This PDF includes a chapter from the following book:

Reassembling Scholarly Communications

Histories, Infrastructures, and Global Politics of Open Access

The title-level DOI for this work is:

doi:10.7551/mitpress/11885.001.0001

15   Is There a Text in These Data? The Digital Humanities and Preserving the Evidence

Dorothea Salo

The "digital humanities" umbrella shelters scholars curious about novel computer-mediated analysands—software, computer games, works of digital art and literature, social media, online-only forms such as the video supercut, and so forth—as well as scholars applying computational analysis methods to text, image, sound, and video corpora both small and unimaginably large.[1] Nearly all of these scholars discover that fitting their work and its associated evidence into the humanities' present print-centered scholarly communication system—is there a readable, reviewable, (print-)publishable, citable, immutable, preservable *text* in these data?—carries serious challenges. Until the humanities consciously break the hegemony and path dependency of print, digital humanists will remain alienated from the rest of the humanities, preventing the humanities from adopting open processes such as data sharing and open-access publishing. In turn, this harms the reach and sustainability of the humanities as a whole.

How Digital Humanities Changes Humanities Evidence and Its Stewardship

Humanist scholarship relies on a reliable past of carefully preserved cultural materials, reluctant though humanists often are to acknowledge those who do preservation work.[2] Accumulating evidence (not to say "research data," as many humanists find that phrase unintelligible with respect to their own work) is a key task of humanist inquiry, obligatory for responsible publication, since humanist scholarly communication assumes that a scholar may at any time reexamine the evidence adduced by an earlier scholar. Moreover, in recent years many disciplines have strategically embraced data

sharing and open data not only to advance work in the field, but to explain the field to external agents and even to bring such actors into the disciplinary space, as with various "citizen science" initiatives such as Galaxy Zoo. As István Rév notes elsewhere in this volume, obviously evidence cannot always persist or be open to all; wars destroy art; performances not recorded are lost to time; archives contain much sensitive material inappropriate for public dissemination. Yet much analogue evidence is so straightforward to adduce, and so many analogue analysis techniques are wholly contained within the skull of the humanist scholar, that the assumption that past evidence must be available to future scholars tends to go unnoticed.

Digital-humanist modes of research such as the various forms of corpus analysis, however, add significant complexity to the adducing of evidence:[3] What is the corpus? When and how was it collected? What does (and doesn't) it contain? How has it been processed, both prior to and during the research? Should the corpus change or disappear, or the analysis tools become unusable due to technological change, subsequent scholars may reasonably suspect analysis error, bugs in analysis software, or (most troublingly) actual skullduggery to "prove" a point, and those scholars may therefore find themselves wholly unable to check or build on prior scholars' work, a significant hindrance to progress in humanities knowledge.[4]

Unfortunately, digital objects and digital tools are notoriously prone to change or disappearance without warning or trace; this has already been noticed as a scholarly communication problem in the guise of "reference rot."[5] Some digital humanists are fortunate enough to conduct research on digital objects already under responsible stewardship, such as collections of digitized materials or born-digital art from well-run libraries, archives, and museums. For other digital humanists, though, particularly though not exclusively those who build or curate their own digital artefact collections, data disappearance is a daily reality in the absence of significant preservation effort.[6] The World Wide Web, for example, is one object of humanist study, social media another; both resemble Heraclitus's ever-changing river, with the added drawbacks of extreme growth and rapid decay.

Addressing one too-common shibboleth immediately: caring for digital materials, known as "digital preservation" to its practitioners, is not as impossible as it is sometimes portrayed by people who have never done it.[7] Most born-digital and digitized cultural objects are indeed preservable, given appropriate forethought, infrastructure, staff, budget, and a favorable

legal situation—not coincidentally, the identical prerequisites necessary for preservation of analogue cultural objects. Most digital preservation problems, then, are not strictly technological problems, but organizational priority, local infrastructure, and funding problems.[8] One additional vital question not to be ignored, of course, is when digital objects worthy of study can be preserved without doing violence to their creators; scholars of social media, for example, must ethically consider the social vulnerability of many contributors when deciding whether and how to preserve and make accessible collected postings.[9]

A related shibboleth does have considerable truth to it: digital objects and collections thereof rarely reach a clear point of completion or immutability.[10] Print publication, in contrast, is predicated on completion; even revision and reissuance of books are easy to conceive as discrete, bounded projects in time and materials. Print publishers' self-concept and workflows therefore do not easily fit digital-object collection and refinement practices that may never actually end.[11]

