Introduction

Books, and the spirited discussion they generate, make the Perkins Architecture Library a “machine for learning.” G. Holmes Perkins, an architectural modernist, was active as a designer, planner and educator in the late twentieth century. However, it is his achievement as library consolidator, builder and catalyst that we describe here.

The Perkins Library is a body of approximately twenty-five hundred books, with associated maps and prints, housed in a room of modest size in the Anne and Jerome Fisher Fine Arts Library of the University of Pennsylvania. The Perkins Library supports study in the history and theory of architecture as these disciplines have evolved over the past four hundred years. Its resources are available for consultation at the Fine Arts Library. Users consult the online catalog of the Penn Library and the card catalogs located in the Fine Arts Library. Library staff provide assistance in locating titles and making them available.

The parent Furness Building, erected between 1888 and 1890 and used as the university’s library until 1962, is the distinguished product of Frank Furness (1839-1912), whose architectural practice generated some of Philadelphia’s most notable built works. In 1991, the firm of Venturi Scott Brown and Associates, with Clio Group and Marianna Thomas Architects, completed a sympathetic restoration and rehabilitation of the building. It stands as one of the university’s treasures, serving hundreds of thousands of users each year.

Art and Architecture Libraries at Penn

The University began offering an architecture program in 1868. However, the establishment of the Department of

Architecture in 1890 is accepted as the beginning of the Graduate School of Fine Arts, though consolidation of the fine arts at Penn was not formally achieved until years later. By 1895, the school held one thousand volumes in support of students training for professional practice. The history of art was represented in this early collection and remained so through succeeding decades. The design studio, then as now the center of the school’s program, was located first in a room on the third floor of College Hall, then moved to a generous space in Hayden Hall, initially designed and used for the School of Dentistry.\(^1\) Shelflist cards dating from the library’s presence in Hayden indicate that the collection was divided among a number of rooms; however, there is no evidence of any of its elements having been designated special or separate. The large architectural folios would have been used by students as reference works on and adjacent to their drafting tables. For example, the original catalog card for an 1836 Paris edition of Giovanni Battista Piranesi’s *Antichita d’Albano e di Castel Gandolfo*, a large folio now in the Perkins Library, is stamped “Reference.” In 1942, the library was described as a collection of books, periodicals, pamphlets, loose architectural documents and lantern slides. City planning, landscape architecture, and sanitation were among the subjects collected. By 1960 this collection had grown to 41,329 volumes.\(^2\)

In 1965 the library of the Graduate School of Fine Arts moved to the Furness Building from Hayden Hall. At that time, administration of the fine arts library collections passed from the school to the University Library. Over the next few years, Holmes Perkins brought together books selected from the library’s stacks in order to establish a “locked case” collection of older classics of architectural publication. The locked case was situated adjacent to the room which was devoted to the historical collections of the author, publisher and Penn benefactor Henry Charles Lea (1825-1909). The Lea Addition was designed by Frank Furness’s successor firm. In 1962, the architectural fabric and book collections of the Lea Library were transported to the Van Pelt Library and reinstalled.\(^3\)

**G. Holmes Perkins**

Holmes Perkins brought considerable skill and the experiences of an already distinguished career to the process of pulling together resources for the education of architects and historians at

---


the University of Pennsylvania. The Perkins Library, as it has
developed over the years, reflects Perkins’s convictions about the
total environment of architecture. Perkins prepared for professional
practice at Harvard, where he had completed his undergraduate
education, graduating in 1929 with the M.Arch degree. A teaching
position at the University of Michigan followed immediately.
In 1930 Perkins began two decades of teaching at the Graduate
School of Design, Harvard University, finally serving as Chairman
of the Department of Regional Planning. Beginning in 1933,
Perkins maintained an office as architect and city planner. Midway
through his Harvard tenure, Perkins took on roles of regional
representative and acting director of urban development for the
National Housing Agency. At that time, as well as later on, Perkins
served as consultant to a number of international governmental
ministries and urban redevelopment authorities. His activity dur-
ing the early years of his career suggests that Perkins was most
interested in working on a scale larger than that presented by the
design problems of the individual building; and on issues other
than, for example, the evolution of architectural style.

