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This paper is a history of the four library buildings that housed the principle library over the course of the University of North Carolina at Chapel Hill's history. The four buildings are Smith Hall, Carnegie Library, Louis Round Wilson Library, and Walter Royal Davis Library. The histories of these buildings are examined in the context of general academic library buildings trends in the United States. Special interest is devoted to the effects from increasing enrollment at universities, complementary growth in the size of collections, and the changing pedagogy of higher education. As enrollment and collections increased, and educational techniques changed, new library buildings were needed to replace existing buildings at the University of North Carolina at Chapel Hill. The period covered is 1853-1984.

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THE PRINCIPLE LIBRARY BUILDINGS OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL IN CONTEXT

by
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of the School of Information and Library Science
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Approved by

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Introduction

A student browsing the stacks of a modern multi-million-volume university library in the United States may find it difficult to believe that the enormous research library with which she is familiar is only a recent development. Within living memory, library stacks were closed to students, and university librarians congratulated themselves on their sizable collection of 15,000 volumes. Further back, in the nineteenth century, university libraries often found themselves located in whatever closet or disused hall that could be spared. If students wanted a book from the library, they would have to plan ahead to be at the library during the four or five hours a week that the library opened its doors.

The needs of academic libraries in the United States have changed dramatically since the founding of the first university in the country, Harvard College, later known as Harvard University, in the seventeenth century. The changing nature of academia over time has affected university libraries greatly. As educational techniques changed and enrollment figures increased, library collections grew ever larger. In the twenty-first century, many academic library holdings in the United States number in the millions of volumes. As holdings grew, universities needed to build ever larger and more complex buildings to house them.

Architectural planning for academic library buildings in the United States was first thought of as a rigorous professional practice in the period following War World II.[1] Librarians, architects, and other planning practitioners at that time began to create a body of literature about current and former practices in the planning of library buildings. There are now accepted explanations for the ways in which academic libraries have been built in this country. In his comprehensive history of academic library buildings in the United States, Kaser divided the history into four eras:

1st Period	(1840-1875)	Single-function book halls
2nd Period	(1875-1910)	Multi-partitioned structures
3rd Period	(1910-1945)	Fixed-function buildings with multi-tier stacks
4th Period	(1945-date)	Modular integration of book and reader spaces[2]

Kaser's division of the history into periods is a useful framework when looking at the history of academic library buildings. It will be used throughout this paper.

This paper will look at the architectural history of the library buildings at the University of North Carolina at Chapel Hill as a reflection of the general history of academic library construction in the United States, as outlined by Kaser and others. There are four buildings on the University of North Carolina at Chapel Hill campus that have, at one time or another, housed the university's principle library: Smith Hall (now called Playmakers Theater), the Carnegie Library (now known as Hill Music Hall), the Louis Round Wilson Library (originally called the University Library) and the Walter Royal Davis Library. Interestingly, these four buildings chronologically fall into Kaser's four periods of library

construction. The architectural histories of the library buildings will be examined for an understanding of why the buildings were built in the way that they were, both in the context of the immediate needs of the university and in the context of the broader academic community in the United States.

Taking an architectural approach to the history of academic library buildings is significant because, as the widely-regarded dictum states, form follows function. Insight into the activities of libraries on university campuses can be gained by examining the buildings within which they operate. To a large extent, the form of a building dictates the types of activities that may be undertaken in and around that building. Similarly, when planning a new building, the types of activities that the planners wish to have occurring in and around that building dictate the building's form. In an ideal world, form and function interact effortlessly. However, ideal buildings are rarely constructed, and academic library buildings are no exception.

New library buildings were built on campuses throughout the United States to replace older library buildings because the functions of a library changed over time. The changing nature of libraries is a central theme in the history of libraries, and it is an important avenue of study in library science. In order that one may understand the needs of future libraries, it is necessary to study the needs of libraries of the past. Taking into account the enormous costs and resources associated with building new academic libraries, the administrators, architects, funding agencies, and librarians of the future must be well-equipped to construct the best library buildings possible. Libraries should

be built that will adequately meet the needs of as many future generations as possible. One way to accomplish this is to be aware of the ways in which the needs of libraries have changed in the past.

The Literature to Date

There was a brief flourishing of professional literature on the subject in the 1960s and 1970s, but very little has been written since then, although there has been a substantial amount of research done on the architectural history of public library buildings. Too little has been accomplished with regards to academic library buildings. It is a wonder that little curiosity has been directed at the buildings that house such a record of scholarship over the ages.

Despite Arseneau's claim to the contrary in his history of the 1952 addition to Wilson Library, the history of the library buildings at the University of North Carolina at Chapel Hill is not particularly well documented.[3] Various research efforts have been undertaken addressing individual major libraries at the University of North Carolina at Chapel Hill (hereafter referred to as UNC-Chapel Hill),[4] but a comprehensive history of the library buildings has not yet been compiled. Three Master's papers written for the School of Information and Library Science at UNC-Chapel Hill are noteworthy, but all approach the topic from a different viewpoint than that taken in this paper. Arseneau's paper is a history of the 1952 addition to Wilson Library.[5] Murphy's paper examines the growth of the library of the Philanthropic Society at UNC-Chapel Hill.[6] Bullock's paper addresses Louis Round Wilson's role in the planning of what came to be Wilson Library.[7] They are histories about what happened during the building of

specific libraries, and those who were responsible for it. A particularly thorough history of Wilson's activities as university librarian from 1901-1932 was written by Martin as a doctoral dissertation.[8] Wilson himself did a great deal of research on the early library activities at UNC-Chapel Hill. No research has yet been done, however, of the library buildings at UNC-Chapel Hill as a whole or that extrapolates the attributes of its library buildings to the countrywide trends in academic library construction.

Brief Historical Overview

UNC-Chapel Hill was the first public university in the United States. It was chartered by the North Carolina General Assembly in 1789, although the first student did not arrive until February 1795.[9] From its very beginning, it was decided that the fledgling university was to have a library. On January 13, 1795, two days before the university's official opening date, the University Trustees requested that General William Richardson Davie, a member of the General Assembly who had sponsored the bill which chartered the university, create a bookplate for the library, secure the use of a book case, and find a ledger book in which the names of book donors could be written. In December of that year, fifty dollars were appropriated by the Trustees for the purchase of 46 books. Over the next five years the university received a total of 330 volumes.[10] For the following 56 years the library was variously located in residential and administrative buildings. First used was the University President's house, then South Building on the university campus.[11]

The first purpose-built library was erected in 1851 in the Classical style by Alexander J. Davis, an architect fom New York. Smith Hall, as it came to be called, was only the fifth purpose-built academic library in the United States, following those built at South Carolina, Harvard, Yale, and Williams College.[12] Smith Hall later was re-purposed to serve as a theater and renamed Playmakers

Theater. It stands today in the twenty-first century and continues to host dramatic productions.

As the needs of the library at UNC-Chapel Hill grew over the years, three libraries were built in order to serve the purpose of principle library of the university. They were Carnegie Library (1907), Louis Round Wilson Library (1929), and Walter Royal Davis Library (1984). The Carnegie Library was later renovated to house the university's music department and is currently known as Hill Music Hall. The Wilson Library was originally called simply the "University Library." It was renamed Wilson Library in 1956 to honor Louis Round Wilson who had served as university librarian from 1901 to 1932. It was through his strenuous efforts this library building came to be erected. When the Davis Library opened in 1984, the Wilson Library was renovated and became the home of the university's special collections and manuscripts departments. Each of these four libraries, in their time, served as the principle, or main, library of UNC-Chapel Hill. Additional libraries have been, and continue to be, built at the university but for different specialized purposes. For example, the R.B. House Undergraduate Library, opened in 1968, serves the unique needs of undergraduates. As such it focuses on services that support undergraduate education, rather than the research needs of the university as a whole.[13] Satellite libraries such as the Health Sciences Library, the Katherine R. Everett Law Library, and the various departmental libraries serve specialized user groups in the university community. As such they do not serve the function of principle library. These specialized libraries fall outside the scope of this paper and will

not be addressed. This paper will focus on the principle libraries at UNC-Chapel Hill and how they were planned in response to the perceived needs of the university community, the size of the library's collection, and the prevailing educational techniques of the time. Special attention will be given to their relation to the general academic library building trends in the country.

