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ABSTRACT

All of the program elements of this meeting related to the theme of new opportunities for research libraries. Speakers and discussion groups ranged over topics as diverse as the emerging technology of telecommunications and the continuing movement among academic librarians to improve their status, both with the college and university on the one hand and the library on the other. The four major topic headings and the papers presented are: (1) Telecommunications--"Prospect for Research Libraries"; (2) Interlibrary Loans--"Interlibrary Loan Studies," "The Case for Free Access," "Interlibrary Loan Fees, and "The Library Management Review and Analysis Program"; (3) The Evolving Status of University Librarians--"Library Governance in Higher Education: What Is Evolving," "Librarians and Faculty Status," and "The Columbia Study;" and (4) Computers and Regional Networks--"Computerized Cooperation," "NELINET: A Regional Network," and "Technology and the Library." (Other ARL meetings minutes are ED 067115 and LI 004 505-509 and 004 511 through 004 512.) (Author/SJ)

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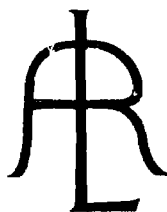
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NEW OPPORTUNITIES FOR RESEARCH LIBRARIES

**Minutes of the
Eightieth
Meeting**

**May 12 - 13, 1972
Atlanta, Georgia**



ASSOCIATION OF RESEARCH LIBRARIES

LI 004 510

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EDITOR'S NOTE

The 80th Meeting of the Association of Research Libraries, like its predecessors, was characterized by a number of program elements. All of them, however, clearly related to the theme of the meeting, "New Opportunities for Research Libraries." Speakers and discussion groups ranged over topics as diverse as the emerging technology of telecommunications and the continuing movement among academic librarians to improve their status, both within the college and university on the one hand and the library on the other. Although seemingly disparate, all of the topics, including those treated during the business meeting, reflected new approaches to research librarianship, or at least new viewpoints on old subjects.

A few words about the Minutes that follow are perhaps in order. The first speakers on the program, Russell Shank and Frank Norwood, discussed the possible future of telecommunications in research libraries. Their remarks are presented in these Minutes as a joint paper.

Concurrent discussion groups continued to be a feature of the meetings. While several speakers presented papers on aspects of the interlibrary loan system among academic libraries, another group was discussing the Library Management Review and Analysis Program which is being developed by the Office of University Library Management Studies. The three papers presented on the topic of interlibrary loan are reproduced here, while Duane Webster has provided the summary of the Management Review and Analysis Program that was presented for group discussion.

The rest of the Minutes consist of formal papers, such as those presented by Edward Holley, Frederick Kilgour and others, and the edited version of the transcript of statements by other speakers and discussants.

The after-luncheon remarks of Frederick Burkhardt and Charles Stevens, chairman and director, respectively, of the National Commission on Libraries and Information Science, were informal and impromptu and are not included in the record.

The editor is indebted to those program participants who provided invaluable assistance in preparing the text of these Minutes.

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ASSOCIATION OF RESEARCH LIBRARIES

Minutes of the 80th Meeting

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John P. McDonald, presiding
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The 80th Meeting of the Association of Research Libraries was held at the Regency Hyatt House in Atlanta, Georgia, on May 12 and 13, 1972.

President McDonald opened the meeting by welcoming new and alternate representatives of member institutions and guests of the Association.

After explaining the procedures to be followed during the program, Mr. McDonald introduced Russell Shank, of the Smithsonian Institution Libraries, and Frank Norwood, of the Joint Council on Educational Telecommunications.

TELECOMMUNICATIONS: PROSPECTS FOR RESEARCH LIBRARIES

Russell Shank and Frank Norwood

Our presence here today stems from a response to the statement by the ARL Commission on Access to Resources, distributed in January 1972, which cites several aspects of telecommunications (e.g. CATV, telefacsimile, communication satellites, teletype, and computer networking) as areas to which we should pay special attention in our attempts to alleviate or ameliorate problems incident to user-library interface.

Developments are moving very rapidly and simultaneously in several of these areas of communication in such a way that we feel that we are on the verge of an era that will be more of a step ahead in the extension of communication events than were radio or television when they were introduced. The communication environment within which we are operating is changing rapidly, and the potential for interlibrary and library-to-person communication is almost revolutionary. We are thus not merely being presented with new technology that we might use to aid us in fulfilling our functions; we are operating in a changing environment to which we must respond.

A special report in Business Week in 1971 delineates the unmistakable signs that a new era of telecommunication is underway. We are facing decisions within the next several years that will determine the disposition of more than 250 billion dollars worth of communications by 1980 going over new wires, cables, switches, telephones, terminals, and display mechanisms to carry everything from the most idle chatter to the most guarded secrets of society and nations.

This era on which we are verging demands that we break our bonds of traditional thought to conceptualize entirely new library-to-library and library-to-user delivery systems. We are here today to urge that the research library community make a positive commitment to undertake the effort that will be required to seize the opportunities offered to us by telecommunications for the information transfer functions in which we are and should be engaged.

We recognize that many research libraries have experimented with several aspects of telecommunications, some of which are even operational. Some ARL libraries, for example, are involved in facsimile transmission, computer-to-computer networks, and teletype networks. Our inventory of involvement would include activities on many of our campuses that do not yet involve libraries, such as the two-way video work in psychiatric care, the closed circuit TV class work, and the TV networks for transmission of class presentations from campus to industrial locations.

This activity, however, is uncoordinated, unassessed and not at all interrelated. New technical capabilities are still coming at us that will increase the potential for involvement of libraries. It is time--perhaps past the time--for us to begin a systematic study of telecommunication capabilities and the need for them in the research library setting.

Technology so far has offered us too few options in selection of system characteristics to match our delivery specifications. But the scene is changing. We note particularly several developments that may be considered landmarks or breakthroughs in the telecommunications industry that are suggestive of the need for action by libraries. Among them are several decisions of the Federal Communications Commission involving terminal devices to be attached to telephone systems, the operation of special purpose common carriers, the FCC regulations on CATV, and the applications for domestic satellite service pending before the FCC. These will open rather spectacular opportunities for communication to those who can organize to take advantage of them.

These are the elements to which we would like to address ourselves today. We will not attempt to make a complete inventory of telecommunication developments of importance to libraries. Nor will we give you a tutorial on telecommunications. Rather, we shall point out the key characteristics of these developments and will specify their significance, particularly as they may lead us to planning for the full use of telecommunications by research libraries.

Cable Television

Briefly, cable television (CATV) is simply a system of building the best possible antenna for receiving television in a given region and attaching to it a coaxial cable that is then strung out through the region (on poles or underground) to pipe signals to homes. Individuals subscribe to the CATV services, paying perhaps \$5 or \$6 a month to receive whatever comes down the pipe. The cable coming into the home attaches to a converter, a small device, that attaches to the antenna leads of the home television set. The converter is the same thing as the channel selector on the home television, except that it is wired to make a selection from a greater number of channels available in the CATV systems.

This description contains two of the key characteristics of CATV. One is that reception at the home is improved, an important characteristic for areas surrounded by mountains or high buildings. Second, the cable contains more highways or channels than are available in the air through broadcast. This allows for much more diversity in programming. Third, the fact that cable must be tied to a "head-end antenna" means that neighborhoods can be served with tailor-made programming by a cable system owner with a "head end" in a local community.

There are other important characteristics. Because of the increased carrying capacity of cable, space can be made available for communication from the home back to the sender. Systems have been developed that will allow the sender of a program to poll local homes to take votes on issues. Also, individual systems can be devised that will allow home viewers to select information from computer files, including computer assisted instruction courses. The cable, thus, becomes a carrier of all kinds of electrical signals, not just those that will generate a moving image on a television screen.

The Federal Communications Commission has included a requirement for

two-way communication in its regulations governing the cable television industry. One can see a demonstration of this in Reston, Virginia in the MITRE Corporation's TICCIT system. Viewers can sit in the living room of a Reston home and interact with the home TV set, tied by cable to the MITRE computer. Information in the MITRE computer is called for by dialing MITRE on the telephone, and then using combinations of the twelve-button telephone pad (following instructions on the TV screen) to get access to various files that are displayed on the TV set. The files include such things as the menu at a local delicatessen, instructions on filling out an income tax form, a list of new books at the public library, poison control information, emergency phone numbers, the Reston phone book, etc. This is a "canned" demonstration and it is only a beginning, but it works and works comfortably for the user.

There are now about 3,000 cable systems in the United States, serving about 6,000,000 subscribers. The FCC regulations just issued should open the door again to CATV system development. There is a lot of work to be done in many areas to provide ordinances that will govern the granting of franchises to get cable systems going. Librarians must be involved in the writing of the ordinances and granting of the franchises in their local areas. The FCC regulations provide for free access to channels for libraries, among other agencies, and we have five years to prove the case for library use of CATV. The channels cannot be reserved forever.

Special Purpose Carriers

Reference was made earlier to the so-called special purpose common carriers. The FCC in making policy has, over the past couple of years, made two very significant decisions: the MCI decision and the Carterfone decision.

The Carterfone decision ruled that the telephone company could not prohibit a small electronics manufacturer from selling a device which was coupled to the telephone. The burden of proof that this would damage phone service fell on the phone company. Heretofore, the phone company insisted on maintaining end-to-end integrity. One could not put anything on either end of the line that was not manufactured and installed by the phone company.

The other significant decision is the MCI decision: MCI--Microwave Communications Incorporated--was started by an electronics specialist in Joliet, Illinois, who dared to take on the telephone company, something that no one ever was supposed to do. This man, Jack Gocken, did exactly that, however. He applied to the FCC for permission to build a microwave network from Chicago to St. Louis to serve as a common carrier for data traffic. He had had experience with the telephone company in long-distance data processing. Everyone knows that the telephone system, which was built as a switch for voice networks, is not at all really suited for the needs of computer communications. That is the point that MCI made. After long deliberation MCI was finally granted permission to build the line. That opened the whole field to special purpose common carriers. MCI and its affiliated companies proceeded to file a number of other applications. Their plans are to build a coast-to-coast network especially for data communication. University Computing Corporation started a subsidiary company, Data Transmission Company (DATRAN), that proposed a somewhat different coast-to-coast network--a

digital system. We are thus about to see the nation rewired with not one but two additional networks.

What does all of this mean? For one thing it means competition with the telephone company--a situation in which the telephone company seldom finds itself. It also means that high quality communication at lower cost is possible because these systems are built especially for data use. The third, and perhaps most important thing, is the change that occurs in regulation and rates. The telephone company will only sell services. A university that uses television with another university across a state line, and also wants to share computer capabilities, will get three separate bills for telephone, for television, and for data transmission, although it is perfectly possible that by time-sharing one might use exactly the same lines for all three purposes. MCI and DATRAN are proposing tariffs that will allow one to purchase bandwidths that one can use whenever he wants for whatever purposes he wants. Additionally, they are talking about the possibility of shared bandwidths, that is, several institutions, although unrelated to one another, might make a "group buy" of whatever communication facilities they need.

Librarians' experiences with facsimile transmission have been generally either very poor or very expensive. Special purpose carriers offer another possibility of getting "fax" at reasonable cost, particularly since DATRAN studies indicate that a digital mode, instead of an analog mode (as now offered by the telephone company) can provide high-speed "fax" at low cost.

Satellites

Even more dramatic in the area of telecommunication development is the satellite. We are all familiar with satellites because we see world events on TV from around the world as they are happening. The significance of satellites is not that they can provide worldwide coverage, although that is of interest, but they they are the only communication system that is "distance insensitive." If one transmits from some point to a satellite orbiting 23,000 miles over the equator (where it must be to appear to be stationary to a ground transmitter and receiving antenna) and back down again, the distance on the short chord of that triangle--the distance between earth stations--is insignificant compared to the total distance the signal travels. Once one communicates beyond a particular distance, probably about 250 miles, it becomes cheaper to use satellite communication than land-line communication carrier systems. One may thus hook up the Folger Library and the Huntington Library economically by satellite because it is no longer necessary to go through the heartland of America.

Reference was made to NASA's ATS satellite series. This program is designed to find out if some of the things in the space program might have other applications. Experiments are now proceeding on a second satellite, ATS-1. NASA cannot absorb the cost of ground facilities for these experiments, but the use of the satellite is free. An experiment is now underway in the field of health. It will connect a small Arctic village, whose medical community is one native who has had a few weeks training as a village health aid, with major medical resources in the United States. There is no

other way for this communication to take place easily without many relays and loss of clarity in the messages. There are no telephones and health care cannot wait for written messages to be flown in and out.

The Lister Hill Center for Biomedical Communication, which is conducting this experiment, is working with Stanford University to provide other kinds of satellite communication, such as facsimile in color. (Unsatisfactory color reception resulted not from satellite trouble, but from differences between the sending and receiving machines.)

NASA continues to launch the ATS satellites. ATS-F will go up next year, and it will carry some programming of interest to education. Projects are being planned in the Rocky Mountain region, in Appalachia and in Alaska. The Corporation for Public Broadcasting, NASA, and HEW are cooperating here. More important is the fact that the next one, ATS-G, planned for launching in 1975, is unprogrammed as yet. We have an opportunity to make its major mission educational communications of all kinds.

Seven companies have filed with the FCC to launch satellites for domestic use. Mr. Norwood, with some help from Mr. Shank, took it upon himself to speak to the FCC, in both written and oral testimony, on behalf of research libraries. The commission staff has recommended that the commission make no provision now for free or reduced rate on commercial, domestic satellites for educational use. The FCC staff reasons that one can always do that later on, using the Public Broadcasting Act which says that nothing in the commission's rules will prevent free or reduced rates for public broadcasting from the common carriers, and the Higher Education Act which has exactly the same wording covering institutions of higher education. Some libraries can breathe easy, but there are others which can't, particularly libraries that are neither on university campuses nor part of a public system. These are not covered by these laws. It is hoped that this problem will be corrected when the rules are finally made.

Having looked at CATV, special purpose carriers and satellites, we come to this conclusion. Education, of which we are part, is expanding along three axes. One is the axis of access--more and more people are demanding access to education and to information. The second axis is life-long learning, which used to be the slogan only of the adult education movement. It is now a reality in professional education, and is even reaching the other way to get to children before they come to school. "Sesame Street" is a shining example.

The third axis is the diversity of curricula. The trivium and the quadrivium are no longer the sum total of what education is all about. All of this means that more and more demands will be placed on libraries for more and more things by more and more people. The relationship between these axes and new communication technologies are removing the constraints with which we have lived so long that we presume they are part of the natural order of things. A lot of chains are about to be broken. CATV, being a broadband communication system, frees us from what has always been a shortage of spectrum space. This expands the opportunity for access.

One of the things that is about to happen in TV is the same thing that

happened to the magazine publishing field after World War II when the mass magazines, which appealed to the broad, general consensus in taste, disappeared, to be replaced by a wide variety of specialized magazines. Cable television is going to give us the opportunity to make that kind of move in TV. As the Electronics Industry Association has said, the Western world has twice before been wired--first for electricity, then for telephone. The CATV cable is the "third wiring" of the nation.

One can learn something, though, by looking back. At the turn of the century, when the nation was wired for the first time it was wired for one purpose only--to replace the gas light with the electric light. All of the appliances--household labor saving devices, communication devices like the radio and TV set, etc.--were later dividends that had not been predicted. CATV will carry more than the kind of programming we are now accustomed to. For the first time the American public is going to have coming into its homes a broad electronic highway. CATV, therefore, is going to free us from the constraints of limited transmission capacity.

The special purpose common carriers are going to free us from the shackles of the telephone company, while satellites will free us from the constraints of distance dependent systems. They will make economically and technically feasible connections between places we heretofore could not afford to go. India is a classic example. If all the money was at hand now to wire India for television, the job would take twenty years. A satellite will do it as soon as the signal is turned on.

These comments could have been called "The Research Library in the New Communications Environment." That is what we are trying to suggest--that the communications environment is changing substantially, and we think that any planning must take this into consideration. All of us are guilty of extrapolating in a straight line from those changes we know are going to happen, and assuming that everything else will not change. We suggest that in information and communication technology that kind of planning cannot be done. But what do you do? One must become familiar with communication technology and seize opportunities to become a part of it.

It is urgent that librarians get involved in the telecommunications world. The FCC is beginning to grant permission for domestic satellite systems. The Office of Telecommunications Policy at the White House is constantly examining all of the nation's requirements. It tries to influence, if it can, the legislation and the regulatory activities of the government that will affect the future of telecommunications. The NASA satellite, now in the planning stage, is open to input from the library world. What kind of experiments would we like to conduct? Equipment and software must be designed. Now is the time to plan.

Let us close with a statement by Ralph Lee Smith in his special report, "The Wired Nation."

There is still enough flexibility in cable TV to create national electronics highways in accordance with any pattern that the nation may select, but if planning is delayed, and if federal and state policies are not created to turn plans into reality, short-term commercial considerations will dictate the form of the network. A wired nation so created will almost certainly fail to incorporate services that would be strongly in the public and national interest--just as the present broadcasting system has failed from lack of national planning and policy. Unfortunately, no branch of the federal government has evolved such planning, nor is any in the process of doing so. The time when effective national decisions can be made and implemented is running out.

(Ralph Lee Smith. "The Wired Nation."
Nation, May 18, 1970. pp. 582-606.)

It is our belief that the same plea for national planning can be extended to include all aspects of the developing telecommunications technology. Libraries should not wait for a large-scale general planning effort to get underway in which they can be included. The library community must take the initiative to bring its telecommunications requirements to the attention of national policy makers.

There are a number of specific tasks which we must undertake to delineate the libraries' future use of telecommunications:

1. We must specify the functions we serve in terms meaningful to telecommunication policy planners. Generally these functions are:
 - a) the transfer of data, particularly bibliographic data, for many library services (e.g., preparation of catalogs, creation of special bibliographies, references to publications containing information specified by users, etc.);
 - b) the transfer of messages such as requests for books and articles for interlibrary loan, answers to reference questions, information search strategies, etc.;
 - c) the transfer of text itself, either in facsimile or re-keyboarded text; and
 - d) the transfer of sound.
2. We must determine in detail the current extent to which we communicate, using system load language, quality requirements, speeds, and other elements that relate to telecommunication system planning and utilization.
3. We must determine the functions that can be served by telecommunication technology and begin to specify the alternative modes of communication, including nonelectrical, that are appropriate to the communication functions in which libraries are engaged.
4. We must determine the geography of information resources in libraries and information centers. We must know the power of the

resource "piles," that is, how readily can they be input into telecommunication systems. Such information may be of particular value to carriers in determining how they must configure their facilities and networks to serve library and information center needs.

5. We must delineate the constraints on library use of telecommunication facilities, legal, fiscal, technical and social.
6. We must conceptualize some idealized library and information center network configurations with telecommunication ties.

It certainly is time for all of us to get to work to ensure that telecommunications are put to proper use in serving the users of libraries.

* * * * *

INTERLIBRARY LOAN STUDIES

Mr. McANALLY: Before discussing the Westat study of interlibrary borrowing and lending, it is important to remind ourselves why we undertook the study and what our overall purposes are. What we are interested in is access to scholarly information at the national level. The larger academic libraries of the nation contribute most substantially indeed to this interlibrary lending activity. However, our present interlibrary loan system, which just grew more or less without any plan, is now threatened by an extraordinary increase in interlibrary loan activity, and by a heavy concentration of lending requests upon some of our larger university libraries. This load has become a severe financial burden on some libraries and is due to get worse. The financial problems of universities are now compelling us to examine this activity and its costs. Our more specific purposes, therefore, are first to preserve our endangered national interlibrary loan concept, and, second, to develop an improved national system.

Magnitude and Rate of Growth

First, three aspects of interlibrary loans were investigated in this study. The magnitude and rate of growth of interlibrary loans are a part of the problem; therefore, they were examined. Interlibrary loans have been growing rapidly during recent years and have become a very sizeable activity. The total number of requests, borrowing and lending, was estimated to be 3,388,000 in academic libraries in 1969/70. Of these, 2,122,000, or almost two-thirds, were requests to lend an item or volume; the rest were requests to borrow. Furthermore, these requests to loan have been increasing at a very rapid rate--the number doubled in the five years since 1965/66. In addition, the number is projected to increase nearly 50 percent more by 1974/75, reaching 3,202,000 requests. Each of these has to be dealt with, in one way or another. Clearly, interlibrary loan has become big business.

As to who is asking to borrow, about 60 percent of the requests come from other academic libraries and non-academic libraries. Therefore, academic libraries are making a substantial contribution to the overall information needs of our society.

As to in-state versus out-of-state, 64 percent of the requests originated within the same state and 36 percent outside the state where the lending library is located. Therefore, 36 percent of the total might be considered as in the national service. Of course every loan has to be paid for by somebody.

Turning from the state to the region, a very high percentage of the total requests originate within the same region as the library which is asked to lend. Only four large regions were considered, but the in-region percentages ranged from about 75 percent to about 85 percent. This fact might be important in planning.

There is a very heavy concentration of interlibrary loan requests upon the larger university libraries. An earlier study by Sarah Thomson indicated

that 63 large university libraries lent 69 percent of the total lent by all academic libraries. The Westat study estimated that 70 to 75 percent were lent by the larger libraries. These large libraries lend twice as much as they borrow; some of the largest have over a 5 to 1 ratio. Clearly, the national interlibrary loan burden falls most heavily on a very limited number of university libraries.

Characteristics

A second part of the Westat study dealt with an analysis of characteristics of the interlibrary loan activity. Some of the characteristics of interlibrary loans may have a bearing on alternatives and solutions. The study contains information about such matters as subject, language, status of borrower, success ratios, types of materials requested by different kinds of libraries, why requests were not filled, time lapse, etc. Some of the findings might be useful in planning. For example, photocopy (in lieu of lending the original) accounts for about 42 percent of all loans. Of this 42 percent, 37.9 percent were copies of articles in journals. Periodicals in photocopy or in the original account for 48 percent of all loans, and 46 percent of these were articles published within the last ten years. Age of materials does vary for different subjects. However, a plan to take care of periodical lending would still leave out 52 percent of the materials wanted on interlibrary loan. Another curious fact is that 64.6 percent of the requests received from public libraries was received by teletype, whereas only 19.9 percent of those from academic libraries came by teletype. Clearly the state appears to be better organized for quick interlibrary loans to public libraries than are other types of libraries. At the state level, we're getting pretty efficient in promoting and facilitating interlibrary loans. There has been little corresponding improvement beyond state boundaries.

Costs

These facts about magnitude and characteristics of interlibrary loan activities are very useful information for planning. But the cost per transaction is the single most important figure in the Westat analysis. Some of these transaction costs are:

The average cost of a completed loan was \$4.67.

The average cost of a search (unfilled request) was \$2.12.

A borrowing (spreading all borrowing costs over the completed requests) cost \$7.61.

These figures are good, sound estimated averages. However, they cannot be accepted as either complete, or, except by the sheerest accident, could they be correct for any individual library. If some library were to set out to arrive at a reasonably precise charge that it would have to assess in order to recover its entire costs, several other factors should be taken into account.

First, it is important to remember that this study covers direct costs only--the marginal costs necessary to provide the interlibrary loan service. Westat states in the report that, because of omissions, "The cost estimates given are almost surely under-estimates of the true cost of interlibrary loan service." Omitted are several kinds of costs.

Amortized collection costs: As Westat states, "There are real costs involved in acquiring and maintaining a collection and...there is a basis for the argument that some of these costs should be allocated to the interlibrary loan operation." These costs probably should be considered in any national plan. Most certainly collection costs should be included if a library is designated a resource library for an interlibrary lending system. However, determining these costs is a complicated and expensive task. Unfortunately, they could not be included in the study. Whether they should be assessed on all loans, or perhaps only on loans to profit-making organizations, I cannot say.

Attempting to estimate these costs, Westat guessed 60¢ and Sarah Thomson suggests \$1.50. Perhaps \$1.00 would be a reasonable guess until more information is available. I believe that some figure for amortized collection costs should be included.

Institutional costs: These were excluded from the study. They probably must be included sooner or later. The cost to an institution of processing a bill or payment has been estimated to be as high as \$3.00 to \$4.00. It should be noted that many interlibrary loan receipts are batched. Sarah Thomson thought the billing cost figure should be \$1.50; Gene Palmour of Westat made an informal guess of about 95¢. Somewhere between the two might be reasonable, though one's own university accounting office might be able to provide hard data and a precise figure. If a uniform billing charge were to be adopted arbitrarily, I would have to favor \$1.50.

Photocopy costs: The Westat study includes no photocopy cost data. To guess at a standard figure of the cost of a photocopy, one might use the \$1.00 figure adopted rather arbitrarily in the earlier study by Gordon Williams and Westat. Sarah Thomson, who has extensive knowledge and experience in interlibrary loan affairs, recommends a figure of \$1.80. This includes a service charge as well as copying costs. Hers seems more realistic. However, one very large library not included in the study found that the total cost of an interlibrary loan by photocopy cost over \$11.00. This same library lent original materials for much less than the \$4.67 average of Westat. While considering photocopy costs, it would be well to remind ourselves that the \$4.67 average cost of an interlibrary loan reported by Westat includes both the lending of original materials and loans by photocopy, but includes no photocopy cost. They would have to be added.

Verification costs: There is some question whether or not a national system should accept unverified requests. Quite a few university libraries do now. At the in-state level, however, some estimate of this cost is needed. Thomson suggests a surcharge for verification where applicable of \$3.00. The Illinois State Library does reimburse \$1.00 for searching, which would buy at least a little attention by a professional. A thorough search undoubtedly would cost more.

Controlling and switching costs: If a national system were to be developed in which all interlibrary loans were cleared through some central point for controlling, routing, and accounting, then the cost of this service would have to be paid by someone. We have no data or estimates for this, though the experience of airlines and oil companies might provide some

information about techniques and costs.

Variations in costs: A second, broad aspect of these cost studies that should be analyzed is the very wide range of costs among the twelve sample libraries. The range for filled requests was from a high of \$6.81 down to a low of \$2.05. The variation in costs for an unfilled request was even greater, from \$7.34 down to 62¢. The reasons for these wide variations need to be explained.

Consequently, in an effort to determine the factors that influence interlibrary loan costs most, I picked some of the libraries whose costs were highest and some whose costs were lowest, and telephoned. Here is a listing of what we believe are the causes of variations in cost, ranked rather roughly in probable order of importance.

1. Policies regarding standards of service: Unquestionably, the most important factor in costs is the attitude of the library towards interlibrary loans. If a library believes that interlibrary loan service is important, then staffing will include a high percentage of professionals, and the staff is more likely to be of a size sufficient to do a better than average job. On the other hand, some libraries staff this service only at the clerical level. Their costs are lower, of course. Higher standards of service just cost more.

2. Location of the activity: The location of the interlibrary loan service is quite important. If the service is located in the reference department, costs tend to be higher because staffing in reference is largely high-salaried professionals, and the professional outlook prevails. On the other hand, characteristic of low-cost interlibrary loan service is location in circulation, which has a predominantly clerical staff. Of course, location of the activity tends to be an extension of the first point--policies regarding standards of service.

3. Centralization or dispersal of library resources: The third most influential factor may be whether or not library resources are physically centralized. Obviously, it costs more when the item must be brought from a distant location.

4. Salary scales: Salaries do vary in different parts of the country and also among different libraries. The single largest cost in interlibrary loans is labor. Salary scales tend to be highest in the East and in the West.

5. Size of collections: Our committee held two differing theories about the influence of size of collections on costs. We were all sure that the larger and more complex the collection, the higher the costs would tend to be. However, some believed that the economies and efficiency produced by the magnitude of the activity might offset the higher costs. That is, a relatively large interlibrary loan unit might be more efficient than a smaller one. Apparently there may be some validity to the second theory--there is little correlation between the size of collection and interlibrary loan costs. However, this conclusion should be accepted with considerable caution, because other factors may be at work too. It is definitely possible that this factor should be ranked higher than fifth. In lending, most of those whose costs

were above the average had only large collections, and most of those whose costs were low had smaller collections.

6. Efficiency of the unit: Obviously, a very efficient interlibrary unit would have lower costs, other factors being equal, than one not so well run. This factor cannot be isolated, for it is affected by policies, centralization of resources, size of collections, etc. But it must have some bearing.

7. Miscellaneous: There probably are several miscellaneous factors that affect costs. For example, considering unfilled requests, a library which has explicit rules about large groups of materials that will not be lent, or which refuses to search a questionable bibliographical entry, can deal with some requests very quickly. Its costs naturally will be reduced.

Conclusion

I will give you some idea of how much money we are talking about by converting into dollars some of the data on magnitude of interlibrary loans by academic libraries. Both in-state and out-of-state will be included because both have to be paid for by someone. Let us use the projected data for 1974/75. Westat predicts that the total requests to academic libraries will be 3,202,000 in 1974/75.

Assuming that the percentage of success remains at 71.4 percent then 2,286,000 items will be lent by academic libraries in 1974/75. At \$4.67 a loan and \$2.12 for an unfilled request, the total costs to academic libraries will be \$12,517,000. If we add 5 percent a year for inflation, the cost to academic libraries in 1974/75 will be about \$16,000,000.

This financial load is not distributed evenly. The 113 largest libraries (those having collections over 500,000 volumes in 1970/71) may be expected to carry perhaps 70 to 75 percent of this cost, or about \$11,200,000 to \$12,000,000. Therefore, the average cost to the 113 large academic libraries would be about \$100,000 each. However, the 63 largest university libraries lent 69 percent of the total in 1963-65. There is some evidence that their share of the load may have gone down 2 to 3 percent. This would leave them carrying about 67 percent or two-thirds of the cost, or almost \$200,000 each. The dozen or so that lend the most might have costs considerably in excess of this.

