THEMATIC CONTEXT STATEMENT

Modernism: 1945 to 1980

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FOR THE PRESERVATION ALLIANCE FOR GREATER PHILADELPHIA

JULY 2009

A COMPLICATED MODERNITY: PHILADELPHIA ARCHITECTURAL DESIGN 1945-1980

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I. INTRODUCTION

Modernisms in Philadelphia after World War II

Like most large, prosperous cities in the United States, architecture in the period after World War II in Philadelphia was, to a great extent, marked by two national trends. The first of these was the spread of the International Style and subsequent popular modernist styles that followed it, including Brutalism and later variations on the International Style. These international idioms were used with some variation in materials and detail throughout the region, and particularly marked large-scale commercial, institutional, and residential projects. The practitioners who relied on these design modes were the most successful in the region by the measures of size and numbers of commissions, and their projects are significant for the changes they wrought to life in Philadelphia region at the local level. The second was a trend that had preceded International Modernism, one that is often described as "regional modernism." It might, however, be better be termed "American modernism," since it encompasses the works of such eminent practitioners as Frank Lloyd Wright. In contrast to many other cities, Philadelphia had a significant history of both American modernist and International Style architecture before World War II, and the Beaux Arts methods and approaches that shaped much of this architecture continued to influence Philadelphia area designs after the war.

In distinct contrast to other cities, however, Philadelphia in the postwar period spawned an internationally significant group of designers that together have been called the "Philadelphia School." They produced far fewer, and generally far smaller projects than those who followed international style trends, but many of their works in Philadelphia are nationally, if not internationally significant. The best known among this group of important designers are arguably Louis I. Kahn (1901-1974) and Robert Venturi (b. 1925) and his wife and professional partner, Denise Scott Brown (b. 1931).

Before the War, Modernism in the city rested in the work of such important figures such as Kenneth Day (1901-1958), with such works as the Charles Woodward House in Chestnut Hill (1938-1939) and Oscar Stonorov's (1905-1970) Carl Mackley Houses (1933-34, in association with Alfred Kastner and W. Pope Barney), representing "Regional Modernism" and "International Style," respectively. Remarkably, Philadelphia was noted for its modernism, particularly in connection with its domestic buildings that were not "modernist" in style. In 1927, George Edgell, then dean of the Harvard's architecture faculty, characterized the Seabreeze residence, a Colonial Revival house designed by H. Louis Duhring, as "truly and at the same time unobtrusively modern," and noted that "it represents careful study in proportion, in planning, and in surface textures, revolutionary in nothing, satisfactory in everything."[1] The most

[1] George Edgell, *American Architecture of Today* (New York: Charles Scribner's Sons, 1928), p. 111.

important contributing factor to this pre-war modernity in Philadelphia twentieth-century architecture was the strength of Beaux-Arts methods of design due to both the teaching and professional practice of Paul Philippe Cret at the University of Pennsylvania. Cret's influence was profound and would continue long after his death in 1945, even on those whose work bears no obvious stylistic connection to his more famous projects in the city such as the Rodin Museum. In contrast to this modernism of the 1920s, in the period after World War II, Philadelphia design would take a decidedly revolutionary turn.

It could be said that Philadelphia architectural design from 1945 to 1980 is complex and even contradictory, and in these ways it reflects the richness of modern experience, to borrow phrases from Robert Venturi, one of the cities most famous modernists.[2] The city with a long-standing reputation of Quaker tolerance boasts both Modern Movement and also "Post"-modern[3] architecture, and was one of the cradles of architectural ideas that by the close of the twentieth century could be seen on six continents. Philadelphia's architectural modernity was weaned on history, and is itself now historic.

European Modernism famously arrived on the shores of the Delaware River in the form of George Howe (1886-1955) and William Lescaze's (1896-1969) Philadelphia Savings Fund Society tower of 1929-1932 (Howe would remain an important force in Philadelphia Modernism until his death in 1955). This building still serves to remind that Philadelphia's modernity was complex long before Venturi foregrounded that adjective, for the PSFS melds a Walter Gropius-influenced International Style with touches of American Art Deco and Machine Age metals, and even a measure of Berlin Expressionism in its blackish hues and corner curve, reminiscent of an Erich Mendelsohn department store. Its anomalous character with respect to the "pure" International Style was articulated simply by Henry-Russell Hitchcock and Philip Johnson's epochal exhibition at the Museum of Modern Art in New York and accompanying book of 1931, when they called the "relation of the base with its curved corner to the tower . . .awkward."[4]

Two main factors set the stage for design and development in the immediate post-war period in Philadelphia, and had long-reaching consequences in the decades that followed. The first of these was a series of planning initiatives in the city that set the direction for areas of redevelopment and growth. The second of these was the arrival of a group of significant designers at the University of Pennsylvania in the early 1950s in connection with the re-making of architectural education there.

The essay that follows charts the course of Philadelphia modernism in two sections. The first identifies the key events and factors in spurring design in the city after World War II. The second section discusses practitioners and key projects through thematic groups and geographic clusters.

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[2] From the opening sentences of Venturi's famous 1966 book (listed in Bibliography below). Although many have allied Venturi's work, and that of his firms including the present Venturi, Scott Brown and Associates, with post-Modernism, Venturi himself has always counted himself as a modernist.

[3] The capitalization and punctuation of this term are significant, as will be discussed below.

[4] Henry-Russell Hitchcock and Philip Johnson, *The International Style* (New York: W. W. Norton & Co., 1932), p. 159.

Key Events and Drivers of Change

Postwar Initiatives and the Presence of the Past

The literally towering achievement of Howe and Lescaze loomed over a key event that came on the heels of World War II. Like most of the country, Philadelphia was imbued with a spirit of renewal and expansion in the immediate post-war years. In the city, one of the first manifestations of this post-war spirit appeared in 1947 in the "Better Philadelphia" exhibit that helped to catalyze the existing batteries of commercial, industrial, legal, and humanitarian Philadelphia to develop a vision of the truly modern postwar metropolis. Although the City Planning Commission had been established in 1919, interest in planning the future of Philadelphia coalesced most strongly after the close of World War II. More than 340,000 visitors saw the exhibit staged at Gimbels Department Store, where ideas were presented for public scrutiny that were deliberately visionary. Many of them, however, were ultimately enacted, and the concepts of the 1947 plan served as the basis for the 1960 Comprehensive Plan for the city and the 1963 Plan for Center City that followed it. Two fundamental, inextricably intertwined outcomes resulted from these planning initiatives: redevelopment and expansion. It is significant that the show was not commissioned by a government agency; rather, the impulse came from concerned private citizens seeking to build a new, post-War Philadelphia. One of the key issues in the postwar era was the anticipation of building for a city that was expanding rapidly as it had done ever since its founding; the anticipated city of two million, however, was short-lived as Philadelphia's industry began to leave it as it did so many American cities after the 1960s.

In 1947, the first objective was to stimulate economic growth, and although the focus in the 1947 exhibition remained in Center City, the proposals reflected a greater awareness of the full extent of the city limits, as well as the effects both good and bad of the surge of suburban growth. Such growth altered not just the Delaware Valley but numerous metropolitan areas across the United States during the postwar Baby Boom. In Philadelphia, for example, the arrival of Interstate 95 spurred the growth that had begun in the 1930s in the Northeast section of the city, where developers constructed hundreds of residences. The overwhelming majority of this work was done without professional designers.[5]

Philadelphia's Revised Charter of 1951, which was in part a response to the 1947 exhibit, gave the City Planning Commission new powers, including advisory oversight of building projects by numerous branches of the municipal government. In 1960, a Comprehensive Plan for Philadelphia's development was adopted. It underwent numerous changes over the ensuing decades, and competing proposals were put forward by various individuals and groups, perhaps most famously by Louis I. Kahn, whose studies were supported by a grant from the Graham Foundation and became well known to architects and urbanists (few of them were ultimately put in place). The debate, though sometimes heated, was a good sign: it meant that Philadelphians were serious about shaping their built environment.

The figure who stands out above most others in planning in these post-World War II years was Edmund Bacon (1910-2005), who served as Executive Director of the City Planning Commission from 1949 to 1970. The effects of his work continued to be felt for decades afterward. Bacon knew well the complexities of getting things built, and the tensions that arose between various groups. He wrote in 1961:

[5] On the role of developers building out this portion of the city, see Peter Binzen, "A Place to Live," in Murray Friedman, ed. *Philadelphia Jewish Life: 1940-1985* (Ardmore, PA: Seth Press, Inc., 1986), 183-199.

> The planner must learn from the architect and the client, the architect from the demonstrated scope of vision of the planner, the developer from the work of other developers, and the government officials, the newspapers and the community at large from what they see rising about them, the whole brought to life by the heat of the tensions of construction.[6]

Although Bacon was not without his later critics, he exerted a prodigious force upon Philadelphia's built environment in the postwar decades nearly equal to that of the redoubtable Robert Moses in New York, who is justly considered a national figure for his effect on the five boroughs of New York City in roughly the same period. Like Moses in New York, Bacon succeeded in getting his ideas implemented.

