
Libraries, Manpower and Automation: Shaping the Future of Libraries*

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BY 1980 THE TREND toward national library programs was sufficiently advanced so as to decide the role of libraries in the total information complex. What had for some time been a confusing and cluttered scene straightened itself out, although complicated by the period of intense disorder and disruption in the American society generally. As we shall discuss, this social disorganization proved first to be a deterrent and then a stimulus to information development.

The two elements—centralization and automation—did have a most decided impact on the library scene. Developments which had previously been gradual were vastly speeded up in the early seventies. Bibliographic control of the printed literature was accomplished with national and regional programs together providing not only ready access to cataloging information, but also taking on the major share of the tasks of acquisitions and book preparation.

The most resisted aspect of centralization on the part of the university research library, as well as smaller academic libraries, was in the area of cooperative acquisitions. Cooperative programs improved knowledge of the whereabouts of items, and these “networks” undertook to use the newer communication technology to speed the transmission of materials. Yet libraries still were loathe to give up the ideal

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Libraries, Manpower and Automation

of local self-sufficiency and the notion that collection size and service capability were synonymous. Cooperative efforts were hampered by accreditation standards for libraries which stressed collection strength. Only quite belatedly were these standards revamped to substitute service capability measures for collection evaluation criteria.

Efficiency studies showing the greater economy of obtaining little-used materials from central sources over the cost of acquiring and maintaining materials did receive acceptance with the medium and small academic library. But it was not until the active intervention of several college presidents that inter-library acquisitions programs were forced on the major university libraries. There was then quite rapid acceptance of the fact that no library could hope to build a definitive collection on any subject, except for a national client group.

This era then saw the working out of cooperative acquisitions programs of more than a token character. The evolving pattern varied with the state and the region and followed precursor efforts, such as joint storage centers and assignment of subject responsibility to large libraries. The smaller research library also won considerable recognition and the "right to serve" many constituencies in smaller sub-disciplines. The competition among libraries was a lively one with user groups joining the fray.

The resistance to microforms also gave way for several reasons—a major one being the easy ability to make full-size copies. Part of the acceptance of this alternative was undoubtedly provided by the library lootings of the early 1970's. In all types of libraries, whether regional or local, routine, repetitive tasks were automated. What had been an initial resistance to automation became a landslide. The next layer of library tasks, what might be labeled semi-professional, was transferred to the newly developed technician class. These developments—and the increased use of media other than print—have resulted in local libraries operating with a fraction of former staff, collection and space. While reducing their size tremendously, libraries have vastly improved their ability to supply known items on request.

The library profession thus came out of the 1970's with two of its traditional functions intact—bibliographical control of book and serial titles and the "supplying" function. (This was not uniformly true. Some information centers have undertaken to supply materials for their client group as a natural corollary to their information service, but most rely on library subject centers for this purpose.) In one sense, what transpired might be described as the magnificent decline of American academic librarianship.

Information center developments of this period followed paths set by early pioneers who assumed the task of information processing. At the time of this writing, they are growing rather than decreasing in number. But the most difficult task, that of coordinating effort, has largely been achieved, and previously unserved groups now have information access.

The general pattern for information centers is national centers linked to each other and to local information centers. Some of these are maintained by local groups such as universities; some are regional outlets of particular national centers. An integral part of this system is the community "interpreter" who functions both out of a local information center and out in the community served. Commercial firms still play a role in information access activity by providing specialized service to one or another group, particularly mission-oriented groups. There are a few libraries playing information center roles, undertaking S.D.I. and other user services, but by and large, libraries coexist with media centers and information centers in the city, schools, and universities and in government and industry.

One reason for this separation, despite administrative efforts to consolidate units, was the exodus of more activist-oriented librarians from conventional libraries into these newer outlets. Gradually efforts to mix passive and active elements were abandoned; it was conceded they simply did not mix.

Library schools underwent interesting developments before their exact role was determined. For a while they became the battleground between the traditional and progressive elements in the library field. There was a temporarily active group who sought to give the library schools a permanent and major role in preparing information workers for local and national centers. They sought to effect a variety of changes, such as shifting accreditation of library schools so as to involve newer professional societies and schools. These and other efforts at coordination were largely unsuccessful, partly because they were launched too late. Again, the elements, despite librarians who were active in information work, simply did not mix. The library field was largely resistant, and the information science groups indifferent.

