

WITH RHETORIC: THE NEW YORK APARTMENT HOUSE

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APARTMENT-HOUSE design is at a low point in its history. Critiques of modernism's housing experiments by sociologists such as Jane Jacobs, Herbert Gans, and Oscar Newman long ago helped us to see the antisocial nature of those designs, but a survey of contemporary American housing would reveal that the majority of architects continue to design apartment houses that are in the mainstream of the modernist tradition. Failures of the past are freely acknowledged, yet the feeling persists that if architects would simply combine new solutions—defensible space, a mix of low-rise and high-rise buildings, and the like—with modernist typologies, the profession will finally get it right. Even after more than fifty years of experimentation, however, the result all too often is more of the same, as, for example, at Ralph Rapson's Cedar Riverside housing in Minneapolis. Picked by the American Institute of Architects in 1975 as a model housing project and Gold Medal winner, less than one year later Cedar Riverside was declared by a federal judge to be "socially destructive."¹ The landmark decision, which ordered HUD to stop any further funding of the project, may some day make Cedar Riverside as famous as Pruitt-Igoe, an AIA honor-award winner in 1951.

Thus, although the shortcomings of modern housing are evident, the question of how to overcome them remains. Unquestionably, part of the problem is a lack of historical perspective. In comparison with the extensive documentation and critical discussion that accompanied the parallel development of the office building, the study of the apartment house has been neglected by modernist historians and theorists. Office- and industrial-building typologies were preferred because they demonstrated the clearest and most polemical use of what Sigfried Giedion called the "constituent facts" of the industrial age—the new technologies, the increased mechanization and accelerated pace of life, and so on. Moreover, because the pre-modernist architects did not revel in the "constituent facts" but continued to use the traditional languages of architecture in their housing, modernist polemic has insisted that those architects were ignorant or even contemptuous of the urgent social and economic problems that are inextricably linked in our time with the issue of housing, and that their apartment-house forms were irrelevant to modern needs.

This persistent myth has been fostered by a passion for a new formal language, not by the facts. Before the presumed reforms of modernism, some of the most eminent American practitioners of the academic styles loosely labeled "Beaux-Arts," such as Ernest Flagg, I. N. Phelps Stokes, and Clarence Stein, were intimately involved in the fight for housing reform and produced designs for multiple dwellings that pointed the way toward the legislation that established those reforms in daily practice. The classical or historical dress that they used on these dwellings added scale and associational meaning to carefully planned building types; they would have considered most modernist buildings unfinished, still awaiting the crowning touches that give life and character to a building and often distinguish the good architect from the bad.

The confusion between style and ideology that has colored much of our recent architectural history tends to cloud all discussions of housing. The origin of this confusion, which can be traced to the influence of Ruskin and Morris on the pioneers of the modern movement, is by now well known.²

As this high-minded morality developed into the artistic puritanism that has characterized many of the modernist styles of the past fifty years, the modern movement took on the aspect of a purgation and a crusade. From small scale to large, from ornament to building type, those architectural elements most intimately involved with traditional values were banished. New churches looked like factories, apartment houses looked like office buildings, and architecture lost much of its richness and became increasingly incomprehensible to its users. As we begin to recover from this puritan revolution, it is appropriate to look back and see how things were before architecture's traditional discourse—the conversation between examples of the past and the pressures of the current situation—was so peremptorily interrupted.

This brief essay, then, is in line with the current revisionist interest in the apartment house and other traditional building typologies. It is also an initial attempt to redress the balance of the rich but generally overlooked history of architecture and urbanism in New York City. Because of the essay's necessarily short length, I have limited myself as much as possible to two traditions found in the New York apartment house that offer us valuable lessons today. One is a dwelling-unit type, the duplex apartment. The other is a building type for organizing the units, the courtyard apartment house.

The Development of the Apartment House

The apartment house is not a New York invention. The Romans built multiple dwellings, and that tradition was carried on in Italy during the Renaissance, and later, in the eighteenth century, in workers' housing built in northern Europe, especially Scotland. In the first half of the nineteenth century, the tradition of multiple dwellings for workers was combined with certain utopian proposals, for example Charles Fourier's *phalansteries*, and was strengthened during the Second Empire by Napoleon III, who encouraged "collective habitation" for the working classes as part of Baron Haussmann's reconstruction of Paris.³ By the end of the Second Empire, the French had brought a high degree of refinement to apartment design, establishing two building types. One, the courtyard apartment house, was based on a socially cooperative idea of collective habitation, with the apartments forming a barrier around a courtyard, which thereby became a private realm reserved for the tenants exclusively. The second type, the tenement, was collective but not cooperative in its implications; in it, the multiple nature of the dwelling was deemphasized in favor of its public aspects, as represented in the street facades and the circulation spaces—lobbies, stair halls, and corridors—which were often quite grand and were thought of as extensions of the street. Contact between the residents of such buildings was minimized; families in the early Parisian tenements were from mixed social strata, with the richest tenants living on the second floor, *le bel etage*, the more bourgeois on the third floor, and so on up the flights, but down the social ladder, to the servants living under the roof.