Providing open access to preserved materials relevant to humanities research adds additional considerations, often complex and difficult ones. Copyright, of course, looms large, as digitization and digital preservation inherently require making copies. The often-noted cultural abyss into which much twentieth-century culture has fallen owes its existence to unwillingness to incur copyright liability.[12] As April M. Hathcock notes in her chapter, cultural appropriation and colonialism may also block access, as members of the originating cultures object to artefacts of their cultural practices and memories being exploited by outsiders.[13] A related issue with some online collections, from social media to digitized zines, is the unwanted extra attention, even exposure, that open access creates, as Rév also gestures towards.[14]

Print-centered monograph publishers, especially though not exclusively in the humanities, tend to have little internal capacity for digital preservation and zero intent to build any. (Contrast this with science journal publishers, many of which are beginning to consider the preservation and availability of data underlying published papers crucial to those papers' credibility. Science journal publishers also participate in electronic journal preservation networks such as (C)LOCKSS, Portico, and European national-library efforts.) Such monograph publishers have therefore essentially declared outside their purview the preservation of the digital scholarly evidence underlying the digital humanities texts they publish, likely because

preservation of analogue evidence was never their problem and they have not come to grips with how digital methods and analysands change the landscape of humanities evidence. Those publishers who do consider digital preservation part of their operations (for example, those who participate in HighWire Press and similar operations) plan to preserve their own publications only, not the evidence on which those publications rest. Looking to these publishers for digital preservation capacity, then, seems ill-advised.

As for scholarly societies, while the Modern Language Association is taking cautious steps toward digital infrastructure (for example, the MLA's *Humanities Commons* effort, described more fully in Kathleen Fitzpatrick's chapter), which might eventually mean infrastructure for the preservation of digital humanities evidence, most humanities societies have adopted the same out-of-scope stance toward digital preservation as print monograph publishers.

What evidence preservation options remain, and how viable are they? Commercially available storage services such as Dropbox, even when humanists can afford them, are not an acceptable alternative for the long-term preservation of digital scholarship and scholarly evidence. They and the data they hold are vulnerable to buyouts, legal proceedings, poor technology and business management, and complete shutdowns; moreover, they operate on a fee-for-service basis, such that whenever the money stops coming in—as when a scholar retires or passes away—the data are destroyed.[15] One or two independent nonprofit organizations, such as the Internet Archive, operate reasonably trustworthy digital preservation infrastructure at substantial scale, but many humanists' collections of digital objects fall outside such organizations' missions and policies. Law can also be a formidable barrier to preserving and openly sharing twentieth- and twenty-first-century analysands; digital artefacts stored in the United States may be vulnerable to takedown demands under the Digital Millennium Copyright Act, and those stored in Europe that include living identifiable people may be vulnerable to takedown demands under a patchwork of European right-to-be-forgotten laws, 2018's General Data Protection Regulation not least.

Libraries, archives, and museums, major repositories of analogue humanist evidence, are very unevenly prepared and funded to take on the work of preserving digital evidence, leaving many digital humanists with nowhere to turn to preserve their evidence collections.[16] Preservation-related disparities among libraries particularly are of long standing due to historically

uneven assignment of responsibility for preservation of analogue materials. For the most part, only academic libraries at research-intensive institutions consider long-term print preservation within their mission, for example.[17] Other academic libraries, outside whatever special collections they have, design and arrange their collections for immediate use and discard unused or outdated volumes accordingly—at dark of night if necessary, to avoid humanist faculty who appear to believe physical shelf space infinite and all printed codices of infinite value—without considering the larger scholarly record.[18] Public libraries may have small unique local history collections (often in the form of physical "vertical files"), but these typically represent the whole of their commitment to preservation.

This pattern of preservation capacity disparity only intensifies with respect to digital preservation, with the added wrinkle that even libraries at research-intensive institutions do not always consider digital preservation a priority,[19] often scared off from doing so by the immense scale of the human and financial investment required[20] or unable to overcome internal staff resistance.[21] The startlingly few research libraries and library consortia that have bravely waded in find that they "continue to struggle to find scalable approaches to offering open, shared, sustainable scholarly infrastructure," especially in "the data publishing and research data management space where institution-focused approaches to capturing and curating data may be hindering our ability to grow adoption by our researchers."[22] Worse yet, hardly any libraries in teaching-focused institutions have built the sort of flexible, large-capacity, scholar-centric preservation infrastructure and associated staff necessary to solve the problem of preserving and usefully presenting the broad variety of evidence their local digital humanists may collect.