What occurred instead of a merger was the establishment of schools of information science at most of the major universities, using as a model the early schools at Georgia Tech and Lehigh. Two library schools did transform themselves into schools of information science. The power struggle was then between the information storage and

Libraries, Manpower and Automation

retrieval interests and computer science departments. A number of events explain the eventual establishment of information science as a separate discipline. There were a number of "break-outs" from computer science schools, faculty who either joined or started information science schools. These schools had the greatest success (the library schools were never seriously in the competition) in producing research scholars. As a consequence, their identity and their preemption of the field was made a reality.

There was steadily increasing pressure from the national and local information centers for professional information workers, and it was not long before these schools undertook not only the research but also the professional commitment. Beginning as they had with a research orientation, it proved easier for these schools to maintain their science base than it had been for the library schools seeking to transform practical programs into theoretical ones.

We cannot account for the large enrollments which these schools have enjoyed, except that perhaps an emerging profession was of particular appeal to young people coming out of undergraduate programs during this period. Black students, especially, identified their social commitments with it. This early popularity put these schools in a good competitive position with the other professions. From the outset this has been a male-dominated profession, although from the beginning there have been and are outstanding women associated with it.

What happened to the library schools? The combination of technicians and automation took away a large share of the market for their product. The addition of subject specialists and systems analysts to library staffs closed other prospects. A large proportion of their students had been from the school field. With the development of educational communication programs, the schools of education undertook and won renewed recognition as being the place to prepare information media workers for schools. (Interestingly, these schools are now in a period of competition with the information science schools.) But the library networks still have managerial roles to be played. It was not surprising, therefore, that several library schools elected to become a department in schools of business and public administration. Other business schools developed similar minors in their programs.

In the late 1970's the Library of Congress became alarmed at the fact that there were now only a handful of library schools still open and capable of education in the bibliographical expertise required to

maintain their bibliographical system. In 1980, they established a national training program to educate for bibliographical roles in the Library of Congress and in other libraries. (The modernization of the Library of Congress is an exciting story in itself.) Dwindling enrollments, reductions in positions, retirements, and finally the closing of library schools marked the end of the efforts of librarianship to maintain its educational programs in the university and at the graduate level.

To illustrate the dynamics of the field during this era, we mention several other events and movements which, while largely unsuccessful, did serve to bring the issues into the open and influence the career choices of the people involved.

It looked for a while as if a young group of librarians—Librarians for Social Action—might shift the library picture. They sought to work in two spheres—the city ghettos and the universities. They were very much caught up in the turmoil of the 1970's, and, while they did not influence the traditional library to shift its orientation, they were moving forces in support of powerless elements and brought to the fore their demands for "information rights."

One reason this group of people failed is that they did not add to their numbers appreciably. The library schools did not make the major shifts in admissions and recruitment and programs which would have been necessary to attract the activist type. Indeed, the records of the time document the disillusionment of librarians who recruited from their communities and sent people to library schools. Their bitterness was greater because it was these very schools whose faculty had encouraged them as students.

We would suggest that the central reason why this group failed was their stubborn insistence, in the face of all evidence to the contrary, that libraries could be reconstituted so as to be socially responsive. For instance, they wasted much effort which might have been better spent in forming new associations in trying to influence change in the American Library Association. Similarly, they sought to work from within local libraries instead of transferring their operation completely outside the library milieu. These efforts did, however, make for lively episodes at national library meetings.

Social action did, however, become a major component of the information profession. The schools of information science did take on a social conscience and commitment. This came about for several reasons, but primarily because of the influx of behavioral scientists

Libraries, Manpower and Automation

and professionals from other disciplines who joined the faculty of these schools. They in turn attracted a different type of student and generated the new information "breed." The combination of technical competence and social commitment has been the basis for most of the successes which this field has enjoyed.

The part played by the unions during this period should also be noted. Unionization did improve working conditions in libraries and so was a force of some consequence for improvement. But it also acted to protect the senior staff. While tasks were transferred to the computer, obligations to the senior staff were maintained. A few unions did undertake to fight on professional issues. There were even remarkable instances of the union taking over the management function of trying to secure financial resources for the public library. Union activity was not a major force in the end because it occurred at a time when many public libraries were being closed as the result of schools taking over children's services. In one sense, decentralization and the building of "new communities" proved an impetus to public libraries. Almost uniformly, these communities established a popular library, staffed by local personnel. While it serves no major community, information, or educational role, it nevertheless survives on the American social scene.

We believe the information profession has become all that its most ardent supporters could have hoped for. American society has come to place a high value on information access. Tremendous strides have been made in solving technical problems, while research potentials still abound. But its success does not lie in the technical realm alone. We also believe that most of the political and social problems associated with information access have been resolved. It has proved possible to have a viable information-producing and -processing industry. The consumer's interests are protected in several ways, including provision of government inspection in those areas where an "information monopoly" might be said to exist. The legislation which brought this about, and incidentally solved the copyright problem of earlier years, is frequently cited as a model of the new relationship between government, industry, and the consumer.

