

IFLA International Newspaper Conference  
**“What, No Backups? Preserving Hardcopies in the Digital Age”**  
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### ***Slow Fires or Tawdry Preservation Consumerism?***

Approximately twenty years following the Florence flood – the unofficial beginning of modern library conservation – filmmaker Terry Sanders released the documentary, *“Slow Fires: On the Preservation of the Human Record.”*<sup>1</sup> Narrated by Robert MacNeil, the film addressed the problem of libraries preserving aging acidic paper and described options for tackling what in 1987 was commonly referred to as ‘the brittle books crisis.’ Inadvertently, the movie also documented the smooth hypocrisy that successfully destroyed as many American historic newspapers as possible in order to preserve them.

Midway through the hour-long film, Mr. MacNeil articulated the movie’s central theme: “It is neither flood nor fire that is the true enemy of the human record,” he declared. Rather, “it is the slow fires – the acid embedded in the paper – that remains the greatest threat.” The scene pans to a book being sprayed with Wei T’o nonaqueous deacidification solution, “page by page, at considerable cost,” Mr. MacNeil said. But, “some books and library materials are beyond any such process. To be saved, they must first be cut apart.”

In another scene that takes place at Northeast Document Conservation Center (NEDCC) in Andover, Massachusetts, a technician lifts an oversized, cloth-covered, bound newspaper from a metal shelving unit and moves it to an empty workspace. The large volume appears intact and in good condition. The technician, dressed in a white lab coat, opens its front cover, inserts the blade of a box cutter into the cloth joint, and smartly slices the front board away from the text block. She explains, “the only documents that we’ll consider to guillotine [here] are newspaper collections, the kind that have been put in a giant volume to be stacked on a library shelf.”

Deftly removing the binding to expose the volume’s brown paper-lined spine, the technician works the razor-tipped utility knife lengthwise down the book’s spine, splitting the very thick volume into one-inch groups of pages. The camera scans the newspaper’s flat front-page banner – *Portland Evening News* – and its glaring headline printed within the slightly yellowed borders; “Amelia Earhart’s Plane Crashes.” The newspaper dates from July 2, 1937.

The technician also observes, “If you wait too long you may get to your shelves and find that the acid process has burned your newspapers and they’ve deteriorated so bad that the pages cannot be turned. At this point . . . [the newspapers] are not able to be filmed. As you can tell from the color of the newspaper [the *Portland Evening News*], they’re turning brown and they are highly acidic; they’re burning up.” The young woman’s observation is contradicted by the camera which shows the fifty-year-old pages in excellent condition aside from the slight discoloration of their oxidized edges. But, as far

as we know, the 'crisis' is on. The volume is 'infected' and needs to be filmed immediately if it is to be saved.

The technician places the first one-inch gathering of leaves into the open throat of a guillotine cutter, spine toward the operator. Rotating the manual iron crank on top of the machine, she lowers the metal platen, firmly pinning the sheets against the cutter's iron bed. The clamp clatters audibly with each revolution of its circular handle. "It kind of bothers me to guillotine newspaper collections because I know the actual papers are not gonna go back on the shelves," the technician discloses. Clutching the guillotine's long, iron lever, she swiftly shears off the tightly bound spine, the machine's 30-inch steel blade crunching through the dense cellulose. "But to contain the information on microfilm is the ideal way to preserve the newspapers," she explains, articulating the contemporary wisdom of America's national preservation program. The camera follows the technician's hands as she sweeps up the detritus from the book's amputated spine, the wheel on top of the guillotine now rotating in the opposite direction to raise the platen. Revealed on the cutter's iron bed is a neat stack of single sheets of an antiquarian newspaper. The scene shifts again to a brightly lit microfilm camera and the clicking begins, the ongoing narration avoids mention of the fate of papers once filmed and, captivated by the process, most viewers forget to ask, "Please tell me again, why must we discard the originals?"