Because the origins of the courtyard apartment house lie at least in part in the proposals of social reformers for working-class utopias, in which the communal activities in the courts would further the cause of class solidarity, it might be argued that there was a class difference between



Fig. 1. Astor Court. Charles Platt. 1916. View from northwest.



Fig. 3. The Century. Irwin S. Chantn and Jacques Delamarre. 1931. View from Central Park.

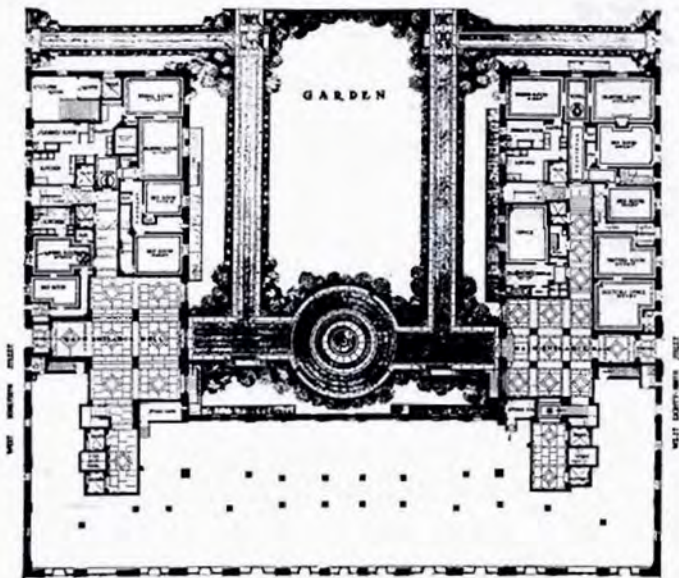


Fig. 2. Astor Court. Charles Platt. 1916. Plan of ground floor.



Fig. 4. The Century. Irwin S. Chantn and Jacques Delamarre. 1931. Plan of one-bedroom duplex apartment.



Fig. 5. *Stuyvesant Apartments. Richard Morris Hunt. 1869. View.*

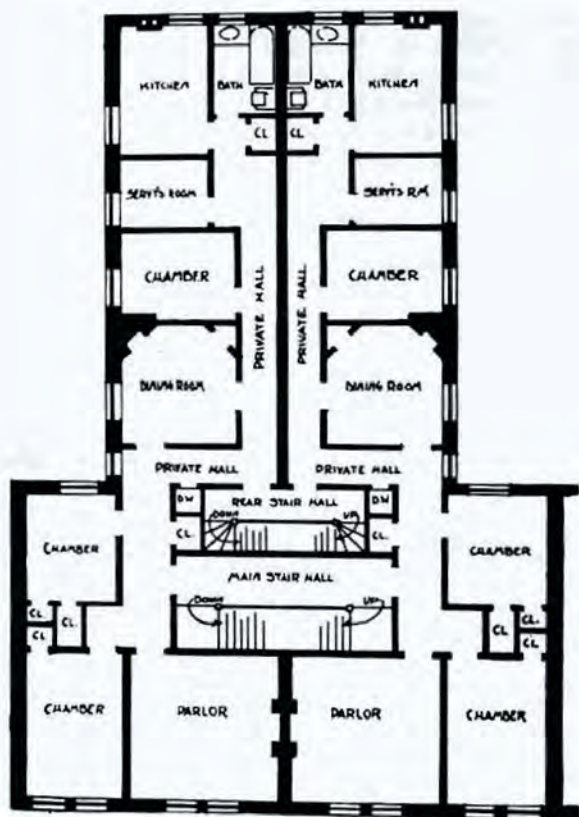


Fig. 6. *Stuyvesant Apartments. Richard Morris Hunt. 1869. Plan of typical floor.*

courtyard apartment buildings and tenements. In practice, however, two factors minimized this difference in Paris and the other European cities where the apartment-house type established itself in advance of New York. First, speculative developers built courtyard apartments and, just as in the tenements, rented the upper floors for less money than the lower floors. Second, the invention of the elevator subsequently made the higher floors as desirable as the lower floors, so that by the late nineteenth century both types of apartment houses had become single-class dwellings: for the upper classes, there were elevators, while the poor continued to make do with walk-ups.

