DOCUMENT RESUME

ED 238 439 IR 050 558

TITLE Two Reports on Research Libraries. Forum I: Toward

the 21st Century: An Agerda for Research Libraries and Their Users (Racine Wiscorsin, December 8-10, 1982). Forum II: National and Regional Aspects of Collecting and Preserving Library Materials (Wye

Plantation, Maryland, October 10-12, 1983).

INSTITUTION Council on Library Resources, Inc., Washington,

D.C.

PUB DATE Nov 83 NOTE 50p.

PUB TYPE Collected Works - Conference Proceedings (021) --

Viewpoints (120)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Academic Libraries; Information Dissemination;

*Library Acquisition; *Library Cooperation; *Preservation; Publishing Industry; *Research

Libraries; Shared Services

IDENTIFIERS Information Technology; Resource Sharing

ABSTRACT

Reports are presented from two meetings on research libraries that brought together individuals concerned with the process of scholarly communication. Libraries were the central topic of both meetings, but they were considered as part of a system that also includes book and journal publishing, the obligations and concerns of university administrations, the needs of scholarly disciplines, and the guidance of foundations. Forum I was intended to identify and explore primary issues needing national attention while Forum II focused on national and regional library cooperation in collection development and preservation. A summary of discussion from Forum I focuses on the future of research libraries and the possible need for fundamental library changes to cope with rapidly changing publishing and information service systems. Topics discussed include bibliographic services, shared resources, preservation, technology, library economics, and professional education. A background paper for Forum II by Walter J. Haas outlines the purpose of the meeting and the case for a planned approach to collection development and preservation. The paper also lists questions for discussion related to bibliographic information, library collections, cooperative collecting, and preservation. A summary of conclusions on the national aspects of collection development, the preservation of library materials, and related issues is also presented. The agenda and list of participants are provided for each forum. (Author/ESR)



TROSOSS &

U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION

EDC (ATIONAL RE - ROES INFORMATION CEN (19) (ERIC)

- This document has been reproduced as expected from the person of a percention organization. The decidence of the percention of the percention.
- Posts track in process tendent solution mention of a meaning increase to the actual post in in poses.

TWO REPORTS ON RESEARCH LIBRARIES

Forum 1

Toward the 21st Century: An Agenda for Research Libraries and Their Users

December 8-10, 1982

Forum II

National and Regional Aspects of Collecting and Preserving Library Materials
October 10-12, 1983

Council on Library Resources, Inc.

Washington, D.C.

November 1983

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jane Rosenberg

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Table of Contents

	Page
Preface	3
Forum I Agenda	6
Forum I _ist of Participants	7
Forum I Summary	9
Forum II Agenda	24
Forum II List of Participants	25
Forum II Background Paper	27
Forum II Conclusions	41



Reports from two meetings on research libraries are included in this document. Both Forums brought together individuals concerned with the process and well-being of ucholarly communication. While libraries were the central topic, they were considered as part of the system that begins and ends with research and scholarship and includes, along with libraries, book and journal publishing, the obligations and concerns of university administrations, the needs of the scholarly disciplines, and the supportive guidance of privite and public foundations.

Forum I, held in early December 1982, served to enhance communications among individuals representing diverse interests. The intent of the discussion was to identify and explore the primary issues needing attention if scholarship is to be well served during the years ahead as libraries transform themselves (and are transformed) by technological change of unprecedented dimension and the new economic realities induced by that technology, by additional user expectations, and by fundamental restructuring of library service and information systems. The agenda for the meeting, a listing of participants, and a summary of conclusions are included. Much longer papers prepared by five task forces, which served to give all participants a common basis for the discussions themselves, are not reproduced here.

The second Forum, held during October 1983, was narrower in scope but no less useful in stimulating discussion and encouraging action. While there was, intentionally, some overlap of participants with Forum I, this was essentially a new group. In addition to the agenda and list of participants, a background paper and the summary of conclusions are included.



We anticipate that there will be additional Forums on other topics during the next year or two. While such meetings cannot assure action, they can promote it by encouraging organizations and individuals to act. Most important, they underscore the facts that libraries are an inseparable part of the nation's intellectual life and activity and that how libraries shape their future is as important to their ultimate success as what they do.

The Association of American Universities and the American Council of Learned Societies have joined CLR in sponsoring the Forums. Funding has come from the Andrew W. Mellon Foundation, the Carnegie Corporation, the Johnson Foundation, and the National Endowment for the Humanities.



ن

Forum I
Toward the 21st Century

Wingspread
Racine, Wisconsin
December 8 - 10, 1982



Toward the 21st Century A Meeting on Research Libraries and Their Users

Wingspread Racine, Wisconsin December 8 - 10, 1982

AGENDA

Wednesday, December 8

Chairman: Melvin A. Eggers

- 1. The expectations of scholars for library resources and services.

 John William Ward.
- 2. Innovation: conditions for success. John E. Sawyer.

Thursday, December 9

Chairman: Warren J. Haas

9:00 a.m. - 12:00 noon

Morning session

- 1. Resources for research: cooperative methods to meet national needs.

 Oscar Handlin.
- 2. The preservation corollary to collecting. David Stam.

1:30 p.m. - 4:30 p.m.

Afternoon session

- 1. Bibliographic services for users. Patricia Battin.
- 2. Technology in the future of scholarly communication. Richard Cyert.

Friday, December 10

9:00 a.m. - 11:30 a.m.

Final session followed by lunch

- 1. Establishing an agenda for action.
 - o Which matters should get initial attention?
 - o What approaches seem most promising?
 - o Who should assume responsibility?
 - o Who should help?
- 2. How can continuity of attention and effort be maintained?

This meeting is sponsored by the Association of American Universities, the American Council of Learned Societies, the Council on Library Resources, and the Johnson Foundation. The meeting itself and the preliminary work of the organizers and their task forces have been supported by the Andrew W. Mellon Foundation, the Carnegie Corporation, and the National Endowment for the Humanities.