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THE CASE FOR CONTINUED FREE ACCESS

MR. CHAPIN: It is unfortunate that my long awaited maiden speech before this august group has to be on such a poor subject. Even the Democratic presidential hopefuls have an opportunity of picking their primaries. Speaking to a group of research librarians on free interlibrary loan, with Bill Dix to speak on the other side of the issue, is like McGovern coming to the South and meeting Wallace head on regarding busing for educational balance. But, so be it!

I will even use Bill Dix to make the case for free interlibrary loan. At the Second, and hopefully the last, Conference on Federal Information Resources, Bill made the following statement:

One objective which we may all share is to get more money and support so that we all can keep on doing exactly what we are now doing. This may sound cynical, but I don't think it cynical to recognize that the normal human instinct, to defend what one is doing, is one of the factors which inhibits change.

Simply stated, free interlibrary loan is a very important part of what we are now doing. The case must be made for a charge.

Librarians have been most successful in providing physical access to library materials; we have been less successful in providing bibliographic access to materials. Why should we now change that which has worked so well, physical access, and continue to ignore the more important bibliographic access?

If further reasons are needed to support free interlibrary loan, we should consider at least the following:

1. Government funding: All libraries, even the private libraries, receive a large portion of their support from a government agency. If we assume only local support, that is, not having university property on the tax rolls, the amount of public subsidy is substantial. If one adds research grants, federal and state student aid support, and other funding programs, such as the National Program for Acquisitions and Cataloging, PL 480, and the former--and hopefully returning--U.S.O.E. programs, it is hard to find a truly private institution. (We can, of course, point to Jim Haas's and my alma mater, Wabash College, which refuses federal funds for any purpose. There are few such private enterprise institutions left.)

2. Lending agreements: At the present time we are all involved with a number of cooperative agreements on state, regional, and national levels. These can range from very simple reciprocal arrangements between institutions to the more complex consortia and blossoming networks. If we are involved with a fee-for-service interlibrary loan program, what happens to these arrangements?

It might well be that we will need a special bookkeeper to keep track of which institutions borrow for free, which ones at a reduced rate, and which ones pay the "full shot."

In my own situation, we provide free lending services to any citizen of Michigan; we cooperate with Illinois, Indiana, Minnesota, and Wisconsin in the M.U.C.I.A.; we are a member of the CRL; and we participate in the medical library network and will be an integral part of the proposed agricultural network. In the two networks alone we assume some regional responsibilities for lending freely all items classified in the Q's, R's, and S's, and some of the B's in the L. C. classification.

3. Cooperative acquisition programs: Bill Dix, at the conference mentioned previously, also said, "It is obvious to me that we shall have to reassess our acquisition and retention policies, hold relatively less material on our own campus, and concentrate more on cooperation through sharing and specialization." Most of us would agree with this statement. After all, isn't that what the Farmington Plan was all about? And now we are proceeding even further: at our last ARL meeting we considered collections of excellence!

Cooperative acquisition arrangements, however, will not work unless we have an adequate program for locating material, and a free exchange once it is identified.

At Michigan State University we have assumed that we have lending responsibilities in our Farmington Plan areas and subjects. This being the case, we now must add the rest of the B's, the DS's and DT's to those classifications for which we have no lending restrictions. I am sure that this could be extended so that the only restricted classes left would be a few D's, E's, some of the H's, and P's.

4. Depository status: All of us, in one way or another, are depositories for selected publications and/or agencies and institutions. The basic understanding in accepting depository status is that we will make materials available to the broader user community. This concept probably originated with the depository program for government documents. The number and kinds of depositories, of course, have grown in recent years. Can we really charge for materials we have accepted with the understanding that we will make them available to all users?

At the First Conference on Federal Information Resources, Steve McCarthy pleaded that we not do away with the philosophy behind the Depository Act. At that time, Steve and others were concerned that the federal government was beginning to charge for what had formerly been free information service. Remember how we all protested when we received our first bill for the A.E.C. reports? It seems logical, therefore, that the smaller libraries would express the same concern if we now start charging for interlibrary loan, formerly a free information service. (Perhaps we will even have to have our own conference on large library information resources in order to hear the complaints of the smaller libraries.)

5. Life-long education: The Association of Research Libraries has always prided itself on looking forward to new areas of service. Certainly,

the Association has been the forerunner in cooperation, automation, management and other programs. Perhaps the next big problem that research libraries will have to face is that of life-long education. All of us will feel the brunt of programs designed to expand off-campus educational opportunities. Even the private institutions recognize this as a coming area. I quote Kingman Brewster, President of Yale, in an article published earlier this month:

I believe that we are at the dawn of a new era of self-education. Not only the remarkable British experiment with the Open University, but the potential of television tapes or visual recordings which permit you to transmit to yourself, at your own convenience, over your own television set, will, I believe, bring the experience of the arts and sciences within the reach of anyone who is interested.

What are we as research libraries prepared to do to support the life-long education concept? The implications for expanded responsibilities are frightening. And do we charge our new "students" for loans just because they are not on campus at the moment?

There are reasons, obviously, why we should not change our long standing practice of free interlibrary loans. There are more reasons than Dix's concept that we want to keep on doing what we are doing. This, however, does not solve the problem that exists with our present interlibrary loan program.

An analysis of the Westat Report shows that a few libraries are carrying the major burden of interlibrary lending in this country. These libraries, of course, are ARL libraries. Even Michigan State University, a "cow college" to some of you, is now a lending library, rather than a borrowing library. Last year the number of loans from Michigan State University was 80 percent of the number of loans from Harvard. We all have a problem, but obviously it is more pressing for the larger, older, and usually private institutions.

The Westat Report showed that two-thirds of all loans were within the state. We all have certain obligations to other institutions within our state, and even the private institutions must feel this obligation. In addition to intra-state use, three-fourths of all interlibrary loans were transacted within the region. As consortia are developed, we will have additional obligations to our regions.

Even discounting for state and regional obligations, many ARL libraries will feel the burden of added loans to other libraries. There must be a better way, but a \$5.00 charge is not necessarily "better."

More important, as I look at the Westat study, is that the loans are not being spread as evenly as they could be. Sixty percent of all loans were for materials published since 1961, most of these in the English language. I am confident that any one of the members of this Association could have responded to most of these requests. Why then do so many of the requests go to the East Coast, or to too few libraries? Perhaps what our Association should concern itself with is a program for spreading the requests over the entire membership, rather than a procedure that would allow a few to recover from

undue financial hardship by charging a fee that may range anywhere from \$2.05 to \$6.81.

Although we have a problem, it will not necessarily be solved by adding a surcharge, or a tax, for information services. If we are concerned with the role we play in the total information needs of the nation, then we should concern ourselves with making our resources more readily available, rather than with a complex, or at least burdensome, charge in the one area where we do remarkably well--physical access to resources.

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INTERLIBRARY LOAN FEES

MR. DIX: Sixty-two years ago my distinguished predecessor as librarian of Princeton, Ernest Cushing Richardson, wrote, "If this matter of cooperation could be organized systematically, it is within bounds to say that it might reduce by one-half the financial problem of equipping American universities and American research scholarship in general with proper book apparatus."

Thirty-two years ago another distinguished predecessor, Julian Boyd, wrote, "The fallacy of an impossible completeness in any one library should be abandoned in theory and in practice; librarians should now think in terms of 'completeness' for the library resources of the whole country."

They were of course not alone. We have been talking about the sharing of resources for a long time. It now seems perfectly clear to me that we, the ARL libraries, cannot continue indefinitely to grow individually at the rate we have been growing. A recent study by Mathematica, Inc., "On the Economics of Library Operations in Colleges and Universities," notes that the total library expenditures of 58 university library members of the ARL in 1950 grew through the next two decades at an annual rate of 10.5 percent. The study then points out, "At a 10.5 percent rate of growth, a variable doubles in magnitude in less than seven years, so that over two decades it increases to approximately eight times its initial value."

We are going to have to devote a great deal of thought to ways of meeting our responsibility to the cause of scholarship, for it seems most unlikely that we shall have the money to continue increasing our expenditures at this rate. One way is the more effective sharing of resources.

It is in this context that a discussion of interlibrary loan belongs, for no system for the sharing of resources can be effective without an adequate delivery system. Interlibrary loan, for all its faults, is a part of that delivery system, and we have a long way to go before it can be abandoned. I have reluctantly come to the conclusion that some system of fees is essential to make interlibrary loan work better.

I say "reluctantly" because we have all been brought up on the noble ideal of the free public library. But most shared resources involve a sharing cost. Through subscription fees we share the cost of abstracting and indexing tools which no library alone could afford. All American taxpayers share the cost of our shared cataloging program at the Library of Congress. As a New Jersey taxpayer I share the cost of a statewide library network, including about \$70,000 a year paid to Princeton and each of three other libraries for providing backup service at the research level. Many libraries charge fees to outside borrowers.

Some may say that we should not charge fees for lending books because making books available is the reason for our existence. However, education is the reason for the existence of our parent institutions, yet they charge tuition. Interlibrary loan is really almost the only library-related service

that I can think of where the recipient of the service does not in some way pay even the costs incurred by the agency which provides the service.

If the sharing of costs were relatively equitable, there would be no problem, but they are not. Every library here, I am quite sure, has a substantially unfavorable balance of trade. A fee system could right the balance, for we would of course pay for what we borrow as well as collect for what we lend.

Therefore, I am at last prepared to support some equitable system by which a borrowing library would pay the cost of an interlibrary loan transaction. This is not the place to work out details, but what I have in mind may be outlined as follows:

1. Participation in the system by the lending libraries, while of course optional, should be sufficiently general to establish the principle.
2. Each lending library would be completely free to waive the fee to certain categories of borrowing libraries. State universities might find it desirable, for example, to charge no fee to institutions in their own states.
3. A uniform fee would be highly desirable in the interest of facilitating transactions and bookkeeping systems.
4. The fee should be large enough to cover actual costs as identified in the Westat study. I am not prepared yet to propose a fee which realistically covers all of the costs, such as amortization, even though such a fee would be rational. (Life is too short to face that calculation and debate!)
5. Some sort of clearing house is probably desirable, but direct payments may be simpler.

Each of us can think of other features, but these seem to me the essential elements. I shall add quite tentatively one other idea. I rather like very broad-based sharing when the breadth does not lead to operating complexity. Why should interlibrary loan not be supported by the federal government?

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THE LIBRARY MANAGEMENT REVIEW AND ANALYSIS PROGRAM

MR. WEBSTER: As a means of quickly summarizing the efforts of the Management Studies Office you have been provided with an outline of the principal activities and accomplishments of the office during its first year and a half of existence. The range of items listed on that sheet provides a good view of the diversity of efforts we are making to provide assistance to member libraries as they strive to improve their management. In the future, we shall continue to consider programs and projects that will provide practical, direct assistance to the individual library, and we shall continue to seek the guidance of members in regard to their management requirements.

An example of the emphasis on practical projects is the focus of this morning's discussion: The management review and analysis program, developed by the Management Studies Office for use by research libraries in conducting a self-study of their management and operations.

Background and Perspective

This program is based on the conviction that the most important challenge facing librarians today is better management of their resources. The reason for this are readily apparent: the growing complexity of research libraries, the changing attitudes of staff toward their work and their status in the university, the financial difficulties faced by almost all universities, the rising costs of staffing and operating information services, and the growing strength of other demands within the university that compete for limited resources. Improved management is one response to these issues. However, most libraries have limited resources available to complete a systematic and comprehensive approach to accomplishing it. Only very few have the funds to seek outside assistance. Most must do something about improving management through the use of their own personnel. The review and analysis program recognizes these financial and staffing constraints and provides the director with a tool necessary to overcome them. Through it, the review and analysis of a library's management and operations that is essential in moving toward improved library programs can become a feasible task for all research libraries.

The program involves a systematic investigation of the top management functions in a research library. It deals with approaches, policies, and procedures in the areas of planning, budgets, organization and personnel, with a view toward improving the effectiveness of the library.

The Management Review and Analysis Program

In explaining how the program works, four ingredients should be emphasized. They are: 1) the commitment of the library, 2) the analytical method, 3) the MSO Manual, and 4) the ARL training sessions. I will spend a little time in looking at each of these ingredients.

The Commitment of the Participating Library: The interest of the administration and staff of a research library is the single most important ingredient for the successful execution of the program. We are talking here of a commitment that leads to some action and results. The program may seem attractive to some libraries that do not really want to make the investment in an effort as ambitious and comprehensive as this is. We would discourage the idea, for example, of a library trying to complete the manual on its own without the ARL training sessions. What is needed is a library's commitment to complete the work involved in all phases of the self-study. That is the only way the program can demonstrate its value to the library.

This type of commitment to improvement is not an isolated phenomenon. Most library staffs have it. What is often lacking, however, is either the appreciation of the processes of management or possession of the skills associated with this process. The review and analysis program, however, will not require the participating library to have sophisticated management skills. In fact, a major intent of this approach is to substitute the desire on the part of the library to effect some improvements in the way its programs are managed for extensive in-house managerial expertise.

The Analytical Method: The time requirement for completing the entire program is six months. It is that long because the staff members completing the analysis simply cannot spend full-time or the majority of their time on it. They will have to continue to perform in their regular jobs. Since this is a detailed, thorough investigation, a half year is the minimum time required. This actually is a pretty short period. It means that in six months a small group will need to learn how to conduct the study and then gather and sift through a massive amount of information, all of which will then require extended consideration. Actually, the shortness of the time will probably be one of the biggest challenges. To complete each step and move along to the next in a quick and effective fashion will not be easy.

Next, there are eight distinct groupings of activities within the review process. These groupings might be referred to as phases.

Phase one is the preparation phase. This involves the review and codification of broad, continuing library objectives. An example of this type of objective is that the library will select and acquire those information resources most needed to support the research and instructional programs of the university, consistent with the principle of selective excellence. These general statements--maybe eight or nine-- are needed to focus the thinking of library staff on the fundamental purposes of the library. They are also necessary to provide direction to the study team as it completes the review and analysis.

Thinking through the basic purposes of the library and writing them down can best be done by the director. He should secure appropriate comments from the university administration and from the library staff. Beyond that, additional effort to get extensive staff input at the formulation stage is probably unnecessary.

The other activity in this first phase is the organizational preparation for the study. This involves information exchange and discussions with the

library staff and university officials. Support from both points are needed. Then, administration will need to review the materials and move toward the selection of a study team.

The selection of the study team is one of the more important steps leading to a successful study. Consideration should be given to the results that the study will be expected to produce. It is the responsibility of the study team to run and monitor the entire analysis, to produce these results. It will have to take the lead in the work, itself, as well as in the discussions of the results, as the library moves toward implementation. Therefore, a good work group is needed. By necessity, this means a small committee of the library's best people. The committee cannot afford to be delayed by the need to upgrade or to carry a single member.

This small group should represent several points of view to ensure the effectiveness of the study team. For example, there should be:

1. A library administrator, not the director
2. A librarian without administrative responsibilities
3. A library user, either faculty or student
4. A support staff member
5. A library staff member from outside the main library.

The chairman of the group should be the administrative officer, who is appointed by the director. His responsibilities include leadership in the conduct of the study and production of the report that summarizes recommendations. It is his job to see that the study team works closely with the director throughout the course of the study.

Phase two of the review and analysis program is the investigation by the study team of the university's plans, objectives and programs. The team will meet with university officials, secure counsel from the university senate library committee, and review the statement of objectives prepared by the library director. The purpose of this phase is to relate the study effort and library objectives to the parent institution's requirements and priorities.

At the conclusion of this phase there should be several visible results of the effort. First, there will be a broad statement of library mission and fundamental purposes. Second, there will be a team of highly motivated staff engaged in a self-study process with intended results clearly outlined. Third, there will be draft statements of short-range, measurable goals for the library departments that can be used for discussion purposes as the study proceeds.

The third phase moves into a systematic review of important technological, educational and professional trends that may reasonably be expected to have an influence on the library over the next several years. The team's discussions about these trends should lead to some agreement as to their possible implications for the library. These may be factors outside the control of the library: for example, the rapidly rising costs of periodicals or the changing interpretation of copyright. Although beyond their control, they are going to have an impact on local operating and budgeting decisions, and must be studied and understood by the library staff as well as by the director.

At the conclusion of this third phase, the study team should have a good understanding of the environment in which the library operates. It will have a knowledge of university needs and requirements; it will have a feeling for the required library responses; and it will have some sense of future developments as they may affect library operations.

Phase four is the analysis of the several functions of library management. The first functions to be examined are those concerned with planning and control. To accomplish this analysis with dispatch, the study team should set up task forces to study the specific areas of planning, budgets, policies, and management information. Each task force should be chaired by a member of the study team. Each is responsible for assessing strengths and weaknesses in its area and for developing a list of recommended actions to facilitate improved performance. The recommendations will then be reviewed and evaluated by the entire study team.

At the conclusion of this phase, there will be drafts available of those chapters of the management analysis report dealing with planning, policies, budgets and management information. In addition, the process of review--simply talking to library staff about what they do and why--will be effecting smaller changes and improvements as the study progresses.

The fifth phase takes the same approach as the previous phase. The study team sets up task forces to examine the areas of library organization, leadership and supervision, and staff development. At the conclusion of this phase there will be draft chapters that will provide descriptions of the library's present activities in these areas, analyses of these activities and suggestions for changes that should be made.

The sixth phase follows naturally from the previous two and is concerned with personnel and management, generally. Personnel in this sense means the recruitment, selection, placement, review, promotion, compensation and termination of staff. Management refers to the ways in which staff members throughout the library work together to achieve the library's objectives. It refers to the integration and coordination of everyone's efforts.

The seventh phase encompasses the revision of the earlier drafts of chapters and integrates them into a draft of the management analysis report that can be used for discussion and review purposes with staff and the library administration. This document will be the concrete product of the entire effort. Considerable care, therefore, should be exercised to focus the report only on the key results and key recommendations of the study. The report should not be a large, bulky document with many descriptive elements. It also is not seen as a literary masterpiece. Instead, it should be a vehicle for moving the library along in several areas that require improvement. Little or no space should be given to belaboring the problems and faults of the past.

The final phase is implementation. It should be accomplished by the library administration with the aid of the study team. This involves scheduling of actions, assignment of specific responsibilities, and creating a review and modification process. Further investigations, such as user studies, may be needed. Certainly, a movement toward planning has been made. Its

continuation will be an important element of the management improvement program.

So much for the first two ingredients in this self-study, the need for a commitment from the library, and the analytical method.

Management Review and Analysis Manual: The next ingredient in this program is a manual developed by the Management Studies Office designed to provide detailed guidance to the library that adopts the self-study approach. The manual represents both an instructional aid for the study team and a working tool for completing the analysis. It operates as an instructional device in several ways. For example, the manual lists the prominent trends in higher education for discussion purposes and then demonstrates their possible implications for research libraries.

Furthermore, the manual provides analytical tables for each management topic. These tables are the heart of the manual and list management principles that libraries should strive to implement. In the area of personnel, for example, the principle, "Personnel programs should be administered with clearly stated policies and procedures," is presented and then criteria are listed which establish performance measures to determine the success of the library's operation in meeting the stated principle. In relation to the principle mentioned above, the following criteria are given:

1. Personnel policies are written and available as a manual for operating staff at all levels of the library (each department has a copy).
2. An employee handbook is given to each new staff member that summarizes the personnel program and major library policies.
3. Personnel policies are reviewed annually.
4. Written policies address the following questions:
 - a) Conditions of employment
 - b) Transfers and promotions
 - c) Salary and benefit administration
 - d) Holidays and vacations
 - e) Participation of staff in professional organizations
 - f) Staff training and educational opportunities
 - g) Grievances
 - h) Performance reviews.

In addition to these several instructional purposes, the manual serves as a working tool for the study team to use in completing the analysis and in producing useful results. For example: the manual lists each step and procedure to be completed in the study. It groups these steps, suggests work assignments and establishes a schedule for completion.

The manual also provides a format that guides the study team through the analysis of each management principle and through the development of recommendations. Data gathering guidelines and selected readings are presented, along with forms to be filled out and questions to be answered in each of the thirteen chapters, to help the study team complete the analysis. Furthermore, the manual describes the management report to be produced and suggests an

outline to be followed. The intent is to ensure that the document focuses on the desired changes, not on past problems.

ARL Training Sessions: The final ingredient in the Management Review and Analysis Program is the concept of ARL training sessions which are scheduled at important points during the entire process. These sessions will bring together the study team chairmen from the several participating libraries. Six sessions are planned for each program with a limit of ten representatives in each. The intent of these sessions is twofold: first, they will provide assistance to the library as it works its way through the study. They will do this by answering questions that occur, providing instruction on the several management areas, and preparing the library for the succeeding phases of the study. The second intent of these sessions is to provide a problem-solving setting for specific issues that a participating library might want to bring to the meeting. For example, the problems a particular library may have with the adoption of a new performance appraisal approach might well be helped by gaining the perspectives of other library staffs. These training sessions are designed for a wide ranging exchange of information and ideas for libraries in similar stages of self-study.

Those are the four essential ingredients in the successful completion of a review and analysis program: 1) the individual library's interest in and commitment to performing a self-study of its management processes and operations; 2) an analytical process of reviewing management functions in a research library taking into account current trends in higher education and applicable principles of research library management; 3) the manual that provides a framework of instructions and guidelines to assist the library in working through the self-study process; and 4) the periodic ARL training sessions for study team chairmen as they complete the review and analysis.

I might conclude by providing a status report on the program. At this point, it has moved through a developmental stage under the guidance of the executive staff and the Commission on Management of the ARL. Because of its close relationship to the analytical approach employed in the Columbia study, staff from Booz, Allen & Hamilton have contributed ideas and perspectives.

The program is now ready for testing. What is proposed, prior to making the program generally available to the ARL membership, is to invite three or four institutions to work through the entire program. The Management Studies Office will work closely with these libraries, giving special assistance and incorporating their ideas and experiences into an extension and improvement of the program. Several libraries have been approached and have agreed to consider acting as test cases. They represent a mix of public and private, small and medium size libraries.

I hope that my comments this morning demonstrate the feasibility of accomplishing a Management Review and Analysis Program in most ARL libraries. The intent of our efforts over the last several months has been to reduce a complex process to a simplified, easily understood self-study effort that can in fact be done even by libraries that do not have extensive management experience among their staff members.

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THE EVOLVING STATUS OF UNIVERSITY LIBRARIANS

MR. McDONALD: Among the concerns of the Association of Research Libraries is that of the status of academic librarians. This afternoon we have two speakers on aspects of that subject. They are Ed Holley of the University of North Carolina and Robert Van Waes of the AAUP. I'd like now to call on David Kaser who will moderate this segment of the program.

MR. KASER: I think one of the interesting phenomena we have been observing over the last four or five years has been the change in expectations of a number of social, economic and professional groups. We see it directly and day to day in the activities of some university librarians and their colleagues in the teaching field.

We have been concerned about this in the ARL, wondering what it means. We have been confused by it, amused by it, bemused by it. We have entered into it ourselves with greater or with lesser interest, concern, and enthusiasm.

We have had at least one program recently concerned with the changing role of the librarian. This was two years ago, if I recall correctly, when Stanley Seashore and Mike Marchant met with us and discussed some of the more theoretical aspects of participation in decision making in large corporations, some of the pure research on the topic, and some of the experiences in industry, but they did not touch on research libraries, themselves. Since that time there has been a group of us who have been meeting regularly to discuss some of the developments we have seen from week to week and month to month and year to year. We also have been discussing the probability of having a portion of an ARL program devoted to examining some of the very practical aspects involved in implementing participatory management in research libraries.

We were asked by the board of director to sponsor a discussion at this meeting and were pleased to do so. We are fortunate in that our first two prospects for participation both accepted invitations to come. As John has already indicated, the first person you are going to hear from is Ed Holley I suppose all of you know Ed. He was born in Tennessee, not too far from here and received the early part of his education at Lipscomb College and Leabody Library School. He received his Ph.D. from Illinois and served on the staff for a long time there. He became director of libraries at Houston and was there for a decade. He recently became dean of the Library School at the University of North Carolina.

Ed has had the interesting experience in the last year of visiting a number of research libraries, primarily in urban settings, to look at the management style. He now has had several months in which to pray about findings and put his remarks on paper. He is going to share those remarks with us here this afternoon.

LIBRARY GOVERNANCE IN HIGHER EDUCATION: WHAT IS EVOLVING?

MR. HOLLEY: To many librarians who had been frustrated and unhappy with their second class status in American higher education, the trend toward faculty status during the fifties and sixties was long overdue. This trend, helped along by the shortage of professional librarians during a period of great expansion in financial support of libraries, encouraged many to believe that at last they would achieve the recognition on their individual campuses which had been denied them. Moreover, they took courage from the periodic articles by Dean Robert B. Downs, articulate and forceful advocate of full faculty status for librarians, whose reports indicated that more and more universities were moving in this direction. A comprehensive review of these developments, "Status of the University Librarian in the Academic Community," by Arthur M. McAnally, appeared, appropriately enough, in the Downs festschrift, Research Librarianship, last year. Many of you have no doubt read McAnally's excellent review article. Though not a part of these remarks, his outline covers most of the topics now becoming crucial as we try to sort out the problems librarians have in behaving like a faculty.

Perhaps one of the landmarks in the whole history of this movement will turn out to be the acquisition of faculty rank by the librarians at the various units of the City University of New York in November 1965, which followed, incidentally, a Downs survey. Since this new status was accompanied by the highest salary scale enjoyed by any academic librarians, the promised land seemed to be just over the horizon, if not immediately across the Hudson River. Moreover, passage of the Taylor Law in New York, which provided for a collective bargaining agent for all public employees, provided further stimulus for the units in the State University of New York to follow the lead of the City University. In essence the Taylor Law declares that it is the public policy of the state of New York that public employees, through their chosen organizations and collective negotiations with their employers, have the right to participate fully in the process of determining all the terms and conditions of their employment. Further strengthening of the bargaining position of the CUNY system has just been announced with the merger of the full-time faculty bargaining agent, the Legislative Conference, and the United Federation of College Teachers, bargaining agent for lecturers and part-time employees.

A number of librarians viewed these developments, as well as the emerging AAC-ACRL-AAUP efforts of the late sixties, with mixed emotions, but it is only fair to say that a great number hailed such progress as an indication that the period when library administrators starved their staffs to build their collections was on the way out. They had earlier found encouragement in the fact that even Harvard has granted a form of academic status to librarians as "officers of administration," a result of the new personnel program initiated by Paul Buck in 1957/58. The only totally bleak picture seemed to be the West Coast where the librarian at Berkeley continued to insist that librarians could in no wise be equated with the faculty at his institution. His counterpart in the Southwest, the librarian of the University of Texas at Austin, was similarly intransigent, but his views had less impact upon that state than did those of the Berkeley librarian on California.

Recently, faculty status for librarians has again come under attack in some states and, as you all know, was actually removed in New Jersey. Unfortunately for librarians, this action comes at a time when the whole concept of tenure and promotion policies for faculty are under serious attack as a result of student unrest and disruption on many campuses. At the same time there has been rising discontent among junior level faculty and librarians, probably allied to the evolving concept of "participatory democracy" in management. There is no need to discuss this aspect of the problem at length, since most ARL meetings in the last few years have devoted considerable time to that topic. Let us merely note that the rising discontent among library staffs is fed by the concept that an individual has a right to participate in decisions which directly affect him and his job.

Anyone who attended the Dallas meeting of the ACRL is fully aware that that particular audience believed that the tentative ACRL Standards calling for full faculty status for academic librarians were just and fair and should be implemented quickly. That sentiment was certainly confirmed by my visits around the country last spring on my fellowship from the Council on Library Resources, especially among the younger librarians on many of your staffs. Perhaps you don't need someone from the ivory tower of a library school to remind you of this, but most chief librarians who have occupied their positions for over ten years are in serious trouble with their staffs. Whether or not that is fair to you, I do suggest that it is a fact of life and I would certainly urge you not to take the current staff unrest casually.

Indicative of the depth of feeling about personnel problems in libraries was the comment of one elderly reference librarian I met on my trip last spring. Reference Librarian X was head of a large departmental library in a separate library building at a major university. He did not impress me on first acquaintance, so I expected to spend little time with him and certainly didn't expect to learn much. Moreover, it was five o'clock at the end of a long, tiring day of interviewing.

"What," he asked, "are you really looking for?"

In my most urbane manner I suggested to him that I was trying to discover how urban university libraries were organized, whether or not they were developing different patterns of management, and, if so, whether these might be applied to the University of Houston.

In unexpectedly harsh tones Mr. X replied, "Nothing is going to change the way libraries are managed until head librarians cease having contempt for their staffs. You can have any kind of organization you want, you can draw nice charts, but until head librarians respect their staffs, it won't make any difference."

As he proceeded to warm up to his subject, I learned the faculty disrespect merely reflected disrespect from the director; that there was no staff participation in the management of that library; that the director never listened to the staff; that departmental meetings were a farce; and that the director always controlled staff meetings by presiding, preparing the agenda, and writing the minutes. This was pretty heady stuff for five o'clock in the afternoon. Mr. X did grudgingly admit that there were occasionally, incompetent

reference librarians, but he thought they paled into insignificance when one compared them with directors of libraries. As far as he was concerned, "Lines on paper don't mean a thing."