A collateral effect of the renewed public interest was the strengthening of the professions of architecture, planning, and landscape architecture in Philadelphia. The Philadelphia chapter of the American Institute of Architects became one of the most energized in the United States by the late 1960s. A trickle-down effect occurred in which the achievements of the more high-profile firms did increase the horizons of more modest firms. As awareness grew, clients – both public entities and private corporations – became intrigued by the possibilities of good Modernist design.

In the immediate postwar years, two key areas of redevelopment came to the forefront in Center City – both of these would engage key, yet different aspects of design in the postwar period. The first of these, the redevelopment of Penn Center at the very heart of the downtown on the west of City Hall, looked to the international precedents in Modernist design to create an up-to-date, urban nexus, removing the nineteenth century built fabric to create anew in much the same manner as countless redevelopment projects in the postwar years around the country. The second, Society Hill and the creation of National Historical Park, sought not just to weave the existing, historic eighteenth-century built fabric of the city into new urban design, but also to highlight it. This was a subtle, yet significant shift in the relationship between modernist design and colonial forms that had existed before World War II.

What is most significant about this shift was the notable difference between the common, tabula rasa approach to the past embodied in the creation of Penn Center and the approach at the center of the work in Society Hill and around Independence Hall. For it was the very presence of history, of an extensive built fabric in which the threads of 250 years of evolution were woven, that made context and contextuality a keynote of the Philadelphia School – the city's most famous contribution to international design in the postwar period. This label had been used by Ralph Adams Cram back in 1904,[7] but its best understood current meaning was established by an article in the magazine *Progressive Architecture* in April 1961.[8] It became a widely-used reference to the architects of postwar modernism in the Delaware Valley. Evident in the work of Kahn and other students of prominent University of Pennsylvania Professor of Architect Paul Philippe Cret as well as in the projects of Venturi, his wife and professional

[6] Edmund Bacon, "Downtown Philadelphia: A Lesson in Design for Urban Growth," *Architectural Record* 129 (May 1961): 146.
[7] In his article "The Work of Messrs. Frank Miles Day and Brother," *Architectural Record* 15, 5 (May 1904): 397.
[8] Jan C. Rowan, "Wanting to Be: The Philadelphia School," *Progressive Architecture* 42 (April 1961): 130.

partner Denise Scott Brown, and others, was a desire to knit an architectural project into its surroundings.

The return of a concern for context and history was nothing less than a sea-change in architecture. Indeed, the 1960s have sometimes been identified as the "death of modernism."[9] Philadelphia cannot claim all of the credit in this; the worldwide resistance to some of the principles of Mies van der Rohe, Gropius, and Le Corbusier resulted from numerous forces on several continents. Nevertheless, Philadelphia's built works of the 1960s and 1970s, and its firms (both world-famous and those less well-known) form a remarkable case study of one of the most significant periods in twentieth-century architecture, and remain one of the most significant aspects of its built environment.

It is important to note that one of the most important matters of the return to response to context for which the "Philadelphia School" is renowned is the matter of the Philadelphia context itself. Never far away from Philadelphia firms stood some of North America's best remaining examples of eighteenth- and nineteenth-century construction, so it is not surprising that the "Philadelphia School" of 1945-1980 looked to history, sometimes subtly if not even mysteriously in the works of Kahn and his followers, sometimes wittily in those influenced by Venturi and Scott Brown. The members of the "Philadelphia School" developed their modernity by looking critically at history, including the history of early Modernism. It is a postmodern irony that what was new in the 1960s and 1970s is now important history.

Reshaping Architectural Education at the University of Pennsylvania and the Philadelphia School

One of the key factors in shaping post-War architecture in Philadelphia was the role of the faculty at the University of Pennsylvania's School of Fine Arts. In the period before the Great Depression, the University of Pennsylvania had become the leading center of architectural education in the country under the direction of Cret, the Professor of Architecture, and Dean Warren Laird. After Laird's departure in 1932, the School of Fine Arts began to fall under the shadow of the new methods and styles being taught at Harvard's Graduate School of Design under the leadership of Dean Joseph Hudnut and the teaching of Walter Gropius. The hiring of G. Holmes Perkins (1904-2004) as dean at Penn in 1951 had a significant impact on Philadelphia modern design, planning, and building. He came from a position teaching urban planning at Harvard's Graduate School of Design, although he had been trained as an architect. Not only did Perkins set about re-making the School of Design in the image of Harvard's GSD, but he brought on a new, energetic faculty, many of whom would become leading lights in the Philadelphia School. Another factor that increased his influence was that the University's leaders consulted him when making decisions about Penn's campus; Perkins also had a role in shaping redevelopment within the city as Chairman of the City Planning Commission (of which Bacon was Executive Director). Perkins role in the massive post-War building and redevelopment program in West Philadelphia conducted by Penn was a significant factor in Philadelphia Modernism: he was at least partly responsible not only for engaging nationally-significant architect Eero Saarinen for Hill Hall on the campus but also probably secured the commission of the Richards Medical Laboratories commission -- an internationally significant design-- for Louis Kahn at roughly the same time, shortly after he had lured Kahn from Yale to return to

[9] See Diane Ghirardo, *Architecture After Modernism* (New York: Thames and Hudson, 1996).

teaching at his alma mater.[10] This was rather unusual; it is more typical for American universities to make decisions about major architectural undertakings without consulting their architectural teaching program.

Perkins wrote in 1961, when many American inner cities were at the nadir of their fortunes, that

> so generally has it become the custom to decry the city that any effort to recreate an urbane and civilized environment within the old fabric would appear foredoomed to failure. Yet despite decay and obvious neglect, despite the false lure of the suburbs, . . . the city uniquely offers that richness of life without which there would be no culture or civilization. Here are the stimuli for new adventures of the spirit ... Here the architectural heritage of the past can be wedded to the future to produce a variety and richness that no single designer could hope to rival ... [In Philadelphia] the fortunate but by no means accidental confluence of political reform, business leadership and creative planning has ignited a renaissance hardly dreamed possible a short generation ago ... Confidence has reappeared in the community ... [Even] if one is skeptical of pictures or is more financially inclined, he will find in ... the Comprehensive Plan convincing evidence that Philadelphia is prepared to back its plans with cash.[11]

In addition to Kahn, Romaldo Giurgola (b. 1920) of Mitchell/Giurgola, Robert Venturi, Denise Scott Brown, and Robert Geddes (b. 1923; who with fellow Harvard alumni formed Geddes, Brecher, Qualls and Cunningham in 1960), all came to teach in Penn's architecture program under Perkins. In addition to these key figures, Perkins also recruited landscape architect and theorist Ian McHarg (1920-2001) as well as architect Anne Tyng (b. 1920), who played a key role in Louis Kahn's firm. Each of them would spread ideas fostered in Philadelphia to other states and nations in the ensuing decades: Giurgola became the architecture head at Columbia University, and his most ambitious project was the new national government building in Canberra, Australia. Geddes went to Princeton University to head its architecture department. With the notable exception of the Richards Building at Penn and the Esherick House in Chestnut Hill, most of Kahn's great works are not just outside of Philadelphia but indeed flung across the world, and can be found in New York, Connecticut, Texas, California, India, and Bangladesh.[12]

[10] This is documented in Emily T. Cooperman, "National Historic Landmark Nomination for the Alfred Newton Richards Medical Research Laboratories and David Goddard Laboratories Buildings, University of Pennsylvania," 2008, on file with the National Historic Landmark Office, National Park Service, Washington, D.C.

[11] Preface to the book by the American Institute of Architects, Philadelphia Chapter, *Philadelphia Architecture* (New York: Reinhold, 1961).

[12] It should be noted that the University of Pennsylvania's Architectural Archives houses Kahn's archive as well as Venturi, Scott Brown's. Penn also houses the papers of other major architects of 1945-1980.

II. THEMATIC GROUPS

1. Commercial and Corporate Design, Vincent Kling and the International Style

In contrast to the ground-breaking work of the architects of the Philadelphia School that appeared on the scene beginning at the end of the 1950s, one of the most visible changes to Philadelphia in the immediate postwar period was the result not just of grand planning initiatives but also of the arrival on the Philadelphia scene of Vincent Kling (b. 1916). Vincent Kling, who would head the largest architectural practice in the Philadelphia region in the 1960s and 1970s and shape much of downtown Philadelphia in the post-World War II era, was born and raised in East Orange, New Jersey. Immediately after the War, Kling took a position in the New York office of Skidmore, Owings and Merrill as a designer. He left soon after to establish his own office in Philadelphia in 1946, taking the corporate, studio-based office organization of SOM with him to the new firm. This highly organized and efficient system was a key element in the successful completion of a prodigious number of projects, many on a large scale, in the Philadelphia region and beyond. One of the earliest of these was the creation of Penn Center in Philadelphia in the 1950s, for which Kling was the principal architect and planner. By the late 1960s, Kling's firm had become the largest in Philadelphia, and by 1973, Kling was at the head of the largest architectural practice in Pennsylvania, with an office of nearly 400 employees.[13] As might be expected given this scale of practice, Kling's firms and successors have been an incubator for other Philadelphia practitioners, including John Bower (b. 1930), partner in Bower Lewis Thrower, who served as a senior designer for Kling in 1955-1961.