Smith Hall, 1853-1907

Before 1840, the year the first purpose-built library building in the United States was constructed at the College of South Carolina, now the University of South Carolina, a typical university library consisted of a room (or locked cupboards if a room could not be found), some shelves, a table or two, and chairs. University libraries had very small collections compared to the holdings of present-day university libraries. As book collections grew to several thousand volumes, more and more universities found that a single room would no longer suffice, and library buildings were built solely for the purpose of housing a library.[14]

The characteristic building type of the First Period, 1840-1875, according to Kaser, was the book hall, adopted from similar European library buildings. There were three varieties of the book hall, but the most popular type adopted in the United States consisted of a single, alcoved, rectangular room with double-faced book cases extending inward between the windows, perpendicular to the two longer walls, with a central aisle.[15] This transverse style, also called alcove style, book hall was useful not only because its simple rectangular footprint could be adapted to the prominent academic building styles of the time, Gothic Revival and Classical Revival. It was also useful because it provided adequate shelving space and access. Two other patterns used in academic libraries in the early

years were perimeter shelving and radial shelving. Perimeter shelving involved a layout of book cases with their backs against the perimeter wall. Radial shelving was a curvilinear representation of the alcove style, with the book cases similarly arranged perpendicular to the exterior walls. The difference in radial shelving was that the exterior wall was round or polygonal. Both perimeter and radial shelving styles were less popular than the alcove style because the alcove style permitted more books to be shelved in the same amount of floor space.[16]

Security from theft and protection from fire were the overriding concerns in early library buildings. Books were costly, and illumination from candles and whale-oil lamps posed fire hazard problems. The builders of the early university libraries were attentive to the need for future growth, but they were more greatly concerned with security. The ideal library was a "large, safe storage edifice." The use of materials was a secondary concern. Virtually no provision was made for either staff or readers. Because of the risk of fire, library buildings were sited as far as possible from other campus buildings. They were built of stone, brick, or iron.[17]

Very few librarians were consulted in the early years of academic library building activity. The needs of library staff and library users were subordinated to the architects' ability to make the library an attractive building. Almost all university libraries of the time denied access to students. Library buildings were planned under the authority of faculty committees, with little input from librarians.[18]

In the mid-nineteenth century, academic libraries were small and simple, paralleling the academic institutions, which also were small and simple. Enrollment in colleges was small, no more than a couple hundred. Higher education was limited to men, and only at the undergraduate level. The educational method used consisted of lectures and recitation.[19]

Although the Trustees of UNC-Chapel Hill were concerned at an early stage with the development of a university library, no building was provided to house the library until 1853, when Smith Hall was completed. There was little need for a library building in the sixty years previous to the erection of Smith Hall. The library collection was small, and access to the collection was very limited. Furthermore, most of the collecting activities were accomplished not by the university, but by two literary societies, the Philanthropic Society and the Dialectic Society, for their own libraries. These two societies were founded by university students within the first two years of the university's existence. They were founded perhaps because of the few social opportunities in what was a rural community. Literary societies were a common feature of institutions of higher education in the eighteenth and nineteenth centuries. Their members engaged in debating, reading, writing compositions, and collecting books.[20]

The university library's collecting activities in that time period (1795-1853) were more sporadic than the activities of the literary societies. University President Joseph Caldwell was authorized to make a trip to Europe on behalf of the university in 1824. On that trip he purchased 979 books, various scientific instruments, and a cabinet of mineral specimens. Additionally, he received a

number of book donations. Unfortunately, over the next quarter-century, all purchases for the library ceased. This was due to, as Wilson conjectures, a multiplicity of factors, including the discontinuation of a student library fee, the excellence of the society libraries, the extensive private collections of faculty members, and the educational methods of the time which required little outside reading.[21] H.W. Owen, the university's librarian, stated in 1836 in a report to the University Trustees that the library held only 1,900 volumes.[22] By comparison, in 1822, 14 years earlier, the Philanthropic Society of the university held 1,491 volumes. Similarly in 1835 the Dialectic Society had a collection of 3,075 volumes.[23]

Before Smith Hall was erected, the holdings of the university's library were housed in various rooms around the campus. The first home of the library was on the second floor of the University President's house. In 1815, the library was moved to the second floor of South Building. These were rather unsatisfactory arrangements.[24] Owen complained in his 1836 report:

> The undersigned believes that he has put the Library in as good a condition as the room in which it is located is susceptible of. It is in the Junior recitation room, and consequently exposed to all that dust which must necessarily be afloat in a Hall which is used by a Crowd several times every day. Many of the Books when presented were in a state almost worthless, the binding of others is materially injured.[25]

The society libraries were similarly housed wherever room could be found for them. Their first locations were in students' rooms in Old East Building. In 1815 they were moved to the third floor of South Building. Over the ensuing decades,

these libraries were variously housed in Old East, Old West, New East, and New West Buildings.[26]

In the early nineteenth century, the library of the university had a meager collection and was ill-housed in whatever space could be spared by the growing university. Moreover, it was infrequently used. A Professor Hubbard recalled, some years later, that before 1836,

> The Library was so poor an affair for a State University that a Librarian was hardly necessary… The College Library was never open to the Students; on two occasions only, as I remember, consulted by persons from abroad; and almost never … used by members of the Faculty.[27]

Soon it was determined that the university needed a separate library building to house the library's growing collection.

Little information survives detailing the actions taken to erect the university's new library building. There are records indicating that, in 1851, the University Trustees resolved that $1,000 per annum for five years be appropriated for the "increase" of the library, some of which, most certainly, would have been used for the costs of construction.[28] The building was erected near to the cluster of buildings already on the campus at Chapel Hill, a departure from the practice commented on by Hamlin of locating library buildings far from other buildings due to the risk of fire.[29] In 1850 the noted New York architect Alexander Jackson Davis was hired to design the building. It was to be an interpretation of an ancient Greek temple, in the Classical style. The 84 x 32 ft. rectangular building sat on a podium and had its egress at one end through a pedimented portico fronted with four Corinthian pillars. The pillars' capitals were

decorated, interestingly, with sheaves of wheat and ears of corn rather than the usual Hellenistic acanthus leaves. This was a nod to American nationalism.[30] The building was deemed attractive and an asset to the university. Curiously, for a period of time, it was on occasion pressed into service as a ballroom for the university's annual Commencement Ball.[31] One commentator wrote in 1854,

> The library building is quite an ornament to the College grounds, but by no means ostentatious or unsuitably elegant for this retired seat of learning. – It measures 130 feet long by 35 wide [sic], and it is provided with shelves for 12,000 volumes. Our Ball managers have insisted on furnishing the room with two imposing chandeliers. These added to its height give to it an appearance at once beautiful and impressive. The basement has been converted into a reading room, which is much relished by those who pride themselves on their reading powers and acquaintance with the world's every day affairs.[32]

The years immediately after the erection of Smith Hall were difficult and chaotic for the university and its library. Some time after 1853 all of the university's library books were transferred to Old East Building. A concern for security from theft seemed to be the motive behind the move. The third story of Old East was safer from burglars and thieves. F.P. Brewer, the university librarian in 1869, lamented in his report to the University Trustees that the library was almost useless. He suggested this was due to the fact that the library had been moved from Smith Hall to Old East. Additionally, the librarian noted that the new location would be troublesome in the event of a fire.[33] In this period, the basement of Smith Hall was used as a reading room, a laboratory and as storage space.[34]

The effect of the Civil War and Reconstruction on UNC-Chapel Hill's fortunes cannot be overstated. During the war, nearly one third of the

university's 1,062 students and alumni were killed in action or died of wounds and disease. The university continued holding classes during the war but shut down for four years during Reconstruction.[35] During this time of instability, the library was assaulted by thieves. Books were taken, some of which were later returned, but a great many disappeared forever.[36] By 1874, the original library building, Smith Hall, was said to be in poor condition. In a Report of the Condition of the Property of the University to the University Trustees, it was stated that "the special custodian of this building has paid a greater degree of attention to the preservation of some plank than he has to the preservation of the valuable building and Library committed to his charge."[37]

