Traditional Scholarship in the Digital Age[1]

David R. Knechtges

University of Washington

It is a great pleasure for me to speak before this distinguished group of librarians. I must confess that I really like libraries. I need not tell you that historically the library always has been the most impressive building on any campus, or for that matter, most large cities. Richard Eberhart, the former U.S. poet laureate, wrote a wonderful poem about the pleasures of the New York Public Library. Here is an excerpt from the poem:

> Reading Room, the New York Public Library
>
> In the reading room in the New York Public Library
>
> All sorts of souls were bent over silence reading the past,
>
> Or the present, or maybe it was the future, persons
>
> Devoted to silence and the flowering of the imagination,
>
> When all of a sudden I saw my love,
>
> She was a faun with light steps and brilliant eye,
>
> And she came walking among the tables and rows of persons.

---

[1] Summer Institute for Chinese Librarianship, Henry Art Gallery Auditorium, University of Washington, August 1, 2008.

Straight from the forest to the center of New York,

And nobody noticed, or raised an eyelash.

. . . .

Everybody was in the splendour of his imagination,

Nobody paid any attention to this splendour

Appearing in the New York Public Library,

Their eyes were on China, India, Arabia, the Balearics,

While my faun was walking among the tables and eyes

Inventing their world of life, invisible and light,

In silence and sweet temper, loving the world.

Even when I was a student in high school in Kirkland, Washington, which is located across Lake Washington from here, I delighted in venturing into the big city of Seattle to use the resources of the Seattle Public Library and the University of Washington Library. To this day, I spend a good deal of my time in the library. Thus, I have a great amount of respect for librarians, the importance of their jobs, and the splendid services that they provide.

Shen Zhijia has assigned me the topic of “Traditional Scholarship in the Digital Age.” The only traditional scholarship that I can claim any knowledge of is Sinology.

Sinology is actually a much-misunderstood word. Although it has sometimes been applied to anyone who studies or writes about China, including journalists and so-called China watchers, historically Sinology has a much more precise meaning. Sinology first developed in early nineteenth century France. It grew out of the newly emerging field of philology—the discipline that was primarily concerned with the careful study of languages (mainly but not exclusively classical languages), literature, and the interpretation of texts. My teacher Professor Hellmut Wilhelm, who taught at the University of Washington from 1949 to 1969, thus used to define Sinology as "Chinese philology."

Professor Wilhelm was the first person to introduce me to the field of Sinology. Wilhelm was a consummate bibliographer who played an important role in the establishment of the East Asian Library on this campus. Professor Wilhelm's father, Richard Wilhelm, was a German who spent much of his adult life in China. He went on to become one of the most distinguished German Sinologists of the early twentieth century. His son Hellmut was actually born in Qingdao, which of course is probably more famous today for its beer than Sinology. After the rise to power of Hitler in the early 1930s, Hellmut Wilhelm returned to China, where he resided until he was invited to take a professorship at the University of Washington in 1949. During his stay in China,

Professor Wilhelm acquired a large collection of Chinese books, many of them rare Ming and Qing editions. In 1957, these books became the property of what was then called the Far Eastern Library. My only regret about this purchase is that many of these books have yet to be properly catalogued.

I have spoken of the monumentality of libraries. That is not always the case, for the Far Eastern Library that was founded here in the late 1940s was not an imposing structure. It was actually housed in the basement of Thomsen Hall. It consisted of a reading room no larger than a living room. There was a checkout counter behind which all of the librarians worked. The only office was a small enclosed space occupied by the head librarian. There were only two tables at which library patrons could sit to consult the very limited number of reference works, mostly dictionaries. The stacks consisted of shelves placed under the pipes that provided heat for the building. Hanging from the pipes were signs in Chinese—注意—watch out lest you bump your head on a pipe.