In the 1980s, film and destroy process was linked to a collaborative plan to build a national digital library, with microfilm serving as an interim medium that would later lend itself to efficient scanning. Segments of this idea had to be taken on faith. Microfilm scanners did not yet exist, although funding to develop such devices was feverishly funneled to resolve the problem.<sup>2</sup> The question of persistent access to the originals also seemed redundant to many of those who engineered the plan. After all, newspapers are bulky. Large amounts of shelf space are needed for storage. And, printed by the million, the loss of one volume would not matter. One last use for filming, or scanning, was considered enough.

This solution was not open to discussion. Surveys to determine the exact number of surviving copies were not pursued. Replication using a time-tested approach was seen as the only answer, after which the experts agreed the papers could be tossed. A few minority voices spoke up publicly to protest the plan. Comparisons were made to overharvesting that led to the extinction of the passenger pigeon, one of the most abundant birds in the world during the nineteenth century but extinct by the early twentieth. Most critically, breaking ranks was strongly discouraged. Dissenters were reminded that only through one collective voice could Congress be convinced to fund a de facto National Preservation Program that could address the crisis. Bucking the system, it was implied, might jeopardize one's future career options.

### ***Other Approaches Internationally***

Observing from outside the U.S., Otto Wächter, Head of National Library of Austria's Institute for Conservation, speculated at an IFLA preservation conference in 1986 that

perhaps there is “a bit of exaggeration in the announcement by the Committee (*sic*, “Commission”) on Preservation and Access in July 1985 in Washington that in many American libraries already every fourth book is threatened by mechanical and chemical destruction.” Mr. Wächter explained “[t]he reason for this skepticism is that one’s first impression on walking through the stacks is that the books and periodicals are largely intact.”<sup>3</sup> This viewpoint resonated with Ellen McCrady, editor of the *Abbey Newsletter*, who, undeterred in her later years by implied threats of retribution, summarized the issue in her characteristically forthright fashion. “I think they leapt at that solution and oversold it . . . Pat Battin [Commission on Preservation and Access president Patricia Battin] was gung ho on microfilming, and to her this was the solution. She used to call it ‘preservation.’ Microfilming is not preservation. Microfilming is microfilming – it’s copying. She was overstating her case.”<sup>4</sup>

My immediate supervisor at Brigham Young University from 1985-87, Ms. McCrady saw microfilm’s role as a means of capturing and disseminating images of material that might otherwise be lost, when no other approach was feasible. She found the national bias toward oversimplifying the problem disturbing, however, and laid the blame squarely at the feet of Commission on Preservation and Access president Pat Battin. “You shouldn’t distort reality in order to gain the favor of the masses. It’ll backfire,” she cautioned.<sup>5</sup>

A huge brittle book survey conducted at Yale University in the early 1980s found “37.1 percent of its collection was dangerously brittle,” while a similar assessment done at the Library of Congress earlier in 1973 discovered “one-third of its collection was too brittle to use.”<sup>6</sup> In an attempt to replicate what appeared to be highly inflated figures, in 1992 I oversaw a study conducted at Brigham Young University that found 75.5 percent of the collection was acidic (pH <5.4) but only 1.9 percent met the standard criteria for brittle paper – two creased folds of the corner of a book page.<sup>7</sup> [This damaging procedure became the source of the title for writer Nicholson Baker’s provocative expose, *Double Fold: Libraries and the Assault on Paper*<sup>8</sup>].

Issues like the variability of book condition from one library to another were never discussed within the context of America’s national preservation program; things needed to remain easy to understand and uniform. If Utah’s arid environment played a significant role in paper permanence, having titles stored in Utah in good condition while a copy of the same book stored at Yale was in crisis was simply awkward. Even if environmental studies indicating that paper stored in cool or dry conditions ages far more slowly than paper stored hot or moist,<sup>9</sup> the national leadership found the information irksome when the national preservation program was discussed. Even if the studies confirmed this reality by direct observation. In 1966, for example, F. Lyth Hudson and C. J. Edwards, faculty at the School of Technology at University of Manchester, examined a copy of Edgar Allen Poe’s *Tales of Mystery and Imagination* abandoned in Antarctica by Robert Falcon Scott’s expedition and recovered in 1959. When this book was compared with copies of the same edition acquired from antiquarian bookstores in Glasgow and Manchester the researchers discovered the copy

that had been stored 'on ice' was in far better condition, the decomposition of its cellulose, the main constituent in books and newspapers, diminished by cold storage.<sup>10</sup>