Although I tried to argue with Mr. X, and suggested that he was much too harsh on directors (after all, I was one), I suspect his deep-felt resentment is more common than most of us realize. Interpersonal relations between chief librarian and staff have suffered much during this past decade. Certainly contempt from the director has been repaid in kind by the staff and whatever may be the reasons for this discontent it has affected seriously and will continue to affect seriously the operation of many libraries. In that particular situation the mere change of directors is unlikely to provide much of a solution and for that reason some of the staff regard the unionization of the staff, with its further polarization of various segments, as inevitable.

Having just recently left the ranks of directors, I find such attitudes disturbing. I also do find myself bothered at times by the fact that library staffs, so concerned about being treated humanly and humanely by their administrators, do not exhibit the same characteristics in return. For by any objective standards the kind of library resources, staffs, and services your leadership has provided would have been the envy of your colleagues around the world a brief decade ago. Now, alas, many directors are retiring early, some with bitterness, some with relief, and only a very few with the honors which would once have been theirs.

One of the major problems appears to be the increasing isolation of the administrative staff from the rest of the staff as libraries grow larger. This may well be the price we pay for growth, but a number of institutions have librarians proclaiming that the price is too high. For that reason a number of libraries are moving toward a form of library governance. In most cases the concept borrows much from the earlier practices in universities where the faculties make the policies and the administrators carry out those policies. Since the whole matter of faculty governance is now under scrutiny, there are a good many who wonder if this is indeed the right path to take. On the other hand, if one does want to become a vital part of the academic enterprise, that usually means an alliance with the faculty, currently the most powerful group on any American university campus.

In retrospect it seems strange that library governance has been so long in coming. Yet even at institutions like the University of Illinois, where faculty titles and the minimum faculty pay scale for librarians are more than twenty-five years old, the library staff did not proceed to organize and behave like a faculty. Knowing how some faculties sometimes behave, some librarians think that is a virtue and not a fault. Nonetheless, few libraries thus far have developed the traditional faculty modes of operation: faculty committees on tenure, grievances, and promotions; regular faculty meetings of the entire professional staff; discussion of goals and objectives of the libraries; and strong participation in the selection of new library administrative officers. This last factor still lies very much within faculty control, the selection of a director of libraries being regarded as far too important a matter to be left to mere librarians. Yet under the circumstances, with the faculty model close at hand, it's somewhat surprising not that there is now a demand for this type of organization but rather that it's been so

long in coming.

At any rate, coming it surely is, for many staffs are busily engaged in drawing up constitutions and bylaws, are petitioning for tenure committees and peer review for promotion and salary decisions, and, in a few cases, are pushing for the direct election of library administrative officials, though as E. J. Josey's recent article in the Library Journal indicated, the reference librarians in New York State, while supporting library governance, take a dim view of rotating chief librarians. I suspect this reflects our general culture. Most librarians, like most citizens, prefer strong leadership, even though they may want a good deal more of a voice in determining the terms and conditions of their employment, to paraphrase the Taylor Law.

As most of you will recall, the new tentative standards of the ACRL contain a paragraph stating that "College and university libraries should adopt an academic form of governance. The librarians should form as a library faculty whose role and authority is similar to that of the faculties of a college, or the faculty of a school or department." Under these circumstances, the role of the chief librarian will undergo a change. He may become a dean, and thus primarily an administrative official, or he may become a department head, possibly elected by or at least confirmed by the staff. Most of us, I suspect, would regard the deanship as more appropriate, especially in a large university, and there are indeed already a number of librarians holding the title, "Dean of Library Administration." The normal academic procedures will then come into play, including regular meetings of the faculty, selection of faculty committees, more formal standards for professional development, as well as the endless arguing, professional jealousies, and cumbersome decision making that follow in its train. I'm not sure that all librarians understand clearly that staff democracy and speedy decision making are mutually contradictory concepts.

For some institutions library governance is already an established fact of life. In my opinion, one of the best defined forms of library governance is that of the University of Miami at Coral Gables. Its charter on faculty government states that the library has the status of a school; its director is considered to be the dean; the faculty of the librarians have the power to participate in the appointment, retention and promotion of their colleagues, and to participate in the selection and retention of their administrative officers.

Another institution in which library governance is clearly spelled out is the City University of New York where the forty-page union contract defines very specifically the duties and responsibilities of the staff. Other universities in the process of developing library governance policies include the University of Minnesota, Northern Illinois University, the State University of New York at Buffalo, the University of Pittsburgh and the California state colleges. Their patterns appear similar and the model is usually that of the faculty.

One puzzling aspect of the trend toward academic governance is that the organization charts remain much the same. As one individual explained, the professional staff makes the policies and the library administration carries out these policies. How this will work, or if it will work, is not yet clear

to me. There is some evidence that librarians, accustomed to working in a hierarchical structure, find it difficult to adjust to a real policy-making role. Perhaps as Stanley Seashore remarked at the ARL meeting in January, 1970, "Few people have had a chance to acquire the skills of participation to the needed degree, and an extended period of training and individual development may be required during the transition."

While I personally would not work in a library which did not accord its librarians faculty rank, I do think faculty organization or library governance should raise some serious questions among thoughtful librarians. If one assumes as a basic principle that staff should participate in decisions that directly affect them, then he can scarcely ignore a group of full-time employees who do the bulk of the work and who constitute anywhere from 50 to 70 percent of the total library staff. One answer is the unionization of the clerical staff, already a fact of life for many libraries. However, this suggests that clerical employees are not interested in policy matters but are chiefly interested in benefits and working conditions. Is this true? Are professional librarians mainly interested in faculty governance because they want to be a part of the educational process or because they want more benefits and better working conditions? I strongly suspect the latter, yet I do so with disappointment, for I think the truly dedicated professional ought to be interested in the policies of the library in which he serves. At some large universities, however, a significant amount of time has been spent by new committees not on organizational structure or policy, but on purely routine personnel problems.

If librarians are more interested in benefits and working conditions, do promotion, tenure and grievance committees necessarily provide a professional librarian with a more objective evaluation for salaries, adjustment of his problems, etc., than competent department heads or other administrators? What about objective evaluation of an individual who may have been passed over several times for promotion? Is he really better off with his peers or with his supervisor? Can a library staff, given both the external and internal pressures exerted upon any large library system, actually determine policies which will be acceptable to the total university community? Moreover, does the advent of library governance really improve the problem of communications? The evidence on this point is by no means clear, but there is good reason for skepticism. These and many other questions need to be answered by those planning to adopt the faculty governance pattern.

As you are already aware, two universities are not moving in the direction of faculty governance: UCLA and Columbia. Yet some of their classifications for staff do bear striking resemblances to faculty rank categories. In both cases it is too soon to say whether or not their elaborate committee structures and their newer management approach will work well in an academic setting. That they have assured large scale participation of the staff seems clear; that they have really changed very much in the way large libraries are managed seems much less clear.

Even if one believes that the Columbia or UCLA studies add little that is new, there is still the very real question of whether or not faculty governance is outmoded. Many campuses are restudying their faculty governance pattern with the hope of a unitary senate comprising all the various segments

of the university community: the administration, the faculty, the students, the clerical staff and the alumni. Even in that kind of situation, though, many decisions will still have to be left to individual units on a campus. That means, in most cases, departments, schools and colleges. Under these circumstances I would guess that an academic librarian's best route would probably still be to ally himself with the faculty. In a complex society he will need a stronger power base than he can muster alone, even in a very large library system. Moreover, I would further speculate that the legislative pattern of New York, and now the permissive legislation in Michigan, on collective bargaining will spread to other states. Some form of participation will be a definite part of library administration in the future. In my opinion, we would be wise to bring our staffs together and pose some of these difficult questions to them. How do they want to participate in library management? Will staff participation benefit not only the staff but the library's clientele as well? Will the staff devote the time and energy necessary for developing significant policy measures for the benefit of the entire academic community? These questions deserve careful consideration. For amid the budgetary constraints with us in the seventies, we are going to need all the input we can get to survive. After examination of the various alternatives, I personally tend to believe that can best be achieved by the evolution of some form of library governance similar to that of the faculty.

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MR. KASER: Thank you, Ed. I can support your thought about directors who have been in office more than ten years being in trouble with their staffs; I have been a director for twelve years and I can assure you I am in trouble. I know you left a directorship after nine years and six months.

MR. HOLLEY: Just in time.

MR. KASER: Some of you already know our next speaker. He is Bob Van Waes, who is associate secretary of the AAUP. Bob was educated at Tufts and Columbia and has for the last ten or twelve years been with the AAUP. The library community has had an opportunity to get rather well acquainted with him in the last year and a half, because he has been working very closely with the ACRL and with the ACE in an attempt to come to some kind of rational position as regards faculty status for academic librarians.

LIBRARIANS AND FACULTY STATUS

MR. VAN WAES: Good afternoon, ladies and gentlemen. I have just come from New Orleans where the AAUP held its fifty-eighth annual meeting. It turned out, as you have noticed, to be an extraordinary meeting. We censured the California Board of Regents for its disposition of the Angela Davis case, approved a new Statement on Faculty Role in Budgets, and whoopingly endorsed, seven to one, a new position on collective bargaining.

It is, indeed, a new era. Cap and gown go into the closet, I believe. The AAUP is rolling up its sleeves and assuming an activist economic and political stance to meet new problems of the seventies. If I were to characterize the shift on the part of the AAUP and on the part of professors, I would say, humorously I suppose, that it seems to me this meeting underscored the fact it was possible for the AAUP to learn about collective bargaining as the National Education Association is apt to learn about higher education.

The response to our meeting and to this shift, which has been sometime in the making, has been very enthusiastic. We have just this week won three collective bargaining elections--and are pleased to be winning some for a change.

I am pleased to participate in this part of your program, which is devoted not to techniques and systems approaches but to the use of human resources, an area I am sure we have tended to neglect in times past. Librarians, I have been told, are the forgotten part of the learning equation. As you know, many of them are in arms these days over what they consider to be less than ideal working conditions and they are stridently demanding changes in status within the library and within the institution as well. The term, "faculty status," summarizes their aspirations in their search for the Big Rock Candy Mountain. Faculty status for librarians is an actuality for some, and an objective for a growing number of academic librarians who seek their new place in the academic sun.

At the same time, we find many administrators who are reluctant to separate librarians from the burgeoning administrative cadre. Many professors also are uncertain that librarians really need faculty status to fulfill their function and receive their proper rewards. And, alas, so many librarians, themselves, have settled for so little for so long that they may not yet support the new movement. But if ignorance or apathy has contributed to this clutch of unpromising views on the part of administrators, faculty members and librarians, then the problem is to create a new mindset that will shatter traditional views concerning the function, role and rights of college and university librarians.

The group I have been working with, the Association of American Colleges, the ACRL and the AAUP, have within the past year and a half been pondering how to achieve that goal. One way, I suppose, is to purge ourselves of outmoded attitudes by confession, in a manner similar to that of Art Buchwald,

Washington humorist, who perhaps is the only glint of decent light in Washington these days. Not too long ago, he had his opportunity to confess in a way that is perhaps suggestive. He was invited, quite inadvertantly and quite mistakenly, to a fund-raising affair for the National Women's Political Caucus held in Washington. As part of his speech he confessed the following:

It's true that I was a male chauvinist pig. I studied it at school. But it wasn't all my fault. I discovered very early in life that during recess it was easier to fight with girls than boys. I also discovered at an early age that girls would do things for you that boys wouldn't--like lend you their roller skates, or their homework. I found out other things. I found out that girls could make me blush and boys couldn't. I discovered, and may the good Lord forgive me for this, that girls were nicer to touch than boys and they made my toes tingle all the time.

He started out that way but he ended up getting married. Many years after that fateful event, he suddenly saw the light. He began to understand, in retrospect, that all those terrible thoughts he had had were wrong. One night he was reading Playboy while his wife was scrubbing the bedroom floor. He asked himself: "How can I be free when this woman I married is still in chains? 'Go get a job. I'll squeeze out the mop.'" Because of these revelations he says: "I can now live with my self. My floors are dirty, but my heart is pure."

Another approach is simple assertion. We can sometimes change things by simply announcing that things have changed. Many librarians tried this approach during the last two or three years, particularly with respect to some of the statements the ACRL group has worked on. The statement that ensued from the committee did librarians a lot of good psychologically. It certainly telegraphed the notion that the attitudes and expectations of librarians have changed even if no one else's have.

Of course, that is the problem. How can college and university librarians obtain recognition, status and academic rights unless administrators are willing to give them, and unless faculty members are willing to move over on the board to provide them a place as faculty colleagues? A year and a half ago the ACRL, AAC and AAUP set out to solve this political problem and to devise a joint statement that would educate, persuade and also suggest appropriate mechanisms for accomplishing this task.

The willingness of these three groups to tackle this complex problem was, in itself, one giant step toward salvation. At the meeting of the ACRL Committee in Dallas last spring, representatives of the AAC and the AAUP were able to convince the library group that substantial progress toward this goal was not likely any other way but through a joint effort. The simple fact was that nothing could be accomplished by either declaration alone or unilateral action. They agreed to go in with the AAC and the AAUP to jointly negotiate statements dealing with faculty status. The three organizations picked able and enlightened representatives for their delegations. The AAC had the president of Goucher College. The ACRL had a number of librarians representing

it. The AAUP had an expert on college and university government, a broad guaged biologist from Amherst and Martha Friedman, a librarian from the University of Illinois, where, as you know, much of the pioneering work in this area was done.

It was assumed that these able people would canvass the difficulties thoroughly and knowledgeably and, once agreed, would be able to produce a statement that would satisfy the three constituencies.

The key delegation in some respects, as you might guess, was the AAUP. We had a librarian within our group to avoid making mistakes, and she proved to be the most vigorous champion of librarians. We also had a very conservative faculty member who took a very dim view of the role of librarians, partly because his experience on campus did not encourage what I like to think is a larger or more enlightened point of view. We also had a faculty member who took a more liberal stance and he turned out to be a key person as far as our delegation was concerned.

We thought out the problem and found the necessary compromises; then we attempted to persuade the other groups to accept the AAUP point of view. Administrators, of course, had special concerns to take into account as did the librarians. However, after three meetings during the past year we managed to iron out the differences and produce the statement, copies of which some of you may wish to pick up after the meeting. [The statement appears in these Minutes as Appendix C.]

The question now is: Will we, once the joint statement is produced, be able to sell it to our constituencies? I'd like to think it will be possible to do that.

Let me detail some of the characteristics of the new statement. It should be the Bill of Rights for college and university librarians. It is a brief, three-page political document. It delineates at some length the functional basis for providing faculty status to college and university librarians. It also contains the new rights which librarians have sought, epitomized to some degree by the recent statement by the ACRL. It projects also a new pattern of government within the library and a new status for librarians within the institution. It is not a perfect document; joint measures of this kind seldom are. Nonetheless, we believe it is a good document.

It does, in some respects, leave some business unfinished in the sense that we do not suggest an exact model of government for everybody, of procedures for providing faculty status, or of dealing with specific conditions of service which may differ in some degree from institution to institution. We leave, therefore, a good deal of business to be attended to by faculty members, administrators and librarians on individual campuses. It does seem clear that the AAUP and the AAC will be major allies to librarians in developing the new dispensation. We hope that directors of libraries will play a major role in the months and years ahead as a new reform is canvassed and implemented on a good number of campuses throughout the country.

Discussion

MR. KASER: Thank you very much, Bob. Having heard these remarks I am reminded of a story we used to tell in Tennessee about the man who was walking across the Cumberland Plateau when he came upon a mountain man sitting beside a tree, with a jug of corn liquor by his knee and a long rifle lying across his lap.

And the mountain man said, "Howdy."

And the stranger said, "Howdy."

And the mountain man said, "Have a drink."

And the stranger said, "No, thank you."

And the mountain man said, "Have a drink."

And the stranger said, "Thank you, kindly, but I don't believe I will."

So the mountain man picked up the rifle and drew a bead right between his eyes and said, "Stranger, I said have a drink."

So the stranger picked up the jug, threw it over his shoulder and took a mouthful and said, "Whoeee, without a doubt this is the worst tasting stuff I have ever had in my mouth."

And the mountain man said, "Ain't it so. Now, you point the rifle at me so's I can have a drink."

I expect to some of us this is the worst tasting stuff we have ever had in our mouths, but we are going to give you the rifle now so you can point it at the panel.

MR. FORTH (Kentucky): I'd like to point out, Dave, that your story is a Kentucky story not a Tennessee story. Bob, was this document drawn up after the ACRL committee last met in Chicago?

MR. VAN WAES: Yes, but subsequent revisions took into account suggestions made at that meeting, sir.

MR. KASER: May I ask a question here? What is the status of this document vis-a-vis the ACRL board? Has the ACRL board approved it?

MR. VAN WAES: It was approved as a tentative statement of standards at the meeting in Dallas last year. The earliest the ACRL group can act on the revision of the statement will be between now and its meeting, which I assume is coming up in June. Whether they will act I do not know. There will be an effort to get it considered. The earliest the AAUP will be able to act will be next January although we will submit this document to our counsel in October. So it will take at least another year for each of the three organizations to act if they act according to the schedules open to them.

MR. POWELL (Duke): I wonder if Mr. Van Waes would elaborate on the statement in the document about librarians meeting the same standards as members of the faculty.

MR. VAN WAES: That appears in the last paragraph on page two in which we say faculty status entails for librarians the same rights and responsibilities as

for other members of the faculty. They should have corresponding entitlement to rank, promotion, tenure, compensation, leaves and research funds. They must go through the same process of evaluation and meet the same standards as other faculty members.

We debated that language very carefully and it was retained throughout all three or four of the drafts. We said this language is likely to be misunderstood because the criteria used for promotion of faculty members may not be desirable for promotion of librarians. What we were attempting to underscore here was that there should be a system of evaluation that would be based on facts of performance, and that there would be criteria established and formally applied in deciding who would be promoted, who would get tenure, and so forth.

MR. BERTHEL (Johns Hopkins): Will this become an official statement of the AAUP, appearing in the Bulletin and accepted by individual chapters of various institutions?

MR. VAN WAES: Our purpose in going to joint negotiations was to produce an official statement, officially sponsored and approved by each of the three organizations, with each of them having corresponding obligations to attempt to implement it.

MR. McDONALD (Connecticut): I'd like to ask Mr. Van Waes a question. About a year ago, the AAUP changed its qualifications for membership by librarians. If I remember correctly, under AAUP rules librarians had to be considered to be engaged in full-time teaching and research to be eligible for membership. Also, they had to be recognized within their own institutions as faculty members. Was that part of the qualifications dropped by the AAUP so that all professional librarians were automatically eligible? Was that decision part of the negotiations that you have been carrying on with the AAC and the ACRL, or was it more closely related to the collective bargaining efforts of the AAUP?

MR. VAN WAES: It was a combination of factors. Librarians have been eligible for AAUP membership since 1956, a very considerable number of years, and several thousand belong. There was pressure from the librarians themselves to do away with the requirement for faculty status because many of them did not have it. When I was working in the membership area six or seven years ago, I received a great many letters from librarians advising that move. We have never been unmindful of the fact it was a frog in their throats.

A second factor was that as we began a year and a half ago to explore the possibility, upon invitation of the AAC and the ACRL, of joining a special committee for administrators, it seemed to us that it would be statesman-like to make a gesture to this problem. The requirement that librarians should have faculty status to be eligible for membership was dropped. This brought more librarians into the fold which is not an unhappy development either.

Third, collective bargaining has been a factor. As you know, collective bargaining is a very new ball game with which most of us are quite unfamiliar. Who will be in a particular bargaining unit depends upon decisions which

faculty members can affect only to a certain degree. They will argue over how the faculty shall be defined and over which groups besides the faculty will be included in the unit. That oftentimes has included librarians and the AAUP has regularly argued before the National Labor Relations Board that librarians should be included in the bargaining unit.

As a matter of fact some groups also argue that counselors should be included. Librarians and counselors have been the two groups, aside from traditionally defined teaching or research faculty, that have been included, although not always.

We promoted this particular effort because it came down to whether or not librarians were going to vote for the AAUP or the AFT or the NEA. We wanted to be sure they felt we were an organization that had visibly displayed our interest in their welfare.

At our last meeting our counsel approved the recommendation that all persons defined as being in a bargaining unit are automatically eligible for membership in the AAUP.

MR. ROVELSTAD (Maryland): Ed, I wonder if you would elaborate just a little on the kind of structure necessary to the active involvement of the nonprofessional staff.

MR. HOLLEY: Howard, I don't know. I don't think anybody has answered that question satisfactorily. I had a variety of responses from people as to what should be done about the clerical staff but none appeared to appeal to a majority. As you know, those who are arguing now for faculty status are not happy to have the clerical group brought into that kind of an organization. The nonprofessionals are really in limbo.

MR. HINTZ (Oregon): I would like to have some reassurance that in the case of institutions in which the librarians have held faculty status for, lo, these many years there will be no need to start all over again and go through the procedures recommended in the statement.

MR. VAN WAES: You are among the fortunates of the world at Oregon. I am pleased to offer you such assurances as are necessary. The AAUP, like the other signatories, is law-abiding and respects what the law says. In Illinois, it was the ruling of the board many, many years ago that provided faculty status. Our document speaks only to those situations where the job is yet to be done. We are not about to suggest that those people who have reached the Holy Grail already would have to go back and start over again.

MR. SLATIN (SUNY-Buffalo): As you know, in the State University of New York the State University Board of Trustees conferred faculty status upon the librarians but did not confer faculty rank. It merely added three ranks of librarians to the four teaching faculty ranks given academic status. In theory librarians and faculty were governed by the same set of working conditions and rules. What the librarians have agitated for, and successfully, is to achieve not professorial titles but to achieve an equivalent number of ranks so that the steps up the ladder would be the same and the means of progression would be the same.

MR. KELLAM (Georgia): I like this statement because I think it may help some of us. At the University of Georgia we have had faculty rank--not status but rank--since the early forties and this may help us keep it.

I am confused a little bit by the use of the terms, "rank" and "status." I don't know what they mean as used here.

MR. VAN WAES: As the librarians have been keen to point out in recent years, faculty rank has its privileges. By and large librarians don't have those privileges and they believe, perhaps too simplistically, they don't have them because they don't have faculty rank. When you talk about the status that goes with faculty rank, you are talking about the role which faculty members play in the government of their institutions.

MR. KELLAM: Doesn't status come with faculty rank?

MR. VAN WAES: I think it doesn't always have to and that's the problem. Librarians are saying they are not interested in having what you call faculty rank without status--the peel of the orange without the pulp. That's where status comes in.

MR. FORTII: I would like to ask this group of assembled dignitaries to help those who are still involved in working on this particular issue to indicate by a show of hands whether they are generally in favor of the concepts presented in the document Bob Van Waes has brought us?

When we go back to the ACRL and this bloody committee, it would be very helpful to be able to say that the ARL either wiped us out, indicated lukewarm approval or enthusiastic approval, or whatever.

MR. KASER: Stewart, I am going to be a strong chairman and do just that. How many generally support the principles in this document? Hold up your hands. My judgment from here is that 75 percent of the hands are up.

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THE COLUMBIA STUDY

MR. WEBSTER: Everyone here knows something of the management study of the Columbia University Libraries completed last year. A summary of the study and its recommendations was distributed to the membership in February and I hope that most of you have had a chance to look at it. We aren't here today to rehash the summary but to go beyond it and look at some additional issues.

I might start by commenting that the study was in many respects a test. It was experimental in several respects. First, the project brought together several national organizations in an attempt to work towards solutions of problems of mutual concern. The Association of Research Libraries sponsored and administered the project. The Council on Library Resources funded the effort, and the American Council on Education cosponsored the project and was represented on the committee that advised and monitored the effort.

Secondly, the project utilized the skills of a management consulting firm, Booz, Allen and Hamilton, with the expectation that its perspective and experience might apply in this area of library management.

This approach included placing a librarian on the study team. The thought here was to insure that the study, on a day-to-day basis, would deal with the distinctive characteristics of research libraries, while at the same time it provided an opportunity for the Management Study Office. In addition, however, there was the intent to bring together the views of practicing librarians in a research library with those of a study team concerned with their problems. This close contact was achieved in part by the large number of separate, individual interviews held with the staff at Columbia -- there were over ninety separate interviews. Furthermore, there were numerous study team contacts with several staff groups, both on informal and formal bases. There was a staff steering committee, for example, that was established to work directly with the study team.

The steering committee looked at the documents that were developed throughout the course of the study and attempted to focus the final report on some of the substantial issues they felt were important. The result was a very large input by the Columbia staff into the report.

The third experimental aspect of this project was the methodology of a case study of management problems of a single institution. Ideally, such a study should cover several libraries having different characteristics. We were unable to do this. We expect that this methodology will prove to have a broad applicability.

Five topics figure prominently in the report and I shall just touch on them briefly before we move on to our speakers. First, there is the topic of organizing a research library on the basis of three staff groupings -- resources, services, and support. The resources group is made up of librarians who work with faculty and researchers to plan and carry out program services.

The services group includes a few librarians and many specialist staff members who serve library users on a day-to-day basis, by providing first-line information, access, and services.

The third group, the support group, includes a few librarians and many technical and supporting staff members. It will provide support services to the services and the resources groups. These would include activities such as acquisitions and production of bibliographic records.

The second topic is the development of a category of staff referred to as "specialists," organized to work with librarians, particularly in the service and support areas.

The third topic is the establishment of a planning and management capacity in the library, an office that's called in the report the Planning-Budget Office. Another topic is a new role for the Personnel Office, encompassing the details of personnel work, and responsible for manpower planning.

The fifth topic is the development of new management techniques, emphasizing staff involvement and commitment, group problem solving, high performance goals, and professional review and development of the staff.

This afternoon we have the major participants in the study present to present their viewpoints. Doug Beaven, from Booz, Allen and Hamilton, will underscore the principles and thinking behind the recommendations made in the report and emphasize their purposes. Jim Haas will talk about progress made by the staff in assessing the impact of these recommendations on their own institution. He will also comment on the wider implications of the study. Then, Larry Wilsey is with us to act in a resource capacity as we move into a discussion session in which we invite your comments and reactions to what has been said.

MR. BEAVEN: I feel I have two purposes this afternoon. One is to highlight some of the key issues we found in doing the study at Columbia, and, secondly, to put the report in its proper perspective. We see the report as a long-range plan for development along uncharted ground that will require significant time and systematic effort to accomplish.

What I'd like to do first is give you a sense of what guided us as we went into this study. There seemed to be three major objectives of university libraries that had to be taken into account. We felt that service obviously is paramount. The library is an integral part of the university and, as a result, needs to relate to instructional and research programs and has to deal with faculty, undergraduates and graduates. It also has a service role beyond the university.

A second key objective was effective utilization of resources, including staff, the collections, new technology, and, obviously, the financial resources.

The third very prominent objective was providing effective career opportunities for the staff.

These are the basic objectives we went into, bearing in mind that the problems we encountered had to be identified in terms of whether or not these objectives were met. We recognized that organization and staffing should facilitate service delivery, should provide meaningful opportunities for development and growth of staff, expedite efficient use of resources, and provide for rational decisions in making choices among priorities.

There also seemed to be a number of transient challenges that seemed critical to the future of a university library. There was overwhelming agreement that the university is a changing, dynamic community. It is not static. Academic programs are changing; the organizational structure of the university is changing; and clearly the library, if it is to be responsive in the next few years, has to accommodate to these changes. This requires flexibility.

In several areas there were key challenges that became apparent: joint and collaborative academic programs, more specialization within subject fields, certainly a broader knowledge base, changing patterns of instruction with greater emphasis on individualized study, and an increasing potential for the application of technology, not only in acquisitions but in the manipulation of data.

It became clear while talking with users that gaining access to library resources is seen as a very complex task. There are numerous facilities, millions of volumes, and changing forms of information resources. It is increasingly difficult for faculty and students to relate to what the library represents, to find within it the kinds of resources they need to tap.

We found increasing involvement by students, faculty and others in decision-making processes, both within the university generally and clearly within the library. And, of course, underlying all these challenges is the continuing limit on financial resources and a great need for management control to focus efforts properly.

We have to find out how to more effectively promote use of libraries, to make them intelligible to the users. Certainly we have to capitalize on staff capabilities in relation to instruction and research needs, and to increasingly regard the human resources as a major service provider. We have to find out how to facilitate access in an increasingly complex situation, how to keep up with the proliferation of knowledge and changing requirements, and how to gain meaningful involvement in decision making. The issue of whether we can manage with a hierarchy or whether we can do it democratically is one that must be explored.

What is the proper balance between action that must be taken and the need for proper involvement of staff in formulating choices? How can we deploy staff resources to capitalize on specialized competencies and to make those specialized skills available as much as possible to develop complementary capabilities that can permit us to manage and provide services in the university libraries?

With these questions in mind we tried to look at the present plan of organization and see how it matched the trends and implications we were mindful of.

I would like to talk briefly about the deficiencies we found. It seemed to us that the deficiencies fell into several key categories. These categories are the capacity to render service, the effective use of staff resources, proper relations with other components of the university, patterns of staffing, and the kinds of management systems employed, particularly with reference to personnel and planning.

The first of these, capacity to render effective service, was severely impaired in a number of respects. There is a lack of clarity as to what the functions of the university library truly are. There are a number of services that are easily identified, but there is no clear understanding of those main functions that we should be devoting attention to. It was clear that the capacity to render service was spread too thin.