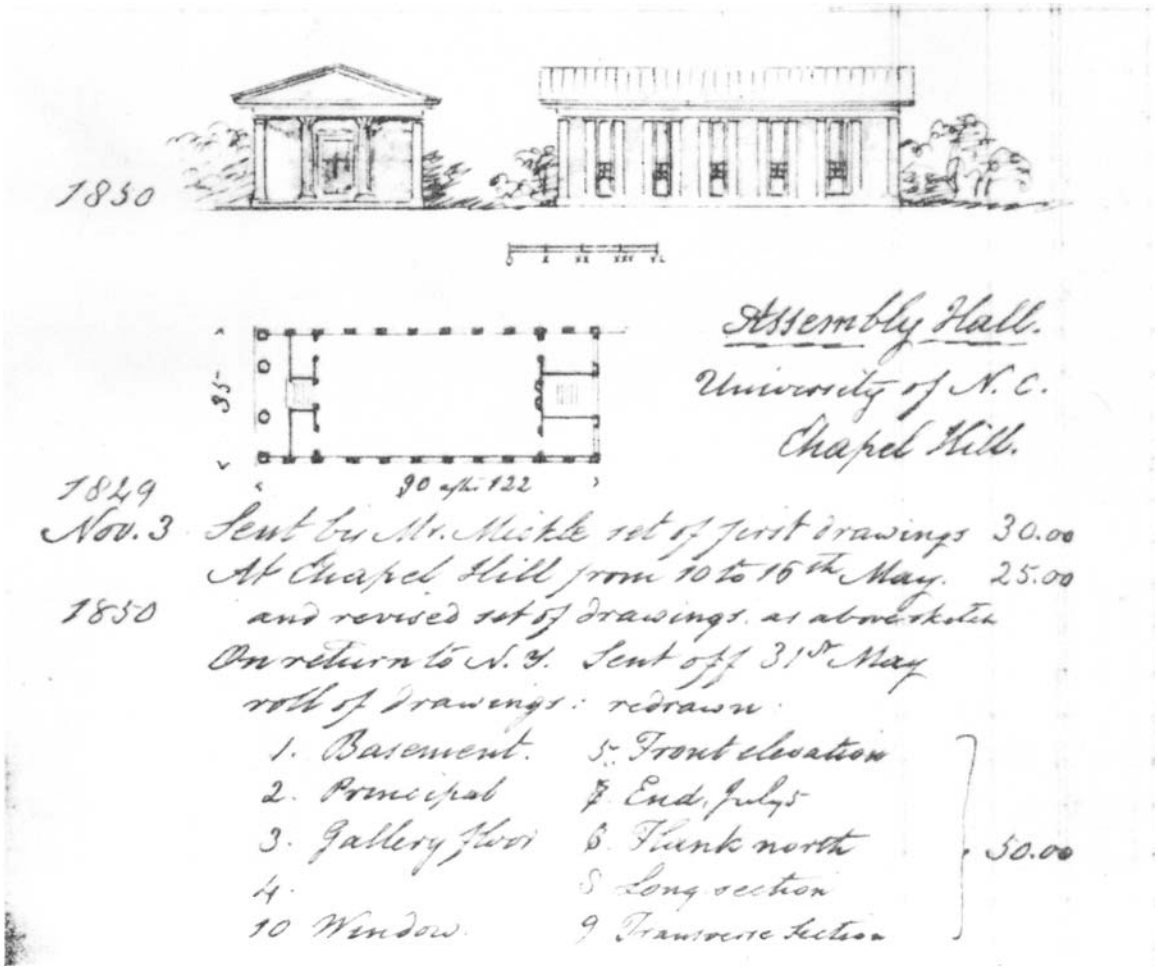
The final quarter of the nineteenth century was a time of reorganization for both the university and its library. The library was returned to Smith Hall. After 1881, it was used exclusively as a library, except, of course, when the annual commencement balls were to be held.[38] The collecting activities of the library increased greatly. Funds were appropriated by the General Assembly of North Carolina in 1881 and 1885 for the purchase of books. Important collections of books also were donated by local families. Despite the return of the library to its own building and its growing collection, use of the library continued to be minimal. James Lee Love, a former student at the University, wrote:

> In this period [1875-1889] the University Library was housed in what is now used for the Playmakers' – Professor Koch's work [i.e., Smith Hall]. In my student days, 1880-84, it was never opened for use as a Library. We made no use of its books. This had been true, I believe from 1875 to 1880; and remained true until the "consolidation" of 1886. The building was used for the Commencement Ball; and the basement was used as a chemical laboratory [until 1881].

> In the period, 1875-1886, students used only the Society Libraries. All students were required to join either the Dialectic or the Philanthropic Literary Societies.… There was no "research" in science, or literature, etc. carried on by students. We wanted books on history, biography, government, and English literature, almost exclusively. Even our professors, with the exception of Venable, did no "research."[39]

The number of hours the library was open increased slowly, from two to three hours per day in 1885[40] to five hours per day in 1890.[41]

In 1886, the Philanthropic and Dialectic Societies merged their libraries with the university's library, thus dramatically increasing the number of volumes held by the library.[42] By 1894, the university library consisted of 32,000 bound volumes and 7,000 pamphlets. Four steel book stacks capable of holding 10,000 volumes had been added to the already cramped library. It was recommended that at least three more stacks be installed to accommodate the unshelved and over-crowded books.[43] Smith Hall continued to serve the university as its principle library for a few more years, but the prevailing educational methods of the time and the library's growing collection soon demanded a better solution to the provision of a library for the university.



Smith Hall.

From Powell, William S. *The First State University: A Pictorial History of the University of North Carolina*. 3rd ed. Chapel Hill, NC: University of North Carolina Press, 1992.

Carnegie Library, 1907-1929

Kaser's Second Period, 1875-1910, is characterized by the development of the multifunction building. The purpose of libraries was enhanced in this period by the evolving nature of higher education from a lecture-based to a seminar-based curriculum that brought a need for more books in the library and greater access to them for students and faculty. The use of steel construction and gas lighting, coupled with the growing professional consciousness of both librarians and architects, further affected the architecture of university libraries.[44]

The previous period, 1840-1875, had been characterized by small rectangular buildings that served as storehouses of infrequently used books. That type of library was adequate for the needs of university communities of that era. In 1876, however, the Germanic seminar style of educational instruction was instituted at Johns Hopkins University in Baltimore. It quickly gained popularity in universities throughout the United States. The change, as Holley describes it, involved a movement, first gradual, then after 1876 more rapid, from a classically oriented and culturally elitist posture, to a more vocational, scientific, and democratic stance. Previous to 1876, educational techniques consisted of lecture and recitation in the subjects of classical languages and mathematics, natural philosophy, chemistry, and moral philosophy.[45] Instruction was imparted via lectures without the aid of supplementary material. The seminar technique,

on the other hand, required the use of outside resources for investigation and problem-solving. Small collections of books were no longer sufficient to support universities' activities. Large numbers of books and other printed materials such as pamphlets, periodicals, documents, and newspapers, were necessary for the new curricula. Libraries had to open their doors to students for many more hours daily. Better-trained staff was necessary to aid students in their use of the collections.[46]

The growing complexity of library functions called for a greater complexity in their design. Library buildings were required to perform varied functions rather than just the simple warehousing function of previous years. Greater book storage space was required to house the expanding collections. Special rooms were needed to house special materials such as rare books and manuscripts, for staff activities, library administration, and specialized reader activities.[47] The small rectangular alcove library of previous generations was ill-suited to the new demands of higher education. A practice of tri-partitioning was developed. The library was divided into separate spaces to fulfill the functions of book storage, reader accommodation, and staff work areas.[48] Librarians also began to be more involved in the design of libraries. As librarians' responsibilities to the university libraries grew, they became more aware of the functional requirements of university libraries, and they were largely responsible for the separating of library functions into separate spaces within a library building.[49]

It was generally agreed that a book storage area should be separated from reader accommodation. This was due partly to the need for more compact

storage than possible with the alcove shelving style, and partly to concern for the security of the collections. Thus, closed stacks were developed, inspired by the success of the multi-tier iron stacks at the Bibliothèque Ste. Geneviève in France.[50] The iron stacks at the Bibliothèque compressed the greatest number of books into the smallest amount of cubic space.[51] Iron, and later, steel, were used with increasing frequency in library buildings, usually in the construction of self-supporting bookstacks. The first such bookstack in the United States appeared in the 1876 addition to Gore Hall at Harvard University. It was described as,

> …a shell…built of masonry walls pierced by rows of small windows…Into this were packed book ranges, row on row, tier on tier…The aisles between the ranges were 28 inches wide and the tiers seven feet high…The stack was six tiers high, self-supporting throughout, and depended on the building only for protection.[52]

With the use of closed multi-tier stacks libraries could keep their collections both secure and compact.

Greater interest in this period given to the planning of libraries was likely spurred by the influence of Andrew Carnegie. Although more well-known for his program of funding public library buildings, he did give funds that aided in building 130 academic library buildings in the period 1900-1910. Incredibly, by 1910, Carnegie was responsible for funding more than half of the academic libraries that existed in the United States. Carnegie had a great concern that the buildings he funded be efficiently constructed and that they would be effective as libraries.[53] There had been concern for efficient use of space even before this period. This was apparent due to the influence of Charles Coffin Jewett and

Frederic Vinton, librarians who influenced the design of libraries at Williams College and Princeton University, respectively. By conceiving of the provision of separate spaces for limited staff activities and other functions they paved a new road to efficient library use of space.[54] However, the standardized departmentalization of the Carnegie libraries was the first instance of widespread realization of the concept of more efficient use of space in library buildings.