This was still the state of affairs here in the 1960s and early 1970s until 1975 when the library was moved to its current location in Gowen Hall. I am sure you all have seen the wonderful reference room in our East Asian Library, which surely must be one of the most spacious reference rooms of any East Asian Library in North America. The fact that I began my Sinological education in the cramped quarters of the Thomsen Hall basement

was something of a blessing, for it gave me the opportunity to obtain an intimate acquaintance with the collection. Although we had a card catalogue, it was not always necessary to use it. The classification system was the Harvard-Yenching Ch'iu K'ai-ming system, and as you all know, this system is based on the Chinese traditional four-category system of classics, histories, masters, and literary collections. This was a system well suited for classifying pre-modern Chinese books. It also made it relatively easy to find a book without even knowing the call number.

Another advantage of the small space was that all of books, including even the Ming and Qing editions, were in the open stacks. Thus, even as an undergraduate I was able to use what now are regarded as 善本 or rare editions. This was actually still possible to do even at Harvard when I studied there as a graduate student in 1964-65. Regrettably now our students do not get the same exposure to old books. I will return to this point at the end of my talk.

As I mentioned, my assignment is to discuss traditional scholarship in the digital age. All of you here certainly know more about electronic media than I, and so what I have to say about this subject is simply from the perspective of someone who has only a slight knowledge of digital resources. I think it is rather striking that it has been the librarians who have been at the forefront in the application of electronic resources in the academic

community. I remember in the 1980s when the late Karl Lo, who had an engineering background, began to introduce electronic resources in the East Asia Library. He perhaps was the first in North America to set up an electronic catalogue. Those of us who were quite content with the card catalogue were not exactly enthusiastic about the diverting of library funds and resources to this effort, but of course the results have been highly beneficial. I need not tell this group what a wonderful resource all of the various electronic catalogues are. I often use them, especially the Harvard Hollis catalogue and the Academia Sinica catalogue in Taiwan, as bibliographical resources. The electronic catalogues have also expanded the use of interlibrary loan. I can remember the days when interlibrary loan was more trouble than it was worth. First, one had to find out what other library had a copy of the book one was looking for—a not easy task, and then wait weeks and even months for the book to arrive, if it came at all. Now of course the system is remarkably efficient and fast. I make frequent use of it. Someone not long ago told me that David Knechtges makes more requests to interlibrary loan than any other member of the China faculty.

Another electronic medium that Karl Lo was the first to introduce to North American was the Academia Sinica standard histories database. Through funding from the China Program, the library was able to purchase the system. This was in the era

before the Internet, so the only way it could be accessed was through a locally installed terminal. We had two terminals in Gowen Hall: one in the library, and the other in the Department of Asian Languages and Literature. As many of you will know, Chinese word processing even in the early 1980s was very cumbersome, and I never had time to master the system used in those days. Fortunately, I had a few technically astute graduate students, and they were more than happy to help me access the data. For some years, the University of Washington was one of the few institutions in the country that had this resource, and I recall my colleagues from other universities who did not have access to this database requesting me to obtain data for them.

It is truly astounding to contemplate the rapid pace at which our ability to access information has progressed in recent times. The most recent issue of the *Bulletin of the American Academy of Arts and Sciences* carries a feature article by Robert Darnton, University Professor at Harvard and Director of Harvard University Library. The title of his article is virtually the same as the title assigned to me this afternoon, "The Research Library in the Digital Age." Darnton begins his article by identifying four great changes in information technology since humans learned to speak. The first is the invention of writing around 4000 b.c.e., the second is in the third century c.e. when the codex replaced the scroll, the third is the invention of printing with moveable type in Europe in the 1450s,

and the fourth change is the application of electronic communication beginning in the mid-1970s. Darnton has a very trenchant comment on how fast these changes have occurred: "the pace of the change seems breathtaking: from writing to the codex, 4,300 years; from the codex to moveable type; 1,150 years; from movable type to the Internet, 524 years; from the Internet to search engines, 17 years; from search engines to Google's algorithmic relevance ranking: 7 years; and who knows what is just around the corner or coming out the pipeline?" (10).

