January 2000

Where Function Meets Form: Observations and Thoughts on Housing for the Archival Enterprise

David B. Gracy II

University of Texas Austin

Follow this and additional works at: https://digitalcommons.kennesaw.edu/provenance

Part of the Archival Science Commons

Recommended Citation


Available at: https://digitalcommons.kennesaw.edu/provenance/vol18/iss1/9

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Provenance, Journal of the Society of Georgia Archivists by an authorized editor of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.
Where Function Meets Form: Observations and Thoughts on Housing for the Archival Enterprise

David B. Gracy II, Rebecca E. Kyle, Erin R. Lawrimore, Rebecca E. Romanchuk, and Stephen A. Naron

The most basic principle of architecture is that Form Follows Function. In other words, a building should be designed to facilitate the activities envisioned to occur within it. Through the centuries, structures erected for managing the archival heritage of civilizations and cultures indeed have reflected and shaped the archival activity transpiring within them. Physical configurations have facilitated or impeded the archival enterprise. A building with provision for storage only, and no area designated for use of the records it holds, obviously says that for the time, place, and archival institution, the value of archives was not broad public use. Rather, the value lay in simply possessing the archives and/or in having them for consultation by a designated constituency for the purpose of carrying on its affairs effectively. Through the past two thousand years, and especially the past two hundred, structures around the globe designed for the management of archival resources have exhibited commonalities and differences, the appreciation of which gives insight into the mindsets of the archivist,
the architect, and the community for which the structure was constructed. Further, the buildings exhibit a changing conception of the nature, role, and purpose of archives.

During the past twenty-two years, and especially the eleven-year period from 1989 to 2000, I have had the opportunity of visiting scores of archival buildings and facilities in Asia, Europe, South America, and the Pacific Rim, as well as in North America of course. Camera in hand, I have tried to capture as much of the essence of as many of these structures as I could, as well as, for the older structures, a sense of the sorts of records with which the archivists worked when each structure was new.

In this article, a team of student researchers and I are presenting views of ten structures in Brazil, China, England, France, Italy, Spain, and Russia, which, because of their historical significance, their architectural interest, the way they reflect the society or institution within and for which they were erected, or for combinations of these reasons, are or should be counted among the most impressive, interesting, and representative in the heritage of archival structures. For the principally North American audience of Provenance, we have confined the selection to structures outside of the United States because so few American archivists have the opportunity to visit archival facilities abroad. Following presentation of these international structures, we offer a brief insight into American thinking on archival facilities both in general and by reference to a few specific structures in particular. The American viewpoint provides a baseline against which to appreciate the qualities of the buildings pictured and suggests comparison with similar structures.

All but one of the international facilities we have chosen are government buildings; most exhibit more than one

---

1 The first person in all instances refers to David B. Gracy II, who not only has visited all of these archives but also took most of the photographs accompanying this article.
feature that makes it of note. The Tabularium in Rome and the Imperial Records Repository (Imperial Historical Archives) in Beijing are the two oldest, purpose-built archival facilities surviving in whole or in part. Both were designed to provide storage only. The General Archives in Simancas, Spain, is the first permanent archival structure of the modern era and seems to have begun the practice of complete renovation of an existing structure to serve exclusively as an archival repository. The university archives of the University of Salamanca, also in Spain, is the single nongovernment repository and the one facility included here that was purpose designed as one part of a new multipurpose structure. The two buildings dating from near the turn of the eighteenth and nineteenth centuries—the Archives of the Indies in Seville, Spain, and the Archives Nationales in Paris—followed Simancas in being renovations. The Public Record Office on Chancery Lane in London was the first purpose-built archival facility to include a search room. The State Archives Building of Rio Grande do Sul in Porto Alegre, Brazil, represents both the highest achievement of which I am aware of architectural design to provide a year-round appropriate environment prior to the introduction of air conditioning and the earliest example I have discovered of raising stack height to accommodate a massive volume of records. Built to house archives of the Communist Party, the building of the Municipal Archives of Khabarovsk exhibits the obsession with security of the records. Finally, the Public Record Office at Kew offers a look at one of the earliest and best designed buildings of the present generation.

The following images show each facility as of the date I visited it, the Public Record Office at Kew as long ago as twenty-two years. Changes of various sorts no doubt have occurred on many of these buildings during the intervening years, which these pictures do not, and cannot show. Consequently, that any pictures are dated is no reflection whatsoever on the contemporary function of the building.
and the archivists within it.

To appreciate features that make a structure remarkable, one needs to establish both categories of structures and norms for them against which to gauge differences in space utilization and configuration. For this article, buildings are grouped into three categories:

- Purpose-built for the singular use as an archival facility, as the Public Record Office at Kew in England;
- Purpose-built, multi-use structure in which the archival quarters are part of the original design, as the university archives of the University of Salamanca in Spain; and
- Buildings constructed for some other purpose entirely, which have been renovated to serve as archival facilities, as the General Archives at Simancas in Spain.