Such services as are fairly commonly (though far from universally) available across academic libraries—institutional repositories, perhaps digitized local collections on a platform such as ContentDM or Omeka—occasionally work well enough, but they are technologically insufficient to present many humanists' evidence collections usefully, which (quite reasonably) discourages humanists from using them to help safeguard those collections.[23] Moreover, some libraries' policies around which content is acceptable to add to these platforms exclude digital humanists' evidence collections. Institutional repository software also tends to share with print publishers an unshakable but often-wrong notion of digital-object and digital-collection fixity and finality.

Central campus IT never has an adequate digital preservation solution, rarely if ever considering digital preservation part of its mission. The central problem is that digital preservation goes far beyond mere provisioning of digital *storage*, just as analogue conservation and preservation require far more than mere shelf space. Assessment, technical and descriptive metadata, access controls (that may change over time), file format management, geographic replication, intellectual property management, human subjects ethics, financial planning, organizational management, and disaster planning may all form part of a digital object's lifecycle.[24] IT departments that only understand storage and backup cannot be trusted with digital preservation on their own and must be approached about it with caution and clarity;[25] one need only examine the disappearance of digital records from two entire gubernatorial administrations in Maine to understand the dangers of uncritical trust.[26] Campus IT departments in particular commonly make three classic digital preservation errors: assuming that only tenured or tenure-track faculty (not graduate students, visitors, or adjuncts) have digital objects to preserve; considering storage and backup the whole of the problem (as Maine's IT department unfortunately did); and (like for-profit cloud-storage companies) deciding on perpetual-payment business models that discard digital objects as soon as money stops coming in to preserve them.[27]

In the presence of insufficient or even nonexistent support from the campus library and campus IT, then, digital humanists' challenge of securing digital preservation for the products they create and the evidence they collect often reduces to a problem of voice and numbers. Most institutions investing anything at all in the digital humanities have only one to a mere handful of digital humanists on the faculty. These paltry few face the Sisyphean task of successfully persuading their library, campus IT organization, and campus administrators to allocate significant money and staff toward digital preservation. Such an appeal typically only happens in the first place if digital humanists are already lucky enough to have access to basic computing and support, which is often not the case.[28] Digital humanists find themselves countered, not to say opposed, in their efforts to secure support and funding by a much greater number of faculty humanists not identifying with the digital humanities, who think of libraries only as print-book purveyors[29] and believe products of digital culture barely or not at all worth preserving,[30] parallel to historic reactions to the advent in the West of printed codices (as opposed to scribed manuscripts), photography, film, television, and comics/graphic novels.

The considerable up-front expense and effort involved in bootstrapping, never mind sustaining and growing, a digital preservation program only worsens digital humanists' persuasion challenge. Grant funding, project-based as it generally is, is not well suited to solving longer-term sustainability and infrastructural problems.[31] In fact, many grant-funded digital humanities projects wholly disappear not long after the grant money runs out.[32] The National Endowment for the Humanities' (NEH) Office of Digital Humanities has tried to create some digital preservation impetus by creating an analogue to the National Science Foundation's data management plan requirement for grant applications[33] but neither holds applicants to any plan quality standards nor assesses post-grant outcomes. Institutions and libraries not already implementing digital preservation infrastructure—which is nearly all of them—have to date ignored the NEH's provocation.

Whether humanists can preserve their collections of digital evidence for future scrutiny, then, depends neither on the intrinsic quality or usefulness of the collection nor on the eminence of the scholars or their research work, but on local campus priorities. Research institutions are much more likely to have appropriate technical and legal infrastructure, digital librarians, and archivists, and funding earmarked for preservation of locally grown digital materials than are teaching-focused institutions. Not even research institutions can universally be relied upon, however, and when they can, they focus exclusively on the work of their own local faculty. Efforts to redress these and similar disparities via collective infrastructure planning have thus far failed in the US, though Project Bamboo's dissolution at least taught some valuable lessons,[34] and several European countries and Australia have managed better. Until the patchwork, sparse availability of digital preservation capacity is addressed, however, the present text-bound scholarly communication system cannot guarantee digital humanists' ability to retrace their steps and to build on prior work—an ability taken for granted by other humanists due to the analogue preservation efforts of archives, museums, and research libraries.