The first multiple dwellings in New York were working-class tenements, a type that began to appear in the 1830s. The first tenement designed by an architect was also, not surprisingly, the first intended to attract an upper-class clientele: Richard Morris Hunt's *Stuyvesant Apartments* (Figs. 5-6), built in 1869 at 142 East 18th Street.⁴ In its essential aspects—its bulk, its dense site coverage, and its poorly lit, ill-ventilated rooms—the *Stuyvesant* marked no advance over the working-class tenements of its day. But the spaciousness of its apartments, with only two per floor, combined with the prestige of a prominent sponsor and a notable designer—the first American to attend the *Ecole des Beaux-Arts*—enabled the *Stuyvesant* to attract and hold an affluent tenantry. It initiated a new category of tenement, first described as a "French flat," and later as an "apartment house"; although the buildings were inferior to contemporary French tenements, the terms were devised to make clear the distinction necessary to give them the social cachet needed if they were to compete successfully with the brownstone—the preferred residence of New Yorkers in the second half of the nineteenth century. Parisian apartments, on the other hand, were the grandest in the world, and it was not uncommon for Parisians to feel they were enhancing their status by moving out of private houses into apartments.⁵ As more architects followed Hunt to the *Ecole des Beaux-Arts*, French architecture became increasingly well known and popular on this side of the Atlantic; a number of prominent turn-of-the-century articles and books documented the history of the French apartment house for American architects.⁶

One problem with French flats was that living on one floor was regarded with considerable suspicion by middle-class New York families in the 1870s and 1880s (the *Stuyvesant Apartments* had been intended for bachelors). Well known, but worth repeating, is Edith Wharton's description of the shocking situation that arose when, in the 1870s, an old lady whose

burden of . . . flesh had long since made it impossible for her to go up and down stairs . . . established herself (in flagrant violation of all the New York proprieties) on the ground floor of her house; so that as you sat in her sitting room . . . you caught . . . the unexpected vista of a bedroom. . . .

Her visitors were startled and fascinated by the foreignness of this arrangement, which recalled scenes in French fiction, and architectural incentives to immorality such as the simple American had never dreamed of. That was how women with lovers lived in the wicked old societies, in apartments with all the rooms on one floor, and all the indecent propinquities that their novels described.⁷

The introduction of the duplex apartment, then, may be seen as an attempt to combine the conveniences and economic advantages of collective habitation with a type of dwelling unit in which the "indecent propinquities" could be shared *upstairs*, just as they would be in a house, thereby making the apartments more competitive with the brown-

stone row houses that were still very much the standard of respectability. The duplex was introduced to New York by Hubert, Pirsson & Company (later called Hubert, Pirsson & Hoddick), an innovative firm combining the roles of architects and developers in their cooperatively financed and maintained apartment houses called Hubert Home Clubs.⁸ The first of these, built in 1883 at 121 Madison Avenue, consisted of stacked duplex apartments, with two separate elevator cores serving five apartments per floor.⁹ A more interesting early duplex building, because of its more intricate cross section, was the Dalhousie (Fig. 7), by an architect whose name has been lost.¹⁰ Built in 1884 at 40–48 West 59th Street, it had alternating duplex and simplex apartments, so that the duplexes had living and dining rooms with 15½-foot ceilings facing Central Park, and bedrooms, baths, and kitchens grouped at the rear under 10-foot ceilings.

Hubert wrote that the French apartment house was the source of the duplex apartment in New York,¹¹ but it is likely that its inspiration can also be traced to Hunt's adaptation of Parisian precedent for his Studio Building, 51–55 West 10th Street, which provided some cooking and sleeping facilities as well as double-height work spaces.¹²

Another possible source of inspiration was Richard Norman Shaw's Albert Hall Mansions in London, 1879–86, whose success in a market similar to that of New York undoubtedly gave the duplex the kind of endorsement that could only help in the effort to acquire for it the necessary social status.¹³ As Andrew Saint suggests, Shaw probably introduced the duplex at Albert Hall Mansions for precisely the same reason that made it so appealing in New York: the simplex flat was associated in the public mind with housing for the poor.¹⁴ We know that Shaw made a trip to Paris to study French apartment houses before he designed Albert Hall Mansions,¹⁵ and though there is no evidence of a similar trip by Hubert, he was French by birth and education.

