

# Schellenberg in Cyberspace

Linda J. Henry

## Abstract

In the last few years, advocates of the ideas of David Bearman have written that archivists need a "new paradigm" for electronic records. The new ideas would change or overturn traditional archival theory and practice, as represented by T.R. Schellenberg and the first writers about electronic records. This article discusses several of the new ideas and the differences between traditional archival writers and those who support a new paradigm for electronic records.

For the last two decades, archivists have struggled with the challenges presented by electronic records. The first writers about electronic records believed that archivists could apply traditional archival theory and practice to records in electronic format. In the last few years, however, some writers have argued that the very nature of electronic records requires archivists to adopt new ideas that would change or overturn traditional archival principles. Archivists trained in and practicing traditional archival theory and practice, as represented by the writings of Theodore R. Schellenberg, can find the new ideas confusing and unsettling. They well may ask, whatever happened to Schellenberg and informational value? This article assesses the new ideas regarding electronic records with reference to Schellenberg and traditional archival theory, practice, and literature, but also draws on contemporary writings that oppose the adoption of new archival theory and practice specific to electronic records.

## Background

As archival practitioner, theorist, and writer, Theodore R. Schellenberg (1903-1970) influenced and continues to influence generations of archivists, particularly in the United States. Schellenberg and colleagues at the National

*This article is a revised and expanded version of a paper presented on 28 August 1997 at the annual meeting of the Society of American Archivists held in Chicago. The author thanks Bruce Ambacher especially, and Tom Brown, Mark Conrad, and other colleagues at the Center for Electronic Records for suggestions and support; Nancy Sahli for editing assistance; and Alan Kowlowitz for the title of the paper. This article does not necessarily represent their views or those of the National Archives and Records Administration.*

Archives, such as Philip C. Brooks and G. Philip Bauer, drew on European archival theories, but they found it necessary to revise and develop new archival concepts in order to manage great masses of records. In 1934 the newly created National Archives inherited an enormous backlog of records. The expansion of federal agencies in the 1930s and 1940s only exacerbated the problems of dealing with a large volume of records. Schellenberg's synthesis of concepts of appraisal—emphasizing the primary and secondary uses of records and evidential and informational values—offered an approach to managing voluminous amounts of records. One concept, imaginative for its time, shifted the focus of appraisal from records proposed for destruction to the identification of permanently valuable records. In urging that archivists work with creating agencies early in the life cycle of records, Schellenberg emphasized the importance of records management. He thus foreshadowed writings of forty years later about electronic records. In addition, Schellenberg argued for the standardization of such archival functions as arrangement, description, and reference. Furthermore, he broke new ground in advocating that the principles and techniques for managing public records also could apply to private records and manuscript collections. For decades, Schellenberg's principles and techniques shaped the training of American archivists, while translations of his publications reached audiences beyond North America. His concepts formed what American archivists have long regarded as the “traditional” approach to archival work.<sup>1</sup>

In the second half of the twentieth century, the issue of voluminous modern records became an even greater problem than when Schellenberg first focused on it. The development of computers promised to reduce the physical bulk of records, given the great storage capacity of electronic media, but it also presented new problems. The practitioners dealing with electronic records in the 1970s were the first to address the issues of the relevance and applicability of archival concepts and principles to this new genre of records. Drawing upon both their archival training and their experiences with electronic records, these writers determined that traditional approaches were

<sup>1</sup> Ole Kolsrud, “The Evolution of Basic Appraisal Principles,” *American Archivist* 55 (Winter 1992): 35–36; Donald R. McCoy, *The National Archives: America's Ministry of Documents, 1934–1968* (Chapel Hill: University of North Carolina Press, 1978), 179–82; Jane Smith, “Theodore R. Schellenberg: Americanizer and Popularizer,” *American Archivist* 44 (Fall 1991): 316, 322–25. Schellenberg's major works are: *Modern Archives: Principles and Techniques* (Chicago: University of Chicago Press, 1956); *Modern Archives; The Management of Archives* (New York: Columbia University Press, 1965); and *The Appraisal of Modern Public Records*, National Archives Bulletin 8 (Washington, D.C.: National Archives, 1956). When I refer to Schellenberg in this article, I am also including the other U.S. National Archives pioneers with whom he developed his concepts. See, for example, Philip C. Brooks, “The Selection of Records for Preservation,” *American Archivist* 3 (October 1940): 221–34 and G. Philip Bauer, *The Appraisal of Current and Recent Records*, Staff Information Circular #13 (Washington, D.C.: National Archives, 1946), 1–25. The National Archives in this article refers to the National Archives of the United States. The National Archives was established in 1934. In 1949 it became the National Archives and Records Service, part of the General Services Administration. In 1985 it became an independent agency again, the National Archives and Records Administration.

valid and useful with the new media, although some new procedures would be necessary.

The first electronic records practitioners sought both to reach a broad consensus on this approach and to disseminate their shared views through a conference, "Archival Management of Machine-Readable Records," sponsored by the National Endowment for the Humanities in Ann Arbor, Michigan, in 1979. One summary presentation concluded that "it seems that traditional archival theory can be applied satisfactorily to organizing this material and making it useful. But it is equally clear that, because of the new machine-readable media . . . traditional practices will have to change to accommodate them." Thus, conference participants affirmed that Schellenberg's informational and evidential values remained relevant for appraisal, and that traditional archival principles also should guide archivists' thinking about arrangement, description, storage, and access. Participants discussed new problems with electronic records, however, particularly those involving technological obsolescence and preservation. Conference participants also anticipated developments in office automation applications, such as word processing and electronic mail, that would later perplex or overwhelm archivists. It was these later developments that gave rise to arguments for overturning traditional archival theory and practice when dealing with electronic records.<sup>2</sup>

The Michigan conference was followed by a publication of the International Council on Archives, which signified that the broader archival community shared the North American electronic records custodians' confidence that archivists could apply traditional archival concepts to the new record forms. Written by Harold Naugler, the definitive 1984 Records and Archives Management Programme (RAMP) study on the appraisal of machine-readable records reinforced the electronic records practitioners use of traditional archival concepts with the new record forms. Writing from experience, Naugler called for content analysis of electronic records utilizing traditional appraisal considerations such as identifying evidential and information values. Naugler also wrote about significant new considerations in appraisal which the records and their media imposed, such as performing a technical analysis.<sup>3</sup>

<sup>2</sup> Robert M. Warner and Francis X. Blouin, Jr., "Some Implications of Records in Machine-Readable Form for Traditional Archival Practice," in *Archivists and Machine-Readable Records: Proceedings of the Conference on Archival Management of Machine-Readable Records, February 7-10, 1979, Ann Arbor, Michigan*, edited by Carolyn L. Geda, Erik W. Austin and Francis X. Blouin, Jr. (Chicago: Society of American Archivists, 1980): 245, 243-44. See also in the same publication Thomas E. Mills, "Archival Considerations in the Management of Machine-Readable Records in New York State Government," 104; Carolyn L. Geda, Erik W. Austin and Francis X. Blouin, Jr., "Introduction," 9; William F. Rofes, "The Archival Snare: Mass and Manipulation," 112, 114-15; and Jerome M. Clubb, "Archival Implications of Technological and Social Change," 233-34.