Holmes Perkins’s commitment to the study of the built envi-
ronment as an integrated whole became clear upon his appoint-
ment in 1951 as Dean of the School of Fine Arts at the University
of Pennsylvania. The school received its graduate designation in
1958. Having received the backing he sought from University
President Harold Stassen, Perkins hired faculty who developed
courses of study in city planning and landscape architecture that
meshed effectively with the established program in architecture.
Perkins’s previous experience in the public sector facilitated his
assumption of leadership roles with, among other groups, the
Philadelphia Housing Association, Philadelphia Zoning Advisory
Commission, and Philadelphia City Planning Commission.

Perkins brought painting and sculpture closer to the integrated
curriculum. The painters wanted to remain independent but
Perkins aspired to a Renaissance model—“those boys did it all,”
he has said.\(^4\) In some instances, Perkins took over the teaching
of a course after the initial faculty appointment had moved
on, or he followed that person’s successor. For example, when
Perkins first came to Penn, he hired Lewis Mumford to teach
the history of city planning. When Mumford left, Perkins ap-
pointed Erwin Gutkind as Mumford’s successor and, in time,
Perkins succeeded Gutkind. In other cases, Perkins began a course
and later transferred it. The curricula he crafted required library
resources of high quality for architecture, city planning, landscape

\(^4\) G. Holmes Perkins, conversation with author, 20 September 1999.
architecture, and for the developing program in urban design. Nationally, new classes of publications appeared as professional opportunities increased. The Fine Arts Library broadened its collecting pattern accordingly. For example, in the 1950s the library began to collect the published planning documents for municipalities and regions throughout the United States.

Still, Perkins realized that Penn lacked many of the earlier monuments of architectural publishing that he had found at Harvard. These books, dating from the sixteenth century forward, provided the foundation for understanding the shaping of man’s environment. For Perkins, the modernism of Le Corbusier, Gropius and Moholy-Nagy was part of a larger and older narrative. He wanted students to see how ideas could be traced. A final exam question from one of his seminars required students to relate the physical, fiscal and social concepts of the seventeenth- and eighteenth-century residential square in London to Ebenezer Howard’s Garden City proposal of 1898. In characteristic fashion, Perkins wanted the students to take a long view and comment on the applicability of these ideas to late twentieth-century problems in urban and suburban development.⁵

As an educator, Perkins intended that the graduates of his school enter the professions equipped to make humane environments for urban living. In his view, the urban renewal process generated the space within which architects and planners would be the primary actors. Perkins used the words of Le Corbusier to frame the role of the heroic architect: “By forms he affects our senses to an acute degree. He gives the measure of an order which he feels to be in accord with our world. He determines the various movements of our heart and of our understanding. All is possible through the architect’s action.”⁶ As a modernist planner of the post-World War Two period, Perkins thought on a large scale and saw land clearance as an integral part of urban renewal. Yet he valued cities in their density and multiplicity of form and advocated the study of the history of cities across time. Perkins also viewed regional planning as a growth strategy. But he was a believer in the process of urban renewal as it was framed in the 1950s. Under the Housing Act of 1949, the federal government agreed to pay two-thirds of the cost of reviving “slum” areas. After 1954, the availability of federal mortgage insurance allowed many small-scale projects to go ahead, using design and renovation loans provided by banks. Perkins was confident of modern architecture’s capacity to replace the slum with humane design for urban living. As an architect of the urban environment, Perkins valued above all the creation of an


environment in harmony with nature. This ethic formed the basis of his view that the advantages of a liberal education should be reemphasized in the professional curriculum.\(^7\)

In consolidating textual and graphic resources in architectural theory and history, Perkins’s efforts recall the activities of a succession of distinguished American architect-scholars and library builders of earlier periods. For example, Ithiel Town (1784-1844), co-architect of the Indiana state capital, assembled 11,000 books and a larger number of prints and made them available to practicing professionals. Town bought heavily in Europe, acquiring titles for an architect’s working library together with illustrated historical surveys. As educator and proprietor of a private library, he extended the use of its contents to young architects. Town intended that his library assist the design process not by supplying examples for imitation but by offering the user the opportunity to improve architectural understanding and refine design skills through study. Perkins shared this view with respect to the library he gathered and developed.