The information profession can be proud of its record in the period of disorder, particularly as it had to solidify itself and at the same time make contributions toward resolving the social crises of the times.

We might cite successes in consumer terms, although these will be well known to the reader. In 1970, faculty and students at universities

had virtually no information service. Public libraries were providing service only to the reading elements of the white middle class and then mainly for recreational reading of a superficial innocuous character. It proved perfectly possible with automation, management expertise, and national information support to provide the entire range of information services to students as well as faculty. Sophisticated identification of city elements in information terms led to local and national services which did reach Americans in their occupational, cultural, social, and political lives. Information access is not only a possibility; information utilization is a reality. Children growing up today find it hard to believe the earlier pre-history of information deprivation.

This is, of course, merely a story. It did not happen, and will not happen, at least not like this. Why did we write it, particularly for a *Library Trends* issue concerned with automation and networks and in an article designed to analyze manpower implications? Because we did not accept the "givens" in the situation. We do not conceive the manpower question as merely how to be supportive of current trends or even what professional leadership may deem to be desirable professional goals. Technology and centralization are merely means; their utilization needs to proceed from socially deprived ends. We must ask the question, automation for what?

Of what value is a futuristic projection? We are sure there are many in and out of librarianship who would not quarrel with, indeed would find acceptable, the future role we posited for libraries. What they would not like, however, is the consequent loss in professional power and prestige which would accompany this relegation to the custodial function in information activity. Further, we believe many in this field are not yet prepared to accept the fact that real information needs exist and are not being met by libraries and will eventually be met in one way or another. We also believe at this point in time no corner of the profession should be sacrosanct. This is then an assault on traditional views of libraries.

But, we hope, despite the sketchy nature of our projection, it can be of positive help to those committed to insuring libraries an important part on the information scene. If it helps to identify key forces and decision points which will decide the direction of the field, it can assist in efforts to insure a future quite different. When we broaden

Libraries, Manpower and Automation

our perspectives beyond the confines of the past or the "here and now," we can see needs to be met, problems to be overcome, and potentials to be capitalized on. An important point to be made is that people are not at the mercy of irreversible technological and social forces. We have not described an unalterable sequence of events. Those in and out of librarianship, whether by action or inaction, are going to decide the future course of libraries. It is to be remembered particularly that if something occurs even once, it is within the realm of the possible.

Our information profession was an idealized model designed to introduce elements which we believe should characterize its development. We do not really have any basis for suggesting that the technologists will concern themselves with social goals in an active, positive way. Indeed, this has not been the history of the engineer. As Merton has expressed it:

Deriving in part from the specialization of functions, engineers . . . come to be indoctrinated with an ethical sense of limited responsibilities

So, in many quarters, it has been held absurd that the engineer should be thought accountable for the social and psychological effects of technology, since it is perfectly clear that these do not come within his special province. After all, it is the engineer's "job"—note how effectively this defines the limits of one's role and, thereby, one's social responsibility—to improve the processes of production, and it is "not his concern" to consider their ramified social effects.¹

We do not note in the information science literature or the curricula of the new schools much evidence to the contrary.

The social events we hinted at are pure speculation, included only to make the point that library and information activity to be relevant must be viewed in a social environment which at this time is one of turmoil and violence, and we believe that efforts to respond positively to social unrest and strife may help libraries find their purpose and identity.

Our characterization of library developments does grow out of analysis of the current library scene. And since we are asking the reader, if he accepts the possibility of this future for libraries as even probable, to become an advocate for change, let us look at just how plausible our projection is.

The Current Scene

Automation. We believe the exploitation of automation and centralization to improve existing library practice is well underway. What first was a resistance to automation has apparently become a landslide for it. We find the profession in 1970 very much absorbed in employing the computer to perform traditional tasks in libraries. Undoubtedly many programs are more talked about than a reality, and much effort is still at the most primitive trial-and-error level. Yet there is clear evidence of acceptance of the computer in libraries as illustrated by the establishment of the Information Science and Automation Division in the American Library Association and the inauguration of the *Journal of Library Automation*.² Its pages document how libraries have come to find ways to utilize high-speed machinery to perform library tasks. The computer and its associated contribution, systems analysis, are being employed to do it more quickly, more cheaply, or more comprehensively. The modernizing of the Library of Congress, set in motion by the King report,³ continues with the work of the Information Systems Office. Its principal product so far is the MARC project whose contribution and utility is clear when we view the time-consuming and costly work of preparing copy locally.