How Humanities Publication Practices Enforce Text Hegemony

The present system of humanist scholarly communication relies on print monographs, mostly print journals, and their publishers. With the some-time exception of performing and visual artists, humanists publish *texts*, a form forced on them by publishers who publish little or nothing else, and

tenure and promotion systems that value little or nothing else.[35] Unless and until this situation changes, the humanities not only do not but *cannot* welcome or support digital humanities scholars. Shutting down novel humanities methods as well as humanities study of digital analysands is no way to ensure a generative future for the humanities.

Not only do many humanists still insist on print publication of text, they insist that not just any print publisher will do, requiring publication through a highly circumscribed set of market-based actors: often though not always corporate, often though not always for-profit or required to recover some or all costs from sales.[36] Much though many humanities publishers such as university presses try to remain mission-driven, their mission alone cannot keep them in operation, especially as operational subsidies from institutions dry up;[37] they must have a steady flow of author manuscripts and sold books. This imperative, alongside near-unshakable humanist notions of prestige, creates a collective intellectual and process monopoly fenced in by copyright law and tenure and promotion systems.[38] What chance has digital dissemination of scholarship, much less open access, against a system so deeply entrenched? Yet without digital dissemination and open access, how do the humanities avoid writing themselves into a remote inaccessible powerless corner? Already, print runs for humanities monographs have sunk to the dozens from the thousands.[39]

Because of the insistence on print publication by humanities internal career processes, the *digital* humanities have been unable to step away from print; a handful of respected digital-only journals such as *Digital Humanities Quarterly* aside. Not a few tenure-track digital humanists shoulder the doubled research burden of writing a print monograph or a set of journal articles over and above their digital humanities research output solely because of books' and articles' intelligibility as research products to tenure and promotion committees.[40] Digital humanists' nontextual research products, which may be software code, digitized or born-digital artefact collections, websites, or novel analysis methods or workflows, are usually not even printable, if printable at all, without loss of function. Print publishers therefore rarely know what to do with these non-texts, save reject them outright or reduce them to clumsy approximations such as "case studies."

Unable or unwilling to expand their genre and form horizons, senior humanist scholars reproduce print's hegemony for future generations by demanding that their graduate students' dissertations adhere to

print-friendly research projects and publishing modalities. In several humanities fields, the main question hanging over a dissertation is whether it can be "turned into a [print] book" on which to found a tenure-track academic career. This prevents digital humanities dissertators from choosing a digital form in which to present their research even when digital forms best suit the work.[41] Moreover, much dubiously sourced folklore claims a negative impact of open dissertation dissemination on future publishability;[42] many dissertation advisors, and even entire scholarly societies such as the American Historical Association, therefore advise dissertators against making their dissertations openly accessible.[43] This has slowed the adoption of open access not only in the humanities, but across academe altogether, as open dissemination of dissertations at several higher education institutions are delayed or even halted due to objections from humanists.[44]

It is hard to blame senior scholars for enforcing print hegemony, however, when those responsible for hiring, tenure, and promotion decisions in the humanities and at the institutional level freeze like deer in headlights when deprived of simplistic text-based achievement heuristics of the "publish one or two print monographs with reputable presses" ilk.[45] Both peer reviewers and tenure committees complain incessantly of inability to judge and value non-texts.[46] The Modern Language Association's (MLA) response, Guidelines for Evaluating Work in Digital Humanities and Digital Media, far from improving matters, is a stark demand that digital humanists make non-texts intelligible to colleagues still textually bound.[47] These guidelines explicitly invite evaluation committees to dump the work of intelligibility onto digital humanists, abandoning any responsibility to learn about digital humanities research and its products. For example, the first requirement listed for committees is to "delineate and communicate responsibility"— not the committees' own responsibility to learn to read and assess their digital-humanist colleagues' non-text forms, but the *digital humanists*' responsibility to shoehorn their work into some form intelligible to the committee. Moreover, committees must "engage qualified reviewers," a curious and dismaying admission that many humanists are unqualified to review non-text digital forms, presumably because humanities disciplines do not require that humanists learn to read or appreciate them. Digital humanists themselves must, per these guidelines, "ask about evaluation and support," which for textual forms is taken for granted. They must also "negotiate and document [their] role in the non-text product"—also taken

for granted with print forms, despite the resulting lamentable erasure of print production labor[48]—and, in a remarkable example of text forcing its way back into the not wholly textual, "document and explain [their] work." Sometimes all this extra explanatory work accomplishes nothing, as a committee reallocates digital humanities work to "service" instead of research.[49]