Of course, if one applies Darnton's scheme to China, one might write a slightly different history. We can trace Chinese writing back to about 1600 b.c.e. The first writing media were shell and bones, metal and stone, and bamboo tablets. One can only imagine how a modern library would function if everything were written on bamboo tablets. Perhaps the bundles of bamboo slips would be stored in carts. If one wished to check out a book he would check on an entire cart. Silk scrolls first appear in China around 700 b.c.e., and paper begins to replace bamboo and silk in the second century c.e. However, we do not get the equivalent of a Chinese codex until the Tang dynasty, when bound paper books were produced. Although Darnton mentions the Chinese invention of movable type printing around 1040, four hundred years before Gutenberg, he claims that Gutenberg's "invention, unlike those of the Far East, spread like wildfire, bringing the

book within the reach of ever-widening circles of readers" (10). This is a very Euro-centric view of things, for if one considers the vast population of China, and the diverse cultures in East Asia—notably Korea and Japan—that soon acquired movable type printing, the Chinese invention of printing certainly spread as rapidly and as widely as in Europe, and printed books in East Asia reached groups of readers perhaps as large as those in Europe.

What about the digital age and its relationship to traditional Sinology? One of the issues that Robert Darnton addresses in his article is whether the emergence of electronic resources will make the research library and even printed books obsolete. As Darnton points out, on some campuses students do not visit reading rooms, but use libraries for lounging and chatting as well for drinking lattes and eating snacks. Darnton claims that most students obtain their information online, not in the physical space of the library.

I actually think that Darnton should spend some time at the Harvard-Yenching Library on his campus, for the situation there is quite different from what he describes elsewhere on the Harvard campus. First of all, if he were to look inside the reading room of the Harvard-Yenching Library at any time of the day, he would see almost every chair occupied. And the users are not chatting, drinking, or eating, but are reading the books. If I may sound a bit like a Chinese chauvinist, I think the Chinese field is somewhat

different from other fields in the humanities. We are much more dependent on reference books and libraries than most other fields. Indeed, on how many campuses does one see a European library, let alone one for French, German, Spanish, or even Slavic languages? But every major institution has a separate library dedicated to East Asian materials. That is as it should be.

There is a reason for the uniqueness of the East Asian research library. Much of it has to do with the need to process East Asian materials separately from works in Western languages. Although old-fashioned philology has become almost obsolete in some fields, it still thrives in the East Asia field. Thus, we still have a goodly number of students and faculty members who have a strong interest in books.

Sinology of course has greatly benefited from digital technology. The various electronic databases of texts provided by the Academia Sinica, the Chinese University of Hong Kong 漢達文庫 or Chinese Ancient Texts, the electronic editions of the *Siku quanshu*, and *Sibu congkan*, even the electronic version of the *Hanyu dacidian* have made the task of obtaining textual and linguistic information more convenient. Having said this, I must say that this convenience does have several drawbacks and even dangers. The first, which I am now beginning to see in even in recent publications, is the tendency simply to rely on the electronic version of a text. Some scholars in fact do not even cite a printed

version of a text, but simply reference the electronic version. This practice has several dangers. The first is that no matter how good the electronic version may be it is far from accurate. The Academia Sinica databases have numerous missing characters, misprints, and even punctuation errors. Of course, the electronic versions of the *Siku quanshu* and *Sibu congkan* do contain photographs of the original, but I wonder how many scholars actually look at the original.

The second danger of over reliance on electronic versions of texts is that this encourages scholars not to pay attention to textual variants. This is also a point that Robert Darnton makes in his article. In recent years, scholars have become increasingly aware of the importance of consulting more than one edition of a book. As Darnton puts it, "Why save more than one copy of a book? Why spend large sums to purchase first editions? Aren't rare book collections doomed to obsolescence now that everything will be available on the Internet?"

