Librarians and Technology:
A Penguin Marriage?

by *Bil Stahl*

When I was a young naturalist, I read a book entitled *Forbush and the Penguins.*[1] Forbush described his life among the penguins. While they may be endearing birds, penguins are not of high intelligence. When mating, they evidently are not clear on who is which gender, so the couple takes turns alternating roles. This seems to me to be a fitting analogy for librarians and technology — it is sometimes difficult to determine who has what role in the partnership.

This role is often very unclear when trying to determine whether librarians are trying to lead the technology or whether the technology is driving the librarians (as well as just about everyone else). We are afraid of becoming irrelevant, so we append ourselves to the latest trends in information delivery. We are now doing with the Internet and the World Wide Web what some library science programs did in the 1970s when their curricula looked more like computer science curricula, full of programming and database design courses, rather than true library science courses. The need for librarians who understand how to select, evaluate, and present information, regardless of the delivery mechanism, is greater today than ever before. People are awash in information, and they need help sorting it out. They do not need librarians to be simply another information delivery source. People usually are looking for someone to help them find sufficient information for their particular needs. They want assistance from someone who is *information literate.*

I believe that, as a profession, we must come to grips with understanding information literacy in all its permutations. Information literacy includes audio, textual, and visual literacy. However, first we must define "literacy." I blanch when I hear people, including librarians, talk about "computer literacy." We do not talk about "automobile literacy." To be literate means to be able to understand the information being provided, not to be skilled in some technology usage. We need to be literate in interpreting the information the computer (or the television or the newspaper, etc.) delivers to us. The techniques of information delivery will constantly change. Many of the current information technology delivery mechanisms will change within a matter of a few months or years, as they have been doing for the past decade. Stake your future on the current World Wide Web, and you will be obsolete within a year or two.

Librarians need to be literate about information and its uses. They need to understand information as a material, in the same way an expert carpenter understands wood. The carpenter knows that all woods are not the same, and knows what wood is especially good for what purposes. It was no accident that a piece of early furniture was made of different types of wood. The legs were intentionally of a different wood from that of the arms of a chair.

In today's world there is usually not a single source of information that answers a question. The information seeker is often confronted with more than one choice, and usually in a variety of formats. Librarians need to be about the business of fitting both the content and the format of the information to the needs of a particular user, so that the user can derive meaning from the information being presented to him or her. The technology increasingly delivers in-

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formation in "multimedia" format, yet in many cases the librarian is still functioning in a single dimension of literacy — that of text. For example, we deal more and more with a world of images, yet often we do not realize the information content of those images. We know that graphical information is "different," but many do not really understand how or why and are therefore unable to assist the user as needed. Too often we get people to the front door of information and then cannot really help them enter into it and gain an understanding of it.

A new field called Information Architecture is one in which I believe librarians need to become major players. Unfortunately, I have seen little evidence to date of librarians in Information Architecture. It seems to be largely the domain of architects, graphic designers, and multimedia developers. The field, whose father is probably Richard Saul Wurman,[2] seeks to present information in ways that allow the user to quickly and efficiently derive meaning. Part of the technique used by information architects is the classic reference interview, except that the questions are directed at the information provider rather than the information user, and the information architect serves as the proxy for the potential users. Their emphasis is not on the simple creation and dissemination of information, but rather on understanding what the information content truly is and presenting it in such a way that the user can understand it with a minimum of effort.

Some may take exception to my focus on information architecture and its emphasis on the creation of information rather than the dissemination of information. However, I believe that it is necessary to be engaged in the creation of information in order to understand its purpose and use by its ultimate recipient. Librarians can no longer function simply as conduits connecting the reader to his or her book. In some respects, I believe that we need to return to the concept of a "reader's advisor," with the proviso that we broaden the term "reader." The reader's advisor had a good understanding of who the reader was and what his or her interests were, etc. The effective reader's advisor also had a thorough knowledge of the information they had available and could make a good match of reader to book. In essence, the librarian who was an effective reader's advisor was an effective market analyst, matching product to consumer. Now we are confronted with a much more diverse clientele, seeking access to a much more diverse array of information in an increasingly growing panoply of delivery mechanisms and formats. This means that the job of keeping up with both the "reader" and the "information inventory" is much more difficult. It also means that it is even more important now than it was before. There are many different organizations, both private and public, attempting to match up the reader with a book. Libraries have seen a large decline in the uniqueness of their role in doing this. Our challenge is to distinguish ourselves from the rest of these organizations by our understanding of the information and its packaging in relation to the particular consumer. To do this, we must understand information architecture in order to understand the products that we deliver. We must also improve our understanding of our customers and their approaches to finding and using information.

Technology is a key element of the information packaging, but it is important to remember that it is the packaging. Perhaps we should think of technology expenditures in the same way we think of binding and processing costs.

Technology is a way of packaging the information as is binding and processing, and packaging has been a standard operating cost for libraries. Librarians must be adept at using the appropriate technologies that get to the information. However, we must resist the current marketing trend that develops the package first and then decides what product fits.[3] Our focus must remain on the product, which is the information. In order to be successful, we also must take responsibility for our consumer's success in using our product. This means assisting the user to reach through the technology, and through the surface of the information, to derive the meaning.

Technology can provide fast access to a lot of "information." However, if librarians cannot add value to the information being delivered by the technology, why should the library be involved? I am not arguing here for the retreat of librarians from the technology, but rather that librarians look at the technology for what it is — a means of delivery — and evaluate it as such. More than a few libraries have equipment acquisitions plans to support information technology, but they have not incorporated the information delivered by the technology into their collection development policies and practices. These definitely seem to be cases of penguin marriages.

Can librarians ignore the Internet or the World Wide Web and still be of value? I would argue in some cases yes, although it would be the exceptional, or specialized, library that really can and still succeed. By the same token, however, I would argue that the librarians who believe that converting the library into an "Internet café" or some other technology–driven information take-out service will not succeed. The value added by the library increasingly needs to be in the interpreting and synthesizing of the information. To the extent that the technology assists with this process, it belongs within the library. However, it also means that librarians need to understand the information as the material, and the technology as the tool.

References
[1] Graham Billing, *Forbush and the Penguins* (New York: Holt, Rinehart and Winston, 1965).
[2] Richard Saul Wurman, *Information Architects.* (New York: Graphis Press, 1995).
[3] Will Novosedlik, "Branding as Mythology," *Eye* 19 (winter 1995): 36-43.

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