interesting and useful to read about research from the perspective of a "digital native"—someone who had no recall of doing research without first checking online. The authors also little acknowledge that many people—especially those with a passion project rather than a professional mandate—rely on the digital world because they cannot afford the time or money to take research trips such as the ones described in *Curiosity's Cats*.

As an archivist who does reference, I appreciate that this book is not meant to be instructional—it is not about how to provide good assistance—but rather shows a user-side view of the joys and frustrations of trying to find information, of suspecting that a fact is floating out there that you have not quite managed to pin down yet. Archivists can learn lessons from it, particularly about how researchers look to us for guidance but can easily lose faith in our abilities. It is also instructive to remember that displaying enthusiasm for a researcher's work can help him or her along. Perhaps most important, *Curiosity's Cats* underscores the relevance of archives.

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The Evolving Scholarly Record

Stewardship of the Evolving Scholarly Record: From the Invisible Hand to Conscious Coordination

In the predigital era, archivists may have felt alone on an island advocating for the preservation of the cultural record. Archival programs were often marginal to the mission of the institutions they were charged with documenting. In recent years, however, the increase in born-digital content has come together conveniently with users' growing demands for ways to leverage data sets and other products that aid in scholarship and research. Librarians who are liaisons

to faculty, metadata specialists, computer programmers, and others are now as anxious about the sustainability of unpublished or semipublished records as archivists have long been. It's become a crowded island.

In reaction to, and to help shape discussions about, this recent focus on a scholarly record that is virtually all born digital, OCLC Research has published two reports that archivists would do well to note. *The Evolving Scholarly Record* (2014) and the subsequently disseminated *Stewardship of the Evolving Scholarly Record: From the Invisible Hand to Conscious Coordination* (2015) provide a starting point for all kinds of information professionals to conceptualize what comprises the scholarly record and what the challenges are in capturing, managing, and providing access to it. Unfortunately, while archivists will be very familiar with the concepts these two reports introduce, they do not acknowledge the archival tradition that could inform discussions about stewardship of this content.

The Evolving Scholarly Record opens by neatly describing the sea change we're experiencing. While in the past, "the scholarly record was largely defined by the formally published monographic and journal literatures," this definition has grown to include the "raw materials" of the scholarly process, including data sets, blog posts, and other unpublished or semipublished materials (2014, pp. 6, 11). Those tasked with capturing the scholarly record confront not just a proliferation of formats, but also unclear ownership of these materials; custody spread across multiple, often proprietary, platforms; and the sheer volume of materials being produced all frustrate easy solutions to effective stewardship. If the content itself does not pose enough of a challenge, demand from scholars to steward it has intensified, as end users sense the value of these materials despite their "weightlessness" (an adjective that OCLC cleverly borrows from economic theory) (2015, p. 5).

To help its readers better understand all the forces at play when stewarding the scholarly record, OCLC has created a very useful graphical model (2014, p. 10). Words will not do it justice, but in short, "process," or the inputs that create "outcomes," cause the "aftermath" of discussion and further research. Credit goes to OCLC for attempting to make concrete its concept by listing examples of formats for each component of its framework; examples of "process" materials include data sets and methods that inform a project; "outcomes" can include print or e-journals; "aftermath" may reflect blog posts discussing the scholarly outcome and even more research. *The Evolving Scholarly Record* even goes so far as to provide some examples of instantiations of this content: ArXiv.org, Dryad, a particular researcher's blog, and so forth. Perhaps unintentionally, the examples reveal the report's limited understanding of what the scholarly record might be, as all of these materials are at least semipublished and, crucially, reflect intent from the creator to disseminate.

What might the scholarly record include, then, if not just the content types that OCLC lists? Stewards of the scholarly record would do well to look at past literature on documenting science, such as Woolgar and Latour's 1979 book, *Laboratory Life: The Construction of Scientific Facts*.[1] The research team's landmark study was to create an anthropology of the scientific method, shadowing scientists at the Salk Institute to observe closely their daily activities. Woolgar and Latour found that science does not unfold in a purely rational, logical manner, but instead is heavily informed by unintentional compromises that are often unconscious to the researcher. *Laboratory Life* is essential reading for all information professionals serious about documenting the scholarly record comprehensively and inclusively.[2] Woolgar and Latour would likely disagree with the implication in the OCLC reports that the creators of science can define, and therefore limit, what is the scholarly record. (The authors might also find helpful their colleague Jackie Dooley's 2015 report for OCLC Research, *The Archival Advantage: Integrating Archival Expertise into Management of Born-digital Library Materials*, which explores the myriad skills archivists bring to stewardship of born-digital content.[3])

Another very useful diagram that *The Evolving Scholarly Record* introduces is the "Stakeholder Ecosystem," which outlines the four main activities surrounding production of this newly inclusive scholarly record: create, use, collect, and fix (2014, p. 16). When understood as sequential activities, this model will remind archivists of the records life-cycle concept, in which a record is created ("create"), used by someone ("use"), acquired by an archives once it is no longer actively used ("collect"), and preserved by the archives in perpetuity ("fix"). "Collect" and "fix" are clearly activities that stewards of the scholarly record would prioritize; for a scholarly record to be used, it must first be captured and preserved in a way that will maximize its use. "Create" and "use" are activities prioritized by end users. The authors note that evolutions in scholarly production can lead to one or more of these activities being bypassed; for example, a scholar may create and use materials without making arrangements to have them collected or fixed; a third-party system may collect without fixing (i.e., taking appropriate preservation actions on) the record; and other scenarios. The challenge for stewards of the scholarly record is to determine how they can regularly integrate themselves into these activities so that the record can be preserved for future use.