Why is it invariably digital humanists' burden to explain their non-text research output, rather than their colleagues' responsibility to learn to understand it and the research modes that produce it? Surely a set of disciplines that (per the MLA's mission statement) "facilitates scholarly inquiry in and across periods, geographic sites, genres, languages, and disciplines in higher education that focus on communication, aesthetic production and reception, translation, and interpretation" should be better prepared to cope with more forms and media than print alone?

Conclusion

Publisher intransigence, library unpreparedness, and unshakable humanist allegiance to print forms of research communication distort scholarly communication systems in ways that disadvantage digital humanists and prevent migration to opener and likely more sustainable digital modes of publication and dissemination. This, in turn, isolates and disadvantages the humanities both within and outside the academy. Exactly how the humanities in general and the digital humanities specifically will break out of this untenable box remains unclear. Until they do, however, the monograph crisis will intensify, digital humanists will continue fleeing the academy for fairer, greener pastures, and the humanities will impoverish their own future.

Notes

1. My thanks to Martin Paul Eve for his interest in the idea behind this piece, to Margaret Smith for advice, and to the anonymous peer reviewers for their helpful suggestions and comments. Remaining errors and infelicities are of course mine.

2. Michelle Caswell, "'The Archive' Is Not an Archives: On Acknowledging the Intellectual Contributions of Archival Studies," *Reconstruction: Studies in Contemporary Culture* 16, no. 1 (2016), https://escholarship.org/uc/item/7bn4v1fk.

3. Alex H. Poole, "Now Is the Future Now? The Urgency of Digital Curation in the Digital Humanities," *Digital Humanities Quarterly* 7, no. 2 (2013).

4. For more on this, see Nan Z. Da, "The Computational Case against Computational Literary Studies," *Critical Inquiry* 45, no. 3 (2019): 601–639, https://doi.org/10.1086/702594.

5. Mia Massicotte and Kathleen Botter, "Reference Rot in the Repository: A Case Study of Electronic Theses and Dissertations (ETDs) in an Academic Library," *Information Technology and Libraries* 36, no. 1 (2017): 11–28, https://doi.org/10.6017/ital.v36i1.9598.

6. Trevor Muñoz and Allen Renear, "Issues in Humanities Data Curation" (Humanities Data Curation Summit, Palo Alto, CA, 2010), http://cirss.ischool.illinois.edu/paloalto/whitepaper/.

7. Such as Vinton Gray Cerf, "On Digital Preservation" (Heidelberg Laureate Forum, Heidelberg, 2013), https://www.heidelberg-laureate-forum.org/laureate/vinton-gray-cerf.html.

8. Blue Ribbon Task Force on Sustainable Digital Preservation and Access, "Sustaining the Digital Investment: Issues and Challenges of Economically Sustainable Digital Preservation," December 2008, http://brtf.sdsc.edu/biblio/BRTF_Interim_Report.pdf.

9. Steven Bingo, "Of Provenance and Privacy: Using Contextual Integrity to Define Third-Party Privacy," *The American Archivist* 74, no. 2 (2011): 506–521, https://doi.org/10.17723/aarc.74.2.55132839256116n4.

10. Matthew G. Kirschenbaum, "Done: Finishing Projects in the Digital Humanities," *Digital Humanities Quarterly* 3, no. 2 (2009), http://www.digitalhumanities.org/dhq/vol/3/2/000037/000037.html.

11. Trevor Muñoz, "Data Curation as Publishing for the Digital Humanities," *Journal of Digital Humanities* 2, no. 3 (2013), http://journalofdigitalhumanities.org/2-3/data-curation-as-publishing-for-the-digital-humanities/.

12. Julia Fallon and Pablo Uceda Gomez, "The Missing Decades: The 20th Century Black Hole in Europeana," Europeana Pro, November 13, 2015, https://pro.europeana.eu/post/the-missing-decades-the-20th-century-black-hole-in-europeana.

