



The Distribution of Libraries Throughout the United States

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THIS ARTICLE is a survey of the distribution of various kinds of libraries in the United States at different times during the last one hundred years. It is a count of libraries, not a study of the distribution of library resources or of use. Counting libraries and giving each of them the same value raises two very serious questions: (1) Why count libraries in the first place? Why not use some other measure of library service? (2) How does one decide when a particular service agency—a branch library, for example—is a library and when it is not?

Ideally, in order to understand how library service has been distributed in the United States at various times during the past one hundred years, several measures should be used; the choice of measures would depend on one's philosophy of librarianship. Practically, however, the only figures available for any large number of libraries are the simple count of libraries and the number of volumes they contain. Some surveys have made good use of volume counts,¹ but the present study is limited to a simple count of libraries for these reasons: (1) it seemed desirable to deal with a large number of libraries and to classify each library fairly carefully (to have considered the number of volumes would have doubled or tripled the amount of work); and (2) during much of the past century, the concept of a library as a single unit has been quite meaningful. A simple count can answer several questions: How rapidly did public libraries spread across the United States? Did they first appear in areas where the old social libraries were already popular? How quickly did the social libraries disappear in various regions? Have college libraries been distributed throughout the country in proportion to the population?

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Decisions about when to consider a library as a separate entity and when to consider it as a part of a larger unit have been necessary mainly in the case of public library systems and university libraries. Actually, the decision depends on a person's viewpoint: a user of a branch library might consider it separate, while a library administrator would view it as part of a larger unit. In this study, a third viewpoint, that of the compiler of a list or directory, is used: if the unit has a separate line or entry in the list, it is considered to be a library. The effect of this decision has been that large public library branches on distinctive subjects and medical or law school libraries are usually included, whereas ordinary public library branches and departmental libraries in universities are not.

To obtain the clearest understanding of how the distribution of libraries has changed in the United States during the last one hundred years, it would be best to know how many libraries of each kind were present during each year. This cannot be ascertained because lists have been issued only at intervals of several years. For the purposes of this paper, rough indications of changes have been obtained by examining lists and directories of national scope issued at approximately twenty-five year intervals, that is, as close as possible to the years 1876, 1900, 1925, 1950, and 1975.

No national list of libraries issued in the United States in the last century has pretended to include all libraries; all lists or directories omit small libraries, or libraries of certain types, or ones whose librarians have failed to answer a questionnaire. For the purposes of this study, five national lists have been chosen. The first three were issued by the U.S. Bureau of Education:

1. *Public Libraries in the United States of America . . .*, published in 1876.² The bureau's 1876 report uses data gathered in 1875 and 1876 from about 3,600 libraries of all kinds except those in common schools (academies, or secondary schools, were included). Only data from libraries with three hundred volumes or more are presented.
2. *Report of the Commissioner of Education for the Year 1899-1900*, published in 1901.³ The tables in this volume are based on reports from about 5,400 libraries of all kinds which had collections of 1,000 volumes or more in 1900.
3. *Statistics of Public, Society, and School Libraries, 1923*.⁴ The bureau's 1923 volume covers all kinds of libraries; it is not as limited as its

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title implies. It contains data on about 5,100 libraries with holdings of 3,000 volumes or more.

The most satisfactory list of libraries published near the year 1950 is the nineteenth edition of the *American Library Directory*, published by the R.R. Bowker Company in 1951.⁵ It contains about 11,000 libraries in its section for the United States, but omits all school libraries, some special libraries which failed to answer a questionnaire, and the smallest public libraries. To be included, a public library had to have: (1) an annual income of \$500 or more, (2) an annual expenditure of \$100 or more for books, or (3) service that was countywide. For school libraries, it has been necessary to use one of the tables in *Statistics of Public-School Libraries, 1953-54*, chapter 6 in the Biennial Survey of Education in the United States, 1952-54.⁶

In order to obtain a list as current as possible, the twenty-ninth edition of the *American Library Directory, 1974-1975* was used; it contains information about 26,000 libraries in the United States other than those in schools.⁷ The compilers of this directory apparently have not excluded any public libraries but they have, for some reason, excluded law libraries of fewer than 10,000 volumes unless they are devoted to special kinds of law. The presence of small libraries has had little effect on the totals in the 1951 and 1974 lists; they include few libraries with collections under 3,000 volumes and almost none with collections under 300.

The 1974 *Directory* contained so many libraries that a sample was taken by selecting ten states from various parts of the country which might be fairly representative of the presence of libraries. Those states selected were: Maine, New Jersey, Alabama, Kentucky, Virginia, Indiana, Nebraska, Wisconsin, Arizona and California. The *Directory* lists 4,201 libraries from these states. A general indication of the ability of these states to represent the entire United States is that in 1951, in these ten states taken together, the relationships among the numbers of various kinds of libraries are about the same as the relationships in the entire country. For example, in these ten states in 1951, public libraries constituted 56 percent of the libraries other than those in schools; in the United States as a whole, public libraries constituted 58 percent. However, in this study, the 1974 figures for these ten states are presented as very rough indicators of changes since 1951. No satisfactory list of school libraries compiled within the last few years has been found, so no recent figures for this type of library are included in the study.

In using each of the lists, the compiler's decisions about inclusion have been accepted. For example, libraries with fewer than 3,000 volumes in the lists for 1876, 1900, 1951 and 1974 have been included, even though they are omitted from the 1923 list. Because each compiler had different criteria for inclusion, no list is completely comparable with another. Each compilation has been accepted as containing several thousand of the most important libraries in the United States at the time, according to the compiler. On balance, it has seemed better to sacrifice comparability of lists in order to learn as much as possible about the distribution of libraries at any one time.

These lists have been used to investigate three aspects of library development in the United States during the last one hundred years: (1) changes in the number of well-recognized "kinds" of libraries (public, college, etc.), (2) changes in what might be considered the "proprietorship" or control of libraries, i.e., changes in the roles of local governments, state governments, voluntary associations, etc., and (3) changes in the subject matter of those libraries on special subjects such as law and medicine: Are some subjects more frequently found in recent years? Have some subjects disappeared?

In order to learn about changes in the kinds of libraries and in the kinds of agencies controlling libraries, every library in every list was classified according to kind (public, etc.) and according to controlling agency if that was not determined by its kind. If the library was concerned with a distinct subject, that subject was also identified. For example, a medical library in a hospital operated by the U.S. government went into a category for federal hospital libraries on medical subjects. This category was later combined with categories for other kinds of hospital libraries in order to determine trends for all hospital libraries, with categories for other federal libraries in order to understand the role of the U.S. government, and with categories for other medical libraries to learn about the prevalence of libraries on this subject.

One kind of library must be mentioned at the outset because it constitutes such a large group and because its examples are so difficult to count: the school library. Only rarely during the last one hundred years has anyone expressed much confidence in statistics about the number of libraries in elementary or secondary schools, yet estimates indicate that, at least during part of the century, they have far outnumbered the total of all other kinds of libraries. For these reasons, school libraries have been ignored in this study in considering a total with which various types are compared. All percentages will

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refer to the total of the nonschool libraries in any list or directory as 100 percent. School libraries will be discussed but statistics for them, also, will be compared with the total for other libraries. The term *all libraries* used in this study signifies all libraries other than those in schools.