Millicent D. Abell Director, University Libraries University of California, San Diego

Hugh C. Atkinson University Librarian University of Illinois

Patricia Battin President Research Libraries Group (Columbia University)

Marjorie Berlincourt National Endowment for the Humanities

David F. Bishop Director, University of Georgia Libraries

Laura Bornholdt Vice President Lilly Endowment

Richard Cyert President Carnegie-Mellon University

Richard De Gennaro Director, University o Pennsylvania Libraries

Sarah Godfrey Program Associate The Glenmede Trust Company

Mario A. DiCesare
Professor, English and
Comparative Literature
State University of New York,
Binghamton

Richard Dougherty Director of Libraries University of Michigan

Shirley Echelman Executive Director Association of Research Libraries Malvin Eggens Charcellor Syracuse University

Mancy Englander ine Getty Trust

Billy c. Frye Vice President for Academic Affairs University of Michigan

D. Kaye Gapen Dean of Libraries University of Alabama

James Govan
Director of Libraries
University of North Carolina,
Chapel Hill

Warren J. Haas President Council on Library Resources

Oscar Handlin University Librarian Harvard University

C. Lee Jones Program Officer Council on Library Resources

Donald Koepp University Librarian Princeton University

Jay K. Lucker Director of Libraries Massachusetts Institute of Technology

John McDonald Director of Libraries University of Connecticut

Deanna B. Marcum Program Associate Council on Library Resources

Susan K. Martin Director, Eisenhower Library Johns Hopkins University



James Morris Program Director Andrew W. Mellon Foundation

John Joseph Murphy Provost The Cathelic University of America

Robert O'Neil President University of Wisconsin

Charles B. Osburn Vice Provost for University Libraries University of Cincinnati

John E. Sawyer President Andrew W. Mellon Foundation

William D. Schaefer Executive Vice Chancellor University of California, Los Angeles

Russell Shank University Librarian University of California, Los Angeles

Donald Simpson Director Center for Research Libraries

Elaine Sloan Dean of Libraries Indiana University

Robert Somerville Professor Columbia University

David Stam
Director of Research Libraries
New York Public Library

Don Swanson Professor, Graduate Library School University of Chicago

John Vaughn Executive Assistant to the President Association of American Universities

John William Ward President American Council of Learned Societies

Rose Weil Executive Secretary College Art Association

William J. Welsh Deputy Librarian of Congress

Joe B. Wyatt Chancellor Vanderbilt University



Toward the 21st Century: An Agenda for Research Libraries and Their Users Summary of the $\sqrt{298}\mu$ - 1 Conference

December 1982

Toward the 21st Century: An Agenda for Research Libraries and Their Users Summary

Preface

Several scholars, university presidents, librarians, and foundation officers met early in 1981 to consider the future of research libraries in the context of current technological and organizational changes. Library economics, operations, and performance were central issues in the discussion and, because many matters needed further clarification, task forces were established and asked to consider five topics of importance to research libraries and their users: resources, preservation, bibliographic services, technology, and education for research librarianship. The task forces, each including users, librarians, and university officers, met uring the fall and winter of 1981-82 and prepared reports for the original committee. Those reports and further discussions within the committee itself provided the base, though not the limits, for a conference held at Wingspread December 8 - 10, 1982. Participants included, in addition to task force leaders (or, in one case, a member) and members of the advisory committee, representatives of several foundations and individuals suggested by the Association of Research Libraries, the American Council of Learned Societies, and the Association of American Universities.

The underlying question that prompted the meeting is whether general research libraries can, by adjusting and refining present practices, cope with the technological, economic and organizational issues that are inherent in the rapidly changing publishing and information service systems, or whether some fundamental change in those libraries is now required. While there was no



consensus on which course is correct, there was agreement that the time has come for a new initiative in the research library arena if the future needs of scholars for library resources and information services are to be met in intellectually sound and financially realistic ways. If that conclusion is valid, the matter for attention centers on identifying which actions might be most useful and which methods are most likely to bring significant results.

It is fortunate that there are great strengths and much distinction to be found in American research libraries. Further, organizations serving libraries and their users (The Center for Research Libraries, OCLC, RLG and many state and regional organization, are examples) have evolved in recent years, and have stimulated operating improvements and stronger interinstitutional ties. So far as the archival aspects of research libraries are concerned (the collection, organization, preservation and provision of books, journals, manuscripts, etc.), it seems that attention might best be focused on further developing and fully using the capabilities that now exist. But accomplishing even that objective is no small task, because it implies adjustments to the scholar's way of working, shifts of institutional funds to inter-institutional ventures, major capital investments, and more complexity for librarians and scholars alike.

The library future is made much more difficult to comprehend and control by the overlay of "information service" on traditional functions. Computer, communication, and text storage technologies will clearly affect operations and obligations to some degree, as well as library affiliations with publishing, commercial information services, and the scholarly world itself. The extent, form, and timing of that influence is really not known, but the very fact of this new presence supports the view that intensified





planning by libraries is essential if technology is to be controlled in both functional and economic terms.

These were the two key points for considerat: . how can the research library world better use what it now has put in place, and how can the promise of technology best be realized? It is the responsibility of librarians to see that these questions are addressed, but they cannot properly do so alone. Thoughtful and effective assistance from the scholarly community is essential, since these libraries exist, at least in part, for scholars. And university officers, responsible as they are for both setting long-range directions and funding present and future operations, must necessarily help set conditions and objectives.

Attention to such matters and even the participation by individuals from the affected sectors is not itself an innovation, but in general the record reflects more fragmentation than cohesion. The Wingspread Conference was intended to make a <u>national</u> beginning by identifying some useful first steps, including establishment of a continuing review process involving those primarily concerned with the research enterprise, to help strengthen and shape American library and information service capabilities.

The notes that follow are a brief, preliminary, and incomplete summary of items for the research library agenda that surfaceo during discussions and seemed to have substantial support. The task of synthesizing the unexpectedly large number of specific items for inclusion that were identified during the discussions was made easier by many thoughtful notes written by participants toward the end of the meeting and by letters sent to the sponsors shortly afterwards.

Most of all, for universities, research libraries, and the scholarly enterprise itself, this report marks the baginning of a new effort to find and



pursue a way of movine forward. Conference participants (and many others who muse ultimately take part) now share responsibility to take the next steps.

General Guidelines

The context for the conference was provided by John W. Ward and John E. Sawyer, who considered the expectations of scholars for library and information service and the conditions that affect the prospects for innovation in established systems. It was noted that while present and projected uses of computer and related technologies impose discipline on system operators and users alike in extending access to information, such discipline cannot be allowed to limit the questions scholars and others can ask. Further, the values of educational institutions and the academic disciplines themselves must help determine the course of future development.

