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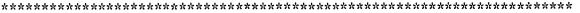
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#### **ABSTRACT**

Traditionally, archivists have been involved mainly in the intellectual preservation of library materials and the selection, appraisal, processing, and cataloging of library collections. Due to the relatively short (approximately 50 years) stability of the paper commonly used for printed and written documents since the mid-nineteenth century, the physical preservation of materials -- the repair, maintenance, restoration, and protection of documents--has drawn increasing attention from the archivist in recent years. Firty academic and 50 public library archivists were surveyed on the relative importance of intellectual versus physical preservation. The study yielded response rates of 76% (n=38) for public libraries, and 80% (n=40) for academic libraries. The survey indicates a greater emphasis on both intellectual and physical preservation in academic libraries as compared to public libraries, but there is no heavy emphasis on physical preservation in either type of library. While paper acidity continues to be the major problem requiring physical preservation in nearly all libraries, damage due to heat and humidity is not reported as frequently in academic libraries, perhaps due to their greater use of environmentally controlled rooms. Formal training in physical preservation is considered inadequate and there is a perceived need for individuals trained in both types of preservation. Appendices include the survey and cover letter. (Contains 18 references.) (Author/SWC)

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# INTELLECTUAL OR PHYSICAL PRESERVATION? A SURVEY OF THE PRESERVATION ACTIVITIES OF ARCHIVISTS AT ACADEMIC AND PUBLIC LIBRARIES

A Master's Research Paper submitted to the Kent State University School of Library and Information Science in partial fulfillment of the requirements for the degree Master of Library Science

by
Elli Bambakidis
January, 1996

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### ABSTRACT

Traditionally, archivists have been involved mainly in the intellectual preservation of library materials. Due to the relatively short (approximately 50 years) stability of the paper commonly used for printed and written documents since the mid-nineteenth century, the physical preservation of materials has drawn increasing attention from the archivist in recent years. This study surveys the relative importance of intellectual versus physical preservation among archivists in academic and public libraries. The survey indicates a greater emphasis on both intellectual and physical preservation in academic libraries as compared to public libraries, but there is no heavy emphasis on physical preservation in either type of library. While paper acidity continues to be the major problem requiring physical preservation in nearly all libraries, damage due to heat and humidity is not reported as frequently in academic libraries, perhaps due to their greater use of environmentally controlled rooms. Formal training in physical preservation is considered inadequate and there is a perceived need for individuals trained in both types of preservation.



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### INTRODUCTION

Traditionally the role of archivist pertained to intellectual preservation, which concentrates mainly on selection, appraisal, processing and cataloging of the collections [1]. Essentially it means preserving the informational content of documents. This traditional role, however, is changing due to the age of "documentary abundance" in which we find ourselves [2], causing archivists to become more active in taking measures for the repair, maintenance, restoration and protection of documents. This is referred to as physical preservation. Essentially this means preserving the form of the information. The increasing attention to it arises not only because there are more documents, but also because many of them are in non-traditional (e.g. electronic) formats, which could pose new problems for physical preservationists [3, 4].

Paper has been the most common material in archival collections. Until the late 18th century, paper making was primarily a hand process and resulted in a high-quality product which was strong and durable. With the advent of paper making machines and the use of chemical additives, paper became easier to make and less expensive but unfortunately the quality also declined. The introduction of wood pulp into the paper making process in the mid-1850s made the mass production of paper possible, but resulted in a product with a storage life of at most fifty years due to the formation of acidic products through chemical decomposition. This is the type of paper still being manufactured and used today, making physical preservation an important function for many archivists. This example illustrates how technological advances can make information more accessible while also creating new problems for its preservation (intellectual or physical). As a consequence, the term "preservation" now refers to a variety of interrelated activities designed to prolong the usable life of archival and manuscript materials. This is especially so in public libraries, where most records are on paper and date from the 19th century to the present and are not commonly stored in environmentally controlled areas. Starting in the mid-1970's, physical preservation of such records has become an important archival function [5,6]. Environental



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control, however, can only prolong the useful life of acidic-paper records. Transfer to another format such as microfilm eventually becomes necessary.