<sup>3</sup> Harold Naugler, *The Archival Appraisal of Machine-Readable Records: A RAMP Study with Guidelines* (Paris: United Nations Educational, Scientific and Cultural Organization, General Information Programme and UNISIST, 1984): 37-41, 57-82.

The new media practitioners also sought to educate archivists in managing electronic records. Beginning in the 1960s, various committees and task forces of the Society of American Archivists stressed the importance of educating archivists about computerized records. These groups used the annual meeting programs, publications, and particularly workshops to work toward this goal, so that more archivists would develop electronic records programs.<sup>4</sup> The emphasis on educating archivists showed a basic assumption: that archivists would and should manage electronic records in an archival setting, i.e., valuable records would be transferred to an archives which would hold custody of them, preserve them, and make them available for use.

Terry Cook later labeled this first group of archivists who confronted electronic records issues “the first generation.” He based his label on his assumptions about the records they managed (statistical databases), the techniques they employed (library cataloging), and their emphasis on informational rather than evidential value. His analysis is questionable, at least when examining the largest electronic records collection. Tom Brown’s analysis of the holdings of the National Archives and Records Administration (NARA) showed that the “first generation” of archivists at NARA accessioned not only statistical databases but also other types of electronic records such as programmatic and text records. They appraised records for both evidential and informational values. Finally, they described electronic records according to NARA’s archival description standards, not library standards. Brown concluded that Cook confused the technology that produced the records (main-frame computers) with the types of records the technology produced. He also demonstrated that the first generation at NARA did use archival models for functions such as description.<sup>5</sup>

A decade after the 1979 conference, there were still few functioning archival programs for electronic records.<sup>6</sup> During the 1980s, though, computer technology had become more complex. In particular, the use of electronic office applications, such as word processing and electronic mail, continued to grow, as did the resulting volume of electronic records and attendant preservation problems. Archivists struggled to understand the new technology and feared losing electronic records. While they knew they needed to address the new media, they remained reluctant to do so. Archivists thus likely became vulnerable to arguments that electronic records were an

<sup>4</sup> Geda et al., “Introduction,” 9; and Geda et al., “Introduction to Chapter 4,” *Archivists and Machine-Readable Records*, 147; Thomas Elton Brown, “The Society of American Archivists Confronts the Computer,” *American Archivist* 47 (Fall 1984): 366–82.

<sup>5</sup> Terry Cook, “Easy to Byte, Harder to Chew: The Second Generation of Electronic Records Archives,” *Archivaria* 33 (Winter 1991–92): 202–16; Thomas Elton Brown, “Myth or Reality: Is There a Generation Gap Among Electronic Records Archivists?” *Archivaria* 41 (Spring 1996): 234–38.

<sup>6</sup> *Report of the Working Meeting: Research Issues in Electronic Records*, published for the National Historical Publications and Records Commission, Washington, D.C. (St. Paul, Minn.: Minnesota Historical Society, 1991), 20–21, discusses some of the reasons why so few programs existed.



altogether new phenomenon, and that they should change or discard the traditional archival principles they used with paper records when they confronted electronic records. Since so many archivists lacked experience with electronic records, they probably also lacked a basis upon which to judge the validity and plausibility of arguments for new archival theories. In addition, Cook's article on the "first generation" might have given archivists the notion that the first practitioners and earlier writings couldn't help them.

Addressing the problems of volume and complexity of electronic records, some writers began formulating new ideas for dealing with such records. Influenced by the ideas of David Bearman, these writers called for a "new paradigm" to deal with electronic records.<sup>7</sup> They argued that archivists should change their focus, from the content of a record to its context; from the record itself to the function of the record; from an archival role in custodial preservation and access to a nonarchival role of intervening in the records creation process and managing the behavior of creators. In general, supporters of a new paradigm seldom referenced past archival literature or practice. They also focused more on appraisal than on other archival functions, largely because, in their new paradigm, archivists would not accept physical custody of electronic records and, therefore, would not need to preserve, describe, or provide access to them in an archival institution. Since archivists would not perform these traditional archival functions, the new paradigm writers did not identify educating archivists about managing electronic records as a major problem, in contrast to earlier writers. The lack of

<sup>7</sup> Ann Pederson, "Empowering Archival Effectiveness: *Archival Strategies As Innovation*," *American Archivist* 58 (Fall 1995) discusses Bearman's influence and his establishment of Archives & Museum Informatics (AMI) in 1986. During its first three years, "75-80 percent of the content of AMI publications [were] attributable to Bearman," Ann Pederson, "Do *Real* Archivists Need Archives & Museum Informatics?" *American Archivist* 53 (Fall 1990): 667-68. The percentage appears to be the same for later years. With volume 11, no. 1 (1997), Kluwer Academic Publishers became the publisher of the journal and announced that it would be peer-reviewed. For the term "new paradigm," see Terry Cook, "Electronic Records, Paper Minds: The Revolution in Information Management and Archives in the Post-Custodial and Post-Modern World," *Archives and Manuscripts* 22 (November 1994): 305-15.

In this article I mainly discuss David Bearman's writings and some of the writings of Richard Cox, Margaret Hedstrom, Terry Cook, and Charles Dollar as being representative of the writers who call for a new paradigm for electronic records, although there are other such writers, particularly in Australia. Cook's writings present a problem. In the same 1997 SAA annual meeting session in which I gave the paper now revised and expanded as this article, a paper by Terry Cook presented some of the same criticisms of Bearman as mine, "Who Will Do It If We Don't: The Cultural Mission of Archives vis-a-vis Electronic Records." His criticisms reflected the second part of an article he published just before the SAA meeting, "The Impact of David Bearman on Modern Archival Thinking: An Essay of Personal Reflection and Critique," *Archives and Museum Informatics* 11, no. 1 (1997): 15-37. This was an "invited" tribute to Bearman in a journal for which Bearman is editor-in-chief and which, at the time, was not peer-reviewed. In this article, Cook crowned Bearman "the leading archival thinker of the late twentieth century," who alone stands with "giants" such as Sir Hilary Jenkinson and Schellenberg. Cook followed this fulsome praise with a discussion of some "incomplete or troubling" aspects of Bearman's vision. Cook then discussed seven "points" which criticized Bearman's ideas, leaving the reader puzzled about the preceding tribute. In the SAA paper, Cook said he was criticizing Bearman and acknowledged his own role in previously promoting Bearman's ideas. I cite some of Cook's promotional writings which support a new paradigm for electronic records; but since some of Cook's later criticisms of Bearman are similar to mine, I cite them as well.

reference to traditional theory and practice also may have resulted from the writers' emphasis on what archivists regard as records management or record keeping, not archival work.<sup>8</sup>

The differences between traditional archival writers and those who support a new paradigm for electronic records emerge most clearly in certain aspects of the new paradigm: the definition of a record, appraisal, the records continuum, noncustody, and a new role for the archivist. Contrasts also appear in the two groups of writers' use of archival history and practice and their mode of expression, or style.

