THE ELECTRONIC LIBRARIAN

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Librarianship is perhaps the most institutionalized of the professions. In many dictionaries a librarian is defined as "a keeper or custodian of a library." To the general public, moreover, a librarian is merely someone who works in a library. Since the most visible operations of libraries tend to be clerical in nature, the public has no real appreciation of what the professional librarian is or should be. It is hardly surprising, therefore, that librarians have suffered from a poor image and have a rather low status compared with many other professions.

The fault lies with the profession itself. The focus of the curriculum of most schools of library science can be summed up as "what goes on in a library." Most librarians prefer to hide within the walls of the institution rather than going out to make themselves known by members of the user community and to discover what the real needs of these users are.

There are historical reasons for this situation. Libraries existed before librarians and the first librarians were merely custodians. It was many years before libraries began to offer true services to the public. Regrettably, the image of the librarian as a custodian still persists. We must change this image if the library profession is to survive.

The librarian's major professional task is to act as an information or reading consultant. The role should be similar to the role played by the physician in health care. The physician diagnoses

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illnesses and prescribes possible remedies. The librarian’s role as consultant is to diagnose information or reading needs and to prescribe sources to satisfy these needs. In general, librarians are well aware of the information sources but tend to have much less knowledge of information users, their behavior and needs. To fulfill the role of information consultant may imply that the librarian should leave the library.

In an ideal situation, information consultants would be integral members of academic faculties, of research teams in industry, of health care teams, of policy making bodies. We are still far from this ideal but we are moving slowly towards it.

The relationship of the information consultant to the library should be similar to the relationship between the pharmacy. Under certain circumstances, the physician prescribes a drug available from the pharmacy. The actual delivery of the drug is made by the pharmacist, a professional whose skills differ from those of the physician and who requires a much less rigorous education and training. In a similar way, the real professional task of the information consultant is to prescribe a suitable information source. The delivery of the source—from the library—is a task that requires much less in the way of skills. Regrettably, it is the lower level task that occupies much of the attention of the library profession.

The great barrier to de-institutionalization (i.e., the separation of the librarian from the library) in the past, of course, has been the professional’s almost total dependence on a collection of physical artifacts—books—housed in the library. This dependence is becoming greatly reduced, and will be even further reduced in the future, as society evolves from one based on printing on paper to one based on electronic communication. It is clear that electronic publishing—the production of publications in some electronic form—will eventually replace print on paper. This replacement will occur much faster than many seem willing to accept: certainly in less than a hundred years, probably in less than fifty, perhaps as few as thirty.
The long history of human communication represents a logical evolution. Cave paintings were replaced, clay tablets were replaced, the papyrus was replaced, parchment was replaced. The printed book will also be replaced.

The printed book is but a brief episode in the history of human communication, an episode measured in hundreds rather than thousands of years, and this episode is now drawing to a close. Electronics will have a profound effect on all aspects of society, perhaps changing our working habits and even affecting our social structures. It will also influence our art forms. Take, for example, the novel.

Novels as we now know them did not exist before the printing press. Indeed, it was 200 years after Gutenberg—and some would say 300—before the true novel emerged. The novel is no more than 300 years old. There is absolutely no reason to suppose that people will still be writing novels a century from now. There is every reason to suppose they will not.

Electronic publishing is no more than twenty years old. It is not yet in its infancy but merely in an embryonic stage of development. So far, computers have been used either to print on paper, possibly on demand, or to simulate print on paper, that is to produce new publications designed to look like the familiar printed product.

But pages from an encyclopedia or from a scholarly journal, when viewed on a screen, do not make a true electronic publication. The fact is that very few real electronic publications are yet in existence. The replacement of print on paper will occur rapidly when publishers begin to exploit the true capabilities of the electronic medium.

Print on paper is essentially static. But electronic publications can be dynamic, incorporating moving pictures, sound and even electronic models of many activities and phenomena. In a children's encyclopedia, for example, rather than describing in pages of text plus a few static illustrations that makes an airplane fly, how much more effective it will be to give the child an
electronic model of the plane, a model he can manipulate and learn from. This is perfectly possible with electronics. Electronic publications, as well as being dynamic, can be interactive; the reader can, as it were, participate with the publication.

The electronic publications of the future—the near future—will be much different from anything to be seen on the shelves of libraries today. In fact, the nearest thing that may now exist is the electronic game. The electronic game may be the single most important bridge between the age of paper and the age of electronics.

Moreover, electronic publications can be delivered in many different forms: through conventional computer networks, by means of television, on videotape, on optical disks, or as hand-held microprocessors. They can go directly into the home by way of television or personal computers.

Even in its embryonic state, electronic publishing has had a profound influence on the libraries of the most developed countries. The ability to access publications through computers and telecommunications is changing our whole idea of what constitutes a library. Ownership of materials is becoming less and less important. Instead, the important thing is access, the ability to access an information source as and when the need arises. In the library of the future, then, capital investment will be made in the equipment needed to access information sources rather than in the ownership of the information sources themselves.

It is already possible to conceive of a great "library" as consisting only of a small room containing nothing but terminals and telecommunication devices. Carried further, of course, all libraries become the same because every library could potentially have access to everything. Taken to its logical conclusion, the library as we now know it—as a collection of physical artifacts—will essentially disappear except, of course, for those that will continue to preserve the printed record of the past. The library will become an archive.

Does this mean that the librarian will also disappear? Not
necessarily. The librarian as custodian will disappear—as he should—but the librarian as information consultant could actually gain in importance and recognition.

The age of electronics is also an age of information. Effective access to information will become of increasing importance to all segments of society. Information specialists will be in great demand in this society. Their value will be recognized and their status and rewards will increase.

Whether it is the present library profession that provides these specialists is quite another matter. If the profession does not respond and adapt to a period of rapid technological and social change, its professional functions will be taken over by others.

We need a change in orientation and in attitude. Above all, we need a change in the focus of our professional education—away from the library as an institution and towards the librarian as a skilled information professional and facilitator of human communication. Schools of library science must adopt a much broader view. The curriculum should deal with the whole field of human communication, in all its facets, and the role that the information specialist can play in this communication process.

The curriculum of library science is changing but it is changing much too slowly. We must speed up this process. We must revise the entire curriculum rather than making minor and cosmetic changes. If we do not, the library profession may well be replaced by others more dynamic.

The library as we know it will die. The profession need not die. Its future depends on us. Let us hope we can rise to the challenge.