While the anticipated changes in libraries promise to be dramatic, success in terms of acceptance and utility will be governed by the skill with which the need of society for linkages between the past and the future is accommodated. A related, and possibly central, topic concerns the need to bring the chademic library back into the teaching and learning process -- in easence, to establish forcefully and effectively the educational role of the library. The magnitude of the anticipated library transformation and its effect on research and teaching have not been generally understood, and both scholars and university officers have paid too little attention to the opportunities and obligations inherent in the new library era.

The scholar's expectation that libraries "deliver what is known and identify and deliver what is not known" is an unbounded assignment. To fulfill expectations, it is useful (and probably essential) to think not in terms of individual libraries but rather of "The Library," the aggregation of



13

all research libraries, as a key component of the scholarly world. "The library" and its cause was the focus of the Wingspread Conference.

Several conditions and guidelines were suggested by participants as useful elements in any future program of action.

- 1. There should be a strong effort to build on existing operating institutions -- individual libraries, regional and state organizations, and national operating boxies. Work by such institutions should be fostered in the context of national objectives, thus emphasizing distributed effort and improved coordination. Ways should be found to discourage inefficient approaches and to encourage and support lead libraries, especially in state systems.
- 2. Attention should be focused on key targets, realizable objectives should be established, and economic realities -- institutional and national -- should be acknowledged.
- 3. The enormous problem of changing user behavior must be fully understood, and specific steps to address the matter must be taken. Each university and the academic disciplines themselves must "pay attention" and play a constructive part in guiding change. While university and scholarly objectives are real and important, as influential forces they are often obscure or diffuse. In the context of a burgeoning national information structure, it is essential that issues of importance to scholarship be addressed cooperatively by establishing better processes for introducing, discussing, and refining proposals for change.



A Continuing Forum

The number and complexity of important issues combined with the experience of the Wingspread meeting itself demonstrated for the participants the need to stablish a continuing forum. While matters of structure and organization were not discussed, the forum should clearly include individuals, selected for their own interests and skills, who are committed to the wellbeing of research and scholarship, of research libraries, of universities and the process of scholarly communication. Members would most likely come from humanistic and scientific disciplines, from research libraries and related organizations, from scholarly publishing, and from the academic and administrative offices of research universities. In addition, other specialists would be tapped to help address specific topics. It is anticipated that activity and procedures alike would evolve with time and experience, and that the initial members would themselves plan for organization and succession.

While the mechanism itself is one that must evolve (CLR has been urged to take steps to establish the forum), the purpose is at least partially set. A continuing forum is needed to help address, in the context of the university setting, the many fundamental issues implicit in research library developments. Such a forum should influence the course of future change in research libraries and the systems of scholarly communication, it should monitor performance and progress in the light of established objectives, it should help assure understanding and constructive participation of concerned parties, and it should stimulate action and promote support for institutions and activities focused on development of "The Library."

The forum would be at the center of an expansive and continuing national conversation and would, if it fulfills the expectations of the



Wingspread meeting, become the source of a new capability for systematic, substant we analysis of issues and an important force for policy formulation in areas of concern.

Bibliographic services

The research library world has made great progress in cooperatively building and sustaining comprehensive bibliographic systems and services. Millions of records are in computerized data files, standards for record content and format have been established, and computer and telecommunications systems have extended access to records and have enhanced their utility. A primary objective is to persist with developing further what is now in place-continuing to add records to the database, establishing links among bibliographic systems, improving production and distribution or bibliographic products, and supporting online catalog development.

Because the efficiency of the bibliographic structure controls library performance, the topic requires continuing attention. As the volume and use of recorded information grow, the need for precision and reliability increases. In the view of most participants, ultimate responsibility rewith the national libraries, especially the Library of Congress, to assure full coverage, high quality of individual records, unimpeded access to bibliographic resources, and imaginative extension of bibliographic products and services. Cooperation and participation by many research libraries is required if the responsibility is to be met, and fuller involvement of library users, especially in product planning, is desirable.

A cohesive research program to consider with fresh perspective such fundamental issues as subject access and authority control in online systems is much needed. The same research capacity needs to address questions that



stem from a new environment where bibliographic files no longer necessarily represent a physical collection. New forms of access to new formats for recorded knowledge are needed to link a multiplicity of scholarly resources, both print and non-print, in a rational and usable system that will curtail duplication of effort and the waste of resources, and that will end the unacceptable bibliographic isolation of some dividual scholars.

Resources

The principle of chared responsibility for building and maintaining comprehensive resources for research and the corollary of assured access by scholars to needed materials and information was assumed without question. National distinction is the aggregation of institutional strength, and the issue for attention concerns the retention of strength in chosen areas by individual libraries in a setting of rising costs, growing quantities of recorded information in all forms, and dynamic demand. The key seems to be to create a national setting which will (1) provide more options for individual libraries, (2) provide access to more resources by more users, and (3) improve prospects for building and maintaining, nationally, unmatched resources for research.

As with all other top s considered, no final answers surfaced, but the specific steps were identified and expressed in varying forms.

First, a permanent and reliable computerized information service show the established and charged with building and maintaining a national inventory of distinctive collections and providing information needed to assure standardized reporting, maintenance of effort, guidance for researchers, and assistance for libraries. Information concerning the quality, scope, and utility of computer-based files of data and text might



17

also be provided. It is probable that the basic inventory data base would also be used in development of a national preservation program.

Second, a research effort to model collection characteristics in relationship to need, use, costs, and other factors should be undertaken for institutional, regional, and national planning purposes.

Third, the concept of national collections of specific categories of publications, as typified in some ways by the Center for Research Libraries, should be expanded and made fully operational as a supplement to institutional collections and regional and state programs.

Preservation

Discussion focused on the problem of retrospective preservation (that is, preservation of existing collections rather than protection of materials to be published in the future) and reinforced the existing image of intractability. In the final analysis, preservation is a matter of choices and resources. Lack of a credible and accepted framework for making choices and dim prespects for extensive funding constrain action.

Accepting the importance of the problem and its magnitude, productive action would seem to involve a series of steps designed ultimately to provide the needed framework and to increase designated funding.

First, each library (and its parent institution) should acknowledge and act on the assertion that a preservation obligation is implicit in commitments to build exceptional collections on specific subjects.

Responsibility for protecting distinctive items in such collections rests with each library.