Vincent Kling's work represents the major counterpart to the "Philadelphia School" architects in the post-War period, in its approach both to the process of design and to architectural style. In the 1950s Vincent Kling & Associates achieved the rare triple feat of simultaneously remaining faithful to the modernist ethic brought from Europe, being capable of answering the complex engineering challenges that are involved in large structures, and being capable of securing numerous major commissions in Philadelphia. The Kling firm's success in getting large-scale works built in Philadelphia was due in part to their repeated selection by city planning authorities led by Edmund Bacon (who naturally looked to a firm that had a proven track record in such projects).

Penn Center, built over a long period from 1953 to 1982, was primarily the work of Kling & Associates and Emery Roth & Sons of New York. It replaced the Pennsylvania Railroad's Broad Street Station and "Chinese Wall" of elevated tracks between Market Street and Kennedy Boulevard from 15th to 18th streets. This railway embankment had previously prevented the natural development of western Center City because it was a substantial barrier between north and south, between Logan Circle and Rittenhouse Square. As the *AIA Journal,* a national publication, wrote in 1976, "Penn Center was the very model of the multilevel superblock which many planners envisioned but few cities built in postwar years."[14] It was a complex spreading over numerous city blocks and meant to encompass office mid-rises and high-rises, ground-level open spaces, underground concourses lined with retail shops and eateries, all of them located just steps from transportation links (bus routes, suburban rail lines, and subway stops that joined the two main axes of Philadelphia's subway system). Street-level

[13] See Emily T. Cooperman, "Kling, Vincent George," Philadelphia Architects and Buildings online database, http://www.philadelphiabuildings.org/pab/app/ar_display.cfm/18734.
[14] Beth Dunlop, "Post-Renaissance Philadelphia," *AIA Journal* (March 1976): 37.

esplanades capable of handling large pedestrian flows would overlook the concourses. The first portion saw construction begin in 1952 and conclude in 1970.

As the *AIA Journal* summarized, "critics initially were kind to the planning but not to the architecture of Penn Center's five nearly identical slab buildings. Time has been even less kind ... [Recent years have witnessed] a seemingly endless procession of large new office buildings, many plugged into Penn Center's concourses and spaces."[15] In the ensuing decades several of the original slabs have seen their exteriors extensively renovated, to the point that they are no longer true to the International Style cues that initially marked their appearance.

The fact that the original five buildings did not capture the immediate enthusiasm of Philadelphians was partly due to the fact that their sober and minimalist modernism was still a rarity in the Quaker city (the PSFS tower possessed some of those attributes, but intermixed them with American Art Deco exuberance). One of the unavoidable problems of being thoroughly modern is that the result is by definition ahead of existing buildings, and so people may take years to learn to appreciate it, just as they gradually grew accustomed to Gothic or to neo-classicism in preceding centuries. As Bacon wrote in the 1961 article cited earlier, "The government officials, the newspapers and the community at large [must learn] from what they see rising about them."[16] Bacon was not alone in thinking that sometimes architects and planners should thrust modern ideas upon citizens, even if at first the citizens are not quite comfortable with the change.

It is worth noticing the difference between Vincent Kling's original five matching slab buildings and his two, slightly unequal towers that form the adjacent development called Centre Square. (That name, with that spelling, is an allusion to Center Square directly across 15th Street. Center Square is the epicenter of Philadelphia on which City Hall stands.) Kling's 1973 Centre Square, which includes a large angular domed space between its two towers, is less insistently orthogonal than his original Penn Center (to which it is extensively linked via underground concourses). The later project has a hint of Frank Lloyd Wright in its geometries (Wright liked hexagons, and their resultant sixty-degree angles infuse Centre Square's lobby and its tower corners). The Centre Square lobby is slightly Brutalist, reflecting the aggressive architecture of massive, often rough-textured concrete that was a global trend in the 1960s.[17]

Also reflecting some Brutalist ideas is Kling's Municipal Services Building of 1962-65 just a block away (it supplements the city government's office space in City Hall), which received multiple design awards at the time of its completion. Many American cities of the 1960s installed this sort of vast, durable, grand-gestured, low-maintenance public space to accommodate crowds, and this project is thus representative of that trend Although it is significant that the building was lauded by the profession at the time of its completion, the Municipal Services Building's reception among the members of the public has not been as enthusiastic.

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[15] Ibid.

[16] Edmund Bacon, "Downtown Philadelphia: A Lesson in Design for Urban Growth," *Architectural Record* 129 (May 1961): 146.

[17] The source of the term Brutalism, which was coined by the scholar Reyner Banham (*The New Brutalism: Ethic or Aesthetic?* [London: Architectural Press, 1966]), was the French words *béton brut,* which mean concrete with a rough or raw surface. Brutality is thus not the sense of the French phrase, but one of the problematic aspects of this architecture is that it can look harsh to many observers.

The Municipal Services Building makes a good comparison to another government offices building, the Pennsylvania State Office Building (1958) just a few blocks up Broad Street at Spring Garden Street. This 18-story tower for local offices of state agencies is less aggressively square than the Municipal Services Building. Three major Philadelphia firms collaborated on it: Carroll, Grisdale & Van Alen; Harbeson, Hough, Livingston & Larson; and Nolen & Swinburne. Like Kling, all of these firms were successful in garnering multiple commissions in the postwar era in Philadelphia and beyond, but none were in the ranks of the stylistic innovators of the more famous members of the Philadelphia School. Carroll, Grisdale and Van Alen was led by Roy Carroll (1904-1990), one of the most prominent architects of his generation in the city, although he cannot legitimately be called a style innovator. In addition to the State Office Building, Carroll, Grisdale and Van Alen completed the former Youth Study Center on the Benjamin Franklin Parkway, a project of particular municipal pride at the time of its completion, as well as the Philadelphia International Airport Terminal (1947-1950), now altered. In downtown Philadelphia, the Library Company Annex (1964-1965) is among the firm's more visible projects. Harbeson, Hough, Livingston & Larson (H2L2) was formed from the firm founded by Paul Philippe Cret after his death. Nolen & Swinburne's work included many Catholic school buildings in the region as well as residential commissions.

The State Office Building represents much of the representative approach of the period: the building slab has an airy lobby beneath its *pilotis*, and it occupies only part of its site, leaving the remainder as public open space in the manner of Mies van der Rohe's Seagram Building in New York City of 1957 (the black glass box became a widespread corporate architectural trope: Philadelphia has its own belated version in the Philadelphia Electric Company tower of 1970 at 2301 Market St., designed by Harbeson, Hough, Livingston & Larson). The latter was a planning gesture typical of the late 1950s and 1960s, two famous examples being the Seagram Building as well as the Lever House by Skidmore, Owings & Merrill, both on Park Avenue in midtown Manhattan. Like the Seagram Building, this Pennsylvania agencies building's multiplication of absolutely identical windows suggests the domain of the conformist Man in the Grey Flannel Suit, the "organization man"[18] of the 1960s. This "corporate modernist" architecture represents a key part of midcentury North America. Thus, Philadelphia midcentury architecture as a whole is a significant record of American cultural developments. Also meaningful is the fact that the Spring Garden Street building reflects the ever-growing government that was required by the 1960s to administer a city (which is also a county) of millions of people. From such buildings, it was hoped, the American Dream would be enacted for all citizens, whatever their background or economic status.

[18] Both of these phrases are titles of widely discussed sociology books about the American corporate mentality of the 1950s and 1960s.

2. Housing, Private and Public

The growing and redeveloping postwar city created a substantial demand for single and "group" housing, both public and private. Among the most notable in the period are two internationally significant landmarks in close proximity to each other in Chestnut Hill. The Esherick House, which Louis Kahn created in 1959-61 for Margaret Esherick, has been noted for its importance in architectural literature as far away as Japan. It is one of the handful of projects that Kahn completed in his city, yet stands out among his projects as one of his most important designs. It typifies Kahn's use of bold, simple geometries in its cubic form, ventilating shutters to control light and air, and areas of wood alternating with stucco (in this case teak appears on both exterior and interior). Located on the edge of Chestnut Hill's early-twentieth-century Pastorius Park, this relatively small residence – really just one bedroom –is mirrored in the equally if not more significant small house by Robert Venturi (b. 1925) for his widowed mother in 1962-1964. The Vanna Venturi House stands out as one of Philadelphia's most significant, if not *the* most significant, post-war building in its bold reimagining of modernism within the context of historic forms and local context. This *meisterwerk* also marked the beginning of the no-less-significant career of the architect and his long time wife and business partner, Denise Scott Brown. Within the category of housing, and among the other key works of the firm are Venturi & Rauch's (in association with Cope & Lippincott) iconic Guild House of 1960-63 at 711 Spring Garden Streets, built for elderly citizens by the Society of Friends. The two Chestnut Hill houses together constitute a Philadelphia gem because even for the general public they encapsulate both overlaps and key differences between two phases of late Modernism in the forms and use of materials.