Reports published during the 1980s indicated other countries approached preservation of their newspaper collections with more custodial sensitivity than the U.S.; in fact, no other nation microfilmed and discarded its national heritage collections. Canada, for example, decentralized its approach. Provincial libraries comprehensively collected newspaper from their own province while the National Library of Canada (NCL) saved representative examples from each region. The provinces microfilmed their papers and sold film copies to NCL to improve centralized access, while the original newsprint remained stored in perpetuity within the region.<sup>11</sup>

During the 1980s, the National Library of Austria developed an aqueous process for strengthening its newspaper holdings that helped maintain their physical durability. The process included impregnating historical newspapers with a low-viscosity emulsion of methylcellulose and polyvinyl acetate that contained an alkaline buffer (magnesium or calcium). The treatment was conducted in a vacuum chamber to allow stacks of newsprint to become thoroughly saturated. The treated paper was then frozen and freeze-dried to remove all excess moisture. Newspapers with the sewing still intact were recased while papers requiring resewing were first hand sewn and then rebound.<sup>12</sup>

During this same period, the Zentrum für Bucherhaltung (ZFB, Centre for Book Preservation) in Leipzig, Germany provided mechanical paper splitting combined with aqueous deacidification for newspapers belonging to research libraries internationally. The technique was so refined it was even possible to treat newsprint that had been charred in a fire. The sheets were washed, split, reinforce in the center of the sheet, and the two half-sheets rejoined with methylcellulose. One example ZFB's chemist, Dr. Manfred Anders, showed me on a visit to Utah had a one-inch (2.54 CM) charred outer edge that after treatment became as usable as the un-scorched center of the paper. A binding edge could be added as part of the process enabling the newspaper to be rebound into a very user-friendly book costing roughly the same amount to produce as a microfilm copy.<sup>13</sup>

Observing the U.S. approach, Austrian Otto Wächter suggested, "with all the talk of rapid deterioration of book, magazine, and newspaper materials in library holdings from the present and past centuries, a horrified librarian may well question whether the damage is really so serious." Rather than a technical issue, Wächter surmised the problem facing American libraries was more "a case of 'preservation policy.'"<sup>14</sup> In Finland, for example, the National Library is mandated under the law to permanently retain the country's original newspapers.<sup>15</sup>

The 6,400-volume collection of rare, historically significant nineteenth and twentieth century American newspapers Nicholson Baker purchased at auction from the British Library in 1999<sup>16</sup> represented that institution's "foreign titles." There was never any question about whether the British Library was going to retain the UK's original papers

in perpetuity. Patrick Fleming, the British Library's Head of Operations and Services, put it to me plainly at a recent IFLA International Newspapers Conference: "We [the U.K.] would put you [the U.S.] in jail for what you do to your newspapers."<sup>17</sup>

### ***Original Newspapers: What are They Good For?***

The question as to whether libraries should preserve newspapers in their original paper format hinges on whether they are needed to meet future research needs of library patrons or institutional requirements of the library. Due to their extreme scarcity and fragility, it is likely the most common role for surviving newspapers will be to serve as primary source material rather than as reading copies. Noted conservator Gary Frost suggests this function has three principal components:

- 1) **As backups** to regenerate screen copies. This security function comes into play as a result of unanticipated system failure, or data loss occurring from unsuccessful archives functions;
- 2) **As master copies**, to augment, enhance, or correct faulty screen copies. Mastering becomes significant when future researchers discover surrogates are missing pages, lack requisite information such as foldouts, color reproductions, or images of original bindings, or abound in technical deficits including poor image resolution; and,
- 3) **For authentication**, to provide forensic evidence about original production techniques, or to verify questions of provenance.<sup>18</sup>

With these three uses in mind, it should be said that preserving reproductions of newspapers can not fulfill the role of the original. Each technology – printed ink on newsprint, microfilm, or digital scan – is a distinct media type imbued with its own distinctive technological 'fingerprint.' Despite the numerous benefits reproductions provide – mass distribution, ease of use, compact storage, chemical stability – not all of the original medium's qualities can be duplicated by an alternative medium. As an example, preservation microfilm is a black-and-white silver gelatin photographic process that by definition cannot reproduce color images. Among its distinct media characteristics, silver gelatin microfilm is 'colorblind' to the four-color process used to print Sunday supplements, magazines and funny pages from the 1890s to the present.