Second, most preservation activity, currently and in the future, will be limited to capturing the content of original publications and not to



preserving the publications themselves. Funds do not exist, nor are they likely to become availate, to reconstitute all threatened literature. There is some support for concentration on American imprints, but scholarly needs are not so limited. A special effort to bring together interested and knowledgeable scholars and representatives of research libraries should be made, and they should be asked to propose categorical priorities and to specify the purpose and method of analytical studies needed to provide a factual basis for subsequent decisions. Within disciplines, scholarly groups and libraries should work together to refine plans and monitor results.

Funding prospects will improve only with a realistic and purposeful plan and strong evidence that methodology is technically sound and economically responsible. Special attention should be given the prospect of establishing and operating regional preservation centers.

Technology

Computer, communication, and text storage technologies were subjects that permeated most discussions, but the central focus was clearly on the use of these capabilities to improve access to information. Discussion ranged from text conversion to electronic publishing. The present and potential influence of technology on established elements of the scholarly communication system was acknowledged but not assessed, concern that users not lose control of their information sources was expressed, and a wide range of economic and organizational problems was identified. While many specific projects were suggested, several seem essential to develop needed facts and experience. First, an academically centered, comprehensive study of all aspects of electronic publishing -- organizational, economic, intellectual and technical -- .s required. This is seen as an extensive effort, involving all primarily



concerned groups: major academic disciplines, university presses, scholarly journal publishers, commercial publishers of scholarly books, university officers, and librarians. The study results should provide guidelines to subsequent development based on user requirements, economic conditions, and quality control considerations.

Second, an intensive, widely available, educational program on the use of small computers for scholarly purposes seems called for, with adequate opportunities for demonstration and personal experiment. The technology is moving so fast that experienced scholars and librarians both need to make a special effort to become informed and thus more effective participants in future discussions concerning the application of technology to teaching and research.

Third, a coordinated set of experiments to test technology-based access systems in several geographical and operational settings is probably the most efficient way to establish facts about performance, cost, and utility of such systems for research and scholarly purposes. Models of alternate approaches for meeting scholarly requirements should be developed. These experiments should probably proceed in phase with the primary study itself.

Library Economics

While not formally an agenda item, the subject of costs and funding was a constant overlay on the discussions. The basic issue, perhaps too simply put, concerns university financial planning for a much recast library service at a time when funds are very limited and competing demands are both important and powerful. Much of what the future seems to hold for libraries is a costly but non-optional supplement to present services rather than a



substitute; thus projected costs are hard to measure against established patterns.

Several steps seem needed to establish more useful facts about library costs and to develop credible ways to test alternate courses of action for economic viability. Economic models of possible configurations of cooperative collection development ventures, of space requirements, of initial and continuing costs of computerized library systems, of preservation plans, and many other activities need to be constructed, tested, and used for guidance in current decisions and long-range planning.

Innovative approaches for financing libraries, especially their extended services, need to be sought, and incentives for improving system efficiency need exploration. Finally, university based (rather than library centered) studies seem needed to explore and test alternate institutional configurations for supplying information resources and information handling capabilities needed for teaching and research.

In short, a comprehensive and imaginative effort seems required to provide the economic backdrop for the technology revolution if universities are to guide a successful library transformation in a fiscally responsible way.

Professional education

The library profession itself was one of five central topics identified by the planning committee, and CLR's Committee on Professional Education and Training for Research Librarianship served as the Task Force. The topic was not formally on the Wingspread agenda, but the discussions reinforced the importance of the subject. The assertion that libraries need to move back into a more central position in the process of teaching and



professional education. Work is already under way to stimulate experimentation in professional education and to test ways to extend skills of library leaders, but the evidence is strong that far more venturesome work is needed to assure that more and more librarians are, by credential and assignment, true colleagues of the teaching and research faculty of colleges and universities.

Taking the long view, achievement of that objective is probably the best assurance that "The Library" will become a reality and that scholarship, insofar as it depends on access to books and recorded information of all kinds, will continue to flourish.

Warren J. Haas

January 4, 1983



22

Forum II

National and Regional Aspects of Collecting and Preserving Library Materials

Wye Plantation, Maryland October 10 - 12, 1983



Forum II

National and Regional Aspects of Collecting and Preserving Library Materials

AGENDA

Monday, October 10

8:00 - 9:30 p.m. Session I.

- o Introduction. Warren Haas.
- o University expectations. Sheldon Hackney.
- o Concerns of scholarly publishers. Herbert Bailey.
- o Requirements of scholars. Lewis Gould.

Tuesday, October 11

9:00 a.m. - 12:00 noon, 1:30 - 5:00 p.m. Session II.

- o Building resources nationally. Patricia Battin.
 Discussion
- o Preservation: goals and means. Rutherford Rogers.
 Discussion
- o General discussion to explore and evaluate possible courses of action.

8:00 - 9:30 p.m. Session III.

o The proposed ACLS Office of Scholarly Communication. John W. Ward, Herbert Morton.

Wednesday, October 12

9:00 - 11:30 a.m. Session IV.

- o Formulation of a plan of action.
- o Forum III plans.



FORUM II -- LIST OF PARTICIPANTS

Roger S. Bagnall Department of Classics Columbia University

Herbert S. Bailey Director Princeton University Press

Patricia M. Battin Vice President & University Librarian Columbia University

Harold W. Billings Director, General Libraries University of Texas at Austin

Laura Bornholdt Vice President Lilly Endowment, Inc.

David Crawford Department of Music University of Michigan

Helen de Shong Program Analyst The Glenmede Trust Company

Richard Dougherty Director of Libraries University of Michigan

Shirley Echelman Executive Director Association of Research Libraries

Melvin Eggers Chancellor Syracuse University

Billy E. Frye Vice President for Academic Affairs and Provost University of Michigan

Maurice Glicksman Provost Brown University Lewis E. Gould Chairman, History Department University of Texas at 1 tin

Warren J. Haas President Council on Library Resources

Sheldon Hackney President University of Pennsylvania

C. Lee Jones
Program Officer
Council on Library Rescurces

Rita Lerner Manager, Marketing Services American Institute of Physics

Deanna B. Marcum Program Officer Council on Library Resources

Geoffrey Marshall Deputy Chairman National Endowment for the Humanities

James Morris
Program Director
Andrew W. Mellon Foundation

Herbert C. Morton Publishing Consultant

Robert M. O'Neil President University of Wisconsin System

Rutherford Rogers University Librarian Yale University

Robert M. Rosenzweig
President
Association of American Universities

Marilyn Schmitt The Getty Trust



Russell Shank University Librarian University of California, Los Angeles

David Stam
Director of Research Libraries
New York Public Library

John Vaughn
Executive Assistant to the
President
Association of American Universities