Margaret Esherick House, 1959-1961, Louis I. Kahn, architect. Photograph by Emily T. Cooperman.

There is an extra significance in the client of the Esherick House: she was the sister of the superb Modernist architect Joseph Esherick (1914-1998), whose practice in the San

Francisco area shared some of the concerns for context and sensivity that distinguish the Philadelphia School. Margaret and Joseph were relatives of the world-class furniture craftsman Wharton Esherick, who lived and worked near Valley Forge, Pennsylvania, half an hour's drive west of Philadelphia. The kitchen of the Margaret Esherick house was created in wood and copper by Wharton himself.

Other examples of Kahn's residential work do stand within Philadelphia city limits, though some are in fact Kahn's revisions to much earlier rowhouses. The Shaw House (2129 Cypress Street, alterations 1956-1959) a few blocks southwest of Rittenhouse Square, is an example. It was owned by an advertising executive and his wife, who took advantage of an unusual opportunity to buy an adjacent parcel, thus doubling the lot size of what began as an1860s house for Philadelphians of modest means. The overscaled window placed by Kahn on the front facade (which substantially changed the historical appearance of the rowhouse yet is sympathetic to it) was cited by Robert Venturi as an inspiration for the traditional yet seemingly mass produced window on the Vanna Venturi house. Some floors of the Shaw house were redesigned by Kahn to use handmade floor tiles from the Moravian Pottery Works in Doylestown, Pennsylvania 45 minutes northwest of Philadelphia; this is a good example of the use by the Modernist Kahn of a celebrated Delaware Valley pottery that can best be described as Arts and Crafts. Kahn frequently specified the Moravian brand of handmade tiles in the 1940s and 1950s. The theme of human contact with and manufacture of materials is a major theme that runs through Kahn's work.

Philadelphia is home to a wide variety of residential work for all income levels. One postwar building that represents the Beaux-Arts approach from the 1930s is Parkway House of 1952-53, which overlooks the Benjamin Franklin Parkway from its perch at 22d Street and Pennsylvania Avenue. Its architects, Roth & Fleisher (fl. 1941-1960; Elizabeth Fleisher one of Philadelphia's first well-known female architects), were clearly influenced by the stepped terraces, pyramidal massing, and curving glass forms of prewar Art Deco. Their work represents another strain of the continuity of Philadelphia's pre- and postwar architecture. Both of the firm's principals, Gabriel Roth (1893-1960) and Elizabeth Fleisher (1892-1975), were part of the generation that had both learned from and worked for Paul Cret, and absorbed his Beaux-Arts approach to style as one of many possibilities for the appropriate decoration of buildings organized by programmatic function and balanced, clear geometric forms. Many other firms and practitioners of this sort could be identified in Philadelphia in the postwar period, including Louis Magaziner (exemplified by his richly materialed Hillman Medical Center in the 2000 block of Chestnut Street), among others.

In contrast to these sorts of practitioners, Oskar Stonorov was one of the first to bring cutting-edge European-born concepts of mass housing to the United States. In turn, his projects were imitated far beyond the Delaware Valley. In Germantown, the now-demolished Schuylkill Falls Public Housing, 1954-55, by Stonorov & Haws, at Ridge Ave. and Merrick St., consisted of low, two-story rowhouses with small private fenced yards, located near the base of a medium-rise slab. The latter showed numerous influences from the Swiss-French architect Le Corbusier: the concept of a tower in a green park; the shape and size of the midrise which is close to that of Le Corbusier's in his famous Unité d'Habitation in Marseilles; the use of rough-textured concrete, even for exterior staircases at the corner of the slab; even the use of curved, sculptural elements rising from the slab's flat roof. Stonorov's slab benefitted from its hilly site; the tower's fierce straight lines created a dramatic tension with the uneven ridges that characterize this area of Philadelphia.

Less important as a design was Stonorov & Haws' Southwark Plaza Public Housing of 1962. This was never liked by the majority of Philadelphians, and at least part of its weakness was that, being built in a very dense area, it lacked the parklike setting essential to Le Corbusier's *Cité Radieuse* concepts which Stonorov knew very well. Moreover, the Southwark neighborhood along the Delaware just south of Society Hill had been densely populated since the early eighteenth century, and Stonorov's design did not approach its historic context of small-scale rowhouses with much sensitivity. The three matching towers of Southwark Plaza stood as a clear counterpoint to I. M. Pei's three matching Society Hill Towers, built in the same decade for a considerably higher-income demographic not many blocks to the north. Pei's project had not only the advantage of a more generous construction budget, but also benefited from his selection of deeply hollowed window modules that, while spacious, responded more compatibly to the proportions of eighteenth-century Philadelphia rowhouses. Stonorov, instead of using vertically oriented windows (which tend to harmonize better with colonial architecture), adhered more closely to European precedent in the horizontal ribbon window strips and balconies of Le Corbusier and the International Style, which were not as well received by Philadelphia citizens.

I. M. Pei's & Associates' Society Hill Towers of 1964 (three 32-story residential towers) and low-rise townhouses adjacent, at Third Street are a key project in the postwar period in Philadelphia. Pei (b. 1917) maintained an office in the city for this project, and won a 1958 competition to design the complex. The towers are made of poured-in-place concrete, which in a highly functionalist way serves as both the structural frame and the facade surface (as do the concrete components of the Police Administration Building, discussed below, which is a ground-hugging complex for a different type of client). Although more sensitive toward their eighteenth-century neighbors, Pei's window shapes on the Society Hill Towers simultaneously possess a vigor that is appropriate when the towers are seen from afar, notably from Interstate 95, from the Delaware River, or from the bridges that connect Philadelphia to New Jersey.

Pei's complex – one of his earliest – was the centerpiece of the dramatic changes in Society Hill, which prior to the 1960s had deteriorated into slum-like conditions, although it remained a vital neighborhood for its residents, many of whom were African-American. Reflecting the fact that Philadelphia modernity was born amid a consciousness of history, much of the activism by elite Philadelphians after the Second World War revolved around the conditions of some of Center City's oldest districts. While the social engineering of the redevelopment of Society Hill has come increasingly into question as much as the creation of large housing projects, Philadelphia, and its architects and planners, is still enormously to be credited with the creative design and planning work in developing new solutions that wove new fabric respectfully into the existing city. Philadelphia's approach stands out significantly from the scorched earth redevelopment approach of other municipalities in the period.

Many of the less positive aspects of the Southwark project can also be said of the also-demolished Mill Creek Public Housing (built 1946-62, in various stages, on Fairmount Ave. between 44th and 46th), which gave Louis Kahn an important chance to emerge as an architect of large projects. While Mill Creek was important as a step in the history of modernism in the United States as a Kahn project, like the other public housing high-rise schemes of the period that have met the wrecking ball, it has been superseded not entirely successful as public housing. As with several other early housing projects in Philadelphia and throughout the country (Minoru Yamasaki's Pruitt-Igoe public housing in St. Louis, Missouri being perhaps the most infamous

example[19]), crime was exacerbated by the design through separate elevator cores and public (rather than private) balconies, among other factors. This also was a considerable problem with Stonorov's Schuylkill Falls. An additional footnote to the troubled history of Modernist public housing in the United States is the extensive alterations that were made in the late twentieth century to the Southwark project, precisely in order to attempt to correct the unsafe environment within the building. The changes were not enough ultimately to save the complex.

