Case Study on COVID-19 and Archivists’ Information Work

Deborah A. Garwood and Alex H. Poole
College of Computing and Informatics, Drexel University, Philadelphia, PA 19104, USA
dgarwood@drexel.edu

Abstract. This paper presents preliminary findings from an exploratory, qualitative case study bounded by the city of Philadelphia. The case study brings the literature on information work (IW) to bear for the first time on archives and special collections repositories. Empirical interview data on archivists’ information work at five medical history collections, pre- and post- pandemic onset, suggests that institutional and personal conditions surrounding COVID-19 prompted archivists to change their information work tasks in phases, first shifting office tasks to remote work under quarantine, then to hybrid work contexts. We explore an information work model including work purposes, work tasks, and work roles. The model shows how tasks of collection management, reference services, and outreach constitute the context and purpose for archivists’ information work. The paper details how hybrid work tasks and hybrid work contexts emerged.

Keywords: Archives · Information work · Pandemic

1 Introduction

Declared a public health emergency of international concern (PHEIC) on January 30, 2020 by the World Health Organization (WHO), the COVID-19 virus outbreak continues to disrupt interconnected global and local knowledge systems at the end of 2020. In parallel to local and global health information networks, the work of information professionals at cultural heritage institutions is a vital component of non-pharmaceutical interventions that support human and animal life and sustain the environment [1, 2]. Websites archivists develop for people to record and share their stories about the pandemic contribute to a reservoir of knowledge useful now and for posterity. In the US, for example, archivists at the National Library of Medicine (NLM) are collecting first-hand accounts of COVID-19 as part of NLM’s web archiving repository for Global Health Events [3, p. 496]. Similarly, the Society of American Archivists (SAA) is actively collecting first-hand accounts and reporting on similar national initiatives. Archivists remain engaged in information work even in the face of ubiquitous institutional closures and hybrid, often tentative and contingent re-openings.

1 https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-(2019-ncov).
2 https://archive-it.org/collections/4887.
3 https://www2.archivists.org/news/2020/archivists-rally-to-document-covid-19.
1.1 Case Study Synopsis

This paper considers how the pandemic’s onset impacted the information work of nine archivists at special collections repositories in one urban center. It is part of an exploratory qualitative case study that brings the literature on information work (IW) to bear for the first time on archives and special collections work [4–7]. The case study contributes both theoretically in testing and applying the IW framework and empirically through two sets of semi-structured interviews spanning pre- and post-COVID-19 onset in Philadelphia. The first round included all 11 participants in the sample and took place from 10 November 2019 to 12 March 2020 at work settings. The second round with nine participants occurred from 7 August to 24 September 2020 via videoconferencing.

We first briefly review the germane literature. Next, we outline the study’s methods. Third, we present our paper’s results. Fourth, we discuss the theoretical and empirical implications. Finally, we note limitations and suggest areas for future research.

2 Literature Review

At a time when information that transcends disciplinary borders is useful to pandemic research, archivists’ information work is enabling regular professional life to continue [1, 2, 8, 9]. More than three decades of research on information work has enlarged the concept of what information is, who uses it, how it is organized and accessed, and how tasks, lines of work, biography, emotion, and resources operationalize shared responsibilities [4–6, 8–19]. Information work (IW) literature suggests that work, a broad concept, becomes specified through contextual description and definition which, in turn, renders tasks as visible or invisible [4, 16, 17, 20]. Work tasks entail the construction, performance, and evaluation of information needed, sought, and used [16, 19]. In the information work setting, more specifically, tasks are theorized as the performance of an objective task description according to one’s internalized comprehension of it [16]. IW concepts regarding work purpose, work roles, work tasks and their performance imply that qualitative methods are suitable for information work research on archival work settings bounded by Philadelphia [4, 8, 9].

3 Methods

The case study relies on qualitative research methods in the naturalistic paradigm [21, 22]. Purposive sampling and analysis influenced by Constructivist Grounded Theory inform interview techniques and coding [23–25]. Textual data in this paper was drawn from semi-structured interviews with archivists in late summer 2020. The author recorded interviews using the Zoom videoconferencing platform and fully transcribed recordings with iTunes and Word’s “dictate” tools. Trustworthiness for the study accrues through repeated contact with participants and peer debriefings; a research journal and analytic memos are hedges against, and acknowledgment of, researcher bias

---

4 The special collections repositories in the case study include archives, manuscripts, rare books, medical materiel, and records in multiple format types. I refer to case study participants as archivists because archival science applies to information work in these settings.
Findings are bounded rather than generalizable: trustworthiness forms a basis for transferability to other settings at the discretion of the reader.