### Definition of a Record

Supporters of a new paradigm for electronic records propose some ideas which have little precedent in the archival literature. For example, archivists should redefine a record as one with "evidentiality" or "recordness." Electronic records are only those with "evidence" of "business transactions." The writers argue that archivists "must focus on *evidence* not *information*." New paradigm supporters also denigrate the bulk of extant archival electronic records collections by proclaiming that "saving databases does not preserve evidence, only information." Most collections of electronic data "are not records because they cannot qualify as evidence."<sup>9</sup>

At least one writer goes to some lengths to make the new definition fit. Richard Cox quotes Schellenberg's definition of a record: "All books, papers, maps, photographs, or other documentary materials, regardless of physical form or characteristics, made or received by any public or private institution in pursuance of its legal obligations or in connection with the transaction of its proper business and preserved or appropriate for preservation by that institution or its legitimate successor as evidence of its functions, policies, decisions, procedures, operations, or other activities or because of the informational value of the data contained therein." Cox then concludes: "by the

<sup>8</sup> The emphasis on recordkeeping is reflected in several research projects. The "Functional Requirements for Recordkeeping" project of the University of Pittsburgh School of Information Sciences, led by David Bearman and Richard Cox, and projects at Indiana University and the City of Philadelphia to test the Pittsburgh model all fall more within what archivists regard as records management rather than archival work. Discussion of these projects is, therefore, outside the scope of this article. Since all three were funded by the National Historical Publications and Records Commission, links to information about them are included on the NHPRC's website, <[www.nara.gov/nara/nhprc/ergrants.html](http://www.nara.gov/nara/nhprc/ergrants.html)>. Another project focusing upon recordkeeping but with a more archival framework, also excluded from this article, is at the University of British Columbia School of Library, Archives and Information Science, <[www.slais.ubc.ca/users/duranti](http://www.slais.ubc.ca/users/duranti)>. Paul Marsden, "Counterpoint: When is the Future? Comparative Notes on the Electronic Record-Keeping Project of the University of Pittsburgh and the University of British Columbia," *Archivaria* 43 (Spring 1997): 158-73, compares the Pittsburgh and UBC projects and provides citations to numerous articles about these projects.

<sup>9</sup> Richard Cox, "The Record: Is It Evolving?" *Records & Retrieval Report* 10 (March 1994): 12, (emphasis in original); David Bearman, *Electronic Evidence: Strategies for Managing Records in Contemporary Organizations* (Pittsburgh: Archives & Museum Informatics, 1994), 285, 2.

mid-twentieth century, there was a firm sense of a record as a transaction and as evidence of transactions.” This conclusion simply does not follow from Schellenberg’s definition. When Schellenberg used the term “transaction of its proper business,” he meant the whole activity of an organization and its conduct of business. His term is not the same as “business transaction,” which is a much narrower construct.<sup>10</sup> Significantly, Cox ignores Schellenberg’s phrase, “the informational value of the data contained therein,” possibly because acknowledging such a value would refute his conclusion.

Both evidential and informational values are important for appraisal, and Schellenberg wrote that they were not mutually exclusive values. The problem with the new definition of a record—which appears to apply only to electronic records—is that the definition eliminates the concept of informational value. It also excludes records that do not document business transactions. Evidential and informational values form two ends of a pendulum’s path. It might appear that the new definition of a record is merely a swing of the pendulum, that archivists are emphasizing one value over another. The new definition of a record is more than that, however, because it removes one-half of the pendulum’s path.

The new definition of a record is too narrow. Using it, archivists would fill their archives with records that document only the “footprints of bureaucrats.” Many, if not most, archives serve a higher purpose. Even national, state, and local government archives are also the “archives of governance,” addressing the much broader role and responsibility of government within society. Even some government bureaucrats know that their organizational records provide documentary evidence of larger societal concerns. The value of archives is cultural and humanistic, not just bureaucratic. Archival programs that collect records or personal papers, which may contain electronic media, find the new definition bewildering. Personal papers may never show “evidence” of “business transactions,” but such archival sources provide a wealth of information needed for society’s memory. The new paradigm excludes personal papers and other similar documentary materials in the definition of archival records.<sup>11</sup>

Defining a record exclusively as a business transaction eliminates documentary materials that may have permanent value, such as databases and personal papers. The definition could cause archivists to spend their time on the bulk of records of most agencies and large organizations: operating rec-

<sup>10</sup> Cox, “The Record,” 10–11; Schellenberg, *Modern Archives*, 139.

<sup>11</sup> Michael Fox coined the unpublished phrase “footprints of bureaucrats;” Ian E. Wilson, “Reflections on *Archival Strategies*,” *American Archivist* 58 (Fall 1995) 422, 424, 426–27; Roy C. Turnbaugh, “Records and Evidence: From Theory to Reality” (Paper delivered at the annual meeting of the National Association of Government Archives and Records Administrators, Sacramento, California, 19 July 1997), 2–3, 6. After supporting a new definition of a record, Cook later wrote that this definition was too narrow. He then made the point about personal papers and private-sector archives in “The Impact of David Bearman,” 29–30.

ords, often known as “housekeeping” records. Such records provide definite evidence of business transactions, but archivists usually appraise them as non-permanent. Schellenberg wrote that these types of records of individual transactions were seldom essential as evidence. The emphasis on *defining* a record thus obscures what archivists are trying to do: evaluate whether documentary materials have permanent value. So, in addition to being unnecessary, a new definition of a record seems to be an obstacle to archival work. Instead of asking whether documentary materials are records, archivists should ask if those materials are important. The concern should focus on the best evidence of the activities archivists are trying to document, not on the “evidence that best reflects an abstract conception of records.”<sup>12</sup>

For more than sixty years, the National Archives, many state archives, and other archival organizations have used a definition of a record that is similar to Schellenberg’s. The National Archives has been able to apply such a definition to records in all media—paper, maps, photographs, and electronic records—with no discernible problems. Even in the National Archives most celebrated lawsuit, *Armstrong v. Executive Office of the President*, the courts did not find any deficiencies in the definition of a record in the Federal Records Act. Furthermore, redefining the legal definition of a record to better reflect electronic records “would make the definition itself subject to obsolescence.”<sup>13</sup>

The new definition of a record raises troubling questions for archivists about why the traditional definition is inadequate. Supporters of a new definition of a record usually do not discuss or analyze what’s wrong but, rather, declare what should be or is. It is also unclear why the new definition of a record applies only to electronic records and apparently not to records in other media, or what a collecting archives would do with such a definition.