One of the most pleasant public housing projects built in Philadelphia during 1945-1980 was the West Park Public Housing by Harbeson, Hough, Livingston & Larson. The firm's partners included Roy Larson, who did much planning work with Ed Bacon. As noted above, "H2L2" was the successor firm to Paul Cret's, and many of its architects had studied with Cret at the University of Pennsylvania. Cret himself had been very active in planning as well as architecture. West Park was built in 1962 at 44th and Market streets, and in it were emphasized naturalistically landscaped green space, in a decade when designers of American public housing all too often forgot that such green space had been a key ingredient of German *Siedlungen* of the 1920s. Those *Siedlungen* had been among the most influential European essays in housing for individuals displaced by the First World War.[20]

Also outstanding in terms of the design of "group housing" of a different sort was Green Belt Knoll of 1957 by Montgomery & Bishop, located near Pennypack Woods (where in 1942 Howe, Stonorov, & Kahn, the partnership of George Howe with Stonorov and Kahn) had built the Pennypack Woods War Housing at Willits Road and Pennypack Street). Green Belt Knoll was in fact a contractor's development, yet is far higher in quality than most other housing from 1945-1980 in the Northeast, as this region of Philadelphia is known. The Northeast underwent rapid, often unthinking, development during these decades. It had previously been considered too remote, but the ascendancy of the automobile in postwar America changed all that. For the most part, Northeast Philadelphia of 1945-1980 is interesting more as a sociological study than as quality design. Among the significant aspects of Green Belt Knoll was that it was a racially integrated community at a time when integration was extremely rare in the United States. It is no coincidence that Montgomery & Bishop were engaged in this relatively utopian scheme – they also were to a great extent responsible for the visionary single-tax community established at Bryn Gweled in lower Bucks County in the same period. The work of Montgomery & Bishop, which can be found perhaps most notably concentrated in several houses on or near Apologen Road (see below), represents an important relationship between "regional modernism" and the Philadelphia School as alternatives to the International Style at midcentury: Robert Bishop (1908-1984), along with his partner Newcomb Montgomery (1907-1986), brought a sensitivity to materials and site and interest in grand social schemes gleaned from a fellowship with Frank Lloyd Wright at Taliesen, resulting in a group of relatively small-scale projects that engage at human scale and endure as strong designs.

In contrast to public housing schemes, Casa Fermi (later called Carriage House apartments) of 1962 by Stonorov & Haws at 13th and Lombard streets is a relatively small building. It is a notable and less austere work of the architects with some Expressionist touches: the inwardly notched and curved windows suggest Erich Mendelsohn's Einstein Tower of 1924

[19] See William J. R. Curtis, *Modern Architecture Since 1900* (Upper Saddle River, New Jersey: Prentice-Hall, 1996), 449.

[20] Extensively discussed in the literature on European Modern Movement architecture; for an introduction see Curtis, *Modern Architecture Since 1900*.

in Potsdam, Germany (as noted earlier, Stonorov knew European Modernism intimately). Casa Fermi managed to be up-to-date without descending into the severity that marked some housing from the 1950s and 1960s. Key to this, of course, was that Casa Fermi was built for a higher budget than Stonorov's public housing: its compact apartments were middle-class.

In the same year (1962) that they built the Southwark Public Housing, Stonorov & Haws built another rectangular tower that has stood the test of time better. This is Hopkinson House, located on Washington Square and targeted at roughly the same middle-class income level as Pei's Society Hill Towers. Hopkinson House's concrete facades, with windows and balconies that are given a vertical orientation, represents a middle point between Southwark and Society Hill Towers both in successfulness of the design and in sensitivity to the context (which here too is the brick rowhouses that have characterized southeastern Center City for two centuries). By now it has become a known part of the Square's southern edge, an echo to the square's north side which had long been defined by the early-twentieth-century, neocolonial bulk of the Curtis Publishing Company (now Curtis Center).

The Cherokee Village apartments of 1955 and 1959, also by Stonorov & Haws (with Robert Venturi working in the office as a draftsman), at the northern end of McCallum St. in Chestnut Hill, occupy a very different setting at the edge of the Wissahickon Valley of Fairmount Park. It is notable in that in this project, and for this Chestnut Hill client, the architects responded to architectural and historical context in a way they did not in other Philadelphia projects – using (shallowly) pitched roofs, and traditional Philadelphia brick along with concrete and plate glass. At the same time, Stonorov was still attempting to answer the same underlying challenge as those earlier developments: housing that is affordable, yet high-quality in its design, is one of the foremost leitmotifs of modern architecture, as that category is defined in the broadest sense. Philadelphia can boast of a cross section of solutions to this enduring challenge.

Cherokee Village Apartments, 1955, Stonorov & Haws, architects. Photograph by Emily T Cooperman.

In contrast to "group housing" designs of the postwar period, certain areas are notable for their concentrations of post-war residential projects in Philadelphia in addition to the remarkable juxtaposition of the Vanna Venturi and Esherick houses. It should first be noted in regard to the immediately preceding discussion that immediately adjacent to the Cherokee apartments on Davidson Road, Stonorov & Haws created a group of single houses for the same client. Other clusters of representative post-war design can also be found in Chestnut Hill, particularly around the Philadelphia Cricket Club's golf course on Glengarry and St. Andrew's roads. The Mrs. Thomas Raeburn (Dorothy Shipley) White House at 717 Glengarry by Mitchell/Guirgola stands out, but the work of regional modernists such as John Lane Evans (Philadelphia city architect 1961-1975) at 719 Glengarry is also notable. Clusters of representative mid-century design can also be found on Lynnebrook Lane and in the area of Valley View Road and Waterman Avenue in Chestnut Hill.

Arguably the most notable of these is the area in East Falls around Apalogen Road. A survey of the properties here demonstrates the variety that can be found in this period: Tulipwood, the Horace Fleisher House (built 1954 by Roth & Fleisher), at number 4030; the Charles Oller House (Frank Weise, 1955) at number 4101; the N. William Winkelman, Jr. House (Montgomery & Bishop, 1958) at number 4141; the George Starrels House (James Reid Thomson, 1958) at number 4165; and the Robert Brasler House (Joel Levinson, 1966) at number 4122. As noted above, the work of Montgomery & Bishop is exemplary of a sensitive approach to both materials, massing, and context. The other houses of the Apologen Road group reflect this quality of design as well.

In addition to the notable work by Philadelphia-based architects, the Apologen Road-area group includes an important example of the work of modern master Richard Neutra (1892-1970; in association with the local architect Thaddeus Longstreth, 1909-1997): the 1957 Kenneth Hasserick House at 3033 School House Lane. It should be considered part of the Apologen Road modernism district. A comparison of the Hasserick House's locally inflected materials and window proportions, to those of the Kaufmann House in the arid California desert, demonstrates Neutra's regionalism even while he worked within the framework of the International Style, as he had ever since the 1920s.

3. Building for the City of 2,000,000

As part of the plan to accommodate the city of 2,000,000 inhabitants, new smaller-scale, municipal buildings were built throughout the city, including libraries, firehouses, police stations, district health centers, and recreation centers as well as schools. While a number of examples could be noted, two relatively low-key yet significant buildings as representative of a type of the period are to be found at Broad and Morris Streets in South Philadelphia. They are the Broad-Morris Branch of the Free Library of Philadelphia, designed in 1965 by Nolen, Swinburne & Associates, and the District Health Center No. 2 of the same year by Norman Rice (1903-1985). Norman Rice, life-long friend of Louis Kahn, and fellow Central High School and University of Pennsylvania graduate, had a relatively small but distinctive practice that included a number of these smaller municipal commissions. These new public buildings of this period were intended as a local focal point in the "city of neighborhoods" (as Philadelphia has famously been characterized), and thus represents the continuation of the city's pre-1854 Consolidation of boroughs and townships within the former Philadelphia County.

Health Center No. 2 resulted from a municipal program of the 1950s and 1960s that was a beneficial outgrowth of the 1947 exhibit. The plan called for ten such centers in Philadelphia, each capable of serving the needs of a population of about 2,000,000 (the total population within city limits hovered around two million throughout the midcentury years). Another example is the Public Health Services Building of 1960 by Montgomery & Bishop, at Broad and Lombard Streets. Its first floor contains the clinical areas of District Health Center No. 1, while the second and third floors are offices and laboratories for the City's Department of Public Health. Montgomery & Bishop's design is exemplary for its inventive use of materials that are sturdy and easy to clean, yet colorful and engaging. Another notable project by the firm in this vein is the Lovett Memorial Library at 6945 Germantown Avenue in Mount Airy (1958-1959).

In addition to the Broad-Morris Branch mentioned above, the Mercantile Library built in Washington Square West as another branch of the Free Library possessed a spaciousness and airiness that were among the most laudable qualities of 1960s American Modernism. The Mercantile Library also had the virtue of fitting quietly among much older neighbors. Its architects, Martin, Stewart & Noble, represent the continuity of post-war and pre-war periods in the person of Sydney E. Martin (1883-1970), whose extraordinarily long career spanned from Academic Gothic buildings at Bryn Mawr College and Penn in the 1930s through to International Style buildings such as this in the 1960s.

The Police Administration Building of 1963, on Race St. between 7th and 8th, by Geddes Brecher Qualls Cunningham, is one of the important landmarks of the works of the Philadelphia School architects. It was also one of the first structures in the United States to be comprehensively prefabricated and then brought to the site, being made of over 2,000 precast pieces of concrete. The Geddes, Brecher firm, founded by Robert Geddes and his partners in 1960, was one of the major members of the Philadelphia School. Their now-demolished Pender Laboratories on the Penn campus of 1957-1960 was one of the major monuments of the then-emerging School and is a significant loss to that heritage. The Administration Building is also a significant work. The pieces framing the windows are simultaneously both the facade surface and the load-bearing elements of the building's distinctive curving walls. The system was designed by August Komendant, the engineer who played a key role in numerous projects of this era including Louis Kahn's Richards Medical Research and Goddard Buildings (1957-1965).