In addition to preservation of paper records, the rapid advance of new technology, especially in digital imaging, has raised the issue of the preservation of audiovisual and electronic records [3, 4, 7]. Experience to date indicates that it is not the physical deterioration of the medium but its obsolescence that determines the useful life of a digitally-imaged record. In contrast to paper documents, then, the issue facing archivists here may be that of intellectual rather than physical preservation [4, 5, 7-9]. The implementation of new technology, despite its high cost, has been more rapid in research and academic libraries, because of their emphasis on "current" knowledge and its rapid access and transferral [4, 10-12]. This raises the question of whether physical preservation generally is less important to archivists in research/academic libraries than it is to their counterparts in public libraries.

Intellectual and physical preservation are both important in an archive, but they are not interdependent except for recognizing the need for physical preservation when appraising a document. Some archivists know very little of the actual techniques used in physical preservation and simply send the document to a conservator who may or may not be in-house. The issue is the extent to which both preservation functions are performed by the archival staff, either by different individuals or by the same individual at different times. This project is a study of the relative importance of intellectual and physical preservation to archivists in public and academic libraries.

For the purpose of this study, <u>intellectual preservation</u> is defined as the selection, appraisal, processing and cataloging of archival materials. <u>Physical preservation</u> is defined as the repair, maintenance, restoration and protection of archival materials. The effort (number of hours per week) and training of archival staff in intellectual preservation are compared to the corresponding effort and training in physical preservation, for public and academic libraries. Some of the major problems requiring physical preservation, and the



techniques used to address these problems, have been determined. The adequacy of formal training in physical preservation, and the perceived need for training in both types of preservation, have been investigated.



### LITERATURE REVIEW

David B. Gracy [1] and Richard J. and Lynn W. Cox [5] have given overviews of the traditional role of the archivist in the intellectual preservation of library records. According to Gracy, archives have been maintained by governments for more than two thousand years. Modern methods for arranging and maintaining them, however, began in France in the 1840's and were extended by the Prussians in the 1880's, who introduced the concept of "provenance", or office of origin, of records. These archival principles reached the United States around the turn of this century and gained only slow acceptance until the establishment of the National Archives in 1934. The principles guiding "appraisal" — the selection of records of enduring value — were developed around this time and codified by T. R. Schellenberg [5]. The National Archives spurred the establishment of archival standards in the United States and the development of archival administration as a profession.

The archivist's role in physical preservation has been reviewed by Mary Lynn Ritzenthaler [6]. She stresses that archivists have primary responsibility for the physical preservation of collections in their care, and that physical preservation principles and techniques have increasingly been adopted by archival institutions and addressed in archival training programs. She adds, however, that some difficulties persist in the large—scale implementation of archival physical preservation programs. These include funding limitations, a short supply of qualified physical preservationists, a lack of readily available training programs, especially those that are accessible to working archivists, and a lack of qualified instructors. Of equal importance is the need for senior archivists and archival administrations to integrate fully physical preservation into archival management. Many of them, in Ritzenthaler's words, "... entered the profession via academic routes that emphasized the content of archival materials while neglecting the limitations of their physical forms" [6].

A comprehensive account of the public library and its administration in the United States has been given by Alice Gertzog and Edwin Beckerman [13]. This work traces the



development of this American institution from pre-colonial times through the social library of Benjamin Franklin (founded in Philadelphia in 1731) and the first "true" public library (founded in Boston in 1854), down to the present. As regards preservation, the focus is on the traditional guardianship of intellectual content from the time of the Boston Public Library. The necessity for physical preservation of documents in public libraries has been recognized by several state and regional organizations. A report by the Illinois State Library [14] describes the efforts of the Illinois Cooperative Conservation Program to provide a coordinated approach to the physical presentation of archival materials in all types of libraries in Illinois, especially the eighteen regional library systems. In New England, the six New England State libraries agreed in 1973 to cooperate across state lines to create the first regional library facility for physical preservation, the Northeast Document Conservation Center [15].

Since 1949, a number of surveys and studies have examined the archives programs at American colleges and universities. Several of these have been conducted by the Society of American Archivists Committee on College and University Archives. These surveys provided information on their holdings, the professional level of their staffs, the sophistication of their records management programs and, more recently, innovative approaches to appraisal and documentation of university records [16]. A high level of activity and interest in intellectual preservation is seen in all these studies. Jan Merrill-Oldham, Carolyn Morrow and Mark Roosa [17] have discussed the establishment of physical preservation models at research/academic libraries. They discuss program components, organization and staffing models, program benchmarks for selected core activities and case histories of programs at four universities. Their study is based on developments in physical preservation that have taken place in research/academic libraries since 1970. Barbara Floyd, Archivist at the University of Toledo, has written an article providing several practical guidelines for physical preservation from an archivist's perspective [18]. She writes, "... the archivist needs to have a broad base of knowledge of [physical] preservation issues. That



does not mean the archivist must be a fully trained conservator with the ability to do everything from deacidification to the removal of complex adhesives. What it does mean, however, is that the archivist must be able to recognize potential preservation problems ..."