In 1947, architect and archivist Victor Gondos wrote a brief article that, some fifty-five years later, remains an insightful piece on the utilization and configuration of archival space. Among other observations, Gondos noted that his study of purpose-built archival structures yielded the fact that the most common division of space for archival structures meant to serve needs of the first half of the twentieth century allocated 60 percent of the space to storage and 40 percent to all other activities. Of the remaining three principal components—processing, public service, and administrative functions—study suggests that the common allocation might be 15 percent, 15 percent, and 10 percent respectively. For contemporary archival structures, modern archivists, more than their predecessors, have preferred floor plans that can be adapted easily to accommodate changing workflows and new technology, such as, over the twentieth century, microfilm readers and printers, photocopiers, and computers.

---

To maintain as constant and optimum an environment as possible within a repository, the modern archivist wants as little glass in the exterior walls, both windows and doors, as possible, and none in the stacks. A minimal number of openings in the building promote security of the contents by facilitating control of entry and, especially, departure. Solid walls with few or no windows, however, mean that the internal environment must be managed by heating, ventilating, and air conditioning (HVAC) systems. Buildings designed to rely on HVAC systems commonly have small windows and/or windows that do not open. Tragedies have occurred in countries in which buildings were designed with the anticipation that a HVAC system would be functioning twenty-four hours a day, year-round, but such operation did not occur, either because a steady supply of electricity could not be provided or because procuring replacement parts was so problematic that the repository had to operate for months without the HVAC system. This meant that for air circulation, the staff had to rely on natural airflow for which the building was not designed.

The principal considerations to be accommodated and balanced in all archival structures, then, are security of the holdings and provision of an environment appropriate to the long-term maintenance of the records. For modern archival buildings, archivists have added the requirements of adequate space for public service and ease of adaptation to changing needs.

Six of the ten structures included in this article were designed to serve exclusively as archival structures. Though the two oldest structures were purpose-built archives, it appears that, through the millennia, purpose-built buildings have been the exception rather than the rule. The earliest archival records in China, for example, as elsewhere were maintained in temples. Constantly staffed, those
buildings offered security for the records. Moreover, those responsible for records assumed that sacred buildings stood the best chance of surviving upheavals. For an example from the previous millennium, the government of Great Britain for six hundred years stored records in a variety of locations including the Rolls Chapel and the Tower of London until at mid-nineteenth century, it constructed the first purpose-built archival structure to house the country’s national archives.

Considering the specific functions for which buildings serving archival needs must provide, and considering that the oldest regulations for construction of purpose-built archival structures (for a time in China two thousand years ago called “the central forbidden house”) dates from the four-hundred-year period beginning approximately 200 B.C., it is curious that adaptation of buildings thrown up for other purposes has been so common. In this regard, the selection of buildings in this article is unrepresentative in the percentage of structures that were purpose-built to be archives.

Finally, as will be seen with three of the ten facilities described in this article which were adapted to serve archival needs—the Archives at Simancas and at Seville in Spain and the National Archives of France in Paris, which date respectively from the sixteenth, eighteenth, and nineteenth centuries—the trend to adapt existing structures that had no previous association with archives began early in Eu-

---


4 Ibid.
rope. The trend has been pronounced. Examples outside of the United States with which I am familiar include:

- the National Archives of Quebec and the Public Record Office of Hampshire County, England, both of which occupy renovated church buildings;
- the National Archives and the Archives of the Ministry of Foreign Affairs of the Republic of Uruguay, the National Archives of Poland, the State Archives of Rome, the Municipal Archives of Cordoba, Argentina, and the Municipal Archives of Rio Claro, state of Rio Grande do Sul, Brazil, all located in residences—homes or palaces—adapted and some significantly expanded for the purpose;
- the National Archives of Mexico located in a former prison;
- the regional archives in Plotsk, Poland, located in a former warehouse;
- the State Archives of Milan, Italy, located in a former legislative building; and
- the Municipal Archives of Piraeus, Greece, located in a renovated grand theater.

Since design of stack space can proceed effectively only with knowledge of the methods by which, and the containers in which, the archival records are to be stored, we must take some notice of containers designed specifically to accommodate records. Principal among the landmarks of container design must be the four-flap structure conceived by King Philip II of Spain in the mid-sixteenth century for use in his archives. Capable of expanding to a maximum of five inches, nearly half a millennium later it continues to be manufactured and used.

Boxes and chests are common. Some were elaborately decorated for show; the construction of others emphasized security. Sizes ranged from small ones similar to those in the Castle at Simancas up to the massive one (measuring, by my estimation, approximately five feet-by-ten feet-by-four feet) for housing both records and three-dimensional
objects in the papal archives room in Castel Saint Angelo in Rome that requires a ladder to enter.

Especially when boxes were not used, but frequently when they were, records keepers maintained units of documentation by binding or just bundling records. Binding offered the advantage of securely maintaining the relationship of each document to the others and provided physical protection for all. The problem often encountered with bound records was the minimal space on the spine to identify the contents, which led to identifications so general as to be useless, such as those pictured in image 18 (see page 128). Bundling by wrapping records in paper, or by simply tying them with cord, afforded the quickest and least costly means of securing a unit of documentation. Though the best example of bundling among the images in this article appears in image 31 (see page 139) from the State Archives of Rio Grande do Sul, the term legajo for the container designed by King Philip translates as “bundle.”
Image 1. The original Roman Forum from the model of Rome in the fourth century A.D. in the Museum of Roman Civilization, Rome, Italy. The Tabularium is the building with the highest roofline in the center of the picture. The second-floor row of eleven (ten visible) Corinthian columns flanks a walkway. Only parts of two of the great arches on the first-floor level are visible on the left side of this view of the building. From a postcard.

