Remapping Digital Libraries:
Returning to Benefits of Browsing Paper

Carl V. Rabstejnek, P.E., M.B,A, Ph,D.

When I started to study clinical psychology, in 1980s, research for writing term papers still followed an age-old process. Professors suggested subjects or journals were scoured for topics to pursue in depth. The second alternative will be discussed further, but first it will be useful to review the efficiencies that the digital age provided over the past quarter century. Unfortunately, software system designer's focus on the search process lost track of the benefits of library browsing through hard-copy publications.

Fortunately, while print media is unlikely to have a resurgence, the benefits of magazine browsing can readily be transposed into our digital world. I will approach this from my historical perspective as a researching student and then professional over two-decade period in which technology changed the face of libraries and provided easier access to full-text articles that can be stored on USB flash memories.

The Way it Was

Once a topic was selected, one went to thick volumes of references that listed articles under subject headings. Finding some select references led to hard-copy journals, which were accessed from their bound volumes. These papers also provided additional sources that were cited within them. Eventually, a collage of publications was developed that supported or refuted the thesis being pursued.

By the 1980s photo-copiers were available so note taking was facilitated and a stack of paper piled up to be highlighted and annotated. This was an efficiency over a generation earlier when index cards and pads were used to compile handwritten notes.

(Herein we are discussing technological advances and not whether the note taking was a better learning process. Aside: There are many writers who argue that typewriters are better for the creation process than word processors; others swear by legal pads and fountain pens.)

A discovery process that also proved profitable was citation indexes. By locating a major historical reference in an area (e.g. Freud), one could be fairly certain that any scholar following a line of inquiry would have incorporated the key publication. Paper formation is basically recursive sleuthing.

Technological Simplifications

Initially, computers simplified the process of finding references. Typing a subject into a database was easier that locating a standard heading within thick books. Then, binary (i.e., AND or OR between keywords) logical operators reduced the number of titles and abstracts to be waded though.

As time went on, the titles and abstracts were linked to full-text and pdf documents. It was no longer necessary to find the hard-copy journal and use an offline paper copier. This led to an increase in paper usage because it was not required to manually place books on the copier's plate. In a sense, copying became too easy and the proliferation of paper became a handling and organization problem.

Currently, the paper use can be reduced by using USB interface on most library computers. Other offline memories are available and some programs allow email, but flash memories' convenience makes them a good place to store information.

Thus, over the years there has been significant advances in online searching for key references. During the same time, little or no effort was devoted to the benefits of browsing magazines to keep up with a field. Some academics still get personal copies of journals in *their* field but libraries are reducing those available to their clientele of students and scholars. This absence can be easily rectified by *digitally mirroring printed journals.*

Digitizing Mirror Images of Journals

I have only seen it once but this is sufficient proof that this proposal can be done. Basically, the proposal is to provide a sequential flow of pages in journals from front cover through back cover. The browsing reader can stop at the table of contents and see what is covered in the issue. Advertisers will no longer have their support hidden from public view.

Isolating specific content deprives readers from surveying sundry fields by scanning and perusing interesting articles. Also, writers seeking outlets for their work would have an easier time of finding a good fit and be better able to tailor their writing to the tone of the particular journal. By focusing on the specific we have lost the gestalt of the browse.

Technology can allow inclusion of facilitating links, such as jumps from contents to article on links to references. These niceties need not be included to once again provide the benefits of library browsing.