All of the studies in this review discuss intellectual or physical preservation, or both, but none have surveyed the distribution of effort between the two archival functions, at either public or research/academic libraries.



### **METHODOLOGY**

This study used a self-administered questionnaire sent to archivists at public and academic libraries in the Midwest, surveying their activities in intellectual and physical preservation of library materials.

The sample consisted of the Archival Administrators at 50 academic libraries and 50 public libraries, selected systematically from the 1995 membership directory of the Midwest Archives Conference (MAC). The MAC draws its membership from all over the country but primarily from eleven states: Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, North Dakota and South Dakota. For public libraries, the first fifty names were selected; this virtually exhausted the public library membership. For academic libraries, every third name was selected.

The instrument used to collect the data was a questionnaire (Appendix A) consisting of fourteen questions, six of a general nature about the library and preservation activity, four about intellectual preservation and four about physical preservation. The validity and relevance of the questions were based on the researcher's experience in both aspects of preservation at the Dayton and Montgomery County Public Library, attendance at preservation workshops, and on the input of two colleagues who are MAC members. The questionnaire was pre-tested on two MAC member archivists, one at an academic library and one at a public library, which provided feedback on any difficulties with the questions and for ascertaining whether the questions would be interpreted in the same way by different respondents.

The questionnaire was mailed together with a cover letter (Appendix B) and a stamped, self-addressed envelope. The questionnaire was numbered, allowing respondents to be tracked while maintaining confidentiality. The respondents were asked to return the questionnaire within one month. Those not responding by that time were sent a follow-up letter or contacted by telephone.



The questionnaire was distributed in September, 1995, and responses were collected until the end of that month.



### ANALYSIS AND DISCUSSION

A total of 42 questionnaires were received from public libraries, of which four were unusable, because they were incompletely or unclearly completed, yielding a usable response rate of 76% from public libraries. A total of 42 questionnaires were received from academic libraries, of which two were unusable yielding a usable response rate of 80% from academic libraries.

### Demographic Data

Table 1 summarizes, for both public and academic libraries, the distribution of the training of full— and part—time archival staff among the categories "archival degree", "MLS degree", "other degree" and "clerical/non—degree". It is evident that academic libraries had more total staff involved in archival work, with a substantially greater percentage holding archival degrees, as compared to public libraries (23% compared to 10%).

Table 1

Training of full— and part—time archival staff in public and academic libraries.

Training	Public		Academic	
_	N	%	N	%
Archival degree	12	10	45	23
MLS degree	43	<b>3</b> 6	53	27
Other degree	34	29	60	<b>3</b> 0
Clerical/Non-degree	30	25	<b>3</b> 9	20
Total	119	100	197	100

Data was obtained on when the respondents received their terminal degree. For respondents from public libraries, the average year of terminal degree was 1980; five received their degree before 1970, twenty during the period 1970 to 1985 and ten after 1985. For respondents from academic libraries, the average degree year was 1982 and the distribution was three prior to 1970, twenty—one from 1970 to 1985 and fifteen after 1985. There is a slight tendency for academic libraries to have more recent hires doing archival work.



The current duties of the respondents were primarily supervision of intellectual and physical preservation staff; some respondents from public libraries also were active in genealogy.

### Type of Material

Respondents were asked to indicate the type of material available in their archive besides books. They were asked to select from a list of 9 material types, and the data are shown in Table 2. For 7 out of the 9 types, the percentages of academic libraries handling them was 1 1/2 to 2 times higher than the percentage of public libraries. In particular, Table 2 shows that almost all academic libraries had manuscripts and photographs. The percentage having electronic storage was much smaller, about equal to the percentage of public libraries for this type of material.

Table 2

Type of material available in the archive besides books.

Туре	Public		Aca	Academic	
	N	%	N	%	
Manuscripts	18	47	39	98	
Maps	19	50	32	80	
Historical Records	19	50	36	80	
Art Pieces	9	24	21	53	
Photographs	20	<b>53</b>	38	93	
Newspapers	17	45	28	70	
Audio-Visual (including microfilm)	19	50	31	78	
Electronic Storage	14	37	15	38	
Other	7	18	6	15	

### Environmental Control

Data were gathered on the environmental control of archival material. Sixty-three percent of the academic libraries surveyed said they had an environmentally controlled room for this purpose, compared to 32% of the public libraries. So on a percentage basis about twice as many academic libraries have such a facility.