In comparing the prevalence of libraries in the various regions on any one list, either of two methods can be used: (1) to think of all the libraries in the country as 100 percent and to state the percentage found in each region, then to compare each region's percentage of libraries with its percentage of the population, or (2) to calculate, for each region, the ratio of libraries to population, (e.g., the number of libraries per 10,000 persons). The two methods give similar results; if a region's percentage of libraries is higher than its percentage of the population, its ratio of libraries to population will be higher than the ratio for the entire United States. In this study, the first method was used because its terms, percentages of national totals, seemed more meaningful; for example, to know that in 1900, the South had .22 libraries per 10,000 population has almost no meaning unless one is already quite familiar with the use of this measure.

THE DISTRIBUTION OF LIBRARIES OTHER THAN THOSE IN SCHOOLS

To consider the distribution of libraries in the United States, it is necessary to think in terms of regions. There is, however, no completely satisfactory way of dividing the country for library purposes. Therefore, mainly as a matter of convenience, the census groupings of four major regions have been used in this study: (1) the Northeast, including New England and the Middle Atlantic states, New York, New Jersey and Pennsylvania; (2) the North Central states, to include the two census subregions, "East North Central" and "West North Central"—that is, a region embracing the states north of the Ohio River and including at its southwestern and western edges Missouri, Kansas, Nebraska, and the Dakotas; (3) the South, a region made up of all states south of the two regions just described, and the District of Columbia, and extending far enough west to include Texas and Oklahoma (this region is made up of the census groups "Southeast," "East South Central" and "West South Central"); and (4) the West, a region which includes every state or territory west of the three major regions just described.

Before considering individual kinds of libraries, something must be said about the regional distribution of all libraries at various times. As

Table 1 shows, in the Northeast the percentage of nonschool libraries has been considerably higher than the percentage of U.S. population at the time of the issuance of every list from 1876 through 1951. Actually, the concentration of libraries has been only in New England; at all times, the states of New York, New Jersey, and Pennsylvania have had about the same proportion of libraries and of population. The disproportion between the percentage of libraries and of population in New England was greatest one hundred years ago: in 1876, New England had about 9 percent of the population and 26 percent of the nonschool libraries. By 1951, the difference was somewhat less: about 6 percent of the population and 13 percent of the libraries.

TABLE 1
DISTRIBUTION OF NONSCHOOL LIBRARIES AND POPULATION BY REGIONS, 1870s TO 1950s; NUMBER AND PERCENTAGE IN EACH REGION

	Northeast		North Central		South		West		All U.S.	
	No.*	%	No.*	%	No.*	%	No.*	%	No.*	%
	Libraries, 1876	1,348	51	744	28	445	17	100	4	2,637
Population, 1870	12,299	32	12,982	34	12,288	32	990	3	38,559	101
Population, 1880	14,508	29	17,363	35	16,519	32	1,801	4	50,191	100
Libraries, 1900	1,755	49	1,078	30	528	15	243	7	3,604	101
Population, 1900	21,047	28	26,333	35	24,525	32	4,310	6	76,215	101
Libraries, 1923	1,702	41	1,363	33	638	15	464	11	4,167	100
Population, 1920	29,661	28	34,018	32	33,126	31	9,214	9	106,019	100
Population, 1930	34,427	28	38,594	31	37,858	31	12,324	10	123,203	100
Libraries, 1951	3,591	32	3,479	31	2,535	23	1,482	13	11,087	99
Population, 1950	39,478	26	44,462	29	47,199	31	20,191	13	151,330	99

*Population figures are from U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957*, 1960, rounded to the nearest thousand.

In the North Central states, libraries lagged somewhat behind population but later moved ahead. The states in this region had 28 percent of the libraries in 1876 and about 34 percent of the population; by 1951 they had 31 percent of the libraries and 29 percent of the population. Here again the subregions exhibit a different pattern.

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In the states east of the Mississippi (that is, in the East North Central census region) population declined slowly from about 23 percent to about 20 percent between 1876 and 1951, while the percentage of libraries declined from 21 percent to 18 percent. For the states west of the Mississippi (the West North Central census region) the percentage of population increased from about 11 percent in 1876 to about 14 percent in 1900, while the percentage of libraries increased from 7 percent to 11 percent. Libraries subsequently became more prevalent, however: in 1923 this subregion had 13 percent of the libraries and 11-12 percent of the population; in 1951, it had 14 percent of the libraries and 9 percent of the population. The reasons for such changes cannot be determined from a broad-scale study such as this; they may be quite complex. A study of the founding of libraries in Ohio, Indiana and Illinois before 1850 showed that the prevalence of libraries seemed to be closely related to the sources of immigration into the various parts of that section of the East North Central states.⁸

The West (that is, the census regions of Mountain and Pacific states) was, of course, very thinly populated in 1876; by 1950, its population was still small in relation to its area: 11.5 inhabitants per square mile as compared with the national average of 42.6. However, its percentage of the national population had risen from 4 percent in 1880 to 13 percent in 1950. The pattern of its library development has been generally similar to that of its population growth: in 1876 it had 4 percent of all the libraries in the country, and in 1951, 13 percent.

Among the western states, the most noteworthy distinction in terms of libraries and population is not in difference between the census subregions of Mountain and Pacific states, but rather between the state of California and the rest of the West. In the years between 1876 and 1951, California had a much greater population and many more libraries than any other western state. In 1876, California had about one-half of all the population in the West and 63 percent of the libraries; in 1900, it had 34 percent of the population and 49 percent of the libraries. After that its library/population ratio goes down: in 1923 it had about the same percentage of libraries and population; in 1950, it had 52 percent of the population in the West and, in 1951, 39 percent of the libraries.

In the South, the percentage of population of the entire United States remained remarkably stable between 1876 and 1951; it remained at 31 or 32 percent in all census years close to the years when the four lists of libraries were issued. The South, however, had a noticeably lower percentage of libraries and this percentage fluctuated

tuated somewhat: in 1876 it was 17 percent; in 1900, 15 percent; in 1923, again 15 percent; and in 1951, it had risen to 23 percent.

In the South, there have always been more people in the South Atlantic census region (states on the Atlantic seaboard plus West Virginia) than in either the East South Central region (between the Appalachians and the Mississippi) or the West South Central region (Arkansas, Louisiana, Texas and Oklahoma). Considering the population of the entire South as 100 percent, the South Atlantic states had a population of about 47 percent in 1876 and about 45 percent in 1951. In the states west of the Alleghenies, there was a definite shift in population from east to west: the percentage in the East South Central region dropped from 35 percent to 24 percent between 1876 and 1951, and the percentage in the West South Central states rose from about 18 percent to 31 percent.