THE BUILDINGS

TABULARIUM—ROME, ITALY

The oldest purpose-built archival structure still standing, and possibly the first structure designed specifically and solely to house archival material, is the L-shaped Tabularium which stands at the head of the original Roman Forum. The building was completed in 79–78 B.C. under the direction of Q. Lutatius Catalus, which we know because a large portion of the original builder’s stone survives, providing us with the inscription: [Q. LU]TATIUS Q.F. Q. [N.]/ [CATULUS COS. DE S]EN SENT.

---

Image 2. The Tabularium in 2001. Only the foundation and first-floor levels remain of the original, three-level building. Nevertheless, the fine workmanship of the foundation wall and the massiveness of the surviving arches of the first floor give a good sense of the presence of this oldest extant, purpose-built archival structure. Photograph by Benjamin B. Gracy.

\textit{FACIUNDU[M]/ [COERAVIT] EIDEMQUE PRO[BAVIT]}

(Quintus Lutatius, son of Quintus, grandson of Quintus, Catulus, Consul, has been in charge of constructing in accordance with a resolution of the Senate and secured its approval). Connecting the two peaks of Capitoline Hill, the monumental Tabularium served as the first State Archives structure of the Roman Empire.

Twenty-five layers of precisely cut gabine stone, two-by-two-by-four Roman feet in dimension, face the foundation wall of the building in a manner described as “the best republican workmanship.”\textsuperscript{6} Fronting the Forum on the first floor (the second level) was a walkway flanked by a series

Image 3. The builder’s stone of the Tabularium. In image 2, it is located out-of-sight, around the far corner on the right of the image.

Image 4. A document on papyrus from the Roman era. Documents of this nature were common in Roman archives. Museum of Roman Civilization, Rome.
of arches supported by Doric columns 7.5 meters tall, three of which arches remain visible and open. Topping the building was a second floor, which has been replaced by an incongruous office structure that serves the Italian Senate. A long stairway connected the upper levels of the Tabularium with the adjacent seat of the Roman Senate, the body that apparently made principal use of the records in the Tabularium.

Many believe that, contrary to the all-too-common modern practice of storing records in basements, the top floor of the Tabularium provided the principal storage area. Sadly, however, no description of the method of organization of records in the building has survived. Records of the period were written on either papyrus or slate tablets (\textit{tabula} meaning a block of wood, and hence the name \textit{tabularium}). Tablets commonly were either placed on shelves or suspended from woven strands of horsehair (\textit{filium}, hence our word “file”) stretched across a room. Notations of content hung below the tablets to facilitate finding any desired text.
Image 6. Imperial Historical Archives, Beijing. Completed in 1535, it is the second-oldest surviving, purpose-built archival structure in the world.

IMPERIAL RECORDS REPOSITORY—BEIJING, CHINA

(Huang Shi Cheng)

Some sixteen hundred years following completion of the Tabularium and after that archival building had been turned from its original purpose into a prison, Emperor Jiajing of the Ming Dynasty constructed the Huang Shi Cheng, or Imperial Records Repository, within the walls of the Forbidden City—the emperor’s huge compound—in Beijing in 1534–1535. This second-oldest, extant, purpose-built archival structure held the imperial family archives of both the Ming and Qing dynasties, including imperial edicts, annals, and genealogies. Inspiration for the building was

Image 7. One of the impressive and secure entrances to the Imperial Records Repository, Beijing. Each boss is roughly the size of a fist.

Image 8. Interior of the Imperial Records Repository. The image was taken as an exhibit was being dismantled. Note the barrel vault ceiling.
Image 9. Close-up of the bronze containers in which the archives of the emperor were stored, signified by the symbol of the emperor—the dragon—on each one.

threefold: to store valuable documents and records, to safeguard particularly precious religious works and secular documents, and to “provide later generations with ‘faithful and reliable’ materials for writing and editing the history and local annals.”

Since the contents were not public records and would be consulted elsewhere within the Forbidden City, the 8,463-square-meter dimension of the Imperial Historical Archives, as it is also known, was designed to serve the needs of the emperor alone. At the same time, the building was ingeniously conceived to provide the optimum environment for preservation. Huang Shi Cheng was constructed of brick and stone, with side walls 6.14 meters thick and each entrance secured with massive stone doors each weighing 10 tons. The end walls were half as thick and contained a single stone window. The floor of the structure was raised 2 meters

---

Records written on palm leaves were common in the Imperial Historical Archives. Writers and records keepers maintained the order of the leaves by stringing them together above ground level to accommodate tunnels that provide circulation of fresh air.