### Time Spent on Preservation

Data were collected on the number of staff hours devoted to intellectual and physical preservation. The responses are shown in bar-graph form in Figures 1 through 3. For both questions, respondents were asked to indicate either 30 or more hours per week, 10 to 29 hours per week or less than 10 hours per week. Figure 1 displays the results for public libraries, Figure 2 for academic libraries and Figure 3 for public and academic libraries combined.

Over 80% of public libraries (Fig. 1) and over 60% of academic libraries (Fig. 2), for a combined total of over 70% (Fig. 3), devoted less than 10 hrs/wk to physical preservation. With respect to intellectual preservation, however, over 30% of the combined total spent 10 to 29 hrs/wk and over 40% spent more than 30 hrs/wk (Fig. 3). These results show that both types of libraries do more intellectual preservation work than physical preservation.

Sixty-eight percent of academic libraries spent more than the 30 hrs/wk on intellectual preservation, and 22% spent more than 30 hrs/wk on physical preservation (Fig. 2). The corresponding percentages for public libraries are 17% and 6% (Fig. 1). So academic libraries do substantially more intellectual preservation than public libraries, and moderately more physical preservation.

### Training of Personnel

Figures 4 through 6 show the responses to two questions dealing with the training of personnel, one referring to intellectual preservation and the other to physical preservation. For both questions, respondents were asked to list the number of staff in each of the following categories: archival degree, MLS degree, other degree, clerical/non-degree and student. Figure 4 displays the results for public libraries, Figure 5 for academic libraries and Figure 6 for public and academic libraries combined.

For public libraries, clerical/non-degree staff and students did not participate much in



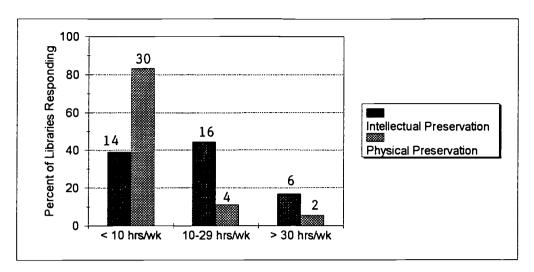


Fig. 1. PUBLIC LIBRARIES.

Distribution of staff time between intellectual and physical preservation.

The number of responses in each category is shown above the bars.

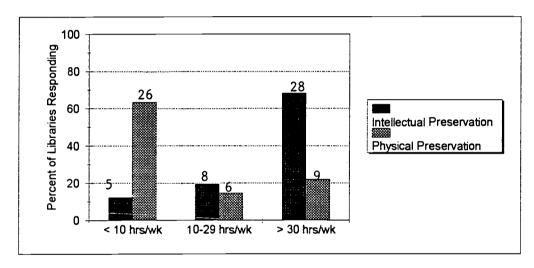


Fig. 2. ACADEMIC LIBRARIES.

Distribution of staff time between intellectual and physical preservation.

The number of responses in each category is shown above the bars.

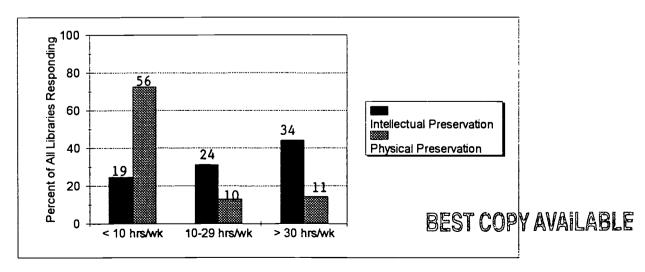


Fig. 3. PUBLIC AND ACADEMIC LIBRARIES COMBINED.

Distribution of staff time between intellectual and physical preservation.

The number of responses in each category is shown above the bars.



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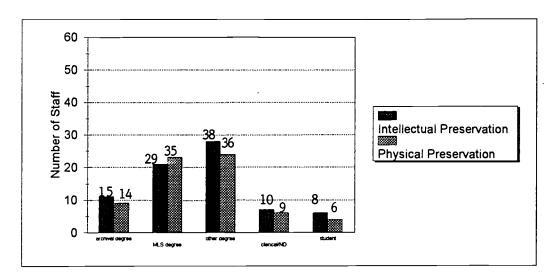


Fig. 4. PUBLIC LIBRARIES. Training of personnel participating in preservation.