## Appraisal

Supporters of the new paradigm for electronic records call for bold, new ideas, but some are not so bold or new. Urging archivists to consider function in appraisal,<sup>14</sup> as a historical review of archival writing shows, is not a new idea. More than forty years ago, Schellenberg wrote that one of the three facts an appraiser should know was “the character of the functions performed

<sup>12</sup> Schellenberg, *Modern Archives*, 146; Kenneth Thibodeau, “Evidential Values and Archival Functions: Fundamental Challenges,” (Paper delivered at the annual meeting of the Association of Canadian Archivists, Ottawa, 6 May 1997), 6. Thibodeau also shows that “databases provide substantial, unique and critical evidence of the conduct of affairs,” 5–7.

<sup>13</sup> Kenneth Thibodeau, “Managing Archival Records in the Electronic Age,” in *Federal Information Policies in the 1990s: Views and Perspectives*, edited by Peter Hernon, Charles R. McClure and Harold C. Relyea (Norwood, N.J.: Ablex Publishing Corporation, 1996), 284–85.

<sup>14</sup> David H. Thomas, “Business Functions: Toward a Methodology,” 3, <<http://www.lis.pitt.edu/~nhprc/Pub7.html>> (accessed 26 July 1997).

by each office” and whether the functions were “facilitative” or “substantive.” In his 1977 appraisal manual, Maynard Brichford discussed function, as did Jerry Ham in his 1993 appraisal manual, i.e., the section on functional analysis.<sup>15</sup>

Some supporters of the new paradigm argue that the function of records is the only important appraisal criterion. They believe that archivists should not consider the contents of records and need not even look at records during appraisal. “We can decide in the abstract whether a function generates records that need to be retained,” and archivists should “focus their appraisal upon the function or competence that produces records rather than the records themselves.”<sup>16</sup> An appraisal archivist easily could find this approach troublesome or unworkable. For example, one important function of the U.S. Patent and Trademark Office (PTO) is granting patents. NARA appraised the important electronic patent records a few years ago. In 1996 the PTO submitted schedules for fifty-four additional electronic systems. The appraisal archivist could have considered only function, judged it to be an important one, not have looked at the records, and appraised all fifty-four databases as permanent. Instead, the archivist considered the content of all the databases and appraised only one as permanent.<sup>17</sup>

Supporters of new approaches to electronic records stress a need for new practices, but they fail to provide a convincing analysis of why traditional practices will not work. They also offer almost no examples of past or present practices. Those they do provide appear uninformed. For example, David Bearman and Margaret Hedstrom argue that “reviewing 100% of records created in order to select the less than 3% which should be saved . . . is inefficient.”<sup>18</sup> In fact, few large archives in the United States review 100 percent of records. The National Archives has not reviewed 100 percent of records for several decades, because it has mandatory general records schedules,

<sup>15</sup> Schellenberg, *Modern Archives*, 143; Maynard J. Brichford, *Archives and Manuscripts: Appraisal and Accessioning* (Chicago: Society of American Archivists, 1977), 4–5; F. Gerald Ham, *Selecting and Appraising Archives and Manuscripts* (Chicago: Society of American Archivists, 1993), 51–53.

<sup>16</sup> Bearman, *Electronic Evidence*, 36; David Bearman, “Archival Strategies,” *American Archivist* 58 (Fall 1995): 383; Charles M. Dollar, *Archival Theory and Information Technologies: The Impact of Information Technologies on Archival Principles and Methods* (Macerata, Italy: University of Macerata, 1992), 58, 76; Terry Cook, “Archives in the Post-Custodial World: Interaction of Archival Theory and Practice Since the Publication of the Dutch Manual in 1898” (Paper delivered at the XIII International Congress on Archives, Beijing, 1996), 13, 22–23. Cook later wrote that archivists do need to look at records in “The Impact of David Bearman,” 33–34.

<sup>17</sup> Michael L. Miller, “Is the Past Prologue? Appraisal and the New Technologies,” in *Archival Management of Electronic Records*, Archives and Museum Informatics Technical Report No. 13, part II (Pittsburgh: Archives and Museum Informatics, 1991), 39–40, discusses the appraisal of PTO patent systems. I was the appraisal archivist for the fifty-four databases.

<sup>18</sup> David Bearman and Margaret Hedstrom, “Re-inventing Archives for Electronic Records: Alternative Service Delivery Options,” in *Electronic Records Management Program Strategies*, Archives and Museum Informatics Technical Report No. 18, edited by Margaret Hedstrom (Pittsburgh: Archives & Museum Informatics, 1993), 86.

or GRS. The Congress gave the National Archives legal authority to prepare GRS more than fifty years ago. NARA estimates that the GRS cover one third of the total volume of federal records. In addition, many states and universities also have general records schedules.<sup>19</sup> The archivist in the PTO example above, by the way, did not write an appraisal for all fifty-four PTO databases. Most of them were already classified as temporary under the GRS.

New paradigm writers urge archivists to quit appraising and scheduling records when they are inactive, when they arrive at the archives, and even after they have been accessioned.<sup>20</sup> However, many, if not most, archivists in U.S. federal and state governments and universities and large organizations already appraise current, i.e., active, records. As practicing archivists understand, appraising current records is the whole point of records schedules. NARA has appraised active records in electronic form as well as paper for many years. In fact, the U.S. Code of Federal Regulations requires agencies to schedule new or changed records series within one year of their creation. Some states, such as Wisconsin, have similar regulations. In 1940 Philip C. Brooks wrote that appraisal is best performed as records are created. In 1956 Schellenberg called for appraisal of active records.<sup>21</sup> New paradigm writers thus tend to ignore both history and the practices of electronic records archives today.

