid experience of alienation and precarity is core to how Franco "Bifo" Berardi organizes his analysis of the commingling, affective evolutions of labor, neoliberalism, and technoculture. In *The Soul at Work*, Beradi suggests that, "precariousness is the transformative element of

---

[6] Ford, "Other Duties."
[7] Hathcock, "Why Don't You Want To Keep Us?"
[8] Wildenhaus, 12.
[9] Myron Groover, "On Precarity," Bibliocracy, January 6, 2014, http://bibliocracy-now.tumblr.com/post/72506786815/on-precarity.

the whole cycle of production… The wages of workers on permanent contracts are lowered and broken down; everyone's life is threatened by an increasing instability."[10] Across these texts, precarity is a leading affective component of the current conditions of labor.

In addition to transforming the nature of work, precarity is also linked to the assumed psychic stability of entire cultures as "the events of economic depression and of psychic depression have to be understood in the same context."[11] Writer and theorist Mark Fischer pointedly argues that rising rates of depression in the U.K. are deeply tied to capitalism and neoliberal governments. He asserts that, "under neoliberal governance, workers have seen their wages stagnate and their working conditions and job security become more precarious… Given the increased reasons for anxiety, it's not surprising that a large proportion of the population diagnose themselves as chronically miserable."[12] When looking at public library salary breakdowns in Los Angeles County, signs of precarity and their psychic influence become immediately evident. Though *permanent* librarian positions come with benefits and salaries that are well within living wage calculations for individuals, paraprofessional positions, those held by workers without graduate degrees, are not guaranteed to offer either. With wages ranging between $10 and $19 an hour throughout branches in the Los Angeles Public Library system and the County of Los Angeles Public Library system, the average salary is barely within the realms of an

---

[10] Franco "Bifo" Beradi, "The Soul at Work: From Alienation to Autonomy," (Los Angeles: Semiotext(e), 2009), 191.
[11] Beradi, 208.
[12] Mark Fischer, "Why mental health is a political issue," *The Guardian*, July 16, 2012, https://www.theguardian.com/commentisfree/2012/jul/16/mental-health-political-issue.

individual living wage for the area.[13] In a 2017 assessment by the U.S. Department of Housing and Urban Development, a shocking half-million low income Los Angeles residents were at risk of losing their homes.[14] This statewide crisis in housing affordability, paired with the precarity of library employment due to lack of consistent hours and low-wages, places countless library workers on the verge of homelessness as well as at-risk for mental and emotional harm.

Utilizing publicly available salary information from the University of California (UC) system, Diana Ascher offers another striking labor visualization through examining the breakdown between male and female temporary librarians.[15] This dataset, from 2016, reveals that out of the thirty temporary librarians documented as working throughout the UC system, only three are male. Though this number could be explained away as evidence that more female hires are being made, even if they are temporary, the significant contribution of this visualization is that the lowest salary held by a temporary male employee is around $62,000. Out of the twenty-seven female employees with temporary status, however, eleven earned under $55,000 in 2016, while six earned under $25,000. Even if some of these lowest numbers are for part-time employees, which is difficult to extrapolate as the original UC dataset does not feature

---

[13] Wage data was gathered from Glassdoor in early March of 2019. For the Los Angeles Public Library, refer to https://www.glassdoor.com/Salary/Los-Angeles-Public-Library-Salaries-E149623.htm. For the County of Los Angeles Public Libraries, refer to https://www.glassdoor.com/Salary/County-of-Los-Angeles-Public-Library-Los-Angeles-Salaries-EI_IE343897.0,36_IL.37,48_IM508.htm. Information related to living wages for Los Angeles County can be found here: http://livingwage.mit.edu/counties/06037.

[14] Josie Huang, " HUD estimates half a million low-income LA renters at risk of losing homes," *KPCC 89.3*, August 9, 2017, https://www.scpr.org/news/2017/08/09/74523/in-la-half-a-million-low-income-renters-at-risk-at/.

[15] Specific UC wage data is public information and can be found, by year, through https://ucannualwage.ucop.edu/wage/. The visualization I've referred to was created by Diana Ascher and is available here: https://public.tableau.com/profile/dianaascher#!/vizhome/UCLAAssociateLibrarianLibrarianbyGender/UCLAAssocLibLibbyGender.

this information, there is still a notable trend of non-permanent, lower wage, and, possibly, part-time positions held by female librarians in the UC system.

The feminization of librarianship has largely influenced both external and internal devaluation of labor; the trauma attributed to precarity, as well, is deeply tied to how gender hierarchies are reproduced and evident in libraries as a workplace. In "The Pink Collar Library: Technology and the Gender Wage Gap," Meredith Broadway and Elisabeth Shook observe that as more male-identified librarians join the field, "men, at disproportionate rates, take both limited management roles and higher pay in a profession ubiquitously thought to be womanly." They muse that, according to data collected by the Association of Research Libraries (ARL), "the pink-collar was only made to be worn by the woman librarian."[16] If female librarians, despite comprising the majority of the field, are excluded from promotions and higher-paid positions, what links can be made between precarity-induced trauma, expectations of emotional labor, and gender? Further, how can we examine those links with regard to how each experience is validated or made further invisible by those in power?

Further, the trauma of precarity is an intersectional phenomenon – impacting not only gender minorities and those with the fewest external financial resources, but library workers of color as well, if not most significantly.[17] Analyzing how power moves

[16] Broadway and Shook, "Pink Collar."

[17] Though this assessment engages directly with questions of gender and race, I do not explore the impact of precarity on disabled library workers or, beyond this initial statement, those of working class backgrounds. A more in-depth exploration of these topics would benefit from additional research as well as specific analysis surrounding disability and precarity in libraries. In discussions surrounding precarity, I often assume that there is an inherent attention given to class as workers who suffer under these labor practices exist without additional financial resources or safety-nets. Despite this observation, future writing on this topic would also benefit from an even more attentive analysis of class.

in work environments is critical when attempting to find solutions that improve the lives of all workers even though the issues they face, including precarity, vary because of racism, sexism, ableism, and homophobia. Just as librarians and libraries continue to uphold literacy empowerment and information access as cornerstones of the profession, systemic inequity and institutional oppression are equally woven into the field's legacy.[18] April Hathcock adeptly argues that precarity and temporary positions, in combination with the overwhelming whiteness of librarianship, further pushes librarians of color out of the profession. She states that, "we need to stop dancing around these coy discussions about early career experience and shifting budgets and confront the true nature of these temporary solutions we uphold. The whiteness of our profession is a problem that is persistently and historically entrenched."[19] Precarity in librarianship operates within broader cultural dynamics that are deeply tied to histories of settler colonialism and white supremacy. Though teasing out and adequately addressing the ways in which racism impacts precarity is incredibly difficult to do in such a brief investigation, highlighting and critiquing discriminatory hiring practices as well as workplace dynamics creates space for more generative and broadly beneficial conversations around future paths forward.[20]

---

[18] The history of white supremacy, sexism, racism, classism, and homophobia within libraries and archives is well documented. Some significant recent contributions include, but are absolutely not limited to, nina de jesus' "Locating the Library in Institutional Oppression" (2014), *Pushing the Margins: Women of Color and Intersectionality in LIS* (2018) edited by Rose L. Chou and Annie Pho, and *Topographies of Whiteness: Mapping Whiteness in Library and Information Science* (2017) edited by Gina Schlesselman-Tarango, and numerous issues of the Journal of Critical Library and Information Studies.
[19] Hathcock, "Why Don't You Want To Keep Us?"
[20] Though the following article is specifically about the invisible labor of faculty of color in universities and colleges, there have been comparisons made between this phenomenon and the experiences of academic librarians of color, especially on Twitter. https://www.chronicle.com/article/The-Invisible-Labor-of /234098

Collective Healing & Care

Through exposing the trauma that precarity engenders, libraries can begin to assess possible solutions with the hope of mitigating harm. As I've argued, precarity facilitates alienation, which then severs relationships between workers as well as prevents those impacted from seeing their blight as part of a larger system of inequity. Collective healing, conversely, offers a critical, pertinent perspective that embraces struggle as communally experienced and liberation as communally dependent.[21] There is no singular or narrow definition of collective healing as the term's meaning and use shifts with each audience that employs it. In my research, collective healing is often called upon as a tool after a community experiences or elects to confront a collective trauma like genocide, war, or lineages of oppression.[22] For this essay, I define collective healing as any consistent and continued healing practice (talk, body movement, energy work, etc.) that is grounded in a singular community to serve that community and their shared trauma. Here, I utilize collective healing in order to move away from modalities that see healing as something that happens once rather than a constant engagement with a source of trauma. Collective healing can be a tool that encourages libraries and library workers to acknowledge that precarity-based trauma is continuous and impacts each of us in differing ways, so singular or individual person-based solutions will never

---

[21] A great deal of my understanding surrounding collective healing comes from the podcast Healing Justice. This show gathers together a range of practicing healers, social justice advocates, and community organizers to discuss the intersections of collective healing and justice movements.

[22] There are many resources related to collective healing and collective trauma, approached the concepts from different vantage points. Two encountered in my research include the work done by the Healing Foundation, "a national Aboriginal and Torres Strait Islander organisation that partners with communities to address the ongoing trauma caused by actions like the forced removal of children from their families," and psychologist Jack Saul's book, *Collective Trauma, Collective Healing: Promoting Community Resilience in the Aftermath of Disaster.*

be the entire answer to this problem. To locate emergent strategies for growth that foster slowness, community investment, and care, I suggest that librarianship consider collective healing as a realized "feminist ethic of care" as well as an extension of relational community responsibility that can be acted upon through anything from wage transparency and unionization to open dialogues about position boundaries and inequitable workloads.

In the early pages of *Emergent Strategy: Shaping Change, Changing Worlds*, adrienne maree brown offers an invitation to heal, stating that "we all have the capacity to heal each other..."[23] brown then continues, suggesting that in order to seek healing, trauma is something that must be fully acknowledged and examined. Discussions of precarity, and the trauma it produces, are often kept outside of the workplace and, likewise, those who experience it are often made powerless in seeking solutions. An intentional step towards embracing an ethos of collective healing in librarianship begins with transparency. Moving past precarity will require library workers to be open about the conditions of their employment with one another, see their colleagues as allies rather than enemies seeking the same full-time position, and identify their struggle as one that is felt in countless others. The potential role of a collective healing ethos in these situations is not one that places all responsibility upon workers. Instead, the elements of collective healing, in the most promising of settings, would be welcomed by management and workers alike.[24]

---

[23] adrienne maree brown, *Emergent Strategy: Shaping Change, Changing Worlds*, (Oakland: AK Press, 2017), 34.

[24] Though I do not imagine many library administrators who would talk on an ethos of collective healing, I introduce the concept as a form a hope. Hope that the field, which puts so much labor into uplifting others, finds a path wherein we can better uplift ourselves.

In her most recent book, *Pleasure Activism: The Politics of Feeling Good*, brown furthers notions of collective healing in relationship with both transformative and restorative justice. She states that, "I believe in transformative justice – that rather than punishing people for surface-level behavior, or restoring conditions to where they were before the harm happened, we need to find the roots of the harm, together, and make the harm impossible in the future."[25] Part of seeking out collective healing as a path forward involves reckoning with the past as well as how harm has been perpetuated. If we look at contemporary conditions of precarity as something that never needed to exist and is, in fact, the result of forces that flow throughout as well as beyond the public library, there is space to examine how mutual responsibility can exist as a collective attitude in the future. In "From Human Rights to Feminist Ethics: Radical Empathy in the Archives," Michelle Caswell and Marika Cifor push the paradigm of archival rights logic away from nation-bound definitions of human rights and towards a feminist ethics that is driven by models of radical empathy and care, thereby, "advocating a feminist conception of ethics built around notions of relationality, interdependence, embodiment, and responsibility to others."[26] This ethics of care grounds brown's attention to transformative justice within the continuum of archival theory. Both notions encourage a mindset that looks outside of punitive forms of justice and, instead, emphasize the need for collectivity.

To further build upon collective healing, as well as transformative justice, within library and information science, Caswell and Cifor also highlight reciprocity in their

---

[25] adrienne maree brown, *Pleasure Activism: The Politics of Feeling Good*, (Oakland: AK Press, 2019), 17.
[26] Michelle Caswell and Marika Cifor, "From Human Rights to Feminist Ethics: Radical Empathy in the Archives,: *Archivaria* 81(Spring 2016): 30.

introduction of this new ethic. They state that, "in a feminist ethics framework subjects are constructed relationally, intersecting structures of violence are interrogated, and injustice is viewed as both structural and 'multi-scalar,' that is, operating on both the micro and the macro levels, in private and in public."[27] Highlighting mutual obligation that is dependent on culture and context is vital for incorporating notions of collective healing and radical empathy into future conversations around labor and precarity. Symbiotic obligations or responsibilities between workers, as possible within the space of the public library, are community-bound. These relationships co-exist and build/bend with one another. In the same manner that precarity is disseminated unequally across boundaries of marginalization, internal reactions to trauma and precarity must be cognizant of intersectional struggles that disproportionately impact non-binary people of color and women of color – specifically Black women, Indigenous women, and trans women of color. As library workers seek solutions for our profession's oppressive labor practices, acknowledging the fact that no two workers experience the world in the same way prevents conversations around collectivity from flattening difference or becoming universal. Though two workers experiencing precarity in the realm of the same public library may share individuated versions of a single form of trauma, this experience does not suggest that their relationship to trauma or precarity is bound by the same external constraints. Instead, incorporating an ethics of care, one that is grounded in radical empathy, supports collective healing as something that situationally dependent and more or less nebulous. Collective healing,

[27] Caswell and Cifor, 29.

then, functions as a way of interacting with one another and working towards finding common ground against the shared forces that exist in opposition to our mutually-dependent liberation.

Conclusion

In addressing questions of precarity and trauma in librarianship, there are countless theories and practical examples from disparate fields that, when interlocked, offer profound insight to these discussions. However, in this brief exploration of two complex concepts as they exist in the incredibly specific realm of public libraries, I was unable to include numerous resources that would have introduced a wider breadth and depth of analysis to my argument. Incorporating field reports from social work organizations and non-profit providers that engage in direct service, for example, could offer new ways to ask how management, as well as workers, are trained to identify and support individuals with symptoms of things like post-traumatic stress disorder. Additionally, future research on this topic would benefit from the inclusion of Marxist feminist theory, a closer assessment of the body and trauma, as well as an exploration of questions related to boundaries and the tangible methods to invite notions of collective healing into all facets of library work.

Creating new languages around harm will forever be imperfect. Regardless, seeking work environments and community spaces that are more attentive to the needs of workers as well as the outside world is the kind of practice that librarianship must pursue. In arguing that precarity is trauma and felt with varying levels of acuity

due to gender and race, my aim is for libraries to better address how harmful labor policies are negatively impacting workers as well as the field at-large. Since the term "trauma" is experiencing a moment of popularity in contemporary culture, I hope that conversations around this topic will be welcomed and come with ease in library and information science graduate programs, library and archival conferences, and individual libraries. Moreover, by suggesting that collective healing and logics of community responsibility offer a path forward in these discussions, I imagine a future for librarianship wherein our practice deemphasizes alienation and competition in favor of relational networks of support. Care and empathy can be liberatory when they are scaffolded in a way that acknowledges the realities of our world, when they do not mutate and evolve into continuous cycles of emotional labor output, burnout, and depression that ask the most out of those who are often supported the least. Towards the end of *Emergent Strategy*, adrienne maree brown offers a powerful assessment of contemporary movement building. She states that, "we are realizing that we must become the systems we need – no government, political party, or corporation is going to care for us, so we have to remember how to care for each other."[28] For the future of librarianship to be sustainable, workers throughout the field need to begin caring for one another. This powerful first step will push against the politics of precarity and offer up a healing space of collective possibility that is desperately needed.

[28] brown, 113.

Bibliography

Ascher, Diana. "UCLA Associate Librarian and Librarian by Gender" Visualization. Tableau. Accessed March 12, 2019. https://public.tableau.com/profile/dianaascher#!/vizhome/UCLAAssociateLibrarianLibrarianbyGender/UCLAAssocLibLibbyGender.

Battle, Matthew. *Library: an Unquiet History*. New York: W.W. Norton and Company, 2003.

Beradi, Franco "Bifo." *The Soul at Work: From Alienation to Autonomy*. Los Angeles, Semiotext(e): 2009.

Blanco, Samantha. *A Trauma-Informed Approach To Libraries*. Los Angeles: 2018.

Broadway, Meredith and Elisabeth Shook."The Pink Collar Library: Technology and the Gender Wage Gap." *Lady Science*. Last modified December 13, 2018. https://www.ladyscience.com/blog/the-pink-collar-library-Technology-and-the-gender-wage-gap.

brown, adrienne maree. *Emergent Strategy: Shaping Change, Changing Worlds*. Oakland: AK Press, 2017.

brown, adrienne maree. *Pleasure Activism: The Politics of Feeling Good*. Oakland: AK Press, 2019.