## 4 Findings

Findings center on second round interview data with nine of 11 participants. Four phases demarcate transitions from a pre-closure work context (the period of first interviews) to a hybrid work context by the second interviews. Some archivists anticipated institutional closures due to pandemic onset while others did not. In March 2020, as P06 put it, “We didn’t know at that time how long we would be closed”. Uncertainty motivated archivists to reconfigure work tasks in overlapping phases (Table 1).

### Table 1. Phases of pre-closure, preparation, transition to quarantine, and hybrid work tasks

| Phase | Pre-closure, preparation, transition to quarantine, hybrid work tasks |
|-------|---------------------------------------------------------------------|
| Phase 1 Interview 1 | Pre-closure 11–2019 to 3–2020 |
| Phase 2 | Preparation 1–2020 to 3–2020 |
| Phase 3 | Transition to work under quarantine 3- to 6–2020 |
| Phase 4 Interview 2 | Hybrid work tasks and work contexts 6- to 9–2020 |

### 4.1 Phase 1 and Phase 2: Pre-closure and Preparation

Participants comment on the timing of institutional closure and their preparation for closure (Table 2).

**Preparation for Closure.** Intern P03 anticipated closure by six weeks. She consolidated two projects, one external to the workplace, and prioritized completing it one week before the institution’s three-day notification of closure. At the same workplace, temporary archivist P11 moved project files to two external drives one week ahead and transported them home; most of her tasks involved digital systems for storage and website work. Archivist P08, a fulltime staff of one, received notification three days before departure but had anticipated closure; she made plans to handle reference questions remotely. Archivist P01’s work tasks primarily involved tours and reference services. Expecting a two-week hiatus, she bundled physical files and “bottom of the pile” tasks for creating databases on three days’ notice of closure. Repository director P05 and archivist P06 received three hours’ notice to depart; they took what physical files they could carry – and cleaned out the employee refrigerator.
Table 2. Pre-closure work tasks and preparation for closure

| Pre-closure work tasks                                                                 | Preparation for closure                                                                 | Participant code |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------|
| Received three-day notification but anticipated quarantine by six weeks             | Consolidated two projects at the workplace and prioritized completing one before departure | P03              |
| Received three-day notification but anticipated quarantine by one week             | Readied equipment and electronic files to work from home                                 | P11              |
| Received three-day notification but anticipated quarantine by about three weeks    | Made plans to communicate with researchers about reference services                      | P08              |
| Received three-day notification to depart and quarantine                            | Bundled physical files and made plans to create databases                               | P01              |
| Received three hours’ notification to depart and quarantine                         | Quickly scooped up a few physical files                                                 | [P05, P06]       |

Pre-closure work and preparation channeled into performing work tasks under quarantine.

4.2 Phase 2 and Phase 3: Preparation and Transition to Work Under Quarantine

Under quarantine, the context for work tasks shifted dramatically from the office to the home (Table 3). Three participants were already connected to their institutions’ remote servers (P02, P08, P09). Four reported a moderately easy transition to remote set up within one week (P01, P03, P10, P11), while two participants at another institution had email access but suffered a three month wait to get remote server access (P05, P06).

Table 3. Work context under quarantine

| Quarantine work context | Tasks                                           | Participant code |
|-------------------------|-------------------------------------------------|------------------|
| Work context at home    | Already set up for remote work                   | P02, P08, P09, P11 |
|                         | Moderately easy transition to remote access in one week | P01, P03, P10 |
|                         | Challenging transition, remote access took three months | P05, P06 |

Quarantine Work Context. P02, head archivist of 20 years, easily adapted to performing work tasks at home; the institution’s remote access to electronic collections dated from “years earlier”. P08 likewise reported that her transition to performing work tasks from home on a work-issued laptop was “fairly easy” after her institution improved existing infrastructure for snow days to boost remote access. P09’s well-organized home
workspace attested to an easy transition as well. P11, finally, adjusted within a week. By contrast, P01 experienced frustration, communicating by phone with IT staff over a whole week merely to connect to her work server. Conversely, though they had remote access, P03 felt discomfort and P10 temporary disorientation while adjusting to working from home. While waiting three months for remote access, P05 and P06 resourcefully used email for reference services, created bridge projects for visitor services staff, curated a digital exhibition, and collaborated with colleagues in other departments.