The pattern for libraries in the South between the 1870s and 1950s differed from the population pattern in that the number of libraries along the Atlantic seaboard has always exceeded that of all other regions combined. Considering all southern libraries as 100 percent, 56 percent of libraries in 1876 were in the South Atlantic region, 57 percent in 1900, 53 percent in 1923, and 53 percent in 1951. Twenty-nine percent of Southern libraries were in the East South Central states in 1876; this had dropped to 20 percent by 1951. In the West South Central region, it rose from 15 to 27 percent in the same period.

VARIOUS KINDS OF LIBRARIES

This section first traces the rise of the public library, the decline of the social library, and changes in the number and distribution of libraries supporting educational activities. The changing roles of local, state, and federal governments and voluntary associations will then be examined. Finally, brief consideration is given to several kinds of libraries of more or less charitable intent—those in hospitals, prisons, and asylums—and to a kind that has no charitable purpose whatsoever—libraries in business establishments.

PUBLIC LIBRARIES

Without a doubt the rise of the free, government-supported public library has been the single most significant phenomenon of the last one hundred years in the library history of the United States. Such libraries were virtually nonexistent before the Boston Public Library

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was established in the 1850s; they had begun to grow in number by 1876, but fewer than 300 appear in the U.S. Bureau of Education's report for that year—11 percent of all nonschool libraries in the country. By 1900, the number had tripled; the 963 public libraries represent 26 percent of the nonschool libraries. In the 1923 list, almost 2,200 public libraries constituted 53 percent of libraries and in 1951, 6,400 libraries represented 58 percent.

By 1974, consolidations, regional systems, and other kinds of networks made it more difficult to decide whether a particular building and collection should be considered as a separate library. However, if we accept the definitions used by the compilers of the 1951 and 1974 library directories, we find an increase in the number of public libraries during the twenty-three-year period in the ten states constituting the 1974 sample. Those states had just fewer than 1,300 public libraries in 1951, 56 percent of the libraries in the ten states (close to the national average of 58 percent), and in 1974, they had more than 1,600, 39 percent of the ten-state totals for all kinds of libraries.

Public libraries have been unevenly distributed in the United States during at least part of the last century. The Northeast has always had a higher percentage of these libraries than its percentage of the country's population. In 1876, when it had about 30 percent of the population, it had almost exactly two-thirds of the public libraries. The proportion of the population in the Northeast has gone down somewhat; by 1950 it was 26 percent, but in the *Directory* issued a year later it had one-third of the public libraries.

In all the lists from 1876 through 1951, the South has had fewer public libraries in proportion to its population than did other regions. In 1876 and 1900, the number of public libraries in the South was negligible (less than 5 percent of the U.S. total; in the 1923 list the figure was 10 percent and, in the 1951 list, 19 percent.

The North Central region in 1876 had slightly fewer public libraries in proportion to population: 30 percent of the public libraries and 34 percent of the population. In both 1923 and 1951, its percentage of libraries was 7 to 8 points higher than its percentage of the U.S. population.

The prevalence of public libraries in the West shows a pattern which is difficult to interpret. In 1876, when it had about 3 percent of the population, it had only 1 percent of the libraries. However, in 1900 the West had 6 percent of the population and 7 percent of the libraries. Its percentage of public libraries continued to increase faster

than its percentage of population; in 1923 it had 15 percent of the libraries and 9 percent of the population. The statistics for 1951, however, are surprising: in that year it had only 12 percent of the libraries whereas in the preceding year it had 13 percent of the population; its ratio of libraries to population was about the same as in the rest of the country.

SOCIAL LIBRARIES

The century since 1876 may have belonged to the public library; the century before that date certainly belonged to the social library. Social libraries were outnumbered, in those days, by only two other kinds, school and Sunday school libraries, which were often very small and short-lived. Almost one-half of all the nonschool and non-Sunday school libraries which existed before 1876 were social libraries in the broad sense of the term; that is, they were libraries formed by societies which were organized to acquire either specialized or general collections, for the use of their own members, or for the use of persons of a particular age, gender, interest, or vocation. Even if a strict definition of the term "social library" is used—that is, limiting it to a general collection formed by a nonspecialized group for its own use—one-third of the nonschool and non-Sunday school libraries were of this kind.

In the first few decades after Franklin founded the Library Company of Philadelphia in 1731, when social libraries were first established in the colonies, almost all of them were social libraries in the strict sense.⁹ Throughout the first three-quarters of the nineteenth century, these "pure" social libraries were joined by a variety of libraries which had some of the characteristics of the early social libraries, but were specialized in some way. However, the central core of pure social libraries continued to be more numerous than all other kinds combined. Changes in the distribution of the various kinds of social libraries will be considered here after the pattern for the entire group is described.

Although the last one hundred years constituted the century of the public library, social libraries did not begin to diminish in number when public libraries first became plentiful. The 1876 report contained 738 social libraries, using the broadest definition, and the 1900 *Report* included 867, some of them established after 1876. After that the decline was undeniable: the 1923 list contained 643 social libraries, and the 1951 directory, 41; the ten states included in the 1974 tabulation had only three. These social libraries constituted 28 per-

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cent of all nonschool libraries in the 1876 *Report*, 24 percent in the 1900 *Report*, 15 percent in 1923, and less than one percent thereafter.

Part of the apparent decline in the number of social libraries may be attributed to methods of counting. In the lists from 1876 through 1923, libraries have been considered in this study as social libraries if they were controlled by library societies, even though local governmental units may have contributed to their support through the purchase of stock or by annual payments, and even though some or all of the citizens may have been allowed to use them without cost. In recent years, this semipublic, semisocial kind of library has come to be considered, by most students of the public library movement, as a special kind of public library. Neither the 1951 nor 1974 directories gives enough information to separate these quasi-public (or quasi-social) libraries from true public libraries, so it is likely that some libraries classified as public in these directories would have been considered as social libraries on the basis of information available in the earlier lists. These hybrid forms still exist; in the Southeastern States Cooperative Library Survey—conducted from 1972 through 1974, and just recently published—thirty two “private” libraries have been identified in nine southern states, 5 percent of all “public” libraries for which data are presented:¹⁰ these “private” libraries are controlled by societies.¹¹ It may be that the percentage of libraries legally under the control of societies is as high or higher in other regions.

The number of social libraries in the different regions did not decline evenly; in fact, in one or two regions, they increased from one list to the next. A few generalizations can be made. The majority of social libraries were always in the Northeast, about six of every ten in 1876, and seven of every ten in 1900 and 1923. The North Central region lost its social libraries faster than did other regions: it had about 28 percent of them in 1876, and by 1923 had only 14 percent. The West never had many, but the South presents a puzzling pattern: a drop from 10 percent in 1876 to 4 percent in 1900, then a rise to 12 percent in 1923. Since the number of social libraries was negligible by 1951, no regional pattern is discernible after 1923.

The “Pure” Social Libraries—The social library which had a general collection and which was not restricted to use by persons of a particular age or gender, was the most common form of social library both before and after 1876. The pattern of founding of these “pure” social libraries before 1876 is distinctly different from that of any

other kind of library. After a great surge, mainly in New England and mainly in the 1790s, the number founded in each decade varies but does not rise above the 1790 rate until the years immediately following the Civil War; quite inexplicably, another surge takes place between 1865 and 1875.