Stone platforms supported the 152 large bronze containers in which the records were placed, each with a capacity of 2 cubic meters and each embossed with the imperial dragon. To protect the contents from destructive insects, the containers were lined with camphor wood. The media of the records in the archives included palm leaf (from which we get the term "leaf" for a sheet of paper), iron tablets, and paper, a Chinese invention some eighteen hundred years earlier.
Image 11. First view on the road from Salamanca of the castle housing the General Archives at Simancas, Spain. The castle began to be used as an archives in the middle of the sixteenth century. With establishment of the archives at Simancas began the practice in Europe of locating royal archives in a permanent location, rather than moving them from place to place with the monarch in travels about the realm.

GENERAL ARCHIVES OF SIMANCAS—SPAIN⁹
(Archivo General de Simancas)

At almost the same time that the Imperial Historical Archives was completed in Beijing, King Charles V of Spain concluded to establish a repository for the records of the Spanish crown and selected his castle at Simancas in north-central Spain as the site. Built along the Duero River approximately a kilometer from Valladolid, the castle occupied a location long important for control of the Castilian dry plain. On the archivist in charge, in 1545, Charles bestowed the title of First Archivist.

⁹Archivo General de Simancas, web site <http://lanic.utexas.edu/project/tavera/espana/simancas.html>; Lawrence H. Feldman, “In a castle long ago and far away, manuscripts, finding aids, and indexing,” Key Words, 6 (May/June 1998).
Image 12. One of the wooden chests specially designed to house records in Simancas castle. On the left front of the box, the royal seal was affixed. On the right side, missing on this box, contents were listed.

To Charles’ successor, King Philip II, goes credit for significant development of the Simancas archives. First, in 1562, he gave the illustrious architect of the Escorial, Juan de Herrera, the job of converting the castle into an archival facility (the earliest documented instance of which I have learned of adaptation for archival purposes of an existing building constructed to serve entirely different needs). Then on 24 August 1588, some forty-nine years after King Charles dedicated the archives, Philip issued the Royal Decree for Archives that promulgated instructions for operation of the archives and set a policy of stewardship for the documentary heritage of the country.

Preceding by more than forty years the essay on archives of Italian cleric Baldassare Bonifacio, the *Instruction for the Governance of the Archives of Simancas* is the earliest well-developed writing on the management of archives and archival repositories. The Decree provided that original documents be kept safe in chests to prevent abuse,
Image 13. Two deep, the chests rested on racks and were secured behind ornate double doors. The label identifying contents is visible on the right side of each of these chests.

Image 14. One of the storage rooms designed specifically to accommodate the chests of archives. The ovals on either side of the walls outside of the room are outlets for chases that architect Juan de Herrera incorporated into the building to provide circulation of air in order to maintain a good environment for preservation of the archives.
Image 15. While by the sixteenth century, paper was the medium of records in Europe, records keepers faced the challenge of keeping associated documents securely in order. Officers of the king in eighteenth-century Spain, as Chinese records keepers before them, used string. For documents remaining within the government, scribes employed paper in which a hole had been cut specifically to facilitate stringing the communications together. General Archives of Simancas.

that neat copies of the original records be made for reference purposes, and that the secretary of the archives prepare a report styled “Index of the Rights Pertaining to the Royal Crown” which contained information on every document within the archives relating to the rights, actions, state, and patrimony of the Spanish monarchy.\(^\text{10}\) Very attentive to the management of his archives, Philip even designed the container in which the individual bundles of records, \textit{legajos}, were to be stored. To solve the problem of maintaining both proximity and order of documents generated

\(^{10}\) Jose Luis Rodriguez de Diego, ed., \textit{Instruction for the governance of the Archives of Simancas (Year 1588)} (Madrid: Ministry of Culture, 1989).
and remaining within the government in relation to a particular transaction, scribes in the eighteenth century used folios of paper in which a hole had been cut so that associated documents could be secured with a string.

By the early 1780s, the castle had reached capacity, and all records pertaining to the New World were transferred to the General Archives of the Indies in Seville. The Simancas repository presently holds the records of the Spanish monarchy relating to Spain and Europe in the fifteenth through the eighteenth centuries.
The university archives of the University of Salamanca, Spain, is located behind the double doors along one wall of the university library. The archival space—a storage room—and the library that it adjoins were designed by architect Manuel de Lara Churriguera as parts of the same job and constructed new in 1749.

UNIVERSITY ARCHIVES, UNIVERSITY OF SALAMANCA—SPAIN

Founded in the thirteenth century, the university is one of the oldest in Europe. The archival facility of the university represents a rare instance in which the space was architecturally designed for the archives in a new multi-use structure—the second university library. Both the archives and the library are unchanged from their completion in 1749. For the archives, renowned architect Manuel

---

Image 17. Records on the higher shelves of the university archives of the University of Salamanca were secured behind single wooden spindle doors, while two doors had to be opened to get to records in lower cubicles. That the university was supported by the Catholic Church accounts for the artwork in this elaborately decorated stack area.

de Lara Churriguera provided a single room entered from the larger, single-room library. A magnificent baroque "cupboard," one guidebook styles the elaborately decorated archives room.