The Carnegie Library at UNC-Chapel Hill was erected in 1907. The previous library, Smith Hall, became too cramped. That small building could not provide sufficient space to house the volume of books needed in the new educational climate nor could it provide for the services needed by patrons. In his "Alumni Address" of 1903, John Sprunt Hill, alumnus of UNC-Chapel Hill and local businessman, described the need for a new library at the university to replace the outdated, 50 year-old Smith Hall:

> Today there is no great library in North Carolina, no general knowledge of library economy, no great source of library inspiration. The library at the University is probably the best equipped in the State, but a feeling of sadness must needs come over the heart of every loyal son of our beloved State when his eyes fall upon our University library equipment. The building shelters 40,000 volumes and 20,000 pamphlets, but many of them are necessarily packed and jammed away in such a fashion as to largely destroy their usefulness. What is a library without research rooms, consultation rooms, seminary compartments, with but little room for the general reader, and less for the real scholar and none for the specialist, the man who digs down to the bottom of research and brings out the pure gold of human learning from the treasure houses of the world? Will not some philanthropist come to our aid and erect a memorial library building on this beautiful campus, with sufficient funds for equipment?[55]

Reports from the librarians to the University Trustees in the 1890s consistently described the library's increasingly cramped condition.[56] One committee

suggested expanding the capacity of Smith Hall by constructing an iron gallery along three sides of the library to house more bookshelves. It suggested that such a solution would allow the library building to last for 10 or more years.[57] By 1905, however, it was clear that Smith Hall could not be improved dramatically enough to satisfactorily house the university's library. By then, Andrew Carnegie had begun funding the construction of academic library buildings, in addition to his activities in founding public libraries. University President, Francis P. Venable, contacted Carnegie requesting aid. Venable received a reply from Carnegie's secretary that offered to pay $50,000 for the erection of a new library building at UNC-Chapel Hill, provided that the university could raise an equal amount of money in an endowment for the continued maintenance of the library.[58] More than $50,000 was raised before the 1906 Commencement, and the building's cornerstone was laid in June of that year. The building was ready for occupancy by October 1907.[59]

The Carnegie Library at UNC-Chapel Hill was typical of the tri-partite structures of the 1875-1910 period. It consisted of a circulation desk in the center flanked by reference and periodical rooms and offices to the left and right. The book stacks were in the rear of the library.[60] The library was planned with functionality in mind, to house the necessary functions of a modern library. Areas were provided for readers, book storage, and staff activities. Reference and reading rooms were located in the two main wings of the building. Additional rooms for special purposes, such as study rooms and a room to house works on North Carolina history, were provided on the second floor. A stack room was

planned of three tiers of shelving with two mezzanine glass floors. It had an estimated capacity of 110,000 volumes. Additional rooms in the library, such as an adjacent periodicals stack, allowed for housing an additional 40,000 volumes. The stacks were closed. Thus patrons were required to use library staff intermediaries to retrieve books. Closing the library stacks to patrons was a solution to the perceived problems associated with open stacks. A previous librarian had complained that the open access to books in Smith Hall facilitated vandalism in the library because of the "lawlessness" of students. It also permitted rampant theft because students took books secretively from the shelves in order to avoid overdue book fines.[61] The closed stacks in the Carnegie Library made for greater work for library staff to find and retrieve materials for patrons, but it reduced the security risks apparent in the previous library paradigm. The book delivery desk was located at the focal point of all foot traffic in the building. It gave a "commanding a view of all entrances and stairs." The librarian's and catalogers' rooms were located in another part of the building.[62]

The Carnegie Library was thus very typical of the academic library building trends of the period. The space in the building was divided into three areas, rooms for the use of readers, rooms to house the closed bookstacks, and rooms for the use of library staff. As was the case with many academic library buildings of the time, it was erected with the aid of philanthropic funds provided by Carnegie. Indeed this library was named after Carnegie. The growing awareness of librarians and, it must be said, of the administrators who controlled

the purse strings, in planning libraries to fulfill specific functions was well-represented in the building. Additionally, an awareness of the need to provide for future expansion is apparent in the planning of this Carnegie library. This was a valuable concept in library planning not considered fifty years earlier with the erection of Smith Hall. Although in 1901 the university's library consisted of only 40,000 volumes,[63] the Carnegie Library was designed for 150,000 volumes.[64]

Unfortunately, the Carnegie Library was built at the tail end of the multi-partitioned academic library building period. Due to unforeseen changes in library trends, collecting activities, and educational activities, within twenty years the building had become outdated. Not long after the Carnegie Library began serving the university as its principle library a replacement was already needed.

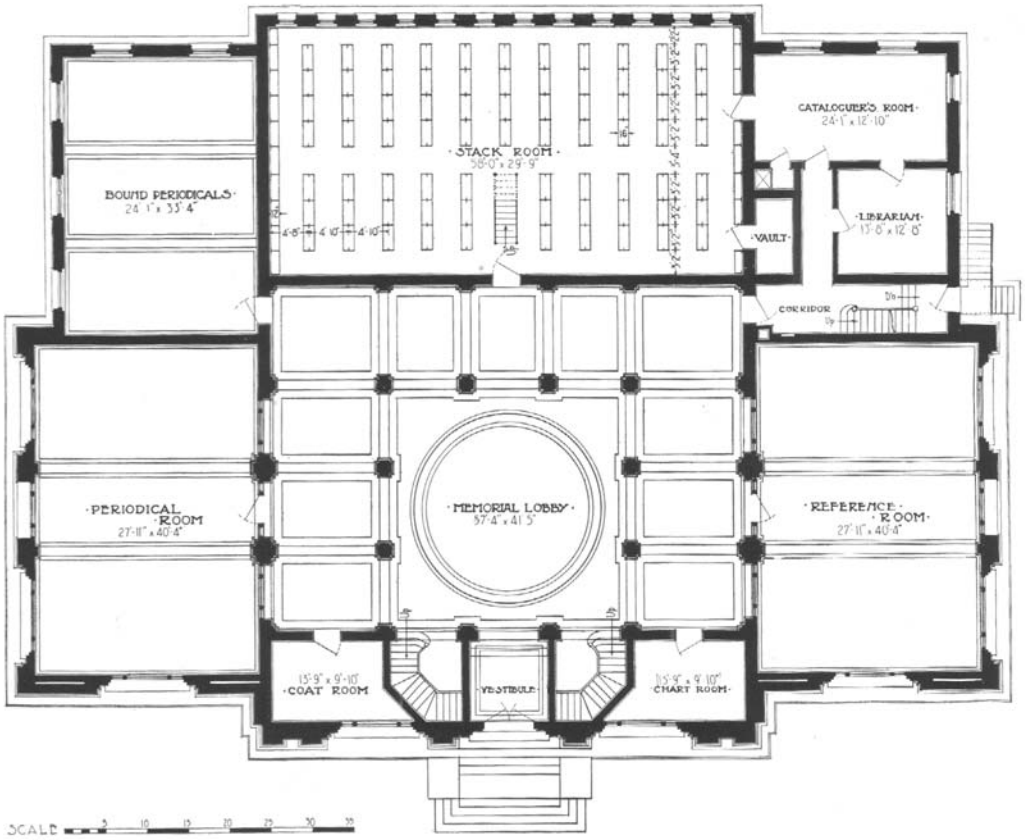


Fig. 223. FIRST FLOOR PLAN

UNIVERSITY OF NORTH CAROLINA LIBRARY, CHAPEL HILL, N. C.

FRANK P. MILBURN & Co. Architects LOUIS R. WILSON, Librarian

Carnegie Library.

From Snead & Company Iron Works. *Library Planning Bookstacks and Shelving: With Contributions From the Architects' and Librarians' Points of View*. Jersey City, NJ: Snead & Company Iron Works, 1915, p. 194.

Louis Round Wilson Library, 1929-1984.

The Third Period of academic library building in the United States, 1910-1945, saw the building of very large, very expensive libraries that featured fixed-function bookstacks. The trends that led to the development of the Second Period of academic library buildings evolved and continued to influence the form and function of buildings in the Third Period. The factors that contributed to this phenomenon include the comparatively large size of the book collections, the explosion of enrollment in higher education, and the increasing popularity of the seminar style of instruction.[65]

The numbers of people using university libraries increased dramatically in the first two decades of the twentieth century. This was the period out of which, as Orne says, "came the universal conviction that education was the undeniable right of every individual."[66] The change in enrollment figures in selected top universities between 1890 and 1920 is striking: Brown University went from 285 students in 1890 to 1,310 students in 1920. The University of Michigan went from 2,158 students to 8,652 students in the same time period. Similarly, Columbia University went from 1,671 students to 8,510 students. Indeed, the typical growth rate in enrollment figures in this time was an astonishing 370 percent.[67] Another trend affecting enrollment figures was the establishment of land-grant colleges and new state universities. They made higher education

more attainable to people who could have previously ill-afforded the cost. The increasing numbers of university students demanded a resulting increase in the number of faculty members.[68] In these same years, the seminar style of education continued to increase in popularity becoming the standard for university education in the United States. Students were increasingly expected to consult multiple sources in their research activities including both primary and secondary sources.[69] The number of graduate students, who were frequently engaged in original research, also contributed to the increased demand for library services. By 1925, 40 institutions in the United States offered rigorous graduate, including Ph.D., programs.[70]

In the early portion of the twentieth century library collections grew in a fashion similar to enrollment numbers. Because there were more students attending universities, and because they were required to consult multiple sources for their coursework, libraries had to collect books with a rapidity never encountered previously. Other factors contributed to the growth in library collections as well. These include the increasing number of publications, the increased output of material produced by government agencies, the growing importance of special collections and manuscripts to research efforts, and the increasing number of periodicals considered essential by researchers.[71] The growth of some university library collections was almost astronomical. For example, between the years 1890 and 1920 Harvard University's collection grew from an estimated 380,000 volumes to more than 2,000,000. Yale University's collection went from roughly 200,000 volumes to 1.25 million. In the same time

period, the University of Pennsylvania's collection grew from 90,000 volumes to 503,572 volumes.[72]

The incredible growth in enrollment and the size of university book collections, coupled with the growing popularity of the seminar style of instruction, required a new paradigm in university library planning. The library buildings that had been built just a generation previously on university campuses were now inadequate to support their institutions' needs. The general principles at work in the multi-partitioned buildings of the Second Period were still generally operable – separate spaces for readers, books, and library staff, closed stacks, an awareness that library planning should consider the needs of libraries rather than purely aesthetic concerns – but the solutions grew more sophisticated and the scale of the buildings grew considerably in the Third Period. Similarly, the self-supporting bookstack used in the Second Period continued to grow in popularity and size. Its functionality – to compress large amounts of books into a small amount of space – became more and more a necessity.

