COMMENTARY

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George Bernard Shaw once wrote that "all professions are conspiracies against the laity." Any researcher using libraries and archives might well agree after trying to wade through idiosyncratic subject headings, cataloging formats, reading room procedures, and finding aids, many of which seem to benefit the professional at the expense of the user. Shane Greenstein's case study underscores the failure of archivists and government documents librarians to preserve important research material and create access to them. From his perspective, the experience may have seemed like a conspiracy against researchers.

Greenstein's story centers on a collection of data that represented an inventory of digital computer systems in the federal government through the 1960s and 1970s. Most archivists, confronted by a continuous twenty-year survey of every computer owned by the United States government would not need to know anything about the history of computing to judge this data worthy of saving. With incrementally more knowledge they would recognize that this twenty-year period traced the domination of large, mainframe computers up to the introduction of minicomputers. Add to this scenario the rarity of comparable, continuous data, and it is doubtful that anyone with a historical perspective would have willingly destroyed either the machine-readable or printed versions.

Yet by the time of Greenstein's search, the federal government had destroyed all of its copies of the machine-readable data, and few government document repositories had retained the published annual. The machine-readable files would have been the more historically valuable of the two forms because they contained more data than the printed version, and the data could be manipulated to reveal additional information. Evidence suggests that the files existed well after the Machine-Readable Archives Division of the National Archives had been established, and the finger of blame could easily be pointed in their direction. The truth is that the data files never entered the National Archives' sphere of influence. No one with a historical perspective had a chance to argue for or against the record. The system did not fail; it simply did not exist.

Most experienced archivists are hardened to sad stories of the demise of good records. Initial comment by archivists who reviewed Greenstein's case study was, "So what?" This was not the first time that the meager resources of the archival profession had not been able to rescue historically important data, much less machine-readable data. Yet the case study is interesting if only because the description of a researcher's quest for archival material reveals the perspective of someone outside the archival profession. Greenstein appreciated the assistance given him by librarians and archivists, and he was not motivated to write his article to lodge a complaint against records custodians. Nevertheless, there are a number of messages in Greenstein's article about how researchers view the work of archivists, librarians, and other members of the conspiracy.

First, he does not distinguish between the roles of reference librarian, government documents librarian, or archivist. When he discusses the need for

"assiduous archivists," he is actually referring to a government documents librarian. A true archivist appears only once—in the form of a corporate archivist at IBM. To Greenstein the distinctions between professions are irrelevant; he was looking for anyone who could supply information to help him. The word *archivist* in today's vernacular means *somebody who saves information.* Regardless of archivists' feelings, the public is willing to accept that librarians, records managers, data processing technicians, microfilmers, and archivists are all subjects of the verb *to archive.* Greenstein blames this broad group of information savers—not archivists specifically—for failing to preserve the data files. If archivists are uncomfortable about being an indistinguishable part of this group, they should ask why it did not occur to Greenstein to condemn archivists specifically for the loss of the data files.

Second, Greenstein demonstrates the difficulty of preserving electronic records. The steps that he followed as a researcher are similar to those that a good field archivist would have pursued, although if every important machine-readable file required even a fraction of Greenstein's effort, most archivists would abandon any hope of recovering such data. In scheduling the disposition of machine-readable records, archivists must be involved when records are created; otherwise, crucial information about the data file, its software environment, hardware environment—even the data file itself—may be altered or destroyed. The problem of preserving such data can be solved in theory, but with the resources that most government archives command, the practical problem remains. Remember that Greenstein's data files never got close to the National Archives. They barely outlived their immediate use. As the GSA employee said, "Why, we just update our data base every year.... The government only needs the present year's data."

That quotation leads to a third message in Greenstein's story: the role of the individual in preserving records. Lacking the perfect records schedule and the means to enforce it, most records, electronic or otherwise, will be preserved by luck and the efforts of records creators who take extraordinary steps to preserve their creations. Greenstein offers an interesting archival tenet that suggests how the process is skewed: "material is put in archives by people who think they are making history, not necessarily by people who quietly go about their business." This is an interesting corollary to a tenet voiced in confidence by fellow archivists, which is that the best collections are saved by truly bizarre people. Both notions hold some truth, and both characterize archivists' reliance on individuals with an innate desire to preserve the substance that documents our culture. Old and new collecting and appraisal strategies rely on such intervention, but they are equally skewed by the inefficacy of "quiet people" and the transience of electronic records.

Finally, Greenstein shows the value in disregarding the boundaries that traditionally define three distinct sectors in archives: government, academia, and business. In his quest for the data file, he started in academia (a probable repository for the data), turned to government (the creator of the data), then to business (a potential user of the data), back to government (a repository for the trial exhibit), and finally to business (using an academic contact to gain entry). An archivist in the same pursuit would have belonged to one of those sectors and would have been apprehensive about crossing into another. What archivist outside the federal government would risk the ire and replevin of federal

archivists by soliciting and collecting a government record? Similarly, is it reasonable to expect a National Archives staff member to go hunting for records in the business sector? Only in remarkable circumstances.