Library Systems. Though it is hard to separate the claims and the publicity from the reality, systems development seems also to be taking on a new lease. In the past, leadership in regional library development has come from the public library interests. Now we find academic libraries moving more strongly in this direction with the accent on cooperation among all types of libraries. Many of these programs have not gotten beyond the generation of a union list of serials, and most academic libraries are probably still not prepared to commit themselves to such programs to the extent of abandoning their own collection-building aspirations. While many efforts must be characterized as grudging and limited, imaginative programs do exist, such as the Ohio College Library Center. Public libraries are probably to be most complimented for success in getting behind-the-scenes tasks done cooperatively. We are not convinced, however, that cooperation has made any basic change in most local public library outlets, many preferring to let cooperative arrangements permit them to continue to serve recreational reading functions with the more specialized questions and demands channeled elsewhere. Yet we know several states where the responsiveness of public library systems far outpaces college libraries.

Libraries, Manpower and Automation

At the national level, the National Library of Medicine, with its MEDLARS project, stands out as one of the few libraries engaged in the entire range of information functions associated with serving a national audience. As we shall see, the more ambitious and more enterprising national systems are arising from other quarters, because, we believe, library leadership still sees itself tied to traditional goals and approaches.

Internal Organizational Adaptation. Internally we find libraries are not only engaged in automation efforts, but that larger libraries are also employing other specialists—systems analysts and subject bibliographers in the academic library. Public librarians are very much absorbed with issues regarding library technicians.

We suspect, however, that these developments are being inserted into libraries so as not to upset the organizational status quo too seriously. Size is still seen as a desirable goal in itself. Academic libraries still absorb the major share of their staff and other resources in acquisitions, maintenance, and control functions. It is because the absorption is here that client relationships so frequently reach a low ebb. It is not just the student but also the faculty who react against the essential client indifference of the academic library. The large libraries in particular seem bound by size and other commitments leaving them unable to adjust and adapt, while the most imaginative innovations are coming typically from smaller and newer institutions.

Libraries in a Cultural Context. In the two most turbulent sectors of society today—the city and the university—we find library service to be most in jeopardy. There is aroused concern among those in public librarianship because of its essential irrelevance in central cities. While the suburban library is more prosperous, there is evidence that it is serving little more than the ephemeral reading interests of only a small proportion of its total population. For the man in the street, the library has become a symbol without meaning; for poverty elements, it is unknown and unused.

Unfortunately, we do not hear the same soul-searching on the part of academic librarians. The “self help” notion with regard to student service still permeates professional thinking, and the library is now becoming the target of attack by students who may perceive it as an element of the older order, not attuned to their needs and aspirations. The symbol of this non-response may be the impersonal file of cards which in several instances has been the object of violence.

We know that in school, industrial, and governmental settings, con-

ventional libraries frequently coexist with newer information agencies. And though we cannot explain the dynamics of the formation of separate agencies, we believe much of the blame can be laid at the door of the conventional library for failing to respond aggressively to new potentials and new challenges.

Power and Politics. Another force is being inserted into the local public library scene—that of the unions. Staff associations, like relics of a former age, are apparently giving way to the more potent force of the union with its stronger bargaining instruments. The library profession has been delaying judgment on these efforts, seeing all the undesirable aspects of unionization, particularly in the light of recent union activity in New York City. Some library unions do appear to have pursued professional goals, and we cannot argue with their efforts to correct the bureaucratic ills. The danger seems to be that in a time when libraries should undergo drastic overhaul, the unions, with their emphasis on security, will act ultimately to rigidify them still further.

On the local political scene, we find public libraries in some cities the recent target of extensive cutbacks. While the public response may seem reassuring, the appeals still seem to be coming from parents and from nostalgia. Nowhere is support heard for the public library at these times in terms of its role in information dissemination. The possibility that schools may take over the children's trade is looming before the public library in at least two states.

Nationally too, at the time of this writing, library interests are faced with setbacks and curtailments. The report of the National Advisory Commission on Libraries is likely, like most politically inspired documents, to disappoint those who thought it might serve as a force for change. In the American Library Association there is the first outspoken dissent in many years. Those concerned with the social responsibilities of libraries have won at least an organizational foothold in ALA.

Education. There is movement in library education in the direction of adding newer information specialties to library school faculties, notably at Berkeley and Chicago, but also at other schools. The impact to date has not been extensive, and probably most library schools are not even at this stage of change. Maryland is still pretty much alone with its strong behavioral orientation.