John William Ward President American Council of Learned Societies

William J. Welsh Deputy Librarian of Congress

Bernice Wenzel
Professor of Physiology and
Assistant Dean of Medicine
University of California,
Los Angeles



Forum II

The National and Regional Aspects of Collecting and Preserving Library Materials Background Paper

Introduction

This brief paper is meant to serve only as a starting point for our discussion. While it supplements the summary of the Wingspread meeting, it does not record the activities of many organizations already at work in areas pertinent to our agenda, and above all, it does not try to synthesize all of the points of view that have been advanced on these topics over the years. It does identify some of the basic questions that need consideration, if only to reinforce the validity of present directions and to improve the prospects of generating the support that is essential if any major new work is to be undertaken on behalf of libraries, research universities, and scholarship.

Purpose of Forum II

Forum I, a meeting of university officers, faculty members, foundation of cials, and librarians held at Wingspread in December 1982, was called by CLR, AAU, and ACLS to consider a number of topics of importance to research libraries and their users. The wide scope and importance of those matters and the realization that the resolution of questions that were raised would come only with persistent and thoughtful attention by many different people prompted the participants to recommend a continuing series of meetings to consider specific topics in detail, to promote discussion of those topics elsewhere, and to stimulate action by libraries and others to help meet in appropriate ways the present and probable future needs of users.



Forum II was planned after a review of the Wingspread discussions suggested the time was ripe to consider the interrelated topics of library collections and preservation. Additional meetings on other subjects will be held during the months ahead. Approximately thirty individuals representing university administrations, faculties, libraries, foundations, and publishers have been invited to Forum II. It is anticipated that a shared commitment to effective scholarly communication and academic research will bridge the special interests of those individuals and result in suggestions for action by libraries and the sponsors of the Forum.

Despite assertions that recent technologies will recast all information-related processes, library collections of printed materials, manuscripts, and recorded information in many other formats are, and will continue to be, essential to research in almost every field. Inherent in the existence of those still-growing collections is the matter of their preservation.

The Forum II discussion will concentrate on the national and regional aspects of collection development and preservation. While it goes without saying that the nation's research resources are measured by the aggregated strength of the collections of individual libraries, it is now equally certain and widely acknowledged that, for reasons of cost and quantity, individual libraries must often make their collecting and preservation decisions in a larger context if true distinction in institutional subject collections is to be maintained and the national capacity to support research is not to erode.

This assertion was unquestioned at Wingspread and its acceptance is already being demonstrated in several cooperative enterprises. But if the principle of interdependency is now established, its implications are not yet



well understood and the means for application are still not well developed. These are the matters on which Forum II will concentrate.

The case for a planned approach

The conclusion at Wingspread was that some sort of planned or structured approach to addressing problems related to collection development and preservation is necessary. While appealing in some important ways, an ad hoc approach that would see each institution go its own way probably would not serve the future any better than it has the past, which has been marked by inadequate and uneven effort, failure to solve the underlying preservation problem, excessive and unjustified redundancy in collections when viewed regionally and nationally, and uncertain access to material for some individuals in a country where availability of publications is expected and equality of access is essential.

There are hazards, institutionally and nationally, in moving into the future without finding appropriate ways to turn the inescapable fact of interdependency into a working reality. Research libraries must redeploy their present funds and universities must rethink their use of the "information dollar" if a new, technology-based "information delivery" capability is to be developed by libraries, one that will match their long-established and equally essential archival role. Further (and again, there are cost implications), the staffs of libraries need to be reconstituted. The traditional "technique" orientation of librarians must be balanced by stronger subject capabilities so that libraries themselves might be more closely and productively linked to teaching and research. This is the only way their costs can be justified.



To provide the budgetary flexibility required to make these and other changes, to promote equality of access to library materials and recorded information, to use present funds more effectively to accomplish university objectives, and to capitalize on the promise of new, technology-based information delivery capabilities, a planned and carefully executed approach to collection development and preservation seems essential, one developed by all participants involved in the process of scholarly communication, including faculty, scholarly publishers, librarians, and officers of research universities, with all considering their own obligations as well as their commonly held interests.

Dependence on "external" structures to accomplish institutional objectives creates problems as well as opportunities. In a sense, interdependence is, for libraries, an act of faith, largely because performance becomes increasingly dependent on external factors as well as on more easily controlled internal effort. To reduce the hazards implicit in cooperation, several operating conditions seem important: (a) there must be assurance of program continuity in order to institutionalize new procedures and thus realize the full benefits of cooperation; (b) provision for basic funding of cooperative enterprises must be the responsibility of the participants; (c) the management structure of the cooperative enterprise must be able to meet established performance specifications; (d) faculties and university administrations, as well as libraries, must have full understanding of both the intent and limits of the cooperative enterprise; and (e) the expansion of cooperative programs must be controlled to keep in step with organizational capabilities and demonstrated need. They must not be allowed to outstrip either financial or operating capacities.



The bibliographic base

It is essential, in any significant cooperative collecting and preservation enterprise, to know "who is responsible for what." A reliable inventory of distinctive subject collections throughout the nation is required so that each participating library might make informed decisions concerning its own practices. The same information, current and readily available, is important to scholars for their own work and as they, in cooperation with librarians, monitor the performance of research libraries in building and maintaining collections of lasting importance and providing the necessary coverage of current materials.

Of equal importance are comprehensive, it gh-quality bibliographic databases that identing individual items and provide location information. Failure to extend the coverage of computerized bibliographic databases to all forms of recorded information, failure to provide improved subject search capabilities to enhance precision in their use, and failure to as ure. For libraries and individual users alike, effective access to diverse and complementary bibliographic databases and indexes, especially for purposes of item identification and location, will be, in effect, a failure of the research community to make known its requirements to those whose business it is to serve scholarship. Restricted access to information about information, nationally and internationally, for whatever reason, is incompatible with the spirit and objectives of scholarly inquiry.