Situated behind a pair of ornately carved doors set in one wall of the library, and up a short flight of stairs, the archives space provides only for storage of records. Depending on the size of the documents, archives were kept in one of two areas in the room. Oversized items found housing at one end of the room in a substantial, locked chest secured behind a wooden door solid at the bottom and with spindles at the top. Standard-sized documents, some of which were bound, were kept in one of two areas along the longest wall: (1) upper shelving behind single wood spindle doors and (2) lower, more secure cubicles, each with its own door, and all further protected by either a solid door or a wood spindle door.
Commonly up to and through the nineteenth century, as evidenced in the university archives, records were bound so as to provide secure housing and to maintain their order. Frequently, the volumes were poorly labeled, as is the case with these from the Cathedral in Seville, Spain. The title on the vellum-bound volume on the left, for example, reads: *Varios Papeles Eclesiasticos* (Various Ecclesiastical Papers) and bears numbers from three different filing systems.

The records for which the archives was designed were administrative and student files of the university. Joining appreciation of the value of archives with the fact that the university at that time enjoyed the support of the Catholic Church, elaborate decoration was lavished on the doors in the archives room, creating the most sumptuously painted stack area I have encountered.
ARCHIVES OF THE INDIES—SEVILLE, SPAIN

The Archives of the Indies (AGI) holds more than three hundred years of records (approximately eighty million original document pages in forty-three thousand legajos) relating to Spanish overseas possessions in the Americas and the Pacific Rim. When Simancas no longer could accommodate all of the archival records of the government, the AGI was established in 1785 to centralize records pertaining to the Spanish colonies. Rather than increase the capacity of the castle, all records relating to the New World were deposited in the Casa de la Lonja, located in Seville, the city that for more than two hundred years had been the seat of administration of the overseas lands.

Images 20 and 21. Two views of a legajo from the Archives of the Indies. This container was designed by King Philip II during the latter half of the sixteenth century and continues in use in at least two archives in Seville. The legajo is carried by the cloth ribbon across the top. Commonly the papers within are enclosed in a sheet of paper and further secured with a cloth ribbon.
Image 22. Secure storage of legajos on the ground floor facing the patio of the Archives of the Indies. The cannon was a gift of a satisfied customer who used the archives to locate and salvage the wreck of the treasure ship *Atocha*.

The Casa de la Lonja is a large edifice that originally was designed to serve as a merchant exchange house and was built between 1584 and 1598 from the design of architect Juan de Herrera (the same who renovated the castle at Simancas). The building forms a square surrounding an interior patio. Only parts of the building, such as the search room, are cooled artificially. During the four-year renovation project, mahogany and cedar bookcases were installed. The AGI is a charming mix of classic and contemporary technology. While the archives continues to use the legajo designed by King Philip II, the facility was the site of the first massive archival digitization project, which generated more than seven thousand disks of records.
NATIONAL ARCHIVES OF FRANCE—PARIS, FRANCE

(Archives Nationales)

The Archives Nationales (AN) of France was created by decree on 7 September 1790. Not quite fifteen years later on 6 March 1806, the Hotel de Soubise in Paris became home to the AN. Intended to collect and preserve documents of the revolutionary government, as well as records of the Old Regime, by decree on 24 June 1794, the AN gave the public access to government records that before had been kept secret for the sole use of the government. For

---

Image 24. The grounds between the entrance gateway and the Hotel de Soubise.

this characteristic, which distinguished the AN from all of its predecessors, the Archives Nationales is identified as the first of the modern archives.

The Hotel de Soubise is located at 60, rue des Francs-Bourgeois in the Third Arrondissement of Paris, a swamp-land until drained in the thirteenth century. Built between 1705 and 1709, the exterior of the structure was designed by Pierre-Alexis Delamair and the interior by Gabriel-Germaine Boffrand. The Rohan-Soubise family occupied the hotel until the Revolution. Considered one of the most beautiful buildings of Paris, the Hotel de Soubise has a large rectangular courtyard with columned walkways on two sides.

After being interviewed by an archivist to determine their research interests, researchers are seated at long tables to view documents in the Salle de Lecteur on the second floor. In addition to the now traditional organization of the
Image 25. View of the traditionally laid out reading room of the National Archives of France. The attendant archivist occupies the raised desk to the left. Records are paged through the door at the far end of the room.

search room, the AN is included here because of the role of the National Archives of France in establishing the basic archival principle of *respect des fonds*.

**PUBLIC RECORD OFFICE, CHANCERY LANE—LONDON, ENGLAND**¹⁴

Designed by Sir James Pennethorne in 1858 and completed not quite forty years later in 1895, the Public Record

---

Office (PRO) on Chancery Lane in London served as the primary repository for records of the British government until it was vacated in 1996. Situated on the edge of the City proper, the PRO Chancery Lane was the first purpose-built archives in the country. Designed as a fireproof building, it was constructed to bring together documents previously stored at locations throughout London.

The Public Record Office Act of 1838 created an official national archives and paved the way for the building of the repository. The neo-Gothic building featured stained glass windows and a huge floor mosaic. Its unique Round (actually octagonal) Room, which served as the Literary Search Room, drew its inspiration from a similar space in the British Museum. More importantly, of cast-iron construction, it was the first reading room ever designed into a purpose-built archival building. The room featured a domed ceiling and incorporated fragments from the Rolls Chapel, a thirteenth-century chapel that once occupied the site and housed records for centuries.