### The Records Continuum

Supporters of new approaches to electronic records go further than appraising active records. They urge archivists to intervene before the creation of electronic records and appraise records in the "concept stage," when creators are conceiving electronic records systems. Archivists "should appraise business functions, deciding before any records are created at all, what documentation it is desirable to create and retain for a given function." A closely related idea follows: there should be no distinction between archival and records management work. A "records continuum" should replace the concept of the life cycle of records.<sup>22</sup> The traditional life cycle delineates clear responsibilities to creators and records managers for the primary value of records and to archivists for secondary value, to use Schellenberg's defini-

<sup>19</sup> McCoy, *The National Archives*, 157; "Introduction to the General Records Schedules," *General Records Schedules*, Transmittal No. 7 (Washington, D.C.: National Archives and Records Administration, 1995), 1; Ham, *Selecting and Appraising Archives and Manuscripts*, 29.

<sup>20</sup> Cox, "The Record," 12; Bearman and Hedstrom, "Re-inventing Archives," 86; Bearman, *Electronic Evidence*, 29.

<sup>21</sup> Code of Federal Regulations, Title 36, Part 1228, section 26(a)(2); Ham, *Selecting and Appraising Archives and Manuscripts*, 29; Brooks, "The Selection of Records for Preservation," 226; Schellenberg, *Modern Archives*, 26, 109.

<sup>22</sup> Bearman, "Archival Strategies," 399. David Bearman, "Managing the Records Continuum," *Archives and Museum Informatics* 10, no. 2 (1996): 133-36.



tions. In a records continuum, however, archivists hold responsibility beginning before creation, through maintenance, preservation and use. A records continuum would “mend the Schellenbergian split between records managers and archivists.”<sup>23</sup>

First of all, Schellenberg did not think archivists should become creators of records. Nor do all those who write about electronic records today. Contemporary writers who do not call for new archival theory and practice for electronic records believe that archivists can give advice about creating and managing reliable records. But if archivists usurp the role of creator by defining what records should be created, archivists make records “less genuine, less authentic,” and thus sacrifice their highest virtue: neutrality. Secondly, records managers seem to have disappeared in the new paradigm, or archivists have replaced them. The supporters of the new paradigm apparently think archivists should become a “new breed of revitalized records manager,” concentrating only on the records management portion of Schellenberg’s split and “merging the broader archival agenda with the narrower records management or institutional agenda.” Largely because of Schellenberg, archivists recognize the importance of records management. He worked as both an archivist and records manager and understood the duties, roles, and principles of each profession. Archivists regard records management as an important process of managing volume and identifying and obtaining archival records. But for them, records management is not the work they ought to do instead of archival work. If archivists follow the advice of new paradigm writers, archivists’ “primary mission, facilitating more efficient functioning of our parent organizations” would become their “only mission.”<sup>24</sup> The protector of the archival side of Schellenberg’s split also seems to have disappeared.

### Custody

Supporters of a new paradigm for electronic records promote the notion of “post-custodialism,” which defines a centralized archives as “an archives of last resort.” New paradigm supporters urge archivists to “cease being identified as custodians of records” because, among other things, this role “is not professional.” An archives with custody is “an indefensible bastion and a liability.” These writers maintain that creators of records or other institutions, whether they are archives or not, can take care of archival records.<sup>25</sup>

<sup>23</sup> Cook, “Archives in the Post-Custodial World,” footnote 73.

<sup>24</sup> Thibodeau, “Evidential Values and Archival Functions,” 12; Luciana Duranti and Heather McNeil, “The Protection of the Integrity of Electronic Records: An Overview of the UBC-MAS Research Project,” *Archivaria* 42 (Fall 1996): 60-62; Cook, “The Impact of David Bearman,” 34-35. In this article, Cook apparently rethought the desirability of mending the split and wrote that archivists shouldn’t become records managers. Turnbaugh, “Records and Evidence,” 4.

<sup>25</sup> Dollar, *Archival Theory and Information Technology*, 54, 75; David Bearman, “An Indefensible Bastion:

Schellenberg did not advocate noncustody, nor did traditional European or English archival writers. Schellenberg and the other National Archives pioneers knew all about noncustody, although their term surely would be "precustody." The U.S. government, by default, practiced noncustody for more than 150 years before the National Archives was established in 1934. The pioneers knew all about noncustody: records lost and damaged, others in vast disarray and a new National Archives to deal with the aftermath. They could not possibly wish that situation on later generations for records in any format.

Nor do several contemporary writers who argue for a rigorous custodial role for electronic records. These writers maintain that records creators face possible conflicts of interest. Shifting custodial responsibilities to creators "would leave the Oliver Norths of this world in charge of their records." Maintaining historical archival records in active systems could easily lead to their destruction, to gain disk space for example, or to changes that would alter their character. An archives also is committed to preserving records as created and as received. Furthermore, creators have little incentive to retain records—in any form—beyond their primary usefulness. Why would an organization allocate resources to a function that is not its primary mission? "Archives without custody would not be archives at all; they would simply disappear into the maw of a bureaucratic leviathan and with them the guarantees they offer the world of an uncorrupted and intelligible record of the past." The noncustody argument may have a deleterious effect as well, if archivists were to decide that "we'll be a post-custodial archives and require the records creators to maintain their own records. Then we won't have to worry about electronic records." While some archivists in Australia have embraced the noncustody argument, "it is striking that despite the fact that some of the most persuasive writings on the subject have urged traditional archives to take a non-custodial approach to the preservation of electronic records, no national archives in Europe, whether it has already begun an electronic records programme or is about to do so, has opted to take a non-custodial approach."<sup>26</sup>

---

Archives as Repositories in the Electronic Age," in *Archival Management of Electronic Records*, Archives and Museum Informatics Technical Report No. 13, part I, (Pittsburgh: Archives and Museum Informatics, 1991), 14-24; Bearman and Hedstrom, "Re-inventing Archives," 94; Cook, "Archives in the Post-Custodial World," 22-23.