Caswell, Michelle and Cifor, Marika. "From Human Rights to Feminist Ethics: Radical Empathy in the Archives." *Archivaria* 81(Spring 2016): 30.

"Compensation at the University of California." University of California. Accessed March 10, 2019. https://ucannualwage.ucop.edu/wage/.

Correal, Annie. "Once It Was Overdue Books. Now Librarians Fight Overdoses." *New York Times*. Last modified February 28, 2018. https://www.nytimes.com/2018/02/28/nyregion/librarians-opioid-heroin-overdoses.html.

"County of Los Angeles Public Library Salaries." Glassdoor. Accessed March 6, 2019. https://www.glassdoor.com/Salary/County-of-Los-Angeles-Public-Library-Los-Angeles-Salaries-EI_IE343897.0,36_IL.37,48_IM508.htm.

de jesus, nina. "Locating the Library in Institutional Oppression." *In the Library with the Lead Pipe*. Last modified September 24, 2014.

http://www.inthelibrarywiththeleadpipe.org/2014/locating-the-library-in-institutional-oppression/

Drucker, Johanna. "Modern Publishing Transformations." History of the Book. Accessed March 5, 2019. https://hob.gseis.ucla.edu/HoBCoursebook_Ch_10.html.

Ettarh, Fobazi."Vocational Awe and Librarianship: The Lies We Tell Ourselves." *In the Library with the Lead Pipe*. Last modified January 10, 2018. https://www.inthelibrarywiththeleadpipe.org/2018/vocational-awe/.

Fischer, Mark. "Why mental health is a political issue." *The Guardian*. Last modified July 16, 2012. https://www.theguardian.com/commentisfree/2012/jul/16/mental-health-political-issue.

Garrison, Dee. *Apostles of Culture: the public librarian and American society, 1876-1920*. Madison, University of Wisconsin: 1979.

Glasmeier, Amy K. and MIT. "Living Wage Calculation for Los Angeles County, California." Living Wage Calculator. Last modified 2019. http://livingwage.mit.edu/counties/06037.

Groover, Myron. "On Precarity." *Bibliocracy*. Last modified January 6, 2014. http://bibliocracy-now.tumblr.com/post/ 72506786815/on-precarity.

Hathcock, April. "Why Don't You Want To Keep Us?" *At the Intersection*. Last modified January 1, 2019. https://aprilhathcock.wordpress.com/2019/01/18/why-dont-you-want-to-keep-us

Harvey, David. *A Brief History of Neoliberalism*. Cambridge: Oxford University Press, 2007.

"Healing Foundation." Healing Foundation. Accessed April 10, 2019. https://healingfoundation.org.au/

Huang, Josie. " HUD estimates half a million low-income LA renters at risk of losing homes." *KPCC 89.3*. August 9, 2017. https://www.scpr.org/news/2017/08/09/74523/in-la-half-a-million-low-income-renters-at-risk-at/.

June, Audrey Williams. "The Invisible Labor of Minority Professors." *The Chronicle of Higher Education*. Last modified November 8, 2015. https://www.chronicle.com/article/The-Invisible-Labor -of /234098.

"Los Angeles Public Library Salaries." Glassdoor. Accessed March 6, 2019. https://www.glassdoor.com/Salary/Los-Angeles-Public-Library-Salaries-E149623.htm.

Saul, Jack. *Collective Trauma, Collective Healing: Promoting Community Resilience in the Aftermath of Disaster.* London: Routledge, 2013.

Topographies of Whiteness: Mapping Whiteness in Library and Information Science, ed. Gina Schlesselman-Tarango. Sacramento: Library Juice Press, 2017.

Torrey, E. Fuller. "Ronald Reagan's shameful legacy: Violence, the homeless, mental illness." *Salon*, September 29, 2013. https://www.salon.com/2013/09/29/ronald_reagans_shameful_legacy_violence_the_homeless_mental_illness/.

Werning, Kate. Healing Justice, podcast audio, 2017-2019, https://radiopublic.com/healing-justice-podcast-WznLEJ.

Wildenhaus, Karly. "Wages for Intern Work: Denormalizing Unpaid Positions in Archives and Libraries." In "Evidences, Implications, and Critical Interrogations of Neoliberalism in Information Studies," eds. Marika Cifor and Jamie A. Lee. *Journal of Critical Library and Information Studies* 2, no.1 (2019): 1-25.

The Smartphone as a Personal Archive : Investigating Chechnya's Anti-Gay Purge and its Impact on Future Archival Protocols

Fall 2017

In my first quarter at UCLA, I elected to take Professor Anne Gilliland's *Archives, Records, and Memory* as my first non-core class in the program. Throughout the course, we continually examined the historical and global role of archives as both community memory repositories, as well as records of power. Inspired by our discussions of contemporary archival and record-related issues, I wrote the following paper as a way to connect my interests in technology, privacy, and queer rights with archival practice.

We don't have any gays. If there are any, take them to Canada. Praise be to God. Take them far away from us. To purify our blood, if there are any here, take them.[29]

Introduction

In late 2016, a wave of arrests began to take place in the Russian Republic of Chechnya. Continuing into 2017, local military and police systematically captured men that were believed to be gay. Reports and first-hand accounts have alleged that these men have been abducted, arrested, tortured, imprisoned, and even beaten to death. At the center of each of these abhorrent crimes, there is a key tool that has given the state expansive access to their victims – the cell phone. Through the use of online message boards and gay dating apps like Grindr, police and military lure desired persons with the offer of a romantic or friendly interaction and abduct them. Once captured, detention center guards look through victims' phones – examining digital photographs, social media profiles, text histories, and emails to obtain information about the "accused" as well as other potential LGBTQ people.[30] In our increasingly digital world, cell phones – smartphones specifically – have become the keepers of our most "incriminating" records.

With this in mind, is there a way to protect that information from being used against us? And, specifically, can archival practice evolve to prevent or limit digital exposure during illegal state seizures? By examining these damaging technological conditions, I will use Chechnya's gay purge as a case study to demonstrate how

---

[29] Brooke Sopelsa and the Associated Press, "'We Don't Have Any Gays': Chechen Leader's Remarks Concern White House," *NBC News*, Jul 19, 2017, https://www.nbcnews.com/feature/nbc-out/we-don-t-have-any-gays-chechen-leader-s-remarks-n784356.
[30] Masha Gessen, "The Gay Men Who Fled Chechnya's Purge," *The New Yorker*, Jul 3, 2017, https://www.newyorker.com/magazine/2017/07/03/the-gay-men-who-fled-chechnyas-purge.

smartphones are now repositories for personal archives and, further, advocate for practicing archivists to play an active role in securing their content.

The Purge

Over the last eighteen months or so, more than 100 men have become victims of Chechnya's recent efforts to "cleanse" their population of "subhuman" gay "devils." [31] Those imprisoned are tortured, through electrocution and other methods, until they inform on their community verbally as well as through the materials on their phones. Men have been picked up and imprisoned over and over again by the military, many for a week or weeks at a time. Some survive the camps only to disappear once returned to family custody, causing fear that widespread honor killings are also taking place with the unspoken encouragement of the state.[32] Dozens of victims have been forced to flee Chechnya for Moscow, most with the aid of Russia's LGBT Network. It appears that the Chechen government's goal is that of total eradication, which, when supported by the republic's intensely conservative Islamic culture, is very possible.[33] Their leader, Ramzan Kadyrov, has been quoted numerous times denying all

---

[31] Ibid.

[32] Shaun Walker, "Victim of Chechnya's 'gay purge' calls on Russian to investigate," *The Guardian*, Oct 16, 2017, https://www.theguardian.com/world/2017/oct/16/victim-chechnya-anti-gay-purge-urges-russia-investigate-maxim-lapunov.

[33] According to Masha Gessen's 2017 *New Yorker* profile on the purge, "Kadyrov relies on a crude homespun version of Islam. Behavior including drinking (which is technically legal), drug use (which is not), women dressing immodestly, women smoking, contact of any sort between unmarried women and men, and open sexual expression is policed by law enforcement and by extended families. Islam has served as Chechnya's cultural glue for the past two decades… The pro-Moscow government that was finally installed in the aughts has harnessed much of the religious rhetoric to fortify its own power, while also persecuting anyone who identifies with strands of Islam that it deems radical. While many Chechens have only the most superficial familiarity with the Quran, their daily lives have been profoundly transformed: virtually all women now cover themselves, drinking has been severely restricted, and any hint of sexual expression has been banished."

accusations of the torture or suppression, likewise, members of the military recently toured an alleged detention center with Vice News to prove to the US and Europe that such "indiscretions" were not taking place. Even Chechnya's Human Rights Coordinator was interviewed saying that there was no need for state sanctioned eradication because any gay Chechen, aware of the republic's zero tolerance for "sexual perversion," would leave of their own accord.[34]

Most gay men in Chechnya live double lives, often engaging in sexual activity with other men only when they are outside of the republic.[35] Few dare to pursue relationships with other Chechen men in Chechnya. Many have wives and children, engaging in whatever means necessary to either suppress or hide their sexuality.[36] Some are even married to lesbians, often thought of as a loophole through which both parties have protection from state and familial anti-gay violence. The mere defense of existence for *any* oppressed community living amidst extreme opposition like this is a powerful political act. Considering the overwhelmingly anti-gay environment in which LGBTQ Chechens are living, it is all the more traumatic that the state is utilizing intimate personal archives as evidence against their creators and co-creators. Texts are sent, photographs are taken, and memories are preserved and accessible through our smartphones as a way to assert that *we are here*[37] – allowing users to create an

---

[34] Hind Hasson, "Inside the Chechen prison where gay men say they were tortured," *VICE* News, Jun 20, 2017, https://news.vice.com/story/chechnya-prison-gay-men-tortured.
[35] Gessen.
[36] Ibid.
[37] "We are here" is a general reference to the representational politics of queer visibility, common throughout early historical narratives of queer placemaking in cities like New York and San Francisco as well as the AIDS documentary *We Were Here* (2011). Even more recently, the phrase has been taken up within archival literature by Michelle Caswell in her extensive research and writing on community archives.

expressive archive about themselves and their chosen families. In this vein, archivist Laura Millar argues, "the 'who, what, where, when and why' that contextualize documents gives them greater meaning and allows them to serve as evidence."[38] Millar continues, asserting that "authenticity is demonstrated if it is possible to prove that the person who *appears* to have created, sent or received a piece of evidence actually *did* create, send or receive that piece of evidence."[39]

In Chechnya, the men in question are who the state purports them to be. The who, what, where, when, and why evident in their personal archives turns that "authenticity" into proof of their sexuality and thereby proof, in the eyes of the government and most of Chechen culture, that they shouldn't exist. Unlike a lot of archival literature investigating the role of digital records in criminal cases or human rights violations, the digital records in question for these persecuted individuals are not evidence in support of an *actual* crime. Instead, they are personal records or documents created, sometimes unintentionally, in support of and shaped by their owner's identity. At the height of the purge in spring 2017, many of those aware of the threat were forced to delete content that could out them, destroying the digital version of a life they may desire but feel they can never have. Even the presence of a phone number of another accused gay person has been considered enough evidence for the police and military. One of the men profiled in Masha Gessen's *New Yorker* article recounts removing his cell phone's SIM card prior to arrest and placing it in a different

[38] Laura A. Millar, *Archives: Principles and Practices* (Chicago: Neal-Schuman Publishers, Inc., 2010), 7.
[39] Millar, 15.

device so his phone would be unable to provide additional incriminating information.[40]

The purge in Chechnya is not the first or only circumstance wherein the authority in power deems one group of people undesirable and uses whatever violent means necessary to oppress or destroy them. Additionally, this instance is not the first or only example of a government using whatever documents they can acquire, whether created through government channels or living in personal repositories, as support in their efforts. The difference between this event and prior events is that the threat of being informed on through our own personal technology, the devices we carry everywhere, is real. Though there are numerous situations in which nothing will protect any victim from violence at the hands of a nation's military or police, I want to question and assert the role that archivists, archival protocols, and archival ethics can play in mitigating future harm caused by smartphones and the records they contain.

Personal Archives: Creation & Destruction

In order to do so, it is necessary to establish smartphones as repositories for our personal archives. Richard Cox's 2008 book, *Personal Archives and a New Archival Calling: Readings, Reflections and Ruminations,* argues the relevance of the personal archive, calling it "a kind of autobiographical assemblage"[41] whose content "gives us meaning beyond the superficial material stuff we acquire."[42] Our personal archives reflect our lived experiences, built through a combination of intentional and

---

[40] Masha Gessen, "The Gay Men Who Fled Chechnya's Purge," *The New Yorker*, Jul 3, 2017, https://www.newyorker.com/magazine/2017/07/03/the-gay-men-who-fled-chechnyas-purge.
[41] Richard J. Cox, *Personal Archives and a New Archival Calling: Readings, Reflections and Ruminations* (Duluth: Litwin Books, 2008), 162.
[42] Cox, 186.

unintentional materials ranging from receipts to family photographs to letters to notebooks. Personal archives can be created in conjunction with and in opposition to government records, sometimes simultaneously telling the same story as well as alternative narratives. They give their owner the ability to share and preserve a part of themself that may be overlooked by or even kept secret from dominant society. Sue McKemmish identifies personal "recordkeeping as a kind of witnessing."[43] "It is a way of evidencing and memorializing our lives – our existence, our activities and experiences, our relationships with others, our identity, our 'place' in the world."[44] McKemmish continues to identify outward and inward files, personal records created for personal reflective purposes and personal records created with the aid of or in order to express something to outside parties.

The records we create, keep, collect, store, and share are part of identity formation in action. A personal archive is a symbol of self-preservation. McKemmish's groundbreaking "Evidence of *me*" also addresses the importance of the personal archive to people other than the creator, including archivists, for personal archives can be emblematic in revealing things about a specific communities and cultural moments. "Archivists, in particular collecting archivists, are in part in the business of ensuring that a personal archive considered to be of value to society at large is incorporated into the collective archives of the society, and thus constitutes an accessible part of that society's memory, its experiential knowledge and cultural identity – evidence of *us*."[45]

---

[43] Sue McKemmish, "Evidence of *me*," *The Australian Library Journal* 45, no. 3, (Aug 1996): 175, accessed September 24, 2017, doi: 10.1080/00049670.1996.10755757.
[44] McKemmish, 175.
[45] McKemmish, 175.

For gay men in conservative Chechnya, the unintentional personal archive serves as evidence of that community's existence. Though much of the destruction of those records is at the discretion of their creator, it is motivated by the threat of violence against them at the hands of their government and their families. In addressing the destruction of libraries and archives during the 1990s conflicts in Bosnia-Herzegovina, McKemmish notes that the destruction of cultural identity records "destroy the memory – the evidence that those peoples ever lived in that place – and (as a result) those peoples, those cultures *never existed at all*."[46] Archival violence reproduces aspects of the initial trauma that drives their destruction. To fully eliminate a group of people after genocide, ethnic cleansing, or systematic murder, governments turn to archives as a way to destroy records, evidence of existence, and a community's cultural memory.

From Cell Phone to Smartphone: Our "New" Archives

In the past, personal archives were comprised of only physical ephemera which gave way to, as Cox notes, collections made of physical documents and digital ones. Contemporary digital-centric cultures are beginning to push beyond that. Outside of cultures whose knowledge systems are heavily oral or performative, digitally mediated societies are moving closer to a realm wherein most documents are created online or through our network-connected phones. Cell phones, specifically smartphones, are where we collect a great deal of our personal information. With immense storage capabilities, smartphones are slowly replacing home filing cabinets and under-the-bed-shoeboxes. Now more than ever, receipts are digital (text, email),

[46] McKemmish,183.

photographs are digital (taken with our smartphones), letters are emails, phone records are accessible without having to contact your service provider, texts are replacing phone calls; our records aren't paper, they're bits and bytes and variations of code. We make records, receive records, and store records on our smartphones. Though this phenomenon has been evolving for decades, Cox argued in 2008 that "still there is no consideration of the impact of the cell phone on personal (or organizational) recordkeeping."[47]

If we carry our phones with us everywhere and they act as our intermediary with the world around us, why are they and their recordkeeping implications not at the forefront of archival conversations? Beyond possessing our photographs and our texts, phones are gradually becoming repositories for all of our financial information – you can access your bank statements and information, store your credit cards, as well as connect to other digital payment apps. Both Ancestry.com and 23andme have digital apps and communicate with their users via email. This makes the entirety of a family's known genealogical history and demographic breakdowns accessible with the click of a button. Users are marketed the services through the belief that it is easier than searching for it through libraries and archives on your own. No paper necessary! The content of our records and our personal archives is not changing but, rather, the tools through which we create, store, and share them are. Proponents of these changes argue that our digital era allows for greater access and ease of use, which is entirely true. However, with this shift, there are other implications regarding how, by whom,

[47] Cox, 177.

and for what reasons these smartphone-based personal archives can be used – without our consent – by various people, corporations, and governments.