Despite the use of off-site storage, the PRO Chancery Lane proved inadequate for the national archival needs of Great Britain. A second Public Record Office building was constructed at Kew in 1977 to accommodate the massive
Image 27. The Round Room in the PRO Chancery Lane, the first reading room designed for a purpose-built archives building.

Image 28. Before proceeding to the Round Room, prospective users were interviewed in this little room designed for the purpose but far distant from the Round Room.

twentieth-century growth of records. In 1990 the government recommended closure of the Chancery Lane location. Consolidation of the nation’s archival holdings at the PRO Kew was completed in December 1996. The PRO Chancery Lane building is currently undergoing a two-year renovation in preparation to serve as a university library.
STATE ARCHIVES OF RIO GRANDE DO SUL—PORTO ALEGRE, BRAZIL

(Arquivo Publico)

Few buildings are as well designed for their time and place as the State Archives that President August Antonio Borges de Medieros of the southern Brazilian state of Rio Grande do Sul, on 8 March 1906, ordered to be built in the capital of Porto Alegre. Designed in the neoclassical style by a French architect, the building was constructed between 1910 and 1918. It incorporates features found in no other archival facility in Latin America and found in few, if any, archival buildings of its period anywhere.

Image 29. The 1940s street façade of the State Archives of Rio Grande do Sul, Porto Alegre, Brazil.

Located on the Guaíba River at the junction of five rivers at the head of dos Patos Lagoon, about fifty miles from the Atlantic Ocean, the port and commercial city of Porto Alegre is subject to high humidity. The architect designed the State Archives building with two purposes in mind: First, it was to maintain as good an interior environment as possible, and in a day in which fans and heaters constituted the only means of affecting interior air, the goal would be achieved with the use of a minimum of technology. Second, the building would accommodate a massive volume of records for each square foot of floor space.

Shelves of reinforced concrete rise seventy-two feet above the ground floor. To reach all shelves, the architect provided steel-grate flooring on two levels above the ground floor, each upper level provided with a rolling ladder. Working in tandem, the steel-grate flooring facilitates movement of air within the building, while the ferroconcrete shelving contributes to maintaining a constant interior temperature.
Image 31. The highest of the three stack levels in the State Archives of Rio Grande do Sul. The height of each stack level can be judged by the ladder midway down the walkway. The flooring consists of iron strips that permit circulation of air. Each bundle of records is identified on a card held to the bundle with a cord.

In the event of high humidity or temperature, the staff can turn on one or more of the few small exhaust fans located near the ceiling. In practice, the fans have seen little use, as the air temperature, humidity, and natural movement are sufficient to prevent the outbreak and spread of mold. Anticipating the need to rid the facility of dust from time to time, the architect equipped the building with a vacuum system that permits staff to connect a hose to piping that follows main aisles and evacuates dust from any given area within the archives.

The original building was constructed on three sides of a patio. While the decorative neoclassical features face the patio, to provide security and to contribute to maintenance of as constant an interior environment as possible, the outside wall is of solid construction with no windows. An office wing added in the 1940s enclosed the patio and
Image 32. The natural circulation of air is so good that the few fans incorporated in the building rarely are used. In recesses near the ceiling, the fans exhaust warm air and are out of the way of the archivists. Architecturally, they are cleverly concealed from the outside by being located in portals above the windows. (See image 30, page 138.)

blocks the view from the street of the older structure. The building houses some eighteen million documents of the state government dating from the middle of the nineteenth century. The State Archives building of Rio Grande do Sul is the earliest structure I have found to use high-rise shelving. Moreover, it is remarkable for the stable interior environment achieved primarily by building design rather than by utilization of air conditioning technology.
MUNICIPAL ARCHIVES OF KHABAROVSK—RUSSIA

The building that in 1996 housed the Municipal Archives of Khabarovsk had been constructed four decades earlier as the regional archives for the Communist Party. Construction of Communist Party buildings commanded the best design and materials available. Central to Soviet, and especially Communist Party, archival facilities was security of documentary material. This accounts for the stack rooms, located off the main stack floor, which are protected by massive steel doors.

This emphasis on security and control began in 1918, when Vladimir I. Lenin issued his famous June Decree nationalizing all documentary records of government bodies into a Single State Archival Fond. As a result, the archival heritage of Russia was subjected to a new administrative organization according to the ideological dictates of the Soviet system. According to Russian archives scholar Patricia Grimsted, this ideology gave both philosophical justification and crucial political importance to documentary

Image 33. Municipal Archives of Khabarovsk in the Russian Far East. The structure was built in the 1950s to serve as an archival facility for the Communist Party.
Images 34 (top) and 35. Two views of the steel doors securing the several vaults built into the former Communist Party archives building in Khabarovsk.

control. The combination of historical determinism as philosophical background and ideological orthodoxy as reinforcement for centralized, rigorous political control gave unprecedented importance to the national documentary legacy. If the ideological orthodox were the only ones to write history, then the sources on which that writing was to
Image 36. The office of the senior archivist of the Municipal Archives of Khabarovsk. With curtains, hanging plants, and wallpaper, this is the most highly personalized archivist’s office I have encountered. The presence of this personality is all the more remarkable because of its location in a building whose interior plainness is evident from the images on the previous page.

be based must be carefully controlled by ideologically orthodox authorities.  