<sup>26</sup> Thibodeau, "Managing Electronic Records," 282; Kenneth Thibodeau, "To Be or Not To Be: Archives for Electronic Records," in *Archival Management of Electronic Records*, Archives and Museum Informatics Technical Report No. 13, part I (Pittsburgh: Archives and Museum Informatics, 1991), 3, 11-12; Luciana Duranti, "Archives as a Place," *Archives and Manuscripts* 24 (November 1996): 250-53. Theodore J. Hull, "Reference Services for Electronic Records in Archives," in *Reference Services for Archives and Manuscripts*, edited by Laura B. Cohen (Binghamton, New York: Haworth Press, 1997), 152-57, gives examples of agencies having little or no interest in maintaining records no longer needed for current business. Cook later made the same point about creators' unwillingness to retain archival records in "The Impact of David Bearman," 32-33. Terry Eastwood, "Should Creating Agencies Keep Electronic Records Indefinitely?" *Archives and Manuscripts* 24 (November

## The “New” Archivist

The new paradigm delineates a new role for archivists and, it seems, a new definition of an archivist as well. Traditionally defined, archivists appraise, arrange, describe, preserve, and provide reference and outreach for archival records. Supporters of new approaches to electronic records argue that archivists have failed in their traditional role. If archivists follow the new paradigm, a new definition of a record presumably means a smaller body of records with which to deal. Appraisal by function also reduces the workload. Within the ideal records continuum, creators will produce the records archivists want. Archivists wouldn't be burdened with physical custody or requests for records. The new paradigm sees archivists as regulators, auditors, and “internal consultants, defining record keeping regimes and tactics.” Archivists can then “manage organizational behavior.” Archivists will become, at best, only consultants and educators.<sup>27</sup>

If archivists follow the suggestions of David Bearman and Margaret Hedstrom, however, they could just as likely face a future with no role at all. Bearman and Hedstrom call for archivists to get others to adopt archival goals and thereby “co-opt their resources.” They profess that archivists should get others, such as “representatives of the public,” to select records, or use technology to automatically select records based on metadata. Interestingly, Bearman and Hedstrom don't suggest that creators select records, a concept Sir Hilary Jenkinson once espoused that had, at least, precedent in the archival literature. If creators shouldn't select records, however, creators or perhaps users can describe them. Or technology can describe records, as in “self-documenting records.” As for reference and access, “couldn't libraries provide access since they're in that business?” As for preservation, archivists should “have someone else keep records instead of archives.” If all this doesn't work, they propose that archivists: 1) lend records to those who might use them, 2) give records to others, or 3) sell records “to those who want them most.” Ann Pederson writes that if archivists *don't* follow Bearman's advice, they will become professionally obsolete.<sup>28</sup> It seems that if archivists

---

1996): 265. In this article, Eastwood dissects Bearman's arguments against custody and writes that “Bearman is wrong on *every* score,” 259 (emphasis in original). Mark Conrad, “To Have and to Hold?: Archival Responsibility in the Electronic Age,” *Irish Archives* 37 (Spring 1996): 37; Ken Hannigan, “A Summary on Electronic Records Management in the EU Member States: Relations Between Public Administrations and Archives Services,” in *INSAR Supplement II: The Proceedings of the DLM-Forum on Electronic Records, Brussels, 18–20 December 1996* (Luxembourg: Office for Official Publications of the European Communities, 1997), 230.

<sup>27</sup> Lewis J. and Lynn Lady Bellardo, comp., *A Glossary for Archivists, Manuscript Curators and Records Managers* (Chicago: Society of American Archivists, 1992), 3–4; Bearman and Hedstrom, “Re-inventing Archives,” 97–98; Pederson, “Empowering Archival Effectiveness,” 442. Wilson, “Reflections on Archival Strategies,” 427, points out that “the trend in government is strongly away from further control and regulation.”

<sup>28</sup> Bearman and Hedstrom, “Re-inventing Archives,” 88–95; Bearman, “Archival Strategies,” 389, 394, 397, 400–406; Pederson, “Empowering Archival Effectiveness,” 433.

do follow his advice, they will become obsolete. Obviously, Schellenberg did not suggest that the solution to archival problems was to eliminate archives and archivists.

### Archival History and Practice

Reading Schellenberg and then reading the writings of supporters of the new paradigm for electronic records provides contrasts in the use, or lack thereof, of archival history and practice. Schellenberg found much previous archival writing limited in usefulness because of the problems he faced in dealing with the results of 150 years of noncustody and the continual creation of a mass of federal records. Nevertheless, he used parts of previous archival writings, applying them when he could. Ole Kolsrud writes that Schellenberg “elegantly represents a synthesis of American, English and German appraisal theory.” Schellenberg thus developed his concepts in the context of both archival history and his own and others’ experiences.<sup>29</sup> In contrast, supporters of the new paradigm for electronic records seldom ground their pronouncements in, or demonstrate an understanding of, Schellenberg or any historical archival theoretician. In the few instances when they do, the history seems distorted. For example, one writer incorporates Schellenberg’s informational value when it supports documentation strategies but does not accept that value in writing about electronic records. Another writer broadly discusses one hundred years of archival writings, but refers only to the writings of supporters of the new paradigm for electronic records, ignoring the first writers on electronic records. His conclusion from “studying the intellectual history of our profession,” postcustodialism, seems to come only from the writings of new paradigm supporters, and not from writings of the preceding ninety years.<sup>30</sup>

Supporters of a new paradigm for electronic records usually don’t cite historical sources; most of them cite themselves and each other. For example, in one Bearman article, 62 percent of the citations referred to his own writings. Another writer cited his own and other writings supporting a new paradigm forty-one times in thirty-six footnotes. The practice of citing each other refers readers only to other new paradigm writers, who then proclaim a growing consensus for their ideas.<sup>31</sup>

<sup>29</sup> Smith, “Schellenberg,” 324; McCoy, *The National Archives*, 77–78; Kolsrud, “The Evolution of Basic Appraisal Principles,” 36; Schellenberg, *Modern Archives*, 67–77, 133–39, 169–79, 195–203; T.R. Schellenberg, *The Management of Archives* (New York: Columbia University Press, 1965), 20–60.

<sup>30</sup> Richard Cox, “The Documentation Strategy and Archival Principles: A Different Perspective,” *Archivaria* 38 (Fall 1994): 11–36, and “The Record,” 1–33. It seems to me that a documentation strategy depends on evaluating records for their informational value, because records of “business transactions” may document nothing larger than a bureaucracy or an organization. Perhaps this explains Cox’s inconsistency. Cook, “Archives in the Post-Custodial World,” 1–33.