In 1970, just as his deanship was ending but with years of teaching still ahead of him, Perkins began to devote considerable energy to establishing the collection of select printed resources in the history of architecture which has come to be known as the Perkins Library. The close proximity of the locked case books, the availability of air conditioning, together with the fact that some rare books had been shelved there since 1962, prompted Perkins to develop a portion of the 1924 Lea Addition as a collection and seminar space. Perkins designed a bilevel mahogany interior, with modern detailing, bookshelves, a seminar table, and office and work space.\(^8\)

The Perkins Library

The Perkins Library is a collection of monuments of architectural publishing. The collection formed by these monuments speaks to an audience of researchers and designers drawn from the Graduate School of Fine Arts, the university community, and the broader populace. The foundation of the collection is formed by the single great book of Vitruvius Pollio (ca. 90–20 B.C.E.) together with the works of five figures from the Renaissance period: Alberti, Scamozzi, Serlio, Vignola, and Palladio. Vitruvius, a Roman architect-engineer, produced a manuscript of ten “books” which summed up the architectural knowledge of his

\(^7\) Ibid., 3, 4, 8, 10; Baltimore Sun, 16 May 1958.

\(^8\) Morrison, conversation.
period. The books present the code of practice for a Roman architect of the time, commentary on the education of the architect and theoretical and practical principles of architecture. Vitruvius provided the first description of the orders of architecture (four, in his discussion: Ionic, Doric, Corinthian, Tuscan) but does not define them as a canonical group. The manuscript, rediscovered in the monastery library of St. Gall in 1414, appeared in print in 1486. Here is a crucial source for the architecture of antiquity. The Perkins Library holds several editions, abridgments, and translations of the work, including one of the first editions of the “pocket Vitruvius” (De architectura libri decem, 1522), reduced in size for handy reference; and the translation by the Venetian humanist Daniele Barbaro (I dieci libri dell’architettura, 1556), with its vigorous illustrations, including one of an odometer of the first century B.C.E..

The author-architects of the Renaissance, beginning with Leon Battista Alberti in the middle of the fifteenth century, presented and interpreted Roman architectural theory (e.g., treating the orders, proportion, geometry, and perspective) based on Vitruvius and on their own observations of classical remains. The architects, craftsmen, patrons, and students who read these books came to understand the orders as an authoritative grammar of form. An order was not just a column and superstructure within a temple colonnade, but a scale-giving, form-generating element of architecture. These first generations of architecture books established the elements of architectural practice, and their practical application was visible everywhere. For example, the 1611 London edition of Serlio’s First (-fift) booke of architecture, an English translation of part of the author’s sixteenth-century treatise, served as a source of inspiration for specific building programs in England.

In the seventeenth century, the role of the orders in the construction of modern buildings was addressed in works such as Roland Fréart’s influential Parallèle de l’architecture antique et la moderne (1650). As a counterpoint to Fréart, the Perkins Library offers to the reader Claude Perrault’s Ordonnance des cinq espèces de colonnes selon la méthode des anciens (1683). Perrault, the lead architect of the Louvre, proposed deriving a definitive set of proportions and ornaments from the orders. By doing so, he began to alter the traditional framework of the orders by asserting the influence of preference and taste. The discussion of taste moved through subsequent publications, reaching well into the nineteenth century.

10 Ibid.
Holmes Perkins viewed the development of architecture as a continuum: the interpretation of the classical heritage by the Italian theorists represented an important part of the story of architecture which should be joined and complemented by a range of later publications conveying other messages. In the Perkins Library’s development, certain themes have become especially well represented and invite the attention of researchers. In the 1620s, Joseph Furttenbach (1591–1667) began publishing a series

of treatises on types of buildings. *Architectura civilis* (1628) describes and illustrates examples of churches, lighthouses, and hospitals. *Architectura martialis* (1630) is part of a small but choice collection of works on city fortification, developed by Perkins to support teaching in urban history. The form of the city has been influenced by the presence of military architecture and associated earthworks. In his courses, Perkins discussed fortified cities, referring to Daniel Specklin’s *Architectura von Vestungen* (1608). Specklin, the city’s architect, attempted to insert fortified elements within a planning process for Strassburg’s future development.

