Critical Distance Reading:

A Feminist Data Literacy Framework for Decolonizing Historical Memory

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Introduction

We have come to learn that the process of critically reading historical artifacts necessitates both an existential evaluation of history and a thoughtful interrogation of historical memory. It is clear to us that history, while often considered objective infallible fact, routinely proves nothing more than subjective experience and interpretation.[1] Despite this, readers of history continue to read, reread, and engage with narratives of the past while all too often standing blind to the notion that history remains nothing more than a narrative. But whose narrative? Historical memory privileges specific political and social perspectives and, subsequently, all but elevates those narratives to the level of accepted objective fact.[2] Western thought and culture maintain strict hegemonic agency over historical memory and the cultural record.[3] The Global North has normalized both societal and academic standards in order to perpetuate its power over the past, present, and

future in ways that not only overlook non-Western values but also forcefully impose Western norms on all societies and cultures.[4] This exertion of power continues to shape processes for selecting, preserving, and presenting memories; it trains readers to use western methodologies when analyzing materials, dictates "appropriate" ways of sharing subsequent interpretations, and marginalizes non-prevalent, non-western perspectives. It is a perpetuation of white supremacy and imperialism. Therefore, a critical reading of historical artifacts requires an epistemological shift in order to confront the Global North's monopoly over historical memory.

While current Primary Source Literacy (PSL) standards acknowledge that archival gaps in historical memory now emerge as voids in the cultural record, we find their skills-oriented approach to reading continues to perpetuate Western practices. The Association of College & Research Libraries' Rare Books and Manuscripts Section and the Society of American Archivists' joint *Guidelines for Primary Source Literacy* recommend conceptualizing; finding and accessing; reading, understanding and summarizing; interpreting, analyzing and evaluating; and using and incorporating as learning outcomes for working with primary resources[5] but provide little guidance to readers on how to incorporate these skills toward addressing those archival silences and hegemonies. By remaining methodologically neutral, PSL standards tacitly endorse the continued Westernization of historical memory and reading of historical artifacts. However, when augmented by a feminist data literacy framework that intentionally challenges Western tradition, we find these skills can promote a critical reading of historical artifacts that aims to deconstruct the Western narrative of history.

As historical and cultural artifacts are increasingly born-digital (to join the ranks of the digitized analog), from web and email archives to social media and digital news content, a deluge of computationally amendable primary source material is and will continue to be available to readers.[6] Macroscopes, or the tools and perspectives "for looking at the very big,"[7] enable readers to explore phenomena in humanities data at scale to identify important sources that may have otherwise been overlooked. One such macroscope for historians is *distant reading,* a term often used to describe computational analysis of large collections of texts. In the field of digital humanities, distant reading has roots in computational literary analysis[8] and has expanded to more generally refer to how we read when exploring various patterns in textual data with the aid of machines and statistical software. In our context, however, we approach distant reading as both reading with and by machines and any kind of content mining, not just text-oriented humanities data.

Our *critical distant reading* framework grows from Catherine D'Ignazio and Lauren F. Klein's *Data Feminism* which promotes emotional elevation and embodiment, that there is "value in multiple forms of knowledge, including the knowledge that comes from people as living, feeling bodies in the world."[9] This is necessary for readers engaging in computational methods and applying machine-enabled tools to ground themselves in humanistic methods that inherently bring along bias and implications of power. Distant reading has been primarily associated with textual artifacts, yet critical distant reading by computational means can be applied to non-textual sources. Focusing on media corpora intentionally moves us away from Western dominance of and in text and honors the fragmented nature

of memory and rememory. As Jeong-eun Rhee demonstrates, "How can researchers write in the name and practice of research what can never be known or narrated with logic and reason?"[10] The personal connectivity through recognition of knowledge as fragmented across primary source types and genres, including art, photographs, music, and songs, subsequently opens up additional paths of engagement with historical artifacts and distant reading. More importantly, it pushes back against text as more authoritative from the Global North and helps us reimagine our research approaches beyond Western epistemologies.

