THE PERSONALITY OF ELECTRONIC RECORDS: THE IMPACT OF NEW INFORMATION TECHNOLOGY ON PERSONAL PAPERS

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ABSTRACT: This essay considers the changing nature of personal materials in the digital age by examining changes in “personal” means of expression and “paper” formats. Much recent research in the profession has focused on electronic records, but the vast majority of it has dealt only with organizational records. The authors argue that new communications media offer increased opportunities to document the lives of individuals as we exist outside of organizational functions, but that archivists will need to consider broader societal implications of these innovations before collecting these materials. They analyze some possible strategies for archival retention of personal electronic records, and urge archivists to engage in further thought and discussion about how best to identify and preserve these materials.

Technological and social changes of the late 20th century have created new concerns for archivists. The impact of these changes is visible in many areas of archival theory and practice, particularly in the abundance of literature about electronic records. The vast majority of the archival research that addresses the impact of these forces investigates how changes in technology have resulted in shifts in business and organizational practices. We have seen many theories emerge, and archivists and records managers have effectively articulated many new problems caused by the shift to digital media.

Startlingly, though, almost none of the literature on electronic records explores the effect new information technologies are having on personal papers. Only Australian researchers, such as Adrian Cunningham, have written specifically on the changes currently happening in the way individuals create documentation of their lives outside of the provenance of the organizations in which they act. We perceive a gap in archival research that needs to be addressed, for practicing archivists are already beginning to be confronted with personal records in electronic form. New digital media provide opportunities to document the lives of individuals who use them, but archivists will need to come to an understanding of the changes in personal materials to effectively actualize these possibilities. We also must engage in further thought, discourse, and
experimentation on these issues and, perhaps more importantly, consider the broader societal implications that accompany the new technologies.

Before starting, however, any discussion of personal papers should contain some sort of understanding of what comprises this artificially constructed category. Traditionally, an individual’s papers have included items such as correspondence, diaries, manuscript drafts, other writings, and ephemeral materials either created or collected by the person. Researchers often find personal papers to be among the most valuable resources in archival repositories. In more recent times, collections of personal papers have been expanded to include sound and video recordings as well as materials produced in other analog formats. Perhaps the crucial issues in defining papers that are personal can be found by considering the nature of their creation. Personal papers are documents created for personal reasons, be they communication, artistic endeavor, or other activities not necessarily linked to the production of commodities and services.

As we have moved into the digital age, we must now begin to incorporate materials created in electronic formats as personal papers. New electronic mediums provide possibilities for archivists to preserve new types of material and information. Individuals with access to the technology use it, and in doing so create a significant amount of documentation about themselves. Some of the theoretical work being done concerning electronic records in organizational settings can be helpful here, but the nature of personal papers necessitates somewhat different strategies.

The proliferation of electronic mail has substantially increased personal documentation, partially supplanting telephone communication. Although it would be false to assume that the content and method of e-mail communication mirrors speaking on the telephone, its convenience and relatively low cost allow people to supplement and often substitute it for telephone communiqué. The impact of the telephone replacing the letter as the primary method of distanced communication has long been a source of lamentation for archivists, who have been forced to acknowledge that much reflective information about an individual’s personal life now takes place over an unpreserved medium. The relative ease with which one can save e-mail messages provides an opportunity to regain documentation of perhaps intimate exchanges, if archivists can find a way to preserve them.¹

Electronic mail also preserves contextual information better than paper mail. Metadata, automatically embedded in electronic mail messages, describe the author, receiver, delivery path, date, time, and even rudimentary subjects. Also, in an analog world personal letters are usually sent without retaining a copy. It becomes a tedious, if not impossible, process to retrieve the sent letters if one wishes to collect the writer’s correspondence. When an e-mail message is sent, however, a copy of the message is automatically saved in the sender’s files in addition to being sent to the receiver. Furthermore, with the “reply” function, it becomes possible to trace responses to original messages. In short, the metadata and the ability to easily save messages sent and received allow archivists and researchers to reconstruct the contexts of this type of communication more easily.

The ease with which one can route e-mail to named folders also makes it simple for people to impose their own organization on their material, further personalizing not only the message itself, but the manner of storage as well. In this way, especially if the
archivist maintains the electronic records in an electronic environment, it is possible not only to capture the content and the metadata, but also something that in the past archivists could only approximate through original order: the individual's own internal method of organizing and storing the information. However, archivists should be aware of how this freedom to choose is constrained by the configuration of the e-mail program. Also, we need to acknowledge that, as with their paper records, many creators keep very disorganized spaces.

