Presidential Address

Reading, 'Riting, and 'Rithmetic: Speculations on Change in Research Processes

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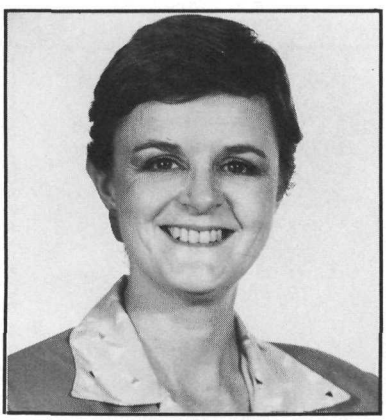

About the author: *Trudy H. Peterson gave this presidential address at the fifty-fourth annual meeting of the Society of American Archivists in Philadelphia on 25 September 1991. Peterson is assistant archivist for the National Archives—a position she has held since 1987. She has held various posts at the National Archives and Records Administration since 1968. Peterson received a B.S. from Iowa State University in 1967 and an M.A. and Ph.D. from the University of Iowa in 1972 and 1975 respectively.*

Abstract: The skills of reading, writing, and arithmetic have evolved distinctly and negatively during this century. These changes have already begun to affect archivists and archival institutions. The need for what archives contain will remain, but the ability of many people to use archives effectively may be expected to diminish. Unless archivists are willing to move away from serving the whole population in a postliterate society, they will have to mediate between the users' needs and the documents' contents to a greater degree than they have in the past.

"READING AND WRITING AND 'rithmetic, taught to the tune of a hickory stick," says the old song. The hickory is not yet an endangered species, but the other three are, at least as they have been known during this century. And the changes in each of these three processes will, in turn, change the nature of research and reference service in archives in the next century.

I want to look at each of the processes in turn: how they have evolved, what is the nature of the change, and finally what that portends for archives. In looking at the processes, I hope to be descriptive, not censorious. It is not my purpose here to take sides in the national debate on literacy. It is, rather, the nature of literacy that concerns me and that I believe affects archives and archivists.

Reading

With that condition stated, let us turn to the issues of reading and writing. The first important step is to separate them. We know from antiquity that many people who could read could not write. Writing was considered a separate skill, and mastering it was not essential to reading. The great British medievalist, Michael Clanchy, reports that in medieval England "reading and writing" were not words that ordinarily tripped off the tongue coupled together: the common pair was "reading and dictating."[1]

If we give *reading* its current, common meaning—to observe and apprehend the meaning of something written—it is then reasonable to ask how reading has changed over the course of the twentieth century.

First we must look at motivation. People read for many reasons. We read to gain information. We read to escape into the world of an author. We read to satisfy spiritual impulses. At the turn of this century there were basically two ways to gain information: to be told the information by someone (necessitating standing within the limits of the vocal carrying capacity of the human voice) or to read it in a document or a letter or a publication. Think of the great scene in *Gone with the Wind* when the crowd gathers to hear read the names of the soldiers killed and wounded and then scrambles for copies of the list. There are the two information vehicles.

What has happened during this century, of course, is that news and information are increasingly delivered orally and pictorially, not by a document that must be read. From the ubiquitous "training videos" and computerized learning games to the services of CNN, from the telephone to "voice mail," the U.S. population simply has less need to read than it had at the dawn of the twentieth century. I don't write my loved ones, I telephone them. Many of us don't read daily newspapers. Recently the *Washington Post* projected that in twenty years "only 29 percent of older adults would read a newspaper every day . . . and only 59 percent would read one more than once a week." A young white female, contacted by the *Post* in a readership poll, said, "The newspaper is harder than TV. With a newspaper, nobody reads it to you. With TV, you just turn it on."[2]

It may be that humans actually prefer to gain most basic information through oral means and that technology is simply taking us in the direction that we have historically preferred. It may be that the demand to read peaked at the turn of this century and that we will not see again that mass, democratic demand to read as a survival skill. This direction seems confirmed by the recent College Board announcement that the

[1]M. T. Clanchy, *From Memory to Written Record: England, 1066-1307* (Cambridge, Mass.: Harvard University Press, 1979), 97.

[2]Richard Harwood, "Rotten News for Everyone," *Washington Post*, 1 September 1991, C6.

reading and writing skills of the high school class of 1991 are the poorest in the history of the SAT examinations.[3]

What does this mean for archives? I think the impact on archives of the decline in reading skill will vary, depending upon who the patrons are and what records they seek.

We all recognize that different types of archives have different clienteles. To give an extreme example, a public archives at any level of government is likely to see genealogists every day, whereas a presidential library will see them infrequently, at best. Moreover, the pattern of requesting services is different: manuscript collections may find that the majority of their researchers write ahead to alert the institution that they are arriving, while in public archives most researchers arrive unannounced. Similarly, the proportion of persons who visit to do research as contrasted with the number of persons who write and ask for mail order services probably varies, with business archives often directly serving an on-site, in-house clientele while the National Archives has half again as many written inquiries as on-site visits.