No matter how the duplex apartment was introduced to New York, it was the financial failure of the Hubert Home Clubs that temporarily killed the type. Duplexes flourished again, however, in the apartment house building boom that developed around 1900.¹⁶ At first, they were built for artists to work and live in; their glory was a double-height "studio" space that functioned as both atelier and living room. But later, as the *Architectural Review* (Boston) pointed out:

So many other people have taken to studio apartments that, it is safe to say, the artists are in the minority in some buildings at least. Probably in the last analysis the motive is in most cases the same that has brought the big living room into favor in moderate size houses—a desire for simplicity and breadth, for at least one room big enough so that one does not feel restricted.¹⁷

Among the duplex or studio apartments intended for artists that were built during this boom, which continued more or less unabated until cut off by our entry into the First World War, were the Bryant Park Studios, 80 West 40th Street, designed around 1900 by Charles Rich;¹⁸ the Gainsborough Studio (Fig. 70) at 222 Central Park South, designed by Charles Buckham and completed in 1908;¹⁹ the Studio Building, 44 West 77th Street, designed by Harde and Short in 1909, and notable for its exceptionally lofty studios supplemented by living rooms;²⁰ and the last—and grandest—of the sequence, George Pollard's Hotel des Artistes at 1 West 67th Street, completed in 1916.²¹ In addition to a wide variety of apartment-unit plans, the Hotel des Artistes originally provided such amenities as a communal kitchen, a ballroom, and a theater, as well as squash courts and a swimming pool.

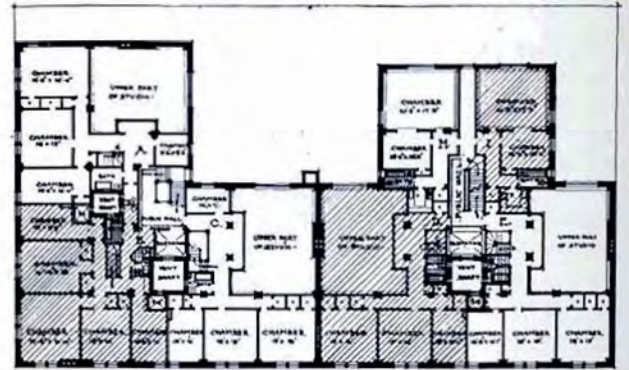
Duplex apartments intended for conventional family life



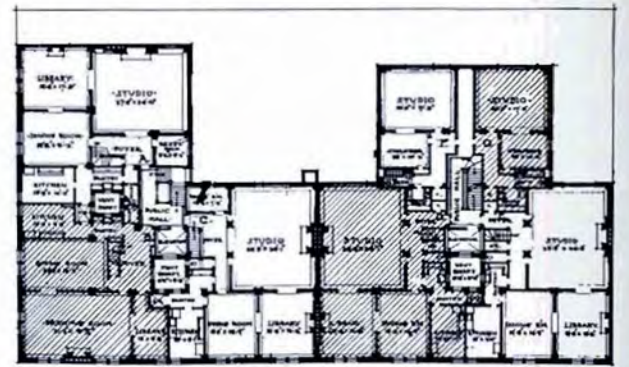
Fig. 7. Dalhousie. 1884. Elevation.

include 471 Park Avenue, also designed by Buckham and completed in 1908,²² and what is surely one of the most elegant apartment houses of any time, the duplex cooperative at 131–135 East 66th Street (Figs. 8–11), designed by Charles Platt in 1908.²³

The duplex-apartment type persisted into the 1920s, but not only were there fewer examples than in the two decades preceding the war, but also those built were less distinguished in their interior planning (often there were no double-height studio spaces, though ceilings were sometimes higher in the living room than in the rest of the apartment); their exterior expression, too, was far less exuberant than in the prewar duplexes. Examples include John Sloan and Adolph Nast's 898 Park Avenue of 1924,²⁴ Caughey and Evans's 71 East 77th Street of around 1928,²⁵ and 1020 Fifth Avenue, a particularly distinguished exception to this postwar crop.²⁶ Designed by Warren & Wetmore in 1925, its cross-sectional organization offers a dazzling variety of apartments, each of which enjoys an extra-high-ceilinged living room facing Central Park. Also interesting is the extension G. B. Beaumont added in 1928 to 31 East 79th Street.²⁷ The original building of 1925 has only one apartment per floor, well-detailed but less novel than the triplexes found in the extension, which replicate four times over the plan of the brownstone previously on the site. Presumably this was meant to provide an apartment for the brownstone's former owner, in the manner of Mrs. E. F. Hutton's (Marjorie Meriweather Post's) fifty-four-room triplex at 1107 Fifth Avenue.²⁸ That apartment was probably the most luxurious built until Stewart Mott's at the top of the Galleria, 119 East 57th Street, in 1975.²⁹ Certainly the architects of 1107 Fifth Avenue, Rouse and Goldstone, one of the most prolific apartment house firms in the city, never came close to equaling it again. Duplex apartments were