The percentage of staff in each category is shown above the bars.

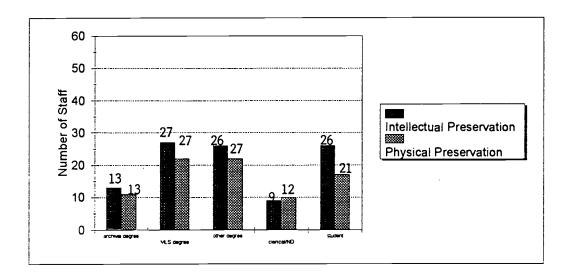


Fig. 5. ACADEMIC LIBRARIES. Training of personnel participating in preservation. The percentage of staff in each category is shown above the bars.

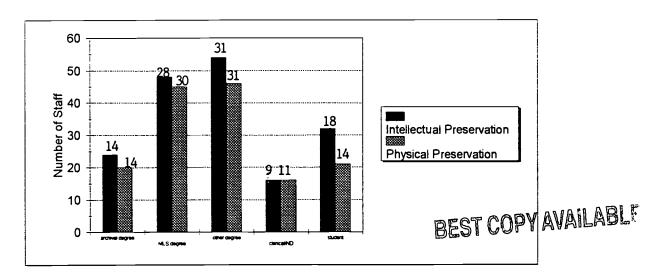


Fig. 6. PUBLIC AND ACADEMIC LIBRARIES COMBINED.

Training of personnel participating in preservation.

The percentage of staff in each category is shown above the bars.



14 17

preservation work, and only eleven individuals (15%) doing intellectual preservation and nine individuals (14%) doing physical preservation had archival degrees (Fig. 4). Most preservation work was done by MLS and other non-archival degree holders. The same trend is seen for academic libraries, with the exception of their use of a large number of student employees: 26 and 17 student workers (26% and 21% of the total) in intellectual and physical preservation, respectively (Fig. 5). Figure 6 shows that 102 individuals, or 59% of the total of all library staff doing intellectual preservation, hold the MLS or another non-archival degree; for physical preservation, the number is 91 individuals or 61% of the total. So most archival preservation work, whether intellectual or physical, is done by college-trained staff without a degree in archives.

Figure 7 displays the response to two questions which relate to the perceived adequacy of formal training in physical preservation. Only 30% of the respondents from public libraries and 36% from academic libraries indicated that they thought they received adequate training in physical preservation techniques as part of their formal course work (apart from continuing education/workshops). On the other hand, 74% of respondents from public libraries and 87% from academic libraries indicated that they perceive a need, now or in the future, for more individuals who are trained in both intellectual and physical preservation. Thus, both types of libraries show similar responses concerning the inadequacy of formal training in physical preservation and the need for more trained individuals in the future.

### Problems Requiring Physical Preservation

Respondents were asked to indicate some of the major problems requiring physical preservation that are encountered. The choices were "acidity", "multiple media (non-paper)" and "other". Of the public libraries, 71% listed acidity and 42% listed multiple media as major problems. Of the academic libraries, 95% listed acidity and 75% listed multiple media. Acidity is clearly the major problem encountered, with multiple



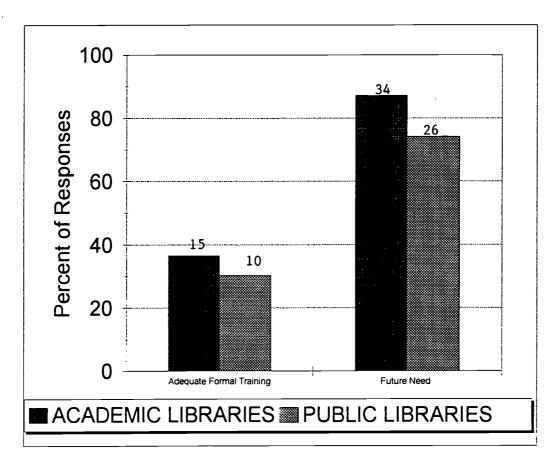


Fig 7. Perceived adequacy of formal training in physical preservation.