There are voices in and out of library education asking for more

Libraries, Manpower and Automation

active, more aggressive students to be recruited in the field, but we do not see this concern translated into concentrated, sophisticated recruitment programs designed to achieve this goal. Student activism is beginning to be a factor in library education, but recent ripples, such as the student-organized Congress for Change, cannot be taken to mean that the library school product yet varies appreciably from that of the past. And activism will only have a point when combined with a meaningful professional preparation. If there is genuine concern over these and other issues confronting library education still oriented toward traditional courses and traditional modes of instruction, it has not reached the pages of the library journals.

The information educational scene now has not only the early pioneers, Lehigh and Georgia Tech, but also such interesting newcomers as the Stanford Communication Program. Meanwhile, information retrieval is becoming a component of computer science programs. Several research efforts will bear watching—Parker at Stanford, Salton at Cornell, MIT's Project Intrex, and what Hillman at Lehigh and Maron at Berkeley are generating. The interesting curriculum work goes on through the American Society for Information Science, while the American Library Association still keeps its exclusive accreditation rights. There is still no clarity as to where the information preparation of the future will be lodged, but the educational split is now a reality. And nowhere is there yet a coalescence of technical concerns with social issues.

The General Information Scene

There is movement in the information world coming from many quarters. As we view these developments, we look for evidence of library participation. COSATI, the Committee on Scientific and Technical Information, continues to address itself to pertinent information questions. Library interests here seem more frequently overlooked than not. While the impact of EDUCOM which was established by the Interuniversity Communications Council, is not yet clear, this instrument, with its concern about cooperative efforts and its politically sophisticated organizational structure which allows for the influence of academic power through councils and conventions, should be a factor strongly considered when calculating the educational information equation. Although it concerns itself with what are clearly library issues, there may be some information fallout through library participation. The Neighborhood Information Center movement is

apparently underway without library involvement, while some Model Cities programs are apparently involving public libraries. Other public libraries have, however, turned these planners away. That public libraries are not more concerned at these "market" losses means simply that they do not see themselves offering service of this nature.

The scientific societies are the scene of much information work because of their long-standing interests and because of the influence the National Science Foundation has been exerting in this direction. Publishing firms are taking an increased interest in information; new companies and new complexes are almost a daily phenomenon on the information scene. The information industry is beginning to take shape to the extent of having a professional association with a Washington office speaking for its interests. Their contention is that no longer should the non-profit organizations—government, universities, and societies—maintain a monopoly over research, development, and the production of information products.

The large-scale activity of consulting and quasi-research organizations who attempt to devise systems and plans for military and technical government organizations is another phenomenon productive of new forms and new patterns of information control. Many of these same interests are involving themselves in analyses of libraries.

These and other developments are important in estimating the future of information activities and the capacities in which various types of agencies will be serving. What can be said generally regarding the extent of library participation? It must be seen to be present but weak, because traditional perceptions of libraries are being projected and because library interests are not pressing seriously for important portions of the information pie. Various interests looking for information support dismiss the library and go on energetically to calculate alternative ways to get service.

There are those in and close to librarianship charging library interests with the potential loss of information functions. In an article encouraging special librarians to seek expanded functions for their agencies, Herbert S. White, recent president of the Special Libraries Association, ends by saying:

We can fight to retain what was ours by default at a time when it was too mundane to interest others, and has now become a challenge of tremendous scope which has attracted many outsiders—some earnest and qualified, some quacks and charlatans. We can fight to demonstrate to others what we so clearly know, that the

Libraries, Manpower and Automation

management of information services is properly ours by training, experience and attitude. Or we can nestle securely in our fortress, ordering material only on demand, indicating its location in the system once it arrives—through an intricate cabala of symbols—and keeping accurate records of who borrowed what. This is a job even our newly arrived competitors in the information business are willing to concede to us. After all, who wants to spend his life running a stock room? ⁴

Ferdinand Leimkuhler, writing in *Wilson Library Bulletin*, has placed the issue squarely before the academic library:

In the meantime, the research libraries will of necessity add more materials in microform to their collections and will make progress in the computerization of their routine operations. But the major breakthroughs may come outside the university libraries, among the government-sponsored information centers and under the aegis of the scientific and technical societies. If this happens, researchers may “plug in” to the new systems from their own offices, and the library will be eclipsed as the repository of information.⁵

Carlos Cuadra, principal investigator of the report on *Technology and Libraries* commissioned by the National Advisory Commission on Libraries, has said:

It is in no way necessary or inevitable that libraries shift the balance of their holdings and services to include microforms, digital information, videotape, holograms, and other trappings of advanced technology. It is not necessary that libraries shift their concept of operations from circulation toward outright distribution. . . . It is not necessary that libraries become elements of networks for the rapid identification and provision of material to users, regardless of geographical location.