The attributes of the typical academic library building constructed in the period 1910-1945 are described in Hanley's *College and University Library Buildings*. The typical building usually included the following essential elements: 1-4 reading rooms for various functions, a delivery hall, administrative offices, work rooms, and a multi-tier bookstack.[73] Orne describes this type of library as an L, T, I or U shaped library, with the various elements of the library housed in different wings. A bird's eye view of the arrangements formed the shape of one of these letters of the alphabet.[74] Doe Library at the University of California at

Berkeley was the first academic library building of the period planned with the spatial demands of the twentieth century in mind. Opened in 1911 for use, but not fully completed until 1917, It was typical of other contemporaneous academic library buildings. It was designed to have a large foyer in the center of the north face of the building, large reading rooms to the right and the left of the foyer, and a monumental stair facing the entrance that rose up to the second floor. The upper floor consisted of staff work rooms, a delivery hall, a large catalog area, and a massive reading room that spanned the length of the north side of the building. In the southern portion of the building were the multi-tier stack levels. They were made of a skeleton of self-supporting, load-bearing cast iron shelves with a stack level at a height of 7 ft. 6 in. Two stack levels aligned with one building floor of 15 ft.[75] This general floor plan included the elements deemed essential by Hanley, and then some. It was used in many other academic library buildings of the time period.

As previously indicated, multi-tier bookstacks required a self-supporting grid of iron or steel. To create a bookstack, metal posts were sunk into the building's foundation. They extended the entire height of the planned bookstack. The shelves and walkways of the stack were built onto the metal posts by laying slats of metal, wood, glass, or marble. The resulting web of shelving did not rely on the building's walls for support. Rather it was self-supporting. Removing only one portion of a stack would cause an entire bookstack structure to collapse. Fixing the bookstack in this manner was an economical activity. The area under the self-supporting bookstack was the only area that needed to be engineered to

support the weight of the books. The other portions of the library, i.e., the reading rooms, staff rooms, seminar rooms, and others, could be engineered to support only the normal weight of people and room furnishings. The resulting building was termed a “fixed-function building” since not all the major functions of the library could be moved to different portions of the library building. As book collections grew very large in the Third Period of academic library building, most new library buildings were planned as fixed-function buildings. They usually included self-supporting multi-tier bookstacks. The self-supporting bookstack most typically defined the form of new library buildings in this period, given that it consumed a great deal of the building’s volume.

The pamphlet entitled *The University Library*, distributed for fundraising purposes in anticipation of the opening of the new library (what would become Wilson Library) at UNC-Chapel Hill described the attributes of the then modern university library: the rapid increase in the production of books, new conceptions of educational methods, increasing circulation figures, and the provision of individual study carrels and group study rooms.[76] It stated, “the modern library structure is not merely an edifice architecturally acceptable in proportion and decoration. The building’s plan and equipment are a concrete expression of the organization of the library within.”[77] Wilson Library was planned to contain and facilitate the planned functions of a modern library. The building was built in the shape of an inverted T, with the book stack projecting out to the rear. It included all the elements described by Hanley.[78]

Louis Round Wilson, for whom Wilson Library was later named, served as University Librarian at UNC-Chapel Hill from 1901-1932. His influence on the development of the university into a major research institution cannot be left unstated. He understood the central importance the library would hold in the workings of a modern university and was able to convince University President, Francis P. Venable, of this importance. One historian wrote,

> Venable grew into the conception, aided and stimulated by upcoming young talent in his faculty, notably by Louis Round Wilson, that a modern library was fundamental to an institution that would serve the purposes of its existence. A library, ever increasing its store of the knowledge of the past, as well as of the present endeavors of scholars who are making brick for the rising edifice of human enlightenment, seemed to Venable and Wilson a prerequisite of an institution of learning.[79]

What makes Wilson's influence most astonishing is that he was the university's librarian. It was a position of very little standing in the university's bureaucracy. It had been, for many decades, an afterthought, one that junior members of the faculty had been tasked into fulfilling. Among his achievements were the erection of two library buildings at the university, in 1907 and 1929, the establishment in 1931 of what came to be the School of Information and Library Science at UNC-Chapel Hill, and the adoption of national cooperative cataloging and classification standards in the university's library. Clearly, Wilson Library's appellation is due to him. He was the primary figure during the development of all initiatives related to the library at the university in a period of transformative change. Wilson began planning for a new library building at UNC-Chapel Hill as early as 1921. In designing the building, he assembled information from many sources, including library reports and articles describing new library buildings,

extensive correspondence with librarians, and from site visits to libraries. Wilson took a number of extended trips in 1925 associated with his involvement with the American Library Association. On these trips he took every opportunity to visit library buildings at Minnesota, Illinois, Michigan, and elsewhere. Toting a tape measure, he documented the size and space requirements of different library functions at the libraries he visited.[80] He was acutely mindful of the trends in academic library building throughout the country while planning for the new library building at UNC-Chapel Hill.

The enrollment pressures and growth in collections that affected a great many of the colleges and universities across the United States in the early part of the twentieth century affected UNC-Chapel Hill as well. Unlike the major universities in the Northeast, however, the universities in the South were still feeling the effects of the Civil War and Reconstruction. While their rate of growth in the years 1890-1920 was similar to that of the northeastern universities, their numbers had started at a lower point. Thus while Cornell University in 1890 had an enrollment figure of 1,329, UNC-Chapel Hill had approximately 200 students. Nevertheless, by 1920, UNC-Chapel Hill had grown to 1,437 students, and its collection had grown, in the same time period, from 34,000 to 93,914 volumes.[81] By 1926, the enrollment at UNC-Chapel Hill had increased to 2,450 students. That number included an increasing number of graduate students, who demanded even greater library services than did undergraduates.[82]

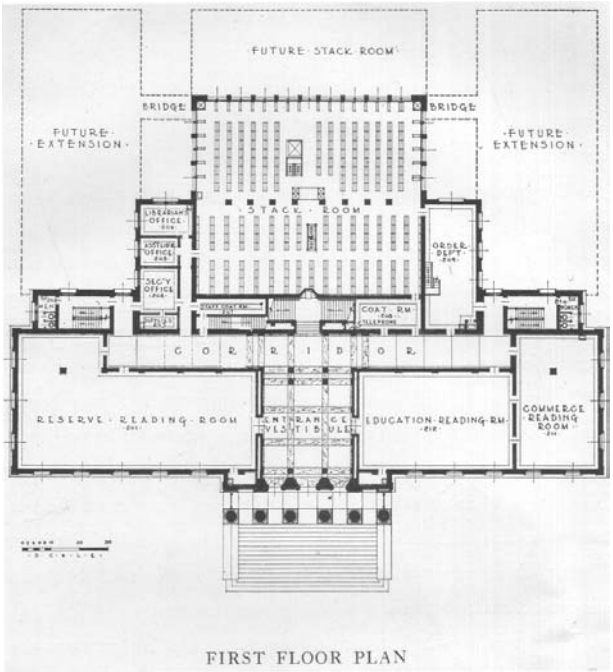
A great deal of bureaucratic wrangling between Wilson and the university's administration was involved to secure funds for the building of the

new principle library at UNC-Chapel Hill.[83] The informational pamphlet created during the construction of the library described the building thusly: "it extends over a front of 210 feet and to a depth in the center of 140 feet, and rises to the height of four stories, including a basement… The stacks now being erected for books are nine stories high and will shelve approximately 400,000 volumes."[84] As already indicated, the building was planned in the form of an inverted T, with the stack room jutting out behind the block that contained reading and staff rooms. The building opened in 1929. Visitors approaching the building came up a wide marble stairs to the front doors, which were sheltered by a high porch framed by classical columns. The large entry vestibule had specialized reading rooms to either side and a monumental staircase opposite the entrance. The staircase led to the main reading room, which encompassed the entire front of the building on the second floor. The delivery room was also on the second floor, behind the main reading room. Staff rooms were located between the reading rooms and the stack room.[85] The tripartite arrangement popular in the previous period continued to influence design in the new era of larger, fixed-function buildings. An interesting feature of this library is that the bookstacks were open to graduate students and faculty. Open study carrels were provided on the periphery of the stack room, a rather liberal design feature in the era of closed-stack library planning.[86]