4. Design for Educational Institutions

Just as the city itself expanded and redeveloped during the postwar period, so did its educational institutions within the city, particularly its best-known universities. The University of Pennsylvania has long been the largest employer within Philadelphia's city limits, and it played an important role in the postwar years not only as the site of the city's most prominent architectural teaching program, but also as a client of architects. The university considerably expanded its campus during this period, growing based on a plan adopted in 1948 to engulf large portions of West Philadelphia adjacent to its campus.[21]

Similarly, Jefferson Medical College and Hospital (now Jefferson University) also expanded in Center City, building an architecturally significant building during this period: its

[21] On the full range of Penn's building program in the period, see, George E. Thomas and David B. Brownlee, *Building America's First University: An Historical and Architectural Guide to the University of Pennsylvania* (Philadelphia: Univ. of Pennsylvania Press, 2000). For the 1948 plan, see http://www.archives.upenn.edu/primdocs/uplan/trusteesmin25oct1948.pdf.

1954 Foerderer Pavilion (a hospital wing of 230 patient beds plus treatment rooms), by Vincent G. Kling & Associates. This building garnered national attention in the architectural press when it won the AIA Gold Medal for new construction. The Foerderer Pavilion, at the northeast corner of 10th and Walnut, is International Style adapted to an orange brick palette, with its long yet narrow slab, ribbon windows, and "floating" roofline. Horizontal planes cantilevered outward cast bold shadows on the sheer walls. The building has lost its original appearance at street level along 10th Street, where "Postmodernist" spheres and stripes were "updated" the building's pedestrian appeal when the interior was revamped in the 1990s (the lobby no longer resembles the original). Built at nearly the same time were Temple University's Medical Research Building (1963) and Student Teaching Building (1967), both by Nolen, Swinburne & Associates, on the west side of Broad St. above Ontario St. Roth & Fleisher designed the Ann Preston Building at Women's Medical College, later Medical College of Pennsylvania, now part of Drexel University. It was built in 1950 at the southwest corner of Henry Ave. and Queen Lane. Moore College of Art (a historic institute that was founded to bring instruction to women) moved after the war to the southwest corner of Logan Square, and has constructed a series of interconnected buildings there since 1959.

The most important institutional project of the period is without question Louis Kahn's Richards and Goddard Buildings. Now a National Historic Landmark and built in 1958-65 on Hamilton Walk at the University of Pennsylvania, it is the project that launched Kahn onto the international scene. The buildings quickly became iconic in American architecture as an alternative to the Miesian "less is more" stylistic mode, and were the first buildings for which Kahn was widely recognized for this articulation of function and volume into "servant" and "served" spaces. Their visually heavy masonry exemplifies Kahn's epoch-making departure from the thin steel-and-glass buildings of the International Style. In its place he achieved a new urban monumentality. Yet in the Richards Building he still retained the *pilotis* crucial to such masters as Le Corbusier or Mies van der Rohe. The Richards Building's combination of both precast, post-tensioned beams and poured-in-place concrete was developed by Komendant. At the same time its red-brown brick, alluding to the characteristic materials of the Penn campus, exemplifies the sensitivity to context for which Kahn became justly famous. The shapes are known to have been inspired by the tower houses of medieval Tuscan towns, and the sense of community interaction that they evoke is key to understanding Louis Kahn's architecture. For him, a building was a community of rooms, and was brought to life by the people in it, whose patterns of interaction (whether business or intellectual or family) was the very core of good architecture.

The fact that the Richards Building was at the cutting edge of the 1960s explosion of biomedical research (in which the University of Pennsylvania Medical Center and Philadelphia's pharmaceutical companies played a world-class role, and remain extraordinarily active today in such projects as the mapping of the human genome) only adds to its significance. In 1961, New York's Museum of Modern Art, which throughout the 20th century took very seriously is role as one of the world's most visible tastemakers in matters of design, termed Kahn's breakthrough here to be "Probably the most consequential building constructed in the United States since the war."

Richards and Goddard Buildings, University of Pennsylvania, 1958-1965, Louis I. Kahn, architect. Photograph by Emily T. Cooperman

As noted above, the University of Pennsylvania had a key role in Philadelphia postwar building and design. In addition to promoting Kahn's name for the Richards and Goddard Buildings project, Dean G. Holmes Perkins also had a substantial role in bringing important modern architects to Penn for campus commissions. Among the works by architects of national significance is the 1960 Hill House (originally Hill Hall), on Walnut Street between 33rd and 34th, by Eero Saarinen & Associates. One of Saarinen's last designs, it was constructed almost simultaneously with Kahn's Richards and Goddard Buildings, and responds to both the red brick context of Penn's Cope & Stewardson buildings and to program in a way that is analogous to, if not the same as Kahn's approach. The medieval fortress of Hill House reflects its original program as a dormitory for women only in a period when colleges and universities still maintained the role of *in loco parentis*. The building thus sequesters and protects its inhabitants. It can be reached by just a single public entrance, across a drawbridge spanning a moat. A high iron fence rings the building, permitting views onto the thick ivy vegetation but separating the citadel from the street. The exterior skin is clinker brick with notably misshapen pieces, giving a markedly rough texture and a deliberately archaic feel. On all four facades of the single big rectangle, relatively small windows for dorm rooms alternate between sharply vertical and strongly horizontal. They are seemingly jumbled yet follow a regular pattern. The most evocative view of the exterior is from the direction of Chestnut Street, with the building extending long and low at the edge of a field like an English manor house tucked into a slight hollow. Such historical allusions demonstrate that it is no coincidence that Robert Venturi worked for a time in Saarinen's firm.

Hill House contains one of the key midcentury interiors of Philadelphia: a soaring atrium capped with an airy openwork truss and suffused with gentle light from clerestories that peek above the building's dark clinker-brick facades (the contrast between the dark exterior and the pale atrium is intentional). Inside this space, what could have been overwhelming expanses of

straight wall are broken by the texture of wooden shutters that can be adjusted by the residents to increase or decrease the barrier between the huge central rectangle and a ring of "small group" spaces that overlook it from a higher floor. These in turn open toward the dormitory rooms which ring the perimeter and look outward toward the city. The interior heart ringed by more individualized rooms brings meaningfulness back to the concept of a "public space" – space that can be a shared experience for a crowd who later dissipate before coming back together on another shared occasion.

Less successful, though significant as a sizeable project by a nationally significant American firm, is Richard Neutra & Associates' Graduate Residence Halls (originally called Married Student Housing) at the University of Pennsylvania, on Chestnut Street between 36th and 37th, dating from the very last year of Neutra's long life, 1970, and completed by his son. Their sheer grey exterior and horizontal ribbons of window, as well as rather choppy interior dorm rooms, are sober in ways not unrelated to Oskar Stonorov's public housing project, Southwark Plaza (discussed above). The Penn Graduate Residence Halls can therefore be characterized as a lesser work by this Los Angeles architect whose world-famous masterpieces included the Kaufmann House of 1946 in Palm Springs, California.

Another project from the same period in the University of Pennsylvania area is International House at 3701 Chestnut Street of 1965-1970. This project, which brought together contemporary design ideas that foregrounded the use of architectural concrete that ranged from Kahn's and Le Corbusier's work, British Brutalist tends, and the designs of Paul Rudolph at Yale University, as well as others. International House marked the emergence of Bower and Fradley (succeeded by Bower Lewis Thrower in 1978), who won the competition for the project in 1965. Like many designers in the region in the postwar period, John Bower (b. 1930) emerged from Vincent Kling's firm with the skills to take on large-scale projects successfully.

Mitchell/Giurgola Associates made a substantial contribution to the University camps in the form of the academic wing of the University Museum (2360 South Street, 1968-71) and the adjacent Garage (1968) at 3200 South Street. Both of these are significant for their success in achieving a serious monumentality and dynamism while responding to the University and Philadelphia context in details and materials.

Finally, the Penn campus and vicinity should be noted as the locus for another important design: the 1978 Institute for Scientific Information building at 3501 Market St. in Philadelphia by Venturi & Rauch is a salient example of one of the most important and best-known aspects of Venturi and Scott Brown's theory of "ducks" vs. "decorated sheds," concepts made world-famous in *Learning from Las Vegas*, written in 1972 with Steven Izenour. The ISI is an important example of the "shed," which was characterized by the architects as "conventional shelter that *applies* symbols." This building housed (until very recently) an organization dedicated to the dissemination of scientific and most especially biomedical information, which is crucial to Philadelphia economically (Philadelphia is home to multiple medical schools and pharmaceutical companies and has a 250-year history of international prominence in medicine and biomedical research). The small squares that, like bits of digitized information, form the decoration of the façade, are concentrated at its center, and seem to flow outward, just as scientific information and data points flow outward from this building. Underneath this ground-breaking decoration, the building is a relatively practical rectangle prism with modernist ribbon windows.