However, these functions are going to take place; and if the library does not bring them about, some other type of agency will. That agency will then occupy the central role in the information business—the role that was once occupied by the library.⁶

If the library profession cannot be encouraged to move because of this potential market loss, it might move in response to the needs of its clients. Robert S. Taylor finds that the library's traditional passive role and its book orientation stands in the way.

As a result of the concern with books as physical objects, libraries have become static institutions concerned with the techniques of

materials handling. Whatever the reasons for this may be, and there are many legitimate ones, the library has nevertheless changed from a humanistic institution to a supply depot concerned with inventory and control. The processing of objects has blinded the library to potentially more dynamic roles as a major channel of communication, and a major processor of knowledge, both factual and fanciful, in all media. This implies not so much a change of function as a change in attitude.⁷

Having no strong client commitment, no clear-cut notion of its community responsibility, the library profession is silent when it should be speaking out loudly, passive when aggressiveness is called for, and indifferent when aroused concern is required. Great imbalances in information access continue to exist because groups lack power to change the status quo. Where libraries as public institutions might speak out for neglected constituencies, they remain value-neutral and passive. And so they must be seen to be the servants of power rather than the defenders of public rights. Intellectual freedom does continue to be defended by a few, but this is basically a defensive position. Positive identification with the information rights of people is not yet within the realm of this profession's consciousness.

The situation described above pertains to the local library situation and nationally. The legitimate spokesmen for the profession are silent on key information issues. The rallying point and the protective mechanisms for a professional group do not exist at this point in time. The image—and the impact—of a socially responsible profession with an organized point of view on key issues are absent.

Hope and Promise

There are then failures to respond to the potential of the computer, to potential market losses, and to the needs of clients. The gap between library activity and information activity continues to widen. What promise is there? Despite the general library situation, the current scene also reveals potentials for change. Dissent and discussion, as we have noted, while still modulated, are louder than we have heard before in this profession. The discouragement of librarians we meet and talk with can be viewed as a positive element, for out of discouragement can come support for programs of change. We have made mention of a concern on the part of librarians that libraries take on social point and purpose, a notable example being the formation of the Social Responsibilities of Libraries Round Table. There are those

Libraries, Manpower and Automation

within the union movement seeking to give professional purpose to this alliance with outside interests.

Promising departures in practice do exist—for example in academia at Stanford, Hampshire, and Federal City College, and undoubtedly there are others not as well-known. Public librarianship is beginning to produce a corps of workers dedicated to helping the disadvantaged. It is probably only a matter of time before they articulate the bureaucratic and legislative support needed to support poverty efforts. Library education here and there is percolating new ideas, and new types of teachers and specialists are being added to their faculties. These faculties may well become the rallying point for the activist students in their programs. We might view the present automation of libraries as a preliminary “housecleaning” preparatory to taking on more active functions.

All these offer hope that the profession has the capability for change today. And there is still time, for information activity is not all that merged. No serious claims are being made by any one group to control information practice. Information opportunities abound everywhere but particularly in the city and in academic settings where the conventional library is yet without any single serious competitor. As Monat also has suggested in discussing the community library:

the idea of the community library as an active information center and not merely a repository for books, a center designed to serve a broad range of interests and diverse local institutions, has seldom been discussed much less explored operationally. A great information void exists in most medium-sized cities. Public agencies lack readily accessible and relevant information. There is no easy source of information for local merchants, financial institutions, and industries. And there is little done to publicize and exchange the information that is available within the community or region. The local library and district center possess the potential and already occupy the publicly accepted role that would support their development of this kind of information system.⁸

Nor do we see why public libraries should yield to the school interests with regard to children's services. Indeed, this goes against the trend of the times, which is for other agencies to step in where the schools have failed. In preference to abandoning their historical out-of-school educational role, public libraries might do better to demand the resources needed to devise adequate services for this constituency.

What does librarianship have to offer to a future information pro-

profession? We believe that in many ways librarianship is further along the road of professionalization than the newer information specialties. In the ideal of intellectual freedom, focused and infused with an advocacy commitment, may lie the rationale for the social purpose of the information profession. We could also argue that it exists, that it has been institutionalized and given legal and other mandates and guarantees of support, and that it has educational programs which have passed the inspection of and won acceptance by universities and accreditation bodies. But these institutional characteristics become an asset only if the profession is prepared to completely shift its institutional commitments to the extent of reallocating its resources and revolutionizing its practices. The support of a national program of library automation should be enlisted to effect these changes in libraries.