Critical Reading Connection

In this chapter, we discuss learning activities that bridge concepts of data feminism with PSL standards and distant reading approaches to enable a *critical distant reading* framework. This framework invites the interrogation of both new and old forms of digital archives with regard to provenance and curation biases and asks readers to consider the role technologies and algorithms play in potentially ignoring and erasing information and knowledges due to harmful epistemologies. While colonialism continues to violate archives through both the presence and absence of some materials, new digital archives and the tools and methods for interacting with them present new challenges that perpetuate racial, gender, and community oppression and invisibility.[11] Our intervention is to augment the skills for reading primary source materials outlined in PSL guidelines with a method that integrates and implements concepts that center critical, anti-racist, and decolonial lenses for disrupting hegemonic narratives in our understanding of historical research and library pedagogies. In doing so, we acknowledge that we have benefited from and are privileged by the very same systems we are challenging. Our whiteness and connections to the settler-colonial states that we inhabit and hail from (United States, England), combined with our genders (hetero, cis) and situatedness in classrooms (perceived power and hierarchy), means we have undoubtedly caused harm. As such, what we offer here is an imperfect and incomplete stop on our journeys toward challenging and decentering Western narratives.

Teaching Strategies

The three learning activities we discuss in this chapter incorporate a critical distant reading framework that enables participants to challenge Western narratives when engaging with historical artifacts. Each of these community-based* learning activities can be adapted to one-shot library information literacy and PSL seminars, embedded library instruction, library workshops, or credit-bearing courses that serve both undergraduate and graduate students. Since there is no universal model for library instruction, we find it important to implement malleable activities that allow librarians to accommodate all learning environments and situations. The methods presented in these activities intentionally scaffold to gradually expose and combat methods that perpetuate Western narratives. The first

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*   We designed these community-based learning activities to decenter the instructor and to deconstruct the Western power norms that remain ever present within learning environments. When participants explore epistemological and methodological shifts in how to engage with materials, we find it critical that their learning environment structurally supports those same epistemological and methodological shifts.

activity aims to teach participants to identify ways that power manifests within primary source collections; the second introduces participants to machine-enabled distant reading strategies and methods that facilitate critical close readings; and the third activity challenges participants to introspectively confront their own biases by critically exploring curatorial questions and processes for ethical data creation.

Activity 1: Identifying Power in Primary Source Collections

The Global North has imposed egregious power over the rest of the world in order to establish control of the historical narrative and has subsequently weaponized both historical artifacts and the methods for engaging with them in order to maintain that control. Power, as explained by D'Ignazio and Klein, refers to the "current configuration of structural privilege and structural oppression, in which some groups experience unearned advantages—because various systems have been designed by people like them and work for people like them—and other groups experience systematic disadvantages—because those same systems were not designed by them or with people like them in mind."[12] In the activity we outline in table 26.1, participants will begin to employ a critical distant reading framework to a primary source collection in order to identify and assess the ways power actualizes within individual collections, the influence of power on framing historical narratives, and the role power holds in biasing our own individual interpretation and reading.

TABLE 26.1

This table provides an activity plan for leading a learning activity on identifying power in primary source collections.

Activity Plan 1: Identifying Power in Primary Source Collections	
Learning Objectives	• Readers will be able to recognize power inherent within current and historical curation practices. • Readers will be able to identify voices and perspectives represented in primary source collections. • Readers will be able to evaluate primary source collections for gaps and silences.
Materials Needed	• Primary source collection. • Metadata and/or finding aids for the collection and its contents.

Activity Summary	• Divide everyone into three groups.
	  ○ Group 1 will choose 3 items from the collection and perform a close reading analysis on those items, identifying patterns, trends, and represented voices.
	  ○ Group 2 will perform a distant reading of the whole collection by creating new metadata, topics, and themes based on their own perceptions. Readers in Group 2 will not have access to the collection's metadata or be able to conduct a close reading of any of the materials.

Activity Plan 1: Identifying Power in Primary Source Collections	
Activity Summary	○ Group 3 will evaluate the collection's metadata and/or finding aid to discover how the materials are represented and presented. Readers in Group 3 will only have access to the metadata and/or finding aid and will not be able to see any of the materials in the collection. This allows Group 3 to perform a close reading of the distance reading conducted by the collection's curators. • Allow time for each group to present their work to the larger group. • Facilitate large group discussion on any trends and patterns that emerged across the three groups. 　○ Questions to ask: 　　▪ What values does this collection present? 　　▪ How does this source/collection/metadata challenge my assumptions? 　　▪ How do my biases impact my interpretation of this source/collection/metadata?