Many of the “big books” of architecture published in England in the eighteenth century transmitted the findings of archaeological investigations of the architecture of antiquity. The Perkins Library holds some of the most interesting of these. Antoine Desgodetz’s *Les édifices antiques de rome* (1682) provided a model for the publication of archaeological efforts. Robert Adam’s *Ruins of the Palace of the Emperor Diocletian at Spalatro in Dalmatia* (1764) resulted from Adam’s 1757 sojourn with the French architect Charles–Louis Clerisseau. Adam produced a not entirely objective visual record of the palace situated at present-day Split. In company with other works of its general kind, such as Robert Wood’s *Ruins of Palmyra* (1753), Adam’s book is a record of the understanding of classical remains by eighteenth-century British architects. Isaac Ware’s *Complete Body of Architecture* (1756) is itself representative of the Perkins Library’s documentation of the practical issues of architecture. In addition to defining the classical orders, Ware discusses building materials and the construction of house drainage systems.\(^\text{11}\)

The reception of the classical heritage in the rest of Europe is dealt with in several Perkins Library titles, including the *Varie architecturae formae* (1601) of Hans Vredeman de Vries, and Fischer von Erlach’s *Anfang einiger Vorstellungen der vornehmsten Gebäude* (1719). We would be pleased to add to the Perkins Library a copy of the 1714 Paris edition of Jean Louis de Cordemoy’s *Nouveau traite de toute l’architecture*, but we can still offer a number of key works, including Jean Courtonne’s *Traite La Perspective Pratique* (1725). This title forms a part of a cluster of works on perspective, reflecting one of Holmes Perkins’s particular interests.

In the Perkins Library, the nineteenth century is characterized by a fantastic array of polemical and practical works. Claude Nicolas Ledoux’s *L’Architecture considérée sous le rapport de l’art* (1804) includes his plan for an idealized expansion of the royal saltworks at Arc–et–Senans. Here are also the works of Augustus

---

Welby Northmore Pugin (1812-1852) who, in *Contrasts* (1836), tried to demonstrate the inferior quality of the architecture of his time when contrasted with the building of the fourteenth and fifteenth centuries.

In the nineteenth century, increases in technological capabilities and market demand generated literature intended to support the architect’s management of practice. At the same time, the question of the effect of architecture and environment on people’s lives emerged in general discussion. The now subdivided field of architecture brought forth many of the books found today in the Perkins Library. Books on domestic architecture, addressed to the architect’s potential client in the country, suburb, or city, are joined by clusters of publications on subjects such as landscape and cemetery architecture, masonry construction, bridge engineering, and public building. Publication of singular works emerged from the mass. Two wonderful examples are John Rutter’s *Delineations of Fonthill and its Abbey* (1823), a guidebook to William Beckford’s romantic gothic fantasy, and Orson S. Fowler’s *Home For All; Or The Gravel Wall and Octagon Mode of Building* (1854).

The Perkins Library is rich in works dedicated to the philosophy and development of urban form in the twentieth century. Bruno Taut’s *Auflösung der Städte* (1920) and Frank Lloyd Wright’s *Autobiography, Book Six: Broadacre City* (N.p., 1943) differ in approach but share in questioning the viability of the city as it existed in the first half of the century. Alternative models came from several quarters. The building plans for Mussolini’s 1942 Esposizione Universale di Roma, published in 1939, have retained their power to influence contemporary architecture. Perkins Library users can pursue related questions by consulting publications about the 1893 World’s Columbian Exposition in Chicago, the Bauhaus, and commercial architecture. The Perkins Library’s collections in these and other areas are not intended to be comprehensive. However, they often do supply key publications in a subject for which the overall collections of the Fisher Fine Arts Library provide complementary material. Also available for consultation are the Architectural Archives of the University of Pennsylvania. Holmes Perkins played a central role in the founding of the Archives.

Perkins knew which books were needed for his teaching but referred to existing bibliographies as a check. Of these, Henry-Russell Hitchcock’s *American Architectural Books: A List of Books, Portfolios, and Pamphlets on Architecture and Related Subjects Published in America Before 1895* (1962), and Helen Park, “A
List of Architectural Books Available in America before the Revolution” (Journal of the Society of Architectural Historians 20), were most important.