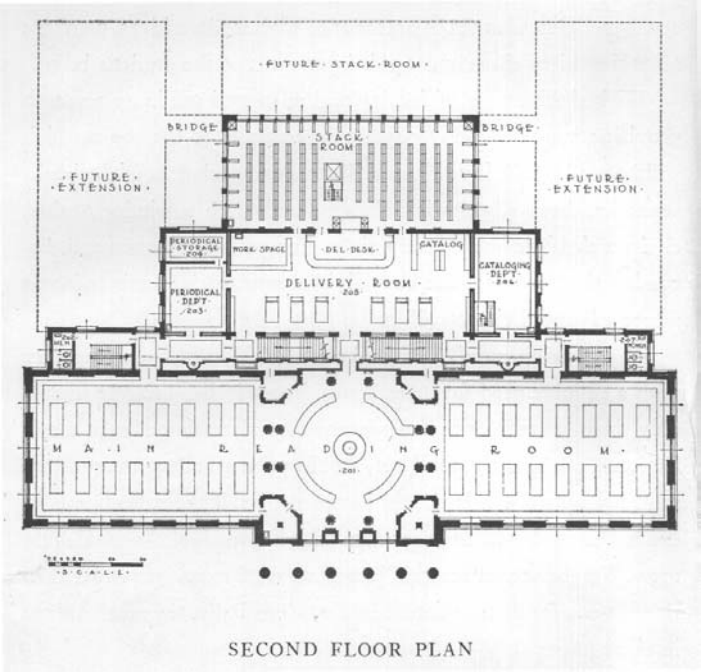
Wilson Library was planned with the expectation of future growth. Even before the building was completed, it was well understood that expansion would be required. The university thought that it would one day be necessary to build

wings on either side of the library, as well as build an addition to the rear of the library for the accommodation of bookstacks.[87] Indeed, Louis Round Wilson assumed that the library would be able to expand ever backwards behind the building whenever the need arose and funds could be assured. That assumption was quickly dashed when South Road was laid out directly behind the library building against Wilson's wishes. Wilson Library was in fact expanded at a later date, but the limits of the road restricted any future expansion plans to the rear.

Wilson Library continues to serve the university community, although it is no longer the principle library on campus. The constant pressure in the growth of collections and increasing enrollment led to the construction of a new principle library for UNC-Chapel Hill five decades later. As mentioned briefly earlier, following the opening of Davis Library in 1984, Wilson Library was renovated to house special library resources, including the Manuscripts Department, comprising the Southern Historical Collection, Southern Folklife Collection, and the University Archives; the North Carolina Collection; the Rare Book Collection; and the Map Collection.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

Wilson Library.

From University of North Carolina. *The University Library*. Chapel Hill, NC: The University of North Carolina, 1929, p. 12, 14.

Walter Royal Davis Library, 1984-

Kaser's Fourth Period encompasses the period following World War II to the present and is described as the modular integration of book and reader spaces.[88] Ellsworth describes the modular building style as a building pattern in which most of the floor space, except the core service areas, can be used to support free standing bookcases or to subdivide into rooms for human use interchangeably.[89] This flexibility is achieved by the creation of "modules," square spaces delineated by a column in each corner, with the columns spaced roughly 12-18 feet apart. The columns suspend and support the floor plans abrogating the need for self-supporting bookstacks. The library is arranged by hanging partitions between columns wherever needed to create rooms or spaces for specific purposes. Free-standing bookshelves can also be arranged between the columns.[90] Kaser defines a modular building as one in which the floor is divided into equal rectangles, each of which is usually defined by structural columns at its corners, as well as by uniformity in ceiling heights, air and light treatment, and floor-loading capacities. It thus allows use to be economically modified as needs change.[91]

The modular style was born of an important development in library construction techniques that began in the late 1930s. It was begun, notably, by Angus Snead Macdonald, a bookstack manufacturer, but it was not realized until

after World War II. Macdonald discovered that the strength of several of the stack columns could be aggregated into one steel column. The steel columns could then be located farther apart than was possible with the stack columns, thus opening up a great deal of floorspace. If all portions of the library building could be constructed to hold a similar amount of load-bearing weight, only the widely-spaced steel columns need be fixed in place. All other internal library structures, including walls and furniture, could be moved about as need dictated. Free-standing bookshelves could be used in place of structurally fixed bookstacks. Prior to World War II, a number of universities in the United States began to open their stacks to faculty members, graduate students, and finally to undergraduate students, due to patron demand. The patrons wanted to be able to retrieve their own items and browse the shelves for materials. Unfortunately, it was impossible to install comfortable reader accommodations among the narrow aisles and low ceilings of the immovable structure of the bookstack. The possibility of providing free-standing bookshelves was an intriguing solution to the problem. Macdonald gained support for his ideas among prominent librarians, including Ralph Ellsworth, who was to have a major impact on the development of the new, modular style. The war, however, put a halt to most non-defense construction, and the new modular style of building was only implemented after its end in 1945.[92]

The economic depression of the 1930s and the war of the first half of the 1940s affected the growth of university libraries in the United States. Both events drained money from university budgets. Construction of new library

buildings virtually ceased during those years. The war also caused a drop in enrollment at universities. Young men went to serve in the military. Library directors were well aware that the end of the war would bring a renewed swelling in the ranks of students at the universities and a complementary upsurge in the use of library materials. Many academic libraries had already outgrown the library buildings constructed for them only years before. As the war raged, librarians, architects, and administrators began to plan for the academic needs of the coming years.[93] The radical new paradigm of library planning, the modular style, gained support during a series of meetings begun in 1944 of representatives from 15 colleges and universities. The meetings came to be called the Cooperative Committee on Library Building Plans. Macdonald gained further acceptance for his model of modular planning. New innovations in lighting, air conditioning, and interior materials such as carpeting were discussed, and librarians were able to confer with attending architects how to best incorporate the needs of their profession into the architecture of library buildings.[94]

A great deal of library building activity began on university campuses in the United States following the end of the war. In 1973, Ellsworth, a librarian who was closely involved with the implementation of the modular style, wrote:

> The quarter of a century since the end of World War II has been unique in the history of academic library construction. Concrete, steel, and dreams converged on campuses across North America creating an unprecedented quantity of new library facilities. Indeed, the past five years alone could qualify as the Golden Age of library-building. Assisted by federal subsidies and loans, four-year colleges and universities in the United States built a record 450 libraries at a cost of almost a billion dollars. We are not likely to

> see soon again, if ever, such remarkable expansion in so brief a period.[95]

Most, if not all, of the 450 library buildings constructed in that time were planned with the concept of modular construction in mind. Librarians and readers alike found a great deal to like in the modular style. For the first time in nearly a hundred years, patrons could retrieve their own books from shelves in spacious, well-lit stack areas.[96] Librarians had a greater influence over the design of their libraries giving thought to the functional arrangement of areas and furniture since the building was planned to be as flexible as possible.

Demographic changes in the United States played a role similar to that played in the previous periods of academic library planning. More students attended institutions of higher education as the twentieth century unfolded. Ellsworth asserts that before World War II, 16 percent of American high school graduates went to college. By the early 1970s, 45 per cent went to college. Total college enrollment in the United States during the period increased nearly six-fold, to approximately 8,000,000 students.[97] Increased enrollment figures brought with them a commensurate growth in collections as more students required more library materials. The modular style of building's success lies, however, not necessarily with its ability to provide solutions to holding the huge collections of modern academic libraries, but with its functional flexibility. The need for space in the cramped libraries at the beginning of the Fourth Period influenced the development of the modular style. Librarians found themselves in fixed-function buildings that could no longer hold their massive collections. However, the modular style was most useful because the resulting buildings

could have their layouts changed with relative ease – by the removal and relocation of partition walls and the movement of free-standing bookshelves from one location to another rather than the construction of an entirely new building – to meet the needs of evolving library services.

The modular building style displayed an overriding concern with function rather than aesthetics. It did not rely on architectural ornamentation for its form. Its preoccupation with flexibility applied to the exterior form of the building as well. As Orne wrote, design possibilities included every variety, the high, the broad, or the deep. The University of Massachusetts, Amherst's library is a tower nearly three hundred feet high. The University of Illinois's library is underground.[98] As long as the interior functionality of the building was maintained, architects could exhibit a great deal of imagination in designing the building's exterior form.

Despite the popularity of the modular library building style in the United States in the mid-twentieth century, UNC-Chapel Hill did not erect its modular library building, the Walter Royal Davis Library, until 1984. The university relied on the Wilson Library until then, choosing to expand and renovate that existing building in 1952, thus extending, by as much as possible, the life of that building by another 30 years. The expansion to the library followed plans very similar to Louis Round Wilson's 1920s original projection of two additional wings and stack extension. Final plans for the library extension were begun in 1938.[99] Further plans were delayed because of the onset of World War II. The planners of the addition seem to have been unaware of the new developments in library planning

following the war's end, despite the fact that, by the late '40s, academic libraries were already being constructed with the modular style in mind. These included the libraries at Hardin-Simmons College, completed in 1947 and Princeton University, in 1948.[100] At the time, UNC-Chapel Hill likely would have been unable to acquire sufficient funds from the State to build a new building in the modular style. Indeed, great difficulty was encountered in securing funds for merely the extension of the library.[101] Nevertheless, the concepts of modular style, and the flexibility it allows, is not reflected in the final design plans for the library additions.[102]

Not until the late 1970s were plans begun to finally replace Wilson Library as the main university library. From the beginning, it was desired that a modular building be erected. Indeed, the modular style had been the academic library building paradigm for the past thirty years. Some modifications were made in the modular concept as it applied to this proposed project, however, perhaps due to the influence of the architect. The building was divided into two spatial units – a long, low block consisting of the reading room and circulation desk and a tall, multi-story block containing the bookstacks. In this design there are echoes of the historical division of functions in academic libraries of previous periods. Gordon Rutherford, the Director of Facilities Planning for UNC-Hill, applauded the design, saying,

> I like the way the architects have developed a distinction between where books are stored and where they are used. While the storage space is an efficient open warehouse, the books are used in adjacent spaces which are pleasant and inviting. It is not like the typical library we have known…"[103]

The architect, Leslie N. Boney, however, suggested that the grouping of reading areas into one space was done for reasons of economy,[104] rather than as a design element.