The organization is divided into a number of administrative units, each of which has to bear administrative responsibility for all services. As a result, the capacity to render those services is limited because the development of collections and application of new technology have been ineffectively attended to. The involvement of faculty and identification of needs are haphazard.

There also is no clear policy on faculty involvement in collection development.

There is no real attempt to tell the academic community what the library has and how one could take advantage of it. We found that advanced professional services were often unavailable. The librarians tend to be buried within administrative units. They are tied to desks, and tied to a nine-to-five schedule. If a librarian advances in the organization, he takes on more administrative responsibility. Consequently, professional competencies brought to the libraries in the first instance tend not to be developed or capitalized on. The professional staff commented that a good portion of their time is spent on nonprofessional activities. This leads to frustration which seems to be increasing.

The opportunities for career development are severely restricted again because if one moves up he must take on administrative responsibility. There is no real opportunity to advance other than through administration.

In some cases, within the key library units, there was little dialogue among librarians. There was no real communication between supervisors and people reporting to them and a good deal of knowledge and experience was wasted and lost this way. Overall, we found frustration throughout the staff over what their roles were.

The third basic problem I alluded to is functional responsibilities. They are spread throughout the administrative structure and there is an inability to clearly identify responsibility.

We found this management process inhibiting the overall development of library services. Supervisory techniques, particularly, were singled out. The tendency of supervisors is to relate to their subordinates as subordinates relate to them. The objective is control. This is not a constructive approach. We found poor communication throughout the organization, but it is improving with the development of new committees.

Another deficiency is a lack of planning capacity or application of planning techniques. Very little information is available on which to make decisions on the allocation of resources. This problem has implications for top leadership because it gets spread very thin in this organization. The university librarian has to relate to everything and everyone with no one to assist in planning, and no one to look to for development of resources.

Then we came to the task of making recommendations. There are no panaceas for the problems we identified. There are no benchmarks one can turn back to. We spelled out several alternatives and reviewed them as a team and with the advisory committee. It became clear that a fundamental change was required to meet the challenges of the future. Much greater clarity as to functional responsibilities was needed. There had to be much more flexibility to accommodate change. We needed to differentiate service requirements and capabilities within the library. Working relationships had to be made more effective. In short, we became convinced that without change the library could not realize its full potential as an integral part of the instructional and research processes.

With this conviction we opted for very broad choices. We felt strongly that administrative centralization is a valid concept. It has been tested and proved at Columbia. It provides leadership capabilities and direction and it makes it much easier to accomplish change.

We began to identify basic functions of the library that ought to be the basis of the organization and staffing pattern, which is what the study is all about. The first is to provide first-line access services to the user, to help him understand and gain access to the resources. Second is to develop subject competence among the staff to deal with collection development, and to relate to faculty and students and research programs and instruction. The third is the need to coordinate programs to facilitate high performance in large volume activities, such as processing. The fourth is to promote systems development, staff development, planning and budgeting as key functions within the library. Finally to provide means for establishing a top management team.

We decided then on the organizational mode based on six principal components: the office of the university librarian; the planning and budgeting office; the personnel office; the services group; the resources group; and the support group.

In terms of leadership, it becomes clear that there are six key people in the recommended plan of organization: the university librarian, the three associate university librarians for resources, the associate university librarian for support, and the associate university librarian for

services. These key people, together with the planning and the personnel officers, would constitute the top management team.

The committee structure also became important to our recommendations. We recommended a continuation of the Senate Committee and an elected representative committee to act as an ombudsman.

Another committee is the Professional Advisory Committee, which has representation from professional and nonprofessional staff, faculty, and students. This is a key standing advisory committee to which the university library looks as policies are formulated and as reaction is sought. This would not be a decision-making group but an advisory group. Its key function is to bring together the insights, perspectives, and knowledge that the university librarian needs as he approaches important issues.

We recommended a Staff Development Committee, a small committee whose principal function is to guide the personnel office in its professional development review process. This committee would look at the professional staff and evaluate performance, career development and growth, including outside activities, and make recommendations to the university librarian as to the status of an individual in his career and compensation changes.

A series of program advisory groups also were recommended. These are largely task forces appointed by unit heads. They would function on a project basis.

Finally, the point I want to stress is that the implementation of the recommendations in this report will be very, very difficult. One of the underlying recommendations has to do with the development of a highly specialized staff. There are no such staffs within Columbia nor any other university library. There is also the problem of changing staff attitudes, a most difficult job.

We see all this as being a long, long time in coming. The subject competencies needed on the resources side will not be there for a long period of time. The capabilities of the nonprofessional staff will require many years to develop as well. What is required from our point of view, is a systematic approach that will break down the problems and allow the library to move ahead in a thoughtful way.

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MR. HAAS: I will take a few minutes to quickly tel' you where we are in the process of reviewing the report, refining it and selecting from it the things that we feel will, in fact, make Columbia's libraries better.

About seventy-five people on the staff have been involved for a month and a half now in the process of assessing the report. It runs three hundred pages plus. It's a large document with all kinds of folding charts. There is much meat to it. The review process is a three-pronged effort.

We have had for the last year eight standing committees, each focusing on a fundamental activity--the process of developing and maintaining a bibliographic record, automation, and so on. We have asked each of the eight committees to look carefully at the report and review it in the context of its own assignment. Secondly, we have asked each of the administrative components of the university library to review the report from the point of view of the professional staff without any constraints as to subject.

Obviously, there are many questions that have been raised by the staff and I don't have time to go into all of them here. Examples are: multiple reporting, as Doug mentioned, which sets the insecure twitching; and the concept of the separation of the process of making or creating bibliographic records from the process of developing and maintaining those records.

There are some members of the staff who see the stratification of different services at separate levels generating a serious problem. Some feel that the recommendations of the report, in terms of the staffing of these two groups--the services group and the resources group--will promote a problem and I think they are right. I don't think these reservations argue against the approach.

If I were to ask the staff to vote--which I never do--we would, I think, see that the spirit and some of the very subtle insights of the study and report have generated real staff interest in what is beginning. The fog is slowly lifting and we are beginning to comprehend the implications for improved service. As a matter of fact, a number of staff members until recently weren't really convinced of the need for the study. They saw it as another very interesting exercise. They were not really convinced there was any real intention to do something.

They are now all convinced that changes are coming and will be made. By July 1 we will have created a planning office that will upgrade substantially our analytical capabilities in assessing library performance. It has not yet been announced, but the Council on Library Resources has agreed to support the development of this planning office at Columbia, which will play a very major role in helping us to implement the recommendations in this report. My new assignment as vice president for information services is not taken lightly. This is a serious effort to recast the way Columbia University is organized. The dimensions of that responsibility, as they become clearer, are substantial and we are indebted to the Council for its continuing support.

The whole concept of the report seems to stand up under very close scrutiny. Just in the last year and a half there has been a great deal of staff participation in setting up objectives and priorities and choosing the means by which we move. We see this as a very useful and proper approach.

Two principal service components are, I think, candidates for very quick change. The services of the Medical Library are being rethought in

terms of bringing technology into the teaching process. Columbia, for a variety of reasons, has not done much until now, but giant steps will be taken.

In the social sciences we have an opportunity that stems from a different set of circumstances. We have a new and dramatic physical facility that is providing a home for social science research. It's quite possible that we will move very quickly to expand the service capability of that library to a very full range, including access to computer-stored files of information. Because it is a new unit we are able to move more quickly than in some other units.

The whole subject of staff structure is very much "in the works," and I anticipate prompt action there. Much of the ground work for that has been laid in the last year and my guess is there will be some refinement of the recommendations made in the management study that will make it even more useful.

A few comments on general implications. We were very careful right from the beginning to say that this effort was directed at Columbia and its ills. But there are lessons here for those who would listen.

The report reinforces the concept of central direction for the full development of resources, staff, collections, services, etc. Secondly, I think that the need to promote analytical and planning capabilities at a much higher level than libraries have them is a valid conclusion applicable to many libraries.

Third is the suggestion that different groups of individuals in the university have substantially different requirements for library services. Library service for the sciences might be substantially different in the not-too-distant future from that provided for humanistic and historical studies. The nature of library services for individuals doing research in the social sciences might be substantially different again. There is an opportunity here to relate with far more precision what we do to the needs of the people we do it for.

The report really faces up to the fact that the library is fundamentally a professional organization. I think we will see coming out of this a natural evolution of the librarian as participant in the academic process and as a full colleague of the faculty in the best sense of the word.

I'm among those that are convinced that libraries must change their view of themselves, not principally to preserve libraries but to help universities persevere and improve. Unless libraries can be a party to this process of evolution in higher education as whole participants in the process, we will have missed a great opportunity.

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Discussion

MR. TREYZ (Wisconsin): I'd like to know how Booz, Allen and Hamilton feels about faculty status for librarians.

MR. WILSEY: I can't speak for the firm because we haven't really studied the question. I noted, however, that in the presentations that were made on this topic a number of institutions were cited that had some years of experience with faculty status for librarians. I think that before any real determination can be made as to the overall policy or rule that should be followed there ought to be a thorough evaluation of what results have been achieved in these institutions. Have their objectives and goals been established more effectively? Have the collections, the programs, and the services been improved? Have the librarians, themselves, developed more rapidly, more broadly, and more fully as professionals? Have librarians been attracted to these institutions because they find the professional environment and satisfactions greater than at other institutions? Lastly, have these institutions benefitted more from innovative and creative staff contributions than have other institutions? My own feeling is that the question is very much an open one.

We would not argue for or against faculty status, but we would urge that before a specific institution goes in this direction it very thoroughly consider all of its implications and not assume that status or rank will solve all problems. Our feeling is that it is not a generally good answer, but it is one that ought to be carefully studied before it is tried.

MR. KASER (Cornell): I would like to know what Booz, Allen and Hamilton's experience has been with multiple reporting responsibilities in other industries.

MR. WILSEY: We find that this is common, more common in the professional fields than in the industrial or the military field. The military and industrial tend to adhere to the old rule of one reporting relationship.

In the fields of law, medicine, and management consulting it's quite common for an individual to have divided reporting responsibilities. There has to be, however, some basic and clear administrative assignment as to time division and responsibility.

MR. KASER: There is one distinction, however, between libraries and the firms you have suggested. The firms work primarily, do they not, on tasks rather than on continuing operations as libraries do.

MR. WILSEY: But doesn't a library work on both of these? In those areas where there is a continuing flow of relatively routine work, we recommend the continuation of the more simple relationships. It is in the areas of highly professional work, particularly in the resources area that my colleagues have been talking about, that we have suggested the possibility of multiple reporting relationships, because there we can get the best use of the professional by having him work in a number of different areas.

This mix may change from time to time and the relationship may change from time to time.

MR. DIX (Princeton): I wish to return to the question of faculty status. Is it not possible that if some of the recommendations of the Columbia report are implemented a number of the important staff members of that library would not and could not conceivably become members of the faculty? For example, the planning officer and the budgeting officer. In our university, the director of the budget and the financial vice president are not members of the faculty, and would not be accepted as such.

MR. HAAS: The plan really marries a hierarchical organization with a collegial organization. Let me go one step further back. The Columbia library staff formally voted not to be called professors. They, instead, want to be known as librarians. They want all of the rights and privileges that professors have, and I think we are making progress in that direction. The salary problem is still with us, but I think we will overcome even that as we truly professionalize the work that librarians do, and demand that the individuals who are chosen to do that work have the kind of professional training and the kind of subject competency that enables them to do the job properly.

I can see that people like a planning officer might have two titles. There is a real problem though with the small group of top administrative staff. The report identifies them as "executive staff." They might, in fact, not be members of a faculty.

MR. BOSS (Tennessee): I assume Columbia is made up of staff ranging from eager people, who want to be involved in participatory management, to others who like the security of a hierarchical system and turn to the director for answers to all problems. How does one handle this wide range of preferences?

MR. BEAVEN: As we talked with the staff, it became clear that what you say is true. Some people want to know exactly what their job is; they want to do it well and are not interested in getting involved in management. But we found many more who felt they could make a real contribution to the decision-making process. They want to become involved at a point where they feel their contributions will be significant. We think the task forces provide that opportunity.

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COMPUTERS AND REGIONAL NETWORKS

MR. MCDONALD: I take particular pleasure in this program segment because I thought of it and because I have a regional interest in NELINET and NELINET has a general interest in the OCLC. It seems to me that the presentation you are about to here is timely. I am confident that it will be interesting to all ARL representatives. I want now to turn the program over to Richard De Gennaro who will moderate it and introduce the speakers.

MR. DE GENNARO: Thank you, John. Before I turn to our speakers, I thought it might be useful if I took a few minutes to tell you why this program was selected and to try to put the Ohio College Library System phenomenon into some perspective.

In the fall of 1971, the OCLC went operational with on-line MARC data file and shared cataloging system serving some fifty member libraries. Access to the data was via CRT terminals with upper and lower case and full diacriticals. This on-line search capability was complemented by an effective and versatile off-line three-by-five card production system.

The two systems were said to be cost effective and this was just the beginning. The OCLC had announced that it was designing a serials system, an acquisitions, ordering and accounting system, and a circulation system. These four modules of a total library system were to be on-line and operational within the next several years--and as each one went operational the relative cost of operating the previously implemented modules would decrease.

This looked from a distance like the most exciting development in library automation since the movement began over a decade ago. Furthermore, it came at a time when library automation appeared to be in the doldrums and was being criticized by Ellsworth Mason and others for having promised too much and delivered too little. Coinciding with this depression in the fortunes of automation was a simultaneous depression in the finances of higher education in general and of research libraries in particular. Budgets were being cut and it was evident that real economies would have to be made. University administrators were urging library cooperation and the sharing of resources.

Against this background of gloom, the announcement of the successful implementation of the OCLC's on-line shared cataloging system came like a ray of sunshine and seemed to herald not only a new era in library automation and operations but also the long-awaited beginning of regional and national library networks.

Men from Missouri, and there were many of them, went to Ohio to be shown and to observe the system in operation, to see for themselves if it really worked, and most of them came away convinced. Many came away so convinced that they wanted to join the OCLC network or try to transfer and replicate the system in their own regions.

Ron Miller, the director of the New England Library and Information Network (NELINET), was probably the first to express serious interest in replicating the OCLC system. He applied for and received a grant from the Council on Library Resources to study the feasibility of transferring the system to New England. We shall hear more about that this morning.

I was another early visitor to Columbus and was sufficiently impressed by the system that I proposed that the Union Library Catalog of Pennsylvania become an experimental member of the OCLC so that we could use and experience the system for a period of time and consider the feasibility of transferring or replicating it in Eastern Pennsylvania.

Three of the members of the Union Library Catalog--Penn, Drexel and Temple--each has had a terminal into the center since February with promising technical results so far.

The Five Associated University Libraries (FAUL) is also negotiating membership in the OCLC. The Cooperative College Library Center in Atlanta has had a working relationship with it for nearly a year. Other consortia that have expressed serious interest in the OCLC are: Association of South-eastern Research Libraries, with a \$23,000 grant; California State Colleges; Council of Ontario Universities; Louisiana Regional Cooperative; New York State Library and CUNY; Consortium of Universities in Washington, D.C.; and the Pittsburgh Regional Library Center. EDUCOM also is attempting to carve out a role for itself in assisting groups who want to transfer the system and in providing off-line card production services.

The point I am trying to make is that there has been a rapidly growing nationwide interest in the OCLC system as a prototype regional network and even as the possible foundation for a national library network.

Indeed, there has been so much interest in the OCLC that many of us are seriously concerned about the adverse reaction that may occur if the initial promise of the system is not fulfilled and sustained.

In spite of its apparent success, it should be emphasized that the shared cataloging system has been operational less than eight months. It is not yet completed, and it is only the first of four modules that are planned. It is not yet known what effect the phasing in of these later modules will have on the operations of the earlier ones.

There are many other potential problems in this as in all prototype systems. The OCLC system is far from perfect, but it appears to be far and away the best system of its kind in operation today. The recognition of this situation is what has caused the great surge of interest in the OCLC system throughout the country and that is why we scheduled this program for you this morning.

A word about the format now. Fred Kilgour will be the principal speaker. Ron Miller will follow and Larry Livingston will finish up.

I thought it would be unnecessary to introduce Fred Kilgour to this

group as I am sure he is well known to all of you personally or by reputation. However, since he may be known to many of you only as a developer of computer systems for libraries--and he has done that exceedingly well for the last ten years at Yale and in Ohio--I want to take a moment to introduce the other Fred Kilgour.

Long before he got involved with computers as medical librarian at Yale, Fred was, and still is, primarily a humanist, a classical bookman, a book collector, and an active historian who taught the history of medicine for twenty years at Yale. He is the author of some eighty papers and was the editor of several books and journals.

Even in his work in library automation, Fred has always had a sweeping vision of the library field as you will see in the next hour. Fred is going to talk primarily about computerized library cooperation, using the OCLC system as an example and illustration of his theme.

COMPUTERIZED COOPERATION

MR. KILGOUR: This paper presents the concept that computerized library cooperation enables librarianship to establish new substantive and economic goals. Computerized cooperation opens up untrodden avenues of research and development, and, by making unnecessary the imposition of uniformity on library processes, the new cooperation creates hitherto unexplored opportunities for intellectual development in the profession. However, computerized cooperation is, at the present time, in a highly dynamic and incomplete state of development and operation. Such activities at the Ohio College Library Center have turned a major corner into a new avenue of library evolution but have taken only a few steps into a vast and unexplored area.

As is well known, it was the lure of the benefits of cooperation more than any other one factor that stimulated librarians in 1876 to establish the American Library Association. The first important committee of the association was the Cooperation Committee. This committee established a variety of standards that enabled libraries to cooperate and to reduce costs, if not expenditures. One of the early accomplishments of the Cooperation Committee was the establishment of a standard size for catalog cards. This accomplishment enabled libraries to purchase cards much more cheaply because they were mass produced and, similarly, to obtain inexpensive cases in which to house the cards. Prior to the acceptance of a standard size card, each library obtained a special size card from a paper manufacturer and had a cabinet maker build special cabinets in which to house them. Moreover, the employment of a card of a standard size meant that it was possible to interchange cataloging information among libraries, a process that made possible the dissemination of catalog cards among libraries.

The standardization that made possible the interchange of cataloging information, and thereby a reduction in cataloging effort, was a simple technological standardization. Today, another technological event, the advent of the digital computer, enables a new type of cooperation--a cooperation that for the first time will enable the profession to attain some of the goals hoped for a century ago as well as other goals entirely unanticipated.

Despite the fact that cooperation has long enjoyed a limited success in librarianship, there exists no definition of library cooperation, and this paper will not present one. However, there are at least three qualities that characterize library cooperation. First and most important, cooperation makes possible the establishment of new objectives for a group of cooperating libraries as distinguished from the classical goals of individual libraries. Altogether too often a library cooperative is thought of by its members as supplying each member with a service to further its own goals. Such service centers have enjoyed only limited successes. A truly cooperative center establishes goals that are not achievable by individual libraries.

A second quality of cooperation is the sharing of resources without cost to the institution providing the resources. An example here is the shared cataloging project of the Ohio College Library Center (OCLC), wherein it does

not cost the original cataloging library anything to have another library use cataloging information that the cataloging library entered into a central store. Of course, to be truly cooperative each participating institution must do its small share of input cataloging.

A third quality of cooperation is the pooling of human and financial resources to achieve a system unavailable to individual libraries. Another example from the OCLC will illustrate this characteristic. It is most doubtful that any library in Ohio could afford to operate the computer system that the OCLC maintains. Moreover, there are few individuals qualified to do the research, development and maintenance necessary to carry out the evolution and operation of such a center. The parent institutions of a number of academic libraries participating in the Center do not even possess a small computer, but OCLC makes available to their libraries computer power that the entire institution could not afford.

Although computers possess a variety of capabilities that enhance library cooperation, only two of those capabilities will be discussed. The first is the computer's enormous power to treat an individual person as a person, and an individual event as a single event. Second, the computer has the capability of operating an information system that can supply information to a person when and where that person needs that information.

New Objectives

Cooperatives that possess expensive manual union catalogs have sought to make the resources of a region available throughout the region. Such union catalogs have attained only limited success because the catalog existed in but one place. What was needed was a technology that would make union catalog information available throughout the region. Until the advent of the computer, the only solution to this problem was an extravagantly costly printed book catalog that never contained the listings of publications most in demand--namely current publications. The computer has made possible a less costly bookform catalog that can be kept more up to date than could manual bookform catalogs, but this process still does not thoroughly solve the problem of making available to users throughout the region an entirely up-to-date catalog of resources in the region.

A computerized cooperative, like the OCLC, can establish the new objective of making an up-to-date union catalog an attainable objective and therefore an undefined objective. At the present time, the OCLC system enters one-quarter of the institutional holdings information into the central data base at the time cataloging is performed, and the other three-quarters on the evening of the day the cataloging was done. Nevertheless, at some time in the future, the system will be modified so that all institutional holdings information will be entered into the data base to be available for users within seconds after cataloging has been completed.

One-librarian libraries have long had the objective of participating in the intellectual activities of the library's individual users. In such a library it is possible for the librarian to know his collection in detail and to know his users as individual persons. In this attractively human

situation, the librarian often participates in the educational, research or information activities of individual users. The same type of participation also occurs in intelligence agencies that are designed to obtain information and communicate it to a decision maker before that decision maker knows that the information exists. However, intelligence agencies have relatively few users, and, in terms of number of users and amount of information processed, their expenditures are high. Of course, high expenditures are justified because of the extreme importance of the information.

Libraries lost the ability to participate in the educational, research and informational activities of individual users almost as soon as the professional staff exceeded one, but computerized cooperation can make it possible for large libraries once again to participate in their individual users' informational activities. Indeed, an exciting assemblage of techniques to achieve such participation is visible immediately ahead, to say nothing of selective dissemination of information techniques that are already operating successfully. In information processing, it is SDI services that have done most to demonstrate the ability of the computer to treat an individual user as an individual person; SDI services have even demonstrated their value to individual librarians by enabling them to keep up with the publication of new findings in library research and development.

Computerized cooperation also makes possible establishment of a new economic goal for libraries. Possibly with the exception of the libraries participating in the Ohio College Library Center, the economic goals of libraries have been to design and operate efficient procedures that eliminate unnecessary expenditure. This technique is sometimes described as "saving money," but it is doubtful that any library has been able to reduce overall expenditures by improvement in efficiency of procedures. The forcing up of librarians' salaries by rising living standards in the community as a whole causes an increase in expenditure despite economies of procedure.

This circumstance can be expressed as a rate of rise of per-student costs in academic libraries. In the past couple of decades, this rate has been 5 percent as compared with a somewhat more than 2 percent increase in per manhour costs in the economy as a whole. Until the advent of computerized cooperation, it was impossible for librarianship to set a goal to decelerate the rate of rise of per-student library costs and to depress that rate of rise to the rate experienced in the general economy. It is now clear to librarians that economies of procedure are not enough and that it is necessary to invoke computer technology to increase continuously the productivity of library staff members and thereby decelerate the rate of rise of per-student costs. For the entire library population, it now appears that the only way that computer technology can be invoked is by computerized cooperation.

The highly efficient manual procedures developed by libraries in the last half century have caused an imposition of uniformity that restricts the thinking of librarians about library processes. A simple example is the technique of employing unit cards in card catalogs. Such cards are uniform except for call numbers and entries typed on them. However, there is no need for tracings to appear on all cards, but until recently all librarians accepted their presence in an essentially unthinking manner. With

computerization it became possible to treat each card as an individual card and thereby put tracings only on cards where tracings are needed. In short, the main entry can now be re-established as a truly main entry. Nevertheless, it has not been easy for librarians to divest themselves of the limited thinking imposed by such simple uniformity, largely because until recently there was no opportunity to think about such a matter. There still are librarians who insist that the tracings should be on all cards largely because tracings have been on all cards with which they have had experience in the past.

Computerized cooperation will destroy the tyranny of uniformity that has more and more narrowly confined the effective imagination of librarians as librarians have increasingly imposed uniformity on their manual processes. Once again, a librarian can experience the delicious euphoria that comes with the creation of a completely novel idea that he knows will work and which he can have the pleasure of transforming into action. Once again, librarians are becoming intellectuals in the true sense of the word.

Instability

Cooperative librarianship does not, however, bask in the security of time-tested principles of organization, cannot afford the false facade of self-sufficiency, cannot relax in simplistic techniques of communication and the low technology of typewriters, and is utterly destitute of qualified manpower.

At present, there is no organizational design of choice for computerized library cooperatives. The Ohio College Library Center is a cooperative made up of constituent members that are academic institutions--not academic libraries--in Ohio that have paid a membership fee for the current academic year. However, it must be pointed out that it was the presidents of the institutions, not the librarians, that brought the OCLC into being, and that the presidents and librarians had been talking and working with each other, off and on, for a decade and a half prior to the incorporation of the OCLC in 1967. These two circumstances have certainly contributed to some extent to what appears to be organizational effectiveness.

Five years of experience is inadequate to warrant recommendation of the Center's type of incorporation as a model. Other regional cooperatives possess differing types of organization. Organizers of new cooperatives should examine existing organizations and adopt a policy of eclecticism.

Some regional cooperatives have had difficulty in obtaining exemptions from payment of income tax. The OCLC, for example, had to change its charter at the behest of the Internal Revenue Service to qualify for exemption. Other cooperatives have been unable to obtain exemptions or have received only partial exemptions. Organizers should be certain that the organizational mode selected will qualify the cooperative for exemption from income tax payment.

Computerized cooperatives cannot afford the presumption of self-sufficiency any more than can individual libraries, no matter how large or small. Intrinsic to cooperation is recognition on the part of an institution of lack of self-sufficiency, and just as individual libraries should cooperate with each other so should regional organizations cooperate. Indeed,

cooperation among regions will extend cooperation nationwide and internationally, and will enhance the availability of resources, while at the same time it will further reduce duplication of effort. In other words, cooperation among regions will further decelerate rate of rise of per-student costs.

Extension of cooperation among computerized regional cooperatives will not be achieved easily. First, it will be necessary to design a complex, computerized inter-regional communication system that will solve hitherto unsolved technical problems. There is no reason to think that these obstacles cannot be overcome, but it will take time and special competence to eliminate present ignorance. Moreover, it will be necessary to establish some kind of a national library network agency to develop, operate and maintain the network. The informal library network of the past and present are completely inadequate for the immediate future.

On-line, computerized, telephonic communications employed by computerized cooperatives have no predecessors in classical librarianship. Hence, the new librarianship has an entirely new area of technology about which it must become effectively knowledgeable. Such knowledge involves at least a smattering of telephony, an acquaintance with complex rate structures, legal restrictions, and telephone company policy. Unhappily, even a thorough knowledge of these topics cannot provide communication effectiveness because telephone companies do not have the necessary know-how and techniques to design and operate a large network without falling into an unknown number of self-designed traps into which the computerized cooperative is also catapulted. Only knowledge, patience, experience, and excruciating pressure can yield an effectively operating telephonic network.

Similarly, librarians participating in the development and operation of computerized cooperatives must possess some knowledge of the operation of computers and of the characteristics of the world of computation. The extent of this knowledge must be sufficient to enable the librarian to understand the potential of the computer as well as the potential of libraries, for only by thoughtfully combining these two potentials can a librarian make a contribution to the new librarianship. Altogether too often, library computerization consists of a computer programmer computerizing an existing procedure. Such computerization is tragically inadequate, for it exploits neither the potential of the library nor that of the computer.

A major source of instability in computerized cooperation stems from the fact that computer hardware that will be needed in the foreseeable future does not exist. Dependence on development by others of drastically new equipment required for continued operation does not impart that comfortable sense of security to which librarians have long been accustomed. Nevertheless, computerized cooperatives can exist only by taking such calculated risks.

The requirements of the OCLC for secondary memories furnishes an example of such a calculated risk. The on-line catalog is growing at such a rate that present equipment will, by the end of the year, be inadequate for reasons of equipment expense and available floor space. File organization is entirely adequate to support a much larger file than present equipment and floor space can house. Early next year, the Center will receive brand new, as yet unavailable, secondary memory equipment that will more than double memory capacity

per square foot of floor space. The equipment will be adequate for a year or so at which time still higher density memories are promised. When the file overflows this equipment several years hence, it will be necessary to obtain wholly new types of memories now in the early stages of development but not yet in operation except in purely experimental laboratories.

Fortunately, there remain changes in file maintenance that can be invoked if the equipment development timetable slips further into the future than is now estimated. Such changes may be inelegant and may impose minor inconveniences of hopefully short duration; the main power of the system would not be affected.

Computer software contributes more instability to library automation than does hardware. Computerized cooperatives must have the most highly qualified, imaginative, and effective programmers that can be located and persuaded to join the elite. Until recently, there has been no measure against which programmer performance could be judged, but by now enough cost-beneficial library programs exist to allow specific goals to be set for programmers. Incompetent programmers, of which there are altogether too many, program disaster. One instance is known in which a catalog-card program producing unit cards required several hundred times the amount of computer processing as the OCLC program that puts out catalog cards in final form, ready to file. It is absolutely necessary that such disastrous programming be eliminated from library automation.

