A curious amount of unease surrounds Google's initiative to scan thousands of books in major research libraries and make them available online. Although I understand the concerns, I don’t entirely sympathize with them. About ten years ago, while writing a dissertation, I also started research on an article that CAUSE (now EDUCAUSE) published in 1999. It was no easy task because the Internet at the time had just begun to show its promise. Nonetheless, performing my first real research on the Internet for that article provided a window through which I could see at least some small part of the future.

I had heard of problems at San Francisco’s main library when it introduced hundreds of computer terminals to facilitate Internet research. So, I did something we all take for granted today, which was near magic to me back then: I searched the Internet for the San Francisco Chronicle. Surprisingly, it had a homepage. Then I searched for topical articles, found one, and printed it out—and then printed out some more, obtaining just the information I needed. And, I had the information in my hands without a trip to the library, searching for articles on microfilm, or any of that. I glimpsed the future for a moment, and it was thrilling.

Since then I have become a computer system administrator in the federal government. Those early lessons on the potential of the Internet and digital content not only have never left me but serve as a touchstone when things (as they are wont to do) get complicated. Google’s initiative will not make books obsolete; it will make the information in them more widely available.

Making the Past Accessible

Recently, while making final changes to another article for publication, I accessed a nineteenth-century book by Justice Joseph Story, which had been scanned and was available on the Internet through Google’s efforts, and I marveled anew. This and other digitization endeavors will preserve and perpetuate the ideas of thousands of authors by transferring them to today’s technology. Pause to imagine the absence of Google’s initiative, and it immediately becomes apparent that books and other printed material would quickly reach obsolescence if...
not easily accessible through digital technology. That is precisely what the Internet has changed in our everyday lives—we expect information of all kinds and from all sources to be only a few keystrokes away. Search engines are the new subject indexes to virtually infinite amounts of information on the Internet.

Numerous studies have testified to the increasing use of digital sources by students from primary to graduate school. The journal database JSTOR is one example of how fervently academia has embraced the new technology, while furtively disposing of the cumbersome method of accessing articles via subject matter indexes and paper journals. The breadth of this transformation is much larger, however, spanning reading the news online to finding driving directions and purchasing everything from groceries to cars online. We all realize, at some unconscious level, that society is changing apace. No matter how unwieldy or even frustrating using a search engine sometimes can be, simply because of the mass of information it accesses, I suspect we all still marvel occasionally at how this technology has changed our lives.

Libraries and Access

On the academic front of information retrieval, performing research in a major library remains the preserve of specialists, whether librarians, professors, or graduate students. Those of us who grew up before the Internet spread so widely remember being taken to the library at the beginning of the school year to learn how to access its resources. The only way to really learn how to use a major research library is to experience it, first hesitantly, and then through endless questions to the staff. Luckily, even intensive users need only master those corners of the library that house the fields of particular interest to them.

Even these individual treasure troves contain some things and not others, however, and most students do not have access to the world’s finest research libraries. Previously, a scholar’s only recourse would have been to file a request with the interlibrary loan office. Now, Google is liberating multiple books from our major research libraries and providing them not only to students across the country but across the world.

Conquering the Pre- and Post-Internet Digital Divide

Anyone who administers a web-based database knows a great divide separates digitized information and pre-Internet hardcopy material. A digital database begins its life with bits and bytes dutifully loaded, but soon you find yourself scratching your head on how to make the hardcopy accessible. Once users have become accustomed to typing in queries, they want to know why they can’t find everything in a like manner. If the only option is to go where the “old stuff” is kept, in archives somewhere in the basement or a dark attic, people will seek them out, if reluctantly. As the Internet generation graduates from our schools, though, such willingness is disappearing. If they can’t obtain something via the keyboard, it might as well not exist. In the world of information and ideas, authors’ efforts to compose their life’s work should not be irrelevant simply because they wrote and published in the “wrong” format.

Human knowledge is a temporal thing and susceptible to loss. (Consider, for example, the destruction of the ancient library of Alexandria.) Loss, in the case of physical representations of knowledge, includes not being used. If a hard-copy book or article disappears in the transfer of information from paper to bits, does anyone notice? Not after the transfer has taken place, certainly. The only people who might notice are the academic and computer professionals who plan for this transfer and watch it occur.

The technology exists to transfer knowledge and stories in print into a new, digital format for the consideration of this and future generations. The book, like ancient and medieval manuscripts, will continue to be a pathway for the transmission of knowledge. It is, after all, the ideas that are essential, and while many of us will never lose our love of paper books, the wonderful stuff inside them should survive for generations to come. Otherwise, collected human knowledge will be partial, mutated, and far too recent.

Looking at the breadth and complexity of the issues involved in this endeavor—from technology to copyright, indexing, and beyond—the successful transfer of knowledge is the task that lies before us. Any effort that responsibly furthers the task benefits all of us.

Endnotes

2. Find the scan of Story’s work at http://books.google.com/books?id=CErHyf2Aap0C&dq=&pg=PP1&ots=CCOFz5Ddps&sig=6Ia69a6pS5ZG6CZx6vb6mzczqYvE&prev=http://www.google.com/search%3Fhl%3Den%26q%3DJoseph%2Bstory%2Bequity%2Bjurisprudence%26btn%3DGoogle%2BSearch&sa=X&oi=print&ct=title#PPR1,M1.

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