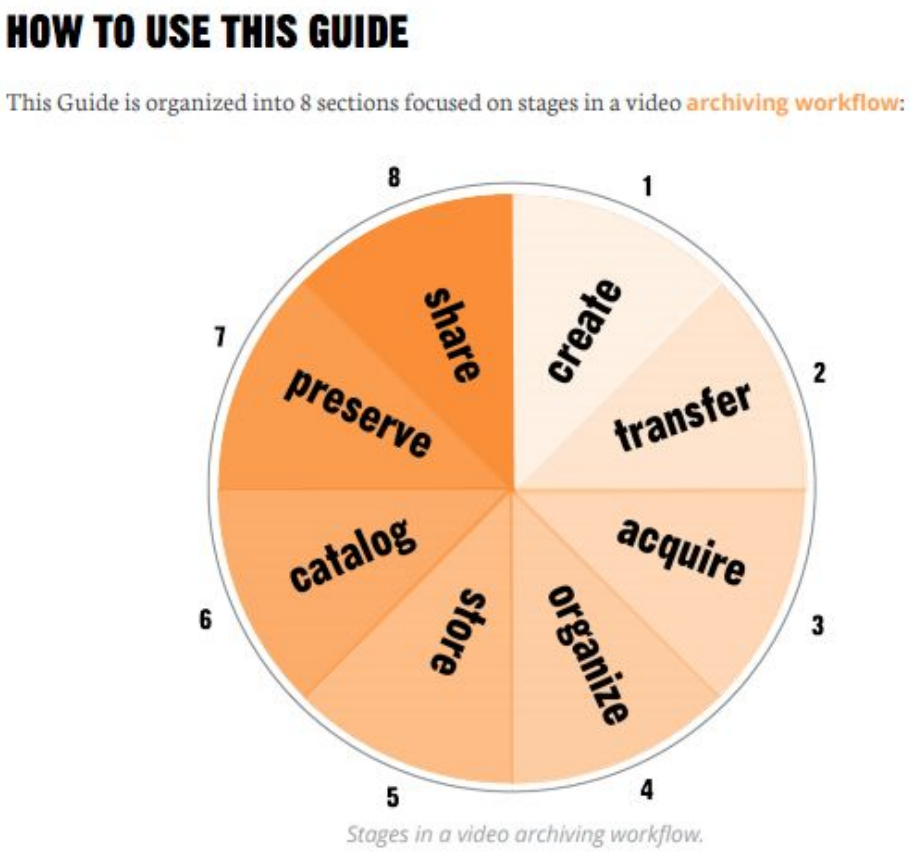
Archival Intervention & Potential Archival Practices

As I've demonstrated through the work of archivists Sue McKemmish and Richard J. Cox, personal archives play a critical role in the stories told throughout our institutional and community collections. Personal archives pull from the evidence of *us*, creating cultural narratives that are often, though not always, more multi-faceted. The personal archives people keep during times of trauma or conflict can have an immense impact on community or national memory, access to reparations, and legal pursuits of justice. With that in mind, it is crucial for archivists to consider the impact of smartphones on all facets of individual records management. The specific technological and security risks associated with smartphones need to be addressed in a more holistic way by archival theory and practice. For the men in Chechnya, I wonder if there are any archival protocols that could have helped prevent the abuse of their records.

The Electronic Frontier Foundation, a nonprofit advocacy group, has created multiple guides related to digital privacy – Digital Privacy at the US Border, Know Your Rights, and an interactive Surveillance Self-Defense guide. Each of these tools guides the user through multiple scenarios wherein the police or government may try to unlawfully access their digital records. The archival field is absolutely moving in a direction where issues like this are of greater interest, so I believe that it is possible, as

archivists, to both create and share resources that can protect communities from unwarranted record seizure. If there were readily accessible archival protocols in place for the Chechen victims, maybe some men wouldn't have been incriminated or harmed to the degree that they were. What if part of an ethical archival practice encourages community members to know how to hide or secure their SIM cards? Archivists could also advocate or help develop software that blocks outside user access to things other than a dial tone if a certain button is pressed or key-code is entered. Since personal records play a key role in building our cultural memory institutions, archivists need to consider how those records are kept secure prior to accession and find ways to ensure that the owners of said records aren't harmed because of they exist.

There are numerous ways in which the work of practicing archivists can have ramifications in protecting human rights and attempting to find closure for violations. WITNESS, for example, is an international nonprofit that trains and supports people using video in their fight for human rights. Their information heavy website features online-accessible and downloadable resource guides on things like how to navigate digital data in doing human rights research, how to receive informed consent from the people you videotape, how to livestream protests, as well as tools to verify your own digital security. There are nearly 70 guides, representing 24 languages. One of their most recently released resources is an "Activist's Guide to Archiving Video," wherein users are provided with a breakdown of the archival steps in creating, transferring, acquiring, organizing, storing, cataloging, preserving, and sharing their video.



From "Activist's Guide to Archiving Video," WITNESS[48]

Though not a cyclical life cycle model, the above user-friendly diagram represents the archival elements identified by WITNESS as necessary in working with human rights video. As the document was designed under the direction of the organization's senior archivist, it touches upon multiple elements of critical archival interest and ethical archival practice for dealing with digital information – highlighting the importance of detailed metadata and controlled vocabularies, ensuring authenticity, the use of checksums to show that files have been unaltered, maintaining

[48] "Activist's Guide to Archiving Video," *Witness*, Last modified 2013, https://library.witness.org/product/activists-guide-to-archiving-video/

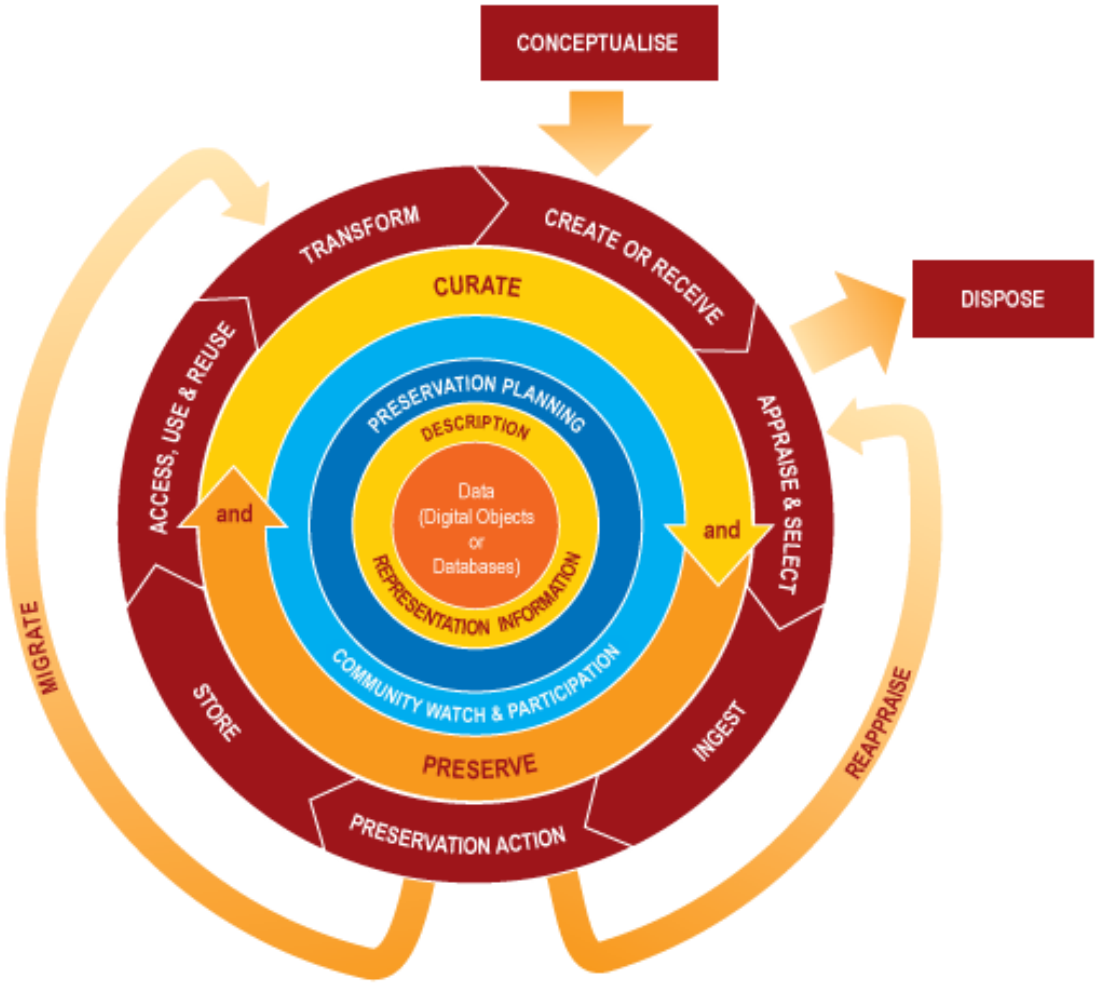
an unbroken chain of custody, geographical separation of digital backups, and keeping your files in their original order. The guide also reminds users that "archiving is not a one time action"[49] and provides detailed directions to support users in donating sensitive collections to outside archives or repositories. WITNESS's emphasis on protecting sensitive information and encrypting data resonates particularly strongly with the Chechen case study. Their guide is geared toward activists and individuals – not professional archivists – which demonstrates the diverse impact that archival tools and ethical protocols can have. However, the guide does not address the specific issue of securing records contained within your smartphone nor does it fully expand upon what happens after you share a file.

There are multiple archival life cycle models for digital stewardship that advocate for a comprehensive downstream approach to digital materials from conceptualization to disposal or appraisal and reappraisal to migration, etc.[50] The Digital Curation Centre's innovative archival continuum takes into account "full lifecycle actions" like description and representation information, preservation planning, community watch and participation, as well as curate and preserve. DCC further elevates their model through the inclusion of sequential actions, each of which are accompanied by downloadable checklists to help guide users in through their processes. Despite providing an innovative, continual model for archival practice, this specific model and, actually, none of the current professionally endorsed models

---

[49] "Activist's Guide to Archiving Video," *Witness*, Last modified 2013, https://archiving.witness.org/archive-guide/.
[50] Bill LeFurgy, "Life Cycle Models for Digital Stewardship, *"The Signal* (Library of Congress Blog), Feb 21, 2012, https://blogs.loc.gov/thesignal/2012/02/life-cycle-models-for-digital-stewardship.

include mention of the importance of security or privacy. Whether that be because it is implied or was forgotten, it's hard to imagine a digital archival future without a strong emphasis on keeping your data secure at every step of the lifecycle process.



Digital Curation Centre's Curation Lifecycle Model.[51]

At this time, DCC's above model appears to be the most comprehensive in regard to digital holdings. In considering security issues, I believe any archival lifecycle

[51] "DCC Curation Lifecycle Model," *Digital Curation Centre*, Accessed Dec 14 2017, http://www.dcc.ac.uk/resources/curation-lifecycle-model.

model should also feature an additional protocol – Privacy Verification and Security Assessment. Theoretically, this should be part of every step of an archival protocol, including during conceptualization and disposal. However, an adequate model for most archival uses would place a full, circular arm around everything underneath "conceptualise" and "dispose." This would encompass migration and reappraisal as well as all actions underneath. Whether one is a professional archivist managing the records of a small town or an individual managing their own personal archives, verifying the privacy of your machines, hard-drives, and smartphones is – and will continue to be – a key element in preserving and protecting your materials.

A new archival future – wherein security measures like encryption are taken during every step of assessment, preservation, and use – promises to result in better tools and systems for professional archivists and individual personal archivists. Though under that assumption, how do archivists, human rights organizations, and privacy advocates create better protocols that utilize all of these diverse concepts to better protect smartphones that carry "incriminating" personal records? Without deeper research done on the implications of unsecure personal devices and state-interception of those devices, it will be impossible for archivists and other advocates to make informed decisions for how to proceed.

Conclusion

The scope of this paper is intentionally narrow. There are several additional concerns I have related to archival interaction with smartphones – including the question of what makes a digital record valid to how to preserve them to what other

security issues should be of concern to archivists and archival protocols. Other research can and does more adequately investigate the validity of born-digital, especially born-smartphone, documents and records. There are serious archival implications to digitally motivated societal changes in terms of how we store and manage our digital information. How will archives be impacted if, in 50 years, all records are from smartphones? Will the shape of our archives evolve? Will future archivists interact with their collections through phones and tablets? Asserting the smartphone as a new repository for our personal archives can be seen as an introductory step in looking at the future of archives and digital records.

Additionally, privacy concerns surrounding our personal archives are perpetually growing as society pushes towards a world wherein all new records are digital and transitory. As I've examined in relation to the gay purge in Chechnya, there are serious security issues when the current gatekeepers of our personal archives – our smartphones – fall into the wrong hands. The core of this concern extends to rising problems like digital preemption, military-developed IMSI catchers (Stingray)[52], as well as biometric (facial recognition, thumbprints) cell phone verification for access.

State utilization of these tools can have widespread damaging effects. In 2011, legal scholar Danny Rosenthal introduced the issue of digital preemption, "a law enforcement model in which a government or private party programs a digital device (like a cell phone) or application (like an Internet browser) to eliminate opportunities to use that device or application to break the law or engage in other conduct deemed

[52] "ACLU Stingray Tracking Devices: Who's Got Them?," *ACLU*, Last modified 2017, https://www.aclu.org/issues/privacy-technology/surveillance-technologies/stingray-tracking-devices-whos-got-them.

undesirable."[53] Political and technological climates that allow for systems of digital preemption raises serious questions about the futures of government control over digital access to archives, smartphone applications, and our personal social media. In light of Chechnya's fervent intent to eradicate all LGBTQ persons and memories of their existence, how will their campaign and those of similar authoritarian or religiously conservative regimes expand under a digital preemption model? If a government like Chechnya can already systematically entrap and torture individuals through their physical devices and the personal records they encompass, then there are further concerns surrounding a future wherein the state possesses total control over how we obtain, preserve, and control our personal archives.

With an understanding of the ethical and legal implications of our personal records, archivists have the power to lead the practical and ethical charge for all information professionals in navigating these new territories. Further archival research should be done to expand upon the impact of smartphones on the future of personal archiving as well as how the field will maintain the privacy of sensitive records, both before and after accession.

The 2016 to 2017 anti-gay purge in Chechnya is an illustrative example of how modern personal recordkeeping practices are being manipulated by abusive state powers. The Chechen government's intense campaign against gay citizens was unintentionally bolstered through accessible records found on victim's phones. By asserting that smartphones are now repositories for our personal archives and

---

[53] Danny Rosenthal, "Assessing Digital Preemption (And The Future of Law Enforcement?)," *New Criminal Law Review* 14, no. 4, (2011): 576. doi: 10.1525/nclr.2011.14.1.576

examining the security measures that could be taken to protect them, I've demonstrated the role that archival theory, practice, and ethics should play in future cases such as this. These are not just issues for lawyers or information technologists, securing the privacy of our digital devices and personal archives must fall under the jurisdiction of archivists, too.

Bibliography

"ACLU Stingray Tracking Devices: Who's Got Them?." *ACLU*. Last modified 2017. https://www.aclu.org/issues/privacy-technology/surveillance-technologies/stingray-tracking-devices-whos-got-them.

"Activist's Guide to Archiving Video." *Witness*. Last modified 2013. https://archiving.witness.org/archive-guide/.

Caswell, Michelle, Alda Allina Migoni, Noah Geraci, and Marika Cifor. "'To Be Able to Imagine Otherwise': Community Archives and the Importance of Representation." Archives and Records 38(1) (2016) (Special issue on Public History): 1-20.

Cox, Richard J. *Personal Archives and a New Archival Calling: Readings, Reflections and Ruminations*. Duluth: Litwin Books, 2008.

"DCC Curation Lifecycle Model." *Digital Curation Centre*. Accessed Dec 14 2017. http://www.dcc.ac.uk/resources/curation-lifecycle-model.

Gessen, Masha. "The Gay Men Who Fled Chechnya's Purge." *The New Yorker*. Jul 3, 2017. https://www.newyorker.com/magazine/2017/07/03/the-gay-men-who-fled-chechnyas-purge.

Hasson, Hind. "Inside the Chechen prison where gay men say they were tortured." *VICE News*. Jun 20, 2017. https://news.vice.com/story/chechnya-prison-gay-men-tortured.

LeFurgy, Bill. "Life Cycle Models for Digital Stewardship." *The Signal* (Library of Congress Blog). Feb 21, 2012. https://blogs.loc.gov/thesignal/2012/02/life-cycle-models-for-digital-stewardship.

McKemmish, Sue. "Evidence of *me*." *The Australian Library Journal* 45, no. 3, (Aug 1996): 174-187. doi: 10.1080/00049670.1996.10755757.

Millar, Laura A. *Archives: Principles and Practices*. Chicago: Neal-Schuman Publishers, Inc., 2010.

"Privacy." *Electronic Frontier Foundation*. Last modified 2017. https://www.eff.org/issues/privacy.

