Human Operators: A Critical Oral History on Technology in Libraries and Archives. Edited by Melissa Morrone. Sacramento: Library Juice Press, 2018. 394 pp. Index. Softcover. \$35.00.

What is technology? Although the definition changes depending on context, editor Melissa Morrone starts off her collection of oral history interviews, *Human Operators: A Critical Oral History on Technology in Libraries and Archives*, by posing that question. In a unique style, Morrone compiles, edits, and connects interviews from 42 different librarians and archivists into one book that reads like a conversational narrative. Many interesting topics are covered throughout, but the book mainly provides responses from librarians and archivists about how we, as humans, use and ultimately feel about technology in different environments.

Morrone conducted the interviews primarily over Skype; though one was one done via e-mail and some in person, between July 2016 and March 2017. She found willing participants through personal connections and a call for participation on the Library Juice website, social media, and e-mail listservs. She also specifically targeted the ALA Social Responsibilities Roundtable (SRRT) and the Library and Information Technology Association (LITA) for interviewees. The 42 librarians and archivists she interviewed come from all across the United States and include a handful of international participants from Canada, New Zealand, and Lebanon.

The first section, titled "Learning," addresses the different ways that librarians and archivists, as well as their patrons, learn technology. Although Morrone does not include a comprehensive list of all the questions she asked interviewees, she does begin each section with a short description of the types of questions asked. In "Learning," Morrone asks about technology instruction, technology in library school curricula, and influential people that interviewees read or follow. Although not all archivists have library science degrees, the responses regarding library school are intriguing. Some interviewees argue that certain technologies or skill sets, such as coding, must be taught in library school to allow librarians to keep pace with changing technology. Others emphasize that the particular tool is not important, because those can change so quickly, but that it is more important for future librarians and archivists to be willing to engage, explore, and be curious about new technologies. This section also includes thoughts on education and technology by Elvia Arroyo-Ramirez, assistant university archivist at University of California, Irvine, which are relevant for many archivists. She discusses the lack of practical experience in graduate school with born-digital processing, stating that "when in reality, eventually there won't be 'archivists' and 'digital archivists'; everyone is going to be a digital archivist" (p. 57). The profession is grappling with the concept of digital archivists today, as evidenced by the number of digital archivist job postings. These types of positions indicate that the profession understands the need to address born-digital content, even though it can lead to that type of work being siloed away from traditional processing.

In the section titled "Connecting," Morrone pulls together responses that focus on the ways librarians and archivists utilize technology to communicate, highlighting a couple of specific services and listservs. Some of the more interesting topics discussed by interviewees include Internet filters and universal design. Although much of the section applies more broadly to librarians, ways that archivists can connect with, and ultimately collect from, specific communities is discussed. Beatrice Colastin Skokan, head of manuscripts and archives management at the University of Miami, discusses her institution's use of Archive-It to capture social media and other digital content from grassroots organizations in South Florida. She and others mention the importance of capturing ephemeral, web-based information that previous generations would have documented on paper.

Throughout the section titled "Building," interviewees discuss some of the promises and practicalities of open source software in libraries and archives. The Interference Archive is mentioned throughout the book, as Morrone conducted a group interview in person with Hadassah Damien, Molly Fair, Daniel Kahn Gillmor, Bonnie Gordon, Drew Gordon, and Jen Hoyer. The mission of the Interference Archive is to "explore the relationship between cultural production and social movements. This work manifests in an open stacks archival collection, publications, a study center, and public programs including exhibitions, workshops, talks, and screenings, all of which encourage critical and creative engagement with the rich history of social movements." Readers unfamiliar with the Interference Archive—located in Brooklyn, New York, and run completely by volunteers—are able to construct an understanding from the various responses. In this section, Daniel Kahn Gillmor and Drew Gordon describe the positive and negative aspects of the Interference Archive being hosted on their own local server. For example, while local hosting gives the group more control and autonomy over its catalog, access to its collections is impeded when its server goes offline.