Perhaps surprisingly, microfilm's inability to capture this category of data from the media it was intended to replace was considered an acceptable compromise for most nineteenth and twentieth century material converted to preservation microfilm. Defining the norms of the U.S. brittle book program in the 1980s, Commission on Preservation and Access president Patricia Battin delimited the national goal to "preservation of the intellectual content rather than the conservation of the individual artifact,"<sup>19</sup> and justified this decision like a general facing questions of triage. The magnitude of the problem combined with limited response time produced a crisis management mentality that included some tacit flaws, not the least of which was the exaggerated timeline. Also, certain members of the scholarly community rejected as

unusable microfilm reproductions of specific types of nineteenth and twentieth century printed illustrations occurring in scholarly books and serials. With support from the Getty Grant Program, the Commission appointed a Joint Task Force on Text and Image to conduct a study on the material identified as “text-cum-image.”

After a lengthy review, the Task Force recommended that some text-cum-image works warranted an alternative to microfilming. Diverging from the Commission’s lockstep approach, the Task Force justified this option by asserting, “the claims of future scholarship must be considered.” And further, although “in many cases,” those claims “can only be guessed at, it is at least evident that historians of specific disciplines will always want access to the visual materials of the past.”<sup>20</sup> Microfilm, they judged, was simply inadequate to tackle the problem. The ‘specific disciplines’ they identified were: “anatomy, architecture, art history, cultural history, entomology, geology, history (general), medieval archaeology, and photographic history.”<sup>21</sup> Newspapers, technically a serial that fit each of these disciplines occasionally, remained unaddressed despite being chockfull of woodcuts, halftone reproductions of photographs, and color imagery printed by rotogravure and offset lithography. For the material that merited an alternative approach, physical conservation was recommended for the following reasons:

- 1) As a hedge against time to await better conservation technologies for material containing text-cum-image
- 2) In order to return objects to normal use after preservation reformatting
- 3) Because items are recognized as having intrinsic value for exhibition, teaching, or research.<sup>22</sup>

Easily overlooked in its innocuous number two slot, the recommendation to *save original material* so it could be returned to “normal use” after reformatting was an anomaly, the only published acknowledgement of this concept to occur in the national preservation program. But rather than becoming integral to the national strategy, the option to preserve actual historical media was relegated by the Task Force to “a service-oriented decision of primarily local interest.”<sup>23</sup> In practice, that meant while some media was clearly impossible to reproduce with silver gelatin microfilm, the problem could not be addressed with national preservation funding. The rationalization behind this constraint was that legislative funding could only be guaranteed if the national goal remained unified and uncomplicated. Individual research libraries needed to pay for conservation locally; the national program could only fund duplication.

Between 1982 and 2011 the National Endowment for the Humanities (NEH) allocated approximately 54.1 million dollars to microfilming approximately 76 million sheets of newspaper within the United States Newspaper Program (USNP).<sup>24</sup> According to the USNP website, this was “a cooperative national effort among the states and the federal government to locate, catalog, and preserve on microfilm newspapers published in the United States from the eighteenth century to the present.”<sup>25</sup> With technical assistance from the Library of Congress, the program allocated no money to improve

environmental storage conditions or for conservation of original objects. Again, such preservation activities were deemed “local responsibilities” as opposed to fundable “national priorities.”<sup>26</sup> But of course, lacking federal assistance, efforts to improve the basic care of historical newspapers nationally were seriously hobbled.