Rosenthal, Danny. "Assessing Digital Preemption (And The Future of Law Enforcement?)." *New Criminal Law Review* 14, no. 4, (2011): 576-610. doi: 10.1525/nclr.2011.14.1.576

Shuster, Simon. "'They Tell Me A Demon Lives Inside Me'." *TIME Magazine*. Sept 25, 2017. http://time.com/chechnya-movsar.

Sopelsa, Brooke and the Associated Press "'We Don't Have Any Gays': Chechen Leader's Remarks Concern White House." *NBC News*. Jul 19, 2017. https://www.nbcnews.com/feature/nbc-out/we-don-t-have-any-gays-chechen-leader-s-remarks-n784356.

"Surveillance Self-Defense: Tips, Tools, and How-tos for Safer Online Communications." *Electronic Frontier Foundation*. Last modified 2017. https://ssd.eff.org/.

Walker, Shaun. "Victim of Chechnya's 'gay purge' calls on Russian to investigate." *The Guardian*. Oct 16, 2017. https://www.theguardian.com/ world/ 2017/ oct/16/victim-chechnya-anti-gay-purge-urges-russia-investigate-maxim-lapunov.

"Video Archiving." *Witness*. Accessed Dec 14, 2017.https://archiving.witness.org.

Beyond Neutrality : Questioning Professional Ethics, Neoliberalism, and Data Violence in LIS Praxis

Spring 2018

Written for my final core class in the program, *Values and Communities* taught by Professor Ramesh Srinivasan, this essay explores whether or not LIS professionals are responsible for the harm caused by new technologies like surveillance and predictive policing. I advocate, like many scholars before me, that the language of neutrality found throughout our field's professional organizations is problematic and engenders things like data violence through a lack of critical professional ethics.

Categorizing systems of information depends upon, first, the acknowledgement of a pre-existing structure of knowledge. These pre-existing structures are not immune to the biases or dominant voice of society, they are, rather, a product of them. Any knowledge system or collection of information that one may encounter is deeply entrenched in the world that created it, however ethical or unethical it may be. With this framework in mind, what then, is the responsibility of those working in library and information science (LIS) to acknowledge the harm that our systems, datasets, and collections can cause? The work that we do – identifying, naming, cataloging, archiving, quantifying – plays a significant role in how pre-existing structures of knowledge *and* oppression become either further reified or challenged. Unfortunately, so much of our work within this ever-professionalized field is often in alignment with the status quo; our institutions and organizations embrace neutrality instead of overt advocacy and activism. Right now, the field appears to be in a particular moment of crisis where our technological actions have increasingly grave consequences in the non-digital, external world. Evident in the data-driven realms of predictive policing, for example, various forms of data violence have become an unavoidable reality that must be recognized and ameliorated. Therefore, by questioning neutrality, the ethical foundations of LIS, and the ideological impact of global neoliberalism; I argue that information workers are actively perpetuating harm against the very communities they see themselves supporting.

Pulling apart the ethical foundations of the field, then, is a necessary first step to locate the ways in which professional LIS organizations view social responsibility and

neutrality. Organizations like the American Library Association (ALA), Society of American Archivists (SAA), and ASIS&T (Association for Information Science and Technology) each set the professional standards, values, and missions of their respective specialization within LIS. The values explicitly or implicitly encouraged through these organizations have a definitive impact on what is expected of workers in these professions as well as what is expected of the graduate programs that support them. Though many practicing archivists, librarians, and information scientists do not align their individual moral compasses up with what ALA, SAA, or ASIS&T encourage, the influence of these tenets across the field is, regardless, incredibly palpable.

ALA begins their values statement by asserting that, "the foundation of modern librarianship rests on an essential set of core values that define, inform, and guide our professional practice."[54] It continues through identifying access, confidentiality/privacy, democracy, diversity, education and lifelong learning, intellectual freedom, the public good, preservation, professionalism, service and social responsibility as guideposts for an ethical practice. Superficially, these all appear to be strong *external* values that recognize the importance of librarianship in our society and how librarians can support their patrons in a multitude of critical ways. However, upon closer examination, ALA's outlined values only marginally look inward at librarianship as a practice that is performed and, thus, has internal responsibilities or values as well as external ones. Under "Social Responsibility," ALA, rather lukewarmly, states that the organization should be willing to "take a position on current critical issues"[55] so long as they relate

[54] ALA Council, "Core Values of Librarianship," American Library Association, adopted June 24, 2009, http://www.ala.org/advocacy/intfreedom/corevalues.
[55] ALA Council, 2009.

to the library. With "Professionalism," ALA confirms that, to the organization, library personnel are only deemed professionally qualified if they have an appropriate graduate degree. Quite obviously, higher education does not inherently provide soon-to-be practitioners with some sort of transferrable ethical foundation nor does it demonstrate an individual's capacity to do good work or be successful as a librarian. This inclusion is a confusing but, simultaneously, very telling aspect of the field's moral code.

Librarianship as a profession and librarians as individuals appear to be deeply concerned with maintaining the cultural cache the library has gained as a bastion of "good" ethics. Baharak Yousefi critically untangles this issue by arguing that, "perhaps this understanding of ourselves as 'being on the right side,' institutionally and professionally, allows some of us to dismiss the need or urgency for personal action. But it is important to probe and problematize our progressive professional rhetoric by looking at what we actually do."[56] She continues, arguing that, "while the concept of 'neutrality' was and is still sometimes being used to maintain and perpetuate the status quo, the tactics have been changing. In my experience, we often relied on the language of neutrality to explain and justify our decisions."[57] Throughout the essay, "On the Disparity Between What We Say and What We Do in Libraries," Yousefi skillfully questions the moral code of librarianship, assumptions of neutrality, and the various ways in which challenging those systems can have actual, though never entirely

[56] Baharak Yousefi, "On the Disparity Between What We Say and What We Do in Libraries," in *Feminists Among Us: Resistance and Advocacy in Library Leadership*, (New York: Litwin Books and Library Juice Press, 2017), 95.
[57] Yousefi, 95.

faultless, impact. Her work provides a powerful frame with which to view questions of ethics, neoliberalism, and responsibility within LIS. If we are to push the field and ourselves as practitioners beyond this current place of quasi-neutrality, then we must look inward at how we work and what issues we see as necessary or possible for fighting within the space of the library.

Similar to ALA, SAA outlines access and use, accountability, advocacy, diversity, history and memory, preservation, professionalism, responsible custody, selection, service, and social responsibility in their "Core Values Statement." Their "Code of Ethics," then, supports professional relationships, judgement, authenticity, security and protection, access and use, privacy, and trust. Under "Social Responsibility," SAA calls upon members to recognize "their responsibility to a variety of groups in society and to the public good."[58] The hierarchy of responsibility, however, begins with archivists needing to "serve the needs and interests of their employers and institutions"[59] first. Rather than encourage the field to see themselves as responsible to the co-creators represented within institutional documents or those that they may be harmed by the material contained in the records; archivists are compelled, by their professional organization, to serve their employer above all others. Again, like ALA, SAA also argues for professionalism, though SAA does not explicitly assert the need of graduate education to be recognized as a qualified member of the field. This phrasing may seem like a radical choice on the part of SAA, but I, unfortunately, do not believe that a post-higher education politic is the reason for the difference. Unlike librarians,

[58] Society of American Archivists, "SAA Core Values Statement and Code of Ethics," last revised January 2012, https://www2.archivists.org/statements/saa-core-values-statement-and-code-of-ethics.
[59] Society of American Archivists, 2012.

practicing archivists have only recently been formally trained in institutions of higher education as such. I believe that in due time SAA will update their values to acknowledge graduate degrees as a new marker of validity within the field to justify the rise of graduate-level archival education.

Further, within their "Diversity" statement, SAA encourages archivists to seek out underrepresented community members as a possible solution for diversifying collections. "They seek to build connections to under-documented communities to support: acquisition and preservation of sources relating to these communities' activities, encouragement of community members' use of archival research sources, and/or formation of community-based archives." The conclusion of the above excerpt is unsettling. SAA suggests that "Archivists" should encourage underrepresented community members[60] to use archival sources and/or form their own community-based archives as though any working archivist or member of SAA could not, themselves, be from an underrepresented community. Likewise, the statement frames community-based archives as something outside of traditional archival praxis rather than something that is very much part of the field's present and future. These statements, instead, act as a continuation of a sort of us/them dichotomy. It does not feel like an actual call for representative diversity within the field or acknowledgement of the individuals already present who occupy both roles. Further, this "Diversity" statement fails to name cultural, ethnic, racial, or linguistic diversity, for example, as additional important ways with which to reach "a diversified and representative

[60] Though not explicitly outlined, we can gather from the historic role of archives and archival collection in the world that SAA identifies the "under-documented" as people of color, religious minorities, LGBTQ individuals, indigenous communities, working class or low-income communities, and women.

membership in the profession."[61] Entirely identical to their librarian peers, SAA fails to be explicitly self-reflexive in how they project ethics and values for the profession. There is very little acknowledgement of an archivist's responsibility to see their work as that, work that both evolves and is shaped by one's specific understanding of and experience within the world.

ASIS&T, then, provides the technologically-driven ethical foundation for LIS as a field. The organization identifies as "the only professional association that bridges the gap between information science practice and research... leading the search for new and better theories, techniques, and technologies to improve access to information."[62] Unlike ALA and SAA, ASIS&T's professional guidelines are relatively clear, stating that the organization, "urges its members to be ever aware of the social, economic, cultural, and political impacts of their actions or inaction."[63] That said, ASIS&T, in having the briefest professional guidelines/ethical code, only identifies three responsibilities that members should keep in mind throughout the course of their work. They are responsible to their employers/clients/system users, the profession, and the association. This structure of responsibility is interesting, though not surprising, in that two of the three categories represented above are the profession itself and the professional organization that supports it. Under "Association," ASIS&T asks that members, "resist procedures that promote unlawful discriminatory practices in access

[61] Society of American Archivists, 2012.
[62] Association for Information Science and Technology, "About ASIS&T," Association for Information Science and Technology, accessed June 1, 2018, https://www.asist.org/about/.
[63] Association for Information Science and Technology, "ASIS&T Professional Guidelines," Association for Information Science and Technology, accessed June 2018, https://www.asist.org/about/asist-professional-guidelines/.

to and provision of information, by seeking to extend public awareness and appreciation of information availability and provision as well as the role of information professionals in providing such information."[64] Though this statement is radical in its message, I'm unsure whether or not many of the practitioners within the field will see it as such because, like ALA and SAA, there is still a lack of self-reflexivity throughout the entirety of the guidelines. An additional omission of internal reflection is evident in how ASIS&T limits their responsibilities to direct stakeholders. It does not recognize, as an issue relevant to all of its members, that society now occupies a dangerous cultural moment wherein our information technology impacts individuals outside the systems in question, like those represented in the datasets we use to build or test new technologies.

With the ethical foundations of LIS relatively exposed, I will now frame the political environment that unites each of these specializations as well as their professional associations: neoliberalism. "Neoliberalism is… a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade."[65] You cannot examine professional organizations that simultaneously emphasize and obfuscate the individual, nor can you examine the professions they are connected to without looking at the role that neoliberalism has played in their evolution. In his groundbreaking work, *A Brief History of Neoliberalism*, David Harvey suggests that,

[64] Association for Information Science and Technology, "ASIS&T Professional Guidelines," 2018.
[65] David Harvey, *A Brief History of Neoliberalism*, (New York: Oxford University Press, 2005), 2.

"we can, therefore, interpret neoliberalization either as a *utopian* project to realize a theoretical design for the reorganization of international capitalism or as a *political* project to re-establish the conditions for capital accumulation and to restore the power of economic elites."[66] Each of the above organizations – ALA, SAA, and ASIS&T – encourage their LIS members to see and serve the profession as well as their employers, with only marginal attention given to the world outside that inner sanctum. The individual is repeatedly emboldened to see the value of the work that they do as something exemplary. Rather than focus on economic capital, each organization, though ALA and SAA most significantly, use a kind of pseudo-ethical capital as an additional form of exchange for workers.

LIS does not function as a tool of neoliberalism in the same way that, for example, Wall Street or global real estate markets do. However, there are countless ways in which these fields perpetuate neoliberalism via mass corporatization through corporate sponsorships, supporting private property through attention to intellectual property laws, and placing an internal cultural emphasis on professional autonomy. At the same time, archives and libraries are also *victims* to the powerful wave of neoliberalism via funding cuts, the outsourcing of projects, a focus on metrics as a demonstration of value, as well as the elimination of employee benefits and rise of contract labor. Technology and innovation becomes highlighted in the neoliberal state so many libraries and archives are only able to secure outside funding via fellowships and grants if there is some sort of "smart" component to their project – mass

[66] Harvey, 19.

digitization efforts, digital library infrastructure, new computer systems, makerlabs, technology-centric collection development, etc. In the realm of neoliberalism, individual freedoms are championed as increased access to the globalized, free market where competition breeds innovation and success is believed to trickle down to even the least advantaged among us. Numerous archives and libraries have been on the forefront of this technological wave and have found critical, beneficial ways to incorporate more of the digital into their historically analog realms. This kind of work is both necessary and useful. Technology in LIS can be viewed as a complex dualism – where new digital elements can, on one end, bring increased access and literacy to patrons and, on the other end, further individualize or datafy the patron or community member in a way that threatens their privacy and safety.

Neoliberalism beyond the library and archive can be seen even more dramatically in the data-driven world of information science, which, for those in LIS is covered under the umbrella of ASIS&T. Here, privatization is seen as an unquestioned absolute. The model of success in Big Tech and Silicon Valley is a model of neoliberal corporatization where the few provide for the many. There is very little emphasis on creating actual community networks unless that community has the capacity to bring profit to its connector. So often, value within technology as an industry is purely financial – and purely financial for only the highest echelon of members. Individual autonomy, increased efficiency, and quantifiablity become the tenets of how any organization, private or public, should be managed in the neoliberal era. The value statements of ALA, SAA, and ASIS&T feature very specific language surrounding

professionalism and, overall, encourage members to be invested in the professional organization itself. This standpoint is a neoliberal result; the organization sees its future wrapped up in the practitioners of the field and, rather than project values that matter without question to said practitioners, the organization is explicit in its call for support. They almost suggest that, "you exist because we exist" as a way to place their significance in the field above the day-to-day praxis. Under these conditions, the affective experience of a system, program, or space matters less than a company's ability to know how long your experience was, what you did during that experience, and how your time in that world could predict future actions.

From neoliberalism, we can better understand the rise of unethical, yet seemingly efficient systems and how that rise is deeply entrenched in an economic market obsessed with "new" innovation. Neoliberalism has created a financial, ethical, and political market that makes the desire to quantify anything and everything profitable. This exact environment has fostered the evolution of contemporary data violence. Data violence, a term coined by theorist Anna Lauren Hoffman, "occurs as the result of choices that implicitly and explicitly lead to harmful or even fatal outcomes."[67] These choices "are built on assumptions and prejudices about people, intimately weaving them into processes and results that reinforce biases and, worse, make them seem natural or given."[68] Micro and macro, data violence is a form of, most often, racialized harm that is caused on a daily basis at every corner of the tech

[67] Anna Lauren Hoffman, "Data Violence and How Bad Engineering Choices Can Damage Society," *Medium*, April 30, 2018, https://medium.com/s/story/data-violence-and-how-bad-engineering-choices-can-damage-society-39e44150e1d4.
[68] Hoffman, 2018.

industry. Hoffman's "Data Violence and How Bad Engineering Choices Can Damage Society," incorporates numerous powerful examples of this phenomenon. Everything from transphobic body-scanners at airports internationally to a racist Google algorithm that identified photographs of Black people as gorillas, data violence weaponizes bias and oppression, two things that are far from new to U.S. society, with the unprecedented power of digital technology.

Like so many other information systems of the past, the power of individual data is not limited to the direct environment that controls or created it. It should go without question that data is not limited to our computer screens, smartphones, or tablets. As human existence becomes increasingly datafied, whether you are directly connected to the digital network or not, there is almost no way to avoid being captured and logged. It lives beyond us, increasingly, without our knowledge. This development means that, without creating a space for informed consent, technology companies are profiting off data based on the everydayness of human existence. If data collection is constant and deeply entrenched in the biases (recognized or subconscious) of those collecting it, then what kinds of systems are we creating and how does their impact flow back to the originator of the data?

Hoffman argues that, "neither distributional nor representative forms of harm can survive without a cultural backdrop that enables them. Pernicious racist or ethnocentric ideas … perpetuate violence by justifying extant inequalities, supporting destructive policy or rationalizing physical harm."[69] Since the majority of U.S. society is

[69] Ibid.

deeply caught up in racist, xenophobic, sexist, transphobic, and homophobic understandings of the world, then so are the systems we create. Hoffman continues saying that this, "is the crime we commit when, as researchers and engineers and data scientists, we fail to think not only about the consequences of our work, but also our assumptions, our categories, and our position relative to the subjects of the data we work with."[70] Forms of data violence perpetuate because the people behind the algorithms, facial recognition software, datasets, initial artificial intelligence programming, and interface architecture inject their own biases into them.