In parallel to the redevelopment and expansion that led to Philadelphia's public housing projects discussed above, a program to rebuild Philadelphia's schools, initiated under the much admired Mayor Richardson Dilworth (to whom should go some of the credit for Philadelphia's postwar renaissance), resulted in several notable projects. Among these are Mitchell/Giurgola Associates' William Penn High School, built in 1968-74 on Broad St. between Master and Jefferson. The partnership of Romaldo Giurgola, one of the illustrious members of Perkins's faculty at Penn, and Ehrman B. Mitchell (1924-2005) was formed in 1958, and the firm soon rose to become one of the most important in the region and beyond. Less successful as a design but also notable is the Clarence Pickett Middle School of 1968, on Wayne Ave. between Chelten and Rittenhouse Streets, by Geddes Brecher Qualls Cunningham. Much in the same manner as public housing projects of the period fell into disrepute, the intended image of stability and substance for adolescents resulted here in a fortress-like building that has been seen as problematic. In this way, however, it is important that the Clarence Pickett School is representative of a chapter in the history of educational architecture in the U.S. As in the arena of public housing, the design challenges were seen as severe: the architect was mandated to both maintain security and durability (schools see hard use day after day) yet not let the design suggest a prison to its inmates.

5. Society Hill and Architectural Design around Independence Mall

As noted above, Edmund Bacon's planning approach to the eastern end of downtown Philadelphia was one of the key developments in postwar Philadelphia. The creation of Independence Mall and the new Independence National Historical Park provided both a grand new setting for Independence Hall, Carpenter's Hall, and the First and Second Banks of the United States and swept away the dense nineteenth century city surrounding these newly monumentalized buildings. What is now Independence Mall had been occupied till the 1960s by commercial buildings and houses and was opened up under Bacon's direction following the vision of Roy F. Larson. The City Planning Commission had in mind the advent of the Bicentennial year, which would draw huge crowds. Another impetus to the revival of eastern Center City was the creation of Independence National Historical Park, which brought federal funding to the area as well as greater national publicity, increasing the flow of tourists.

An example of simply re-erecting a vanished past in this neighborhood is the building occupied by the American Philosophical Society Library. This organization was nationally important to intellectual life during the midcentury, but the building is an exception in Philadelphia's architecture reconstructed in 1954 at 127 S. 5th St. by Martin, Stewart & Noble looked back to history and not forward toward Philadelphia's future. This reproduction of the facade of Dr. William Thornton's long-gone Library Company of Philadelphia built in 1789 is representative of the attitude to historic form in Independence Mall at the time of its creation in 1943.

To the east, in the residential area of Society Hill, the African American neighborhood was swept away by redevelopment and renovation of surviving eighteenth and early nineteenth-century buildings. There, in addition to Pei's towers already noted, new residential construction at smaller scale was woven into existing fabric, and generally responding to the existing historic buildings with sensitivity and resulting in a visually engaging neighborhood of layered yet generally cohesive design. One of the midcentury's notable designs, the Eli Zebooker House and Office of 1968, by Mitchell/Giurgola Associates, at 110-112 Delancey Street, is ahistorical yet respectful of its eighteenth-century neighborhood. The same can also be said for

Mitchell/Giurgola's Franklin Roberts House one block down at 230 Delancey Street, also of 1968. This coexistence of new and old has spread southward in the ensuing decades into Queen Village (Southwark) and down Passyunk Avenue.

Innovative modernist design in connection with historic sites is particularly notable in two examples, one of which no longer survives. Demolished is the rigorously Modernist Liberty Bell Pavilion by Mitchell/Giurgola Associates, formerly on Independence Mall south of Market Street. It was constructed in 1974 in anticipation of the Bicentennial Celebration. Equally important and still extant is Franklin Court, created in the same year by Venturi & Rauch. Benjamin Franklin's long-vanished house is evocatively and inventively suggested in outline, a more intelligent solution on this cramped site than a literal reconstruction would have been.

The redevelopment area around the new Mall also became the locus for a group of new buildings. The Bicentennial of 1976 further reinforced redevelopment and new construction in the area. Along the new mall, at 100 North 6th St., the Federal Reserve Bank, 100 North 6th Street, was constructed in 1973-76 (just in time for Bicentennial observers) to designs by Ewing Cole Erdman Rizzio Cherry Parsky, a firm that followed in the footsteps of Kling's practice in gaining large-scale projects beginning in this period. The Federal Reserve had a tradition of building high-budget, "landmark" structures in the approximately one dozen cities in the United States that are home to one of the Federal Reserve Banks (these cities were chosen long ago in accord with regional population distribution across the U.S.). Each of these Federal Reserve buildings is also meant to look secure, since they do handle gigantic amounts of financial paper in their vaults. Boston's, for example, is a gleaming and forbidding steel-clad tower along the waterfront. Philadelphia's 1973-76 low-rise is similarly an example of this expression of purpose.

Considering that the budget was extremely generous and the location fronting Independence Mall was high-profile, Philadelphia's Federal Reserve Bank was not well received by the national architectural press that found it too heavy-handed. In addition to the expression of purpose, machine-age Le Corbusier is the clear reference here, but at the time of its construction, when social consciousness was sweeping the nation, and Philadelphia's homeless were clearly visible on blocks to the north, this building sent a message about government to an unappreciative audience.

In contrast, one of the best modernist designs in Philadelphia from the period 1945-80 stands to the south: the headquarters of Rohm and Haas, built in 1964 and designed by Pietro Belluschi, who was then dean of the highly regarded School of Architecture at Massachusetts Institute of Technology. Its ahistorical forms make no reference to eighteenth-century Philadelphia, yet its openwork patterns cast a welcoming face toward strangers who troop past on their way to the Liberty Bell. Rohm and Haas is a large building yet carries itself with grace – the very opposite of the Federal Reserve Bank. The building has the added significance of being the flagship of one of the Delaware Valley's giant pharmaceutical companies. Philadelphia has been a leader in pharmaceuticals ever since the mid-twentieth century. This is almost the only industry (aside from medical care, higher education, and classical music) in which 21st-century Philadelphia retains its former world-class glory.

But we must remember that Philadelphia is also remarkable, in fact is on a par with any other city in the Western Hemisphere, in another arena: its 300-year survey of still-extant architecture and city planning, of which 1945-1980 is a very important chapter.

6. Market Street East and The Gallery

To counter the pull of suburban malls and retain vitality in downtown Philadelphia, Edmund Bacon proposed the Galleria (Gallery) for Market Street between 9th and 10th. The concept went through many revisions, and it was finally constructed in two phases, the first in 1975 by Bower & Fradley and the second by Cope Linder. It was a large and very visible piece of urban renewal that was intended to link the area around City Hall and Reading Terminal, to the Independence Mall that was being opened up. In retrospect, the Gallery is has suffered from being too much like its suburban counterparts, and therefore not engaging the outdoor pedestrian and the street. It was a key step in reviving economic growth along Market Street (Philadelphia's traditional commercial and retail core), and it was serviceable as a mall design. Its main significance is as a reflection of Philadelphia's importance as an important generator of American planning ideas after the Second World War, and in its role in reshaping the public's experience of East Market Street. Ideas that were nursed under Bacon spread to cities of all sizes across the United States. Although some of them were attacked by critics such as Jane Jacobs, they are important as parts of a broader discussion.

Almost across the street stands a related piece of the rebirth of Market Street East. 1234 Market Street, a 20-story office tower built in 1972, is also by Bower & Fradley. The major investor in 1234 Market Street was the same Philadelphia Savings Fund Society that built the adjacent Howe & Lescaze tower which, before its demise, was truly a tradition in the Quaker city, with roots in the early nineteenth century. The 1234 Market Street building sported its own architecture distinct from the PSFS tower; the new structure was marked by a multilevel lobby of blocky stone-faced masses, relieved by plentiful sunlight which filtered down through two levels of subterranean concourse. There the building connected directly to the Market East subway and rail links, with a pedestrian flow underneath Market Street that echoed what the same planners (hired by Ed Bacon) had achieved in Penn Center, on the other side of City Hall. These Market East concourses would ultimately flow into the lower levels of the Gallery. The last big stroke of the plan, finally accomplished with federal funds, was a tunnel joining the commuter rail lines coming into the Reading Terminal on Market Street East to the Suburban Station at Penn Center, whence the lines flowed to 30th Street Station and points west. This did achieve its prime objective: increasing the flow of people into Philadelphia to shop, dine, and experience the city's entertainment and cultural attractions.