The highest obstacle in the path of evolving computerized cooperatives is the near total absence of librarians possessing an effective knowledge of computation, and of system programmers with experience in designing and programming complex character manipulation systems. Librarians must be sufficiently--even intimately--familiar with computation to be able to combine the potentials of libraries and computers into new systems. The technique of truncated search keys as accesses to computerized catalogs, as employed at the Ohio State University Libraries and the OCLC, is an example of a type of catalog searching wholly new to libraries. The prospect of computerized descriptive cataloging pushes the new librarianship a considerable distance from classical librarianship. To make effective decisions in the area of library automation, librarians must know much more about computation than they think they must know. The bright side of this dismal picture is the vista ahead, for surely part of man's greatest happiness is learning.

Summary

The combination of cooperation and computation makes possible establishment of new library objectives unattainable by individual libraries. Perhaps the most important of new goals is that of economic viability--a goal to which individual libraries cannot aspire.

Computerized cooperatives do not, however, enjoy the comfortable stability of classical libraries. Indeed, their instability, not to be confused with insecurity, can be a frightening experience for classical librarians. Moreover, librarians, as have physicians, engineers, and members of other professions, must redirect themselves to become perpetual students--an enterprise

in learning that produces the most pleasurable of human gratifications.

Discussion

MR. KIDMAN (Southern California): Was there a particular reason that you chose to start with cataloging rather than the module on control of periodicals?

MR. KILGOUR: When I got involved in computerization, it became apparent that the real central area is cataloging. Everything depends on cataloging: your acquisitions activity, your serials activity, your circulation activity, etc. The catalog is the bridge between the library and the user.

Since I became involved ten years ago nothing has happened that doesn't convince me this is the place to begin. It is also the area in which you can eliminate a large amount of costly duplicative effort.

MR. CABELL (Colorado): If organizations down the Eastern Seaboard are joining in with the OCLC, will distance be any real barrier to participating, and if it is would the satellite proposed for 1975 overcome it?

MR. KILGOUR: First, those organizations aren't joining the OCLC. We only will have as members institutions in Ohio. We can work with other regional systems that are going to be electronic nodes in a national system. It's on this basis we have relationships with the group here in Atlanta, the groups in Pennsylvania and New England, and the Pittsburgh Regional Library Center.

There isn't a computer in existence that could handle the kind of load you suggest. As for your questions about the satellite, it would be lovely to get away from antiquated technology, but I have a feeling we are not going to soon. The telephone company sets up its circuits the way it wants to and you haven't anything to say.

MR. SHANK (Smithsonian): Could I comment on that? It was people like Fred and his needs that convinced the Federal Trade Commission to vote seven to nothing to let communication satellites be built because Bell was not handling the problem adequately. Daytron will monitor the condition of the network constantly as a basic operation.

Frank mentioned yesterday that the satellite communications facilities will be built into communication capabilities. It will not cost any more to go from Ohio to Colorado than from Ohio to Washington. It will be costly, perhaps, as compared to telephone rates but we are not even sure of that. The terminal operation is a critical one and Daytron is trying to convince many terminal manufacturers to pay particular attention to the computer and build better terminals. Even that company is having considerable difficulty convincing the terminal manufacturers to increase their rate of capability.

MR. KILGOUR: Let me say something about cost again. It costs the Union Library Catalog of Pennsylvania five hundred dollars a month to extend the line from Pittsburgh to Philadelphia. This is about what you pay per month

to rent a tape drive. What Russ says is correct, but I doubt very much if Daytron is going to have lines going into Bluffton, Ohio, in the foreseeable future. In Ohio we have fifty-eight independent telephone companies and the manager of one of those didn't even know what a duplex line is.

We have had incredible experiences. Some of those companies will not allow a Bell System vehicle to come into their areas. If Bell tries, it has to rent a Hertz or Avis car. I'm telling you these things to give you some insight into some of the problems associated with these systems.

MR. STONE (New York University): The capability of the OCLC is incredible and remarkable. What is the scholarly response to it? The habits of scholars, it seems to me, are about as difficult to change as the habits of librarians. Has there been a great response from scholars in all fields in Ohio to use this system to their profit?

MR. KILGOUR: No, I don't think so. Certainly there has been some response. The major response that I have seen has not been to the OCLC system but rather to the remote catalog access system at Ohio State.

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MR. DE GENNARO: Our next speaker is Ron Miller. Ron is a graduate of Wesleyan University in Connecticut, my old school. He has his MLS from Rutgers. He taught at the Syracuse Library School for a few years and started his career in networks on a research project at Syracuse for the National Information System for Continuing Education. He was director of FAUL, Five Associated University Libraries, in upstate New York for several years and I think it was last year that he moved from there to NELINET, which is based in Wellesley, Massachusetts.

NELINET: A REGIONAL NETWORK

MR. MILLER: I have been asked to describe NELINET's efforts to create a regional library network in New England, with particular emphasis upon the results of a recent grant to NELINET from the Council on Library Resources, and also to make a few comments about our particular problems and what I think at this point in time our prospects are.

I'd like to say initially that starting a regional network serving libraries in a six-state region is a curious and paradoxical process in practically every respect. Certainly, the stability or instability that Fred alluded to includes a multitude of activities. It's paradoxical in some ways because, at first glance, the concept of such a network seems to run counter to the self-interest of the agencies and people with whom one must deal. At the same time, however, it is thought to be a natural way to deal with pervasive problems which are reasonably common among institutions regardless of their geopolitical orientation, particularly because the solution of those problems collectively appears to be less expensive than if an institution tried to solve them on its own.

NELINET was described as a project to establish a regional center which would provide computer-aided services to New England libraries. The heart of the project was and remains MARC. The hope was to embed that data base in a specially programmed and very large computer in a commercial service bureau which could become remotely accessible by means of terminals. This resulting communications component was planned to support cataloging, provide access to a machine-readable union catalog, and provide some control over circulation, interlibrary loan, serials processing, acquisitions and management information.

It's self-evident that these areas of automation activity sound almost identical to the system at the Ohio College Library Center. Furthermore, three early objectives of NELINET are variations upon the theme of re-allocating scarce financial and human resources which libraries must allocate to certain procedures, to share bibliographic resources, and finally to expand common services, all to the benefit of the user.

To that end studies were undertaken by the research and development staff at Inforonics, Incorporated, in Maynard, Massachusetts, and they remain today the present technical contractor to NELINET, with the support of the Council on Library Resources.

Development was exceedingly slow and tentative. Librarians were required to learn new procedures and to embrace a mode of operating different from that to which they had become accustomed, in order to take advantage of the MARC-based catalog support services. Certainly, a few staff members were released or reallocated, to replace or redistribute costs of library operations.

Few of the five participating libraries tried to make full use of the system for a wide variety of reasons. There was constant talk of errors in MARC records and deficiencies in the coverage of the MARC program; and there was dissatisfaction with card formats and virtually no effort was made by the librarians to maintain the accuracy of holdings information in the bibliographic master file which served as the gestating union catalog. It wasn't done because it wasn't easy to do.

Speaking anthropomorphically, the system has no voice and no eyes at this moment. Conversing with the system is fraught with delay, which any interactive system operating through the mails in a batch processing mode is subject to. It is a slow, dream-like state which can cause frustration. It has no eyes because librarians cannot see the file from which their products emerge. Even manual LC proof slip files and their microform derivatives provide this needed reassurance and connection with the past.

After a year of operating the catalog support system, it became clear that much more money would be needed to give the system the voice and the eyes it lacked even in the cataloging system. And that goal remained many months away. Then, almost a year ago, representatives of OCLC, NELINET, and the Washington State Library, met informally with Henriette Avram to discuss the possibilities of coordinate action among the three groups of libraries.

It was quickly discovered that the early success of the OCLC on-line system was becoming apparent and, if the economic and service objectives of the groups were reasonably coincident, the next step was to determine how the three system development efforts could be reasonably coordinated.

Later in the summer of 1971, NELINET agreed to write a proposal on behalf of the three groups which would test the transferability of the OCLC system to both NELINET and the Washington State Library Network. COMRESS, the firm which performed a simulation to analyze the performance of several hardware configurations for the OCLC in 1969, was asked to submit a proposal to the group which would simulate various system loads on the Sigma Five Configuration installed at the OCLC. These loads would reflect the characteristics of the participating groups of libraries. Dartmouth College agreed to be a demonstration and evaluation site for testing both the on-line and off-line versions of the OCLC cataloging system. At this point in time, the Washington State Library withdrew from the venture because it became clear that the state would not purchase a Sigma machine regardless of the results. Other groups--the Union Catalog Center in Philadelphia, Five Associated University Libraries, the Consortium of Universities of Washington, D.C., and the Council of Universities in Ontario--were informed of the project and the beginnings of relationships among them were built.

The results of the simulation and demonstration were educational for all concerned. I'd like to describe without getting very technical what our approach was. In effect there were a number of steps in the simulation. Simulation makes believe that a system is operating in the future, or makes a future system operate in the present, and tries to give us some method of

predicting the performance of that system given certain conditions in the operating world.

In the 1969 simulation, COMRESS built a model, which the computer could understand, of the OCLC system as it was then envisioned to decide which hardware components to acquire for the OCLC system. This model necessarily changed over a period of time as operating decisions were made. In effect, the model was updated and validated against the current operating characteristics of the shared cataloging system at that point in time, which was January-February of this year.

A special piece of equipment called a Dynaprobe was attached to the machine to monitor certain traffic signals to see whether or not they restricted ultimate performance of the model. Given this validation requirement, we devised a very simple data gathering questionnaire as input into the simulation.

Such things as number of titles cataloged, serials subscriptions, quantities of potential users within the academic environment, which we defined as all people on a campus, and the communications lines and terminals distribution had to be defined. In addition, we needed to make some estimates about the gross rate of these activities as related to the system. Furthermore, we broke New England into three groups of libraries. First, there was a group of thirty-five which contained the present members of NELINET at that point, plus one or two others. Another group of libraries was defined, numbering seventy-five, which included the first thirty-five plus some other reasonably warm prospects for membership.

Finally, according to data gathered by the New England Board of Higher Education, the agency which is the home of NELINET and the sponsoring body, 249 libraries were defined in terms of averages of the categories described above. The characteristics of each of these three groups were run against models as defined in the shared cataloging system at the OCLC on serials control, technical processing and bibliographic access, and circulation control.

We learned some interesting things. Message response time, which is defined as that time it takes a message to be displayed on the terminal once the operator has hit the key that transmits the message into the machine, was for our thirty-five libraries 3.32 seconds in the simulation. For the seventy-five libraries, curiously enough, it went down to 3.21. For the 249 libraries the average message response time went down to 1.97 seconds.

This is characteristic of the fact that in each group of libraries many more telephone lines have to be strung on the assumption that telephone lines are going to work. We did not simulate a dud telephone system, if you will. Finally, we discovered and it was known in the beginning, that it would indeed require a second central processing unit for the 249 libraries and it would probably have to be implemented for the smallest group also.

The general conclusion was that the use of the OCLC system by at least three or four times the present membership of the center is technically possible, given the system as it is now constructed and some recommended modifications that emerged as a result of the simulation activity. Some improvement was made in the performance of the system as a result of using the simulation in this manner. At the other end of the spectrum, or the other end of the country I guess, Dartmouth was involved with evaluating what the system requirements were for a user library.

Dartmouth was using the off-line, punched card, input type of system beginning in November. With grant aid it was transferred to on-line status in January of this year. Therefore, they had some time, but I don't think enough, to evaluate both the off-line and on-line systems and compare them to their previous manual system.

They estimated, as we requested them to do, the cost per card in the shared cataloging system within the demonstration environment. Costs ranged from 14.4¢--for their previous manual system, which was done with the Magnetic Tape Selectric Typewriter--to 5.3¢ per card using the OCLC system with available MARC records.

In terms of time lapse or turn around time, the OCLC batch system was estimated at two weeks over the time period; the on-line system was approximately one week; their previous manual system ranged between three and four weeks.

As to percentage of hits on the OCLC system, the English language monographs, which do not include government publications, were in the range of 70 to 75 percent. Of the government documents, which were excluded from the previous figure, 34 percent could be found in the system in the first three to six months; 54 percent in six to nine months; and 70 percent in nine to eighteen months.

In terms of terminal time required to do some of the operations, cataloging with MARC records required approximately 2.5 minutes per record; original, non-MARC LC, and substantially altered Ohio cataloging used as the copy required 8.5 minutes per record.

Some recent data on Dartmouth's use of the system--Dartmouth cataloged approximately 2,000 titles, which resulted in 16,414 cards, in April of this year--indicated they did in one and a half months the equivalent of what any Ohio library did in six months.

What this means is that Dartmouth is moving along full tilt. Since Dartmouth does not wait if an item is not in the file, they find that a typical record shows that six Ohio libraries have used the record within one week after it is input at Dartmouth. They now tell me they are going to experiment at least with the inputting of maps and monographic formats.

These are essentially the major activities which NELINET has been engaged in over the last six or seven months with specific reference to the grant from the CLR. I should add that the membership in NELINET, on the basis

of promised performance, rose from five to thirty-three during that period.

Now, I'd like to mention some transferability problems and what our prospects are. Fred's word "stability" is certainly operative overall and relevant to each of these problem areas. I think we have taken a reasonable look at the technical aspects of transferability and are optimistic about them. In effect, the machine can do the work. The stability of the hardware, namely terminal availability, computer availability, and performance, is still somewhat open to question.

What we are saying here is that we do not know too much about the future in terms of the availability of key points of the system. We think, at least in Dartmouth's case, there is high user satisfaction with the system as it now operates. There is some dissatisfaction. I don't know the source of that dissatisfaction, but the system tends to impinge too much and too early on the internal operations of the library and I think this is probably the most negative factor in the system, but it should be expected. Other factors which we have to treat in a much less scientific way, I would gather, are geopolitical factors. For instance, how does one administer and build a stable organization and an interstate agency?

In the New England states, NELINET is equivalent to a state agency that is owned in some strange way by the whole region. It can underwrite responsible contracts. With respect to regional administration, we obviously must deal primarily with state agencies.

The early conflict I told you about, the self-interest of participants, resulted in each of the six New England states developing a master plan while completely ignoring the existence of NELINET. We thought that our capability should be brought to their attention. The process is a long one, but we have been able to receive assurances of support from three of the state agencies that handle federal funds and are responsible for library development.

Another geopolitical factor is the size of the network. This has not been answered. We know it can handle 249 libraries of the characteristics we used in the simulation, but we are not sure the actual library participants would have the same characteristics as that group.

We are looking with some hope at a recent grant to Lehigh which is doing a simulation of network growth and governance in another context. As Fred indicated, there are models around which we should be sensitive to and I think this is one of them. When does it become cost beneficial to establish a new network as opposed to continually expanding one already existing?

We now have a National Advisory Panel made up of Henriette Avram, Fred Kilgour and David Kaser. We also have a regional advisory panel, which includes many representatives from the state agencies I mentioned earlier plus some other regional agencies which already exist, namely the New England Regional Commission. We have established varying degrees of relationships with other consortia, particularly FAUL and the Union Library Catalog of Pennsylvania.

These relationships seem to be going rather well from our point of view. Another group, the Ontario University group, is in fact performing another simulation using the work we did for purposes of analyzing their own libraries. That is going on this week. They are able, at no cost to us, to take advantage of the model building and the processing that went on as part of our simulation, and they are paying the difference in cost it would take to accommodate that simulation for their own needs.

Finally, of course, we need a mechanism within the governing structure which gives us a reasonable guarantee of cash flow to take into account that instability in the system which results in cost increases. We think we can contend with this, but there are so many unpredictables in devising a system of this magnitude that we must be ready for changes that are not foreseen.

The rules that govern the current administration of NELINET were derived from the Western Interstate Commission on Higher Education, "WICHE" to some of you, specifically from a project which is pronounced "NCHEMS," for National Center for Higher Education Management Systems. There is an operating document used by this group. This basic document is refined as needed to provide us with operating guidance and a series of procedures, which hopefully are not so awkward that they cannot be implemented. Finally, in moving toward the transfer of the Ohio College Library Center system, which is now firmly approved by our membership, we are working hard to develop a written agreement between NELINET and OCLC, which we hope will be signed soon.

We expect that some of the academic and public libraries in New England will join with the members of the Five Associated University Libraries as short-time, on-line participants in the OCLC system during the summer of '72. Another point, an additional group of relatively small libraries will try to use the off-line card system. Finally, another small group, some of which are state agencies, will be sustaining members, providing administrative support. A few NELINET members, however, are academic institutions of medium to large size, which are not able to release or divert requisite monies to participate in either off-line or on-line status early in the fiscal year.

We are undertaking a plan to begin training users of the system so that we can have a minimum of interruption and misunderstanding as this new librarianship moves into our member libraries. As the region gains experience, we expect the library base to expand along with matching support to enable the region to support a stand-alone system after transfer costs are paid.

We do not know yet what the transfer costs are going to be, but we have a reasonably good handle on a major component, not the least of which is the development of a staff of expert people which Fred assured me are scarce. This may be our biggest task. We will build a transfer schedule sometime toward the end of the summer in concert with the OCLC and so make our actions coincident with its future operations.

Finally, a general observation which is intuitive more than

anything else. I think we have perhaps moved too fast, but I don't know this yet. In any event, we are going to be as careful as possible and our mission is, of course, to protect our members as much as we can and to be completely candid and open with them as problems arise.

There are so many debts that one owes in a situation like this. We owe a great deal, all of us here, especially NELINET, to the Library of Congress for MARC, RECON, and the emerging standard bibliographic descriptions. NELINET particularly owes Fred Kilgour a debt for his vision in getting the show on the road as quickly as he did.

Particularly, NELINET owes the Council on Library Services, the United States Office of Education, the National Science Foundation and others for joining with the library community to support these exciting and challenging experiments, which show such great promise, directed towards the true sharing of resources and increased services for the ultimate users of our libraries.

Discussion

MR. DIX (Princeton): Two questions. First of all, you said something about your hunch as to the capacity of the network to absorb participants. Is there anything you can say about the composition of the membership? Yours is essentially a geographic principal including quite diverse types of libraries. Is it possible that the cost and service benefits may be greater if you had a group of quite similar libraries, say ARL types only, in a system in which reciprocity would seem greater even though there would be a broader geographic spread?

MR. MILLER: The model I use, which relates to the questions you raise, is the Federal Reserve Bank. I have been asked to give a presentation to all the Federal Reserve Bank librarians in Boston, some of whom come from the West Coast. They would like all their banks to join the network if the price is right, obviously. Now, simply stated, NELINET cannot have lines going coast to coast in this kind of environment. We are devoted to developing regional organizational nodes as opposed to discipline oriented or types of library oriented networks.

We are excluded from involving special libraries because of tax problems, but governmental agencies are within our possible compass. We are now including public libraries in our structures. We think there are more than enough libraries in New England to support and even overload a system developed along the lines that have been designed at the OCLC.

MR. DIX: My second question, if I may. Would you mind repeating those cost per card figures with a little more definition?

MR. MILLER: First of all, these costs are peculiar to Dartmouth. Secondly, they are peculiar because the work is done under a grant and, therefore, the total cost of operating in a full service mode is not included. These are costs during the demonstration period.

MR. DIX: Would you define what that cost includes? Does it include cataloging?

MR. MILLER: It includes production of cards from available copy, everything but original cataloging. The MF/SF system did include original cataloging and its cost was 14.4¢ per card. The typical card set that I saw in Ohio cost 6.6¢. The cost of cards in the OCLC on-line MARC record, that is, records that were available in the system is 5.3¢ per card.

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MR. DE GENNARO: We now move on to Larry Livingston. Larry is a computer systems specialist who received his training at the University of Maryland and at the Department of Agriculture Graduate School. His experience in systems work came in the Military Intelligence, U.S. Army, from which he retired as a lieutenant colonel. He has been on the staff of the Council on Library Resources for about four years. He is going to give us a system man's point of view about the OCLC system.

TECHNOLOGY AND THE LIBRARY

MR. LIVINGSTON: I have been asked to comment on what I thought the impact of the development and application of technology would be on your libraries and on yourselves as individuals. I also intend to say a few words about where I think we are going in terms of developing a national system. Before I get done I will probably make half a dozen people in the room angry. I hope to raise your worry quotient a notch or two.

I should say that I think library development is based on the following assumptions, which are beginning to be accepted almost as truisms. The first one is obvious but it needs saying: the printed page, bound in books, is going to be the main depository of knowledge in your libraries for at least our lifetimes. Let's face it. Technology is going to have an impact on how we handle the information in these volumes but the books themselves will remain. Facsimile transmission will have much less impact than some of the other technology we have heard about, simply because it's not here yet. We heard yesterday, almost as a footnote, that facsimile transmissions were available, but that they wouldn't transmit six-point type so it could be read. Of course, that's only important if you run a library.

I think that the first result of the development of this kind of technology is, as was well stated by Mr. Kilgour, the requirement that you as librarians know more about it. You are going to have to make hard decisions on the acceptance and introduction of technology into your libraries. If you don't have more than what I perceive to be the average librarian's knowledge of it, the implications seem clear. Either you are going to make these decisions based on insufficient knowledge or you are going to have to acquire that knowledge before you make decisions. Of course, I'd advocate the latter course.

I'm not saying librarians need to be computer programmers because I don't think they need to be. But they need to know enough of the jargon to understand what the programmer is proposing and they need to know enough about the system to understand whether the program is not within 1/400 as efficient as it should be. You can hire programmers if you have enough money, but I submit to you that you will have a difficult time hiring good programmers if you don't understand the language they speak.

Now, it would almost seem from what we have heard today that the Ohio College Library Center is the only route that one might go. I must pause here and warn you that what I have to say next is precautionary in nature and may even sour you a little. So let me begin by saying that I think the OCLC is head and shoulders above other similar developments in this country. I know of no other system supporting fifty libraries with good cataloging, and with a capacity for serials control. It's one of the best, if not the best, there is. However, it's not the only one there is. You have already heard about NELINET and the fact that the Association of Southeastern Research Libraries is looking at the possibility of cooperation with the OCLC as is the Louisiana State system.

The Southwestern Library Association is working along the same lines. There are other good developments in this country in library automation. Good work is going on at the University of Chicago and at Stanford. The University of California system has a very well developed plan for automation. You heard about the circulation system of Penn State, which is very efficient. There is another one at Northwestern. Syracuse University, the University of Toronto, and the University of Pennsylvania all have library systems under development. Serial systems are proliferating all over the country, and you have heard about the Five Associated University Libraries. Let me mention to you there are national systems and international systems as well that will have an impact on what you do.

Someone mentioned the MEDLINE system yesterday. It is very efficient, but oriented to the handling of journal article citations in a single discipline--biomedicine. The Agriculture Department and its library are building an agricultural information network and there is a National Serials Data Program. Perhaps you saw a recent announcement of the appointment of its director by the Library of Congress. Paul Vassalo is his name. He has the beginning of a staff, office space, furniture, telephones and money. And he has a written plan for development which has been approved by the directors of the three national libraries.

This national program, in conjunction with other interested parties, has begun the numbering of a major base of serial titles, using the international standard serial number. With publication of the third and last volume, scheduled for 12 May 1972, Bowker has now completed publication of its Serials Bibliography, which includes seventy thousand titles, all numbered with the ISSN. The first two volumes came out some time ago. The third volume will include an ISSN index to all three volumes.

There is also a plan, essentially approved and in process, to number a much larger data base of serials in this country with the international standard--that is, the twenty-one-year cumulation of New Serial Titles being produced in printed form by the collaborative efforts of Bowker and the Library of Congress.

There is an International Serials Data System being implemented by contract between UNESCO and the French Government. With headquarters in Paris, the ISDS is building an international registry of serial titles based on the ISSN. All work done in this country dovetails exactly into what's planned there. The international system includes the concept of a key title to be constructed for each serial at the time of input. You need to know more about key title because it's going to be in the international data base. The cataloging committee of the International Federation of Library Associations is working on an international standard for bibliographic description of serials which follows the international standards for monographs.

All of these have implications for the systems you will develop. It is an impressive list and it's far from complete. I think it has enormous implications for our friends, Dr. Burkhardt and Charles Stevens of the National Commission, who are to write the national plan for the libraries. It's obvious we are not going to be able to go back and develop ideal

systems in every region. They have the problem of capturing what's going on and shaping it into a cohesive plan.

I think there is an analogy here which will serve to illustrate the difficulty they face in national planning for libraries. Consider someone who must paint a train that has left the station some time ago and is accelerating rapidly. First one must catch it; then keep abreast of it; and then paint it without missing any of the moving parts. That's the problem that the National Commission has in writing a plan as I see it.

Now the fact is that these diverse systems are developing at the same time, and they are not going to go away. Several OCLC-like systems will probably develop, but other types will come along as well. It seems to me we need to concentrate on the "connectability" and compatibility of these systems. In this area I think one absolute requisite is that each system be compatible with MARC, in both monographs and in serials.

Almost all systems designers plan a capability to accept MARC records as input to their systems. This is fine, because it permits the acceptance of all MARC cataloging done at the LC and elsewhere. But I would suggest that this is only one-half of the compatibility requirement; each system also must have the capability to output full MARC records as well, or it can't contribute to the composite national data base.

Now, I would like to give you an idea of what will happen to you when you try to copy a system like the OCLC by walking you through a set of procedural steps that might be involved in planning such a system. I think that when this is done you run into several kinds of problems--maybe four general kinds of problems--and I place them in this order of importance: financial, legal, political and technical. Speaking as a technician, I think the technical problems are probably the least difficult.

One of the obvious first steps, if you would build a regional system, is to decide upon regional membership, and this is not quite as easy to do as it is to say it. You need to decide where the center will be located. A way to decide upon a location might well be to first postulate a membership. Stick pins in a map, if you will. Connect these with lines and then go to the telephone company. In spite of all the talk at this meeting about communication satellites, I think you're just as well off to plan to build a system based on telephone company lines.

I would like to think that this kind of planning would influence the way communication channels are allocated in the future because adequate channels are critical to regional library systems and they are very expensive. In my view, that is the stumbling block which will prevent nationwide systems of libraries in the near term, that single fact of the cost per mile per month for the kind of wire communications it takes to run this system we are talking about.

One might then take his map to the telephone company. They do have people who are versed in helping to design--not run--networks of this kind. You take your map and say: "Here we are. We need to run these lines from

this center to these places. How much per mile per month for a particular line capacity?" You cluster libraries on the ends of trunk lines so as to keep trunk costs to the minimum. The telephone company comes up with a price. One might move the center to see what happens to the cost package. One might also drop or add libraries as potential members in the system until one gets something he thinks he can live with.

I should mention at this point that telephone line charges of the kind we are discussing come in at least four different packages. There are intrastate charges for normal subscriptions. These are very expensive. There are interstate charges for normal subscriptions which are substantially lower than intrastate charges for the same service. There also are TELPAK charges. TELPAK is a system whereby government agencies, state and federal, may get lesser rates for telephone service. Remember that only state or federal agencies qualify for TELPAK service.

Now, we need to talk about some of the attributes required of the Center itself. It must, first of all, acquire tax-exempt status. It must be a not-for-profit entity. Tax-exempt status is quite important. I believe that the Center should act as an official agency of a state government, if possible, so that it may take advantage of some of the reduced rates I have mentioned. In any case, that's a question for the lawyers: how best to incorporate an entity to run one of these regional networks. Perhaps new state legislation is required. Consult your state's legal counsel early, and keep him advised of your plans.

The charter for the Center should permit the acceptance of gifts from several kinds of sources. This is all obvious but needs thinking about when you design a center.

Now, what about the personalities, those people who will be involved in the system? As you begin to pin these libraries to the ends of your network lines, you must decide if you can live with Joe Smith down the road who really doesn't know how to catalog, or even how to run a library. These changed relationships among libraries and librarians, which will be brought about by the advent of regional systems, are, next to financial problems, probably the most difficult.

Don't forget the need for trained staff. My own view is that you should have started some time ago to train your own staff in systems work, because I think eventually that's what you must do--take librarians and make systems people out of them. Librarians already possess the most critical knowledge, a thorough knowledge of how libraries operate. You know what the system is expected to do. For example, I, as a technician, could dazzle you with descriptions of the potential capabilities of facsimile transmission, but all you have to say to me is: "Here's a typical library page. Copy it and transmit it, and let me see the results." That will prove all sorts of things. If you focus your thinking on real library requirements, you can stay ahead of fast talking systems types.

When you begin to concentrate on the costs of one of these regional systems, I think you will see that costs break out into about four roughly

ual parts: center staff and facilities, the center hardware, the terminals, and the communication lines.

You can readily see that some of these costs are fairly constant, that is, they don't vary with membership. If you copy the OCLC, you can take a list of its hardware and go to Xerox, who will tell you how much it costs to lease or buy. You should look into the business of educational discounts. Again this poses legal requirements on your charter.

When you decide on your network, you can easily see what the line costs will be. You can vary the costs in two ways by reducing your membership. First, when you reduce membership you cut line costs; and when you reduce membership you cut requirements for some terminals. These are quite variable. Now, one could easily decide how much staff is required. This is largely independent of membership. Agreed, we don't have much experience with building systems of this kind, but many other systems have been staffed and I don't think it would be too difficult to find out what you need.

By moving the location of the center around one can easily come up with something pretty definite on costs. Then the problem of funding can be addressed. Who is going to pay for the startup costs? Who is going to pay for the parallel costs of operating until one can cut over to the new system? And there are some very serious questions that haven't been mentioned yet. If you realize savings by these techniques in cataloging staff--clerks, typists, catalogers, etc.--what are you going to do with the people that you have displaced? Are you ready to fire them? If you fire them, is the provost going to take the savings away from your library? He will probably want to.