In addition to Hoffman's work on data violence, scholars Safiya Umoja Noble and Cathy O'Neil both question the role that algorithms play in reproducing oppression beyond the realm of the computer screen. O'Neil, in *Weapons of Math Destruction*, demonstrates how opaque and biased algorithms have the power to prevent people from gaining access to critical things like employment or receiving bank loans.[71] In *Algorithms of Oppression*, Noble demonstrates how the data violence of racist algorithms has the power to cause actual physical violence as well as extreme psychological damage and financial inequity. Using the radicalization of white supremacist and mass murderer Dylan Roof, Noble details his fateful Google search of "black-on-white-crime" and a subsequent spiral deep into white supremacist fallacies perpetuated online. She demonstrates how, after being provided with misinformation and increasingly toxic content by Google's secret algorithm, Roof justified his decision to murder nine African-Americans at the Emanuel African Methodist Episcopal Church

---

[70] Ibid.
[71] Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, (New York: Random House, 2016).

in Charleston, South Carolina in 2015.[72] As an active scholar in the IS field, Noble's recent work is a significant example of why issues of data violence need to matter to all members of the LIS field.

Another powerful demonstration of data violence can be found in the relatively recent rise of predictive policing. Seen as an innovated tech solution to a "civic issue" by governments, police departments, and the private sector, predictive policing has become one of the most damaging realities to come out of society's desire to fix the world through artificial intelligence (AI). PredPol is considered one of the most recognizable predictive policing start-ups, which "aims to reduce victimization and keep communities safer."[73] Using a combination of pre-existing crime statistics and new information, PredPol "identifies where and when crime is most likely to occur" thereby enabling police departments "to effectively allocate... resources and prevent crime."[74] From the outside, predictive policing could appear, to an individual in favor of traditional policing, as a way to save tax dollars, punish criminals, and protect private property. Taking into consideration the biases that are inherent to data collection and infused in how algorithms and machine learning are initiated, the high fallibility of these critical datasets, and thus predictive policing decisions, becomes clear. Despite arguing that their machine-learning algorithm never uses any personally identifiable information

[72] Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism*, (New York: NYU Press, 2018).
[73] PredPol, "About PredPol," PredPol, last updated 2018, http://www.predpol.com/about/.
[74] Ibid.

or demographic, ethnic, or socio-economic information, I find it hard to imagine that an algorithm that teaches itself overtime will forever ignore these kinds of data-points.[75]

In a 2016 article for *Slate*, Logan Koepke questioned the ethics of predictive policing, pulling from academic research about the dangers of algorithms based on historic drug crime data, and argued that, "if the underlying historical crime data is biased in a statistical sense—meaning that the data doesn't actually perfectly reflect reality, and certain things are overrepresented or underrepresented in the sample relative to the actual population—it's fair to infer that the forecasts made on that data will, in turn, also be statistically biased."[76] With predictive policing systems like PredPol being offered to police departments around the country, we can see how these algorithms and the actions that result from them could have serious consequences, especially considering that many of the "crime hotspots" identified by these programs are often within low-income, communities of color.

Recent research from PredPol has highlighted the company's lack of introspection about the potential harm that can and, ultimately, will come from their system. Early in 2018, a team of researchers associated with PredPol, including co-founder and UCLA anthropologist Jeff Brantingham, presented a new study about the use of machine-learning algorithms for predicting gang violence using only partially completed police reports. Rather than incorporating the nuanced full-text narrative description of a crime, the neural network in question generated new text that then is

---

[75] PredPol, "How Predictive Policing Works," PredPol, last updated 2018, http://www.predpol.com/how-predictive- policing-works/.
[76] Logan Koepke, "Predictive Policing Isn't About the Future. It's About the Past," *Slate*, Nov. 21, 2016, https://www.slate.com/articles/technology/future_tense/2016/11/predictive_policing_is_too_dependent_on_historical_data.html.

turned into a mathematical vector used to make the crime prediction.[77] Critics like journalists Ali Winston and Ingrid Burrington of *The Verge* astutely observed that, "this new line of research suggests that Brantingham has not taken critiques of his research methodology to heart and is pressing forward with a project that is founded on incomplete data, dubious methods, and a premise that, if applied in the field, could result in more people of color behind bars."[78] Not surprisingly, the work of PredPol and Jeff Brantingham has, largely, been funded by the U.S. Department of Defense,[79] demonstrating a connection between the federal government and the increased surveillance of communities of color in cities like Los Angeles, where PredPol is active.

Another recent project at the intersection of big data, surveillance, and policing, is that of Palantir. A brainchild of Silicon Valley tycoon Peter Thiel and others, Palantir – like PredPol – found early funding through the U.S. Government, specifically from the CIA's venture capital firm In-Q-Tel (IQT). Palantir is a data-mining company that has provided data analysis and integration for the Los Angeles Police Department (LAPD), New York Police Department (NYPD), and New Orleans Police Department (NOPD).[80] Unlike PredPol's use of non-individualized information, Palantir's work in New Orleans pulls directly from individual criminal and non-criminal records (social media, probation

---

[77] Ali Winston and Ingrid Burrington, "A pioneer in predictive policing is starting a troubling new project: Pentagon-funded research aims to predict when crimes are gang-related," *The Verge*, April 26, 2018, https://www.theverge.com/2018/4/26/17285058/predictive-policing-predpol-pentagon-ai-racial-bias.
[78] Winston and Burrington, 2018.
[79] This information is freely available to the broader public. There are mentions of Brantingham's Pentagon contract in the Winston and Burrington *Verge* article, as well as in other recent publications about PredPol.
[80] Ali Winston, "Palantir has secretly been using New Orleans to test its predictive policing technology: Palantir deployed a predictive policing system in New Orleans that even city council members don't know about," *The Verge*, Feb. 27, 2018, https://www.theverge.com/2018/2/27/17054740/palantir-predictive-policing-tool-new-orleans-nopd.

and parole information, jail phone-calls, the city's central case management system, etc.) to create a list of potential perpetrators and victims of crimes.[81] Potential offenders are then targeted with the city's CeaseFire program wherein police officers threaten interested parties with maximum sentencing if they reoffend and then connect said citizens with services like job training.[82] Between the gross privacy violations committed as a result of Palantir's intensive data mining and the questionable ethics of the NOPD's secrecy surrounding the program, the necessity of such a new technology becomes difficult to parse out. With both PredPol and Palantir, the question of *why* must be asked. Without diving too deep into the history of policing in the U.S., why does predictive policing seem like a solution for making communities "safer"? Why aren't the data scientists at the helm questioning their own biases or the potential negative impact of their systems? And, possibly most significantly in conversations about our tech-obsessed society, why has the answer to our ills of late been to collect more data?

Adding another voice to the chorus against data violence, Kate Crawford argues that these systems risk

> perpetuating an already vicious cycle, in which the police increase their presence in the same places they are already policing (or overpolicing), thus ensuring that more arrests come from those areas. In the United States, this could result in more surveillance in traditionally poorer, nonwhite neighborhoods, while wealthy, whiter neighborhoods are scrutinized even less. Predictive programs are only as good as the data they are trained on, and that data has a complex history.[83]

---

[81] Winston, 2018.
[82] Ibid.
[83] Kate Crawford, "Artificial Intelligence's White Guy Problem," *New York Times*, June 25, 2016, https://www.nytimes.com/2016/06/26/opinion/sunday/artificial-intelligences-white-guy-problem.html.

As expressed earlier in this essay, there appears to be a problem with self-reflexivity and introspection in the fields of LIS, which extends to the work of data scientists and the engineers they often collaborate with. This lack of awareness to the needs of society beyond the desires of the individual worker – be they a librarian, archivist, engineer, data manager, or otherwise – needs to be addressed to create information systems that are more equitable and less likely to cause harm and violence. Seeking a solution is especially pertinent as those victim to harm in these scenarios are already marginalized and oppressed under a neoliberal state. Crawford continues her above argument by highlighting the lack of diversity in the artificial intelligence industry, what she identifies as AI's white guy problem. "Like all technologies before it, artificial intelligence will reflect the values of its creators. So inclusivity matters — from who designs it to who sits on the company boards and which ethical perspectives are included. Otherwise, we risk constructing machine intelligence that mirrors a narrow and privileged vision of society, with its old, familiar biases and stereotypes."[84] The same can be said for the entirety of LIS. There needs to be an active push to critically engage with who is represented and supported in the field as well as who is silenced or tokenized.

To reach a more equitable and representative future that challenges ethical violations like the data violence of racist algorithms or the evolving institutions of predictive policing, LIS needs to see that it, like AI, has a problem with whiteness and, by proxy, is influenced by their own culture of white supremacy. This problematic status

[84] Crawford, 2016.

extends to the construction of these fields in terms of the people that make up the workforce, the actual physical spaces each institution occupies and the ways in which those spaces either work towards upholding or dismantling oppression, the actual collections inside each institution, the construction of the very knowledge systems or datasets used, the oppressive structures that are reinforced through professional organizations and workplace culture, as well as how white supremacy and other forms of oppression are rampant in LIS education. The specific historic context of each these institutions provides powerful explanations surrounding their current political (or neutral?) instantiations. nina de jesus in "Locating the Library in Institutional Oppression," traces the history of the liberal library with rise of the enlightenment and connects those ideals to the genocide of indigenous people within the U.S., identifying that the library perpetuates settler states and is thereby complicit in institutionalizing oppression.[85] de jesus further critiques the library by highlighting additional ways in which it upholds white supremacy, arguing that "libraries are another institution necessary for maintaining a system of intellectual property within a larger context of white supremacy that depends on the inherent enslaveability of Black people."[86] Her argument is nuanced and thoughtful, painting a complex and less positive picture of library history than what is so often outwardly projected.

Beyond the institutional history, there are also significant labor-based ways in which LIS, and here libraries specifically, reflect and reinforce white supremacy. Teresa

[85] nina de jesus, "Locating the Library in Institutional Oppression," *In the Library with the Lead Pipe*, Sept. 24, 2014, http://www.inthelibrarywiththeleadpipe.org/2014/locating-the-library-in-institutional-oppression/.
[86] de jesus, 2014.

Y. Neely and Lorna Peterson's 2007 paper, "Achieving racial and ethnic diversity among academic and research librarians," examines the lack of recruitment, retainment, *and* advancement of librarians of color. Noting that to improve these conditions, libraries and library graduate programs need to do intentional things like "institute a system of accountability regarding the retention and advancement of underrepresented groups in libraries," create opportunities for mentorship, as well as foster opportunities for professional development.[87] In the more than ten years since Neely and Peterson's paper was first published, librarianship is still overwhelming white – with 86.7% of respondents in recent ALA study identifying as such.[88] Despite these glaring statistics, both libraries and library graduate programs are failing to do the appropriate work necessary to create spaces that are both safe and supportive for diverse students, especially students of color. Each of these institutions are many years away from reaching a more equitable reality but, to get there, both libraries and library schools need to fully acknowledge the problem.

In addition to confronting the lack of diversity within the field and finding dedicated ways to improve it, we can look to how the professional organizations of LIS can serve to be more than tools of neoliberalism and, instead, act as foundations for progressive action. Though the public guidelines for all members of ASIS&T are intentionally framed to be palatable to as many members as possible, considering the

---

[87] Teresa Y. Neely and Lorna Peterson, "Achieving racial and ethnic diversity among academic and research librarians The recruitment, retention, and advancement of librarians of color— A white paper," *C&RL News*, October 2007, 565.

[88] Kathy Rose and Kelsey Kenke, "2017 ALA Demographic Study," American Library Association Office of Research and Statistics, January 11, 2017, http://www.ala.org/tools/sites/ala.org.tools/files/content/Draft% 20of%20Member%20Demographics%20Survey%2001-11-2017.pdf.

various ways in which specific arms of the association are doing critical work is incredibly important to this conversation. ASIS&T has an active special interest group dedicated to Information Ethics and Policy (SIG/IEP), for example. In "Research Ethics and the Age of Big Data," Chris Allen Sula asks two critical questions of information professionals: one, "how do we, as researchers, approach our work ethically where new data collection and analysis tools are concerned?" and, two, "how do we do ethical research in an age of big data?"[89] The author skillfully pulls from an ethical model for ethnographic fieldwork (PERCS)[90] and applies it to the work that ASIS&T members are actively doing in terms of collecting data. With big data research, Sula questions participant selection, invasiveness, informed consent, privacy/anonymity, exploratory research, algorithmic methods, dissemination channels and participant response, and data publication. Knowing that many of the members of ASIS&T are connected to companies throughout the world of algorithms and artificial intelligence, Sula's call to his peers is powerful. Here, he pushes the field to reflect upon the impact of the work they do and the value that ethical criticism offers them.

Advocating for social justice to be part of LIS work and education has been critically examined in Safiya Umoja Noble and Sarah T. Roberts' essay, "Empowered to Name, Inspired to Act: Social Responsibility and Diversity as Calls to Action in the LIS Context." The two scholars do significant work suggesting the role that faculty members can have in the social justice praxis of their students. "Students must be

---

[89] Chris Alen Sula, "Research Ethics in a Age of Big Data," *Bulletin of the Association for Information Science and Technology* 42, no. 2 (December/January 2016), https://www.asist.org/files/bulletin/dec-15/Sula.pdf.
[90] Program for Ethnographic Research & Community Studies at Elon University: Sula, 18.

given the opportunity to develop their historical understanding of social justice issues; foster their vocabularies and abilities to talk about the complex issues of race, gender, sexuality, and class; and recognize the ways in which issues of power play out in the communities in which they will live and practice."[91] They continue that beyond directly supporting students, faculty can also create courses with social justice components and make their own activist politics visible. Through such work, in tandem with continued writing about the importance of ethical research as well as more intentional conversations surrounding white supremacy and institutionalized oppression, LIS scholarship may be able to encourage the field's various professional organizations to look beyond static neutrality.

So, where does all of this research leave us? What will the future of LIS look like? Can there be interventions to reverse the harm done by data violence? Is predictive policing not only an inevitable future for the communities we serve, but their present realities? This brief essay provided a cursory look at the evolution of professional ethics in LIS and connected those values to a larger culture of neoliberalism. Through analyzing data violence, and predictive policing specifically, I expressed a link between our internal climate, the broader political state in which we operate, and how those things impact the work we do. This moment of neoliberalism is not yet over, so further conversations and critical writing must be done to untangle how it impacts LIS and what kinds of things we can do to limit its reach. If we do not pay attention to these conditions, then we are enacting harm upon the very communities we claim to serve

[91] Safiya Umoja Noble and Sarah T. Roberts, "Empowered to Name, Inspired to Act: Social Responsibility and Diversity as Calls to Action in the LIS Context," *Library Trends* 62, no. 3 (2016): 528, doi:10.1353/lib.2016.0008.

and support. Further, predictive policing has only just begun. Many other scholars have recognized this as an ethical crisis that needs to be confronted by information scholars, engineers, technologists, and our government bodies. Future research on this topic should include a deeper historical analysis of white supremacy and its underpinnings in the ethical and institutional foundations of LIS. A closer analysis such as this would allow the connections between historic forms of institutionalized oppression and how that oppression has been reformatted and re-weaponized through predictive policing to be seen even more clearly. Our values shape our field, so I can only hope that radical work against racist neoliberal projects like PredPol and Palantir can continue to occur.

Bibliography

ALA Council. "Core Values of Librarianship." American Library Association. Adopted June 24, 2009. http://www.ala.org/advocacy/intfreedom/corevalues.

Association for Information Science and Technology. "About ASIS&T." Association for Information Science and Technology. Accessed June 1, 2018. https://www.asist.org/about/.

Association for Information Science and Technology. "ASIS&T Professional Guidelines." Association for Information Science and Technology. Accessed June 1, 2018. https://www.asist.org/about/asist-professional-guidelines/.

Crawford, Kate. "Artificial Intelligence's White Guy Problem." *New York Times*, June 25, 2016. https://www.nytimes.com/2016/06/26/opinion/sunday/artificial-intelligences-white-guy-problem.html.

de jesus, nina. "Locating the Library in Institutional Oppression." *In the Library with the Lead Pipe*, Sept. 24, 2014. http://www.inthelibrarywiththeleadpipe.org/2014/locating-the-library-in-institutional-oppression/.

Harvey, David. *A Brief History of Neoliberalism*. New York: Oxford University Press, 2005.

Hoffman, Anna Lauren. "Data Violence and How Bad Engineering Choices Can Damage Society." *Medium*, April 30, 2018. https://medium.com/s/story/data-violence-and-how-bad-engineering-choices-can-damage-society-39e44150e1d4.

Koepke, Logan. "Predictive Policing Isn't About the Future. It's About the Past." *Slate*, Nov. 21, 2016 ,https://www.slate.com/articles/technology/future_tense/2016/11/predictive_policing_is_too_dependent_on_historical_data.html.

Neely, Teresa Y. and Lorna Peterson. "Achieving racial and ethnic diversity among academic and research librarians The recruitment, retention, and advancement of librarians of color – A white paper," *C&RL News*, October 2007.

Noble, Safiya Umoja. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York: NYU Press, 2018.