Manpower Factors

We are assuming that readers in the library profession share the conviction that the future projected for libraries at the beginning of this article is an undesirable one, not only because they are in and of librarianship, but also because in libraries there is a potential resource to be exploited for the social good. We hope the reader understands that the pessimistic future has a positive purpose and that it will have failed if it makes the reader only discouraged or angry. Yet the question must still be asked, are the gains of the past and the changes of the present sufficient bases for anticipating a future for libraries quite different than that posited in our projection. And our thesis would be, no, not without quite active and major interventions into library affairs which are not yet underway, or even recognized as necessary, in the field. Without such interventions we see little hope of overcoming the dominating force of tradition.

Let us focus on one major ingredient, the potential influence of manpower development on the future of the field. Our concern is not to evolve manpower policy for the field, but rather to suggest what the key variables are, their inter-relationship, and their importance in permitting the adaptation of the conventional library. As an aid then to those who influence policy choices, the following are ideas and suggestions as to the needs and desirable directions for the field. These developments are supportive of national programs of library automation and in themselves are crucial to this field's advancement.

The ability of the library profession to change is inextricably tied to its ability to attract, educate, and utilize manpower in the cause of

Libraries, Manpower and Automation

change. The nature of the task requires efforts to move along many fronts simultaneously at a more rapid and more comprehensive pace than is presently conceived in most quarters of the profession.

Our scenario has suggested a number of key manpower elements. Automation, centralization, and technician programs in themselves will markedly influence the numbers, the types, and the locations of library workers in the future. In the public library sector we see the union as a potentially powerful ally in insuring that the extensive retraining programs required get underway and are implemented. Yet there is a danger here for the unions may want the security of assured jobs in new roles, while for the foreseeable future library organizations should be characterized by fluid and changing work patterns.

When we consider expanded roles for libraries and the broader issue of preparation for information work in all settings, then other educational requirements emerge. New curricula will have to be devised for workers who undertake the information processing roles, for those who are prepared to undertake much more sophisticated and active user service roles, particularly with information communities which are still largely unsophisticated and unaware of their information needs, and for managers who can adapt and renovate the conventional library and manage the complicated information enterprise of the future.

We only hinted at another manpower need—the need to fill what is becoming a serious leadership vacuum in this field. By this we mean far more than managerial competency. Rather, the need is for people who are prepared to give new meaning and significance to the library's role in the local community and for articulate spokesmen at the regional and national levels who can crystallize issues, engender support for needed changes, and insure the position of libraries in future information networks. The shift required may be away from institutional leadership to professional leadership.

What should characterize this emerging leadership? It may need for its base a measure of activism, involving a disenchantment with the traditional, but also a zest for change and an ability to identify the key issues and platforms for change. This new leadership probably cannot hope to enjoy the following of the majority in the profession now. They will continue to lean toward the present institutional leadership whose values they share. Therefore, not only the proposals of the new leadership, but its political strategies as well, will need to vary from those of the past.

Clearly this field also needs to attract quite different types of people than have traditionally found their way into librarianship—more talented and capable people from the “hard” sciences, more who are behaviorally oriented, more men, more Blacks. Without this shift we see little prospect of changing the institutional stance of libraries from a passive to an active one.

In making the massive recruitment effort which we believe is called for, librarianship can no longer depend on the traditional “desire to serve.” The profession through its associations and its schools must take a more aggressive position on salaries, so that the salaries in this field come to be not what a single person can live on, but rather what a married man with three children requires. It would be naive to proceed with recruitment under any other terms. And we must accept the fact that these new entrants expect to get ahead and move faster than has traditionally been the case in this field.

Recent recruitment efforts at Maryland offer some additional clues as to increasing the occupational attractiveness of the field. We have found that the newer information developments have reached the consciousness of students and are attractive to them. Another appeal being used, particularly with Black people, is that librarianship is a changing profession which welcomes people who would like to increase the social usefulness of libraries.

But improving economic incentives and rewards and shifting the appeal are only the beginning. Inevitably these new “types” will manage to shift the organizational environment of libraries so they will be supportive of wholly new relationships with clients and with regard to utilizing the computer. But the change process would be vastly speeded up and the recruitment task made easier if libraries could prepare now for their accommodation to new elements and come to deal frankly and openly with the internal consequences of change. External pressures for change may cause even the most conservative libraries to accept new people with differing talents and points of view. But with the demand for workers in newer information facilities, it is difficult to see how libraries can maintain their status quo commitments and at the same time provide job opportunities attractive enough to compete in the talent market of the information field. Over time we can hope the professional struggle will come to center around improving the organizational environment for professional practice rather than security concerns. Similarly, unless the educational programs genuinely respond to people with perspectives

Libraries, Manpower and Automation

and orientations quite different from the traditional humanistically, middle-class orientation, their efforts will not ultimately succeed.