<sup>31</sup> David Bearman, “Documenting Documentation,” *Archivaria* 34 (Summer 1992): 33–49; Cook,

In addition to using historical archival sources, Schellenberg and other National Archives pioneers were practitioners; they had experience. Their writings emerged from that experience and the real problems they faced. In addition, Schellenberg incorporated the archival experiences of other practitioners. In contrast, Bearman “is not an archivist, has never worked as an archivist, has never trained as an archivist—and moreover is proud of being such a professional ‘outsider.’”<sup>32</sup> He is thus unable to incorporate an experience-based perspective. Surprisingly, advocates of the new paradigm who do have archival experience do not use it to support their new paradigm. These writers also do not use the experiences of archives which hold electronic records. Instead, they make generalizations based on little information, and this leads to some unfounded statements. For example, “the implications for archival institutions of assuming physical custody of electronic records have yet to be worked out.” Preserving electronic records has “proved beyond the capabilities of every . . . archives in the world.” Advocates of a new theory for electronic records argue that appraisal of electronic records has not assured their preservation or access. And one writer generalizes from the experience of *one* archives that, “projects that attempted to extract archival records from existing or inactive information systems confirmed that this approach is . . . usually futile.”<sup>33</sup> While few archives have worked with electronic records, the National Archives has almost thirty years of experience in the administration of such records. Supporters of new approaches to electronic records have not tried to learn what NARA does or what it has learned about electronic records from its custodial experience. Instead, Bearman promulgated misinformation about NARA in order to conclude that its electronic records program was “dangerous, deluded and destructive.”<sup>34</sup> For-

---

“Electronic Records, Paper Minds,” 300–26; Margaret Hedstrom, “Teaching Archivists About Electronic Records and Automated Techniques: A Needs Assessment,” *American Archivist* 56 (Summer 1993): 425 and footnote 8.

<sup>32</sup> Schellenberg, *Modern Archives*, 67–77, 133–39, 169–79, 195–203; Schellenberg, *Management of Archives*, 20–60; Cook, “The Impact of David Bearman,” 15–16.

<sup>33</sup> Cook, quoted in Alf Erlandsson, *Electronic Records Management: A Literature Review* (Paris: International Council on Archives, December, 1996), footnote 259; Adrian Cunningham, “Journey to the End of the Night: Custody and the Dawning of a New Era on the Archival Threshold,” *Archives and Manuscripts* 24 (November 1996): 317; Alan Kowlowitz, “Appraising in a Vacuum: Electronic Records Appraisal Issues — A View From the Trenches,” in *Archival Management of Electronic Records*, Archives and Museum Informatics Technical Report No. 13, part II (Pittsburgh: Archives and Museum Informatics, 1991), 32, 35; Margaret Hedstrom, “Electronic Records Research: What Have Archivists Learned From the Mistakes of the Past?” *Archives and Museum Informatics* 10, no. 4 (1996): 319 (emphasis added).

<sup>34</sup> Thomas E. Brown, “Myth or Reality” counters writings of Cook and Cox about the electronic records experiences of the National Archives. For a list of writings and presentations of National Archives staff about electronic records, see <[www.nara.gov/nara/electronic/selpub.html](http://www.nara.gov/nara/electronic/selpub.html)>. David Bearman, “The Implications of *Armstrong v. Executive Office of the President* for the Archival Management of Electronic Records,” *American Archivist* 56 (Fall 1993): 689. Bearman’s article contains factual errors. For example, NARA has never claimed that changes in practice were unnecessary to cope with electronic records (p. 689). In attributing this position to Acting Archivist Trudy Petersen,

mulating theories lacking a basis in practice and not drawing upon their own experience, supporters of a new paradigm appear to read computer literature and decide that the latest technology is what archivists face, which isn't necessarily so. They then conclude that traditional archival theory and practice cannot accommodate the new technologies.

The approaches of supporters of a new paradigm thus raise questions about practitioners versus theorists. One opponent of archival education worried that the development of archival education would lead to a division between theorists and practitioners. He feared that theorists would come up with new models "whether they are needed or not" and impose those models upon practicing archivists "whether they are workable or not." Archivists apparently resist imposition, however, since one supporter of the new paradigm concedes that only a few archives have tested or used the new models.<sup>35</sup> Perhaps archivists do not find the proposed models workable. While not all archival education programs are taught by and produce such theorists, the new archival theories do raise questions. What are students learning about electronic records in graduate programs? Are they reading only the writings of the supporters of the new paradigm, whose ideas are impressionistic, speculative, and, as yet, unproven? If so, how prepared are archival graduates to deal with electronic records in the real world? Schellenberg's admonition to the educator remains valid: "he should certainly learn before he ventures to teach."<sup>36</sup>

In working with electronic records, archivists need not and should not forget all the lessons they have learned with paper records. For example, one supporter of new approaches to electronic records worried, "is the record version my memorandum drafted for initial review, the second version sent to its intended audience, or the third version which has been modified by the recipient as he included the memorandum into a report?"<sup>37</sup> Why this is

---

Bearman contradicts her published views, see footnote 45. Also contrary to Bearman's undocumented assertions, NARA did have both experience and competence in processing electronic records (p. 680), and has never based electronic records retention on "software utilities" (p. 689). Because the *Armstrong* case was still under litigation at the time that Bearman's article was published, NARA could not respond. Neither the author nor the editor noted that Bearman was a consultant to the plaintiffs in the court case. Nor did they note that Bearman was a consultant to the Pittsburgh Project, whose functional requirements he endorsed in the article. Finally, they also failed to note that the principal investigator of the Pittsburgh Project, Richard Cox, was the editor of the *American Archivist* at that time.

<sup>35</sup> John Roberts, "Archival Theory: Myth or Banality?" *American Archivist* 53 (Winter 1990): 119; Hedstrom, "Electronic Records Research," 323.

<sup>36</sup> Cook, "The Impact of David Bearman," 31, points out that Bearman is an idealist and conceptualizer who is impatient when "real-world" problems are said to block his approach. Schellenberg quoted in McCoy, *The National Archives*, 182. Inadvertently making my point about what students are learning, one of the external reviewers of this article wanted a discussion of Schellenberg's evidential and informational values because his or her "sense is that the present generation of archivists may not have read the 'classic' account on this in archival administration courses."

<sup>37</sup> Cox, "The Record," 2.



a problem with electronic records is unclear, since archivists have been appraising drafts of paper records for years. The writer appears to have forgotten provenance as well. As another example, NARA appraisal reports for electronic records first discuss the sufficiency of evidential and informational values, just as archivists do for paper records, and only discuss issues regarding the electronic format if they present a problem. Furthermore, NARA archivists describe electronic records using the same format that archivists use for records in other media, with only minor exceptions. The loss of records, however unfortunate, is not a phenomenon unique to electronic records. Being unable to accession electronic records due to technological problems is analogous to being unable to accession paper records due to irreparable damage.

### **Manner/Expression**

Schellenberg realized that he did not have all the answers. Nevertheless, he tried to understand archivists' problems, and to help and educate them. He wanted to "perk up the pride" of archivists and "bolster their faith in themselves and in the significance of their profession."<sup>38</sup> In contrast to this esteem for archivists and archival work, supporters of the new paradigm seem to denigrate archival work and unduly alarm archivists about the problems. Some examples of this pessimism include statements that appraisal is "fatally flawed," and that if archivists resist new approaches, they "might soon be out of a job," facing "professional obsolescence." They claim that archivists suffer from "denial and self-delusion" and have a "victim mentality." They label archivists' efforts to manage electronic records "futile and professionally suicidal."<sup>39</sup> All this fatality imagery frightens and insults archivists. In contrast to Schellenberg, it does not educate them.