The number of responses in each category is shown above the bars.



media second. The higher percentages for academic libraries is attributable to their greater physical preservation activity (see Figs. 1 and 2). Table 3 shows the most frequently cited problems (all libraries combined). In the "other" category, mold, mildew, rust stains, tears, dirt and heat and humidity were cited by both types of libraries. The eight libraries citing heat and humidity as a problem were all public, and were among those who had earlier indicated the lack of environmentally controlled areas for archives. Onion—skin paper and obsolete electronic formats were listed by some academic libraries.

Table 3

Major problems requiring physical preservation.

Problem	N	%
Acidity	65	83
Multiple media	46	59
Tears	1 <b>3</b>	17
Rust stains	10	1 <b>3</b>
Dirt	9	12
Heat and humidity	8	10
Mold	6	8
Mildew	6	8

### Physical Preservation Techniques

The survey asked respondents to identify what physical preservation techniques they used in-house, choosing from a list of 9 techniques. The data are shown in Table 4. The most frequently used techniques were basic repair techniques and the making of protective enclosures. Exhibit preparation was an important activity for academic libraries, occurring more than twice as frequently as in public libraries (75% to 34%). This is reasonable considering the educational mission of their institutions. The restoration of leather-bound volumes is technically demanding and was the least frequently used technique. Academic libraries used every technique listed more frequently than public libraries except commercial bindery preparation, for which the percentages of use were essentially the same for



both (37% for public and 35% for academic). The results are consistent with the greater activity in physical preservation occurring in academic libraries.

Table 4.

Physical preservation techniques used in-house.

Туре	Pu	blic	Ac	ademic
	N	%	N	%
Basic repair techniques	30	79%	35	88%
Disaster planning/salvage of damaged material	19	50	27	68
Treatment decision making	18	47	27	68
Protective enclosures, e.g., phase box, drop spine box	28	74	35	88
Restoration of leather-bound volumes	1	3	5	13
Exhibit preparation	1 <b>3</b>	34	30	75
Deacidification	7	18	12	30
Commercial bindery preparation	14	<b>3</b> 7	14	35
Other	5	1 <b>3</b>	11	28

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### CONCLUSIONS AND IMPLICATIONS

Based on this survey, the following conclusions and implications can be drawn.

- The percentage of academic libraries surveyed that handled various types of non-book material was 1 1/2 to 2 times higher than the percentage of public libraries surveyed; future hires in preservation should be aware of the problems involved in handling and storing such material, and have the training to deal with them. While the higher percentage of academic libraries handling non-book material may be due to several factors, the most important one is probably the academic library's view of itself as serving the research interests of scholars. The specific areas of historical and archival scholarly interest vary widely with the institution. A small church-affiliated college may have an extensive collection dealing with the religious order which formed it; a land-grant university may have a variety of materials dealing with regional or state history; a large research-oriented university could have archival collections in a variety of disciplines. A second factor is economic in nature. Academic librarians and archivists believe that the ability of a library to support research of quality depends on the acquisition of related collections in as many areas as possible. In addition to accepting donated material, academic libraries go out of their way to find collections to fit their needs for research by subscribing to various auction catalogs. This requires a budget. Public libraries are reluctant to invest money in archival material and rely almost exclusively on donors.
- Over 60% of the academic libraries have an environmentally controlled room for archival material, which is about twice as great as for public libraries. The up-front cost of creating an ideal physical environment for archival material is high, but it must be balanced against the cost of failing to do so. Everything else that a repository may do to retard deterioration, or to repair the damage caused by it, is undermined if the material continues to be housed under poor environmental conditions. The most cost-



effective method of extending longevity is to prevent deterioration to the greatest extent possible. Academic libraries make this a priority. Public libraries, by and large, do not. Some public library administrators are of the opinion that rare and valuable manuscripts and other types of material are the province of academic and special libraries. Frequently, however, public libraries are the recipients of such material but subsequently are loathe to give them up to an institution better equipped to house them. In such cases, a greater awareness within the library administration of the importance of environmental control, and a willingness to allocate the resources to achieve it, is needed.

Libraries do more intellectual preservation than physical preservation; academic libraries do substantially more intellectual preservation than public libraries, and moderately more physical preservation. The greater emphasis on intellectual preservation in all libraries may be related, in part, to the fact that this type of preservation does not require much additional training on the part of the archival staff. Although library schools as well as history programs teach archival methodologies of appraisal and records scheduling, which can be applied to the critical problem of selecting material for physical preservation, they do not emphasize the practical aspects of preservation techniques, which often require a good deal of skill. Another factor is that physical preservation, besides being labor-intensive, is expensive, requiring materials, special tools and a dedicated work space. Opportunities for educating staff in physical preservation techniques through workshops and special courses should be provided, as well as the resources necessary to implement these techniques. The fact that academic libraries do more preservation work than public libraries, especially of an intellectual nature, is consistent with their perception that providing the material for scholarly research is an important part of their mission. This has led to the establishment of well-defined collecting fields and a high level of activity in material collection.