In the midst of the plainness of the interior of this archival facility, which characterized so much of Soviet construction, and the heavy environment of a building designed to keep the contents secure, the appointments with which the archivist graced her office expressed a personality unexcelled by any other archivist’s office I have seen anywhere. She had decorated her personal space with curtains, hanging plants, and even wallpaper.


PUBLIC RECORD OFFICE AT KEW—LONDON, ENGLAND

Opened in 1977, the seven-story building of the PRO Kew, as it is known, is both the largest archival facility in England and a thoroughly modern structure in design. Thirty-five years later, it continues to serve as an example of innovative concepts in archival buildings. Floor space is 33,440 square meters, with a storage area of 100,000 linear meters. The exterior of the building is glass and prestressed concrete panels that could be removed to permit an addition of the magnitude of the original building. Such an addition was opened in 1995, creating storage capacity sufficient to house the quantity of records expected into the year 2010.

The building was a technological showpiece from the beginning. It utilizes a computer-controlled requisitioning system by which users can order the records they wish to consult. In the stacks, pages using electric carts trans-

---

Image 38. The visitor enters the finding aid room of the PRO Kew, where one can browse cards and volumes to locate information on desired materials. PRO Kew photograph, 1980.

Image 39. Having located material the visitor would like to see, the visitor keys in the information. PRO Kew photograph, 1980.

Port the records from their shelf locations to a "paternoster" elevator system that delivers them to the reading room. The patron can pass this retrieval time relaxing in the restaurant, knowing that when the records arrive in the search room, the archival staff will send notification via a personal pager issued by the archives.
Images 40, 41, and 42 (top to bottom). In the stacks, the page selects the desired material from the shelf, puts it in the bin of an electric cart, and drives to the dumb waiter, which conveys it to the search room. PRO Kew photographs, 1980.
Images 43 (top) and 44. The search room of the PRO Kew retains the tradition of a single archivist at a raised desk. Security is provided by closed-circuit television cameras located in the black spaces above the search stations. The search stations were specially designed both to accommodate a multitude of users in a small space and to minimize opportunities for mixing of files by adjacent users. PRO Kew photographs, 1980.

Staff members consider the open design reading room to be one of the building's greatest successes. Acoustics were carefully planned to minimize noise in the busy reading room. The specially designed desks for users have proven effective in providing working area, maintaining separation between users, and making maximum use of floor space.
THE UNITED STATES

By way of comparison with the archival structures from other countries pictured in this article, a number of notable facilities in the United States rank among the significant monuments of our archival heritage. A short list below of American structures selected because of age and/or innovation which highlights the positive, notable quality(s) of each building, would include:

- The Public Records Office in Williamsburg, Virginia. Constructed in 1760, this was the first purpose-built archival structure in what is now the United States. A simple brick building, it was intended to house records, nothing more. Despite being constructed for the specific purpose of removing records from the capitol, where a recent fire had endangered them, the PRO was equipped with two fireplaces. Protection of the records from fire consisted of boxing them in “sturdy wooden crates” which could be heaved through the windows in such an event.

- Archives I, in Washington, D.C., the first national archives building of the United States. Sited between Pennsylvania and Constitution Avenues and designed in the neoclassical style, this building of the Depression era expresses democracy in its architectural style. The great rotunda in which the Constitution and Declaration of Independence are exhibited, along with changing displays of other documents significant in American history, invites the public to get close to and to enjoy archives and the role they have played (and are playing) in American life. Built on a small, trapezoidal piece of land and designed with the stacks in the center of the structure, the 757,000 square feet of storage space could not provide for expansion.

- Archives II in College Park, Maryland, the largest structure so far constructed in the world to house and manage archival documentation. Dedicated in 1994, the building of 1.7 million square feet of floor
Where Function Meets Form

space provides office and 691,000 square feet of storage space for the National Archives and Records Administration, which decades earlier had expanded beyond the capacity of Archives I. Breaking with the traditional central search room as the only one, Archives II serves its users in multiple search rooms, most of which have materials available by format such as maps, photographs, and machine-readable records.

The Lyndon Baines Johnson Library and Museum in Austin, Texas. In its Great Hall, this presidential archival facility presents the majesty and magnitude of modern archives in the most impressive manner of any structure yet designed. First, the building positions the museum visitor to look up to four floors of shelves of records. After moving through a series of exhibits in a hall of normal ceiling height, the visitor turns to come upon a stairway that directs one's gaze up to the floors of records which compose most of one wall of a multistory atrium. Second, every box visible to the viewer is covered in a bright red buckram book cloth and is adorned with a substantial gold seal. The brilliance of the unique scene is inescapable. Indeed, architects of the presidential library of Jimmy Carter incorporated into the design of the Carter Center in Atlanta a scaled down, but still imposing, view of three floors of multitudes of boxes of files. From the perspective of the workspace of the archival staff, the Johnson Library building was badly designed, as it anticipated processing archivists being scattered individually on each stack floor. Presently housed on the floor above the stacks, the archivists still are isolated.