More than 2,000 of these "pure" social libraries were in existence in the American colonies or the United States at one time or another before 1876; however, the 1876 report lists only 434 such libraries, 16 percent of all nonschool libraries. A total of 601 is to be found in the 1900 list, but its percentage of all libraries in the list increases by only one. In 1923, the number decreased to 544, or 13 percent. Because the 1951 and 1974 directories do not permit easy identification of social libraries, it is impossible to tell how many were present; the number would have been small.

Social Libraries Established by One Group for the Benefit of Another—Beginning at least as early as the second quarter of the nineteenth century, Americans began to organize themselves into groups for a great variety of charitable purposes. It should not be surprising, then, that libraries planned by groups for the benefit of other, less fortunate groups should be second in number only to the "pure" social libraries in 1876. The list issued in that year contained about 150 of these, more than one-half of them formed by the Young Men's Christian Association since its establishment in this country in the early 1850s. The only other group of any size was made up of about thirty-five libraries originally established for young mechanics but, by this date, often permitting use by others. In the years following 1876, the number of libraries established for the benefit of special groups becomes smaller; in 1900, two-thirds of them were YMCA libraries. Even these were seldom found on the 1923 list; almost none of the charitable libraries were present in the 1951 directory or in any of the ten states in the sample for 1974.

Social Libraries for a Single Gender—Social libraries established primarily for use by members of the one gender were fairly common in the mid-nineteenth century; at least 700 had existed by 1876, although the U.S. Bureau of Education's list for that year contained fewer than one hundred, that number being equally divided between use for women and use for young men. More than one-half of the "ladies' libraries" were in Michigan, where women had, for some reason, become intensely interested in establishing libraries, some-

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times admittedly to compete with existing social libraries which were dominated by males.¹² In 1900, the libraries for women outnumbered libraries for young men by five to one, and Michigan was still the center for women's libraries. By 1923, very few of either kind were left.

Lyceums, Athenaeums, and Social Libraries on Particular Subjects—Before 1876, a few other kinds of libraries existed which were sometimes almost indistinguishable from “pure” social libraries. The lyceum movement, started by Josiah Holbrook in the 1820s, had caused the formation of associations which established libraries and sponsored lectures and debates. In many of these local lyceums, only the library aspect remained after the first few years. However, even the libraries had become rare by 1876; only eighteen lyceums are to be found in the list for that year and even fewer are found in later years.

A similar kind of association, the athenaeums, flourished for a while during the mid-nineteenth century. If the athenaeums differed from typical social libraries, it was in their emphasis on the provision of current periodicals and newspapers. Only twenty-two were included in the 1876 list; later lists have fewer.

Another type of library, unlike the lyceum and the athenaeum, was being founded with increasing frequency during the decades just prior to 1876: the social library with a collection on a special subject. In their operation, societies formed for the purpose of establishing special libraries may sometimes have been indistinguishable from societies which had other purposes but also maintained libraries. However, in name at least, a “law library association” is different from a “bar association which owns a library.” Only about forty subject-related social libraries of any kind appeared in the 1876 report, about one-half of them legal collections and the rest on religion, agriculture, or medicine. In the 1900, 1923, and 1951 lists, all but the law collections disappear; even the legal collections seem to have disappeared in the ten-state sample by 1974.

COLLEGE AND UNIVERSITY LIBRARIES

Despite the fact that the college library is one of the oldest kinds of American libraries, dating from the 1630s when a library was started at Harvard, there were few academic libraries before the 1820s, when the number founded in each decade began to increase rapidly. By 1876, more than 750 had been established; the Bureau of Education's

report for that year lists slightly fewer than 500.

During the century since 1876, the increase in the number of libraries in institutions of higher education has kept pace with the increase in the number of libraries of all kinds; in no list from 1876 to 1951 have college and university libraries constituted less than 18 or more than 21 percent. The college and university libraries in the ten-state sample for 1974 had, in 1951, been 21 percent of all of the libraries in those states; in 1974 they were 18 percent of the total.

When the various kinds of college and university libraries are considered, several changes over the last one hundred years can be noted; of course, these changes reflect the changes in the types of institutions of higher education. The liberal arts college had dominated in the years before 1876; in the century since then, the liberal arts section of undergraduate and graduate work has continued to be considered central. Several types of professional schools, however, had developed before 1876: the best established were the law schools, medical schools, and theological schools, although engineering schools and agricultural colleges did exist in small numbers. Training for most other occupations took place either at the secondary level or through apprenticeship.

Before 1876, professional schools as well as liberal arts colleges characteristically had libraries. Approximately two-thirds of all academic libraries established before 1876 were in liberal arts colleges; about one-sixth were in theological seminaries, and most of the rest were in medical schools, law schools or technical schools. The distribution in the U.S. Bureau of Education's report for 1876 is almost the same.

In 1900 and again in 1923, seven of every ten college or university libraries had only general liberal arts collections, and there continued to be more collections to support theological training than law, medicine or engineering. However, a new type of institution was rising: the teachers' college. By 1923 there were more collections serving teachers' colleges than there were for medicine or law; the number of teachers' college collections had almost equaled that of the theological seminary libraries.

By 1951, general collections for four-year colleges and for universities made up only one-half of the total of academic libraries; a new kind, the junior or community college library, had risen to a total of 23 percent and the seminaries and teachers' colleges were far below with 7 percent each. Collections serving medical, law, engineering and agricultural schools were even less numerous. The figures for the

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ten states chosen from the 1974 directory may not be representative because they include California, the home of a very large number of community colleges. At any rate, the pattern for 1974 is not much different from that of the same states in 1951, except that community colleges are slightly more prominent and four-year or graduate liberal arts collections are slightly less noticeable. In 1951, in these states, community college libraries were 4 percent above the national average and liberal arts collections were two percent below; in 1974, in these states, community colleges represented 4 percent more of the total than they had in 1951, and liberal arts collections represented 3 percent less than before.

The distribution of academic libraries throughout the four major regions of the United States has been similar to the distribution of the population at the time of every survey from 1876 through 1951. At no time has a region's percentage of academic libraries varied by more than five points from its percentage of the population. In 1951 the balance was particularly striking; in no region did the percentage of population vary by more than two points from its percentage of academic libraries.

LIBRARIES IN COLLEGE LITERARY SOCIETIES

The libraries owned by college literary societies have not been included in the figures for college and university libraries, but they deserve some attention because they had not yet disappeared one hundred years ago. The 1876 report does not always indicate the exact number of society libraries which existed at a particular college, but it includes references to at least 327 such libraries—almost exactly two-thirds of the number of college libraries. The society libraries disappeared quickly from the lists; only sixty-one appear in the 1900 Bureau of Education report and they are rarely mentioned after that.

SCHOOL LIBRARIES

Of all the kinds of libraries in this study, those in schools are the most difficult to describe. The lists for 1876, 1900, and 1923 include them on the same basis as other libraries; the 1876 report omits those in elementary schools. The two later lists have few, if any, elementary school libraries, possibly because they set their lowest volume limit for inclusion above that which elementary schools were likely to have had.