Paradoxically, microfilm produced in accordance with national preservation standards requires stringent environmental storage conditions to achieve long-term permanence.<sup>27</sup> Research libraries are largely unable to provide this type of optimal cold, dry, gaseous pollutant-free environment, so they frequently rent commercial microfilm storage space from contractors and store their master negatives offsite. The resultant ongoing storage fees represent one of the hidden costs often overlooked in discussions about space-saving economies achieved by shrinking newspapers to the size of microfilm. Were permanence a valued goal in America, the deterioration rate of the country’s original newspapers could be dramatically reduced by storing them at even a fraction of the temperature and relative humidity provided as an ongoing local cost for microfilm.<sup>28</sup>

Non-damaging, spring-loaded cradles that compensate for the thickness of bound newspapers as the volume’s pages are turned and pressed firmly against the glass photographic plate for microfilming have been a viable technical option since the 1930s. This method of handling fragile volumes prevents damage from occurring in the gutter margin of the original paper as it is filmed and allows the book to be returned to the shelf undamaged. The book cradle was reserved for books with “artifactual value”<sup>29</sup> because it added time and therefore expense to the procedure and so generally was not used for filming mid-nineteenth and twentieth century newspapers. For reasons of this kind, the author of the microfilming guide written for the Association of Research Libraries, Nancy Gwinn (Director, Smithsonian Institution Libraries) emphatically stated, “the filming process is often damaging and irreversible.”<sup>30</sup>

Ms. Gwinn’s warning was not directed to the practice of taking pictures, but rather, to the preparation of bound volumes before they are microfilmed. Following her cautionary note, Ms. Gwinn went on to advise, “if you do remove the bindings from bound volumes before filming, the quality of the film is usually improved, and the cost of producing the film is significantly reduced. The most expedient method is to use a cutting machine, known as a guillotine, for those volumes that are not to be retained.”<sup>31</sup> Fiscal constraints inherent in USNP grants predisposed applicants to minimize filming costs. And critically, when the technical advisor to USNP was asked whether it was “necessary, feasible, or appropriate”<sup>32</sup> to retain original newspapers after they were filmed, the Library of Congress demonstrated by its own in-house policies that discarding original historical newspapers was acceptable because they lacked artifactual value.

### ***Following the Library of Congress***

Library of Congress's predilection to filming and discarding American newspapers was a documented fact long before *Slow Fires*. The illustrated volume entitled *The Library of Congress: A Picture Story of the World's Largest Library* published in 1966 explains in a caption that, "Because single sheets are reproduced more quickly and accurately than bound pages, this bindery employee is taking apart newspaper volumes that are to be photographed as part of the Library's program to preserve most of its newspaper files on microfilm."<sup>33</sup>

Through Nicholson Baker's pioneering research in *Double Fold: Libraries and the Assault on Paper*, the Library of Congress's predisposition to 'film and dispose' can be traced back to 1941 when the formidable Luther Evans – who became the tenth Librarian of Congress in 1945, and eventually director-general of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) – described his pioneering approach to microfilming the Library of Congress's run of Washington's *Evening Star*: "The entire back of the binding was sheared off under a power cutter and the pages photographed individually," Mr. Evans stated. He went on to praise this approach as "the ideal technique for microfilming bound newspapers,"<sup>34</sup> because of its great efficiency. S. Branson Marley, Jr., then chief of the Library of Congress' Serial Division, summarized the impact of Mr. Evan's radical protocol some years later by explaining, "This was a major decision, for it meant that in order to film a file for preservation, it was necessary to destroy it; once the volumes were cut for this purpose it was impractical, and usually impossible, to restore them."<sup>35</sup>

A newspaper's binding provides significant safeguards, protecting its paper contents from random physical abrasion as well as from oxidation. Like any serial, the binding is added once the series is completed. Because a newspaper is oversized, the binding is difficult to execute and requires copious amounts of hand labor. Bound newspapers typically require hand sewing rather than oversewing because of machine limitations, and are usually sewn through the fold or overcast with tiny, meticulous stitches. Once the spine is glued up, either of these sewing structures exert minimal stress on the paper where the pages turn and permit the book's massive pages to open flexibly. An obscure fact about bound newspapers printed on acidic, unpurified groundwood paper is that as they age and gradually grow more fragile, the sheets can often continue to be turned carefully, without damage. In essence, newspaper bindings do far more to protect their contents over time than one might suspect, including compressing the contents to limit the paper's exposure to air, light, and changes in environmental conditions. Bound newspapers often continue functioning as intended for long periods of time because they were designed to be durable. But once cut from the binding, aged newsprint's fragility cannot tolerate the stress of new sewing. And because they are now as vulnerable as a snail without its shell, loose single sheets are far more susceptible to physical damage.