A shift in reading facility will obviously affect these archival institutions differently. Manuscript collections, business archives, presidential libraries—those whose research clientele is highly educated and often the intellectual elite—will be least affected. However, even in these institutions serving researchers skilled in reading, they may find researchers less patient and more resistant to reading written finding aids. This, I think, will reflect the different sense of time that the computer has brought. We see today a real decline in what the Germans call *sitzfleisch*—patience, if you will. (Eternity is in direct proportion to the amount of time a person spends before a frozen computer screen.) These researchers will be highly skilled in using computer technology and will be insistent upon direct random access rather than the slow, sequential access of the typical written finding aid. But they will still be able to read instructions on a screen quickly, scan documents rapidly, and navigate written information with ease.

In public archives and in other archives whose focus is the general public, the change may be much more significant. They will continue to have some of the same elite researchers I have just described. But a substantial part of their current clientele comes to the archives from the general public for research of purely personal interest: my church, my lighthouse, my grandfather. These persons are already intimidated by coming to an archives; as the facility in reading declines, and if archives are perceived as places where you must read—a page, a screen, anything—to get service, archives will seem even more intimidating.

There is also the category of users who want nontextual material. They seek an image, a bit of footage, an architectural rendering. They have always had trouble deciding what they want from a written description, and archivists have always had trouble providing satisfactory words to substitute for pictures. As the "image lock" on society increases, researchers seeking nontextual items will become even more reluctant to work through a process of image identification that requires reading first.

Finally, as immigration continues to add three-quarters of a million new people annually to the U.S. population and multiculturalism takes hold, an increasing percentage of the people who read may read most easily in a language other than English.

Writing

Now let us turn to writing. The reasons people write are strikingly different from the reasons why we read. Writing evolved

[3]Harwood, "Rotten News."

to solve some very distinct problems. At its heart, of course, is the desire to transmit information accurately over space and over time. But writing has at least two other major uses. First, it makes administration of very large entities possible, bringing with it the possibility of managing organizations that are so large that a single individual cannot hold in the mind all the details required for effective administration. Second, writing assists in logical thinking, bringing with it the possibility of advances in fields as diverse as philosophy and physics, by fixing a random placement of thought with the possibility of retrieving and reviewing ideas forgotten or incompletely realized and subsequently ordering them into a logical pattern.

All school children are taught to write, usually by several means: block print, cursive, and typewriting on a computer keyboard. But not all people write much beyond checks. (A friend of mine appeared before a citizenship examiner and was asked whether she could write English. "No," she said, "only checks." The examiner laughed, and she is now a citizen.) Some of the lack of writing may be culturally based: think, for a moment, about the holiday cards that you receive—how many include a note from a woman and how many from a man? Another reason for the lack of writing may be class-based: sociologists have identified a pattern of professions sloughing off tasks to paraprofessionals if the tasks have become routinized to the extent that instead of actually having to compose a sentence the action can be completed satisfactorily by filling in a blank.[4]

Yet another reason is lack of demand: according to the U.S. Department of Labor, this decade will see very large numbers of jobs created in service occupations, administrative support, and marketing and sales, jobs that require "only modest levels of skill" where "workers will be expected to read and understand directions, add and subtract, and be able to speak and think clearly."[5] For these jobs, the skill of writing is simply not required. And like any skill, if it is not practiced it soon becomes increasingly difficult to do it proficiently.

What does this mean for archives? Again, probably not much for the elite clienteles. These researchers, living in the world of voice mail, will probably become impatient with the request to "please put it in writing," but if their work depends upon the archives they will probably comply. However, the non-elite researchers using the archives for purely personal reasons may turn increasingly to oral inquiries rather than written ones. Archivists generally believe that written inquiries are easier to handle than oral inquiries because, even though we can query a researcher about the research interest during a conversation, a written inquiry is usually stated with more precision and care (a modest example of the utility of writing in fostering the development of logical thinking). If oral inquiries increase in proportion to written inquiries, the archival staff will have to devote more time to clarifying and defining the object of the research.

Arithmetic

Arithmetic is the third of the traditional skills. The everyday use of arithmetical concepts has been gone so long that we no longer find it remarkable that we dig out pocket calculators to divide a restaurant bill three ways. A study by the U.S. Department of Education found that among 21- to 25-year-olds "only 44 percent of whites,

[4]Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago, Ill.: The University of Chicago Press, 1988), 243.

[5]William B. Johnston and Arnold E. Packer, *Workforce 2000: Work and Workers for the Twenty-first Century* (Indianapolis, Ind.: Hudson Institute, 1987), 99-100.

20 percent of Hispanics, and 8 percent of blacks could correctly determine the change they were due from the purchase of a two-item meal."[6] The computer was initially a data processing device and, like the plot of the old Elmer Rice play, *The Adding Machine*, it soon made all those of us who had learned to "carry" and "borrow" irrelevant. (What are slide rule manufacturers doing these days?) Because of the precision of the usual arithmetical procedures, mathematical reasoning has been almost wholly surrendered to the electronic calculating devices.