Regardless of the underlying reasons, Davis Library was designed with special care given to flexibility. A Schematic Design Presentation was given in 1977, in which the architect described the more noteworthy design features:

> Main Floors: The design solution involves an extensive area of first and second floor/mezzanine space. This was deemed desirable in order that the functions of the library facility would not be compromised but rather the patron and technical service flows would be the most convenient and efficient.
>
> Stacks: The free-standing stacks are located on six floors and are grouped in a rectangular layout for optimum continuity of shelving and minimal disruption of traffic flow…
>
> Flexibility: The design of the building recognizes that interior changes will be necessary over the years of its anticipated life.
>
> Interior partitions are non-load bearing in nature.[105]

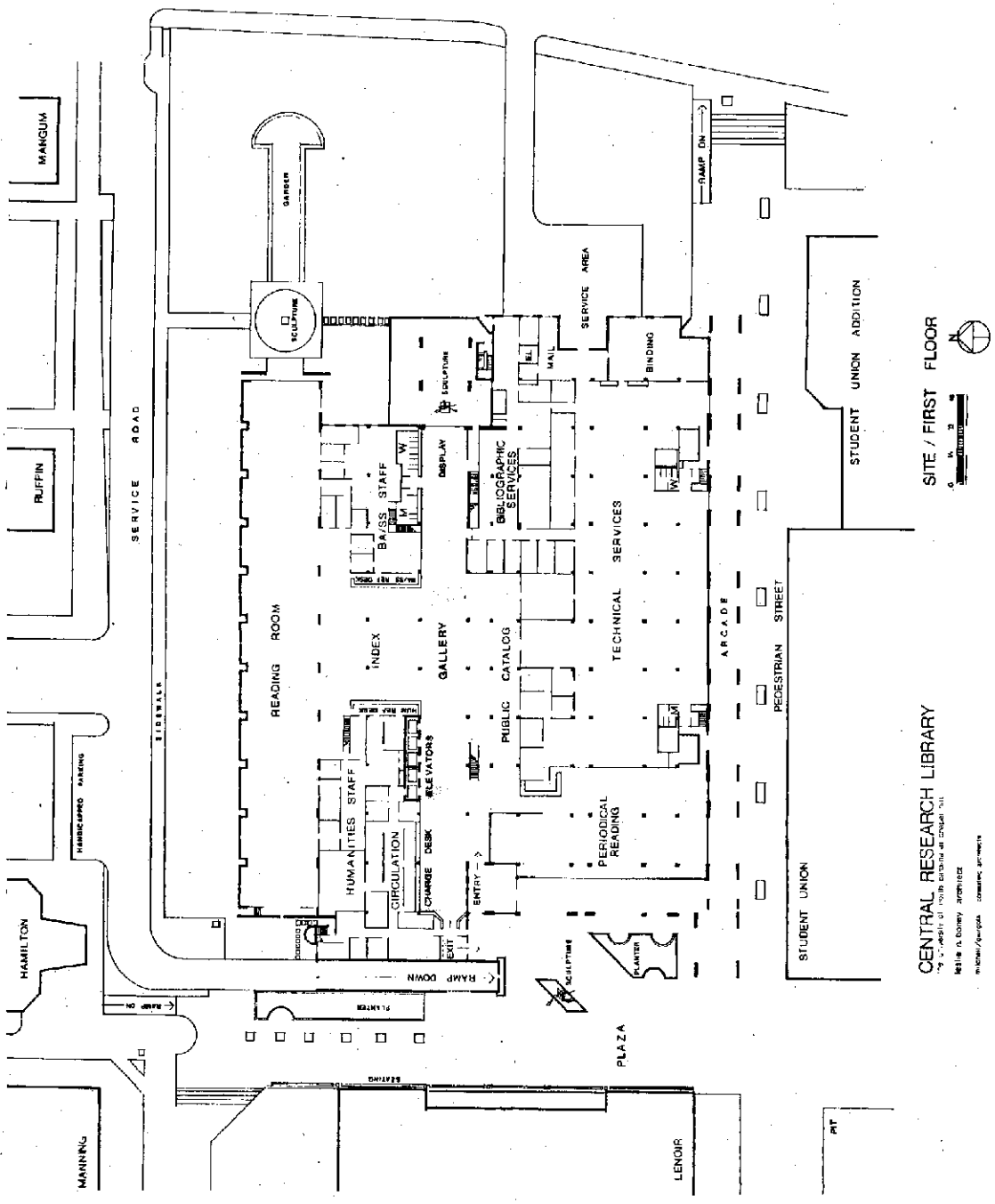
Issues of primary concern to Boney were flexibility, library functions, and traffic flow. An informational pamphlet later produced about the library touted the library's functionality and flexibility: "Because the building has a minimum number of interior barriers, it can be adjusted as its functions and services change."[106] One description of the final design included the following concepts:

> On each stack floor, the center area is devoted to a very efficient rectilinear book storage layout. On the north and west are open carrels, on the east are faculty studies, and on the south six study towers containing closed carrel modules are interspersed with study and typing rooms, and lounge and table seating. The plan emphasizes the sense of place for people to read, study, and meditate.[107]

Great care was given to adhere to the philosophy of modular design. In the resulting building, steel columns are laid out in a grid throughout the building, creating squares of space within which the elements of the library are arranged. Free-standing bookcases are laid out in the stacks block, the reading room, the periodicals room, and the mezzanine level. It was assumed, even in the early planning stages, that these stacks would be movable.[108] Furniture of varying sorts – chairs, tables of different sizes, computer stations, study carrels, sofas – were arranged in reader areas. An additional element desired by the architect and the library administrators was the block of study carrels for graduate students and faculty members attached alongside the stacks block. Boney described the addition of the carrels as "the single most important idea [in the design]. It provides a dignified comfortable atmosphere for study and reflection. It is more than an architectural feature. It shows how people can have a better life through a study space."[109]

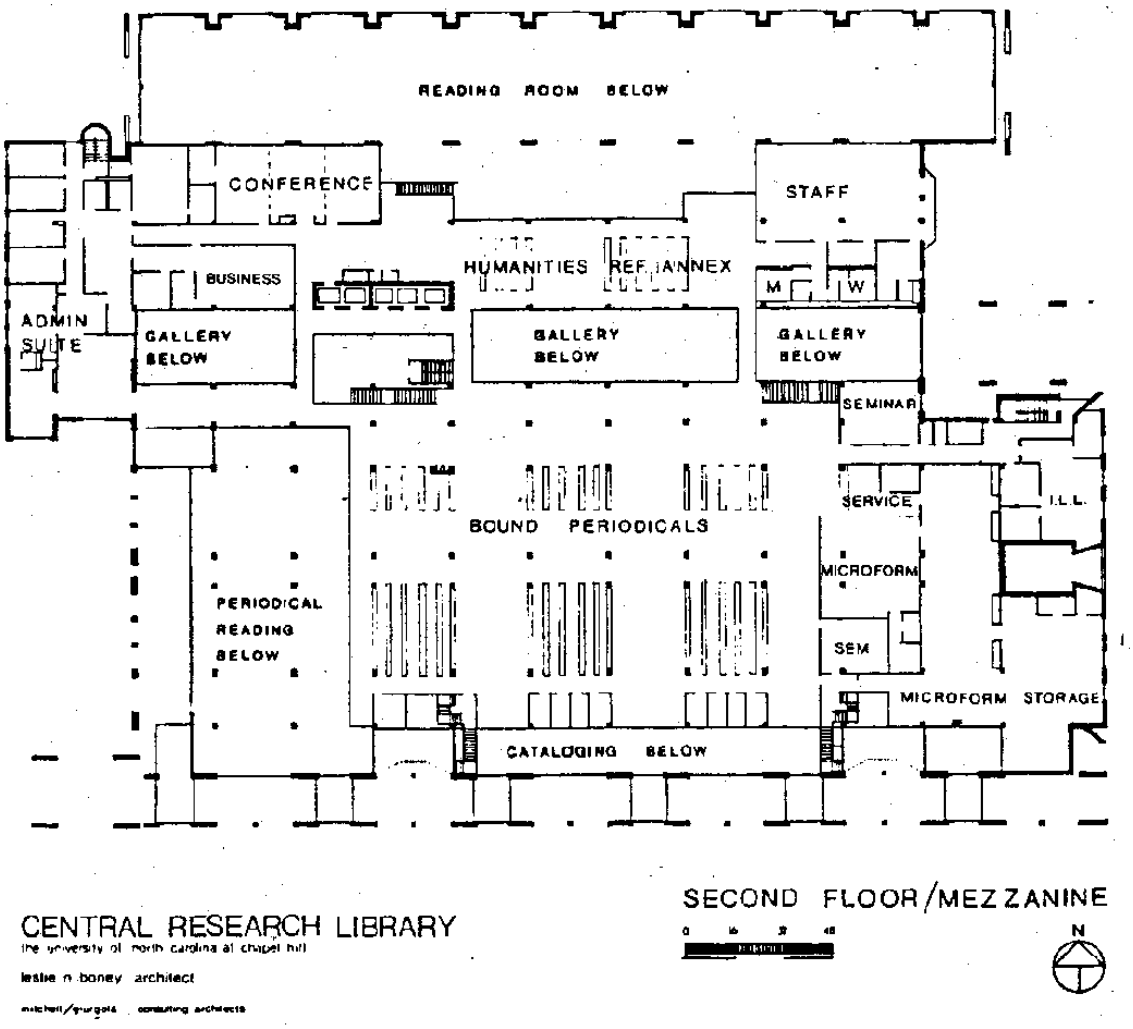
One final concern that the planners of Davis Library had was its potential for future expansion. The constant need for more space in libraries in the previous 100 years was not forgotten. The planners were well aware that there might be the need to expand the building in the future, although the library staff thought that such a probability was not great. It was intended that the stack area be capable of allowing for a 50 per cent expansion. The stack area was planned to hold 1.2 million volumes. The planners hoped to provide the possibility of expansion to accommodate an additional 600,000 volumes. The University Librarian, James Govan, hoped that the future expansion could be horizontal, but