7. Mitchell/Giurgola

In addition to those buildings designed by Mitchell/Giurgola already mentioned, a number of other projects by the firm merit discussion under the rubric of this essay. One of the most prominent and significant modernist designs in Philadelphia in mid-century is the United Fund (United Way) Building of 1968-71, at the intersection of Cherry Street and the Benjamin Franklin Parkway. To prevent tall buildings from interrupting views along the Benjamin Franklin Parkway, the city had imposed height limits in this neighborhood by the 1930s. In addition, the building site was trapezoidal, resulting from the diagonal Parkway's intersection with the grid of Center City. The seven-story structure is a sophisticated and nationally influential response to these site limitations and the classicizing architecture on Logan Circle in its breaking up of the mass into lights and darks, its proportions, scale, and overall composition.

Unlike many buildings of midcentury which had uniform exteriors, each elevation of the United Way Building responds to the unique conditions that it faces. Using distinctly different,

yet harmonized, facades became one of the hallmarks of Mitchell/Giurgola. Here the north side is a curtain wall of gray-tinted glass that allows maximum light into office spaces. The west wall is shielded from the sun by horizontal concrete sunscreens, another favorite device of Mitchell/Giurgola Associates which was an updated interpretation of the concrete *brise-soleil* pioneered by the Swiss-French architect Le Corbusier. The south wall, of structural concrete, has deeply recessed windows that block the sunlight but permit views of Logan Circle. Mitchell Giurgola demonstrated their subtle mastery by avoiding any visual quarrel between their thoroughly Modernist building and the grandly ornate, mid-nineteenth-century brownstone Cathedral of Saints Peter and Paul on an adjacent parcel.

The Penn Mutual Building of 1970 by the same firm employs something of the same careful response to site – setting back from Independence Square (to the south of Independence Hall) in order to leave room for the facade—that was preserved from John Haviland's Egyptian Revival building for the Pennsylvania Fire Insurance Company, which had stood along Walnut Street since 1838. Giurgola's tower is a refined and polished form of the Brutalism that swept architecture of the 1960s and early 1970s as an after-effect of Le Corbusier's late works in *béton brut* (exposed concrete). Such concrete architecture tends toward boldness and power and rarely has the subtlety of the work of Mitchell/Giurgola. Like I. M. Pei in the Society Hill Towers, Giurgola chose for the east facade a repeating module of window frames that is vertically oriented, not horizontally, and is proportioned in a way that is appropriate both to the scale of the building and to its historic context. The result is a fabric of rectangular openings that subtly refer to those of eighteenth- and early-nineteenth-century Philadelphia architecture, and also to those of early-twentieth-century Neocolonial, for example the Curtis Building diagonally across the intersection at Walnut Street. For the north facade, just as in their INA Tower discussed below, Mitchell/Giurgola chose an almost fully glazed facade to let in as much light as one can get from the north. The Penn Mutual Tower is assertive enough to hold its own in a neighborhood full of interesting architecture from many periods. It finds a place in here yet sharply abjures any tendency toward pastiche.

The INA Tower, 1975, at 17th and Arch Streets, repeats many of the firm's influential motifs, but this time in a simple vertical box in a sleek skin of pale-green enameled aluminum and tinted glass. As an addition to Stewardson & Page's 1925 building for the Insurance Company of North America (a neo-Georgian midrise of brick with white trim at a highly visible corner along the Benjamin Franklin Parkway, built for a company that dated all the way back to 1792), the addition by Mitchell/Giurgola is creative, welcoming, and elegant. Its pale colors and the transparency of its glass north wall help to lighten the building's bulk in a fairly dense area of Center City and thus both asserts itself and does not overpower its neighbors. Its frankly machine-like midsection is a functionalist expression of where the heating/cooling systems are located, yet this stripe is carefully matched to the thick white stripe of cornice on the Stewardson & Page building. Here again, contextuality is a key hallmark of the Philadelphia School.

8. The Decorated Shed

To truly understand the period 1945-80, the term "Postmodern" should not be overused to tag buildings near the end of this time span; instead, dates and specific qualities make better sense of design in the built environment. Cultural critics and historians on both sides of the Atlantic Ocean have pointed out that "post"-modernism is a problematic label that was

transferred to architecture from literary criticism and sociology.[22] Robert Venturi and Denise Scott Brown still define themselves today as "Modernists" when they discuss their architecture in public. They view their works and their influence as part of the continuing story of Modern architecture. Indeed it is undeniable that they continue developments that can be seen in Kahn (who is always classified as a late Modernist) and even in late Le Corbusier (the quintessential High Modernist). For this reason, the "Philadelphia School" label is convenient, as it recognizes the important connections between Kahn, the late followers of Paul Cret, Giurgola, and Venturi Scott Brown. VSBA's allusiveness is neither lower nor higher in artistic quality and historic significance than the achievements of Giurgola or Kahn; it is simply a slightly different, though related, direction. Philadelphia is fortunate to have significant examples of both "sides" of the Philadelphia School.

An idea that is crucial to understanding the work of Venturi Scott Brown and their followers is that some of the world's best architecture is simultaneously both highbrow and populist. This idea too had lurked behind the Modern Movement of the 1920s (even the PSFS Building of 1930), and behind the very concept of modernity as it was understood beginning in the nineteenth century.[23] But at its best the Philadelphia School achieved a profound balancing act between humble and sophisticated in ways not explored by earlier Modern masters. Such balance, it need hardly be said, is particularly appropriate in the city publicly identified with Quaker culture (however debatable this simplistic version of the rich heritage of the city may be).

An example that reflects both the philosophy of the "decorated shed" and the needs of its program is the Mummers Museum, 1975-76, by Ueland & Junker, at 2d St. and Washington Ave., acts as a sign of billboard dimensions placed along the very wide Washington Avenue, just like the advertising that can be spotted from cars along the Las Vegas strip. Such car culture had famously been a starting point for Venturi and Scott Brown's landmark book *Learning from Las Vegas.* The Mummers Museum is a South Philadelphia "headquarters" for a long-standing and well-known Philadelphia tradition. Bright colors and oversized graphics are brilliantly appropriate here as a reflection of the strong colors and flashing sequins of the New Years' Day strutters on Broad Street. In the Mummers Museum, architecture dances with history in a colorful and quite Philadelphian way, by means of waves built into the facade that simultaneously echo the big "wings" of Mummers' costumes and also the zigzag ornament of 1930s American Art Deco. Art Deco, it must be remembered, was a 1930s architectural trend that, like "Postmodern," celebrated pop culture in a sophisticated way. As Venturi had pointed out back in 1966 in *Complexity and Contradiction,* architecture as sign-symbol is an idea with a long history in Europe, hundreds of years before the twentieth century.

In addition to the Institute for Scientific Research, already noted, a salient example of this approach is, not surprisingly, another Philadelphia venture by Venturi & Rauch was their series of projects for the Basco company. These too apply a fascination with signage to decorate

[22] See for example K. Michael Hays ed., *Architecture Theory Since 1968* (Cambridge: MIT Press, 1998).
[23] "Being modern," it should not be forgotten, was set forth as a criterion in the arts in the 1840s in Paris, in Charles Baudelaire's essays in criticism. Thus "modern-ness" is not the province of the 1920s, nor of the twentieth century, but rather of the entire era from the mid-nineteenth century to the beginning of the twenty-first. The Modern Movement (those two words together, with capital letters) is an architectural category that generally refers to European-influenced buildings from the 1920s through the 1950s. See for ex. Harry Francis Mallgrave, *Modern Architectural Theory* (Cambridge: Cambridge Univ. Press, 2005).

commercial warehouses with a "lowbrow" audience (Basco was an inexpensive home appliance retailer). The BASCO Building at Roosevelt Boulevard and Woodhaven Road (an extensive 1977 remodeling of an earlier building) is a good example.

It is an aesthetic that lends itself particularly well to public buildings for local neighborhoods (as mentioned above, Philadelphia has long born the sobriquet "the city of neighborhoods"), and the work of Friday Architects in various such projects exemplify this in a number of locations in the city. One of the best examples of their work is the Old Pine Street Community Center, 1974, at 4th and Lombard Streets, is a superb application of Venturi and Scott Brown's concept of the decorated shed. This firm was formed by Donald Matzkin (b. 1940) and Peter Aarfa (b. 1935) in 1968. The straightforward plan, boxy in order to be cost-effective, is eminently appropriate for such a program. Yet this building is engaging in scale, shape, and materials, which is equally crucial in a community center, while not calling undue attention to itself. It inflects itself to its historic Society Hill neighbors with its white trim and varied brickwork (running bond alternating with reverse Flemish bond), alluding to the patterned brickwork visible in eighteenth-century houses down the street. The windows are modern in their simplicity, yet their panes harmonize with Georgian ones. Glass brick, a 1930s Moderne touch, signals the entrance.

The same glass block was used more exuberantly in the Grays Ferry Neighborhood Community Center of 1978, also by Friday Architects, at 2730 Dickinson St. It consists of extensive alterations and additions to a Methodist church. Friday Architects essentially wrapped the 1920s Tudor-style church with curves of glass block and stainless steel, in an homage to 1930s Art Deco that has been humorously dubbed "Main Street moderne."

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