I am sure that these are issues that all librarians have had to face in this age when library budgets seem not be necessarily the highest priority of many institutions of higher learning.

Darnton's answer to these questions is that textual transmission has always been unstable even in the age of printing. He cites the example of Henry Clay Folger, who

began to collect editions of Shakespeare in the late 19th century. Darnton says that many of his contemporaries viewed Folger's obsession with collecting copies of the First Folio edition of Shakespeare "as the mania of crank." This is how Darnton tells the story: "The First Folio, published in 1623, seven years after Shakespeare's death, contained the earliest collection of his plays, but most collectors assumed that one copy would be enough for any research library. When Folger's collection grew beyond three dozen copies, his friends scoffed at him as Forty Folio Folger. Since then, however, bibliographers have mined that collection for crucial information, not only for editing the plays but also for performing them" (12).

The same principal can be applied to Chinese books. If I may be so bold, I would suggest that libraries indeed need more than one copy of the same book. One of my greatest complaints over the years with the East Asia Library is the failure of the acquisitions librarians to buy new editions of the same book. When I would recommend such a purchase, the reply often has been: we already have this book. No, we no not have this book. We have another version of it.

One of the "hottest" new fields in Sinology is the study of textual transmission. This study requires access to as many editions of a work as possible. Digital resources perhaps can help with this kind of study, but not in the way that one might expect. The most

important new resource in my field is the photographic reproduction of manuscripts and rare printed books. We now have most of the Dunhuang manuscripts available, and such collections as the *Xuxiu Siku quanshu* have given scholars access to many works that were only available in one or two libraries in the world. However, these are all printed works. There is a project in Europe to prepare digital versions of the Dunhuang manuscripts, but only a very small portion of these materials is available. So for the near future, libraries will still have to invest funds in purchasing these expensive but indispensable printed collections.

What about such projects as Google Books? Perhaps that will make more rare editions of Chinese works accessible. Robert Darnton, who admits to being a Google enthusiast, has some caveats about the project. He first is skeptical about the promise of putting virtually all printed books online. He is especially concerned that this illusion could result in the neglect of works that are not deemed worthy of being digitized. Another related concern is that Google has yet to venture into special collections where the rarest works are to be found. There is also a strong bias toward works written in Western languages. As Darnton puts it, the totality of world literature "lies far beyond Google's capacity to digitize." And very importantly for the textual scholar, Darnton says that Google will make mistakes—"it will miss books, skip pages, blur images, and fail in

many ways to reproduce texts perfectly" (14). One last important point Darnton makes is the possibility that Google will not always be around or will be replaced by some other form of technology. We all remember the instability of the old floppy disks on which some of us stored digital copies of our files. As Darton puts it, "Research libraries last for centuries. Better to fortify them than to declare them obsolete, because obsolescence is built into the electronic media" (14).

These caveats apply to the Chinese case even more so. I have already mentioned the numerous errors that one finds in digitized versions of Chinese texts. I have even found some mistakes in imaged versions of old texts. I can think of at least one advantage from digitizing rare Chinese editions. Even books conserved in special collections are gradually deteriorating. If done properly—and properly is an important qualifier here—digitization can be a way of preserving an old text in the form that is now exists.

So what do I conclude about the status of Sinology in the digital age? I would say that despite all of the convenience of electronic resources, Chinese books and libraries are not going to disappear within the immediate future. As I mentioned earlier in my talk, I love libraries and books. I also detest reading a text on a computer screen. I want not only to feel the book, test its weight, examine the binding, and but even smell its pages. The older the book the more important this information can be.

What then do I recommend? I could not put it better than Robert Darnton who says: “shore up the library. Stock it with printed matter. Reinforce its reading rooms…. Long life Google, but don’t count on it living long enough to replace that venerable building with the Corinthian columns.”