Individuals create and make available personal information about themselves using another common digital medium, the personal homepage. On a homepage, a variety of material is compiled and organized, so that one can view an individual's résumé, writings, and interests all in one take. Weston Thompson and Caryn Stein claim that homepages are analogous to old-fashioned scrapbooks, but go even further because they are "living documents that the creator can—and generally will—alter many times."2

Erecting personal information on the worldwide Web also allows people to be "touched" by a potential audience of millions. The business community has realized the marketing possibilities of the Internet and so have individuals, even if they are not after financial gain. It is curious to think about why people put personal information on the Web, and how they decide what is appropriate personal information to be looked at by strangers. The way the Web is constructed allows people to find you, but you cannot openly solicit their attention. People are drawn to a personal Web page as a way of displaying oneself. We reckon that not knowing who will see your display is conceivably what makes it exciting to mount information of a personal nature in what amounts to a public space. People have to find your personal homepage somehow, whether they stumble upon your page by accident or track you down deliberately. Also, one doesn't know who has accessed one's personal material, or downloaded it for that matter. There is a thrill to being exposed to strangers in this indirect and therefore, we assume, safe way. Another reason for the erection of a Web page is its faddish standing among today's technically touched individuals. The authors are both cognizant of social pressure to prove mastery of the technology by putting up a personal page.

Although the above might seem like a frivolous aside, archivists should always consider self-consciousness and audience when assessing personal papers, whatever the medium. The medium will often, as is the case with these types of electronic records, impact both context and content in complex ways.

These new opportunities for documentation aside, we would like to examine some of the problems engendered by a shift from traditional paper to electronic formats. Perhaps the best way to look at this transformation would be to break down the phrase "personal papers" into its individual components. If we can come to an understanding of the changes in what is "personal" and what are "papers" in our society, that will steer us in a direction for dealing with the new forms of documentation of individuals.

First, papers. The use of electronic means of communication, including word processing and e-mail, has significantly influenced how people create documentation of their lives. As mentioned earlier, archivists, records managers, and consultants have studied the move to these mediums within organizations, but these transformations also pertain to the personal realm. Much of the information formerly transmitted only on paper now exists only in electronic form, which has a critical impact not only on
how we create and revise documentation, but also on how we consume and retain it. Richard Lanham hits on this idea as well, writing that "Texts are not fixed in print but projected on a phosphor screen in volatile form. They can be amended, emended, rewritten, reformatted, set in another typeface, all with a few keystrokes." When one adds the reality of being able to immediately send or transmit one's work over networks, most documents no longer exist in a static form, the way putting ideas down on paper necessitates.

Furthermore, as the development and use of new information and communication technologies have become more widespread, documents are created in many different formats. From multimedia projects to personal homepages and beyond, new expressive digital media proliferate. Since content in these formats, too, can be easily altered over time, the past forms, looks, and contents of these documents become replaced, and normally lost, with the developments of their replacements. This ability to continually edit documents leaves the archivist, historian, or producer himself/herself with only a view of that which currently exists, and no record of previous versions. As an example, if on a personal homepage an individual erases certain links or content that reflect political leanings in order to "sanitize" the page before joining a corporate team or government office, he/she will do so without leaving any trace of its existence. Creators could potentially save and store versions of electronic records at certain points in their development, but we acknowledge this practice to be rare.

Electronic mediums inherently possess this tendency to erase contexts and historical processes, which poses a significant problematic shift in the concept of "papers" from an archival standpoint. We would also suggest that this lack of evidence of development over time has the deleterious effect not only of erasing history, but also of decreasing societal awareness of the past.

In addition to papers, the "personal" is rapidly changing in our society, although perhaps this is a more difficult point to make. New technologies allow communications between folks from afar, in quicker ways, and in different formats. Electronic mail, for instance, allows users to be in convenient and frequent personal contact with one another from around the world. Our networked world is becoming smaller, a global village. As a trade-off, though, technology now mediates human communications in ways formerly unimaginable.

One significant consequence of the development of more sophisticated communications technologies lies in the reality that communications can now more easily be monitored. For instance, although electronic mail seems to be private, all messages are recorded on back-up tapes owned by the Internet service provider. When people are aware of such things, the lack of privacy could and does alter that which gets transmitted. While these mediums provide opportunities to preserve documented material, they also alter the content of the communication in ways that cannot be quantified.