The principle that allows a bound newspaper to continue functioning even as the pages become chemically weakened is similar to the properties that allow a fakir to lie unharmed on a bed of nails. Distributing a person's body weight evenly over a broad



surface prevents the pressure from an individual nail from puncturing the skin. If sewing is applied when newsprint is in its physical prime the paper can easily tolerate the torque exerted by the taut thread. But as the paper loses physical strength, re-sewing becomes difficult if not impossible. Once weakened, individual leaves can easily be torn, yet collectively even a fragile volume often remains relatively durable. Damage most frequently occurs to the pages at the front and the back of the book – the place in the book where stresses most closely resemble the single nail – while the dense interior of the book can remain quite sound. The erroneousness, oft-repeated assertion that acidic paper ‘is turning to dust’ is pure hyperbole. Properly housed and carefully handled, venerable bound newspapers can continue serving for millennia in their most important role, in Gary Frost’s term, as “leaf masters.”<sup>36</sup>

### ***Preventive Conservation***

In 1989, Barclay Ogden summarized a sustainable approach to a national preservation strategy other than microfilming that included low cost methods and supported the long-term retention of original material. He wrote, “The vast majority of all artifacts could be preserved without treatment and at low cost through preservation measures to reduce their rates of deterioration and wear, thereby extending their lives and minimizing the number of artifacts in need of treatment at any one time.”<sup>37</sup>

Now termed preventive conservation, this strategy will dramatically reduce the rate of chemical and physical deterioration if individual objects are stored in consistently cold, dry conditions, with reduced light levels and minimal exposure to particulate and gaseous pollutants.<sup>38</sup> Use of protective housing (custom fitting boxes made from alkaline paperboard or chemically-inert plastics) also provides much needed physical protection in addition to imposing a microenvironment around the volume inside the building’s gross storage environment. Preventive conservation should be coupled with policies that restrict access by encouraging use of reproductions in lieu of the original newspapers for most research, and impose elevated levels of physical care when handling the fragile artifacts. Glove use is strongly discouraged as gloved hands are awkward and apt to break fragile paper through clumsiness.<sup>39</sup> Aspects of this approach have been formally proposed as a national preservation strategy since 1962 when Gordon Williams, with support from the Council on Library Resources, proposed a federally funded, “centralized, preservation agency” where one copy of every significant book in the U.S. would be housed in cold storage and microfilmed on demand for access.<sup>40</sup>

Obstacles to implementing a cooperative approach for preserving original copies of American newspapers have been fiscal as well as technical. While funding agencies continued making grants available for preservation reformatting, Oya Y. Rieger observed in 2008 that, “Some of these funders may question the value of maintaining and preserving book collections that are available in digital format.”<sup>41</sup> Ostensibly, this is because federal agencies have limited their funding to a single expenditure for any one volume. This does not address the national problem and Ms. Rieger goes on to suggest,

“One justification for retaining print copies is that they can be considered backups or ‘leaf masters’ for the digital copies.” As noted above, Ms. Rieger, like Mr. Frost, identify the primary long-term use of original newspapers as being to regenerate, augment, enhance, or correct faulty screen copies, making their ongoing survival essential. This position is a minority opinion within the U.S. and at odds with the national preservation program’s predisposition to define microfilm or digital reproductions of original newspapers as their historical replacement – the object of record. But researchers, the constituency that needs to maintain uninterrupted access to original material for research, understand. Dr. Werner Gundersheimer, director of the Folger Shakespeare Library in Washington D.C., said, it is “a rare scholar indeed who would be willing to justify the wholesale elimination of all surviving copies of an embrittled work where some of those copies remained intact.”<sup>42</sup> And perhaps this view is not limited to academe. If the U.S. National Register of Historic Places proposed preserving the 89,510 properties it oversees with photographic documentation and then destroying the original buildings to economize on space, the public would be justifiably outraged. As observed by John E. Newhagen, then associate professor in the Philip Merrill College of Journalism at the University of Maryland, “Logic dictates the simple truth that any facsimile is not the same thing as the physical object it represents, no matter how well rendered.”<sup>43</sup>