the prevailing idea was of a vertical expansion – the addition of another floor to the stack block.[110]



Davis Library.

From Facilities Planning and Design Office, Records, #40100, in the University Archives and Records Services, Wilson Library, University of North Carolina at Chapel Hill.



Davis Library.

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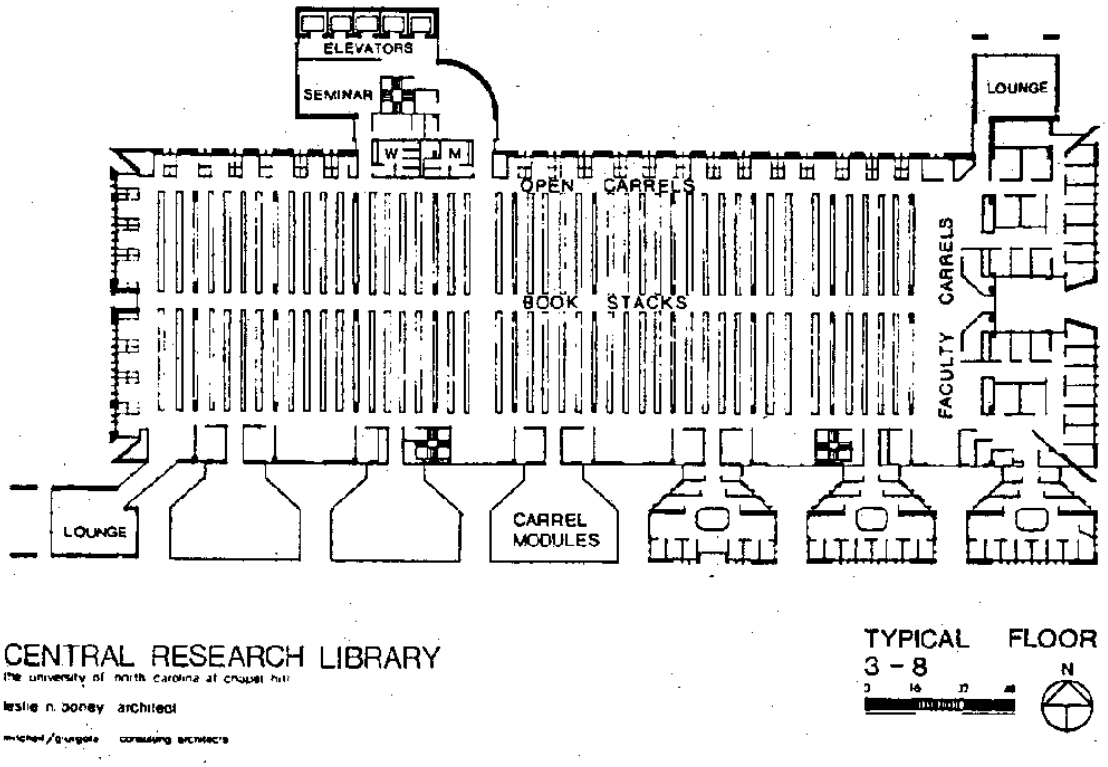

Davis Library.

From Facilities Planning and Design Office, Records, #40100, in the University Archives and Records Services, Wilson Library, University of North Carolina at Chapel Hill.

Conclusion

The history of academic library building activity can be reduced to the relationship between the continued growth in numbers of people attending academic institutions, the complementary growth in the size of collections, and the pedagogy of higher education. These factors have consistently played a role in the development of academic library buildings in the United States. Each generation of architects, administrators, and librarians assumed that by building a new, more functional, larger building, they were solving the problem of housing the never-ending increase in the size of their collections while increasing services to their patrons. Yet the demands of patrons, demographics, and collections created continued to put pressure on the ability of library buildings to fulfill their functions as an integral element of the academic community.

The history of the library buildings at UNC-Chapel Hill mirrors the prevailing general trends in academic library planning in the United States, from its infancy into the modern age. From the first library building on campus, Smith Hall, to the most recent, Davis Library, changing times and conditions have affected the function and form of each library building built. The alcove style of Smith Hall is representative of the early years in academic library building, when a small, warehouse-type building was all that was needed. Security rather than use was then the primary concern in academic libraries. Carnegie Library

reflects a time when library planners began to put more effort into planning a building that could house the different functions of a library building, by providing reader space, book space, and staff space in a tripartite arrangement. Wilson Library was a more sophisticated version of the tripartite style incorporating new elements in library practice in a comparatively large building yet it was a library dominated by the bulk and inflexibility of the fixed-function structural bookstacks. Davis Library, the most recent library building at UNC-Chapel Hill, with its grid of steel columns typifies the modular style, the predominant academic library building style of the greater part of the twentieth century with its focus on flexibility and functionality. It is clear that the Four Periods as described by Kaser in his comprehensive history of academic library buildings are neatly illustrated by the library buildings at UNC-Chapel Hill.

The modular style, as of the early twenty-first century, continues to be the planning paradigm in new academic library buildings. Because this style continues to be used, opinions are strong and fierce as to how the style can be used best. The general opinion on the modular style is that it is a suitable adaptation to, and enabler of, modern academic practices. However, some have found fault with this style. Davidson writes of “the boredom of interior columns and low ceilings.”[111] Some architects and librarians have suggested that putting the focus on the utility of the interior can leave an exterior bereft of style. Sanders, for example, writes that, in the change from the attractive, yet inflexible, fixed function buildings of the pre-war period to the modular building period we have seen the pendulum swing from the campus library designed from the

outside-in (without consideration to the interior arrangement) to the one designed from the inside-out.[112] Perhaps the future of academic library design in the United States lies in bringing style and function more closely into harmony with each other. Or perhaps unseen, emerging trends in higher educational practices and enrollment will bring an entirely new building style to the fore. Whatever the future holds one thing is certain – library buildings will continue to change.

NOTES

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4. The University of North Carolina at Chapel Hill was originally known as the University of North Carolina. In 1963 its name was officially changed to its present designation. The appellation UNC-Chapel Hill is used throughout this paper to avoid confusion.

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6. Murphy, Evangeline Burbank. “The Growth of the Library of the Philanthropic Society at the University of North Carolina, Chapel Hill, 1797-1822.” Master’s thesis, University of North Carolina at Chapel Hill, 1979.

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11. Ibid., p. 14.

12. Kaser, 1997, p. 18-19.

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15. Kaser, 1997, p. 3.

16. Ibid., p. 2-6.

17. Hamlin, 1981, p. 148-149.

18. Ibid., p. 151.

19. Kaser, 1997, p. 8.

20. Murphy, 1979, p. 2-3.

21. Wilson, 1960, p. 12.

22. Owen, H.W., Report of the State of the Library of the University, December 15, 1836. Quoted in Wilson, Louis R., compiler. *Papers on the Library of the University of North Carolina, 1776-1927*. Vol. 1. Chapel Hill, NC: 1966, p. 191.

23. Murphy, 1979, p. 68.

24. Wilson, 1960, p. 14.

25. Owen, H.W. Quoted in Wilson, 1966, p. 189.

26. Wilson, 1960, p. 17.

27. Quoted in Fisk P. Brewer, “The Library of the University of North Carolina.” Wilson, 1966, p. 231.

28. Trustees Minutes, 1841-1888. Quoted in Wilson, Louis R., compiler. *Excerpts on the Library From the Minutes of the Trustees*. Chapel Hill, NC: 1962, p. 134.

29. Hamlin, 1981, p. 149.

30. Kaser, 1997, p. 18.

31. Wilson, 1966, p. 265.

32. Ibid., p. 207.

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