The lesson from this last message is straightforward. Archivists prefer to operate in their own sectors despite the fact that historical documentation often crosses such boundaries. Many state archives are thankful for the excuse not to have to worry about federal records, much less contend with the bureaucracy of NARA. But there is no question that some federal records that would not be preserved by NARA would be critical to a state's history. To add to the problem, technology increases the portability of data in electronic form. The "cleanest" version of a data file may not be owned by its creator. Greenstein's survey data is evidence of this situation.

It is true that if there were greater cooperation between archives and manuscripts repositories in each of the three sectors, then fewer historically-valuable records would elude archivists. However, calls for cooperation over-simplify the complexities of the institutions within each sector and the motivation of individual archivists. Perhaps the most useful idea to come out of the discussion of "documentation strategies" was to provide a model of communication between a number of collecting institutions.[1] While documentation strategies may result in too many resources devoted to too few topics, the exercise might very well develop informal ties that could form the basis for more general cooperation in some situations. The Department of Energy project conducted by the American Institute of Physics remains an archetypical example. Motivated by a group outside government, it resulted in the establishment of a records program at a federal agency. Such projects are extraordinary, and, unfortunately, rare.

The other lesson provided by Greenstein's article is less forthright; it concerns the image of archivists. Archivists view themselves as the ultimate protectors and gatekeepers of records; from their perspective the archives would be the first stop for any researcher interested in primary sources. Yet Greenstein never really engaged archivists or their formal descriptive tools; instead, he relied on informal contacts and never knew that he was bypassing the profession. His experience suggests that many researchers have little notion of the role of archivists; in the article they are grouped together with other information savers. This is a painful image for most archivists, especially when Greenstein describes "assiduous archivists" as those who collect "indiscriminately." While archivists might take the point as an indictment of their ability to appraise historical value, it is simply a misinformed perception. In fact, Greenstein was describing a government documents librarian, not an archivist.

Such perceptions have prompted archivists to conclude that the profession must promote a better image to the public. But in many ways it is not the cultivation of a better image that will distinguish archivists, but rather a more successful experience at archives. Why do genealogists flock to archives? Because archives have what genealogists want. How many archivists have witnessed the genuine surprise of researchers after discovering that the archives holds useful material? Researchers will use (and support) archives when it is apparent that archives are useful.

Archivist's self image is also self-centered. It is a provincial attitude when one considers the role of records' creators and their intermediaries. Archivists

need all the help they can get in preserving modern records, and the individual needs to be recruited to the cause. Manuscripts curators depend on individuals who are inspired by any number of factors (pure and impure) to save historically valuable records; while such effort may only yield a set of *National Geographic,* it can also be responsible for protecting a rare collection of family correspondence, letterpress books, or even machine-readable data files. Government archivists, too, rely on government employees to keep the good records from destruction, as Greenstein's story so aptly demonstrates. Anyone can subvert an official records schedule. If individuals cannot appreciate the value of archives, then the next best strategy is to convince them of their own importance in preserving the documents. Then perhaps some of Greenstein's quiet people will be more protective of the results of their work, and there will be fewer sad stories of the destruction of important records.

There is an epilogue to Greenstein's story. Because his work was supported by a fellowship from the Charles Babbage Institute (CBI), he reported on his research at CBI's home in Minneapolis. As CBI's archivist, I was well aware of the federal survey and was excited to learn that the machine-readable files still existed. I asked Greenstein to donate them, and he has promised to send copies to both Stanford and CBI. However, his current duties at the University of Illinois have distracted him from his good intentions and the files remain outside the custody of an archives. The tape story tapestry may still find itself frayed at the end.

Also, Greenstein's research has focused some new attention on the collection of printed inventories of federal data processing installations housed at the Charles Babbage Institute. Another researcher, after searching for these volumes at a number of East Coast research libraries, confirmed Greenstein's observation that the government publication was, in fact, rare. I would like to say that their preservation at CBI was the result of careful deliberations, joint documentation strategies, and use of a "black box" algorithm. But, no, I had simply stumbled across the volumes, thinking they were interesting and worth retaining even though they probably were duplicated at a number of government depositories. It is worth everything in archives to witness researchers heaping praise (albeit unearned) on an archivist for individual clairvoyance in preserving one of the few remaining volumes that happen to be key to a person's lifelong research. So what is wrong with making a grand sweep of the arm, showing the countenance of an all-knowing deity, and stating, "I did it all for *your* research"? After all, building a good image requires some conspiracy.

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NOTES

1. See Larry Hackman and Joan Warnow-Blewett, "The Documentation Strategy Process," *American Archivist* 50 (Winter 1987): 12-47.