13. Amy E. Earhart, "Do We Trust the University? Digital Humanities Collaborations with Historically Exploited Cultural Communities," in *Bodies of Information: Intersectional Feminism and Digital Humanities*, ed. Elizabeth Losh and Jacqueline Wernimont (Minneapolis: University of Minnesota Press, 2018), 369–390.

14. Tara Robertson, "Not All Information Wants to Be Free: The Case Study of On Our Backs," in *Applying Library Values to Emerging Technology: Tips and Techniques for Advancing within Your Mission*, ed. Kelly Tilton and Peter Fernandez (Washington, DC: Association of College and Research Libraries, 2018), 225–239.

15. Jon Brodkin, "Kim Dotcom: Megaupload Data in Europe Wiped out by Hosting Company," Ars Technica, June 19, 2013, https://arstechnica.com/tech-policy/2013/06/kim-dotcom-megaupload-data-in-europe-wiped-out-by-hosting-company/.

16. Malina Thiede, "Preservation in Practice: A Survey of New York City Digital Humanities Researchers—In the Library with the Lead Pipe," *In the Library with the Lead Pipe* (blog), May 17, 2017, http://inthelibrarywiththeleadpipe.org/2017/preservation-in-practice-a-survey-of-new-york-city-digital-humanities-researchers/.

17. Deanna Marcum, "Due Diligence and Stewardship in a Time of Change and Uncertainty" (New York: Ithaka S+R, April 26, 2016), https://doi.org/10.18665/sr.278232.

18. Lizanne Payne, "Winning the Space Race," American Libraries Magazine, September 23, 2014, https://americanlibrariesmagazine.org/2014/09/23/winning-the-space-race/.

19. Gail McMillan, Matt Schultz, and Katherine Skinner, "Digital Preservation, SPEC Kit 325" (Association of Research Libraries, 2011), https://publications.arl.org/Digital-Preservation-SPEC-Kit-325/.

20. Jennifer Howard, "Born Digital, Projects Need Attention to Survive," *The Chronicle of Higher Education*, January 6, 2014, https://www.chronicle.com/article/Born-Digital-Projects-Need/143799.

21. Dorothea Salo, "How to Scuttle a Scholarly Communication Initiative," *Journal of Librarianship and Scholarly Communication* 1, no. 4 (2013), https://doi.org/10.7710/2162-3309.1075.

22. John Chodacki, "Community-Owned Data Publishing Infrastructure," *UC3: California Digital Library* (blog), October 24, 2018, https://uc3.cdlib.org/2018/10/24/community-owned-data-publishing-infrastructure/.

23. Dorothea Salo, "Innkeeper at the Roach Motel," *Library Trends* 57, no. 2 (2008): 98–123, https://doi.org/10.1353/lib.0.0031.

24. Alexander Ball, "Review of Data Management Lifecycle Models," February 13, 2012, https://researchportal.bath.ac.uk/en/publications/review-of-data-management-lifecycle-models.

25. Scott Prater, "How to Talk to IT about Digital Preservation," *Journal of Archival Organization* 14, no. 1–2 (2017): 90–101, https://doi.org/10.1080/15332748.2018.1528827.

26. Colin Woodward, "Huge Number of Maine Public Records Have Likely Been Destroyed," *Press Herald* (blog), December 30, 2018, https://www.pressherald.com/2018/12/30/huge-number-of-maine-public-records-have-likely-been-destroyed/.

27. See, for example, "Bucky Backup Archive" at https://it.wisc.edu/services/backup-bucky-backup/ which commits all these errors in addition to inappropriately pretending to be a genuine digital archive.

28. Janet Broughton and Gregory A. Jackson, "Bamboo Planning Project: An Arts and Humanities Planning Project to Develop Shared Technology Services for Research," January 16, 2008, https://wikihub.berkeley.edu/display/pbamboo/Proposals+to+the+Andrew+W+Mellon+Foundation.

29. Christine Wolff, Alisa Rod, and Roger Schonfeld, "Ithaka S+R US Faculty Survey 2015" (New York: Ithaka S+R, April 4, 2016), https://doi.org/10.18665/sr.277685.

30. Nicholson Baker, *Double Fold: Libraries and the Assault on Paper* (New York: Random House, 2002).

31. Miriam Posner, "Money and Time," *Miriam Posner's Blog*, March 13, 2016, http://miriamposner.com/blog/money-and-time/.