SIXTY SIXTH STREET STUDIO BUILDING



also included throughout the period in buildings predominantly composed of flats. Late examples that use this parti are River House (discussed below) and 740 Park Avenue.

The duplex was one means of making the tenement more amenable for the well-to-do; but the poor, and many others, had to rely on other reforms to ameliorate the worst limitations of the tenement-house type as it was built in New York. The Stuyvesant had established not only a tradition of fashionable, luxurious tenements but had also paved the way for numerous moderately priced tenements, so that the tenement house became the basic urban dwelling unit for all classes between 1870 and 1930. Whether built on Fifth or Park avenues, on the Upper West Side, in the Bronx or Brooklyn, the tenement houses varied enormously in terms of desirability of location, sizes of apartments and rooms, luxury of appointments, and amount of associated services offered, but were all nonetheless characterized by the same problems of density, bulk, and high land coverage that inherently characterized the Stuyvesant.

The tenement-house type was first codified by the guidelines established in the Tenement House Law of 1867, modified in 1879 to ensure the reforms introduced in what came to be known as the "dumbbell" type, and again by the so-called New Law of 1901. It was not until the passage of the Multiple Dwelling Law of 1929 that the tenement-house era ended.

The Courtyard Apartment House

While there was comparatively little apartment-house construction for the middle and upper classes in the 1880s and 1890s, owing as much to the instability of the national economy as to the failure of the new typology to gain a foothold of acceptance, working-class tenements continued to proliferate, often bringing slum conditions with them. By the late 1870s, the limitations of the narrow-lot tenement had become plainly evident, and the movement for the reform of this building type became interwoven with a more general movement for the amelioration of a host of social conditions that plagued the poorest classes. Strong public support for housing reform in New York led to the adoption of the dumbbell plan, but by the 1890s its inadequacies were all too apparent to a number of crusaders, the most notable architect among these being Ernest Flagg. Flagg had close connections with the Vanderbilt family and, like Hunt, was trained at the Ecole des Beaux-Arts. His architectural practice was diverse and distinguished; among his most notable works, both of about 1907–8, are the now-demolished Singer Tower, for a brief time the world's tallest building, and the Singer Building (now the Paul Building) on Prince Street at Broadway, with lovely ironwork tracery that emulates the work of Viollet-le-Duc. In 1894, Flagg wrote an important article in *Scribner's Magazine* outlining the evils of the tenement house.³⁰ He contended that the root of the problem was Manhattan's typical, narrow building lot (25 x 100 feet), which under the prevailing legislation not only permitted but even encouraged the worst type of land speculation and overcrowding. Flagg argued for a wider minimum lot size (Fig. 12); his own submission to the competition held in 1896 for a model tenement house proposed a lot size 100 x 100 feet as a workable standard, which would permit the

Opposite page:

Fig. 8. 131 and 135 East 66th Street. Charles Platt. 1908. View from southwest.

Fig. 9. Plans of typical floors.

Fig. 10. Interior view of the studio in apartment "C".

Fig. 11. Interior view of the staircase in apartment "C".