The 1876 report includes 1097 school libraries—42 percent of all other kinds combined; school libraries were more numerous than

were any other kind of library. Public high schools were almost nonexistent in 1876 but had begun to appear by 1900, when high school libraries were again the most numerous; the 1,762 high school libraries were 49 percent of all other kinds combined. In 1923, perhaps because the lower limit for inclusion was 3,000 volumes, the group of 853 school libraries was equal to only 20 percent of the total for all other libraries combined. In that year, one other group was larger; 2,175 public libraries comprised 53 percent of the total of nonschool libraries.

The regional distribution of the school libraries in the first three lists is quite different from the distribution of other major kinds of libraries. In 1876, 66 percent of all public libraries were in the Northeast, and 55 percent of all school libraries. The North Central region had 30 percent of the public libraries, but only 22 percent of the school libraries; in the West, there were few of either kind. In that year, the South had only 3 percent of the public libraries, but had 20 percent of the school libraries.

By 1923, the distribution of school libraries and public libraries had become about the same in the major regions. The Northeast had 34 percent of the school libraries and 37 percent of the public libraries; the North Central region had 40 percent of the school libraries and the same percentage of the public libraries; the West had 13 percent of the school libraries and 15 percent of the public libraries. In the South, the school libraries were still ahead; that region had 13 percent of them and only 9 percent of the public libraries.

It is very likely that great numbers of school libraries were omitted from these three early lists. One indication is that the number of nonschool libraries in the *American Library Directory* for 1951, which is more inclusive than any of these early lists, is about one-twentieth as great as the number of schools with library service to be found in the U.S. Office of Education's *Statistics of Public-School Libraries, 1953-54*. The 1953-54 volume counts schools, not libraries; if a school had several classroom libraries, it was counted only once. It shows that the Northeast had 15 percent of the schools with library service, the North Central region had 41 percent, the West had 11 percent, and the South had 33 percent. For some regions, these percentages are similar to the percentages of the population at about that time: the Northeast had 26 percent of the population in that year (25 percent in 1960); the North Central region had 29 percent in both 1950 and 1960; the West, 13 percent in 1950 and 16 percent in 1960; and the South, 31 percent in both years. Of all the schools in the 1953-54

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survey, 80 percent were elementary schools, 14 percent were high schools, and 6 percent were schools in which a single library served both elementary and secondary grades.

THE ROLE OF GOVERNMENT

During a century when many services performed by voluntary organizations have been taken over by governments, it is to be expected that federal, state and local governments would control an increasing percentage of all libraries. This has been the case: of all the nonschool libraries which could be identified as existing before 1876, 11 percent were government libraries (including public libraries but not including publicly controlled college or university libraries). Of the nonschool libraries in the 1876 report, 24 percent were operated by a government; in 1900, 35 percent; in 1923, 61 percent; and in 1951, 66 percent. For the ten states in the 1974 sample, the percentage in 1951 had been 66 percent, but in 1974 was only 52 percent, mainly because the number of public libraries had not increased as rapidly as had the number of libraries operated by business and industrial establishments, private hospitals, and various kinds of associations. Indeed, the rise of the public library has been the main cause of all changes in the statistics of government-controlled libraries since 1876; the other kinds of government libraries have increased in number but not in the percentage which they represent of all libraries in the country. Excluding public libraries, the percentage for 1876 was 13 percent; for 1900, 8 percent; for 1923, again 8 percent; and for 1951, 9 percent. For the ten-state sample, the percentage in 1951 was 11 percent and, in 1974, 13 percent.

Libraries Operated by Local Governments—During the past century, even though free public libraries (discussed earlier in this article) have been the most numerous of the libraries established by local governments, they have never been the only ones. In 1876, about one-fourth of all libraries controlled by counties or cities were special collections for particular groups of people; but after that, nine out of ten were general public libraries. In 1876 there were an appreciable number of county law collections; in 1900, a few of these and a few “teachers’ libraries” in cities; in 1923, a small number of law libraries; and in 1951 and in 1974, some law libraries and hospital libraries.

Libraries Operated by State Governments—Few libraries had been

established by state governments before the 1820s, but from that decade forward, more and more were founded. At least 200 had existed by 1876; about one-fourth were state libraries containing varying mixes of general and legal books, about one-fourth were in state prisons, one-fourth in various eleemosynary institutions of some kind, and a final quarter were mainly for the use of state courts.

The 1876 report included about 150 libraries provided by state or territorial governments; this represented 6 percent of all nonschool libraries. The number of state-owned libraries fluctuates from list to list, but the percentage which these represent of the nonschool libraries drops steadily until it reaches 1.5 in 1951. It is possible that this ratio was higher by 1974; for the ten-state sample, it was slightly below 2 percent in 1951 and was between 3 and 4 percent in 1974.

The kinds of state-owned libraries have not changed very much over the last one hundred years. The "state libraries," i.e., collections of general or legal material at the seats of government, have, of course, increased only slightly; the number of prison libraries in the lists has fluctuated without any definite trend indicated. Asylum libraries, however, have disappeared, and the number of law libraries has increased. In 1974, each of several states in the sample owned a few scientific or technical collections.

Libraries of the Federal Government—In no list before that for 1951 did the federal government have more libraries than did the states, considered together. Fewer than one hundred federal libraries appear in each of the lists for 1876, 1900 and 1923. In 1951, the number jumps to almost 800, 7 percent of all of the nonschool libraries. For the ten-state sample, the federal libraries constituted 8 percent in 1951 and, although the number was greater in 1974, it represented only 7 percent of all libraries.

The concentration of federal libraries in Washington, D.C., was far greater in 1900 and 1923 than in 1876 or 1951; the District of Columbia was not included in the 1974 sample. In 1876, almost the only libraries outside of the District of Columbia were those in army posts; few of these appear in the 1900 or 1923 lists but they are back in great numbers in 1951 and by that time, many federal libraries on technical subjects had been established in various parts of the country. This situation accounts for the percentages of federal libraries in the District of Columbia in the different lists: 39 percent in 1876, 71 percent in 1900, 71 percent in 1923, and 14 percent in 1951.

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SOCIETIES USING LIBRARIES TO ACHIEVE THEIR PURPOSES

Americans are known for their propensity for forming associations. It requires almost no excuse at all for a group of people to organize a society, and the lists of libraries published during the last century make it clear that many societies have formed libraries as they pursue their various aims. In this study, society libraries on particular subjects are considered along with other libraries on those subjects, but by considering all of the association libraries together, the tendency of voluntary organizations to establish libraries can be evaluated.

In 1876, these libraries made up 10 percent of all nonschool libraries in the country; by 1951, the number of such libraries had increased, but its incidence among all libraries had gone down to 5 percent. In the ten states used for the 1974 sample, the percentage had been 5 percent in 1951, but had risen to 7 percent by 1974.