Are you going, instead, to divert these savings into better service to your clientele? Can you manage that? What about the individual, especially in a small library? In the large library real savings are not overly difficult because if one has thirty catalogers and he can save four positions, he can empty these by attrition. But suppose the library has only one cataloger and you save one-third of his effort. What does one do with the other two-thirds? You see, there are many personnel problems which will crop up in setting up one of these systems.

Let me make this perfectly clear, as another of my friends often says. If you copy the OCLC, you have married yourself to a definite and exact set of hardware. The reason for the efficiency of the OCLC operation lies in the fact that all the software is tailored to library applications. You know that computers usually come with a set of master programs which allows you to provide other programs specifically designed and written to handle your own applications. At the OCLC, even the operating system has been modified for efficiency in library operations. If it hadn't been so modified, it wouldn't be so efficient for libraries. That's where the other systems (tested by simulation at the OCLC) wouldn't cut the mustard--the operating systems were not efficient enough, in the specific environment of library operations, because they were designed to do many other things too. That has its price, and one price is that the OCLC is married to that set of hardware exactly. Don't let someone tell you that there is a one

hundred thousand dollar computer available on your campus and, therefore, if you copy the OCLC you may subtract one hundred thousand dollars from costs. It just isn't going to happen that way.

If one decides to copy OCLC, he is going to copy the hardware exactly. If he chooses somebody else's hardware, he has a completely new requirement; he must recode the programs for it. This can be done. It hasn't yet been done, but it can be done. Let me make one more point about the modified operating system which runs so efficiently at the OCLC; because it has been modified, it is no longer supported or maintained by Xerox. If one uses a unique operating system, not supported by the manufacturer, obviously he must provide that support himself.

Let me comment on a couple of other points. Don't overlook site selection and preparation. A system of this kind has very definite site requirements. It needs a room of a certain size and it shouldn't have posts or other obstructions in it. The floor should be level and it should be raised to permit passage of power cables. Requirements for power are easily determined; the manufacturers can tell you what they are. There is also a requirement for air conditioning, for a tape vault, and for security. Protection for the tape files from fire and vandalism is required. As you see, the site itself presents some real technical requirements.

What then does one need to do? He needs to get someone to learn the system in enough detail to copy and transplant it to your facility and to initiate the system in that facility after it is built. The system has to be tested and debugged. The fact that it runs in Ohio and runs very well doesn't mean it will run very well in your place. Very likely it will not, at least at the first trial.

As Mr. Kilgour's system develops, as these other (planned) modules are tested and debugged and made effective there, one should plan to copy these additional parts so as to avoid unnecessary duplication of effort. There should be a division of labor on future developments with each center contributing what it can do best.

If NELINET goes into operation next year, some arrangements between NELINET and the OCLC will be made with regard to future developments so some of the burden can be spread around.

I think regional centers are inevitable, just on the basis of economics alone. The systems required to support a comprehensive set of library functions using MARC, for example, are so expensive as to preclude their justification in the average library. They are, at the same time, so powerful as to be too large for any single library except the very largest. I think that we must accept as fact that no library can go it alone in the development of technology. You are going to have to cooperate.

Now we come to some of the sticky parts. The Library of Congress has not found it possible to build a national data base in machine-readable form fast enough to meet the requirements of the developing systems. There are probably good reasons for this, but the result is that significant portions of the national data base are being put into machines outside of Washington.

For example, at the OCLC they are putting in something like twice as many records locally as are being input at LC in the MARC system.

MARC is going to be the standard, but not fast enough. So what happens? It seems to me this presents us with at least three kinds of problems. First of all, there is no formal division of labor; therefore, there is no way to prevent what is being input at Stanford from exactly duplicating the work being done at the OCLC, or at LC.

The OCLC records are not MARC standard because an individual library or even a region doesn't find it necessary to put in the richness of detail that LC has seen fit to do in MARC. So one has a record that's not as full as the LC MARC record. It's nonstandard as to the details of MARC tagging. I say that without even having seen this tagging because I feel that if there isn't centralized quality control in this kind of operation there is a degree of nonstandardization introduced. I also know the degree of centralized quality control that goes into the MARC system at LC.

Some people say we don't need this degree of standardization. We can build a system flexible enough to circumvent a certain lack of standardization. I submit that that's possible, but it's not the way we should be going because I feel the ultimate economic savings of systems of this kind depend on our being able to use the records in such systems without major modification. How is one going to make savings in the salaries of all this high-priced library talent if it has to be kept around to make modifications in the records to suit your system?

I am not advocating absolute standardization. What I am talking about is a general direction, or major thrust. I disagree with Mr. Kilgour in this particular. I think we should strive for more standardization. I know he's going to say he didn't say we shouldn't, and I agree with him insofar as the use of the record is concerned. I'm not talking about stereotyped thinking as to use; I am talking about how the records are represented in the system.

I think a second and much more difficult problem exists in the fact that records created outside LC do not have the advantage of access to LC's authority file. These records are by definition not standard because they are not based on a single, standardized authority file. Agreed? A user who would create a new record could call up a record in the MARC system and get his authority that way. But MARC as an authority file is not complete because of its limited coverage.

Another thing. The authority reflected in MARC records is not up to date at the Library of Congress as of the date the record is used in the field. We have to do something about this and I am not sure how to do it.

There we have the nonstandard problem with the data base. How about support for the software for regional systems, our third problem? This is no small matter and it urgently requires solution. I guarantee that the OCLC with its present funding will not be able to do it. Somebody else will need to. We need somebody to maintain the software, to instruct in its

use, and to assist in its transfer.

We have been tippy-toeing around public libraries in all of these comments. Can we really expect to build, and especially fund, regional systems which exclude public libraries since outside funds usually enter the states by way of the state librarian's office? We also need trained systems people and this is not going to happen accidentally. If you as library directors don't go after them you will not have them. These systems present us with the need for some real changes and they present some real challenges. For example, as knowledge of your holdings becomes more available in your region, are you ready for the impact on your inter-library loan system that will result? As that knowledge of your holdings really begins to be perfect, how about the effect on your circulation? How about the narrowing of the difference between the definitions of circulation and interlibrary loans? Are you really ready for this?

It will be technically feasible to share acquisitions absolutely. Will it ever be politically feasible? I feel that a systematic purging of collections is eventually technically feasible based on the knowledge of what other libraries hold, but are you going to be ready to get rid of that which is not used? There is a real possibility in systems of this kind that a certain degree of lost autonomy will be included. What are you going to do about that? I conclude with two questions: Are you ready for these systems? And, who in the world is going to pay for them?

Discussion

MR. WILLIAMS (Center for Research Libraries): We have heard a good deal about the telephone company and the importance of a price structure for a network system. One of the principal problems with respect to the price structure seems to be that it's tied to distance as a function of the charges. I seem to remember that a few years ago, there was talk of the phone company gradually abandoning this procedure and moving toward a system, essentially like that of the United States Postal Service, that is distance independent. Do any of you have an idea whether or not this is coming?

MR. KILGOUR: That is a very easy question to answer. The telephone company isn't trying to do anything like that. If anything, it's going the other way.

MR. WILLIAMS: Wasn't this, though, what Bell was telling us?

MR. KILGOUR: I can't conceive it was because that is not their method. They have reduced the price of some things, such as models, but they were not competitive and were getting into trouble with independent manufacturers.

I do want to clarify one thing I said. When Larry said I was opposed to uniformity, that's correct. But I want to point out standardization and uniformity are not the same thing. Standardization is necessary. We comply with the national standard on the communication of bibliographic

records, and any program that will process MARC II records from the Library of Congress will process any OCLC MARC records.

MR. MILLER: I recall that comment on phone charges, Gordon. It seemed to relate to satellites because they are theoretically distance independent. As an example of what Fred is saying about rate changes, I talked to the telephone company yesterday and got two sets of rates for the same category, one of which went into effect May 1 and which superseded everything before that, and another which may go into effect in July. I don't know which to use. Obviously, the higher one.

MR. SLATIN (Buffalo): You implied that participation in the OCLC ties us to a Sigma Five, with a particular configuration of software as well as hardware. Does that mean that if another state agency were to attempt to replicate the services of the OCLC without replicating the hardware that the costs would go up?

MR. LIVINGSTON: You would have a different ball game.

MR. SLATIN: Does that mean Mr. Kilgour has to go into the computer manufacturing business?

MR. LIVINGSTON: No. You can buy from Xerox and Spirus exactly what he has. If you copy the system without paying the developmental costs he has already paid, you must copy the hardware exactly.

FROM THE FLOOR: Aren't you telling us, Larry, that one company has devised a collection of units that will serve a specific purpose and that no one else has done this? Isn't this exactly the same situation we faced before when we were trying to find ways of duplicating catalog cards and couldn't get machines developed because it was not economical? Is it possible that now there is a visible market that might inspire the computer manufacturers to direct their attention to this area and to devise machinery that could be compatible?

MR. LIVINGSTON: You've raised several points. First of all, it was not a computer manufacturer who made a discrete set of elements suitable for libraries. It was Fred Kilgour who got this set from two manufacturers and put it together. He didn't do this deliberately at all. In addition, we know that other manufacturers, specifically IBM, are looking at the possibility of the library market anew in recent weeks. Things may get better.

MR. KILGOUR: The stability of Xerox was mentioned. Xerox isn't the problem; it's the operations of United Machine Company that's giving us difficulty, because it owns Spirus Systems, Incorporated, which manufactures terminals.

Xerox has made the decision to market the Sigma equivalent that runs the OCLC system and is writing up a brief describing it. They are making an active attempt to market it. This decision is a relatively recent one. They will do just what every other commercial firm does, that is, they will try to sell the equipment but are not going to do what the

OCLC has done, as Larry pointed out.

MR. BOES (Syracuse): Since there will be more regional bibliographic centers, and since Fred Kilgour has turned the corner as a pathfinder, I think it obvious at this time that the Association of Research Libraries should lead the field in beginning to designate these centers as National Bibliographic Centers, along with the Library of Congress. This is something that should be acted upon, I think.

MR. KILGOUR: I have a comment. We have talked this morning about the OCLC programs becoming available, but they will not become available until we are absolutely assured that this other node is going to operate. This is a problem with respect to IBM. IBM has come to see me and talked about carrying the programs, but somehow or other we have to get out of IBM that they are not going to market it unless it's demonstrated as cost beneficial. This is true of translation for other computers. It is also true of going on the Sigma Five.

MR. LOCKE (MIT): I want to express a certain amount of confusion stemming from the different signals I am getting here and from the computer people at MIT. Maybe the Sigma Five system is what we need for library work but the computer people at MIT don't think so.

MR. KILGOUR: It was picked on the basis of a simulation. There were ten manufacturers who made proposals for the system. (It would be eight today.) There were three computers able to do the job. The expensive computers that were included in the system would not do the job. The reason is that the system has a different architecture. If your people at MIT are doing largely numerical analyses, where one has the same unknown on both sides of the equation, they ought not to have a thirty-two-bit word machine but ought to have a sixty-bit word machine. That's not what we are doing. The "number cruncher" isn't going to do our kind of job.

MR. DE GENNARO: As moderator, I think I will give myself the liberty of making some final remarks. I have been thinking about the OCLC system and I'd like to make a summary of cautions on the transferability of it.

The on-line catalog system has been operational for less than a year. There is not enough experience yet with the system to warrant the confidence that many have already begun to place in it as the basis of a national network. There is no question that it appears to be a promising prototype, but it may be too early to accept it as the definitive system to replicate on a national scale.

The system is still under development while at the same time it must be operational. It is without backup in case of serious machine failure. Only the batch card system and a portion of the on-line catalog systems are operational. The hardware and software appear to be capable of handling the cataloging module. Although it has been simulated, we do not know for sure whether the addition of later modules will degrade or impede the operation of the earlier ones. How the problem of file growth will affect the system in the future is another grey area.

The system is still dependent on its initial designers for operation and maintenance. Documentation is very incomplete. The operating system is custom-made and unique. It may eventually become a limitation and liability because of this uniqueness and consequent rigidity.

The entire system is hardware bound--and bound to the hardware of a minor computer manufacturer, and a terminal manufacturer beset with serious financial and production problems.

This is a prototype system, but because it is the first successful large scale, on-line catalog processing system we may be too uncritical of it and too eager to accept it as is. "It works; transfer it as is," is a natural reaction. A more prudent approach might be to observe the system in operation at the OCLC and NELINET for a period of time and then try to redesign and reprogram it to make it more flexible, less hardware-dependent, and less expensive to operate. Experience has shown that the first successful model of a complex system demonstrates the feasibility of the concept and the general design approach; later models take advantage of the knowledge and experience gained with the first one to produce more efficient and more economical operational systems in later installations. The initial success of the OCLC should not be used as a reason for halting the development of other on-line cataloging systems.

In spite of its problems, the OCLC system still appears to be the best and most promising on-line cataloging system in the country and Fred Kilgour, Phil Long and others at the OCLC deserve credit for their outstanding technical and organizational achievement. Whatever the future may bring, they will have the satisfaction of having pioneered and implemented the first successful on-line cataloging on a network basis.

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BUSINESS MEETING

MR. McDONALD: The business meeting will, I hope, be relatively short. We will have, as I said this morning, reports from the newly formed ARL commissions. They are beginning to function in a very helpful way. You will be able to determine this for yourselves when you hear the reports of the commissioners.

There are several items of business that should precede those reports. Some of these result from actions of the board of directors in its meeting held on Thursday. For some time, as you know, the Association has had a committee on the microfilming of dissertations. In the early years of the microfilming program, it worked with good effect as a liaison between the Association and University Microfilms. In recent years there has seemed to be less and less reason for a continuing committee, and the Commission on the Development of Resources recommended that the Committee on Microfilming Dissertations be terminated. The board took this action at its meeting on Thursday and I report that action to the membership at this time.

I should say, that this action does not imply that we are without problems with respect to dissertations and our relations with University Microfilms. I, for one, believe that there are continuing problems, but we see these problems being handled by ad hoc committees in the future.

Amendment to Bylaws

MR. McDONALD: I would like now to turn to a matter which was presented to you at our midwinter meeting in Chicago. This is the adoption of a new bylaw on membership.

You received the report of the Membership Committee earlier and a copy of the proposed change in the bylaws was mailed to you at least thirty days in advance of this meeting as is required by our bylaws. It only requires now that we take final action on the changes in our membership criteria as agreed upon at the midwinter meeting.

The chair would entertain a motion then to amend the bylaws in accordance with the report of the Membership Committee.

[The motion was made and seconded from the floor.]

MR. McDONALD: I am glad to acknowledge the hand of Bill Locke, who certainly did yeoman's work as chairman of the Membership Committee.

MR. LOCKE: Mr. Chairman, on behalf of one of the members of the Membership Committee who couldn't be here, Arthur Hamlin, I would like to propose an amendment to the amendment. I move that we eliminate the last two and one-half lines of the new Section I, Member Institutions, and substitute the

following: "give evidence of an institutional capacity for and commitment to the advancement and transmittal of knowledge."

MR. McDONALD: One could wonder why a member of the committee hadn't seen fit to make these suggestions earlier.

MR. LOCKE: The reason, Mr. President, is that the present form of the first section was arrived at only after a great deal of discussion and there was no chance to reflect on it during our last meeting.

MR. McDONALD: The language which this motion would substitute is "capacity for and commitment to the advancement and transmittal of knowledge." That language would replace "both to the purpose of major research libraries and to aid in solving the problems characteristic of such libraries." Do I hear a second to that motion?

[The motion was seconded from the floor.]

MR. McDONALD: Unless I hear objection, I think we can vote on the amendment. All in favor please say aye; those opposed? In the opinion of the Chair, the ayes have it.

We now return to the basic question before us, the motion as amended. Is there discussion? Apparently not. All those in favor of adopting the new bylaw on membership as amended please say aye; opposed? A unanimous vote in favor. Thank you very much. We have accomplished a final action on a matter which has taken a great deal of the time of the Membership Committee and a good deal of the time of the Association. I have acknowledged our indebtedness to Bill Locke and his committee before, but I am very happy to do so again.

This matter leads directly to another, namely, the report of the Statistics Committee.

You will remember that John Gribbin, a member of the Membership Committee, laid special stress on the importance of clarifying the ARL statistics. The Association asked a committee, comprised of Ben Bowman, chairman, Gus Harrer and John Heussman, to look into the matter and make recommendations in preparation for the next annual call for statistical information. You will remember that the new criteria include three new statistical categories.

We will need one year of experience with the new criteria to derive the media by means of which we can measure the qualifications, if you will, of candidates for membership. We will have some necessary delay before new institutions can be brought into the Association or can become eligible for membership, but the delay will not be an intolerable one. I now call on Ben Bowman to present the report of the Statistics Committee.

Report of the Statistics Committee

MR. BOWMAN: I believe all of you have a copy of the report. I might say in presenting it on behalf of the committee that for a number of reasons, which are summarized on page three of the report the committee took a pragmatic view of this matter of definitions of statistics. After all, we must move with respect to the new membership criteria, which are all quantitative. There are three new statistics to report, one of which is serials holdings. The committee recommends that we might use the word, "periodicals."

Another is the number of PhDs awarded and the third is the number of fields in which PhDs are awarded. The latter presented as much difficulty to the committee as any of the other considerations. Continuing along pragmatic lines, we propose, as the report states on page two, to meet the matter of fields in which PhDs are awarded by relying on the HEGIS report.

Attached to Bill's Membership Committee report was a list of thirty-seven PhD fields which might be considered. Discussion immediately indicated that they weren't satisfactory.

During our deliberations in April in Washington on this matter, the committee got in touch with the Council of Graduate Schools, which is working on a list. On the day we called the Council, we learned its list had reached 800 fields. The HEGIS Report has only about 260. We propose that those be used.

The committee also rather strongly recommends that you continue the practice of footnoting your statistical reports to explain your figures. Continuing analysis of these footnotes may lead us to further standardization of the statistics. In substance, then, the committee hopes that this report is a pragmatic first step in the matter of getting the statistics in this year and moving toward, as time goes on, further refinement of them.

I think in lieu of any other mechanism existing at this time, I should volunteer to receive letters and comments from you as to problems with the definitions as we move into the new membership criteria and refinement of them.

MR. McDONALD: Ben's committee has had relatively little time in which to put together this report and I think it's to their credit they were able to accomplish so much so soon. They are aware, as I think he has indicated, that there are a number of questions remaining. We assume that experience in gathering the information called for by the new criteria for membership will help us to make adjustments as time goes on. When this matter was discussed in the board meeting, we had the very helpful suggestion from Dave Weber that you might wish to look for general guidance to the report of the Statistics Coordinating Committee of the ALA. Most of you will be able to find a copy of this report.

From a procedural point of view, I assume the ARL office will be getting out the new statistical questionnaires on the usual schedule.

Are there questions then on the report of the Committee on Statistics? This does not mean that the committee is discharged. We want to have a

repository for the questions and complaints that will inevitably arrive.

There has been a motion and a second that this report be accepted. Any discussion? All in favor, please say aye; opposed? The motion is carried.

The time has come for the promised performances of our commissioners. I now call upon Doug Bryant, chairman of the Commission on Development of Resources, the group we sometimes refer to as Commission Number 1, to make his report.

Report of Commission on Development of Resources

MR. BRYANT: Thank you, John. This is the report of Commission Number 1, the Committee on Development of Resources. There are now under the commission's wing four committees. First is the Preservation Committee. I would report to you that Jim Haas has, for reasons clear and obvious to all of us, asked to be relieved of that chairmanship. Another appointment to the chairmanship of the Preservation Committee is now pending.

The report of the Preservation Project has been distributed to ARL members and has been accepted by the Office of Education, under whose grant the work was carried on. It now remains for the Association to concern itself with the implementation of the recommendations of the Haas report. I can only say this is a long-term proposition. We are not going to answer by tomorrow morning or by a year from now all questions with respect to preserving man's memory, which is deteriorating rapidly at least with respect to the last century and a half. We must address ourselves, however, with full energy and full attention to the preservation problem and not allow it to become another subject on which there is an excellent report that can be found in somebody's files.

Second, there is the Foreign Newspaper Microfilming Committee, an active committee working closely with the Center for Research Libraries in the field of microfilming foreign newspapers. There is nothing at the moment to report or any action to recommend with respect to this committee.

My third point has to do with a noncommittee matter, one which is of considerable concern to all of us with respect to development of resources for scholarship. I speak here of data banks or libraries of information in computerized or digital form. There can be no doubt that this is an important matter facing research libraries throughout the world. We have only to remind ourselves of the 1970 Census. The Commission on Development of Resources regards this as a major question confronting libraries, one requiring coordinated and cooperative action.

We thus have recommended to the board of the Association that a committee be appointed to deal with this subject. This committee would not be an easy one to provide a mandate for. I am sure all of us are aware of the problems. The Association needs, I believe, to address itself to this matter in a formal fashion. I would propose that the committee once established should most appropriately be assigned to the Commission on Access to Resources rather than to the Commission on Development of Resources. This very point suggests the close inter-relationship of all five of the commissions and it is repeatedly borne in on us that the work of each affects the other four.

Now I come to my principal concern of the afternoon, the Farmington Plan. You will recall that I reported on this subject at the January meeting in Chicago. Since then a questionnaire, I think a good one, was compiled jointly by Howard Sullivan, chairman of the Subcommittee on Western Europe, and Phil McNiff, chairman of the parent Foreign Acquisitions Committee. I would like to report on the findings of this questionnaire.

To start with, the questionnaire was distributed to all ARI libraries whether or not they have Farmington Plan commitments and to all other libraries with Farmington Plan commitments. The response was extraordinarily high: two-thirds responded. Virtually 100 percent of the libraries that have Farmington Plan commitments responded. Thus, the validity of the returns is hardly to be questioned.

One of the interesting things gleaned from the returns is that there does seem to be considerable confusion among respondents as to the two aspects of the plan, coverage by subject for Western Europe, and by country for the rest of the world. Another finding of the questionnaire is that decisions to abandon Farmington Plan commitments are made on the basis of local conditions and that often these decisions are not reported to headquarters. In effect, then, the holes in the system are frequently unknown, and being unknown are not filled. This is a mark, if you please, of the kind of disintegration of the system which I think highly unattractive. There is also evidence of fairly widespread dissatisfaction among Farmington Plan libraries with respect to the operation of the plan and its results.

The dissatisfaction is based on such factors as poor selection procedures, duplication of non-Farmington Plan acquisitions on the part of particular libraries, poor service from the dealers, and, particularly important in recent years, budget restraints with respect to the acquiring of materials not needed by a library's immediate clientele.

I must repeat what I said in January, namely, that the Farmington Plan at the time of its conception and implementation was certainly one of the major undertakings and successes of this Association. It was an undertaking of really noble proportions that during the years in which it functioned successfully performed a task no other mechanism could do. The whole conception of ensuring, through the cooperative efforts of research libraries of this country, that materials of potential--and I underline potential--benefit to scholarship in the decades and even centuries to come would be in the libraries in their aggregate of this country, and would be promptly and accurately reported bibliographically to central agencies such as the National Union Catalog, was and is a unique contribution.

I think it very important now that none of us confuses this conception, the purposes and goals and aims of the Farmington Plan, with the mechanism by which it is carried out. There is considerable evidence, you see, that the mechanism which was admirable nearly thirty years ago is no longer as effective as it might be. All kinds of developments have intervened. To start with, the reconstruction of the publishing industry and the whole book trade in Europe has provided a different context within which the Farmington Plan in Western Europe has worked.

Another very important factor within the last twenty-five to thirty years has been the increase in the number of libraries seriously collecting foreign materials. Here we are speaking only about Western Europe. They have increased to such a marked degree that it is quite safe to assume that in the aggregate collecting by significant research libraries of this country publications of significance emanating from Western Europe surely will be covered to a very considerable extent.

Now to the critical question in the questionnaire. Let me quote: "Given the continued existence of the NPAC program at its present level, do you think the continuation of the Farmington Plan is necessary for all or some of the nations of Western Europe?" Please bear in mind that the returns from participants in the Farmington Plan were virtually 100 percent. The results were: yes, four; no, thirty-eight. It should be noted that nearly all of the libraries with Farmington Plan commitments are participating in the NPAC.

Finally, in summarizing the results of the questionnaire, I would report that no library in question reported itself willing to assume any of the listed assignments of significance that have lapsed. One or two said they may be willing if they had more money.

In view of the clear results of the questionnaire, it is evident to the commission that steps must be taken to forestall further disintegration of the Farmington Plan in Western Europe.

The commission, therefore, recommended to the board of directors that the Committee on Foreign Acquisitions be asked to develop procedures for a nationally based, cooperative scheme to replace the Farmington Plan, one which will ensure that the purposes of the Farmington Plan will be achieved in the changed circumstances of the 1970s and beyond.

It is very much the hope of the commission that, if the board adopts this recommendation, the Foreign Acquisitions Committee will be able to present its recommendations in sufficient time that they could be discussed fully at the meeting of the Association in January of 1973. Mr. President, I thank you.

MR. McDONALD: Thank you very much, Doug. I am sure that the membership greets this report as I do with mixed feelings. The Farmington Plan has been watchword of the library world. It's been associated in the minus of many with the ARL and I think this report, in its clarity and respectfulness, treats the latest developments with respect to the Farmington Plan as they should be treated.

We would like now to hear from Commission Number 2. Dave Kaser, chairman, will report for the Commission on Organization of Resources.

Report of Commission on Organization of Resources

MR. KASER: You will recall that in the course of the last couple of months this commission sent each of you a list of twenty-one possible activities that it could undertake within its general purview. We invited your expression of priorities as to the areas wherein the greatest need existed for further work. We had a good response and we are grateful to you for your comments.

The list, by your additions, now totals some thirty activities. Your responses have now been tabulated. There was a very substantial expression of concern in the general area of serials--and I say "general area" because it didn't concentrate on any particular aspect. You are interested in cooperative processing, union listing, and machine control and inventory, although I am sure in many of your minds many of these things are interconnected. By far, then, the highest priority was given to serials.

There also was expression of concern for machine-based catalogs for monographs and a relatively high expression of interest in the cooperative handling of data bases. The commission, in evaluating the responses to this questionnaire, has opted out on the matter of cooperative handling of data bases because, as Doug explained to you, there is ARL action on this subject on another front.

In looking at serials, we have been attempting to find a way to come to grips with this expression of concern and anxiety on your part. This is somewhat difficult to do because we can't get anywhere simply by appointing a committee to "look at serials." At the present time, we seem inclined to focus on the problem of standards for bibliographic data bases for serials.

Primarily, we sense two kinds of needs here and we have heard some discussion of them both yesterday and this morning. The first need, which I think is being well taken care of by the good work of the Library of Congress, is for high standards for a permanent serial data base.

The second need, however, stems from the likelihood that the permanent serials data base is not likely to be available soon. We need then fairly immediately a shorter but quite comprehensive serials data base against which local operating systems can be built now or very soon. This interim base will be, if possible, consistent with the high standards of the permanent base.

Many of you are in the process now of converting serial records on longer or shorter formats. I think it's the very substantial cost of this duplicate effort from library to library and agency to agency which is disquieting to all of us. The commission, therefore, would hope that through some kind of effort by the ARL the elimination of duplication of effort among us can be accomplished. We hope that this charge can be given to an appropriate committee or work group within the ARL within the next several weeks.

The commission will be meeting again next month. Between now and then I am sure that Joe Treyz, Bill Budington or I would be grateful for any comments or thoughts you might have on this subject.

MR. McDONALD: Thank you very much, Dave. We now turn to Edward Lathem, chairman of Commission Number 3, who will present his report. He is assisted on the commission by David Weber, who serves as liaison with the board of directors, and Mrs. Virginia Whitney, of Rutgers, newly appointed to this commission.

Report of Commission on Access to Resources

MR. LATHEM: Thank you, Mr. President. I'd like to begin, on behalf of the Commission on Access to Resources, by thanking the many of you who responded to our request for comments on the basic statement that we distributed in January and for identifying individuals who might be considered as having special interests or competencies in the areas pertinent to the work of this commission. We are grateful, too, to the chairmen of the three committees that existed when the new committee structure was enacted and which relate to the work of this commission. The chairmen are Arthur McAnally, Dick Chapin and Jim Henderson. They made observations and recommendations on the development of appropriate, updated, formal charges within the spheres within which these committees have acted in the past.

The commission has met twice since the first of the year. The first meeting in March consisted of, if I might style it so, the "old commission." Rudy Rogers has left the room so he will not take that as a reflection on his antiquity. We met most recently earlier this week with not the young but the new commission. Rudy was succeeded by Virginia Whitney as a member of the commission. We are attempting to concentrate on the six main program components that we identified in our basic statement to you. Some of these components seem to require commission concern only, rather than committee assignment. These include the areas of access to large data banks, access to auxiliary or deposit collections, and the access aspects of library-to-library service or networking.

In this connection, we will be meeting this afternoon with Russell Shank to devote attention to some of these areas. We have decided, however, to make three specific recommendations to the ARL board for action relating to committees.

In the area of interlibrary loan, the commission recommends and Arthur McAnally concurs that the Interlibrary Loan Committee be reconstituted and a new charge created for it.

Secondly, we recommend that the committee, heretofore known as the Availability of Resources Committee, be newly organized to consist of two distinct bodies, obviously closely related--a committee on library service to external scholars, and a committee on library service to commercial users.

Thirdly, the existing Committee on Copying Manuscripts and Unpublished Material, under the chairmanship of James Henderson, should have its charge broadened to encompass access to manuscripts, generally.