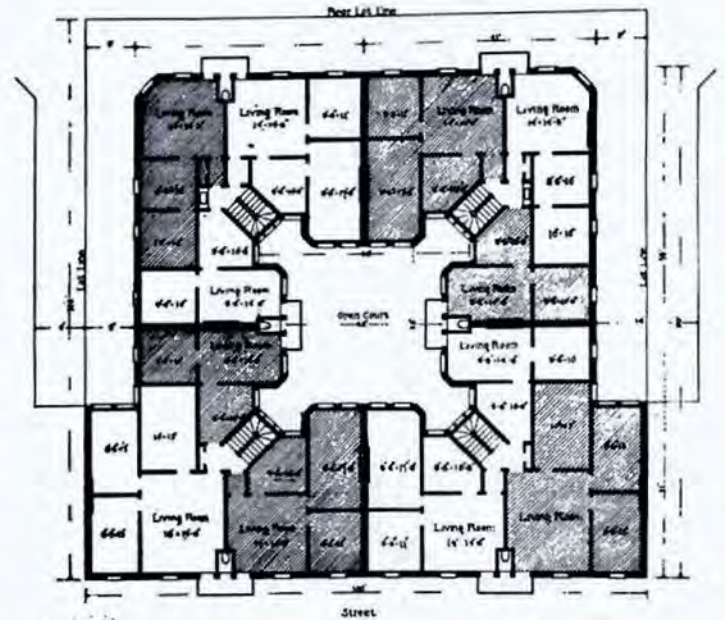


Fig. 12. Model Tenement Design. Ernest Flagg. 1894. Plan of typical floor.

design of a building surrounding a hollow center. Though the core was so small that it was hardly a courtyard in the sense that would have been understood by the designers of the best courtyard apartments already existing in New York, it at least provided adequate light and air to all apartments. Flagg's model tenement house was divided by fire walls into four sections and had stairways at each corner of the courtyard.³¹

Flagg's proposal was shortly realized by the newly formed City and Suburban Homes Company, a limited-profit development company specifically devoted to the building of houses for wage earners. In 1898, the company commissioned Flagg to design a complex of model tenements to house 373 families. They stood at West 68th and 69th streets, between Amsterdam and West End avenues, until they were demolished in the late 1950s as part of the Lincoln Square Urban Renewal Project.³² In 1900, Flagg designed a development of eleven six-story walk-up tenements for 470 families, constructed on a large parcel of land on Tenth Avenue between West 41st and 42nd streets. These were notable in that the sponsorship of the New York Fireproof Tenement Association introduced a new and highly significant note of concern into the project.³³

However, it was not Flagg who won the 1896 competition, but James E. Ware, so that when the City and Suburban Homes Company built a second project, this time on East 64th Street between First Avenue and Avenue A (York Avenue), Ware's ideas were incorporated into the design. Like Flagg's tenements, these were six-story-high walk-ups, but they showed improvements in the organization of the interior plan.³⁴

The competition of 1896, the two built examples of the new ideas, and the continual proselytizing by Flagg and others for reform, led to the implementation of the New Law of 1901, which remained on the books until replaced by the currently operative Multiple Dwelling Law of 1929. The New Law for the first time encouraged large-lot development—the basic lot size was doubled from 25 feet to 50 feet wide, while land coverage was held to 70 percent—and led to what might be considered a truncated version of the courtyard apartment. Examples are Harde and Short's Alwyn Court of

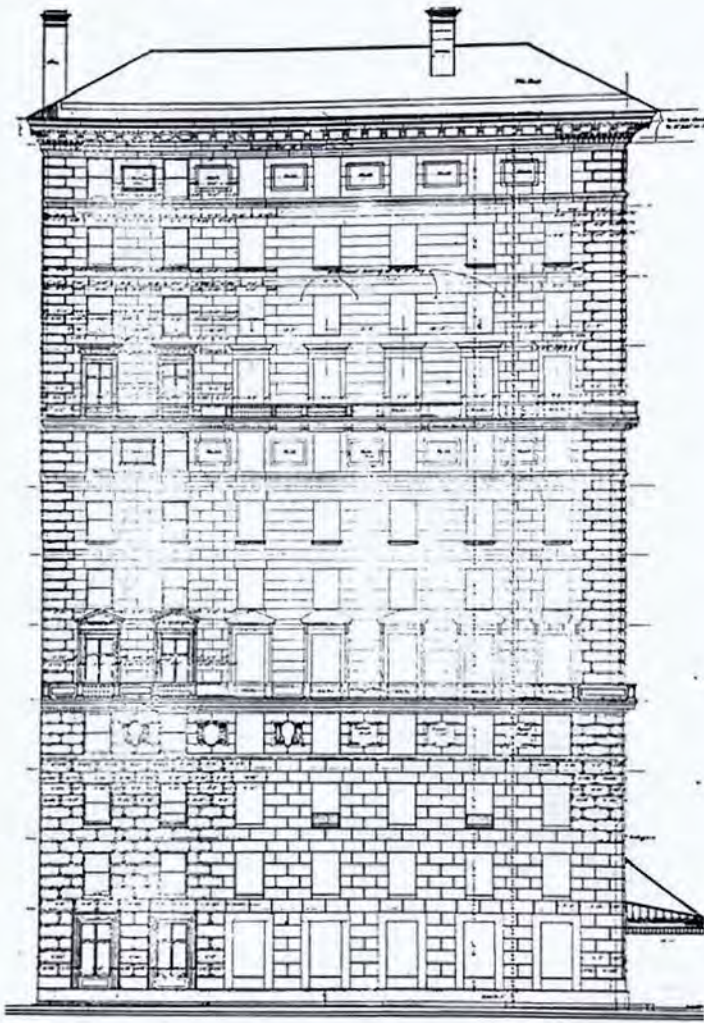


Fig. 13. 998 Fifth Avenue. McKim, Mead & White. 1910. West elevation.