Supporters of new approaches to electronic records furthermore use confusing jargon and technobabble, both of which fail to enlighten archivists. Typical jargon includes "business acceptable communications," "enterprise or business systems analysis methodologies," and "semiotically constructed contexts of records creation." Archivists should become "documentary risk managers," "technology assessors" and "metadata auditors." Technobabble includes "metadata requirements" for "recordness," a "metadata encapsulated object," and "BLOB (binary large object)". Archivists undoubtedly need to be aware of business jargon. They must learn and be comfortable with technical terminology, particularly so that they can talk with technologists about electronic records. But archivists expect their colleagues to write

<sup>38</sup> McCoy, *The National Archives*, 77–78, 92–104, 168–89. The quotations are taken from page 181.

<sup>39</sup> David Bearman, "Archival Methods," *Archives and Museum Informatics Technical Report* 3, no. 1 (Spring 1989): 10; Pederson, "Empowering Archival Effectiveness," 431–34, 439.

in a language that archivists understand. They do not expect their colleagues to just appropriate jargon and technobabble without an attempt to educate. Since so many supporters of the new paradigm do just that, and offer alarmist imagery as well, the result is to exclude the majority of archivists from the dialogue about electronic records, rather than invite them to participate in it. Ann Pederson gives clues to the exclusionary nature of the group in an article about Bearman and his followers. She uses terms such as “close colleagues,” and “circle of colleagues;” phrases such as “choosing collaborators carefully to include leading opinion shapers and disseminators;” and sentences such as, “key ideas had circulated informally.”<sup>40</sup> All of this implies a “we know best” aura. Nothing in the writings of the supporters of a new paradigm approaches Schellenberg’s introductory statement to *Modern Archives*: “I do not believe that American methods of handling modern public records are necessarily any better than those of other countries; they are merely different.”<sup>41</sup>

### Conclusion

Supporters of new approaches to electronic records have made archivists think about what they do, and a reexamination of archival theory and practice is useful. But the price has been too high. Both the ideas of advocates of a new paradigm for electronic records and their manner of presentation have deterred archivists from learning about electronic records and from developing electronic records programs. The writing has little basis in archival theory and practice and contains alarmist language, unnecessary jargon, technobabble and unclear new ideas. The writing thus seems to discourage new learning and to offer little useful advice. The understandable advice is non-custody, but it may convey a disturbing message: “somehow, magically, electronic records will be taken care of by the records creators. . . .” No wonder, then, that few archivists are developing electronic records programs.<sup>42</sup> While the supporters of a new paradigm did not cause this situation, they have done little to improve it.

Unfortunately, the supporters of new approaches to electronic records have served to divide the profession, because they exclude “that half [or

<sup>40</sup> David Bearman, “Item Level Control and Electronic Recordkeeping,” *Archives & Museum Informatics* 10, No. 3 (1996): 214–17; Bearman, *Electronic Evidence*, 283; Cook, “Electronic Records, Paper Minds,” 318; Edith Cowen University, quoted in Erlandsson, *Electronic Records Management*, 26; David Bearman, “Virtual Archives,” (Paper delivered at the ICA meeting, Beijing, 1996): 2, 4. <<http://www.lis.pitt.edu/~nhprc/prog6.html>> (accessed 2 August 1997). Pederson, “Empowering Archival Effectiveness,” 433–34, 437.

<sup>41</sup> Schellenberg, *Modern Archives*, x.

<sup>42</sup> Conrad, “Archival Responsibility in the Electronic Age,” 37; Margaret Hedstrom, *Electronic Records Research and Development: Final Report of the 1996 Conference held at the University of Michigan, Ann Arbor, June 28–29, 1996* (Ann Arbor: University of Michigan School of Information, 1997), 6; Hedstrom, “Electronic Records Research,” 315.

more] of the archival tradition which focuses on the cultural, historical and heritage dimensions and uses of archives.”<sup>43</sup> In particular, their narrow definition of a record and their arguments against archival custody of electronic records pertain, at best, only to organizational archives. These arguments do not hold any promise for noninstitutional archives and manuscript repositories. The new paradigm excludes them.

Electronic records undoubtedly present some new challenges. Archivists who have electronic records programs do not have answers for all of the problems. Solutions will come, as they have for other new types of records, from archivists’ first examining what they know and the extent to which it is applicable, before dismantling archival theory and practice. Archivists should “start believing that traditional archival principles and theories . . . reconceptualized for an electronic world, may hold the key to prospering in the new environment we face.”<sup>44</sup> Although this writer’s reconceptualization was postcustodialism, tradition does offer help in dealing with new problems presented by electronic records.

Archivists should continue using established archival principles and practice in dealing with electronic records, as Trudy Peterson wrote a decade ago: “Managing machine-readable records does not . . . mean having to create the world of archival theory anew. The traditional archival principles—evidential and informational values, provenance, levels of arrangement and description—continue to undergird archival practice. That practice will grow and change, but the principles will endure.”<sup>45</sup> Supporters of a new paradigm for electronic records need to demonstrate conclusively that this approach won’t work and why, and their arguments need to draw on evidence based on archival history, traditional archival theory, and the experiences of practicing electronic records archivists.

More than forty years ago, Schellenberg’s concern was “how to meet current challenges on the basis of present practices and resources, not starting over again from scratch.” In 1992 Ole Kolsrud reflected the same concern: “Whatever we do in the way of theorizing or reflecting upon the nature of our profession is an obligation of ours. . . . But to do so sensibly, we ought to be aware of how archivists elsewhere and before us have tried to come to grips with their task. There is a strange tendency, even among archivists, to start from scratch as happy amateurs every time the need to ponder what we are really doing is felt.”<sup>46</sup>

<sup>43</sup> Cook, “Impact of David Bearman,” 36.

<sup>44</sup> Cook, “Electronic Records, Paper Minds,” 305.

<sup>45</sup> Trudy Huskamp Peterson, “Machine-Readable Records as Archival Materials,” XI International Congress of Archives (Paris: International Congress of Archives, 1988): 13. This article is similar to an earlier one Peterson wrote, “Archival Principles and Records of the New Technology,” *American Archivist* 47 (Fall 1984): 383–93. Supporters of the new paradigm do not cite or discuss Peterson or the other first writers about electronic records whom I noted earlier.

<sup>46</sup> McCoy, *The National Archives*, 180; Kolsrud, “The Evolution of Basic Appraisal Principles,” 37.