The section titled "Collecting" may be of the most interest to archivists, as it discusses cataloging, oral histories, community digital archives, and the specific needs of audiovisual materials, among many other topics. Several archivists, including Jarrett Drake, a PhD student at Harvard University and former digital archivist at Princeton University, discuss a community-based archives documenting police violence in Cleveland, Ohio. When the Society of American Archivists hosted its annual meeting in Cleveland in 2015, a group of archivists wanted to put their skills to use for the community and organized their efforts online together prior to the conference. Drake explains that over 75 people volunteered to work alongside community members, whether setting up the infrastructure of the archives or transcribing collected stories. The result was the creation of A People's Archive of Police Violence in Cleveland, an archives that "collects, preserves, and shares the stories, memories, and accounts of police violence as experienced or observed by Cleveland citizens."

Privacy is mentioned throughout the book, but the section on "Accessing" specifically addresses the additional security measures implemented in special collections with a critical eye. Several interviewees mention their concerns about the liberties that special collection units take for the sake of security. For example, Drake specifically calls attention to special collections and archives that require photo identification to access materials. He states, "There are some special collections and archives that not only require photo identification—which is racist, and it's classist, and it's ageist. That's what

the practice is; it doesn't matter to me that the argument that gets regurgitated is that it helps keep materials safe. That's not what it's about, as much as voter ID is not about preventing fraud. It's about excluding people" (p. 275). This conversation should inspire archivists and special collections librarians to reflect more critically on security practices at their own institutions and whether or not they may actually be violating the privacy of patrons.

In the final section, "Being," interviewees reflect on gender and race, and specifically discuss the origin of codes of conduct for professional conferences such as Code4Lib. The practice of adopting a code of conduct has spread to many conferences and organizations, including the Society of American Archivists, which adopted a general code of conduct applicable to annual meetings and other SAA events.<sup>3</sup> Several interviewees mention how critical a code of conduct is for the safety of marginalized groups. The code of conduct clearly defines behavioral expectations and offers a proactive approach to unwelcome incidents to replace those that are reactionary. Another interesting topic in this section is the environmental impact of the profession. For example, when we think of resources stored in the "cloud," it can be difficult to comprehend the massive amounts of energy required to maintain the physical servers on which those resources are stored. The increasingly digital aspects of the profession can be harder to reconcile with environmental concerns, but they exist nonetheless. On this subject, the work of Eira Tansey, digital archivist and records manager for the University of Cincinnati, is cited, including her involvement in Project\_ARCC (Archivists Responding to Climate Change).4

The unique format and style of *Human Operators* can be challenging for readers; with so many voices, it is nearly impossible to keep each interviewee's background and affiliation in mind while reading. In a way, the responses sometimes feel like a puzzle, with each piece providing a bit more context about the interviewees themselves. Morrone includes brief biographies at the end, which provide valuable context for some of the responses, clarifying or reaffirming what had been pieced together. In addition to an index, she also provides a list of books, articles, web resources, and media references that were mentioned or alluded to in the interviews. Morrone explains in her introductory section, "Before," that she learned some lessons throughout the process, including the importance of using a structured set of questions while interviewing. However, it would have been nice to be able to view this list of questions, even if it had been included as an appendix. After the interviews were transcribed using InqScribe, interviewees were given copies of the audio files and transcripts and had the opportunity to clarify or edit their remarks. Some chose to leave their words unaltered, while others made substantial revisions. Still, it is interesting to wonder whether they changed the meanings of certain words, depending on how they were juxtaposed with others' responses.

Morrone's creativity and willingness to experiment with format beyond the traditional compilation of essays is admirable and, for the most part, very successful. The topics and ideas discussed in the interviews are thought provoking, regardless of who said which exact phrase. Perhaps Morrone deliberately left out the questions to maintain the feeling of casual conversation among colleagues. Even while including a variety of narrators,

the content seems to lean toward public libraries, though it is still useful for archivists and librarians working in other kinds of institutions. The topics and themes discussed include issues that all information professionals should be thinking about, even if we do not engage with them throughout the course of our daily responsibilities. Going beyond the initial question of "What is technology?," *Human Operators: A Critical Oral History on Technology in Libraries and Archives* pushes readers to expand their definition of what technology currently is, and what it can become.

Kayla Harris Librarian/Archivist University of Dayton

## **NOTES**

- 1. Interference Archive, "Our Mission," http://interferencearchive.org/our-mission.
- 2. A People's Archive of Police Violence in Cleveland, http://www.archivingpoliceviolence.org.
- Society of American Archivists, "SAA Code of Conduct," May 2016, http://www2.archivists.org/ statements/saa-code-of-conduct.
- 4. Project\_ARCC: Archivists Responding to Climate Change, http://projectarcc.org.