4.3 Phase 4: Hybrid Work Tasks and Hybrid Work Contexts

As Sects. 4.1 and 4.2 demonstrate, phasing work tasks to a quarantine context entailed technological, psychological, and social adjustment. Enabled to access repository collections, email, and virtual conferencing platforms to perform work tasks under quarantine between April and June, participants phased in hybrid home-remote and in-office work tasks from June to August 2020 while institutions remained closed. Hybrid tasks involved four lines of work: communicating, coordinating, and collaborating with colleagues, creating remote work for staff whose work was exclusively on-site, adapting reference services for the hybrid context, and making on-site visits for reference work and to check on collections (Table 4).

| Hybrid work context                             | Tasks                                                                 | Participant code |
|------------------------------------------------|-----------------------------------------------------------------------|------------------|
| Performed work tasks remotely and on-site      | Communicated and collaborated with colleagues                        | All              |
|                                                | Created remote work for visitor services staff and transcribed catalog cards | P05, P06        |
|                                                | Adapted reference services to remote and hybrid delivery              | All              |
|                                                | Brief on-site visits to fulfill reference requests and check on physical collections | All              |
|                                                | Planned for reopening and performing on-site information work tasks  | All              |

Communicated, Coordinated, and Collaborated with Colleagues. P01 communicated weekly with her volunteers, several of whom are elderly and/or live alone. In similar spirit, P02 regularly checked in with his colleague who was on maternity leave. P08 attended remote departmental meetings concerning remote work policies and employee well-being. P05 and P06 met virtually and often, finding a productive work rhythm by
April 2020 while awaiting remote connection, which came only in June 2020. The four interviewees from the same work setting, P03, P09, P10, and P11, held frequent wellness check-ins during the first weeks of quarantine.

**Created Remote Work for Staff Normally On-Site.** P05 created information work for visitor services staff; they transcribed 19th century medical student notebooks showing future research potential. Both P05 and P06 collaborated with colleagues in other departments on transcriptions of 19th and early 20th century museum catalog cards.

**Adapted Reference Services to Remote and Hybrid Delivery.** P01 “canceled the calendar” for tours of the building, VIP events, and on-site research appointments. Like all participants, she addressed research questions via email and took notes on documents to consult on returning to the archives. P02 meanwhile discovered under quarantine welcome opportunities to pursue reference questions using digitized collections—and to do so in more depth than was possible when immersed in her hectic physical work context. Similarly, P08 notified researchers that reference services were open even if the archives were closed; like P02, she relied heavily on previously digitized resources for detailed requests. For frequently asked questions, finally, P08 directed users to a webpage she had previously set up for the purpose.

Conversely, P03 and P10 were unaccustomed to performing work tasks in the home. The separation between home and work contexts felt meaningful and required effort—and time—to overcome. Once reoriented, however, both were highly productive: P03 completed a substantial metadata project for 19th century medical student doctoral theses, and P10 resumed reference services for questions that called on her extensive knowledge of collections. Like P02 and P08, P10 and her colleagues relied on previously digitized resources for reference requests.

**Made Brief On-Site Visits.** By May or June 2020, participants had leveraged state and institutional safety protocols to make brief on-site visits to scan or retrieve materials necessary for reference questions and to check on the physical status of collections.

**Planned for Reopening and On-Site Work Tasks.** By July 2020, all participants had planned for on-site work tasks according to state and institutional reopening protocols.

### 4.4 Hybrid Work Tasks Through December 2020

As of their second interviews conducted in August and September 2020, participants had maintained hybrid work contexts and hybrid work tasks while adapting to staff reductions (Table 5). P05 and P07, both directors, left their positions in July 2020 (P07 declined the second interview). P09 anticipated the loss of temporary staff and the intern. Only P01 and P06 performed on-site reference services and tours, though at reduced capacity.

**Hybrid Re-openings.** P01 and P06 were glad to reconnect with colleagues and regain proximity to their repositories’ physical collections. P01 remarked poignantly, “There’s an emotional stake in everything that’s here”. P01 scheduled a minimum of on-site reference appointments and tours of the physical building, whereas P06 followed elaborate
Table 5. Hybrid work contexts and tasks anticipated through December 2020