Noble, Safiya Umoja and Sarah T. Roberts. "Empowered to Name, Inspired to Act: Social Responsibility and Diversity as Calls to Action in the LIS Context." *Library Trends* 62, no. 3 (2016): 512-532. doi:10.1353/lib.2016.0008.

O'Neil, Cathy. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. New York: Random House, 2016.

PredPol. "About PredPol." PredPol. Last updated 2018. http://www.predpol.com/about/.

PredPol. "How Predictive Policing Works." PredPol. Last updated 2018. http://www.predpol.com/ how-predictive- policing-works/.

Rose, Kathy and Kelsey Kenke. "2017 ALA Demographic Study." American Library Association Office of Research and Statistics. Last updated January 11, 2017. http://www.ala.org/tools/sites/ala.org.tools/files/content/Draft%20of%20Member%20Demographics%20Survey%2001-11-2017.pdf.

Society of American Archivists. "SAA Core Values Statement and Code of Ethics." Society of American Archivists. Last revised January 2012. https://www2.archivists.org/statements/ saa-core-values-statement-and-code-of-ethics.

Sula, Chris Alen. "Research Ethics in a Age of Big Data." *Bulletin of the Association for Information Science and Technology* 42, no. 2 (December/January 2016), https://www.asist.org/files/bulletin/dec-15/Sula.pdf

Winston, Ali. "Palantir has secretly been using New Orleans to test its predictive policing technology: Palantir deployed a predictive policing system in New Orleans that even city council members don't know about." *The Verge*, Feb. 27, 2018. https://www.theverge. com/2018/2/27/17054740/ palantir-predictive-policing-tool-new-orleans-nopd.

Winston, Ali and Ingrid Burrington. "A pioneer in predictive policing is starting a troubling new project: Pentagon-funded research aims to predict when crimes are gang-related." *The Verge*, April 26, 2018. https://www.theverge.com/2018/4/26/17285058/predictive-policing-predpol-pentagon-ai-racial-bias.

Yousefi, Baharak. "On the Disparity Between What We Say and What We Do in Libraries." In *Feminists Among Us: Resistance and Advocacy in Library Leadership*. New York: Litwin Books and Library Juice Press, 2017.

Project Summary for "Imperial Eyes"

Ariel Hahn and Asa Wilder
Fall 2018

"Imperial Eyes" is a digital humanities project that was conceived of and created during Professor Johanna Drucker's *Digital Methods for Research and Scholarship*. The aim of the assignment was to scale a full-fledged digital humanities project using data that was either downloaded through an API or publicly accessible repository, scraped from the web, or gathered and modeled directly by the project creators. The following document is a final summary that details our approach, methods, and possible future plans for this experiment.

Project Statement

Imperial Eyes (https://aireuhl.github.io/i_e) uses digital tools to engage with the ideological, physical and geographic creation of the United States. Through a side-by-side visual analysis of historical maps, and a textual analysis of land acquisition treaties, we ask: how did the acquisition and theft of land by European colonizers influence the way the continent was conceived, envisioned and mapped? What can the visual qualities of maps tell us about the role cartography plays in the larger development of colonization? Additionally, using digital tools to draw out deep, hard-to-decipher patterns, we attempt to answer questions about how government treaties helped shape the way land and space were visualized by early cartographers of the American continent.

By creating a navigable timeline of maps and treaties, we hope to offer a deeper understanding of the way space is visualized in relation to political circumstances and cultural assumptions. Using a series of 39 historical maps from the New York Public Library's "Maps of North America" Digital Collection, we offer the beginnings of a larger project aimed at recontextualizing the evolution of mapping in America. Paired with interactive text and network analysis of contemporaneous treaties with indigenous peoples, these visualizations encourage digital learners to locate slippery and easily lost historical patterns in an effort to better understand the complex interplay of power, geography and visual representation. This project represents the beginning stages of a much larger-scale endeavor, which unfortunately is beyond our current capacity. We believe that more meaningful and interesting analytics could emerge through further

harnessing the power of GIS data and building more links between these two robust categories of data.

Methods and Rationale

Imperial Eyes employs multiple complimentary digital methods to build a cohesive and meaningful display and analysis of visual and textual data. First, using textual analysis tools Voyant and Recogito, we assessed our initial dataset of 30 full-text treatries through informed distance reading and taggable event/person/place mark-up. The text of each treaty within our dataset was scraped from the web by hand and placed directly into an individual .txt file. After the initial readings of and engagement with our textual data, we were able to identify and build a more diagrammatic dataset of names, treaty titles, party information, dates and locations. This data model allowed for a deeper network analysis of 7 randomly selected treatries within our set, and pointed to overlapping data points (or edges), such as tribal members or United States government officials that were signatories to multiple treaties. Moreover, by geocoding the location names using LatLong.net for this sample, we were able to visualize the geographic relationship between treaty locations. After building our data model and going through multiple iterations of data clean-up in both Google Sheets and OpenRefine, we initially attempted to visualize our .csv dataset through Gephi and Cytoscape. Ultimately, we elected to finalize our network analysis using the visualization software in Palladio. Though the export function within Palladio is not ideal (only a JSON file), this particular software had the lowest learning

curve with regard to ingest and provided highly accessible visualizations that are both clear and comprehensive.

To develop our image collection and corresponding dataset for the maps, we again relied on a wide array of methods. We used the NYPL's API to download a set of .xml files in MODS 3.4 schema. A simple Python script was written to scrape these files and download the linked image files. The image metadata was then combined and cleaned in OpenRefine and reformatted into a .csv with a new data model. This data model provided deeper comparative analysis (such as filtering/organizing maps by date or language) and allowed us to add links to the treaty data. By aligning certain fields (date) between our two datasets (treaties and maps), we were able to combine them into a singular visualization in our timeline using Timeline JS .

Moreover, we also offer the beginning stages of a more advanced layer of computer-aided visual analysis. To measure the color, hue, brightness, shape and saturation of each map we used ImagePlot, a suite of high-powered visual analysis tools powered by ImageJ software. The use of computer vision software allows for rapid, large scale visual analysis of dozens of images at the same time. Using this software, we visualized a portion of our dataset using just the images themselves. Through the visualization of large sets of collected images, patterns and trends can begin to emerge that may reveal otherwise overlooked phenomenon.

Community

This project is primarily designed for the academic study of the history of settler colonialism in the United States. Motivated by a desire to highlight the often ignored historical contingencies of our contemporary political moment, we hope to engage historians and geographers in a wider discussion of the hidden ideologies behind mapping. In its current state, many of our tools are only marginally useful, but with a growing dataset, we are confident more interesting and novel patterns would emerge. These patterns could be useful to students and researchers interested in the intersection of cartography, visual cultural and political science as well as those working across indigenous and native studies, critical geography and information science.

Imperial Eyes was built and designed by two settlers of European descent. Asa Wilder is a third generation American who grew up in traditional Osage territory. Ariel Hahn is a fifth generation Arizonan and descendant of colonial-era settlers who was raised in traditional Tohono O'odham territory. They both currently reside in traditional Tongva territory and are interested in interrogating their participation, both familial and personal, in settler colonialism.

Design

The digital presentation component of Imperial Eyes is a website comprised of two primary sections: one, a comprehensive timeline and, two, a series of visualizations and associated analysis. Additionally, we've included an introductory homepage, a comprehensive next steps page highlighting the potential future of our project, and an

about page with information on us as individuals alongside resource links. On the home page, users are met with our custom-designed title/logo as well as a project summary, brief description of our data, and a territory acknowledgement. From here, users can navigate to the interactive, detailed timeline with embedded images and linked text files. The timeline contains records for each of our 39 maps and our sample of seven treaties, including the date issued, names of creators, physical descriptions and a detailed, large-scale image. In addition to the timeline, the second section of our project features a gallery of visualizations and images of analysis tools used to process our data. Users are able to explore the textual datasets of our research through visualizations provided by Voyant and Palladio, highlighting the lingual, networked nature of our data. Then, users can see images of a prototype for an interactive GIS-linked interface. These images, including an animated .gif, demonstrate the possibilities of using warped map images as .kml files in a GIS interface such as Google Earth. While Google Earth has disabled its API and embedding functions, future possibilities for this kind of project remain. Finally, users can choose to navigate through a gallery of ImagePlot map visualizations. These visualizations order, sort and arrange the maps according to predefined specifications such as hue, color, brightness or date issued.

The Imperial Eyes website is designed for both directed, narrative storytelling through the timeline and more open, non-structured exploration through our gallery of descriptive analysis and mapped/networked visualizations.

Technical Specifications and Workflows

Our set of digital assets include .txt files, .csv files, .jpg images, and .kml files. Our .txt files have been created by scraping text off of the web, both manually and through a Python script. Our map images are high quality .jpgs downloaded from the NYPL Digital Collections using a targeted API query. Our .csv files for both sides of the project (maps and treaties) were compiled, cleaned and edited using OpenRefine and Google Sheets. Using ImagePlot, an open source image processing and visualization tool, we produced a series of additional, original image files, as .jpgs. The warped map images used in Google Earth were produced and exported using NYPL Map Warper project. After rectifying each map by assigning multiple linked geo-codes, the .kmg file was produced and exported to Google Earth. To publish these visualizations through the web, screenshots and one animated .gif were produced.

Metadata:

Since this project was small in scope and somewhat iterative in practice, we did not stick to a single metadata infrastructure. Our data models evolved as we experimented with various visualization software until we created satisfactory visualizations. For our map metadata, we relied on the fields created by NYPL's API, which we originally downloaded as .xml Files in MODS 3.4 schema. Initially, we retained MODS date, name, size and location metadata standards. Image-naming was later altered to allow for interoperability with ImageMeasure and ImagePlot. For our treaty data model, our categories we designed for the specific purpose of visualization. We did add a few LOC Name Authority files to our network analysis data, though they

were only available for United States authority figures. In our initial search, there were no authority files for any of the native signatories present within our treaty sample.

Digitization standards and workflow:

- NYPL Map images originally digitized as "High Res Tiffs" (2560 px).
    - Physical description of original maps (size and number of composite parts) documented in full maps dataset and on timeline.
- .jpg derivatives (1600 px) downloaded for ImagePlot and ImageMeasure processing.
- These .jpgs were then cropped and edited to remove excess border space and rulers.
- Settings for ImagePlot visualizations are highly adjustable and customizable depending on the amount of images included in final image.
- Since sample of treaty images is small, they were downloaded individually and then uploaded to our Google Drive and made public for Timeline JS. A few additional images were manually uploaded to our CMS/Jekyll for use on our website.
- Digitized files of the *Indian Affairs: Laws and Treaties* as evident in our timeline are high-resolution .jpgs, 730 by 900 px at 600dpi.
- Digitized files of original treaties vary in size and resolution with the highest quality being a downloaded image from the National Archives which is 2204 x 3840 px at a less-than-archival 250dpi.

Analytic tools summary and workflow:

- Extracted text from web into individual .txt files, future instantiations of this project would hopefully automate this step through Python.
- Ran .txt files through Voyant and Recogito to perform distance reading and explore taggable event/person/place mark-up.
- Translated elements of .txt documents to .csv using Google Sheets.
- Created an initial data model and cleaned data in OpenRefine.

- Ran .csv file through Gephi and updated data model without success.
- Ran .csv file through Cytoscape and updated data model. Built a network but was not satisfied with visual result.
- Updated and greatly simplified data model. Ran .csv through Palladio, saved JSON file for potential future use and took screenshots of all network visualizations.
- Used NYPL API interface to extract .XML files of map metadata.
- Composed a simple Python code and scraped .xml files for image links.
- Downloaded and renamed .jpg files to allow for ImageMeasure analysis.
- Ran images through ImageMeasure plugin for ImageJ.
- Added resulting visual measurements to .CSV file and converted back to .txt.
- Used .txt measurement file to produce new visualizations with ImagePlot plugin.
- Used Map Warper to rectify and mark geolocations on historic map images.
- Uploaded .kml files to Google Earth instance and saved in "My Places" folder.
- Attempted to render dynamic visualizations of map layers through recorded "tours."
- Downloaded Timeline JS data model .csv and added map data as appropriated. Uploaded .csv to Timeline JS. Produced initial interactive timeline and upload as an iframe to CMS.
- Added treaty data and created additional descriptions in .csv. Timeline JS automatically updated as did the interactive timeline within our website.

Interface and infrastructure summary and workflow:

Our front-end interface uses Jekyll liquid templating shaped by Forestry.io's block front-matter. Jekyll is a static-site generator that creates easy-to-program blogs and websites. The code is served through and assets held within Github. We

experimented with several possibilities – other Jekyll templates, Omeka, Wordpress – before settling on Forestry's CMS. Unlike other Jekyll templates, Forestry can be programmed through your command line, the Github interface, and their own well-designed CMS. This made sense for our project as we were interested in working with code but do not have the technical capacity to create a site on our own, end-to-end.

To build the site, we forked a Forestry.io repository (uBuild) and linked each of our Github accounts with the Forestry CMS page. We experimented with a few Forestry templates, and even did a trial-run where we created all of our own front-matter, before choosing uBuild. Within Forestry, we updated our config.yml and began adding and experimenting with their pre-programmed block-templates. This required us to create each page independently and copy over recurring elements like our navigation and footer each time.

We encountered a few errors throughout the process but were able to fix most issues within the code directly from Github. In terms of shaping the content of our visualization and timeline components, we did the following:

- Exported or embedded necessary visualizations into our CMS/interface after downloading them directly from our software of choice.
    - ImagePlot renderings exported as .jpgs and loaded into our Github repository.
    - Palladio renderings captured through .png screenshots.
    - Voyant and TimelineJS captured through embeddable iframes, which we added directly to our CMS after experimenting with a few workarounds.
    - Google Earth renderings captured through .png screenshots.

- Embedded maps and treaty images as .jpgs.

We also attempted to use ImageJ's built-in export/embed functionalities to integrate interactive visualizations in HTML.In the end, the embedding function too buggy for implementation. We complemented our visuals with alt-text to make it as accessible to audiences with limited or zero vision capacity or those interested in engaging with our descriptions in addition to the direct images. The site features no audio or sound video so it is accessible to individuals with limited or zero hearing capacity. Future iterations will also include a search function to provide further access to those who do not engage with the web through scroll and cursor-based exploration.

Sustainability

- To insure the sustainability of our code, we rely on Forestry and Jekyll remaining stable/supported. We can download our code and possibly use the Jekyll liquid templating through our own server in the future should Forestry or Github cease to operate.
- To scale up the project, the current workflow for incorporating new map images and further treaty text needs to be simplified and more automated through Python scripts or other command-line requests.
- A more automated way to ingest content into the data model could eventually be worked into the standard digitization workflow for maps as well as treaties.
- Institutional partnerships offer a promising future for the sustainability of Imperial Eyes:
    - This project would greatly benefit from a partnership with an institution that houses a large collection of historical maps or treaties.
    - Expanding the project would also introduce new voices into our discussions regarding how we model our data, what constitutes as data violence, and what tools make these materials most engaging and accessible.

- The obsolescence of Google Earth's API has already affected the ability to embed functionality as planned. This may happen to the other programs, like TimelineJS and Voyant, that we have embedded directly. It would benefit the project to find a long-term, archival solution for these visualizations beyond screenshots or video screen capture.

- As size and scope of the project increases, Github will no longer be able to function as a viable asset management system. Thinking about other digital asset management systems would be critical to ensure the projects longevity and growth.

- Our TimelineJS plugin relies on images stored in a Google Drive account (this was not initially our plan, but we could not find a way to interface the timeline plugin with files stored in our github repository).

- Creating workflows for data migration would be key to this project's future success. As it stands, we have the capacity to download our repository to our individual computers in addition to leaving it on Github. Another instance of the updated folder would be useful for archival purposes.

- The digital labor required to maintain this project poses perhaps the greatest obstacle to its continued growth and longevity. Without a stable and reliable funding model, the continued labor necessary to scale up this project is likely untenable. While this initial build did not require a budget for digital asset storage, website design/maintenance or hosting, we recognize that these activities require substantial resources and pose a challenge moving forward.

Summary

Due to time and resource constraints, we are limited to including only a small portion of the land treaties and maps produced during the time period in question. A larger, more in-depth project would build off of this initial set to include not only maps of the whole US or continent, but also more focused and detailed maps of specific local areas, of which there are many more in NYPL's collection. Moreover, by linking the historical maps to geocoded data on contemporary maps, future instantiations of this project could be used to analyze much more minute, and localized historical

changes in land visualization and mapping. Ultimately, the goal would be to link the warped map images to the location and network data contained in the treaty data model. This would allow for a single, centralized interface for all of our data and images.

In the site's current instantiation, Imperial Eyes is a prototype and working model for a much larger and more labor-intensive digital project. One of the major limitations to image analysis software such as ImagePlot is that it requires a huge collection of images to produce interesting and insightful data. With only 39 maps in our image collection, the analytics produced by the program do not produce very interesting or meaningful visualizations. Additionally, the treaty text sample in our network visualizations was equally small. A larger sample of adequately modeled treaty data would better interrogate many of the questions we have when engaging with these materials. With a more comprehensive network analysis, it would be easier to see the gravity of how treaties impact they way the United States as we know it evolved. We could see what United States representatives were engaged in the creation of multiple treaties across decades or with multiple tribes, as well as what tribes and specific tribal members were present when the shape of their territory was reduced, moved or shifted by the will of the United States government. Future explorations of these materials would also be complemented by a visualizations and analysis paired with the geo-coordinates we collected.