Persuasion by Text and Image

Books on architecture are convincing in proportion to the force and persistence of their arguments. Authors deploy texts and images to persuade, argue, and, in the case of author-architects, establish and develop professional standing. The Perkins Library is a rich trove of such spirited enterprise. James Gibbs (1682-1754) is a good example. Gibbs is usually described as the first British architect to be trained abroad. His London church of St. Martin-in-the-Fields, under construction between 1722 and 1726, featured prominently in Gibbs’s Book of Architecture (1728). Gibbs had sought subscribers to make possible the preparation of the book’s plates and texts—in effect, counting on titled men, artists, craftsmen, and even fellow architects to help him advertise his own architectural services.

The Book of Architecture was the first book published in Britain to be devoted to the designs of a single architect. Its influence was felt in buildings throughout the American colonies. John Taylor’s Mount Airy in Richmond County, Virginia, of 1758-62, follows one of the book’s engravings. Mount Pleasant, of 1761-62, situated in Fairmont Park, Philadelphia, is a rectangular block with a pedimented central pavilion, analogous to designs in Gibbs. Thomas Jefferson used a design for an ice house found in Gibbs to aid his thinking about a garden temple at Monticello. The form of St. Martin-in-the-Fields is seen in St. Michael’s, Charleston, South Carolina (1752-61), in the First Baptist Meeting House in Providence, Rhode Island (1774-75), and in many other examples. In that era, the engraved plate was a powerful transmitter of architectural form. Later in Gibbs’s life, in connection with another one of his designs, Gibbs published Bibliotheca Radcliviana: Or, A Short Description Of the Radcliffe Library, at Oxford (1747). The plates and text, introduced by a frontispiece portrait of Gibbs from a Hogarth drawing, supported Gibbs’s program of professional self-promotion.

The Perkins Library offers a number of the publications of Giovanni Battista Piranesi (1720-78), the great generator of architectural imagery. Piranesi identified himself with the accomplishments of Rome and took part in the debates of the

---


1750s and 1760s pertaining to the architectural primacy of Greek or Roman civilization. Julien David Leroy (1724?-1803), an architectural historian and scholar, published in 1758 *Les ruines des plus beaux monuments de la grece*, of which the Perkins Library has the second edition. Piranesi criticized Leroy’s focus on the monuments of Greece in his *Della magnificenza ed architettura de’ romani* of 1761, asserting the priority of Rome. Piranesi’s visual polemic took the form of juxtaposing the engraving of a column fragment found by Leroy on the Isle of Delos (and included
by Leroy in his 1758 book) with Piranesi’s sumptuous Roman ornament, derived from capitals embedded in the fabric of Roman churches. Piranesi intended to present Leroy’s engraving—effectively pinned in front of lavish Roman forms—as a typically weak example of Greek civilization.  

With the enrichment of student learning as a guiding principle, Perkins often sought and acquired books whose inclusion in the collection would add value to the whole. For example, the presence in the collection of Piranesi’s *Il campo marzio dell’antica roma* of 1762 is in itself a cause for celebration. This folio is a striking exercise in planning, based on the area of the Campus Martius. The book’s large plan, or *Ichnographia*, claims to show Rome under Constantine. In several instances, the reader is able to compare a reconstructed form with its condition as eighteenth-century ruin. In order to enable the student to undertake a more sophisticated analysis of the Piranesi, Perkins acquired Francesco

Bianchini’s *Del palazzo de cesari* of 1738, a work that would have been available to Piranesi as he conceptualized the *Campo Marzio*. In this work, Bianchini records the excavations and reconstructions of Roman palaces on the Palatine Hill carried out for Duke Francis I of Bourbon Parma between 1720 and 1727.\(^{15}\)

The holdings of the Perkins Library illuminate the development of the architectural profession and its literature in the United States during the first half of the nineteenth century. The representation of visual evidence was central to one aspect of this story: the expansion of the architect’s business practice into the realm of promotion and the direct appeal to prospective residential customers. For example, compare the illustrations

\(^{15}\) Ibid., p. 52.
of country houses in Asher Benjamin’s *American Builders’ Companion* (1820) and Andrew Jackson Downing’s *Cottage Residences* (1842). Benjamin’s handbook, first published in 1806, contains guidance for carpenters in practical geometry, classical orders and treatment of stairs and other building elements. Benjamin pays homage to Sir William Chambers’s *Treatise on Civil Architecture* (1759), also present in our collection. In his work, Benjamin provides plans and elevations for a number of house types. His engraved plate of a “house intended for the country” is a frontal view of a classicizing structure of perfect symmetry. Benjamin’s main concern was to represent the house by its physical dimension and by the surface variety evident on the one face presented to the reader.