| Hybrid work context                                      | Task                                                                                     | Participant code |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------|------------------|
| Conduct work tasks through end of 2020                    | Glad to be on-site, missed physical collections and colleagues                         | P01, P06         |
|                                                           | Scheduling a minimum of on-site visits and tours                                        | P01              |
|                                                           | Following elaborate protocol (state & institution) for on-site reference services        | P06              |
|                                                           | Catching up on reference interview work that could not be done remotely, physical care of collections, administrative responsibilities due to staff reductions | P01, P06, P03, P09, P10, P11 |
|                                                           | No on-site reference interviews yet                                                       | P02, P08, P09, P10, P11 |
|                                                           | Continuing remote information work through end of 2020                                   | All              |
|                                                           | Might be terminated                                                                      | P11              |
|                                                           | Planning to virtualize as many services as possible                                      | P09              |
|                                                           | Staff reductions, related and not related to COVID-19, increase responsibilities for which staff are not trained | P06, P03, P09, P10, P11 |

state and institutional protocol to ensure safe on-site reference services. P06 also caught up on her backlog of reference interview tasks, such as scanning and shipping materials, and returned to projects put on hold during quarantine. In addition, P06 tended physically to collections and to a limited amount of processing given staff reductions in July that conferred on her temporary administrative responsibilities. At the same repository, P03, P09, P10, and P11 also found their work tasks much altered by loss of two staff.

**Plans to Continue Working Remotely from Home.** Given institutional policy to work from home if possible, P02 plans to continue her remote work tasks. P08’s remote work tasks persist through the end of 2020; her department is developing a policy for remote work tasks. “It’s been interesting to see what we can do without the physical documents,” she notes. Temporary staff member P11 works exclusively with electronic documents and digitized heritage resources. She plans to continue remote tasks.
Adapting Work Tasks to Staff Reductions. Grant funding that subsidizes P11 runs out at the end of 2020. Given that challenge and the unlikely prospect of replacing two staff who left over the summer, P09 is planning to virtualize as many services as possible and pare back tasks she shares with P10, the reference specialist and remaining full time staff member.

Hybrid Work Tasks and Hybrid Work Contexts in 2020. Participants’ phasing of work tasks due to COVID-19 quarantine beginning in March 2020 enabled hybrid work tasks to emerge in hybrid work contexts post-quarantine. P06 remarked, “it was a good way to get us to think about how much we can actually do remotely, but it was very challenging”. In starker terms, P09 observed, “the pandemic has accentuated what our needs are and accentuated our limited resources”.

5 Discussion

This paper surfaces the complex, emotional, time-consuming work archivists perform professionally in the midst of the pandemic [4, 8, 9]. Interview data explores how archival work tasks traverse the boundaries between processing collections, invisible to users, and reference services and outreach, the visible output of their work [17, 20]. Building on Huvila’s [4] premise that work purpose is a useful context for tasks, Table 6 introduces an information work model for the case study.

Table 6. Information work model for the case study

| Work (purpose)               | Work tasks (outcomes)                                                                 | Work roles (viewpoints)                                                                 |
|------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Reference services           | Reference services                                                                   | Director, Librarian, Administrator, Head archivist, Staff-of-one archivist, Reference specialists |
| (visible work)               |                                                                                      | Archivist, Curator, Managing archivist, Processing archivist, Project archivist, Student intern |
| Outreach                     | Donor relations                                                                       |                                                                                        |
| (visible work)               | Social media                                                                          |                                                                                        |
|                              | Tours                                                                                 |                                                                                        |
|                              | Student orientation day                                                               |                                                                                        |
| Processing collections       | Physical arrangement of collections                                                   |                                                                                        |
| (invisible work)             | Writing finding aids and description                                                  |                                                                                        |
|                              | Digitizing resources                                                                  |                                                                                        |
|                              | Metadata                                                                              |                                                                                        |
|                              | Curating website reference content                                                    |                                                                                        |
|                              | Curating online exhibitions                                                           |                                                                                        |
|                              | Creating transcription tasks for intra-institutional students and staff                |                                                                                        |
6 Conclusion

The exploratory qualitative case study applies information work concepts to archivists’ information work tasks at five medical history collections in Philadelphia. This paper analyzes second round interview data to explore how nine archivists phased work tasks while transitioning from office to home under quarantine from March through September 2020. These interviewees managed information work within their institution and external to it. Indeed, their information work shifted between visibility and invisibility as hybrid work contexts for hybrid work tasks emerged. Future research may explore archivists’ information work and dynamics of visible and invisible work at archives and special collections repositories.