Beyond the limitations of our current datasets, we also encountered issues with are CMS/Interface that would need to be remedied before continue with the project.

Though our Forestry/Jekyll hybrid offers a ready-to-go, code-heavy html website, it doesn't appear to have an accessible .css file to manipulate things like font or padding between content blocks. It is also difficult to build a website based on someone else's template and contend with the legacy data that will sit and, for lack of a better term, rot within your repository. Despite these few issues, we found our chosen repository to work the best for the current needs of our project.

Appendices

Rights Statement:

All treaty images and treaty text are historic government documents and are within the Public Domain. All of the historical map images used in this project were obtained through NYPL's digital collections and were labeled as Public Domain. After

initially searching for all maps of North America, the results of the API query were modified to only contain public domain images. Each image is published with the following rights statement on the NYPL website:

> The New York Public Library believes that this item is in the public domain under the laws of the United States, but did not make a determination as to its copyright status under the copyright laws of other countries. This item may not be in the public domain under the laws of other countries. Though not required, if you want to credit us as the source, please use the following statement, "From The New York Public Library," and provide a link back to the item on our Digital Collections site. Doing so helps us track how our collection is used and helps justify freely releasing even more content in the future.

Data Provenance:

- Map images and metadata downloaded from NYPL digital collections.
- Warped map .kml files produced and exported through NYPL's web-based Map Warper interface.
- All ImagePlot visualizations are original images produced using the ImageMeasure and ImagePlot plugins for ImageJ, an open source visual analysis program.
- Treaty .txt files were scraped from Yale Law School's "Avalon Project: Documents in Law, History and Diplomacy."
- That online text was transcribed from the multiple volumes of Charles Joseph Kappler's *Indian Affairs: Laws and Treaties*, a bound collection of United States governmental laws and treaties with Indian nations that stem from the beginning of this country.
- Images for our treaties are a combination of digitized pages from Kappler's text and actual digital scans of original treaties, gathered from online digital collections and exhibits by the National Archives, University of Wisconsin-Madison, Beaver Area Heritage Foundation, and Oklahoma State University.

Additional Sources:

- Cultural Analytics Lab: http://lab.softwarestudies.com/p/cultural-analytics.html

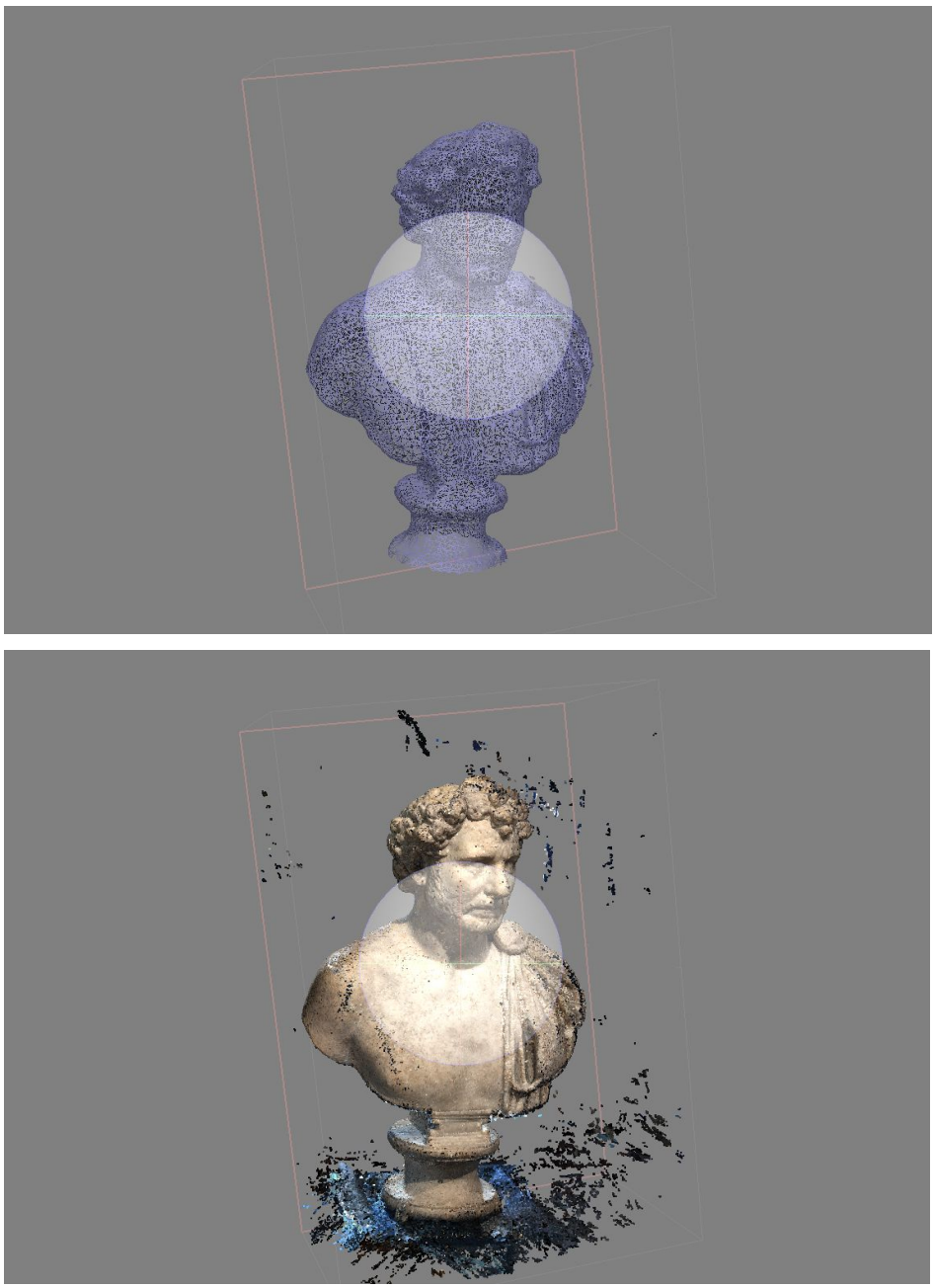
- ImageJ: https://imagej.nih.gov/ij/
- Google Earth Pro: https://www.google.com/earth/versions/
- NYPL Map Warper: http://maps.nypl.org/warper/
- NYPL Digital Collections API: http://api.repo.nypl.org/
- TimelineJS: https://timeline.knightlab.com/

Summary of Elective Materials and Media Components

Spring 2019

Created over several quarters during my time at UCLA, the following materials represent work created in an elective class, a core class, and my methods class. All of these examples demonstrate my capacity to use digital tools as well as my interest in the digital humanities and experimental ways to engage with data and information. Though the general concept of each project is summarized below, they are best seen and experienced digitally through my online portfolio, available at aireuhl.github.io/portfolio.

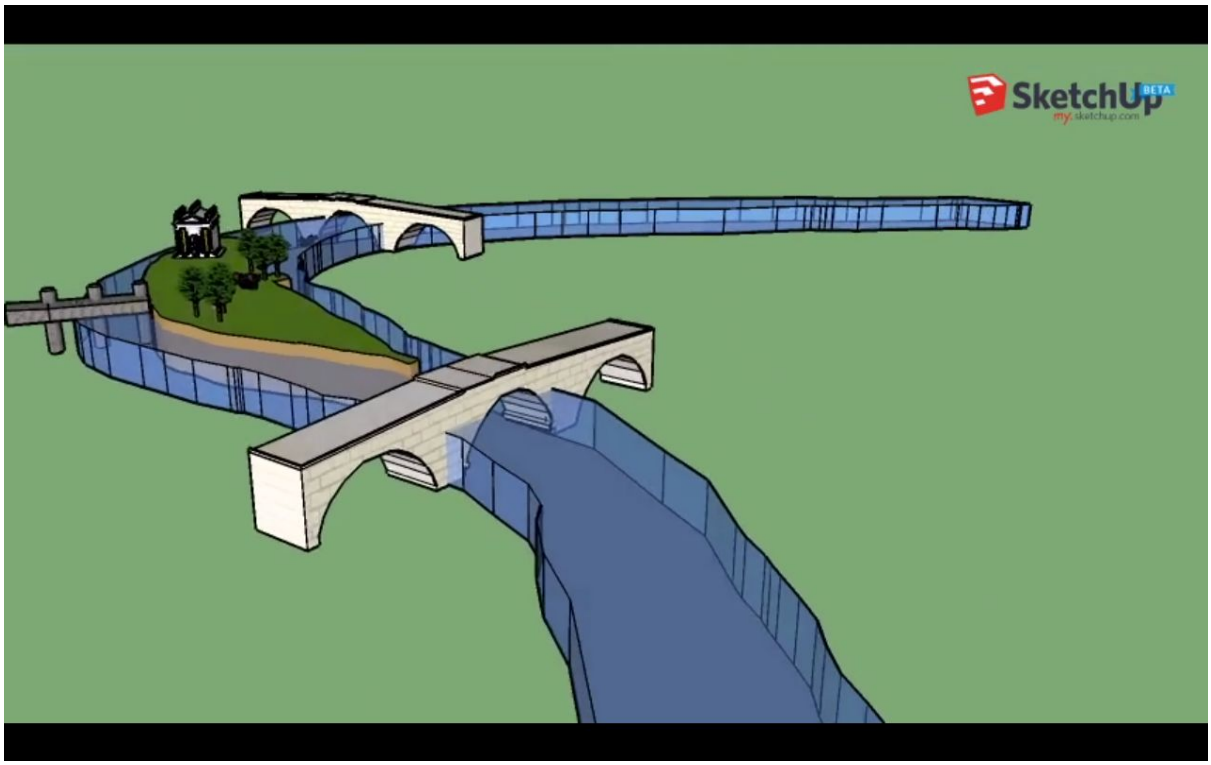
Bust of a Man Wearing a Military Clock : Photogrammetric Art History



The above documentation portrays part of my process in creating a photogrammetric 3D object. For Professor Christopher Johanson's *Computing and Classics*, I elected to digitally reconstruct a Roman marble bust from AD 140-160. I captured over 150

images at the Getty Villa using my iPhone 7 Plus and then ingested them into PhotoScan. After the object was slowly constructed over six stages, it was imported alongside those of my fellow three classmates into RomeLab as an experimental monument.

The Tiber Project : Modeling Livy's River



A collaboration with lauren molina, the Tiber Project was also created for Professor Christopher Johanson's *Computing and Classics*. In this digital humanities seminar, we experimented with different ways to read Livy's *Ab Urbe Condita* through close reading, distant reading, geographical visualization, language processing toolkits, photogrammetry, and 3D modeling. For our final project, we elected to merge

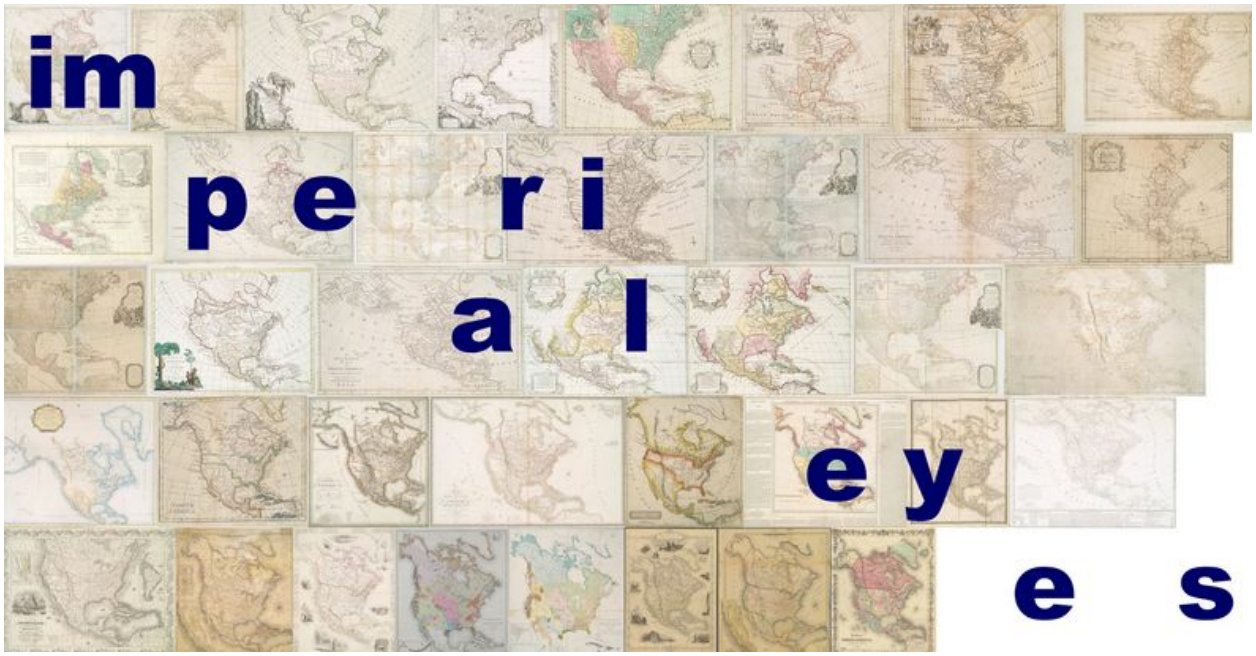
distance reading with close reading and a 3D modeled interpretation of the Tiber River to tell a deeper story about the role of this water in the life of early Romans. Since digital tools are imperfect, the project is, unfortunately, only visible through an exported .mp4 file. Though this surrogate captures the essence of our experiment, it fails to serve as a full representation of the narrative.

Our approach to the project can be best summarized by the following text, written by lauren molina:

"The history of Rome as recorded by Livy in *Ab Urbe Condita*, could not have been written without mentioning the Tiber and its island. The river Tiber acted as (and continues to be) a main artery for water bound traffic in Italy; the small land mass towards one of the Tiber's southwesterly bends, nearest Rome, also makes significant contribution to the stories of the Roman empire in ways which beg for closer examination. By recording its regular floodings, making note of the island & river as fortress and boundaries, Livy placed little emphasis on the larger ways in which the Tiber influenced how Romans positioned themselves and their city.

Using digital tools like Recogito to discover instances of the Tiber's mention, we have prioritized its existence in Livy's Ab. SketchUp offers a place for our digital project to be visualised to offer a depth and meaning of the Tiber in relationship to this classics text."

Imperial Eyes : A Digital Humanities Project Narrative



"Imperial Eyes" is a digital humanities project that was conceived of and created during Professor Johanna Drucker's *Digital Methods for Research and Scholarship*. The aim of the assignment was to scale a full-fledged digital humanities project using data that was either downloaded through an API or publicly accessible repository, scraped from the web, or gathered and modeled directly by the project creators. The document beginning on page 69 of this portfolio is a final summary that details our approach, methods, and possible future plans for this experiment.

"Imperial Eyes" was a co-creation between myself and Asa Wilder.

How We Live Now : A Digital Storytelling Experiment

"How We Live Now" is the result of a quarter's long exploration into the infrastructure of the San Gorgonio Wind Farm, between Los Angeles and Palm Springs in the California desert. Created for Professor Miriam Posner's *Systems and Infrastructures* alongside mutliple research essays that attempted to tease apart the intricacies of a system with questionable ends, the above video looks at the rise of non-fossil fuel energy sources, questions of private vs. public space, and the role greenwashing plays in local energy consumption.