Finally, the commission has indicated to the board its readiness to supplement these recommendations with such suggestions of prospective members for committees and on possibly text for new charges to these committees as the president may require from us.

MR. McDONALD: Thank you, Ed. We now turn to Commission Number 4. Jim Haas, either because he is a vice president or a good executive or for other reasons, means to bring a little support along with him for his report. Duane Webster will be at his side. Jim is aided on the commission by Ben Bowman, who provides liaison with the board, and Dick De Genaro, Pennsylvania.

Report of Commission on Management

MR. HAAS: It's a sign of good management that we are the only commission with a staff.

The role of the Commission on Management is to promote ARL activity to improve the management process in research libraries. We see management as the process of getting from here to there, that is, it's a means rather than an end. This approach implies both a clear understanding of library objectives and assumes the availability of a wide range of alternative courses of action from which managers choose. Thus the commission works toward clarification of library objectives and seeks to promote development of new methods as well as the refinement of old ones. Above all else, we acknowledge there is no best management style or any single way to administer a library. That's our credo.

The commission is somewhat different from the other four in that it serves in a continuing capacity, for the time being, as an advisory body to the Office of Management Studies, because the program of the office is seen as a means to achieve many of the goals that the commission sees as important. But before I return to the office and turn to Duane, let me briefly note a few of the recommendations the commission has made to the board.

First, we feel the Committee on Training, which Dave Kaser chaired for several years, has carried out its function as far as it can be carried out at this point in time. We have recommended to the board, with Dave Kaser's concurrence, that the committee be discharged. The same fate has been suggested for the Committee on Security. That committee, chaired by Ben Bowman, put together a description, or a prescription, for security measures that might be taken by libraries, brought it to the Library Technology Program of the ALA, and worked to develop further the concept of a publication that would focus on this topic. The next step is to obtain funding for the study itself, but the committee sees its work done for the moment.

A topic of extreme importance to the Association is the nature of our affiliation with the American Council on Education. You will remember that three years ago, when the ARL first embarked on a broad range of management topics, we wisely, and with the help of Fred Cole and others, created a joint committee of ARL and the American Council on Education to "ride herd" on this management effort.

From the beginning that committee included five librarians and four university administrators, typically the presidents. It was an extremely useful alliance and I think the first time that there has been continuing attention to a topic of importance both to librarians and officers of

universities of which those libraries are a part. We don't want to lose that contract because there are other topics of equal or greater importance that demand this kind of attention. So we have underscored our conviction to the board that ways be found to maintain this continuing working relationship with the American Council on Education so as to get formal input from university presidents on the topics that we see as important and that they must see as important. For example, the whole question of copyright, or ownership of information, is a topic of significant consequence to both librarians and university administrators. There are a number of such topics.

You will remember that two or three years ago Rudy Rogers and Bob Blackburn and Herman Fussler put together a kind of table of specifications for a study of automation, a kind of Flexner Report as we saw it, of automation and its implications for libraries. What we have heard during the last couple of days suggests that the need for such a study still exists. We have been unable to identify a Flexner, but that topic continues high on our list. On another front, there is the whole concept of administrative or organizational capacity for collective action, what I have been calling a research library corporation.

Again, a problem that is difficult to deal with but one that needs attention is staff development. Duane will discuss this in a minute, but there is little doubt that the combination of the very nature of librarianship today coupled with the nature of higher education demand a capacity in libraries for maintaining and further developing the expertise we have which means, I am sure, some kind of continuing education process for those involved in this very complicated business of putting information to use.

Let me turn back to the Management Office. I will touch on a couple of topics and then turn to Duane. He has been running a number of workshops designed to bring together individuals from ARL libraries, concerned with one major topic or another. The budgeting process and planning process are examples. He is now in the process of putting together working sessions that will bring together personnel officers. There is also an application to the National Science Foundation for funds to support a data base study under the auspices of NELINET, and we in ARL have agreed that the Office of Management Studies would be the cooperating agency in that effort. The two principal activities of the office in recent months have been a survey of recruiting practices and staff development in research libraries, and the development of a management review and analysis manual. Those of you who participated in our discussion yesterday morning learned a great deal about those activities, and Duane will discuss them further now.

MR. WEBSTER: I believe all of you have the little brochure that describes in detail the nature of what we are doing with this management self-study approach. It contains a brief listing and outline of office interests and activities that we have been involved in this past year and a half. I hope you will look at them and react for my benefit.

I might just touch on the survey of recruitment and staff development in terms of what we are trying to do there. That survey had two purposes. First, to secure for the Management Studies Office a better understanding of current practices of member libraries in three areas: recruitment, staff development,

and minority employment. At the same time the very real intent here was to get a better feel for what your needs and requirements are in these particular areas. What we did was to complete a telephone survey of the university members. This was a bit of an experiment with the intention of getting that information without burdening you with another questionnaire.

We wanted to accomplish this survey rather quickly and I think we succeeded; it took four weeks. The telephone calls were preceded by a letter to each director explaining what we wanted to do and talk about. The responses indicated that most were willing to participate. I did find that twenty-two of the seventy-nine university members said, "Don't call. We aren't really doing that much and you wouldn't be interested in talking to us." I hope as we pursue this activity, that the other part of our intent, to get an understanding of and a feeling for your needs and requirements, will be taken into account in responses from members. We want to find out what we can do to be of assistance in these specific areas.

I thought the phone calls worked well. Again, I'd appreciate your comments on this procedure. We did cover a number of libraries in a short period of time. We spent about an hour on the phone with each library and found that in that time we gave and received much useful information. Certainly this approach is less expensive than traveling to every library.

We are in the process of preparing a brief statement of current practices in these areas. I am not sure what would be the best vehicle for distributing it. It may be the ARL Newsletter, but some document will be coming out very soon.

Now the results. The survey underscored the several topics that need attention from our office's point of view. One is the need to do something about interesting more blacks in academic librarianship. From the figures we were able to get in this survey, it is quite obvious that the number of blacks in ARL libraries is very small and the problems of getting more are very large.

Secondly, there is the topic Jim mentioned, helping libraries develop a capacity in-house for providing staff development opportunities. The survey showed that very few libraries are presently doing anything in the way of concrete organizational support for staff development programs. Of the few libraries that are--I think there are eleven--none really has a model program others could use. It seems that there is a need to provide outside assistance in stimulating interest in and providing guidance on this matter.

The third area that really needs attention is providing training for trainers. It seems this again might be something the Management Studies Office can address successfully.

MR. McDONALD: Thanks very much to both of you. One of the privileges of my position is more frequent opportunity to visit the ARL headquarters and to see the staff at work. This includes Duane Webster, who has devoted himself to his assignment in a remarkable way. I am sure Jim Haas would bear this statement out.

I want to say, before going on to talk about Commission Number 5, that every commission report to this moment has made some reference to the question of data banks. This points up a problem we are beginning to appreciate about our new commission structure, namely, the jurisdictional problem. You can understand that there are various ways to look at any topic.

Management is an all-pervasive subject, so it was natural for us to think in terms of the Management Commission when we began to consider how the Association might react to the data bank question. We had long had an interest in it and when we saw some conjunction between our interests and the procedures NELINET was putting forward, the Management Commission was brought into the picture immediately.

As Doug Bryant said, however, this could be a proper concern of Commission Number 1. Clearly it's also something Dave Kaser's commission has had an interest in as has the Ed Lathem Commission on Access. We are going to have to get a little experience and work with this sort of problem to be sure we don't get in the way of one another.

As for Commission Number 5, our Commission on External Affairs, I am happy to report, as I was not able to report at the midwinter meeting, that the membership is now established. Roy Kidman, of USC, has kindly agreed to chair the commission. Ralph Hopp is serving as a member and provides liaison with the board, and Dick Couper, president of New York Public Library, is the third member of the commission. We wish the commission well with its important work and I might say in that regard that Roy has already been asked to be familiar with the work of the Federal Relations Committee and to take up the important report prepared by the committee chaired by Carl Jackson on the recommendations of the Federal Information Resources conferences.

That report was discussed at our recent board meeting. We have asked the chairman of Commission Number 5 to chair a committee to be made up of the chairmen of the commissions plus the chairmen of the Federal Relations Committee and of the FLR Committee to refine some of the recommendations in Carl's report. The board is meeting again tomorrow and we may talk further about this subject. I think we do see ways in which to get Commission Number 5 under way. I have the feeling that it will not be long before it is abreast of the other commissions.

There is nominally a sixth commission. It is in fact your ARL Executive Committee, made up of McDonald, president, Bill Budington, vice president and president-elect, and the past president if there were such a person. In the place of that absent person, I have asked Ben Bowman to sit in with us as necessary, partly because Ben's in the East and relatively easy for us to contact if needed. He is already doing at least double duty for the Association, so I hope we don't have to call on him too often.

I wish to turn now to our hard working executive director, Steve McCarthy.

Executive Director's Report

MR. McCARTHY: Thank you, John. I think that I can follow the example that's been set this afternoon and make this rather brief. First, the higher education bill is still in conference. There are those who don't think it will emerge. One of these is apparently Edith Green, who has introduced a continuing resolution to make the legislation which is already a year beyond its normal life continue for another year.

We don't know what will happen. The reports we get on the work of the conference is that in general the Pell bill, the Senate bill, seems to be gaining acceptance over the House bill. In general terms the Pell bill was favored by the ALA and by us because it provides more advantages for libraries than does the House legislation. With respect to appropriations for next year, the amounts recommended in President Nixon's budget were approximately the same as those for this current year. There were some changes but they were not very great. We have joined with the ALA in trying to get these amounts raised. The Subcommittee on Appropriations, like most appropriations subcommittees, remains noncommittal but I expect there will probably not be any significant changes.

To turn to another aspect of some of our work in Washington, I have continued my relationship with the COSATI Panel on Library Programs, on which several ARL representatives also serve. I can tell you, and I hope this will not offend Dick Chapin, that a third conference on federal information resources is now in the planning stage. It is expected to be held next April 9th and 10th at the conference facilities of the National Bureau of Standards in Gaithersburg, Maryland. The program is in the process of formation and as information becomes available about it we will pass it on to you as quickly as possible.

The COSATI Panel held a meeting last December in Columbus, Ohio, at which it adopted a number of resolutions, some of which came out of the conference of March, 1971. One of these resolutions was that there be a thorough and objective study of the whole matter of federal government publications, the collection of materials, the organization of them and their publication and distribution.

At one point we had hopes that the National Science Foundation would finance such a study, but this has not occurred. In the meantime, the National Technical Information Service (NTIS) has been able to develop plans for a study of a part of this project. It will concern the question of user charges for federally produced information. It will deal not only with printed material but with tapes and other types of information carriers.

Bill Knox is very optimistic about this effort. I can describe the study but the specifications had not been fully worked out a week ago and yet he expects the study to be completed by January, 1973. If Mr. Knox really thinks that, and I doubt he does, I am quite sure he's the only one that expects it to be done that rapidly. I suppose if the results are available a year from

now, or even later, we will be lucky.

This investigation deals with only part of the problem. The COSATI Panel is aware of this and will continue to be concerned with the broader question to which it addressed itself last year. It's true that the NTIS is primarily concerned with establishing a reasonable basis for user charges for material produced by executive agencies. But as those of you know who may make use of the listings of the NTIS there is a great deal of overlap between the Monthly Catalog, which comes from the Superintendent of Documents, and the material listed by the NTIS.

I believe that it should be a matter of concern to us to see that the depository law and its application are not whittled down in the course of this study and any actions that may follow from it. I have been nominated to serve on the advisory committee for the study by the chairman of the COSATI Panel.

Another matter which I am pleased to mention is that the ARL has been invited by the Council on Library Resources to participate in its fellowship program for this next year. We hope that we can identify a staff member in a member library, who has an interest in some aspects of management, who might be an appropriate candidate for a fellowship. His task would consist principally of working for a period of perhaps three months with Duane Webster in the Office of Management Studies.

We believe that this could benefit the library from which this person would come by exposing him to an investigatory job in the management area. We believe it could also add to the productiveness of the Management Office. I would solicit from any and all of you the names of promising young people with this interest who might qualify for this CRL fellowship.

One might suppose that at a library conference at this point in time there would be a great deal of discussion of copyright. There hasn't been because in some respects there is not a great deal to report. Just briefly on the Williams and Wilkins case, because the ARL has devoted so much staff time and money to this question that I think a brief report is due you. Of course, you all know about the Davis Report and you know that there has been no legal action subsequent to it. There has been, however a good deal of discussion and a fair amount of activity. The schedule as we know it now is that the Justice Department will file its exceptions to the Davis Report on June 2nd. However, the Justice Department, in keeping with its customary practice, will request an extension of time. How long that extension will be, no one knows at this time. We have been able to learn that it depends on how much progress Justice makes in developing its document. It may be two weeks or a month.

The exceptions then go to the judges of the Court of Claims. There is again a period of time in which the plaintiff can respond, a period of thirty or forty-five days. In the interim, between the time the Justice Department files its exceptions and the plaintiff responds, amicus briefs are to be filed. These briefs are being prepared. We don't know how many there will be. The ALA will be filing one and the ARL has a brief in preparation. We hope to have as cosponsors the same organizations that joined with us a year ago, the Medical Library Association and the American Association of Law Libraries. It's possible that the Special Libraries Association will also join us. An effort also has been made to get organizations that are not library organizations to file briefs, and we have pretty strong assurance right now that the NEA, the American Council of Learned Societies and the Association of American

Medical Colleges will file amicus briefs. We also are trying to get user groups to express their concern.

In order to keep abreast of developments, I spend a fair amount of time attending meetings about copyright. I am now formally aligned with three groups on copyright, and an ad hoc committee convened by the NEA. There is yet another group which I call the "Fraze Group" because Bob Fraze is responsible for bringing it together.

In the latter group, I am going into the camp of the enemy and I realize there are some dangers in that. Some of the people, for instance, on the NEA ad hoc committee will not go to the other meeting because they are afraid they will be used, and that is a possibility. I think, however, someone has to go and listen to the thinking of the publishers so as to try to cope with it as best one can. Many of these discussions seem to no purpose, but I suppose it's also good to keep on talking and that is what we are doing.

With respect to the copyright revision bill, the expectation is that the earliest it could be passed would be 1974. The solution to this whole problem, as Fred Burkhardt mentioned yesterday, involves the inclusion of an appropriate definition of fair use in the new legislation. Don't ask me what that definition is. As you may remember from Commissioner Davis's report, although four criteria or four qualities have been identified which enter into any decision about fair use, Commissioner Davis brushed three of them aside and settled on only one. He, therefore, found that Williams and Wilkins has suffered at the hands of the NLM and the NIH. I don't know how many of us will be around when the copyright revision bill is finally passed. If we are, it may or may not be a great day. It depends on what's in the bill.

Thank you very much.

President's Report

MR. McDONALD: I want briefly, on behalf of the Executive Committee, to report on one or two actions taken in Thursday's board meeting. First of all, I would like to say that we discussed at some length the status of women within ARL libraries. As you know, there are at the present time on-going efforts by the Office of Civil Rights and, in particular, its contract compliance specialists or affirmative action specialists to consider the situation of women on many campuses.

We don't know as much about the status of women in our libraries as we might. We see ways in which we might secure additional information as we did in the area of minority employment opportunities not long ago. As a step in the direction of sharing information with you and securing information from you, we will be distributing through the office a copy of the recent ACE special report entitled, "Sex Discrimination and Contract Compliance." I think this document, if you have not seen it, will be interesting and useful to you all. Steve, is there more I should say on this matter at this point?

MR. McCARTHY: Just briefly, the suggestion was made in the board meeting the other day that the Management Office attempt to collect samples of affirmative action plans, put them together in some kind of document, and make them available to the membership, with the thought that many of you may be faced with the preparation of similar plans on your own campuses. Duane will be addressing himself to that task--along with a few other things.

MR. McDONALD: The telephone survey that Duane has been conducting has resulted in a good deal of information on this subject. Duane can go through his records and determine which of you indicated that you were paying some attention to this matter already. He may come back to you for more information.

I'd like to say a word to the Association about the International Federation of Library Associations. You will remember that Bob Vosper, who is currently vice president of the IFLA, has been attempting to secure greater support in this country for that organization as it enlarges its scope of activities and thus is in need of stronger financial assistance.

A new dues scale is in prospect which would call for more contributions from all of the member countries. Contributions are made up of institutional dues, such as those from the ARL, ALA and other associations and dues of associate members. These are the individual libraries that hold membership. Bob sent a mailing to the ARL membership sometime back and received a gratifying response. If more information is wanted, I think it could be secured either from the ARL office or Bob Vosper.

I would say to those of you who might be aware of the jeopardy in which the IFLA seemed to be, because of the UNESCO requirement that its nongovernmental organizations clear themselves of any association with countries practicing racial discrimination or apartheid, that the matter seems to have been resolved without difficulty. The IFLA has assured UNESCO that it is not involved and none of its members is involved in practices which are prescribed by UNESCO.

The board has considered future ARL meetings in light of the questionnaire sent to you some time ago. You will remember that the membership expressed a preference for a two-day meeting in the spring to be held at a resort-like location. The board has some doubt as to whether you're firm in that resolve. Many people have spoken of the importance of good transportation, which a city like Atlanta fully provides. We would be interested in knowing whether you consider this kind of meeting situation a reasonable competitor to the Broadmoor in Colorado Springs.

How many of you feel this is a tolerable alternative? May I have a show of hands? I think your response means the overwhelming enthusiasm for Colorado Springs may still be there but that we needn't be bound absolutely by it. It's a good thing, too, because we have already determined that Colorado Springs is not available at this time next year.

I should say that we mean to follow up on the previous suggestion of Bob Blackburn that we might come to Toronto in '73. Hopefully, the new library there would be available for us to see.

At Colorado Springs I made a fairly lengthy report to you and, among other things, I asked for your support and active help with the work of the Association, either as program participants or as members of ARL committees or commissions. I am pleased to say that your response has been outstanding. I really have had the finest sort of cooperation throughout my term of service and I am most grateful.

There will be new appointments to be made because there are several committee posts to be filled and our commission structure calls for annual appointments. I hope that the sort of support you have been providing can be continued, and I urge any representative who has an interest in serving in any way to let that interest be known either to me or to the headquarters staff.

I have only one substantive matter to mention at this time. I've been concerned since taking office with what I perceive to be the growing size and work of the Association. I do mean to bring to the attention of the ARL board tomorrow the possibility that the staff of the Association may need to be enlarged.

Despite Steve McCarthy's enormous energy and despite the excellent support provided him by Lou Martin, our new structure and our larger size carry with them some implications for the office. I have talked with Steve about this so my comments come as no surprise to him. They may be a bit of a surprise to board members but I think they would agree this is something that ought to be shared with the membership at the earliest opportunity.

If any of you has ideas on this subject, I would certainly be happy to hear from you. I don't mean to imply in anything I say that this term has been anything but highly satisfactory insofar as my relations with the ARL office are concerned. Steve continues to do a remarkable job of keeping the elected officers on the right track, and believe me we can go pretty far afield without him and without Lou.

I want to remind you that our next meeting will be in Washington, D. C., not in Chicago. I believe it's on January 27th. It immediately precedes the midwinter meeting of the ALA which will be there as well. I hope to see all of you at that time.

I now declare the 80th Meeting of the Association adjourned. Thank you.

[Thereupon the meeting was adjourned at 3:45 p.m., on Saturday, May 13, 1972.]

* * * * *

APPENDIX A

PROPOSED AMENDMENT TO THE BYLAWS
OF
THE ASSOCIATION OF RESEARCH LIBRARIES

Strike all of Article II and substitute the following:

ARTICLE II--Membership

Section 1--Member Institutions:

Membership in the Association shall be on an institutional basis. On invitation of the Association membership shall be open to major university libraries whose collections and services are broadly based and to certain other libraries whose collections are recognized as having national significance. Major university libraries are considered to be those whose parent institutions broadly emphasize research and graduate instruction at the doctoral level and grant their own degrees, which support large, comprehensive research collections on a permanent basis, and which give evidence of an institutional capacity for and commitment to the advancement and transmittal of knowledge.

Invitations to other libraries shall be issued at the initiative of the Board of Directors after approval of the membership.

Section 2--Qualifications for Membership:

Qualifications for membership are established by vote of the members and are reviewed from time to time. The Regulations in effect at any given time are available on request from the office of the Association.

Section 3--Termination of Membership:

Regulations for the termination of membership are established by vote of the members and are reviewed from time to time. The Regulations in effect at any given time are available on request from the office of the Association.

Section 4--Transfer of Membership:

Membership in the Association is not transferable or assignable.

APPENDIX B

B Y L A W S

OF

THE ASSOCIATION OF RESEARCH LIBRARIES

ARTICLE I - Offices.

The principal office of the Association shall be located in the office of the Executive Director. The Association may have such other offices as the Board of Directors may determine, or as the affairs of the Association may require from time to time.

ARTICLE II--Membership

Section 1--Member Institutions:

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Section 4--Transfer of Membership:

Membership in the Association is not transferable or assignable.

ARTICLE III - Board of Directors.

Section 1 - Board of Directors:

There shall be a Board of Directors which shall manage the affairs of the Association. The number of Directors shall be not less than nine nor more than twelve. The President, Vice-President, and Immediate Past President of the Association shall be members of the Board. Directors shall be elected for terms of three years, three to be elected annually as provided in Article IV. Each Director shall be chosen from among the chief librarians representing member institutions of the Association. Each Director shall take office at the close of the Annual Meeting at which he is elected and shall serve until the end of the Annual Meeting held at the close of his term of office. Notwithstanding any other provision contained in these Bylaws, an officer of the Association who is serving as a member of the Board of Directors may continue to serve as a member of the Board until the expiration of his term as officer despite the fact that his normal, three-year term as Director may have expired. Any vacancy arising in the Board of Directors shall be filled by the Board of Directors, the appointee to serve until the next Annual Meeting, when a successor for the unexpired term shall be nominated and elected by the members of the Association.

Section 2 - Quorum and Action:

A majority of the members of the Board of Directors shall constitute a quorum. Action by the Board of Directors shall be by majority vote of the Directors present except that, as provided in Article V, Section 4 of these Bylaws, election of the Vice-President shall be by the vote of an absolute majority of the total membership of the Board.

Section 3 - Notice of Meetings:

A regular meeting of the Board of Directors shall be held without other notice than this Bylaw, after the Annual Meeting of the Association, either on the same day thereof, or on the next

succeeding day thereafter, at the time and place announced by the President at the Annual Meeting. The Board of Directors may provide by resolution the time and place for the holding of additional regular meetings of the Board of Directors without other notice than such resolution. Special meetings of the Board of Directors may be called by or at the request of the President or any two Directors. Notice of any special meeting of the Board of Directors shall be given at least ten days previously thereto by written notice delivered personally or sent by mail or telegram to each Director at his address as shown by the records of the Association. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, with postage thereon prepaid. If notice be given by telegram, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company. Notice of a meeting need not be given to any Director who signs a waiver of notice whether before or after the meeting, or who attends the meeting without protesting, prior thereto or at its commencement, the lack of notice to him. The business to be transacted at, and the purpose of, any special meeting of the Board of Directors shall be specified in the notice or waiver of notice of such meeting.

ARTICLE IV - Nominations and Elections of the Board of Directors.

Section 1 - Nominating Committee:

There shall be a nominating committee of three persons one to be the Vice-President who shall serve as chairman of the Nominating Committee; and two persons to be appointed annually by the President of the Association.

Section 2 - Nominations:

It shall be the duty of the Nominating Committee to select annually a slate of five nominees for the Board of Directors. No Director, having served a full three-year term, may be nominated to succeed himself. The consent of the candidates to serve if elected must be obtained before nominations are accepted. The report of the nominating committee shall be distributed to the members at least thirty days before the election.

Additional nominations may be made from the floor.

Section 3 - Elections of the Board:

Each member may vote for not more than three nominees, except for the election of a successor for an unexpired term.

The three candidates receiving the highest number of votes shall become members of the Board for three-year terms.

ARTICLE V - Officers.

Section 1 - Officers:

The officers of the Association shall be a President, a Vice-President, an Immediate Past President, and an Executive Director. The officers, except the Executive Director, shall serve for terms of one year each. The Vice-President shall automatically succeed to the Presidency at the end of his term as Vice-President. The President shall preside at meetings of the Association and of the Board of Directors. The President shall perform all duties incident to his office and such other duties as may be prescribed by the Board of Directors. In the absence of the President or in event of his inability or refusal to act, the Vice-President shall perform the duties of the President and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The Vice-President shall perform such other duties as from time to time may be assigned to him by the President or by the Board of Directors. The officers shall have and may exercise all the powers of the Board of Directors between meetings of the Board, when necessary. Their action shall be subject to subsequent ratification by the Board of Directors.

Section 2 - Executive Director:

There shall be an Executive Director of the Association, appointed by the Board of Directors, who shall serve at its pleasure. The Executive Director shall serve as Director of the Association but shall not be a member of the Board of Directors. He shall also serve as Treasurer of the Association and shall be bonded.

Section 3 - Duties of the Executive Director:

The Executive Director shall be in charge of the principal office of the Association and its personnel; he shall conduct the Association's administrative affairs; he shall be responsible for the execution of all orders of the Board of Directors; he shall prepare an annual budget and carry out the activities provided for in the budget as adopted by the Board of Directors; he shall have charge and custody of and be responsible for all funds and securities of the Association; he shall receive and give receipts for moneys due and payable to the Association from any source whatsoever and deposit all such moneys in the name of the Association in such depositories as shall be selected by the Board of Directors; he shall see that all notices are duly given in accordance with these Bylaws or as required by law; he shall keep a register of the post office address of each member which shall be furnished to the Executive Director by such member; he shall keep all minutes, and issue minutes and reports as required by the Board of Directors; he shall perform such other duties as from time to time may be assigned to him by the Board of Directors.

Section 4 - Vice-President:

The Vice-President shall be chosen from among members of the Board of Directors. Notwithstanding Article III, Section 2 of these Bylaws, he shall be elected by the vote of an absolute majority of the total membership of the Board. In the event that no one candidate for Vice-President receives an absolute majority in the first election, there shall be a run-off election between the two candidates receiving the highest number of votes, and that candidate receiving a majority in the run-off election shall be elected Vice-President. In the event the run-off election results in a tie, additional elections shall be conducted until one candidate receives a majority.

ARTICLE VI - Meetings.

Section 1 - Annual and Special Meetings:

There shall be an Annual Meeting of the Association at a time and place to be determined by the Board of Directors. The Association may meet at such other times and places as may be determined by the Board of Directors.

Section 2 - Notice of Meetings:

Written or printed notice stating the place, day and hour of any meeting of the Association shall be delivered, either personally or by mail, to each member entitled to vote at such meeting, not less than ten nor more than fifty days before the date of such meeting, except as otherwise required by law or by these Bylaws, by or at the direction of the Board of Directors, the President or the Executive Director. When a meeting is adjourned to another time or place, it shall not be necessary to give any notice of the adjourned meeting if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken, and at the adjourned meeting any business which might have been transacted on the original date of the meeting may be transacted. In case of a special meeting or when required by law or by these Bylaws, the purpose or purposes for which the meeting is called shall be stated in the notice. If mailed, the notice of a meeting shall be deemed delivered when deposited in the United States mail addressed to the member at its address as it appears on the register of members, with postage thereon prepaid.

Section 3 - Quorum and Action:

A majority of the total membership shall constitute a quorum for the transaction of business, and an affirmative vote of a majority of the members voting, but not less than one-third of the total membership, shall be sufficient except as otherwise required by law or by these Bylaws.

Section 4 - Voting:

Each member shall be entitled to one vote on each matter submitted to a vote of the members. A member shall be represented in proxy by its chief librarian, or in his absence, by its associate or one of its assistant librarians. Voting may be by proxy or by mail or by a combination thereof.

Section 5 - Parliamentary Procedures:

The conduct of meetings shall follow Robert's Rules of Order.

ARTICLE VII - Committees.

In addition to the Nominating Committee, such other standing and ad hoc committee as may be needed to carry out the business of the Association may be appointed by the Board of Directors.

ARTICLE VIII - Dues .

Section 1 - Fixing of Dues:

Membership dues shall be proposed by the Board of Directors and shall require approval by an affirmative vote of a majority of the total membership of the Association after due notice.

Section 2 - Forfeiture of Membership for Failure to Pay Dues:

A member failing to pay dues for two successive years shall automatically forfeit membership in the Association.

ARTICLE IX - Contracts, Checks, Deposits and Funds.

Section 1 - Contracts:

The Board of Directors may authorize any officer or officers, agent or agents of the Association, in addition to the officers so authorized by these Bylaws, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Association and such authority may be general or confined to specific instances.

Section 2 - Checks, Drafts, etc:

All checks, drafts or orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Association, shall be signed by such officer or officers, agent or agents of the Association and in such manner as shall from time to time be determined by resolution of the Board of Directors. In the absence of such determination by the Board of Directors, such instruments shall be signed by the Executive Director and counter-signed by the President or Vice-President.

Section 3 - Deposits:

All funds of the Association shall be deposited from time to time to the credit of the Association in such depositories as the Board of Directors may select.

Section 4 - Gifts:

The Board of Directors may accept on behalf of the Association any grant, contribution, gift, bequest or device for the general purposes or for any special purpose of the Association.

ARTICLE X - Books and Records.