Library collections

Building and maintaining the comprehensive collections essential for research and scholarship have become increasingly difficult assignments for libraries. The sheer size of general research collections, which until



aspects of library operation more complicated. This growth, coupled with escalating costs for materials and labor, has been accompanied in recent years by dramatic technological innovation, dispersion of research activity, and nigher levels of user expectations. Taken together, such factors have created a situation that is forcing an intense and comprehensive review of the way research libraries, individually and together, meet their obligations to provide resources for research and scholarship.

If self-sufficiency is no longer a realistic course to pursue for general research libraries, a limited number of options are open for use, singly or in combination. All of them imply to some degree irreversible dependence on supplementary sources, and most involve assumption of extrainstitutional responsibility. Movement toward these new relationships has, uncerstandably, been cautious and slow, partly because the implications of interdependency for their own work have generated concern among some faculty and because costs and funding have been uncertain. The tentative approach to cooperative undertakings has, in some cases, undermined the vitality of such enterprises and thus limited their effectiveness. The approaches to cooperation that are open to libraries need to be considered anew by all who are involved and, when appropriate, unambiguously endorsed by faculty and administrators so that the work of transforming what are still essentially autonomous research libraries into a cohesive national system that is capable of meeting the anticipated, much-expanded demands of the future might go forward.



Cooperative collecting

Whether applied singly or in combination, and whether viewed regionally or nationally, the fundamental approaches to cooperative collecting seem to be summarized in these questions:

- Should collections of specific categories of publications (foreign language scientific journals, microfilm masters, etc.) or material in other formats (databases, videotapes, etc.) be maintained on behalf of all libraries, thus giving each library the option of eliminating identical material or at least reducing the quantity held in their own collections? The Center for Research Libraries is the obvious working example of this approach, but in its more than thirty years of history, it seems never to have flourished in the sense of having adequate funding or in influencing member libraries to take full advantage of the availability of the Center's collections by significantly reducing what they acquire or retain. If this is still a valid approach, there are many questions that need attention: What are the characteristics of material that might be most usefully included from the viewpoints of scholars and library administrators? Does the much-improved capacity to locate publications through computerized bibliographic systems reduce the importance of such "national" collections? Given their utility, how can institutions such as CRL be funded with sufficent stability to assure program continuity and service dependability?
- 2. Should a limited number of general and specialized research libraries assume (under appropriate conditions) responsibility for forming the core of a national system of distinctive subject collections? The intent would be to assure reasonably complete coverage of all important subjects,



retrospectively and prospectively, (and, implicitly, to provide access to such materials) that are needed to support extensive research.

There is a strong foundation for developing this approach in the existing and exceptional collections of major academic and specialized research libraries. Further, the objectives and program of the Research Libraries Group support this approach, and work now under way in both RLG and ARL to establish an inventory of major subject collections is seen as an important step in this direction.

Again, there are a number of questions to be considered. In the context of this approach, what is the role of the Library of Congress? How can access by individuals, regardless of their institutional affiliation, to these materials be assured? What are the costs and funding implications? Is it realistic to assume that institutional competition will be contained by financial realities? What happens when financial conditions or program priorities change, and preclude making the expenditures required to assure continuity of effort and performance?

3. What kind of system of compensation should be established to meet the costs of access to "national" collections? Will payment be required? Who should pay? Is a subsidy program necessary to enable the lead libraries to maintain continuity of effort in collecting and preservation?

In addition to considering such basic policy questions, each library must make decisions about its own collecting objectives and the degree to which it will contribute to, and/or become dependent on, external resources. To make reasonable decisions, much information not now available is needed.



Establishing reliable facts about needs and use would seem to be an important item of business, whatever the approach on the national and regional level.

Among subjects that are likely candidates for investigation are these:

- 1. The needs of users.
 - a. What type of subject access to bibliographic files is most important?
 - b. What is the relationship between certain characteristics of literature (currency, format, language, record of previous use) and the utility of that literature for individuals in various discoglines?
- 2. What is the relationship between the availability and quality of bibliographic information and actual demand for materials?
- 3. What is the relationship between the kind and place of storage for material and the ability to provide access to it?

Preservation

A large and growing portion of the collections of the strongest and oldest research libraries of the country are physically deteriorating. The problem stems from a set of causes including the chemical characteristics of most book paper, past (and sometimes present) storage conditions, changes in book manufacturing, and at times misuse and overuse. The magnitude and complexity of the problem are matched only by the difficulties that have, over many years, impeded efforts to find a solution. In fact, there are several problems and, by extension, several approaches to their solution. The assumption here is that this is a matter worth attention and, in the long run, one that justifies considerable investment of effort and funds.



In simplest terms, there are two aspects to preservation -- the prospective and the retrospective. Books now on library shelves are deteriorating -- some of them are, for all practical purposes, already beyond use. Many others are approaching that state at varying rates. There are also those books that will be published in the future. Will they add to the problem or will they, because of changes in paper quality and manufacturing materials, mark a turning point?

Again in simplest terms, there are two ways (excluding doing nothing) to address the retrospective problem: (1) preserving by some appropriate method the book itself (or any other item) and (2) capturing the content of the item, independent of its original form. In addition, the rate of deterioration can in some cases be slowed, thus deferring final action. The prospective problem seems to have only one solution if future books are not to become part of the retrospective problem: employing format, materials, and methods that assure longevity of the book at the outset. Recent experimental efforts to record the content of newly published books for preservation purposes reflect the difficulty of improving the product and simply anticipate the retrospective problem.

Because the "preservation problem" has been long acknowledged, there has been much investigation, planning, and even some action:

- 1. There is a good basic understanding of the extent and importance of the problem within most research libraries and some government agencies foundations, and academic and scholarly organizations. It does not follow that there is widespread agreement on how to address the problem.
- 2. There has been much sound research on the characteristics of book paper and a number of laboratory and pilot tests to treat existing books



chemically to slow the rate of deterioration. It is unclear whether the physical properties of paper in books can be changed, reliably and durably.

- 3. A few libraries, and especially RLG, have mounted formal preservation and/or replication programs, but in general, budgeting for preservation has a low priority.
- 4. Much progress has been made in formalizing the process of assessing collection condition and establishing protective/preventative measures within libraries.
- 5. The training of practitioners at several levels is expanding and improving.
- 6. An effort has been made to stimulate paper manufacturers and publishers to produce and use acid-free paper in scholarly books and to encourage manufacturers to consider book durability in the production process.
- 7. Several commercial ventures (reprinters, microtext producers) to reproduce existing books are well established, but their activity is typically concentrated on responding to meeting a demand for a specific item, rather than on preservation <u>per se</u>.
- 8. An established, but not yet fully satisfactory, bibliographic system for identifying and locating "preserved items" exists.