1908, at 180 West 58th Street;³⁵ McKim, Mead & White's 998 Fifth Avenue (Figs. 13-14), 1910;³⁶ and Schwartz & Gross's Heathcote Hall, 609 West 114th Street, 1911.³⁷ Each is, in effect, as much a tenement as a courtyard apartment house.

The most notable of the truncated-courtyard apartment houses were the East River Houses, also known as the Cherokee Flats or Cherokee Apartments. Working-class housing that was even more successful than Flagg's group for the City and Suburban Homes Company, the East River Houses were designed by Henry Atterbury Smith, and built under the sponsorship of Mrs. William K. Vanderbilt in 1908 and 1909.³⁸ The group of four buildings, housing a total of 384 families, is sited along Cherokee Place between East 77th and 78th streets facing John Jay Park (Figs. 15-16). Although the courtyards around which the apartments are grouped are only marginally larger than the light wells of speculatively built hollow-core tenements, they nevertheless ensure cross-ventilation in all apartments and break down the scale of the development.

Using a relaxed variation on a Florentine Renaissance vocabulary, Smith was able to infuse the Cherokee Flats with considerable grace and intimacy. A number of attractive features were introduced to modify the austerity of the overall massing. The tunnels leading to the interior courts from the street are lined in Guastavino tile; they not only connect the courtyards with the street but also establish a grid of pedestrian circulation through the block. Delicate glass and iron pergolas at the roof shelter the stairs, which are left open to enhance the movement of air through the buildings; wrought-iron seats at the landings are provided for those made weary by the climb; and triple-hung windows opening onto openwork-iron balconies are included in each apartment (Figs. 17-18). In fact, the fine sense of detail rivals (and in some ways exceeds) that of contemporary luxury apartments. The gentle scale, which results as much from the decision to build walk-ups and from the intimate relation to John Jay Park as it does from the delicate handling of the forms, makes the complex a very special oasis in the city.

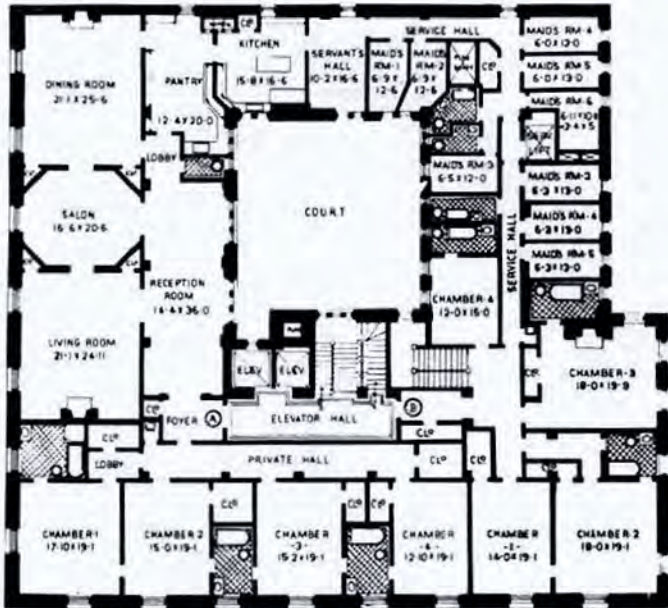


Fig. 14. 998 Fifth Avenue. McKim, Mead & White. 1910. Plan of second floor.