No one kind of society has ever had noticeably more libraries than others. In 1876, an approximately equal number of libraries were held by historical societies, religious societies (excluding churches), and fraternal organizations; societies with German interests (the Sangerbunds and Turnvereins) were not far behind. In later years, libraries continued to be held by a variety of societies, but some kinds of societies disappeared and others began to establish libraries. By 1900, a considerable number of what were designated as "general" societies were appearing in the lists; the purposes of these organizations were not always clear, but some were simply clubs to provide opportunities for a pleasant social life.

The century since 1876 has been the century of the museum in America; few of these existed one hundred years ago. In this study, the gradually increasing number of museum libraries has been grouped with societies of similar purpose, e.g., scientific museums with scientific societies, etc.

Kinds of societies whose libraries have virtually disappeared from lists and directories during the last one hundred years have been the fraternal organizations and the German-language societies. Both in 1951 and in the sample from the 1974 directory, libraries of scientific societies and museums have been more numerous than any other kind; there has been a small but increasing group of libraries held by art museums and art associations.

The geographical distribution of societies holding libraries reflects the general tendency of such societies to cluster around population centers; the proportion in the North remained remarkably stable

from 1876 through 1951; in the four surveys the northern societies held between 86 and 88 percent of the society libraries in the United States. The Northeast has had a far greater percentage of these libraries than it has of the population in the country. In 1876, when it had 61 percent of society libraries, it had about 30 percent of the population; in 1951, it had 46 percent of the libraries and 26 percent of the population. In three of the four lists issued from 1876 through 1951, the West has had more than its share of society libraries, always because of the dominance of California.

INSTITUTIONS WITH LIBRARIES OF A CHARITABLE PURPOSE

During the past century, governments have to some extent taken over the work formerly done by charitable organizations. Even in penal institutions before 1876, the establishment of a prison library was often a charitable enterprise undertaken by some church or religious society. Nevertheless, in the present study it has seemed desirable to group "institutional" libraries together—whether operated by voluntary associations or by governmental units.

Hospital Libraries—A few American hospitals had libraries by 1876; approximately fifty such collections have been identified as existing before that date, but none of the three lists issued before 1951 included more than thirty-five. In 1876 most of them were in the Northeast, but by 1923 they were scattered throughout the country. In 1951, the number of hospital libraries was much greater, both in number and in the percentage they represented of all non-school libraries in the country. In this study, if a hospital was known to have a separate medical collection and patients' collection, each of the two collections was counted as a library in order to make some estimate of the percentage which were medical; apparently, about six of every ten collections were on the subject of medicine.

Even if a hospital's medical and patients' collections had not been counted separately, the number and percentage of hospital libraries was far greater in 1951 than in earlier lists. A large part of the increase was in federally operated hospitals; about two-thirds of all listed collections were in these (almost all were veterans' hospitals). In the ten states in the 1974 sample, hospital libraries tripled in number, compared with 1951, and almost doubled in their percentage of all libraries in the sample. This increase was greater among collections in nongovernmental hospitals.

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Prison Libraries—The provision of wholesome reading matter had been a part of the movement to transform prisons into “reformatories” for several decades before 1876. The U.S. Bureau of Education’s list for that year included sixty libraries in penal institutions, mostly in state prisons or reformatories. Despite the continuing interest in prison reform since 1876, the number decreased to fifty-one in the list for 1900 and to thirty-one in the 1923 list. In the 1951 directory, thirty-eight prison libraries could be identified, a very small percentage of all libraries. In the sample of ten states, the number increased appreciably between 1951 and 1974, but the percentage represented by these libraries again decreased.

Libraries in Protective Homes—The charitable efforts of Americans in the nineteenth century were partly expended in the establishment of protective homes or asylums for orphans, for the aged, and for the mentally ill. The survey for 1876 lists libraries in 122 of these institutions, approximately one-half of them operated by governmental units and one-half by charitable organizations; the sponsorship of some is not clear. In the past century these homes have become less necessary for various reasons, including the tendency to care for the mentally ill in hospitals and the growth of pension plans. For whatever reasons, libraries in asylums or homes for the unfortunate are rarely found in the list for 1900 or in any later lists.

BUSINESS LIBRARIES

The lists used for this study indicated that libraries owned by business firms have been rare until recent decades. In 1876 and again in 1900, the operators of commercial rental libraries were virtually the only entrepreneurs who owned libraries as parts of their businesses. By 1923, a few firms had technical libraries, law collections, or libraries about some aspect of business. However, in no list before the 1951 directory did libraries held by businesses comprise more than 5 percent of all of the nonschool libraries in the country. In that year, about 800 such libraries appeared, approximately one-half of them on science or technology and the rest in advertising firms, publishing houses, banks, and law and other firms. In the sample of ten states for 1974, four out of every five collections were scientific or technical libraries; however, in these ten states in 1951, two-thirds of the business-owned libraries had been on scientific or technical subjects, a proportion well above the national average. The figures from these

five lists are not directly comparable with statistics gathered by Anthony Kruzas in 1961-63, but they are generally compatible with his; for example, he found that 57 percent of the company libraries were on science/technology.¹³

LIBRARIES ON SPECIAL SUBJECTS

In a century which has seen the rise of the special library, one might expect that the proportion of libraries on particular subjects would increase. However, the number of libraries on special subjects has not increased with noticeably greater speed than has the total number of libraries, each of which covered a variety of subjects, unless the acceleration in the growth of the special libraries has been quite recent. In 1876, 23 percent of all nonschool libraries were subject-specialized; in 1900, 20 percent; in 1923, 14 percent; and in 1951, 24 percent. By 1974, the subject-specialized libraries may have increased considerably in comparison with libraries on general subjects: in the ten states in the 1951 sample, the percentage of specialized collections was the same as that for the entire country: 24 percent. By 1974, it had risen sharply to 43 percent.

In comparing the distribution of subject-specialized libraries in the various regions, one surprising phenomenon appears: the South had a higher percentage of the specialized libraries than it did of all libraries in every list from 1876 through 1923. In the 1876 list it had 17 percent of all libraries and 19 percent of the libraries on special subjects; in 1900, 15 percent of all libraries and 19 percent of the subject libraries; and in 1923, 15 percent of all libraries and 22 percent of the subject libraries. In 1951, subject libraries and all libraries in the South each comprised 23 percent. As might be expected, the District of Columbia contributed to the South's good showing for subject-related libraries. In 1876 and again in 1900, 29 percent of all southern libraries on special subjects were in Washington, D.C.; in 1923, 28 percent, and in 1951, 24 percent.

In the North, the Northeast understandably had a large share of all the subject-related libraries in the country—56 percent in 1876. This ratio dropped to 36 percent by 1951, but in that year the percentage of all libraries in the Northeast was 32 percent. The North Central states always had considerably fewer libraries on particular subjects than they did of all kinds. In different lists the percentages varied somewhat; in 1951 that region had 24 percent of the subject-related libraries and 32 percent of all libraries. In the West, the proportion of all libraries and of libraries on special subjects remained about the

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same until 1951, when that region had 13 percent of all libraries and 17 percent of the subject-related collections. Of course, California was the home of a large proportion of the subject-related libraries in all the lists.