The items noted above suggest progress, but in the aggregate, they do not assure ultimate success. Perhaps they do set the stage for further action along lines such as these:

1. The understanding of the problem that does exist might now have to be more effectively and forcibly presented to a wider audience if funding for retrospective programs is to be secured, if reasonable protective steps are to



be taken in more places, and if the momentum now focused on the prospective aspects is to be expanded and maintained.

- 2. Each library (and its parent institution) will have to understand better its obligations and find ways to assume responsibility for the protection and preservation of exceptional elements of its own collections. Responsibility for the preservation of specific items (as distinct from content only) because of intrinsic value can only rest with the owning library, for a whole set of practical reasons. Each library with a historical mission needs formaliv to budget for preservation purposes.
- 3. Additional research is required, on behalf of all libraries, to perfect preservation techniques and to apply technological methods to preservation goals.
- 4. Bibliographic records identifying and locating master preservation copies of text must be routinely created and readily available.
- 5. Ways will have to be found to underscore for paper makers and publishers the importance of book longevity as an important factor in production.
- 6. On the assumption that, so far as content preservation is concerned, the problem is essentially one shared by all librarians rather than a problem for each library, it seems necessary to establish a plan of action, procedures for implementing the plan, and methods for financing the plan, along with a way to assign responsibility and monitor progress. A capacity to act collectively needs to be established and accepted before effective action at any significant level seems possible.

To better understand what is required to develop a national preservation plan, several topics need to be considered:



- a) What administrative structure is needed to implement and oversee the development of a national plan, to consider where responsibility should be vested, to establish funding needs and sources, and to fix monitoring responsibility?
- b) Given limited funds, should preservation programs be based on selectivity across the board or on comprehensive coverage in fewer subject fields? Should comprehensive, subject-oriented preservation projects be undertaken, or should preservation activity be focused on items for which there is demonstrated demand but which are physically deteriorated?
- c) What are the Characteristics of items that should be preserved in the original or need to be preserved for content alone?
 - d) How might publishers contribute to preservation objectives?
- e) How can the concerns of institutions that they may be asked to bear a significant portion of the burden of a decentralized plan be addressed?

From the above list, it is clear that technical, fiscal, organizational, and intellectual matters are important components of the preservation problem. Most important, the preservation of research collections is inseparable from their inital shaping, and the task must be addressed institutionally and nationally.

Conclusion

These are old but still central topics for research libraries and those who use them. The action taken, or lack of action, will over time affect the nation's research capacity, the methods of scholars and research workers, and the costs and quality of libraries. It is essential that all who are concerned have a hand in setting the course of future action.



Progress (even change) will be slow, but time is also short. The pace will be governed in part by the quality and credibility of leadership, but possibly, in the final analysis, it will be controlled by the introduction of new ways to provide access to library resources. It is perhaps here that recent technologies will come into full play.

Warren J. Haas

September 1983



FORUM II

Wye Plantation, Maryland October 10 - 12, 1983

National and Regional Aspects of Collecting and Preserving Library Materials

Conclusions

The Wye meeting was a true forum, with all participants exploring the topics of central concern from many aspects and speculating openly about the utility and validity of alternace approaches. The background paper and the introductory comments by individuals identified on the agenda proved to be all that was required to prompt intense and constructive discussion under may at each session.

No useful purpose would be served in reporting those discussions in any detail. It is the general thrust of the conversation and the specific conclusions, in the form of suggestions for action, that are of importance and are thus recorded here.

The National Aspects of Collecting

The general fact of growing interdependence among research libraries is not arguable, nor are the principle means used -- collecting categories of material on behalf of many libraries and providing extended access to the exceptional subject collections found in research libraries. The rate at which individual libraries can or will adjust their own collecting policies and practices to take full advantage of opportunities that cooperation brings is less certain. Each institution must seek for itself a proper balance between economy and service. Faculty members as well as librarians need to assess the effect of collecting changes on research and teaching, confidence



in new systems of delivery of materials must grow from experience rather than from promises, and the potential for savings must be realistically assessed.

These and many other factors suggest that changes in collecting practices that will enhance scholarship will come slowly. The general objective is to create and/or maintain carefully planned and well-managed cooperative collecting projects to be put to use by libraries when the time is real. A single, prescriptive plan is probably inappropriate and certainly unrealistic. However, several specific matters for attention were identified by the participants.

- 1. The value of the Center for Research Libraries to the research library community was affirmed, but several matters were identified that need attention if the prospective worth of the Center is to be fully realized.
 - o There is an inadequate base of reliable information relating the characteristics of published materials to present or potential use. This fact makes formulation of collecting policies difficult for CRL and all other cooperative undertakings, and underscores the need for effective policy coordination with other organizations having similar objectives.
 - o The persistent financial problems of CRL need to be resolved. The members themselves must become enthusiastic supporters if the financial base is to be stabilized and program development funds secured. Once the Center's program is set, members must adjust their own operations so that savings are realized.
- 2. The further and timely development by ARL and RLG of the computerized inventory of research collections was seen as essential to



progress in rationalizing collecting and preservation activities nationally. Long-term objectives should extend participation to all libraries that have subject collections of scholarly importance. Careful consideration should be given to the matter of fully using this new source of informat. n, not only as a base for cooperative action among libraries in collecting, preservation, and cataloging or as a finding aid for scholars, but also as a stimulus for periodic reviews of the quality of research resources, nationally, for the primary subject disciplines. The American Council of Learned Societies and the appropriate library organizations should work together toward this end.

of libraries (which is at the heart of all cooperative collecting programs), the practice of judging research libraries solely by their size was considered a detriment to the evolution of the concept of service caracities as an appropriate measure of library quality. Access to information systems and to materials from remote sources as alternatives to ownership are valid options of growing importance for all libraries. The dependence on size alone as a measure of quality is of decreating validity. The Association of Research Libraries was urged to consider again its measures and processes for determining library standings.

Preservation of Library Materials

The discussion concerning preservation was extended and intense.