The Massachusetts State Archives. From the outside, the building exhibits lines reminiscent of a fort, as the inspiration for its design was the forts constructed around Boston Harbor. Inside the 1986 building, storage space is maximized by building
shelves up, not just compacting them on floor level. Stacks in the Massachusetts State Archives building reach a height of forty feet and are accessible by forklift. This is the earliest instance we have found in which maximizing storage capacity has been treated as more important than the ability of the archivist to walk or climb to the material on the shelf.

For each archives in a purpose-built structure, there is an archives in all or part of a building renovated to house it. This approach to accommodating the archival enterprise has characterized archival structures of the twentieth century in the United States. Examples of adaptations include:

- the Southwest Arkansas Regional Archives in a renovated house in Washington, Arkansas;
- one facility of the American Heritage Center at the University of Wyoming located in a renovated grocery store;
- the Utah Historical Society located in a former railroad station;
- the former home of the State Archives of New Mexico in a wool shipping facility;
- the Municipal Archives of Nashville, Tennessee, in a renovated public school building;
- the former home of the Municipal Archives of the City of New York located in an adapted storefront building;
- the archives of the King Ranch located first in a former schoolhouse, then in a former icehouse;
- the Austin History Center in the former Austin Public Library building;
- the archives of the University of Puerto Rico located under the football stadium; and
- numerous university archives situated in adapted space in other buildings, as the Southern Labor Archives of Georgia State University located formerly in part of a renovated auditorium.
A number of multipurpose buildings have been constructed in which space to serve archival purposes has been part of the original design. One could point to:

- facilities for state archives in Alabama, California, Florida, Kentucky, Minnesota, New Mexico, New York, Ohio, Pennsylvania, Tennessee, South Carolina, Texas, and Wisconsin; and

- buildings planned and constructed to house both libraries and archives on innumerable university campuses.

Perhaps the most interesting of all is that it just may be that the twentieth century, in which so many structures have been made over to serve as archival repositories, nevertheless holds the distinction of seeing a higher percentage of architecturally designed and purpose-built archival structures than any century of the previous millennium or two.

Examples from the United States include:

- Archives I and Archives II of the National Archives;
- state archives buildings of Georgia (present and planned), Illinois, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, North Carolina, South Carolina, and Virginia; and
- the Southwest Collection building on the campus of Texas Tech University in Lubbock.

Examples from abroad include:

- The General State Archives of the Netherlands;
- The Archives of the Russian Far East in Vladivostok;
- The Municipal Archives of Beijing, China;
- The Tianjin Municipal Archives, Tianjin, China; and
- The Regional Archives in Cluj, Romania.

CONCLUSION

Buildings are the most visible manifestation of thinking about the process of archival work. For all of the differences around the world—some large, most relatively small—in archival concepts and processes, the buildings in which the archival enterprise has been pursued reflect a substan-
tial commonality. For one thing, considering the unique nature of archival work, remarkably few of the buildings are built exclusively to accommodate the archival enterprise. Until the nineteenth century, this may reflect only that the purpose of the archival facility was simply to house records and that the volume of records to be housed was small. Since then, this fact seems to be a commentary on the value accorded to archival enterprise by those controlling the resources necessary to provide space. Certainly, it is no indication of the way in which archivists think of the space appropriate for their work. For another thing, happily, the progression of building design from storage alone to accommodation of users in the facility reflects the progress of societal concepts of archives from documents maintained by and for institutions—principally governments, churches, and universities—to records that are the heritage of and open to the use of the general public. This is a late development, however, in the history of structures that accommodate archival operations.
Curious in light of the ubiquity of buildings housing archives is how little systematic study has been done of them. The practical bent of archivists that has produced countless articles and monographs on ways of performing archival functions has yet to concentrate on the layout of and workflow within archival buildings or ways of using the building to showcase either archival work or the contribution of archival enterprise to the functioning of society. Little has been written about materials appropriate or inappropriate for use in archival structures or about ways of communicating effectively with architects. And this lack is


hardly confined to the United States.

Perhaps most glaring is that none of what has been written looks ahead in an effort to conceive possible forms appropriate for a structure housing archives of, say, even just a decade hence. Only a small handful of books and articles do more than simply describe and picture archival structures. Much more needs to be done, and especially in our time when the advent of electronic records presages a change in the use of space in archival facilities. We urge archivists and the architects who work with them to enrich our literature with

- accounts of their experiences in the past,
- recommendations for meeting the needs of the present, and
- anticipations for the nature of archival structures of the future, focusing especially on the functions to be served and the workflow to be facilitated within the structure.  

David B. Gracy II is the Governor Bill Daniel Professor in Archival Enterprise at the School of Information in the University of Texas at Austin. Rebecca E. Kyle, Erin R. Lawrimore, Rebecca E. Romanchuk, and Stephen A. Naron are students in the Archival Enterprise program of the School of Information, the University of Texas at Austin.

19 The authors invite readers to send information and comments regarding archival structures to build a resource that can serve as the basis of studies that the profession presently lacks. Contact David B. Gracy II, School of Information, 1 University Station D 7000, University of Texas at Austin, Austin, TX 78712–0390; gracy@ischool.utexas.edu or 512–471–8291.