32. Broughton and Jackson, "Bamboo Planning Project"; Quinn Dombrowski, "What Ever Happened to Project Bamboo?," *Literary and Linguistic Computing* 29, no. 3 (2014): 326–339, https://doi.org/10.1093/llc/fqu026.

33. National Endowment for the Humanities, "Data Management Plans for NEH Office of Digital Humanities Proposals and Awards," 2017.

34. Dombrowski, "What Ever Happened to Project Bamboo?"

35. Stacy Konkiel, "Approaches to Creating 'Humane' Research Evaluation Metrics for the Humanities," *Insights: The UKSG Journal* 31 (2018), https://doi.org/10.1629/uksg.445.

36. Geoffrey Crossick, "Monographs and Open Access: A Report for the Higher Education Funding Council for England," Higher Education Funding Council for England, 2015, https://dera.ioe.ac.uk/21921/.

37. Roger C. Schonfeld, "A Taxonomy of University Presses Today," 2017, http://www.sr.ithaka.org/blog/a-taxonomy-of-university-presses-today/.

38. Donald A. Barclay, "Academic Print Books Are Dying: What's the Future?," *The Conversation* (blog), November 10, 2015, https://theconversation.com/academic-print-books-are-dying-whats-the-future-46248.

39. Carl Straumsheim, "Amid Declining Book Sales, University Presses Search for New Ways to Measure Success," Inside Higher Ed, August 1, 2016, https://www.insidehighered.com/news/2016/08/01/amid-declining-book-sales-university-presses-search-new-ways-measure-success; although Crossick, "Monographs and Open Access: A Report for the Higher Education Funding Council for England" comes to a different conclusion.

40. Sydni Dunn, "Digital Humanists: If You Want Tenure, Do Double the Work," Vitae, January 5, 2014, https://chroniclevitae.com/news/249-digital-humanists-if-you-want-tenure-do-double-the-work.

41. Denise Troll Covey, "Opening the Dissertation: Overcoming Cultural Calcification and Agoraphobia," *TripleC: Communication, Capitalism & Critique* 11, no. 2 (2013): 543–557, https://doi.org/10.31269/triplec.v11i2.522.

42. Jill Cirasella and Polly Thistlethwaite, "Open Access and the Graduate Author: A Dissertation Anxiety Manual," in *Open Access and the Future of Scholarly*

Communication: Policy and Infrastructure, ed. Kevin L. Smith and Katherine A. Dickson (Lanham, MD: Rowman & Littlefield, 2016), 203–224.

43. American Historical Association, "Statement on Policies Regarding the Embargoing of Completed History PhD Dissertations," Perspectives on History, July 22, 2013, https://www.historians.org/publications-and-directories/perspectives-on-history/summer-2013/american-historical-association-statement-on-policies-regarding-the-embargoing-of-completed-history-phd-dissertations.

44. Andrea L. Foster, "U. of Iowa Reverses New Policy That Would Have Made Nearly All Theses Freely Available Online," *The Chronicle of Higher Education*, March 18, 2008, https://www.chronicle.com/article/Students-Protect-Their-Novels/601.

45. Matthew McAdam, "Deans Care About Books," Infernal Machine, March 5, 2018, https://hedgehogreview.com/blog/infernal-machine/posts/deans-care-about-books.

46. For examples, see the cluster of articles in "Profession," MLA Journals, 2011, https://www.mlajournals.org/toc/prof/2011/1.

47. Modern Language Association of America, "Guidelines for Evaluating Work in Digital Humanities and Digital …," Modern Language Association, 2012, https://www.mla.org/About-Us/Governance/Committees/Committee-Listings/Professional-Issues/Committee-on-Information-Technology/Guidelines-for-Evaluating-Work-in-Digital-Humanities-and-Digital-Media.

48. Kathleen Fitzpatrick, *Planned Obsolescence: Publishing, Technology, and the Future of the Academy*, New York: New York University Press, 2011, 57–60.

49. Sean Takats, "A Digital Humanities Tenure Case, Part 2: Letters and Committees," *The Quintessence of Ham* (blog), February 7, 2013, http://quintessenceofham.org/2013/02/07/a-digital-humanities-tenure-case-part-2-letters-and-committees/.