- Aside from the large number of student employees used by academic libraries, both types of libraries show a similar distribution of trained personnel doing archival preservation, most of whom are college—trained but do not have a degree in archives. This reveals that an archival degree is not considered to be really necessary, and supports the idea of placing archival education programs in schools of library science. Both archivists and librarians are becoming generalists in information storage and retrieval. Both know how to define preservation problems, see what options are available to solve them, and allocate resources. Both function well in the area of intellectual preservation, which is the major archival activity in public and academic libraries. Physical preservation skills, however, are lacking in both archival and non-archival degree holders. Perhaps enriching the curriculum in library science schools to include, as a minimum, a core course in physical preservation with "hands-on" laboratory experience would be helpful. Lacking this, continuing education in physical preservation techniques should be provided for archival staff.
  - The major problem encountered requiring physical preservation is paper acidity. This result confirms the many reports in the literature on the seriousness of this problem. While acidity is a widely recognized problem, the commitment on the part of library administrators to combat it is by no means uniform. The reasons for this are largely budgetary. Four procedures can be identified for treating paper acidity. In order of decreasing cost, they are (1) mass de-acidification, (2) environmentally controlled areas, (3) in-house physical preservation, and (4) re-formatting. Mass de-acidification involves large segments of the collection and cannot be done in-house. Subsequent storage of the de-acidified collection in an environmentally controlled area would extend the lifetime of the collection indefinitely, but the total cost involved in this two-step process would be prohibitive. An in-house preservation program would include de-acidification on a small scale involving single items; it would be significant for rare and valuable material, and would preserve it in its original form. The most

cost-effective program would probably be a combination of procedures (2), (3) and (4), i.e., an environmentally controlled area which would retard acidic decomposition, under the supervision of a trained physical preservationist, together with an in-house preservation effort and a re-formatting program which would include copying of textual material onto acid-free paper, copying onto microfilm, and re-formatting onto digital electronic media as these become financially more accessible in the future.

• A large majority of respondents considered their formal training in physical preservation to be inadequate and felt that there is a future need for more individuals trained in physical and intellectual preservation. As mentioned earlier, curriculum reform of archival and MLS degree programs should include physical preservation techniques. This should encompass both textual and non-textual material, e.g. electronic records. In the short term, opportunities for continuing education in physical preservation techniques should be provided. This can take many forms, including graduate-level courses, seminars, workshops, institutes, and professional meetings. For physical preservation, workshops are probably the best continuing education format, because they provide the "hands-on" experience and active participation required in learning the essential techniques.

While paper acidity continues to be the major problem requiring physical preservation in nearly all libraries, damage due to heat and humidity is not reported as frequently in academic libraries, due perhaps to their greater use of environmentally controlled rooms. The study does not show a preponderance of electronic documents in either academic or public archival collections. The survey indicates that there is a greater relative emphasis on both intellectual and physical preservation in academic libraries, but there is no heavy emphasis on physical preservation in either academic or public libraries. But both intellectual and physical preservation are coming together in archival management, for after appraisal and record selection, the physical condition and stability of the records must



be evaluated. The respondents considered formal training in physical preservation to be inadequate, which indicates an awareness of the problem and points toward the inclusion of training in physical preservation in archival and MLS programs as a desirable goal.



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### APPENDIX A

## Questionnaire

1.	Type of Library (circle one)	a) Academic b) 1	Public
2.	Full- and part-time archival staff training. (List number in each category)	a) archival degree b) MLS degree c) other degree d) clerical/non-degree	æ
3.	Your current duties		
4.	Year of your terminal degree?		
5.	Type of material available in the archive be manuscripts historical records photographs audio-visual (including microfilm) other	esides books. (Check all that apply)  maps art pieces newspapers electronic storage	
6.	Do you have an environmentally controlled room for archival material?	yes in future	e pl <b>ans</b>
7.	Approximately how many archival staff ho (selection, appraisal, processing and catalog 30 or more hours per week 10 to 29 hours per week less than 10 hours per week		eservation
8.	What is the training of personnel partice number of staff in each category)  a) archival degree d)  b) MLS degree e)  c) other degree	clerical/non-degree	on? (List