The fact that many electronic personal records reside on servers not personally owned by users creates another problem. If authors or creators do not own the medium on which they produce and store their material, can the material really be considered theirs, and if not, is it really personal? Although good-faith relationships normally exist between users and service providers, the records actually belong to the service provider even though they are created by users. The authors' lack of ownership of their personal
material indicates yet another area where the concept of personal papers is jeopardized.

Another change in the "personal" is the impersonality of many of these new forms of communication and self-expression. The effect of the mediation of computer technology on graphic creativity cannot be overstated. If you've seen one e-mail message, you've in effect seen them all. There is nothing personal about the format itself. One can almost understand why an archivist would throw up his/her hands at the challenge of devising policy for collecting and preserving personal e-mail if the personality of the content is suspect and if there is nothing personal about the format itself. Although some character strings have emerged to represent personal touches — :-)

;)-(: — these serve to prove our point rather than to undermine it. These few uniform symbols, already rendered meaningless through overuse, cannot approximate the relatively infinite possibilities afforded even by paper and pen. The move to electronic communication has all but eliminated nuances often found in paper documents.

Homepages seem to allow a certain amount of room for self-expression, and for those with access to the tools, they are relatively easy to create. But personal HTML documents tend to all look the same and, more importantly, they generally suffer from a lack of original content. In a way they are a peak of post-modern activity: a pretty package full of referents, in the form of clickable links, leading you away from the "original" document back to the "real original" document. People personalize their homepages by the selection of links they choose and graphics they copy from other documents to in effect "represent" them. Originality finds its expression in arrangement rather than in content.

This results, arguably, in the individual's voice of authority being undermined by the very same complex technologies that have been set up as tools intended to facilitate communications, workflow and creativity. Marshall McLuhan coined the now cliché phrase, "the medium is the message." The authority of the individual, which can be thought of at the most rudimentary level as the unique voice of a person, has been overwhelmed by the authority of new technologies, flattened out by uniform presentation, by fears of surveillance, and by a greater interest in the packaging than in the contents.

Deflecting attention away from original production on the part of the creator has profound implications for material that we have previously considered personal papers. "Personal" material, as we now define it, might not even be created in the future. People will continue to create material, but it may only be considered fallout from transactional processes, and not be imbued with anything remotely resembling the rarefied aura of, say, the papers of the United States' founding fathers. Intimately tied to this is the fact that the media for personal expression will continue to change. The term "personal papers" is even now outdated, as more and more of what might be considered "personal" is generated in electronic formats and, if retained, may never exist as paper. It may have been created on a "personal computer," but there is nothing particularly unique about that machine's performance. Both terms, "personal" and "papers" are fast becoming anachronistic. If they are going to continue to be used to identify the non-work-oriented materials generated by an individual, they will need to be explicitly redefined and expanded.
Up to this point we have argued that new digital mediums provide opportunities to document the lives of individuals who use them, but that archivists will need to fully consider the changes in personal materials. It would be helpful to consider some possible strategies for curating electronic personal records through an examination of the work of Adrian Cunningham. In an article in *Archives and Manuscripts*, Cunningham suggests strategies to combat the shifts of personal materials into electronic formats, and a brief discussion of his thoughts would be prudent here.  

In many ways Cunningham’s article draws on the ideas of organizational electronic records researchers, generally calling for the retention of electronic materials in electronic form, hardware and software standardization, increased technological ability among archivists, and proactive strategies to educate records creators. But at the heart of his argument Cunningham points out where organizational techniques will not suffice, due to the unique nature of personal papers.

For instance, when encountering authors’ works in progress, he advocates encouraging writers to print out drafts to provide a record of the writing process. Most contemporary authors who work with word processing software save over previous drafts, thereby losing the creative process. This erasure of process can be eliminated by printing out hard copies periodically, thereby fixing the text in time. Although this idea can be criticized by pointing out that drafts can be saved and fixed in time electronically more easily and compactly, we believe the practice of using a paper printout better preserves the writing process because it offers writers the opportunity to edit without employing the uniform appearances of a text editor. To put it another way, we believe the unique traces left by the proverbial red pen to hold evidential value lost to the text editor, and if an author works with hard copies, they should be encouraged to save them. For authors who work solely in electronic formats, we advocate capturing the work in progress electronically.