In contrast, Downing presents his asymmetrical country house ("Villa in the Italian Style") in an oblique view, placed in a rural landscape. Here Downing addresses a readership of prospective homeowners. The villa is depicted in a most comfortable and pleasant situation. Its studied asymmetry harmonizes with the natural world, here domesticated. Downing’s image is intended to generate associated images and feelings of the beautiful and the picturesque. Now informed by cultivated taste, the prospective owner would be able to work as client with the growing number of architects of residential housing. Such housing could develop not only on the urban periphery but also within city limits. The industrialization of the urban core during the first half of the nineteenth century generated greenspace in the form of parks and the desirable building lots for private homes which bordered them. This increased opportunities for architects to obtain private commissions. In his text, Downing contrasts the simplicity of the Grecian style with what he terms the elegant variety of the tasteful villa. He points out that the Italian villa form, in its irregularity, allows for future additions, while the Greek temple form is usually marred by addition. By defining irregularity and complexity of form as a mark of good taste, Downing supported the architectural profession, which was under some pressure to maintain its distinguishability from the profession of builders, as that group became more able to take over the planning and construction of desirable single family housing. In that sense, the book of architectural designs could function as an agent of both popularization and exclusivity.

Twentieth-century modernism produced formidable publications of advocacy, many of which are represented in the Perkins Library. The urban vision of Le Corbusier is presented in the signed Perkins copy of *Vers une architecture* (1923). Le Corbusier rejected the form of the city of his time and embraced a new vision of towers gleaming in the sun. This vision, shared by many architects, planners, and highway department engineers in the United States, became concrete reality after the Second World War. N. A. Miliutin’s *Problema stroitelstva sotsialisticheskikh gorodov* (1930) proposes the formation of linear, socialist communities divided into regions of housing, parks, railways, roads, industry, and farming. The housing interiors show the author’s familiarity with the works of Le Corbusier and others.

Images of tall buildings and fast motorways do not make up the whole of urban planning in the first half of the twentieth century. Compare Le Corbusier’s concept with the late 1920s
plan for Pennsylvania Boulevard in Philadelphia, produced by the
architectural firm of Graham, Anderson, Probst & White, and
published in 1933. The plan shows a proposed street connecting
the new railroad station at 30th and Market Streets with a large
plaza on the north side of City Hall. If Le Corbusier argued for
breaking with the past, Ernest Graham (whose signature is found
in the Perkins Library copy), thought of architecture as a “brilliant
and lordly procession from Egyptian civilization to the American
development of our own time.” The Graham firm’s plan situated
earthbound buildings at focal points, entirely different from Le
Corbusier’s image of elevating forms and infinite perspective.

Books and Place

The Perkins Library exists to generate the presentation and
discussion of ideas in architecture. Students, working individually
and collectively, consider, accept, modify, and refute these ideas.
For Penn today, as for Perkins himself, the Library is more than a
place, more than its books: it is a mission. Still, however fruitful
the physical environment has been and will continue to be, we
need to consider new ways to present the texts and images of the
Perkins Library in order to extend its reach and effect.

The Library carries the name of its builder and central sponsor,
G. Holmes Perkins. The Perkins Library Endowment Fund and
the Perkins Rare Book Fund have been crucial elements of sup-
port during the first twenty-five years of the Library’s existence. It
is a pleasure to thank all of our donors and to cite, in addition, the
active named funds whose income has allowed us to enrich our
rare book collections in architecture: Alfred Bendiner Memorial

Villes-Tours. Le Corbusier, Vers
une architecture. Paris: G. Cres,
Anne and Jerome Fisher Fine
Arts Library.

Fund, Adam H. Fetterolf Fund, Gemmill Family Book Fund, Alfred H. Gumaer Estate, George Gund Memorial Fund, H. Lawrence Herring Memorial Fund, and the Harold C. Putnam Book Fund. The University of Pennsylvania Library is indeed grateful to all of the men and women whose interest and trust in our work is demonstrated by the establishment of these funds. The effort continues: to a considerable degree, our capacity to develop and present the resources contained in the Perkins Library will depend on the continued support of our friends, old and new.