References

1. National academies of sciences, engineering, and medicine, exploring lessons learned from a century of outbreaks: readiness for 2030. In: Proceedings of a Workshop, p. 25391. National Academies Press, Washington, D.C. (2019)
2. Miller, M.A., Viboud, C., Balinska, M., Simonsen, L.: The signature features of influenza pandemics—implications for policy. N Engl. J. Med. 360(25), 2595–2598 (2009). https://doi.org/10.1056/NEJMp0903906
3. Greenberg, S.J.: Resilience, relevance, remembering: history in the time of coronavirus. JMLA 108(3) (2020). https://doi.org/10.5195/jmla.2020.986
4. Huvila, l.: Work and work roles: a context of tasks. J. Documentation 64(6), 797–815 (2008). https://doi.org/10.1108/00220410810912406
5. Cox, M.: An exploration of the practice approach and its place in information science. J. Inf. Sci. 38(2), 176–188 (2012). https://doi.org/10.1177/0165551511435881
6. Savolainen, R.: Information behavior and information practice: reviewing the “umbrella concepts” of information-seeking studies. Libr. Quart. 77(2), 109–132 (2007). https://doi.org/10.1086/517840
7. Huvila, l.: How a museum knows? structures, work roles, and infrastructures of information work. J. Am. Soc. Inf. Sci. Tech. 64(7), 1375–1387 (2013). https://doi.org/10.1002/asi.22852
8. Hogan, T.P., Palmer, C.L.: “Information work” and chronic illness: Interpreting results from a nationwide survey of people living with HIV/AIDS. Proc. Am. Soc. Info. Sci. Tech. 42(1), n/a-n/a (2006). https://doi.org/10.1002/meet.14504201150
9. Strauss, A., Corbin, J.: Managing chronic illness at home: three lines of work. Qual. Sociol. 8(3), 224–247 (1985). https://doi.org/10.1007/BF00989485
10. Fulton, C., Henefer, J.: Information practice. In: Bates, M.J., Maack, M.N. (eds.) Encyclopedia of Library and Information Sciences, 3rd edn., pp. 2162–2171. CRC Press (2018)
11. Lloyd, A.: Learning to put out the red stuff: becoming information literate through discursive practice. Libr. Quart. 77(2), 181–198 (2007). https://doi.org/10.1086/517844
12. Lloyd, A.: Informing practice: information experiences of ambulance officers in training and on-road practice. J. Documentation 65(3), 396–419 (2009). https://doi.org/10.1108/00220410910952401
13. Lloyd, A.: Framing information literacy as information practice: site ontology and practice theory. J. Documentation 66(2), 245–258 (2010). https://doi.org/10.1108/00220411011023643
14. Wenger, E.: Communities of Practice: Learning, Meaning, and Identity. Cambridge University Press, Cambridge (1998)
15. Wenger, E., McDermott, R.A., Snyder, W.: Cultivating Communities of Practice: A Guide to Managing Knowledge. Harvard Business School Press, Boston (2002)
16. Byström, K., Hansen, P.: Conceptual framework for tasks in information studies. J. Am. Soc. Inf. Sci. 56(10), 1050–1061 (2005). https://doi.org/10.1002/asi.20197
17. Veinot, T.C.: “The eyes of the power company”: workplace information practices of a vault inspector. Libr. Quart. 77(2), 157–179 (2007). https://doi.org/10.1086/517842
18. McKenzie, P.J.: A model of information practices in accounts of everyday-life information seeking. J. Documentation 59(1), 19–40 (2003). https://doi.org/10.1108/00220410310457993
19. Byström, K., Lloyd, A.: Practice theory and work task performance: how are they related and how can they contribute to a study of information practices. Proc. Am. Soc. Info. Sci. Tech. 49(1), 1–5 (2012). https://doi.org/10.1002/meet.14504901252
20. Star, S.L., Strauss, A.: Layers of silence, arenas of voice: the ecology of visible and invisible work. Comput. Support. Coop. Work 8(1–2), 9–30 (1999). https://doi.org/10.1023/a:1008651105359
21. Lincoln, Y.S., Guba, E.G.: Naturalistic Inquiry. SAGE Publications, Beverly Hills (1985)
22. Mellon, A.: Naturalistic Inquiry for Library Science: Methods and Applications for Research, Evaluation, and Teaching. Greenwood Press, New York (1990)
23. Miles, M.B., Huberman, A.M., Saldaña, J.: Qualitative Data Analysis: A Methods Sourcebook, 4th edn. SAGE Publications, Los Angeles (2020)
24. Charmaz,K.: Constructing Grounded Theory, 2nd edn. SAGE Publications, London, Thousand Oaks (2014)
25. Rubin, H., Rubin, I.: Qualitative Interviewing: The Art of Hearing Data, 2nd edn. SAGE Publications, Thousand Oaks (2005)