Another point where Cunningham diverges from organizational strategies is the call for distributing the custodianship of records out toward their creators. Cunningham sees this practice, and we concur, as inapplicable to collecting institutions on very obvious grounds: people die and their heirs will not be interested in managing electronic records legacies. Clearly, it will continue to be necessary for archives to physically house personal electronic materials. This need will require archivists to increase their technological knowledge, and Cunningham even suggests new positions be created within archives for computer professionals to provide support to users and staff.

The wide variety of record formats and storage media are causing problems, and technological obsolescence in particular will force archivists to be more proactive. Herein lies Cunningham’s most radical proposal. He advocates a shift from traditional practices of identifying donors of personal papers near the ends of their lives to performing this function as early as possible in individuals’ careers. A relationship between archivist and author would then need to be cultivated in an extremely long-term sense, with the archivist acting as advisor to the creator on records-keeping activities. He justifies these radical methods by reminding us that these records will be lost to technological obsolescence and incompatibilities without an extremely proactive approach.
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It is this suggestion of Cunningham’s, however, which gives us the greatest distress. While such a strategy would conceivably provide for tidily kept records, it would also influence the creation of those records in unforeseen ways. Furthermore, the difficulties of dealing with a donor over the long term cannot be overemphasized, especially considering the sometimes iconoclastic natures of many records creators. There is a crass, backroom archival joke: the only good donor is a dead donor. While surely this is a harsh and often untrue statement, all archivists involved in collection development know of troubles that arise when dealing with donors, and these troubles will only be magnified with Cunningham’s approach. The ultra-proactive suggestions also would affect appraisal decisions, favoring the work of individuals who gain renown earlier rather than later in life. Additionally, archivists would be forced to appraise records at a time much nearer to their creation, without the benefit of time and hindsight to assist in these decisions.

Though flawed, Cunningham’s suggestions do serve an expository role, forcing us to consider the consequences of avoiding the problems caused by the emergence of new information technologies. The degree to which archivists work with potential donors aside, we see it as imperative that archivists come together to educate the public, both on how to manage their personal records, regardless of format, and on the broader issues surrounding the emergence of electronic mediums of communication. We harbor no illusions that the public has displayed much interest in either preserving the traces of their personal production or in the broader issues. But these issues are at least beginning to be articulated in the popular press, as evidenced by this plea from Jeff Rothenberg in Scientific American: “The content and historical value of thousands of records, databases, and personal documents may be irretrievably lost to future generations if we do not take steps to preserve them now.” These issues are of tantamount importance, and nothing short of future visions of history rely on archival solutions to these problems.

Perhaps more importantly, though, archivists will need to focus on how the introduction of information technologies into both public and private spaces changes the human behavior we strive to document. Archivists must discuss and research the changes brought on by new information technologies. This requires analysis beyond realizing that we will need to deal with encroaching electronic records. Along with calls for re-educating ourselves in the uses of new technology, we need to apply ourselves to learning of the impacts these technologies are having and of their broader societal implications. Without doing this work we will be susceptible to making much poorer selection and appraisal decisions, potentially ignoring much material that does not exist in electronic form or that has no direct connections to the coffers of government and organizations.

The challenges posed by electronic records remain daunting, especially in these early stages of consideration. But instead of ignoring these issues, manuscript archivists must engage these problems, and our voices and concerns must be heard in formulating policies and procedures for the collection of materials in electronic formats. We must also reaffirm that these materials of a personal nature are worth collecting, for the absence of a discussion of personal papers in electronic records literature implies they are not. And we must continue to commit to collecting materials in non-electronic
formats, thereby documenting the lives and experiences of those without access to the new technologies. As such, we need to remind ourselves of the cultural role played by archives and manuscript repositories in our society, and strive to attain these goals for ourselves by collecting and making accessible the personal materials of a wide range of people, whatever the format.

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NOTES

1. Potential legal issues arise when considering preservation of and access to electronic mail. Unlike telephone communication, where capturing documentation requires a proactive approach (i.e., you have to either actively record it or someone else must tap it), the technology of electronic mail intrinsically records the messages, and users must intentionally delete them to remove them. Even when messages are deleted, back-up tapes preserve the information. While archivists will certainly need to be sensitive to personal and legal issues when providing access to material stored on back-up, having to confront these issues improves upon a situation where no records exist at all.


5. Cunningham, ibid., 96–98.