	acidity multiple i	mema (non paper)				
			other			
10.	•	l staff hours are devoted to physical	pres <mark>ervat</mark> io			
		nd protection of archival collections)?				
	30 or more hours per week					
	10 to 29 hours per week					
	less than 10 hours per week					
1.	What is the training of personnel participating in physical preservation? (List number					
	of staff in each category)					
	a)archival degree d)	clerical/non-degree				
	b) MLS degree e)	student				
	c)other degree					
3.	Please identify what physical preservation techniques are used in-house. (Check all that					
	rease identity what physical preserv	vacion rechilques are used in mouse. (e	neck an tha			
	apply)					
	apply) basic repair techniques	restoration of leather-bound	volumes			
	apply) basic repair techniques disaster planning/salvage	restoration of leather—bound exhibit preparation	volumes			
	apply) basic repair techniques disaster planning/salvage of damaged material	restoration of leather—bound exhibit preparation deacidification	volumes			
	apply)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat	volumes tion			
	apply)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making  protective enclosures	restoration of leather—bound exhibit preparation deacidification	volumes			
	apply)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat	volumes tion			
Į.	appiy)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making  protective enclosures  (e.g. phase box, drop spine box)	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat other (please specify)	volumes tion			
l.	apply)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making  protective enclosures  (e.g. phase box, drop spine box)  Do you perceive a need, now or in techniques	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat other (please specify)  the future, for more individuals who are	volumes			
Į.	appiy)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making  protective enclosures  (e.g. phase box, drop spine box)	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat other (please specify) the future, for more individuals who are	volumes			
<b>.</b>	apply)  basic repair techniques  disaster planning/salvage  of damaged material  treatment decision making  protective enclosures  (e.g. phase box, drop spine box)  Do you perceive a need, now or in techniques	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat other (please specify)  the future, for more individuals who are	volumes			
<b>!</b> .	apply)  basic repair techniques disaster planning/salvage of damaged material treatment decision making protective enclosures (e.g. phase box, drop spine box)  Do you perceive a need, now or in the both intellectual and physical preservations.	restoration of leather—bound exhibit preparation deacidification commercial bindery preparat other (please specify)  the future, for more individuals who are	volumes			
-	apply)  basic repair techniques disaster planning/salvage of damaged material treatment decision making protective enclosures (e.g. phase box, drop spine box)  Do you perceive a need, now or in the both intellectual and physical preservations.	restoration of leather—bound exhibit preparation deacidification commercial bindery preparate other (please specify)  the future, for more individuals who are vation? yes	volumes			
	apply)  basic repair techniques disaster planning/salvage of damaged material treatment decision making protective enclosures (e.g. phase box, drop spine box)  Do you perceive a need, now or in the both intellectual and physical preservations.	restoration of leather—bound exhibit preparation deacidification commercial bindery preparate other (please specify)  the future, for more individuals who are vation? yes	volumes			



### APPENDIX B

### Cover Letter

Re: "Intellectual or Physical Preservation? A Survey of the Preservation Activities of Archivists at Academic and Public Libraries."

September 1995

Dear (head archivist):

I am a graduate student in the School of Library and Information Science at Kent State University. One of the requirements is a research paper and, as a result, I am conducting a survey on the preservation activities of archivists at academic and public libraries. The objective of this research is to determine the relative importance of preservation (both physical and intellectual) among archivists in public and academic libraries. The enclosed questionnaire will assist me in getting the information I need. The results will be used in helping library administrators to set up priorities for preservation in the future, and may have implications for the core and continuing education needs of archivists.

Confidentiality and anonymity are guaranteed and you need not identify yourself on the questionnaire. Any material linking the tracking number of the survey to the name of the library will be destroyed when the survey is received. Participation is voluntary but I would very much appreciate your input. You may refuse to participate or withdraw from participation at any time without penalty. A copy of the results of the study will be available upon request. Please return your questionnaire by October 1. A stamped, self-addressed envelope is enclosed for your convenience.

If you have questions or concerns, please contact me at (513) 227-9500, ext 323 or (513) 879-4748 or my adviser, Dr. Richard Rubin, at (216) 672-2782. If you have further questions regarding the rules for research at Kent State University, contact Eugene Wenninger at (216) 672-2851.

Thank you for your help.

Sincerely yours,

Elli Bambakidis Graduate Student





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