When examining the libraries on special subjects formed during the last one hundred years, the order of consideration probably does not matter. In the following sections, the kinds which are first described are those which are well established before 1876: libraries on religion, law, medicine, history, agriculture, and military science. Some subjects are then considered which have become numerous only during the last one hundred years: science and technology, education, and business and economics. Finally, a few subjects are briefly mentioned which have been represented only occasionally by special libraries.

RELIGION

In the years before 1876, Americans gave expression to their interests in religion by establishing more libraries on this subject than on any other; there were about 40 percent more special libraries in the field of religion than on the next most popular subject (agriculture). The number founded each decade had been increasing fairly steadily since the 1790s; in the 1876 report, 150 religious libraries were included, 6 percent of all the nonschool libraries in the list.

The dominance of collections on the subject of religion continued until the beginning of the twentieth century; in 1900, they made up 5 percent of all libraries, still leading all other special-subject libraries in number. However, in 1923 and again in 1951, they comprised only 2 percent of the total; special libraries on several other subjects were more numerous. In the ten-state sample for 1974, religious libraries have risen again: they have quadrupled in number and have risen from 2 to 5 percent since 1951; scientific and medical libraries are the only subject-specialized libraries which are more numerous in the 1974 directory.

The proportion of religious libraries in the four major regions changed somewhat between 1876 and 1951. In 1876, the Northeast had about 60 percent of these libraries and only about 30 percent of the population. The tendency of the Northeast to have more than its share of the libraries on religion persisted, but its dominance was not as great in later years. By 1951, its proportion of libraries was one-and-one-half times greater than its proportion of the population rather than twice as great. In the North Central states, libraries on

religion were relatively scarce in lists prior to 1923. When that list was issued and when the 1951 directory was issued, both the proportion of libraries and that of the population were approximately 30 percent. For the West, three of the four lists show almost the same proportion for libraries as for population. Religious libraries have been found less frequently in the South; its proportion of such libraries has been approximately one-half that of its proportion of the population in all lists from 1876 through 1951.

LAW

Collections of law books were very rare in the American colonies and in the new nation until about 1800, when a few began to appear; during the first three-quarters of the nineteenth century, the number of law libraries founded each decade increased at a fairly steady pace. The U.S. Bureau of Education list for 1876 includes 139 law libraries; local governments owned more of these (sixty-one) than did any other kind of agency. Twenty-two of them were in law schools, twenty-one were owned by associations formed for the purpose of establishing libraries, that is, by "law library associations"; seventeen were owned by states, mainly for the use of courts and not including "state libraries" (some of which might properly have been included because of the large numbers of law books which they contained); a very few were held by bar associations and by the federal government.

By 1951, no kind of law library had disappeared; there were still a few law library associations and bar associations with libraries, but other types had increased greatly in number: the list includes approximately one hundred libraries in law schools, more than sixty controlled by local governments, and about the same number controlled by the federal government. A type which apparently had not come to the attention of compilers of lists of libraries in 1876 was the library owned by a law firm or other business; more than forty of these appear in the 1951 list. In the years between 1876 and 1951, law libraries were distributed geographically in about the same way as the population. In the ten-state sample, law libraries tripled in number between 1951 and 1974; their percentage of all the libraries in those states almost doubled despite the omission in the 1974 list of nonspecialized collections with fewer than 10,000 volumes.

MEDICINE

Medical libraries were not common in the United States before the

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second quarter of the nineteenth century, but beginning in the 1820s, the number founded in each decade increased steadily; the Bureau of Education's 1876 list includes sixty-four medical libraries, more than one-half of them in medical colleges. No other type of institution controlled very many such libraries; a few were held by hospitals and medical societies.

About 500 medical libraries were included in the Bowker directory for 1951. By this time, hospitals had slightly more than one-half of these libraries, and at least one-half of all of the hospital libraries were in veterans' hospitals. Somewhat less than one-fourth of all medical libraries were in medical schools; a few were held by medical societies and other organizations. These libraries were fairly well distributed throughout the United States, but with a slight tendency to favor the North; in 1950, 69 percent of the population lived in the North and, in the 1951 directory, 73 percent of the medical libraries were there. If the ten states used in the 1974 sample are representative of the whole country, the number and percentage of medical libraries had increased greatly between 1951 and 1974. In 1951, medical libraries in those states made up a little more than 4 percent of all libraries, whereas for the entire United States, medical libraries made up just under 5 percent. In 1974, medical libraries made up 10 percent of all libraries in the ten states; they had quadrupled in number. The greatest growth had been in hospital libraries; they now made up about three-fourths of the total.

HISTORY

Libraries on the subject of history may have contained the first American collections deliberately gathered to support scholarly investigation. The historical societies established in various parts of the country beginning in the 1790s were acquiring manuscript letters and other source materials as well as books at a time when most academic libraries acquired only books or periodicals for general reading.

The Bureau of Education's report for 1876 lists fifty historical libraries, all held by societies. Approximately one-third of them were in New England and one-third in the Mid-Atlantic states; the remainder were widely scattered. Between 1876 and 1951, the number of historical libraries did not increase in the Northeast, and increased in the rest of the country more slowly than have most other kinds of special libraries. During the early part of this century, the proportion of historical libraries outside the Northeast began to approach 50

percent; by 1951, two-thirds of the libraries were outside that region. During these same years, historical libraries moved down from fifth to eighth place among all libraries on particular subjects. In 1974, historical collections in the ten-state sample had grown in number and in the percentage which they represented of all libraries; the numbers are so small, however, that an increase for all states should not be assumed.

Unlike most kinds of special libraries, those on the topic of history have continued to be possessed by the same kind of organization from the earliest days to the present; in 1974, almost all were still owned by societies. Of course, the lists do not consider as separate libraries the parts of university libraries which were on the subject of history.

AGRICULTURE

The history of agricultural libraries in nineteenth-century America is very unclear. Almost 300 small libraries were established by agricultural societies in the 1850s and 1860s, but it is difficult to determine whether books on agriculture actually predominated in any of them. The 1876 report lists only twenty-three on the subject, and some of these were in land-grant institutions whose collections often held engineering books as well. Agricultural colleges continued to have most of the collections on this subject—more than one-half in 1900, 1923 and 1951. However, one other type of agricultural library had increased in number by 1951; in that year, there were about one-half as many agricultural libraries owned by the U.S. government as there were in colleges of agriculture. In each of the four lists, libraries on this subject were quite evenly distributed throughout the various parts of the country, except that they had virtually disappeared in New England by 1951. In the 1974 sample, the number of such libraries was negligible, as it had been in 1951.

MILITARY SCIENCE

Libraries connected with military establishments present the most unusual pattern of any of the subject-related libraries. By the time that they begin to appear in numbers, almost all of them clearly belong in one of three groups: (1) garrison or camp libraries, primarily intended for the recreational reading of military personnel, (2) libraries at specialized military establishments, for those engaged in the advanced study of the technique of waging war, and (3) libraries at veteran's hospitals and elsewhere. Libraries about war in general have been very rare.