As discussed earlier, both *The Evolving Scholarly Record* and *Stewardship of the Evolving Scholarly Record* consider a variety of challenges facing stewards of the scholarly record, most of which will be very familiar to the archives community. In addition to the proliferation of formats and the abundance of volumes mentioned before, the authors reference "channels that bypass formal publication venues" and the need to capture this content, the acknowledgment that the

"aftermath" phase often includes people who are not the creator(s) of the initial outcome and the accidental or intentional circumvention of the "fix" and "collect" stages so essential for sustaining the scholarly record (2015, p. 10). Perhaps the most curious assertion in both reports is the claim that a distinction must be made between the "scholarly" record and the "cultural" record. *The Evolving Scholarly Record* notes this without explanation, so one is left to conjecture what the authors mean by this point. Perhaps they are arguing that some products of the scholarly process are important but do not merit inclusion in what suddenly is presented as a narrow definition of the scholarly record. More justification would need to be provided for followers of Woolgar and Latour, who would likely say that all products of the scholarly process are important to analyzing and understanding the conditions under which scholarly outcomes come to be.

The Evolving Scholarly Record and *Stewardship of the Evolving Scholarly Record* are likely to elicit ambivalent responses from the archives community. On the one hand, the valuable service OCLC has provided in summarizing and deepening understanding about a major issue of interest to the field should not be ignored. The authors' diagrams are clear, inclusive as intended to be applied "across domains," and instructive (2014, p. 6). The enumeration of types of scholarly records in *The Evolving Scholarly Record* further helps to solidify understanding of the conceptual model to the point where a reader might be substantively prepared to take action on stewardship in a meaningful way. *Stewardship of the Evolving Scholarly Record* expands on the concepts the previous publication only touched, detailing real-world challenges such as the creation of service-level agreements, division of responsibilities in cooperative arrangements, and the development of "robust trust networks" to give the public confidence in the institutions taking on stewardship duties (2015, p. 26).

On the other hand, in the end, it is troubling to encounter a failure to acknowledge the centuries-old body of knowledge that archivists bring to this issue. Anxious statements that "choices will have to be made" would be readily informed by our tradition of appraisal (2014, p. 22). "New" models seem not-so-new when compared to the records life cycle. And statements like "the "paper trail" of science will be captured in ways it never has been before" will undoubtedly raise eyebrows from archivists who have been preserving the records of scientists for at least fifty years (one can start with books on documenting science by Maynard Brichford and Joan Haas et al. to get a sense of the discussions that came long before conversations about "big data") (2014, p. 11).[4] Archivists are no longer alone on an island, but they risk being cast out to sea if they do not find ways to play a central role in discussions about the stewardship of the scholarly record.

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Notes

1   Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts* (Princeton, N.J.: Princeton University Press, 1986).

2   Christopher J. Prom gave a succinct overview of the volume in a 2013 "Digital Dialogues" presentation at the Maryland Institute for Technology in the Humanities (MITH). See "Documenting Science in the Digital Age: What's the Same and What's Different," Maryland Institute for Technology in the Humanities, http://mith.umd.edu/podcasts/ chris-prom-documenting-science-digital-age-whats-whats-different.

3   Jackie Dooley, *The Archival Advantage: Integrating Archival Expertise into Management of Born-digital Library Materials* (Dublin, Ohio: OCLC Research, 2015), http://www.oclc.org/content/dam/research/ publications/2015/oclcresearch-archival-advantage-2015.pdf.

4   Maynard Brichford, *Scientific and Technological Documentation: Archival Evaluation and Processing of University Records Relating to Science and Technology* (Urbana: University of Illinois at Urbana-Champaign, 1969); Joan K. Haas, Helen Willa Samuels, and Barbara Trippel Simmons, *Appraising the Records of Modern Science and Technology* (Cambridge, Mass.: MIT, 1985).

Dissonant Archives: Contemporary Visual Culture and Contested Narratives in the Middle East

Edited by Anthony Downey. London: I.B. Tauris and Co. Ltd, 2015. 469 pp. Softcover. $28.00. Illustrations (some color). ISBN 978-1-78453-411-0.

The late Egyptian writer Naguib Mahfouz (1911–2006) asserted that you can tell whether a man is clever by his answers and wise by his questions. In *Dissonant Archives: Contemporary Visual Culture and Contested Narratives in the Middle East*, academic, writer, and editor Anthony Downey presents the writings, interviews, and original artwork of acclaimed academics, curators, activists, filmmakers, and artists. By turns clever and at all points wise, these practitioners have produced work that not only creatively engages the heterogeneity of archived cultural production across the Arab world, but also astutely posits important questions for archival science. These sage queries oblige archivists to reconsider their professional practices (p. 14). To illustrate, are archivists open to the dissonant revelations about their profession created by artists whose artistic practice produces work imbued with suppositional visions of the future and explores alternative, interrogative, or even fictional forms of the athenaeum? Alternatively, why have contemporary artists developed a dominant aesthetic strategy committed to working with archives? In seventeen thought-provoking essays and two large inserts featuring artwork created by artists who utilized archival materials from Iraq, Israel, Lebanon, Afghanistan, Tunisia, Algeria, Morocco, Syria, Jordan, Turkey, Egypt, Pakistan, and Palestine, Downey endeavors to show how contemporary artists attempt to provide astute answers to the