Complete List of Courses

FALL 2017

- IS 211 Artifacts & Cultures with Professor Johanna Drucker
- IS 260 Description & Access with Professor Jonathan Furner
- IS 432 Archives, Records, Memory with Professor Anne Gilliland
- COMM 375 Teaching Apprentice Practicum for COMM 10 : Introduction to Communication

WINTER 2018

- IS 270 Systems & Infrastructures with Professor Miriam Posner
- IS 272 Human-Computer Interaction with Professor Leah Lievrouw
- IS 480 Intro to Media Archiving & Preservation with Snowden Becker
- COMM 375 Teaching Apprentice Practicum for COMM 10 : Introduction to Communication

SPRING 2018

- IS 212 Values & Communities with Professor Ramesh Srinivasan
- IS 213 Current Issues in Librarianship : Libraries & their Social Role(s) with Professor Sarah T. Roberts
- IS 433 Community-Based Archiving with Professor Michelle Caswell
- COMM 375 Teaching Apprentice Practicum for COMM 10 : Introduction to Communication

FALL 2018

- CLASSIC 245 Computing & Classics with Professor Christopher Johanson
- IS 289 Digital Methods for Research and Scholarship with Professor Johanna Drucker
- IS 289 Sound Technologies & Society with Professor Shawn Vancour
- IS 498 Internship with Snowden Becker : Southern California Library
- WL ARTS 375 Teaching Apprentice Practicum for WL ARTS 51 : Aliens, Psychics, and Ghosts
- WL ARTS 495 Teaching Assistant Seminar

WINTER 2019

- WL ARTS CM240 Healing, Ritual, & Transformation with Professor David Shorter
- IS 288 Research Apprenticeship Seminar with Professor Christopher Kelty
- IS 461 Descriptive Cataloging with Luiz Mendes
- IS 497 Fieldwork with Professor Michelle Caswell : Women's Center for Creative Work / Feminist Library on Wheels
- COM LIT 375 Teaching Apprentice Practicum for COM LIT 2AW : Survey of Literature : Antiquity to Middle Ages

SPRING 2019

- IS 464 Metadata with Professor Jonathan Furner
- IS 262B Data Curation & Policy with Professor Jillian Wallis
- DH 299 Graduate Capstone Seminar with Professor Miriam Posner
- IS 497 Fieldwork with Professor Michelle Caswell : Women's Center for Creative Work / Feminist Library on Wheels
- COM LIT 375 Teaching Apprentice Practicum for COM LIT 2CW : In Other Worlds : Enlightenment to 20th Century

Additional Courses Audited

- IS 289 Theory & Politics of Collecting with Professor Shawn Vancour, Winter 2018
- IS 438B Archival Description & Access with Professor Kathy Carbone, Winter 2019
- M155 Angels, Demons, & End of World : Magic, Mysticism, & Apocalypse in Jewish Traditions with Professor Catherine Bonesho, Spring 2019

Advising History

FALL 2017

Prior to starting classes at UCLA, I attended Snowden Becker's Media Archives Bootcamp. Though not a strict advising session, I was able to spend this comprehensive pre-program week with many of my new classmates, leading figures in the field throughout Los Angeles, and, of course, Snowden Becker. The bootcamp was incredibly informative and felt like an accelerating force for my graduate education. Upon officially beginning year one, I quickly met with my initial advisor, Professor Jonathan Furner, to discuss my broad interests in information studies. During this first quarter, I also met with Snowden Becker, Professor Anne Gilliland, Professor Shawn Vancour, and PhD student Gracen Brilmeyer. Conversations ranged from requests for assignment support to general questions about the program and what classes I should take to developing a new student group alongside two other first-year students.

WINTER 2017

The following winter, I met again with Snowden Becker to discuss assignments for her media archiving course, with Professor Shawn Vancour to discuss his collecting seminar, and with Professor Miriam Posner to ask questions about assignments for *Systems and Infrastructure*. I also met with Professor Leah Lievrouw and asked for

support as I proposed a session for the 2018 Research and Inquiry Conference. At the end of the winter quarter, I met briefly with Professor Jonathan Furner to discuss class options for the spring and to ask general questions about track specializations and program administration.

SPRING 2018

In my third quarter, I had brief meetings with Professor Michelle Caswell to discuss volunteer work for *Community-Based Archiving* and PhD student Joyce Gabiola to discuss assignments in *Values and Communities*. At the end of my first year, after developing an interest in the digital humanities, I switched advisors and began meeting with Professor Miriam Posner. I also met with Professor Sarah T. Roberts to discuss my work in and final project for *Current Issues in Librarianship*.

SUMMER 2018

During the beginning of the summer term, I met with Professor Miriam Posner to discuss my professional goals related to digital humanities and possible job paths as well as my academic interests in technology, ethics, and access. I also met with Snowden Becker during this same period of time to ask for support as I applied for a DLF Forum Travel Grant. Both meetings were incredibly beneficial as they helped me begin narrowing my field of interest within the program.

FALL 2018

At the end of the summer, I met again with Professor Miriam Posner to discuss my summer position at the UCLA Digital Library, where I primarily worked on metadata for the International Digital Ephemera Project as well as some web development for the Sinai Library Digitization Project. During this meeting, we also discussed my desire to apply for the Digital Humanities Graduate Certificate. Professor Posner was very encouraging and offered clarification about what requirements I would need to fulfill. In this quarter, I also met with PhD student Oraison Larmon to discuss some general questions I had about archival description practices at my community archives internship site, the Southern California Library. I later met with Professor Johanna Drucker to discuss assignments for her digital methods seminar and with Snowden Becker, twice, to check-in about my community archives internship. I also met with Professor Posner two additional times this quarter to discuss my coursework, portfolio, internship, and interest in digital libraries.

WINTER 2019

During the winter term, I met with Professor Miriam Posner two times. At the beginning of the quarter, we discussed my class schedule, possible issue paper topics, and interest in taking a class outside of the department. In this first meeting, we also established an ideal portfolio timeline wherein I decided to submit half of my required elements for review by the middle of the quarter (Week 5). At that point, we met again to discuss my community archives internship site and technical goals for the DH capstone, as well as the status of my issue paper.

Despite being on sabbatical, I also met with Professor Michelle Caswell to discuss my community archives internship site after some unexpected issues arose. Around the same time, I met with PhD student Oraison Larmon to discuss my new internship site and possible goals for the rest of my participation in the internship program. Towards the end of the quarter, I met with Professor Sarah T. Roberts to discuss an upcoming README event and ask for guidance in writing my issue paper.

SPRING 2019

In the first week of spring term, I met with Professor Miriam Posner to discuss my portfolio status as well as ask questions about my DH capstone project. I also quickly took advantage of various programs offered in the IS Lab by both Diana Ascher and Snowden Becker. As the quarter continues, I imagine I will have additional meetings with Professor Posner about my capstone and with Professor Sarah T. Roberts about README as well as, with both, my immediate professional goals. I will also, most likely, meet with several other faculty members and peers to discuss class assignments, personal writing projects, and upcoming job applications before leaving UCLA.

Additional Advising and Final Thoughts

In addition to the thoughtful and individualized attention I continuously received through my direct advising with Professor Miriam Posner, I deeply benefited from numerous professional relationships during my time at UCLA. Over the course of this program, I engaged in informal advising with countless professors, PhD students,

members of my cohort, friends, and fellow TAs outside of the Department of Information Studies. My experience in this program was notably transformed through my engagement with Elisabeth Asher, Caroline Jorgenson, lauren molina, Nataly Palma, Yuri Shimoda, Alex Solodkaya, Karly Wildenhaus, and Asa Wilder, among so many others!

ARIEL NASH HAHN

RECENT EMPLOYMENT HISTORY

University of California, Los Angeles — Los Angeles, CA
Teaching Associate, Survey of Literature: Antiquity to Middle Ages — January 2019 to Present
Teaching Associate, Writing II: Aliens, Psychics, and Ghosts — September 2018 to December 2018
Metadata Assistant, UCLA Digital Library — June 2018 to September 2018
Teaching Assistant, Introduction to Communication Studies — September 2017 to June 2018

Southern California Library — Los Angeles, CA
Project Archivist — September 2018 to January 2018

Various — New York, NY and Los Angeles, CA
Independent Producer & Consultant — November 2015 to January 2018

Free History Project — New York, NY
Associate Producer — October 2015 to March 2017

Capricious Publishing — New York, NY
Managing Editor & Distribution Manager — October 2014 to November 2015
Gallery & Publishing Assistant — November 2013 to April 2014

National Public Radio — Washington, DC and New York, NY
Production Assistant, Programming Department — October 2011 to June 2013

RELEVANT PROFESSIONAL EXPERIENCE

Archival Management and Preservation Coordination
+ At NPR, coordinated a permanent exhibit about the history of radio storytelling, requiring extensive research and liaison duties with the University of Maryland Archives. Utilized editing skills to produce exhibition audio. Managed audio element timelines.
+ Coordinated the digital transfer and preservation of Sarah Jacobson's video archive—an effort between the Free History Project, NYU Fales Library, and Bay Area Video Coalition—providing access to her previously unknown Pixelvision videos.
+ Worked with the Jack Tworkov archive, as a consultant, to process the personal letters of Janice Biala prior to their donation.
+ Created user-friendly accession documents and an archival processing timeline for the Southern California Library.

Content Creation and Technical Production
+ Conducted research and interviews, cut audio, managed grants, and provided editoral support for Peabody-nominated podcast, The Heart. NO, an intimate exploration of sexual consent/power, aired to hundreds of thousands of listeners spring '17.
+ Managed and created content with little to no oversight—including blog posts, interviews, interactive quizzes, news copy, social media, promotional materials, newsletters, screenings, and lectures—for Capricious, NPR, and Discovery.
+ Built and designed Capricious' website. Migrated content to a new CMS. Oversaw all technological needs and content goals.

Teaching and Training
+ Lead discussions, write lesson plans, hold office hours, strategize writing exercises, and grade for UCLA undergraduates.
+ Trained and supported numerous colleagues, interns, and clients on technical programs, operational systems, and general project knowledge at NPR, Capricious Publishing, Discovery, and as an independent producer and creative consultant.

ARIEL NASH HAHN

EDUCATION

University of California, Los Angeles — Los Angeles, CA
MLIS, Graduate Certificate in Digital Humanities — June 2019

Oral History Summer School — Hudson, NY
Oral History and Documentary Film Course — 2013

Mount Holyoke College — South Hadley, MA
BA with Honors in Film Studies — 2010

SKILLS

Research: Primary, secondary, and digital methods.
Writing: Interviewing, writing, editing, and proofreading.
Design & Media Production: Adobe Photoshop, InDesign, Final Cut Pro, Adobe Premiere, iMovie, Hindenburg, MTE.
Web Production & Further Technical Skills: Squarespace/Wordpress/WIX, JIRA, some HTML/CSS, some Python, OpenRefine, SketchUp.
Operations: Quickbooks, grantwriting, event planning, project management.

SCREENINGS & CONFERENCES PRESENTATIONS

Processing Community Day — Interactive Session, Presentation, Zine
README's My Face Is My Own! : Helping Kids Beat Facial Recognition Software — Los Angeles, CA – 2019

Visions of Justice & Liberation Symposium, UCLA — Poster Presentation & Collaborative Zine
README's "A Brief Guide to Your Technological Liberation" — Los Angeles, CA – 2018

Research & Inquiry Conference, UCLA — Session Organization & Panel Presentation
How Do You Know?: Self-Interogation & The Root(s) of Queerness — Los Angeles, CA – 2018

Two Thirty Gallery — Film Screening
"Girls Beware" (3 min, digital video, 2014) — New York, NY – 2014

Bruce High Quality Foundation Bruccenial — Film Screening
"Girls Beware" (3 min, digital video, 2014) — New York, NY – 2014

Adept-8 Film Festival — Film Screening
"Leipzig" (2 min, Super 8mm, 2011) — Milwaukee, WI – 2011

HONORS & AWARDS

Research & Inquiry Conference
Participatory Session Award, 2018

Mount Holyoke College
Edward Allen Wilson Scholarship Award, 2008 & 2009

Five College Film Festival
Best of Mount Holyoke Award, 2008

VOLUNTEER WORK

Processing Community Day
Zine Library and General Event Support, 2018 to 2019

Alumnae Association of Mount Holyoke College
Class of 2010 Vice President, 2015 to Present

Alumnae Association of Mount Holyoke College
Class of 2010 Reunions Chair, 2012 to 2015

Professional Development Statement

Prior to pursuing this degree, I was at a professional crossroads. After graduating from Mount Holyoke College in 2010 with a degree in film studies, I worked across multiple creative industries gaining skills as a researcher, project manager, audio and video producer, artist assistant, web designer, writer, and editor. Though I was often intellectually and artistically challenged through these opportunities, my work consistently centered around facilitating the creative projects of others. I desired more structure, more community connection, more autonomy, and more focus in my practice. As my professional opportunities began to involve more historical research and archival coordination, I realized that a graduate degree in library and information science could offer a more fulfilling and meaningful path forward.

When I initially applied for this program, I intended to pursue public librarianship with an emphasis on media literacy and instruction. Despite still being drawn towards this specialization, I have spent the past two years working across numerous fields of information science. My interest in library and information science is cross-disciplinary and incorporates my knowledge of film history, interest in art and computers, capacity to adapt to new technological environments, and desire to share my skills through teaching and community building. I have taken classes in nearly all departmental tracks: informatics, media archiving, archives, digital humanities, and librarianship. I am

also pursuing a Graduate Certificate in Digital Humanities. With this experience, I feel deeply prepared to work within a variety of information environments upon graduation.

I am interested in working as a public librarian creating media literacy campaigns and programming, guiding readers to resources, and supporting patrons through technical instruction. I am also interested in working as an academic librarian, specifically as a digital initiatives or scholarship and instruction librarian. I would love to support faculty, students, and staff, in both four-year and two-year institutions. In terms of subject expertise, I see myself as highly qualified for librarian work within the humanities, arts, and social sciences. That said, an ideal academic position would center around film studies, art history, literature, or gender studies. In addition to librarian work, I am also curious about pursuing archival positions, especially those that pertain to digital archiving, film or sound archiving, community archiving, oral history, and/or work with museum collections or artist archives. Further, as an amateur mycologist who is deeply invested in nature, I am hopeful that my professional path will eventually involve work with an ocean or desert institute, fungarium, herbarium, or natural history collection.

From the beginning of the program, I have wanted to weave together many different ways of engaging with information work in my educational experience as well as my professional future. I have also wanted to remain committed to my own creative interests and find ways to invite that part of myself into this experience as well. Additionally, I never imagined that I would finish graduate school having reached some static level of area expertise. Thus, to remain competent and grow as an information

worker, I know that future professional development and continuing education will always be part of how I work within the world.

My immediate goals for professional and personal development are fairly simple. Since I have been unable to undertake language courses during my time at UCLA, my first priority is to further my understanding of Spanish. I plan to enroll in an intermediate level language or conversation class very shortly after graduation. Regardless of what my professional future holds, being more proficient and confident in speaking, writing, and reading Spanish will be incredibly useful and increase my capacity to work with a broader audience of archival and library users as well as materials. Additionally, I was unable to take a class on intellectual property or copyright law while enrolled at UCLA. Gaining this knowledge will prove absolutely critical as my career continues. There are numerous professional outlets that offer affordable workshops and online seminars on this topic. The Society of American Archivists, for example, regularly holds a rather ideal two-day Copyright Law for Archivists course within their continuing education program. Outside of these two external education opportunities, I intend to continue to explore technical skills that I have yet to master as a graduate student. Building greater competency in coding, scripting, as well as textual and visual analysis will make me a stronger job applicant and more confident digital librarian.

If I achieve my current professional goals, a large component of my future will involve teaching and instruction. In all of my past professional positions, I have taken on a training leadership role, whether that be with interns, colleagues, or supervisors.

While at UCLA, I have expanded my capacity as an educator through working as a teaching assistant and, more recently, as a teaching associate. Over six quarters, I have taught and supported nearly 240 students in the Departments of Communication, World Arts and Cultures, and Comparative Literature. In the fall of 2018, I refined my teaching expertise through a teaching assistant seminar in the Department of World Arts and Cultures. Outside of my formal classroom experience, I have also developed my skills as a workshop facilitator by co-leading README, a newly formed digital rights student group in the Information Studies department. My work with README has been a central component of my experience at UCLA. Through the organization, I have facilitated workshops and book club meetings with multiple age groups, organized and executed public events, created educational resources, presented at conferences, and hosted regular lab hours. I hope to continue this kind of organizing and movement building work once I leave UCLA, potentially through a feminist technology collective or reading group.

In addition to balancing coursework with student organizations and teaching, I have also spent the last year working in multiple information environments. Over the summer of 2018, I worked as a graduate student assistant in the UCLA Digital Library, contributing to various metadata and web development projects. Then, beginning in the fall of 2018, I began working as a Mellon Foundation and UCLA Community Archives Lab intern with the Southern California Library and, later, the Women's Center for Creative Work / Feminist Library on Wheels. Through this experience, I've been able to reimagine workflow protocols for small institutions that largely rely on volunteer

labor, connect with local material seekers in two active community organizations, and produce internal materials to guide future digital asset management projects. I feel that these professional positions represent the breadth of my expertise and am optimistic that they will prove critical in my pursuit for employment after graduation.

Further, since my academic interests and professional goals are rather multifaceted, I have been involved with the Association of Moving Image Archivists (AMIA), Association for Recorded Sound Collections (ARSC), and the Special Libraries Association (SLA) while at UCLA. I have attended happy hours, tours and networking events, and, for ARSC, done a considerate amount of organizing as a founding member. Though I have yet to participate in any local or national conferences, I hope to do so in the near future. I see conferences as an opportunity to learn about emerging research trends, find solutions for tricky workflow questions, and connect with potential collaborators. With regard to future networking or working group opportunities, I intend to become involved with and attend ARLIS, Code4Lib, and the DLF Forum, specifically. At this stage in my young career, I feel that it is important to engage with diverse professional environments as this will expose me to a multitude of working methods and facilitate new learning experiences.

This portfolio was created towards the completion of a masters degree in Library and Information Science at University of California, Los Angeles. The last edit was made on April 12, 2019. All materials, including photographs, presented in this document are the sole creation of Ariel Hahn, unless stated otherwise.