In this activity, participants divide into three groups to analyze a single primary source collection before joining together to examine patterns that emerge between the groups. While each of these approaches proves beneficial independently, trends and themes related to power become increasingly evident when the groups join together to compare their findings. Each small group exercise demonstrates the impact of power on historical memory, but analyzing them collectively provides a more holistic understanding of how power continues to shape interpretations of the past through the manipulation of historical artifacts and the descriptive information, such as metadata, assigned to them.

Activity 2: Critical Distant Reading

To engage in critical distant reading, participants first need to explore the intersectionality of close and distant reading. David Greenham explains that when reading, "the meaning does not exist within individual words and, as such, it is not just built up from an aggregate of those individual words,"[13] but rather, "meaning exists in the relationships *between* words: the ways in which they work together."[14] While close and distant reading techniques both examine the relationships between words, the scale of the relationships they examine differ. Paula Moya explains that close reading is an "intensive reading and re-reading that calls for a heightened attention to literary language and form, considering both as semantic structures that mediate authors' and readers' perceptions of the social world."[15] It is a humanistic approach that requires readers to intimately engage both with artifacts and with the context in which they were created and currently exist. While computational approaches, such as machine-enabled distant reading, often appear to dehumanize the reading process, they actually present readers with a macroscope to apply humanistic approaches in ways that methodologically were previously unscalable or impossible.

The activity we describe in table 26.2 exposes participants to critical distant reading. It builds upon the interrogation of power practiced in the previous activity by applying

machine-enabled distant reading techniques to a large collection of digitally born or digitized primary sources in order to establish patterns that emerge at the collection level. This activity explores the intersectionality of close and distant reading by performing topic modeling—one form of distant reading—on a collection and allows the results to guide participants' close reading.

TABLE 26.2

This table provides an activity plan for leading a learning activity on engaging in critical distant reading.

Activity Plan 2: Critical Distant Reading	
Learning Objectives	• Readers will be able to demonstrate machine-enabled distant reading techniques and methodologies. • Readers will be able to execute both close readings and distant readings. • Readers will be able to appraise the provenance of multiple artifacts through critical distant reading.
Materials Needed	• Large collection of digitally born or digitized primary sources. • Familiarity with methods appropriate for topic modeling. ○ If not already familiar with appropriate methodologies, then we recommend this free-to-access tutorial: Shawn Graham, Scott Weingart, and Ian Milligan, "Getting Started with Topic Modeling and MALLET," *The Programming Historian* 1 (2012), https://doi.org/10.46430/phen0017.

Activity Summary	• Discuss differences between close and distant reading.
	  ○ Close reading
	    ▪ Interpretation based on interactions between human readers and the text
	    ▪ Evocative and descriptive details affect readers differently (subjective)
	    ▪ Tends toward contextual awareness
	  ○ Distant reading
	    ▪ Approaches collection as a single artifact
	    ▪ Identifies patterns and trends
	    ▪ Interpretation based on computerized counts of words
	    ▪ Scalable
	    ▪ Summary data depicted with visualizations
	    ▪ Exploratory to facilitate close readings
	• Conduct a topic modeling of collection using tools appropriate for topic modeling.
	  ○ Questions to ask:
	    ▪ What do you know about the collection?
	    ▪ What is the provenance of the collection?
	    ▪ What curatorial decisions influence the collection?
	  ○ Select a number of topics based on size of the collection.

Activity Plan 2: Critical Distant Reading	

Activity Summary	• Break into small groups to assign names and classify topics.
	  ○ Questions to ask:
	    ▪ How does power impact the themes, language, and word choice assigned to topics?
	    ▪ How do these themes differ from individual perceptions of the collection?

Topic modeling, as described by Cho, is a "type of big data analysis methodology for discovering abstract topics that repeatedly occur in a collection of documents."[16] It groups words based on co-occurrence into nameless clusters for participants to contextualize and assign themes. By themselves, these word clusters, or topics, do not extract any meaning from the analyzed artifacts, but they create opportunity for an intentional close reading. Participants can leverage the themes that emerge from computational word clustering at a collection level to identify power implications within the collection and identify their individual biases. Regardless of whether or not the themes that emerge through topic modeling affirm or challenge participants' expectations, the topics that emerge from the semantic structure of historical artifacts provide important context for critical reading.