Yet, for American newspapers held in public institutions, NEH’s constraints on the way grant funding could be spent, coupled with the space-saving sensibility of the Library of Congress and the one-size fits all mentality of the Commission on Preservation and Access, America’s research libraries were predisposed to shoot and discard with impunity. This point was driven home to Dr. Gundersheimer when he contacted the newly established Office of Preservation at NEH to propose treating a number of fragile and irreplaceable materials from the Folger Shakespeare Library’s rare book collection. The immediate and adamant response he received left a lasting impression on him: “It’s not our mission . . . to engage in conservation of individual artifacts. We’re only interested in photographing large series of embrittled materials.”<sup>44</sup> That this national funding situation has not changed merely perpetuates the problem. James Mussell, faculty in the Department of English at the University of Birmingham, UK, recently pointed out that Nicholson Baker’s claim made over a decade ago in *Double Fold: Libraries and the Assault on Paper* — “that the vast majority of original American newspapers, from the 1870s on, has been destroyed and replaced by microfilm — appears to be correct.”<sup>45</sup>

Of course, internationally the situation is different. And even within the U.S., not all original U.S. newspapers were lost. Pockets of historical newspapers survived the clearing out in private hands although remaining runs are now very rare, possibly unique. Now, nearly thirty years since *Slow Fires* helped fan the flames of what today looks like a preservation pandemic, the 6,400-volumes of American newspapers Nicholson Baker purchased with his daughter’s college fund are safely donated to Duke University Libraries, complementing their 10,000 other newspaper titles covering U.S. labor history,

immigrant newspapers in multiple languages, and a large cross section of Southern papers. These materials are shelved in Duke's Library Service Center, a 50-degree F., 30 percent relative humidity storage facility designed to warehouse at capacity nearly nine million volumes.<sup>46</sup> And Duke's Library Service Center is not an anomaly – storing large amounts of information is what research libraries do, whether on servers, in the cloud, or within very large buildings with shelving designed for the task.

### ***Local Initiatives for a National Problem***

Operating on a statewide level, the University of Utah boasts relatively complete sets of the secular *Salt Lake Tribune* (1871-present), the LDS Church owned *Salt Lake Herald* (1870-1920), and other historic newspapers. Acquired following more than a decade of negotiations, these bound papers are currently housed in Coroplast boxes (for the most fragile or damaged volumes) or in polyethylene bags on dedicated shelving within the controlled environment of a standalone storage facility. Extremely fragile unbound runs are protected in groups in cardstock wrappers within the boxes, with the most delicate sheets individually safeguarded within polyester folders. Many of these volumes have been scanned as part of the Utah Digital Newspapers project and will reside in storage in perpetuity.

Working with Utah's newspapers has been edifying. During some periods of the twentieth century the *Salt Lake Tribune* produced five editions per day, and a few issues of the *Salt Lake Herald* were printed on handmade paper produced by the State's first paper mill (called the Sugar Mill because it was located in the area of Salt Lake City called Sugar House).<sup>47</sup> This treasure trove of historical material is anticipated to serve the State of Utah: 1) as leaf masters to address problems that may occur over time with digital surrogates; 2) as source material to meet future scanning requirements (hypothetically, to migrate to three-dimensional imagery or similarly unforeseeable futuristic formats); and, 3) for authentication, when researchers require primary source material to investigate nineteenth and twentieth century journalistic practices during western settlement. Their ongoing intrinsic worth is assured. While not every historic copy needs to be preserved, the conversation should include the understanding that remaining runs today are more rare than copies of the Gutenberg *Bible*. Replacement with best copies as they come available could be a huge improvement over current condition, and awareness that multiple editions existed while only one was microfilmed should influence the evaluation process.