There was full agreement that the topic is of great importance and that the time for action has come. The fact that costs will be high was acknowledged but, as one president said, his successor some years hence would be properly incensed if this generation failed to put the machinery in motion to protect



and preserve the content of the millions of published books that will otherwise be lost. The Council on Library Resources was encouraged to describe the elements of a national plan for consideration by scholarly and library organizations and, ultimately, for action by all who are concerned. While details of the plan are not yet established, some key parts are obvious.

- 1. Published items ultimately needing attention (to say nothing of manuscripts, archives, film, and information in other forms) number in the millions, even assuming great selectivity and concentration on the most important material. Substantial funding from many sources will be required over many years. To help assure funding at needed levels, a skillfully planned and persistently executed program of public education is needed to build support for the preservation of our intellectual heritage and our recorded history. Awareness of the problem must shift from those who are most directly concerned to the wider public that understands that continuity of the human record is one of the hallmarks of civilization.
- 2. A financial plan has to be devised that will involve participation by many funding sources over a long period of time. Initial planning will call for at least a decade of effort. Universities, private and corporate foundations, and the federal government will all be looked to for help.
- 3. To reduce unit costs through high volume production, to assure that master copies made for preservation purposes will meet established qualitative standards, to reduce operating complexities, and to apply appropriate technologies in a cost-effective way to preservation goals, a few regional production centers should be established to serve the research

44



library community. The development and operation of preservation laboratories and production facilities in each research library would generate cost and staffing problems that would undermine the primary objective of production of a large quantity of preservation masters.

- 4. To keep goals realistic and the end product useful, representatives of the major scholarly disciplines should be enlisted to aid library administrators in identifying the categories of material to be given first priority. A set of principles to provide overall guidance for the several scholarly disciplines needs to be articulated. The means to be employed in selecting libraries for participation also need to be developed to obtain the maximum yield of titles in primary target areas at the least cost.
- 5. Finally, a management structure must be specified, one that is credible with the scholarly and library worlds and able to carry out a massive, long-term program in a way that is operationally sound, "iscally responsible, and intellectually valid.

CLR has agreed to take the lead in drafting a national plan of action for consideration by those who must, in the end, assume responsibility. The task ahead is not to preserve all items in every library. While all libraries have an inescapable obligation to preserve the unique and distinctive items they hold on behalf of society, whether these be volumes with the author's own notations or items of exceptional rarity or beauty, the real job is to preserve what is of intellectual importance for present and future library users. It is not the collection of any individual library that is to be saved but rather the collection of "the nation's library" -- the most important



segments of each library that, taken together, form the core of our intellectual heritage. The record of the past will never be totally saved, but the sooner a beginning is made, the more likely we are to serve future generations.

Funds are needed to begin. Immediate attention should go to building public awareness of a problem that is intrinsically undramatic but of great importable. Public sensitivity and support is needed to promote adequate long-term funding and, thus, to assure ultimate success.

The second element essential to progress is creating regional technical centers to serve libraries seeking to preserve the high-priority volumes in the cown collections — the items that are valuable as artifacts. Well-equipped facilities with trained staff can serve many libraries and, over time, accomplish an important segment of the work to be done. More important, those same regional centers can provide the facilities for high-volume production of master microfilm (or other text storage media) that, in the end, will account for perhaps ninety percent of all preservation activity.

On the assumption that the plan itself will be far enough advanced and that funding requirements will be known, it has been proposed that a program session concerning research libraries be included during the spring meeting of the AAU.

The ACLS Office of Scholarly Communication

A recent report to ACLS describing the need for, and the initial program of, an Office of Scholarly Communication was included in the docket and considered during one session. There was strong support for establishing a new ACLS component with the specific mission of representing the interests of the scholarly community, broadly defined, in the many current activities



that will affect, in one way or another, the system of scholarly communication. The projected activities of the office include the collection and generation of data descriptive of publishing, libraries, and scholarship itself; the analysis of such information to establish relationships and to assess at least some aspects of the health of scholarship; the provision of a new means to both listen to and represent scholarly concerns; and the creation of a service for the scholarly world to expedite the constructive use of computers in humanistic research.

Committee on Compensation

Two matters concerning the financing of future information services need careful attention. One is inherent in any significant evolution toward major cooperative ventures and extended access to distinctive collections. As more and more users turn to the resources of institutions other than their own, the matter of compensation grows in importance. The prospect that the balance of trade for each institution will reach equilibrium is unlikely. Ways will have to be found to give some supplementary support to the institutions or cooperative organizations that provide substantial resources to meet national needs.

Copyright law, by itself, raises other complex and largely unresolved questions that will affect both the economics and the processes of the future character of scholarly communication. The retrospective aspects of preservation, changes in the nature of library affiliations, the potential impact of recent text storage technologies on library service -- especially on access and distribution -- and even the publishing process itself will all test the strengths and limits of the existing copyright law, which must somehow strike a balance between protecting and even stimulating creativity on

the one hand and encouraging equal access to recorded information at acceptable costs on the other.

A Committee on Compensation, composed of informed individuals with diverse interests, will be established to consider the full range of questions inherent in both topics and to suggest ways of proceeding that might ultimately lead to improved understanding and even appropriate action in that small segment of the much larger information world that is of special concern to scholarship. CLR will take the initiative to form the Committee and will provide the necessary initial funding.

The Library of the Year 2000

Every aspect of the academic research library will be much changed by the year 2000. The new agenda of information service will be superimposed on long-established and still essential archival responsibilities. Libraries (and librarians) will necessarily be full participants in both teaching and research. The changes will affect university and library organization and management, staff composition, costs and funding, service charcteristics, external relationships, and the ways scholars work and teachers teach. It is certain only that little we know now of libraries will be left untouched. It is not at all clear what specific changes should take place in order to assure the future effectiveness of libraries as components in our system of scholarly communication or as fiscally sound and fully productive elements of our universities.

Far more information than is now available on many topics of central importance is needed before there can be much useful speculation about the library of the year 2000. A cohesive program of research involving capable individuals from many disciplines seems required. The Economics Seminar

attention cover a much wider range of the ues. CLR, in cooperation with other organizations and institutions, will explore prospects for establishing and funding a research panel to formulate a cohesive research program to be carried out at a number of institutions over several years. The same panel would monitor results and provide a continuing presence that might, over time, provide a credible base of information and insight of use to institutions and the library profession as they seek. Take a graceful and appropriate transition into a new, demanding, a comising environment.

Warren J. Haas October 1983