Activity 3: Curation in Action

The activity we outline in table 26.3 shifts from critically reading historical artifacts to critically reading the tools and methods implemented in the first two activities as artifacts themselves. While critical distant reading requires participants to intentionally examine how historical artifacts are presented and how individuals interact with them, it also necessitates a critical examination of power and bias built into both methodologies and computational tools. Participants create a curation proposal that critically investigates the methodologies implemented in establishing curation processes; curating a collection while critically interrogating the purpose, methods, and tools incorporated into the curation; ethically presenting their collections; and introspectively examining measures taken to combat power and bias in decision-making processes.

TABLE 26.3

This table provides an activity plan for leading a learning activity on curating digital primary source collections.

Activity Plan 3: Curation in Action	
Learning Objectives	• Readers will be able to recognize digitally born data as historical artifacts. • Readers will be able to curate digitally born primary source collections. • Readers will be able to identify ethical considerations for collecting, describing, and presenting items.

Activity Plan 3: Curation in Action	
Materials Needed	• Familiarity with computational distant reading techniques • Familiarity with digital presentation platforms

Activity Summary	• Readers will create a curation proposal for digitally born historical artifacts that answers the following questions:
	  ○ What is the purpose of this collection?
	  ○ What criteria will be used for selecting data for inclusion?
	  ○ What will be missing from the collection based on the inclusion criteria?
	  ○ What artifacts will be collected?
	    ▪ e.g., web-scraped data, emails, social media, etc.
	  ○ How will the data be collected? Will it be collected by hand, scraped, or acquired by other methods?
	  ○ What data should be omitted due to privacy and/or other ethical considerations?
	  ○ How will decisions regarding the collection and data inclusion be documented?
	• Readers will compile artifacts based on their curation proposal.
	• Readers will create metadata at the artifact and collection level based on
	  ○ Readers' perceptions of the artifacts
	  ○ Individual distant reading of the collection
	  ○ Computational distant reading of the collection through topic modeling
	  ○ Close reading of the machine-enabled topics
	• Readers will present collections while considering the following questions:
	  ○ Whose perspective is highlighted?
	  ○ Who is the intended audience?
	  ○ What biases do the intended audience bring?
	  ○ What perspective is missing from the intended audience?
	• Readers will create an introspective report to accompany their collection that answers the following questions:
	  ○ Does this collection meet its purpose?
	  ○ What biases did I contribute to this collection?
	  ○ How did I challenge these biases?
	  ○ What limitations did my methodology present?
	  ○ What limitations did the tools used present?

Computational approaches such as machine-enabled distant reading are often accompanied by notions of objectivity; however, these methods and tools provide equal opportunity for implementation of power and bias as close reading approaches.[17] Johanna Drucker explains that distant reading "relies on automated procedures whose design involves strategic human decisions about what to search for, count, match, analyze, and then represent as outcomes in numeric or visual form."[18] While designing the algorithms implemented

in automated procedures, participants have the same opportunity for power and bias to impact methodology and approach as when performing close readings. Furthermore, the meaning extracted from distant reading techniques, such as topic modeling, remains grounded in participants' close readings.

This activity continues to develop topic modeling skills and further allows participants to humanize the analysis as well as rehumanize the artifacts themselves. Critical distant reading strategies recenter the human expression as the focal point of collections and can guide participants through decolonial decision-making processes in order to establish the scope and narrative used to contextualize their collections (see discussion prompts in table 26.3). Using a critical distant reading framework to curate a collection requires participants to aggressively challenge biases ingrained in themselves through years of Western indoctrination. This activity requires participants to pair their collection with an introspective report detailing the steps and choices taken throughout the project that were needed to engage perspectives currently ignored by the Global North.