The Association shall keep correct and complete books and records of account and shall also keep minutes of the proceedings of its members, Board of Directors and committees having any of the authority of the Board of Directors, and shall keep at the principal office a register giving the names and addresses of the members entitled to vote. All books and records of the Association may be inspected by any member, or his agent or attorney for any proper purpose at any reasonable time.

ARTICLE XI - Fiscal Year.

The fiscal year of the Association shall be the calendar year.

ARTICLE XII - Waiver of Notice.

Notice of meeting need not be given to any member who signs a waiver of notice, whether before or after the meeting. The attendance of or voting by any member at a meeting, without protesting, prior thereto or at its commencement, the lack of notice of such meeting, shall constitute a waiver of notice by such member.

ARTICLE XIII - Amendments.

Amendment of these Bylaws requires an affirmative vote of a majority of the total membership of the Association, at any meeting of the Association, provided that notice of such meeting and

the proposed amendment has been given in writing at least thirty days in advance of the meeting by the Executive Director with the approval of the Board of Directors.

ARTICLE XIV - Dissolution.

Upon dissolution of the Association, the assets of the Association shall be applied and distributed as follows:

- a. All liabilities and obligations of the Association shall be paid, satisfied, and discharged, or adequate provision shall be made therefor;
- b. Assets held by the Association upon condition requiring return, transfer, or conveyance, which condition occurs by reason of the dissolution, shall be returned, transferred, or conveyed in accordance with such requirements;
- c. Assets received and held by the Association subject to limitations permitting their use only for literary, educational, scientific, or similar purposes, but not held upon a condition requiring return, transfer, or conveyance by reason of the dissolution, shall be transferred or conveyed to one or more organizations exempt from income tax as organizations described in section 501(c)(3) of the Internal Revenue Code having as and pursuing purposes substantially similar to those of the Association, pursuant to a duly adopted plan of distribution;
- d. Any remaining assets shall be distributed to one or more organizations exempt from income tax as organizations described in section 501(c)(3) of the Internal Revenue Code for any one or more literary, educational, or scientific purpose or purposes, or to the federal government, or to a state or local government, for a public purpose, pursuant to a duly adopted plan of distribution, or by a court to one or more such organizations to be used in such manner as in the judgment of the court will best accomplish the purposes for which the Association was organized.

Adopted January 28-29, 1962.

Amended June 22, 1968.

Amended January 17, 1971.

APPENDIX C

JOINT STATEMENT ON FACULTY STATUS OF COLLEGE AND UNIVERSITY LIBRARIANS

[The following statement has been drafted by the Joint Committee on College Library Problems, a national committee representing the Association of College and Research Libraries, the Association of American Colleges, and the American Association of University Professors. It is being referred to the appropriate committees and commissions of these three organizations for consideration and possible joint adoption.]

As the primary means through which students and faculty gain access to the storehouse of organized knowledge, the college and university library performs a unique and indispensable function in the educational process. This function will grow in importance as students assume greater responsibility for their own intellectual and social development. Indeed all members of the academic community are likely to become increasingly dependent on skilled professional guidance in the acquisition and use of library resources as the forms and numbers of these resources multiply, scholarly materials appear in more languages, bibliographical systems become more complicated, and library technology grows increasingly sophisticated. The librarian who provides such guidance plays a major role in the learning process.

The character and quality of an institution of higher learning are shaped in large measure by the nature of its library holdings and the ease and imagination with which those resources are made accessible to members of the academic community. Consequently, all members of the faculty should take an active interest in the operation and development of the library. Because the scope and character of library resources should be taken into account in such important academic decisions as curricular planning and faculty appointments, librarians should have a voice in the development of the institution's educational policy.

Librarians perform a teaching and research role inasmuch as they instruct students formally and informally and advise and assist faculty in their scholarly pursuits. Librarians are also themselves involved in the research function; many conduct research in their own professional interests and in the discharge of their duties.

Where the role of college and university librarians, as described in the preceding paragraph, requires them to function essentially as part of the faculty, this functional identity should be recognized by granting of faculty status. Neither administrative responsibilities nor professional degrees,

titles, or skills, per se, qualify members of the academic community for faculty status. The function of the librarian as participant in the processes of teaching and research is the essential criterion of faculty status.

College and university librarians share the professional concerns of faculty members. Academic freedom, for example, is indispensable to librarians, because they are trustees of knowledge with the responsibility of insuring the availability of information and ideas, no matter how controversial, so that teachers may freely teach and students may freely learn. Moreover, as members of the academic community, librarians should have latitude in the exercise of their professional judgment within the library, a share in shaping policy within the institution, and adequate opportunities for professional development and appropriate reward.

Faculty status entails for librarians the same rights and responsibilities as for other members of the faculty. They should have corresponding entitlement to rank, promotion, tenure, compensation, leaves and research funds. They must go through the same process of evaluation and meet the same standards as other faculty members.¹

On some campuses, adequate procedures for extending faculty status to librarians have already been worked out. These procedures vary from campus to campus because of institutional differences. In the development of such procedures, it is essential that the general faculty or its delegated agent determine the specific steps by which any professional position is to be accorded faculty rank and status. In any case, academic positions which are to be accorded faculty rank and status should be approved by the senate or the faculty at large before submission to the president and to the governing board for approval.

With respect to library governance, it is to be presumed that the governing board, the administrative officers, the library faculty, and representatives of the general faculty will share in the determination of library policies that affect the general interests of the institution and its educational program. In matters of internal governance, the library will operate like other academic units with respect to decisions relating to appointments, promotions, tenure, and conditions of service.²

1 Cf. 1940 Statement of Principles on Academic Freedom and Tenure; 1958 Statement on Procedural Standards in Faculty Dismissal Proceedings; 1972 Statement on Leaves of Absence.

2 Cf. 1966 Statement on Government of Colleges and Universities, formulated by the American Council on Education, American Association of University Professors, and Association of Governing Boards of Universities and Colleges.

The Joint Committee:

Marvin B. Perry, Jr., President, Goucher College, Chairman
Richard Barber, Dean, University of Louisville
Leslie H. Fishel, Jr., President, Heidelberg College
Eric Wormald, Vice President, AAC
Wyman Parker, Librarian, Wesleyan University
Gerald B. Hubble, Director, Library, Stephens College
Louella R. Pollack, Librarian, Reed College
J. Donald Thomas, Executive Secretary, ACRL
Martha Friedman, Librarian, University of Illinois
Henry T. Yost, Biology, Amherst College
Henry L. Mason, Political Science, Tulane University
Robert Van Waes, Associate Secretary, AAUP

Revised April 26, 1972

APPENDIX D

REPORT OF THE COMMITTEE ON STATISTICS

At its January 22, 1972, meeting in Chicago, ARL's membership approved adoption of the Membership Committee's recommendations regarding criteria for membership in the ARL. Briefly summarized, these included:

1. Membership review of criteria every two years.
2. Automatic invitation to membership for any library whose published statistics meet admission criteria and which wishes to join.
3. Expansion of ARL Statistics to include:
 - a. "...serial and journal" titles currently subscribed to.
 - b. Number of PhDs awarded annually.
 - c. Number of fields in which PhDs are awarded.
4. Automatic admission when, over a three-year period, an average of over 50 percent of the current median of eight key ARL statistics and a 40 percent average of the proposed statistics regarding PhDs are maintained.
5. Ten key statistics: Volumes held, volumes added, professional FTE's, total FTE's, expenditures for materials and binding, expenditures, for salaries and wages, total operating expenditures current serial and journal titles, number of PhDs awarded, number of fields in which PhDs are awarded.
6. Membership maintenance dependent upon a library's not falling below 40 percent of the median of any of the first eight key statistics over four consecutive years or below 30 percent of the median of the last two.

Two other recommendations provided for admission in special cases and for appropriate bylaw amendment.

Since the criteria for admission adopted by the membership include three categories of statistics not currently reported in those that the ARL collects, it is necessary to consider practical definitions of them for inclusion in the 1971/72 report. Accordingly, a Committee on Statistics was formed and charged to prepare "...definitions of the statistical items which constitute the criteria for membership in the ARL, as set forth in the report of the Membership Committee and adopted by the ARL at its January 22 meeting Chicago."

With this charge and an August deadline for collecting 1971/72 statistics in mind, your Committee on Statistics met at ARL headquarters for an all-day session on April 7. As a result, it appeared to the committee that, given the August deadline and the newly adopted provision that criteria for admission to the ARL be reviewed by its membership every two years, the job at hand would be to formulate workable definitions; to present them at Atlanta for membership

comment; and, if they proved generally acceptable, to refine them subsequently along lines suggested by the membership for the required two-year membership review.

Accordingly, the Committee on Statistics recommends:

1. That ARL's statistics questionnaire for 1971/72 be altered only by adding three items: Under "Collections," as Item 11, the total of currently received serials and journals would be required. Under a new heading, "PhDs, Number of Degrees and Fields," Item 22 would be, "Number of PhDs Awarded," and Item 23 would be "Number of Fields in Which PhDs Are Awarded."
2. That reporting libraries continue the practice of footnoting exceptions, since, at least at this time, similarity is exceeded only by variation in library statistics.
3. That with regard to the terms, "Serials and Journals," reporting libraries consider following a 1970 UNESCO Conference recommendation for promoting the international standardization of library statistics, that the term, "Periodicals," be used and defined as follows:

Periodicals: Publications constituting one issue in a continuous series under the same title published at regular or irregular intervals, over an indefinite period, individual issues in the series being numbered consecutively or each issue being dated. Newspapers as well as publications appearing annually or less frequently are included in the definition.

4. That, with regard to fields in which PhDs are awarded, reporting libraries use as a standard the fields listed in the form which the Department of Health, Education, and Welfare requires institutions of higher education to fill out: Referred to as the HEGIS Report, its official title is Higher Education General Information Survey, Students Enrolled for Advanced Degrees, Fall, 1971. It is designated E Form-2300-2.5, 3/71.

With these recommendations, your Committee on Statistics believes that:

1) ARL's statistics questionnaire can be held to one page; 2) utilizing the HEGIS Report is a readily available and practical means for reporting on PhD fields; 3) adopting the UNESCO-recommended definition of Periodicals to account for serials and journals merits serious consideration; 4) the practice of accounting for differences, variations, and exceptions by footnoting continues to be necessary pending establishment of acceptable standards; and 5) with general acceptance of its recommendations, the deadline for ARL's statistics reporting can be met, and a basis will have been set for subsequent refinement and for the two-year review of admission criteria by the membership now required in the bylaws.

Gustave Harrer
John Heussman
Ben Bowman, chairman

May 13, 1972

APPENDIX E

COMMISSIONS AND COMMITTEES OF THE ARL

1. Commission on Development of Resources

Basil Stuart-Stubbs (Jan. 1973)
Cecil Byrd (Jan. 1975)
Douglas Bryant, chairman (Jan. 1974)

The Commission on Development of Resources is responsible for the following committees:

Committee on Center for Chinese Research Materials

John Isreal
Ying-mao Kau
Frederick Mote
Warren Tsuneishi
Eugene Wu
Philip McNiff, chairman

Committee on Foreign Acquisitions

Edmond Applebaum
Lloyd Griffin
James Henderson
Gordon Williams
Marion Milczewski
Philip McNiff, chairman
Chairman of Area Subcommittees:
 Louis Jacob (South Asia)
 Robert Johnson (Latin America)
 David Kaser (Southeast Asia)
 Lucien White (Eastern Europe)
 Hans Panofsky (Africa)
 David Partington (Middle East)
 Howard Sullivan (Western Europe)
 Warren Tsuneishi (Far East)
Chairman of Foreign Newspaper
 Microfilm Committee
Chairman of Shared Cataloging
 Committee

Committee on Foreign Newspaper Microfilm Project

Basil Stuart-Stubbs
Lucien White
Gordon Williams
John Lorenz, chairman

Committee on Preservation of Research Library Materials

Robert Blackburn
Douglas Bryant
Herman Fussler
Warren Haas
L. Quincy Mumford
Rutherford Rogers
Gordon Williams
James Henderson, chairman

* * * * *

2. Commission on Organization of Resources

William Eudington (Jan. 1973)
Joseph Treyz, Jr. (Jan. 1975)
David Kaser, chairman (Jan. 1974)

The Commission on Organization of Resources is responsible for the following committees:

Committee on Shared Cataloging

John McDonald
David Kaser, chairman

* * * * *

3. Commission on Access to Resources

David Weber (Jan. 1973)
Virginia Whitney (Jan. 1975)
Edward Lathem, chairman (Jan. 1974)

The Commission on Access to Resources is responsible for the following committees:

Committee on Access to Manuscripts

Roy Basler
William Bond
William Cagle
James Henderson, chairman

Committee on Data Bases

To be appointed.

Committee on Interlibrary Loans

To be appointed.

Committee on Library Services to Commercial Users

To be appointed.

Committee on Library Services to External Scholars

To be appointed.

* * * * *

4. Commission on Management of Research Libraries

Ben Bowman (Jan. 1974)
Richard De Gennaro (Jan. 1975)
Warren Haas, chairman (Jan. 1973)

The Commission on Management of Research Libraries is responsible for the following committees:

ARL-ACE Committee on University Library Management

Willard Boyd, President, University of Iowa
Douglas Bryant
Allan Cartter, Carnegie Foundation
Herman Fussler
Howard Johnson, Chairman of the Corporation, Massachusetts Institute of Technology
Richard Lyman, President, Stanford University
John McDonald
Robert Vosper
Stephen McCarthy, ex officio

ARL-ACRL Committee on University Library Standards

Clifton Brock
Gustave Harrer
Jay Lucker
Ellsworth Mason
John McDonald
Norman Tanis
Robert Downs, chairman

Committee on Standards for Research Libraries

Eugene Kennedy
LeRoy Ortopan
Howard Rovelstad
John Sherrod
Jerrold Orne, chairman

* * * * *

5. Commission on External Affairs

Ralph Hopp (Jan. 1973)
Richard Couper (Jan. 1974)
Roy Kidman, chairman (Jan. 1975)

The Commission on External Affairs is responsible for the following committees:

Committee on Federal Relations

Stuart Forth
W. Carl Jackson
Benjamin Powell
Rutherford Rogers
Chairman of Foreign Acquisitions Committee
Robert Vosper, chairman

Committee on Negro Academic Libraries

Arthur Hamlin
David Kaser
Frank Grisham, chairman

Committee on Recommendations of Federal Information Resources Conference

Hugh Atkinson
John Berthel
Joseph Jeffs
W. Carl Jackson, chairman

Committee on Role and Objectives of Research Libraries

Douglas Bryant
Warren Haas
W. Carl Jackson
David Kaser
Edward Lathem
John McDonald
Robert Vosper
Roy Kidman, chairman

* * * * *

6. Commission on ARL Executive Affairs (Executive Committee)

Ben Bowman
William Budington, vice president and president-elect
Stephen McCarthy, executive director
John McDonald, president, chairman

The Commission on ARL Executive Affairs is responsible for the following committees:

Committee on ARL Statistics

Gustave Harrer
John Heussman
Ben Bowman, chairman

Committee on Copyright

Howard Roveistad, chairman

Committee on Nominations

William Budington, chairman

* * * * *

- Representative on Advisory Committee to
National Translation Center (Crerar).....Joseph Shipman
- Representative on Joint Statistics
Coordinating Committee.....Harold Gordon
- Representative on Joint Committee on
Union List of Serials.....William Budington
- Representatives on COSATI Panel on Library
Programs.....Stephen McCarthy
John Berthel
W. Carl Jackson
Joseph Jeffs
- Representatives on Library of Congress
Liaison Committee for Librarians.....ARL President
ARL Vice President
ARL Executive Director
- Representative to United States Book
Exchange.....Porter Kellam
- Representative on ANSI Committee Z-39.....Jerrold Orne
- Representative on ANSI Committee Z-85.....LeRoy Ortopan

APPENDIX F

ATTENDANCE AT 80th MEETING

Members

University of Alabama Library
Joseph A. Jackson

University of Alberta Library
Bruce Peel

University of Arizona Library
Robert Johnson

Boston Public Library
Philip J. McNiff

Boston University Library
John Laucus

University of British Columbia Library
Basil Stuart-Stubbs

Brown University Library
David A. Jonah

University of California Library
(Berkeley) Eldred Smith

University of California Library
(Davis) J. R. Blanchard

University of California Library
(Los Angeles) Page Ackerman

Case Western Reserve University
Library
James V. Jones

Center for Research Libraries
Gordon R. Williams

University of Chicago Library
Stanley McElderry

University of Cincinnati Libraries
Bruce Kauffman

University of Colorado Library
Leo W. Cabell

Columbia University Libraries
Warren J. Haas

University of Connecticut Library
John P. McDonald

Cornell University Libraries
David Kaser

Dartmouth College Libraries
Edward C. Lathem

Duke University Libraries
Benjamin E. Powell

University of Florida Libraries
Gustave A. Harrer

Florida State University Library
N. Orwin Rush

Georgetown University Library
Joseph E. Jeffs

University of Georgia Libraries
W. P. Kellam

Harvard University Library
Douglas W. Bryant

Howard University Libraries
Saundra Murray

University of Illinois Library
Lucien W. White

Indiana University Libraries
Jane Flener

University of Iowa Libraries Leslie W. Dunlap	National Library of Medicine Erika Love
Iowa State University Library Warren Kuhn	University of Nebraska Libraries John W. Heussman
John Crerar Library William S. Budington	New York Public Library Richard W. Couper
Johns Hopkins University Library John H. Berthel	New York University Libraries George Winchester Stone, Jr.
Joint University Libraries Frank P. Grisham	University of North Carolina Libraries Jerrold Orne
University of Kansas Library David W. Heron	Northwestern University Libraries John P. McGowan
University of Kentucky Libraries Stuart Forth	University of Norte Dame Libraries David E. Sparks
Library of Congress John Lorenz	Ohio State University Libraries Hugh Atkinson
Louisiana State University Library T. N. McMullan	University of Oklahoma Library Arthur M. McAnally
University of Maryland Library Howard Rovelstad	Oklahoma State University Library Roscoe Rouse
University of Massachusetts Libraries Merle N. Boylan	University of Oregon Library Carl W. Hintz
Massachusetts Institute of Technology Libraries William N. Locke	University of Pennsylvania Libraries Richard De Gemaro
University of Michigan Library Frederick Wagman	Pennsylvania State University Library W. Carl Jackson
Michigan State University Library Richard Chapin	University of Pittsburgh Library Glenora Edwards Rossell
University of Minnesota Libraries Ralph H. Hopp	Princeton University Library William S. Dix
University of Missouri Library C. Edward Carroll	Purdue University Library Joseph M. Dagnese
National Agricultural Library John Sherrod	Rice University Library Richard L. O'Keefe
National Library of Canada Joseph Guy Sylvestre	

University of Rochester Libraries
Ben Bowman

Rutgers University Library
Virginia P. Whitney

Smithsonian Institution Libraries
Russell Shank

University of Southern California
Library
Roy L. Kidman

Southern Illinois University Library
Ralph E. McCoy

Stanford University Libraries
David C. Weber

State University of New York at
Buffalo Libraries
Myles Slatin

Syracuse University Library
Warren N. Boes

University of Tennessee Libraries
Richard Boss

University of Texas Libraries
Fred Folmer

Texas A&M University Library
Richard Puckett

Tulane University Library
Charles Miller

University of Utah Library
Brigham D. Madsen

University of Virginia Libraries
Ray W. Frantz, Jr.

University of Washington Library
Kenneth Allen

Washington University Libraries
Andrew J. Eaton

Wayne State University Library
Vern M. Pings

University of Wisconsin Libraries
Joseph H. Treyz, Jr.

Yale University Libraries
Rutherford D. Rogers

ARL STAFF

Stephen McCarthy.....Executive Director

Louis Martin.....Associate Executive Director

Duane Webster.....Director, Office of University Library
Management Studies

Program Participants

Douglas Beaven.....Booz, Allen & Hamilton, Inc.
Frederick Burkhardt.....Chairman, National Commission on Libraries
and Information Science (Luncheon Speaker)
Richard Chapin.....University Librarian, Michigan State University
Richard De Gennaro.....Director of Libraries, University of
Pennsylvania
William Dix.....University Librarian, Princeton University
Warren J. Haas.....Vice President and University Librarian,
Columbia University
Edward G. Holley.....Dean, Library School, University of North
Carolina
David Kaser.....Director of Libraries, Cornell University
Frederick Kilgour.....Director, Ohio College Library Center
Lawrence Livingstone.....Council on Library Resources
Ronald Miller.....Director, New England Library and Information
Network
Arthur McAnally.....University Librarian, University of Oklahoma
Frank Norwood.....Executive Secretary, Joint Council on Educa-
tional Telecommunications
Russell Shank.....Director, Smithsonian Institution Libraries
Robert Van Waes.....American Association of University Professors
Duane Webster.....Director, Office of University Library Manage-
ment Studies (ARL)
Lawrence Wilsey.....Senior Vice President, Booz, Allen & Hamilton,
Inc.

Guests

Verner Clapp.....Council on Library Resources
Fred Cole.....President, Council on Library Resources
F. Kurt Cylke.....Federal Library Committee
Ray Fry.....Office of Education
W. David Laird.....University of Utah Library
Keyes Metcalf
Foster Mohrhardt.....Council on Library Resources
Carl Spaulding.....Council on Library Resources
Charles Stevens.....Director, National Commission on Libraries
and Information Science
Morgan Temple.....Case Western Reserve University Libraries
Edward Weiss.....National Science Foundation

Members Not Represented

Linda Hall Library
McGill University Library
New York State Library
St. Louis University Library
Temple University Library
University of Toronto Libraries
Washington State University Library

APPENDIX G

SEIDMAN & SEIDMAN *Certified Public Accountants*

OFFICES THROUGHOUT THE UNITED STATES

OTHER PARTS OF WORLD
BINDER-SEIDMAN-THORNE INTERNATIONAL GROUP

1200 EIGHTEENTH STREET, N. W.
WASHINGTON, D. C. 20036

202/293-1570

January 12, 1972

Board of Directors
Association of Research Libraries
Washington, D. C.

Gentlemen:

We have examined the balance sheet (cash basis) of Association of Research Libraries as of December 31, 1971, and the related statements of cash receipts and disbursements of the general operating fund and special program funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The financial statements of the Foreign Newspaper Microform Project were examined by other public accountants whose reports have been furnished to us. Our opinion, insofar as it relates to the amounts included for this project, is based solely upon such reports.

These statements have been prepared on the cash receipts and disbursements basis, and, as a result, omit material assets and liabilities. Accordingly, they do not, in our opinion, present financial position and results of operations as they would appear had generally accepted accrual basis accounting principles been applied in their preparation.

In our opinion, the accompanying balance sheet at December 31, 1971, and the related statements of cash receipts and disbursements for the year then ended present fairly the assets and liabilities arising from cash transactions and the revenues collected and disbursements made on a basis consistent with that of the preceding year.

Seidman & Seidman

ASSOCIATION OF RESEARCH LIBRARIES

BALANCE SHEET (CASH BASIS)

DECEMBER 31, 1971

ASSETS

Cash in bank and on hand	\$ 42 530
Cash in savings account	4 795
Cash held by others - agency fund	98 618
Savings certificate	211 331
Travel advances to employees	652
Deposits	<u>1 060</u>
Total	<u>\$358 986</u>

LIABILITIES

Payroll taxes withheld	\$ 1 732
Special program funds for which the Association is accountable to the grantors	<u>130 850</u>
Total liabilities	<u>132 582</u>

FUND BALANCES

Foreign Newspaper Microfilm Project agency fund	98 618
General operating fund	<u>127 786</u>
Total fund balances	<u>226 404</u>
Total	<u>\$358 986</u>

ASSOCIATION OF RESEARCH LIBRARIES

GENERAL OPERATING FUND
STATEMENT OF RECEIPTS AND DISBURSEMENTS
YEAR ENDED DECEMBER 31, 1971

51

RECEIPTS:

Dues	\$133 500
Publications	7 797
Royalties	668
Interest	27 201
Miscellaneous	<u>663</u>
TOTAL	<u>169 829</u>

DISBURSEMENTS:

Board and committee expenses	14 926
Dues	985
Equipment purchases	135
Executive secretary and staff travel	5 162
Hospitalization	1 014
Insurance and bonding	3 925
Miscellaneous	500
Payroll taxes	2 437
Periodicals and subscriptions	692
Printing	9 878
Professional fees	8 080
Postage and freight	2 031
Rent	6 222
Retirement plan	10 416
Salaries	92 411
Stationery and supplies	8 600
Telephone	<u>2 985</u>
TOTAL	170 399

Less: Administrative expenses charged to special program funds	<u>30 206</u>
	<u>140 193</u>

EXCESS OF RECEIPTS OVER DISBURSEMENTS	29 636
GENERAL OPERATING FUND BALANCE - BEGINNING	<u>98 150</u>
GENERAL OPERATING FUND BALANCE - ENDING	<u>\$127 786</u>

ASSOCIATION OF RESEARCH LIBRARIES
FOREIGN NEWSPAPER MICROFILM PROJECT AGENCY FUND
STATEMENT OF RECEIPTS AND DISBURSEMENTS
YEAR ENDED DECEMBER 31, 1971

RECEIPTS:

Dues	\$ 49 059
Sales to members and non-members	84 570
Interest	<u>525</u>

TOTAL 134 154

DISBURSEMENTS:

Audit	500
Miscellaneous	888
Newspapers and microfilm	52 095
Payroll taxes	952
Purchases for members and non-members	67 371
Salaries	18 425
Storage	280
Supplies	<u>1 162</u>

TOTAL 141 673

EXCESS OF DISBURSEMENTS OVER RECEIPTS (7 519)

FUND BALANCE - BEGINNING 106 137

FUND BALANCE - ENDING \$ 98 618

ASSOCIATION OF RESEARCH LIBRARIES

SPECIAL PROGRAM FUNDS
 STATEMENT OF RECEIPTS AND DISBURSEMENTS
 YEAR ENDED DECEMBER 31, 1971

	Center for Chinese Research Materials	Slavic Bibliographic and Documentation Center	Inter-Library Loans
RECEIPTS:			
Grants	\$100 230	\$ 55 422	\$ 12 150
Sale of publications	63 515	2 251	
Other			
TOTALS	<u>163 745</u>	<u>57 673</u>	<u>12 150</u>
DISBURSEMENTS:			
Allocated administrative expenses	10 000	10 000	334
Consulting fees		3 200	
Contractor fees			45 200
Cost of publications	76 022	6 164	
Employee benefits	7 599	6 745	
Equipment purchases	1 989		
Equipment rental			
Miscellaneous	1 032	638	77
Office expense	2 317	1 159	
Payroll taxes	2 108	1 757	
Periodicals and subscriptions	478	189	
Postage	555	561	
Printing	1 234		
Rent	6 222		
Salaries/ investigator fees	58 517		
Telephone	526		
Travel	4 265		961
TOTALS	<u>177 864</u>	<u>22 204</u>	<u>46 572</u>
EXCESS OF RECEIPTS OVER DISBURSEMENTS	(9 119)	(28 303)	(34 422)
FUND BALANCE - BEGINNING	<u>103 212</u>	<u>82 074</u>	<u>(1 817)</u>
FUND BALANCE - ENDING	<u>\$ 94 093</u>	<u>\$ 53 771</u>	<u>\$(36 239)</u>

<u>Microform Technology Project #1</u>	<u>Microform Technology Project #2</u>	<u>Preser- vation Library Material</u>	<u>Office of University Library Management Studies</u>	<u>National Serials Pilot Project</u>	<u>Total</u>
\$ 9 746	\$19 803	\$ -	\$60 000	\$61 107	\$318 458
				6	65 766
<u>9 746</u>	<u>19 803</u>	<u>-</u>	<u>60 000</u>	<u>61 113</u>	<u>384 230</u>
1 247	3 625		5 000		30 206
315	5 400		130	500	9 545
					45 200
	126		3 538	3 569	82 186
			1 023		21 577
				2 114	3 012
102	148		531		2 114
837	112		801	1 467	2 528
			464	2 071	6 693
			125		6 400
			3	8	792
				69	1 227
			792	2 275	1 303
5 696	9 666		22 128	43 177	13 483
60	114		240	944	187 898
1 784	3 976		7 883	440	2 438
<u>10 041</u>	<u>23 167</u>	<u>-</u>	<u>42 658</u>	<u>56 634</u>	<u>21 310</u>
(295)	(3 364)	-	17 342	4 479	437 912
578	-	68	5 803	(5 386)	(53 682)
<u>\$ 283</u>	<u>\$(3 364)</u>	<u>\$68</u>	<u>\$23 145</u>	<u>\$(907)</u>	<u>184 532</u>
					<u>\$130 850</u>

ASSOCIATION OF RESEARCH LIBRARIES

PROOF OF CASH
YEAR ENDED DECEMBER 31, 1971

CASH BALANCE - BEGINNING	\$391 130
ADD: Excess of receipts over disbursements:	
ARL general operating fund	29 636
Foreign Newspaper Microfilm Project Agency fund	(7 519)
Special program funds for which the Association is accountable to the grantors	(53 682)
ADD: Payroll taxes fourth quarter 1971 paid January, 1972	1 732
LESS: Payroll taxes fourth quarter 1970 paid January 1971	<u>(2 311)</u>
CASH BALANCE - ENDING	<u>\$358 986</u>

Association of Research Libraries.

Minutes of the meeting. 1st-

Dec. 1932-

(Princeton, N. J., etc.)

v. 28 cm.

Meetings are numbered irregularly: 9th-10th, 12th called respectively: 10th-11th, 13th.

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