Utah was an early participant in the process of microfilming newspapers. In the 1950s and '60s, runs of newspapers were borrowed from private owners for microfilming and then returned after the microfilm was shot. When feasible, the newspapers were borrowed again during the 1990s and 2000s for digitization to supplement microfilm that was scratched, out of focus, or missing pages, and once again returned to its owners. Today, the long-term responsibility for most of these irreplaceable leaf masters remains in private hands. In many cases, those who lent the papers are the proprietors of small weekly presses who may store them in overly hot backrooms or moist

basement morgues. With the growing ease of searching these newspapers online as a result of the University's Utah Digital Newspapers project, it is easy to imagine these rare newspapers falling into disuse and eventually being discarded – especially as the current generation of printers dies off. One loss of an entire morgue in Utah has already been documented as being caused by digital availability.

Historic newspapers can be difficult to collect because they are fragile, oversized, and require considerable space to house. As the newspaper industry itself struggles to survive in the new digital environment it is likely the morgues of the smaller weeklies will disappear if their owners do not receive immediate and collective help. Working against their survival at this time is the misperception that digital imagery, like microfilm before it, is incorruptible and will last forever. Ms. McCrady was right – Ms. Battin got it wrong. The United States Newspaper Program never included procedures to inventory that quality of what was saved or to evaluate how the future will actually use legacy leaf masters. Is the microfilm that is now the object of record actually legible? Was the hard copy it was copied from complete? Will anyone recognize an opportunity to fill missing gaps or replace illegible digital images if an original volume surfaces as a gift? And why the pressure to decide for all time whether these one-of-a-kind newspapers will be needed again in the future?

The use of original newspapers has just begun to be investigated and future generations will require those materials as exemplars to support digital research and as historical artifacts of a bygone era. Fragile newspapers represent the sole reason microfilm or digital copies were produced in the first place and they continue to serve as irreplaceable exemplars for replication. That many institutions saw fit to throw away their heritage collections in exchange for very expensive, technically inadequate and incomplete surrogates is a shame, a fact the historical record will reflect. Surviving copies still need to be permanently housed in appropriate environmental conditions within institutions capable of managing them in perpetuity. But the public trust has been shaken. It is not enough to shoot high-quality reproductions and ignore the long-term responsibility for what was shot. Who can say when the genuine article may be needed once again to verify and preserve the American legacy? Libraries must get their collection development priorities straight – throw out the general collection if you must, but save the last existing copies of your state's newspaper. Surely, we will need backups.

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<sup>1</sup> Sanders, T. *Slow fires: on the preservation of the human record*. Narrated by Robert MacNeil. Santa Monica, Calif.: American Film Foundation, with support from Council on Library Resources and American Film Foundation, 1987. Videocassette (59 min.): sd., col.; 1/2 in.

<sup>2</sup> Waters, D. J. *From microfilm to digital imagery: on the feasibility of a project to study the means, cost, and benefits of converting large quantities of preserved library materials from microfilm to digital images: a report of the Yale University Library to the Commission on Preservation and Access*. Washington, D.C.: Commission on Preservation and Access, 1991.

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- <sup>13</sup> Conversation in UT, 1994, with chemist Dr. Manfred Anders, now CEO (Geschäftsführer), ZFB Zentrum für Bucherhaltung GmbH, Leipzig, Germany, <http://www.zfb.com/en/home>. A recent email from Dr. Anders (31 January 2014) explained the paper splitting machine has not proven economically viable despite its phenomenal capabilities, although hand paper splitting is still offered.
- <sup>14</sup> Wächter, O. Paper strengthening at the National Library of Austria. 1987, 141.
- <sup>15</sup> Public comment made Minna Kaukonen, Senior Planning Officer, National Centre for Preservation and Digitization, National Library of Finland, in response to a presentation of this paper at the IFLA International Newspapers Conference, Salt Lake City, Utah, 5 February 2014.
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- <sup>17</sup> Public comment made Patrick Fleming, Head of Operations and Services, British Library, in response to a presentation of this paper at the IFLA International Newspapers Conference, Salt Lake City, Utah, 5 February 2014.
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<sup>32</sup> Gwinn, *Preservation microfilming*, 1987: 36.

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