What impact does this have on archives? Rather little, I believe, since the traditional work of the archives has not depended on mathematical manipulations. The archival holdings that have mathematical components, such as scientific data, are almost certainly of research interest to the academic users who are trained to handle mathematical concepts. On the other hand, persons seeking information in databases, many of which may have a mathematical component, will increasingly need retrieval assistance from keepers of electronic records. Archives' capacities to provide manipulation and duplication services may come under pressure as more data sets find homes in the archives. But this shift in arithmetical skill has been more fully and easily accommodated than the shifts in reading and writing.

What Is To Be Done?

One option, of course, is for archives to do nothing. After all, the reasoning goes, if researchers want to use our facilities they must conform to our requirements. Researchers must be able to both state a clear research problem and read the documents that would help to answer it. We cannot help it if we are paper museums in a video world.

[6]Johnston and Packer, *Workforce 2000*, 102–03.

The trouble with that answer is, I fear, that it will tend to move archives away from serving the whole population, away from the great democratic ideals that are the foundations of the public archival institutions. Unless we look the postliterate society full in the face, archives will not be able to continue to serve the research needs of the general public.

And make no mistake: with the change in reading and writing skills does not come a diminution in the need to find a medical record or in the interest in grandpa or in the aesthetic pleasure of seeing the architectural drawing of the church at the corner or the film footage of the bald eagle. The need for what the archives contains is still there, and the need for archivists to mediate between the needs and the documents is even greater.

It may be that the mediation needs will become so intense and the limitations on the archives so great that there will be a growth in the number and variety of professional researchers who, for pay, will find grandpa and church and eagle. Again, however, this is an additional cost of research and tends once again to stratify the research clientele of the archives into the higher economic brackets. It may also be that, if the databases archives *create* continue to be those designed to assist archivists and archival description, that another group of mediators will develop: persons who have mastered the arcane ways of computerized data sets of archival description. While these mediators may be commercial services, with the dollar costs to the users that that implies, the mediators may also be librarians of all types. In other words, if our descriptive databases are difficult to use, potential users may turn to their librarians for assistance, and archives will thereby transfer part of the cost of doing research to the already-strapped library budgets.

If the first option is to do nothing, with the possibility that commercial and other

mediation services will spring up, a second option is for the archives to move into the mediation business itself. This mediation can take two forms: assistance in negotiating finding aids and greater willingness to provide information *from* the documents—not just information *about* the documents. Let me look briefly at each.

Written, paper-based, sequential finding aids and their barely reformatted computerized counterparts must give way to direct access, easy, user-driven (that is, a major leap beyond "user-friendly") computer-based finding aids. In designing our finding aids, we must learn from *USA Today* instead of the *Wall Street Journal*; we must look to the strategies that make learning video games easy and playing them fun. We must think about using signs and symbols; we must use the computer's "artificial intelligence" to give our users easy, logical search paths. We must think about delivering pictures instead of words in some cases. Hardest of all, we must think about *how people think* and design a system that will work for them—not just a system that will work for us.

The second sort of mediation must be to provide more research service than reference service. I think that many, if not most, archives provide a good deal of information *from* the records as well as *about* the records. This is certainly not the archival theory and literature, but I believe it is the truth. If someone calls the university archives and asks about the last time the football team went 3-0 at the start of the season, my guess is the archivist will simply look it up and tell the caller. For those people who are computer-phobic, for those persons who have difficulty reading, for those persons who can express themselves in English but only write checks: these people will need oral services. And this is a large group.

In the mid-1980s the U.S. Department of Education conducted a National Assessment of Educational Progress. It found that among 21- to 25-year-olds "only about three-fifths of whites, two-fifths of Hispanics, and a quarter of blacks could locate information in a news article or an almanac" and "only a quarter of whites, 7 percent of Hispanics, and 3 percent of blacks could decipher a bus schedule."[7] By the year 2000, these people will be the 40-year-olds. If a member of this cohort comes to an archives hoping to find evidence that he owns a piece of land or he was exposed to chemicals in the work place or his ancestors were Native Americans, how does delivering a box of documents help him? Can he read well enough to find the information? Can he write well enough to write the archives a letter and ask for it? What is the responsibility of the archives in a case where a person's rights and benefits may be involved? And if an archives will provide research service in a benefits case, will an archives also provide it in a personal-interest case? Can we afford to provide this service? In a political system where power comes from the people, can we afford *not* to?

Archivists have been fascinated and proud as country after country in Eastern Europe has changed its government, accompanied by demands from the citizens that the records of the former government be revealed. From the Stasi to the KGB, the archives are a major target for the citizen-reformers. We have applauded those demands for access. Now let us look squarely at the demands here at home. Let us look at the public appetite for archives. Let us remember that we hold information that our fellow citizens crave. Let us remember that we hold it in trust. And then let us find ways, make ways, create ways, to deliver it to the democratic whole of the men and women and children who depend upon us.

[7]Johnston and Packer, *Workforce 2000*, 102.