Discussion

In these critical distant reading activities, participants consider and reflect on power, privilege, and representativeness throughout their distant reading processes, from creating descriptive metadata and curating corpora to applying digital macroscopes via computational text analysis. Participants historicize not only the data in aggregate as a corpus but also the methods and tools they are using in order to identify potentially baked-in biases, imperialist revisionism, and archival hegemony. Through all of these activities, the teacher guides participants toward situating and contextualizing their data, rather than abstracting it. We subsequently recommend that teaching librarians approach these learning activities with the intent of challenging the assumed neutrality of primary sources and data, the dominance of Western-valued datasets, and the neo-colonial language that shapes current research practices.

Data feminism reminds us that there is an assumed neutrality in primary sources and data, and Roopika Risam further notes that the "lack of digitized sources articulating perspectives on empire that belong to colonial subjects means that distant reading of empire from any other perspective other than that of the colonizer remains unfeasible."[19] Whether corpora are created through crowdsourcing and labor donated by the general public or are carefully and thoughtfully curated by librarians and archivists, selective memory and unintentional erasure as modes of colonialism are bound to occur. When addressing the provenance of crowdsourced corpora, readers might consider how the distributed labor of people, who have varied levels of commitment and different perceptions and interpretations of the collection, may drive benefits and limitations for analysis. Conversely, readers might consider how a single person or entity play roles in shaping what is included in corpora and web archive collections. If readers are collectively creating a corpus, it opens the opportunity to contribute to and critically engage with their own biases and power and to create *transformative metadata*—that is, "how attributes of a digital object have changed from the object's origins to its current or final form"[20] to document implications of bias and power.

In addition to challenging dominance in data types, we must also withstand neo-colonial language in our research processes and historicize our methods. To do so resists treating "modern" and "technological" as "better than." For instance, in describing the computational text analysis, a method created during late-capitalism of the Anthropocene, we note masculine, industrial, and capitalistic language: we "build" corpora, "extract" data, run workflow "pipelines," "mine" for statistical inferences, and "consume" information. These are violent and dehumanizing words for cultural artifacts and the people they represent, who likely did not release sovereignty of their data or give permission to be analyzed as such. When reading these words, one cannot help but to think about Indigenous people and BIPOC communities who have been victims of neo/colonialism in the Global North and beyond, whether through cultural genocide and resource extraction or gentrification and segregation by design. Imposing patriarchal and imperialistic concepts is harmful and, in this case, can center violence. In order to prevent perpetuating harm, we must approach macroscopes such as distant reading with a critical lens that reimagines reading as a catalyst for social change.

In the context of the learning activities we discussed here, both teaching librarians and participants collectively engage in a process of displacing these Western defaults for interacting with information through employing a critical distant reading framework based on feminist data literacy practices. Our framework is just as much about unlearning to read as it is about critical engagement. It is an introspective exercise and a model for implementing social change that challenges both established historical perceptions as well as the tools and methods we employ when engaging with historical artifacts. Methodological approach, perspective, language, and human interpretation all significantly impact the way we interact with historical artifacts and the way historical memory is preserved and remembered. As we work through these activities, it is only through the combination of engaging ourselves, each other, and the voices reflected (and not-reflected) in historical artifacts that we can begin to facilitate change.

Conclusion

The three activities we discussed in this chapter combine PSL practices with a critical distant reading framework in order to challenge dominant narratives from the Global North that have dictated historical memory. As historians continue to increase integration of large digital collections and data as historical artifacts into their research and teaching, there's an inherent risk of dehumanizing data when reading from a distance as well as the potential for technolust toward the tools or methods that enable macroanalysis. Without a critical view and introspection, it's easy to lose sight of how corpora and the tools we use to read them can perpetuate historical silences and gaps if we don't address the ways in which they embody power and bias. Integrating critical distant reading into primary source literacy is one such avenue to address this gap, as it aims to rehumanize data and the macroscope itself, by way of feminist and decolonial lenses.

Engaging in critical distant reading will prove increasingly important as digitally born historical artifacts continue to become a leading format of historical artifacts in

the computerized era. Engaging with large volumes of artifacts necessitates the use of macroscopes for reading; however, it also allows for an intentional evaluation of historical memory and the narratives available. Therefore, critical distant reading of historical artifacts cannot be a passive engagement but must be a call to action. Reading within this framework requires readers to challenge Western epistemes and intentionally act so that the forgotten, ignored, and silenced perspectives do not continue to be gaps in historical memory.

Notes

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