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During the last one hundred years, the garrison or camp libraries have waxed and waned several times. Very little has been written about these libraries in the years before World War I, but it is clear that they were fairly common in the 1850s, during the Civil War, and in the 1870s. The 1876 report lists forty such libraries, scattered across the country fairly evenly, except that the South had more than its share (fifteen). Very few (only thirteen) of them were present in the 1900 list, and fewer still (only five) in the 1923 list. Many were established with the help of the American Library Association during World War I, but very few camp libraries could still be identified in the 1923 list.

In 1951, these general or recreational libraries were more numerous than ever before; the *Directory* for that year noted approximately 200 of them. As in 1876, the South had more than its share: 45 percent of them. The West had 30 percent, one-half of these in California. The remainder, only about one-fourth, were scattered fairly evenly throughout the rest of the North. The ten states in the 1974 sample had the same number of general camp libraries that they had had in 1951; in both years, California had almost the same number as were to be found in all of the other nine states combined.

Libraries on advanced aspects of military science were not common in any of the lists before 1951; most of them have been classified, in this study, with other libraries on scientific or technical subjects. The medical libraries connected with military establishments have mainly been located in veterans' hospitals; they too were found mainly in the 1951 *Directory*, and are considered with other hospital libraries.

SCIENCE AND TECHNOLOGY

Libraries on science and technology were not rare before 1876. However, they had gotten a late start; few were established before the second quarter of the century. By 1876, more than one hundred had been founded, mostly in the North and principally to serve the needs of scientific societies. In the 1876 list and again in the 1900 list, only religious and legal libraries were more numerous. In 1923, when law was ahead, medicine and science/technology were tied for second place. By 1951, when there were 680 science/technology libraries, that subject led all others by a good margin (second place was held by medicine with 506 libraries).

By 1951 about 60 percent of all scientific and technical libraries were owned by business or industrial firms; in the 1876 list, apparently no library on these subjects had been owned by a commercial

firm. In 1951, societies operated about one-sixth of the total of libraries of this kind and the federal government controlled about the same number; only about 8 percent were the libraries of technical colleges or were separate libraries in multipurpose universities. No other type existed in appreciable numbers.

As might be expected in regard to libraries which were frequently associated with business and industry, the science/technology libraries were, by 1951, concentrated in the East. About one out of every five was in New York state; that state combined with New Jersey and Pennsylvania had about one-third of them. California, Illinois, the District of Columbia, and Ohio each had a respectable number; few were to be found in New England, the South, or the West (outside California). By 1974 the ten states sampled had almost five times as many science/technology libraries as they had in 1951. In those states, science/technology libraries had made up 7 percent of all libraries (1 percent above the national figure) in 1951; by 1974 they comprised 17 percent. The greatest increase had taken place in the number of libraries in business and industrial firms; such commercial operations owned two-thirds of all libraries in this field. About four out of every ten science/technology libraries in the states of the 1974 sample were in California; this proportion is not surprising because California had close to 40 percent of the population in the sample.

EDUCATION

It is difficult to determine the content of libraries related to the subject of education. Educational libraries of any kind were almost nonexistent in 1876; later, collections in teachers' colleges were at least partly about education, although they contained many books of a general nature. After the teachers' college libraries appear in the lists, they were always the most numerous libraries with educational emphasis; they made up two-thirds to nine-tenths of such libraries in lists from 1900 through 1951. The 1951 *Directory* includes seventeen libraries in state departments of education, ten controlled by local governments, and eleven by educational associations. By that year, libraries related to education were distributed in the various regions of the United States in approximately the same way that population was distributed; however, the Northeast had somewhat more of these libraries than it did of the population: 37 percent of the libraries and 26 percent of the population. In 1974, the number of libraries related to education was considerably smaller in the ten-state sample than it had been in 1951; this decrease may have resulted from the continu-

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ing tendency for teachers' colleges to become multipurpose colleges or universities.

BUSINESS AND ECONOMICS

Special libraries on the subject of business or economics have been rare in this country until quite recently. Before 1876 a very small number were owned by boards of trade and federal offices. The "mercantile libraries," which were more common, contained very few books about business; they were general libraries for the use of young men who were clerks in business establishments. Libraries on the subject of business or economics numbered only thirty-one in the U.S. Bureau of Education's 1923 list of libraries, but the number had taken a great jump by 1951; at that time there were more than 300 libraries on these subjects. It is difficult to ascertain their number because some collections were strong in both law and economics or finance; libraries in advertising firms have been placed here rather arbitrarily. In the 1951 *Directory*, approximately two-thirds of the libraries on the topic of business were held by business firms; approximately one-fifth were owned by associations in the field and most of the rest were in federal bureaus or departments. They have been concentrated around cities; about one-half of those in the 1951 *Directory* were in the state of New York; appreciable numbers also were to be found in California, the District of Columbia, Pennsylvania, and Illinois. For the ten states in the 1974 sample, the number of libraries on these subjects had increased, but the percentage of all libraries had hardly changed; as in 1951, it was close to 1 percent.

SUBJECTS LESS FREQUENTLY FOUND

A few libraries on each of three other subjects have appeared in the various lists: art, music, and government or political science. Art libraries existed in 1876 but there were never more than a dozen in any list before the 1951 *Directory*, when there were from forty to fifty; it is difficult to be sure about the subject matter of a few collections held by businesses and museums in which art books may have predominated. In the 1974 *Directory*, the art collections for the ten-state sample made up about the same percentage of the non-school libraries that they had in the same states in 1951: slightly less than 1 percent.

A very few libraries on the subject of music have been listed in each directory, mainly those in independent schools of music; clearly, the many music collections in universities have not been considered as

separate libraries. Virtually the only libraries on the subject of government were in the 1951 *Directory*, when fewer than forty appeared, almost all of them held by associations with interests in the field.

Because of differences in the five lists which have formed the basis of this study, and the lack of precise information about school libraries, no exact figures can be given about the increase in the number of libraries in the United States between 1876 and 1975. However, for nonschool libraries of 300 volumes or more, the 1876 report of the Bureau of Education indicates a total of 2,637. The 1974 *American Library Directory* includes a very small number of libraries with fewer than 300 volumes; its total of libraries with 300 volumes or more is approximately 26,000, an increase of about 985 percent during a period when the country's population increased by approximately 460 percent. Clearly, the number of libraries has been increasing much more rapidly than the number of people.

While the concentration of libraries has been increasing, their distribution within the country has been shifting. The Northeast has always had a high proportion of libraries in comparison with its proportion of the population, but its lead over the rest of the country has not been as great in recent years. The South, on the other hand, has always had a higher proportion of population than of libraries but, again, the trend over the years has been to equalize its proportion of the nation's libraries with that of its population. The Midwest and the Far West have not had a perfect balance between libraries and population, but have usually shown less extreme positions than either the Northeast or the South. When various kinds of libraries are considered, a variety of patterns—chronological and geographic—can be seen. This paper has been concerned with tracing some of the major variations in a very rough way.

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