Not even under the best of circumstances can librarianship place all its hopes on, or simply wait for, the new entrants into the field. There are also other manpower resources to be tapped. Indeed the strength of the information movement came from its ability to attract mature people from many walks of life who brought with them the sophistication and expertise needed to solve information problems. This involvement with those from the "hard" sciences is to some extent taking place now.

But there are other equally important involvements which are currently almost totally lacking. The issue of social responsibility requires insight from those in such fields as journalism, political science and sociology who are also concerned with problems caused by information imbalance. The search for viable positions on the information needs of one or another constituency and the legislative and other programs of action which should follow require linkups, interactions, and joint efforts with these related interests. Much of the ferment and innovation emanating from the field of education is also of direct relevance to librarianship. Here, too, librarianship should seek involvements with this field's innovators and spokesmen for change. Assistance in coming to grips with the essential question of relevancy of libraries may also come from new interaction with the library's users—and non-users—provided ways can be found to present the library's potential to them in new terms. As libraries shift their concern into their communities and identify with the needs of their constituencies, we can expect increased insight into how to make the library's role more meaningful.

The purpose of these reflections on manpower direction has been to emphasize the need for change and to suggest what may be the magnitude and directions of change.

Clearly the institution which will increasingly invite recrimination is the library school. Here, in particular, gradual change in the form of accommodation to newer information interests is woefully insufficient. From the schools, too, should come help in inserting into the professional ethos a sense of social responsibility which can be translated into ability to play socially responsive work roles. In this way the library school would become the dominating force in establishing the social purpose and utility of libraries.

Many of us in library education are becoming increasingly aware that we cannot much longer take people from all walks of education,

but primarily still the humanities, and hope to prepare them for future information roles in a one-year period. Neither can present programs much longer be justified on the grounds that we must fill jobs in libraries. The profession is becoming increasingly unwilling to let the schools keep their monopoly on entry into professional practice as demonstrated by their acceptance of those with less than full professional preparation for professional work roles. In government and industry there is almost no pretense that the library school path matters at all.

There is need for leadership everywhere in this profession; the way is open as never before for the library schools to play a leader rather than follower role in relation to the profession. Unrest is rampant; it is ideas and solutions to problems which are lacking. That the schools are not under pressure now to respond more dramatically means simply that this has not been the history of education in this field. Typically, the schools have followed rather than led practice. Without this expectation from the profession, the schools face the same task libraries face, which is to alter their image of themselves so that they respond in terms not of their history but of their potential and to the mandate implicit in their chartering.

It is not so much a question of whether the schools should risk the loss in enrollments if they lengthen their program, whether they will indeed be able to attract new types of students, or whether they have the faculty talents to implement new programs. Rather it is that they cannot afford not to make the effort. These problems must be viewed as challenges to be met, otherwise they will become mere excuses. The argument that the library field still wants the schools to prepare people for traditional types of positions is becoming a rationalization for maintaining the status quo.

The insertion of new faculties with new points of view should help the schools to escape the straitjacket of conventional ways of viewing libraries and may give them the courage to embark on new endeavors. Perhaps the most challenging educational aspect lies in the public and academic library spheres. A group in the Maryland School of Library and Information Services has recently been focusing efforts in these spheres. The approach to curriculum reform has been to determine work roles of the future and then to translate these into educational preparation terms. To give fresh perspectives and possible prototypes, various directions have been considered including the possibility of transplanting models from industry and government into

Libraries, Manpower and Automation

the more conventional library settings and the possible utilization of such "far out" activist efforts as the free press and switching center services. Programs to prepare citizen information specialists for work with the urban poor and to prepare undergraduate information specialists especially for work with today's student also are under consideration.

Efforts of this group suggest that students begin with or acquire a stronger base in quantitative areas and in the behavioral sciences than has traditionally been the case. This program would have both a strong theory base and, in some form, practical experience in the new work role so that the student would gain the preparation he needs while in school, and feedback would be received into the educational program. Work by this group is far from crystallized and is described here to indicate something of what could be the possible excitement and promise of the field today. Library education, in addition to responding to the profession's need for change, should at last put its programs on a par with the other professions, an important factor in its ability to compete for the talented people who will enter one or another of the professions.

In 1980, when librarians look back on this era, we believe it will have proved to be one of the most decisive—and hopefully exciting—in library history. To understand what happened they will have to view the library schools' response—or failure to respond—to librarianship's search for mature purpose and to the broader mandate of information access in this society.

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MARY LEE BUNDY

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