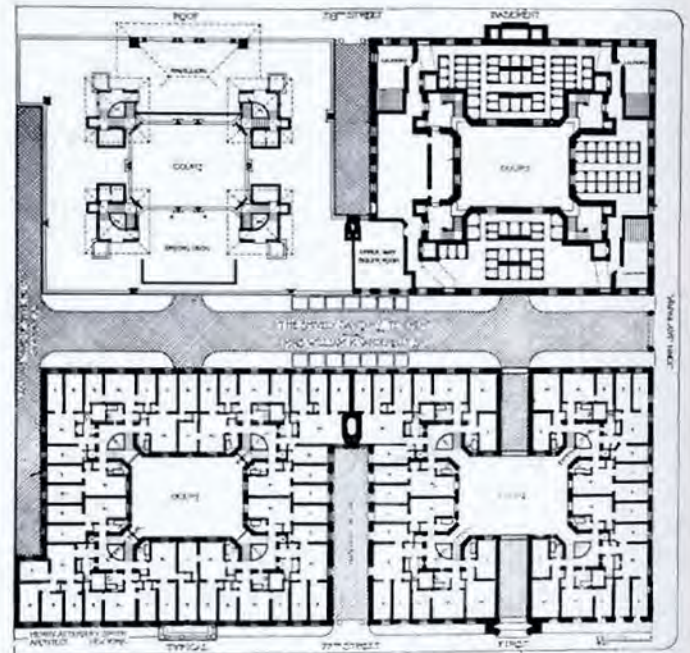


Fig. 15. East River Houses. Henry Atterbury Smith. 1908-1909. Plan of typical floor, basement, and roof.



Fig. 16. East River Houses. Henry Atterbury Smith 1908–1909. View from southeast.



Fig. 17. East River Houses. Henry Atterbury Smith. 1908–1909. View of courtyard from roof.



Fig. 18. East River Houses. Henry Atterbury Smith. 1908–1909. Chimney detail.



Fig. 19. Home and Tower Buildings. Willtam L. Field & Son. 1877–1879. Architects' rendering.



Fig. 20. Tower Mews (now Warren Place). Willtam L. Field & Son. 1879. View looking south.

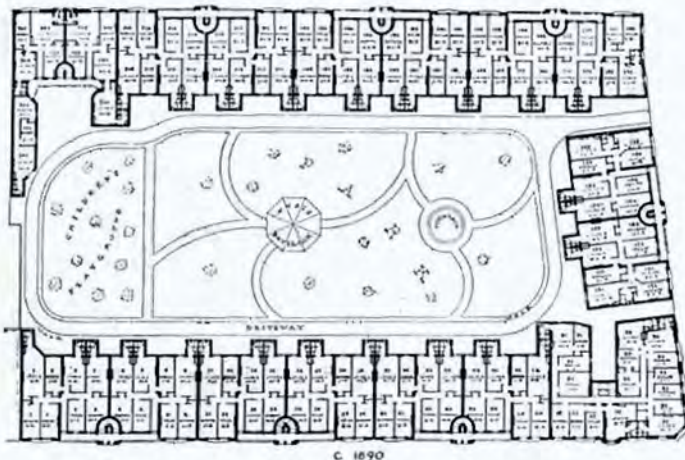


Fig. 21. Riverside Buildings. William L. Field & Son. 1890. Plan of typical floor, almost identical to plan of Home and Tower Buildings.

Although the New Law was general enough to allow different building types, it was clearly influenced by an interest in the true courtyard apartment, an interest that many architects had shared for years. As early as 1877, twenty-four years before passage of the New Law, Alfred T. White, a Brooklyn businessman interested in housing reform, had hired the architects William L. Field & Sons to build the first courtyard apartment house in New York.³⁹ The project, the Home Buildings at Baltic and Hicks streets in Brooklyn, was probably influenced by model working-class developments dating from the 1860s in London, the most notable examples being those of Sir Sydney Waterlow's Improved Model Dwelling Corporation.⁴⁰ In 1879, White built a second and more important development on an adjoining lot, the much larger Tower complex (Fig. 19), also designed by Field. This consists of three six-story buildings on Hicks, Baltic, and Warren streets, all set around a large courtyard, and two rows of two-story cottages built along a mews (Fig. 20), the entire group housing 260 families. The Home Buildings and the Tower apartment houses all featured open stairs on their fronts, and perimeter galleries leading to shallow, floor-through apartments that ring the court. All rooms had outside windows, and each apartment had a water closet, although communal bathing facilities were located in the basement.

With these projects, White, whose motto was "philanthropy plus 5 percent," introduced the concept of limited-dividend housing, later to be carried forward by the City and Suburban Homes Company and many subsequent sponsors of working-class housing. White sponsored a third project in Brooklyn in 1890, the Riverside Buildings at Columbia Place, again designed by Field (Fig. 21); they are now partially demolished as a byproduct of Robert Moses's Brooklyn-Queens Expressway construction, which slashed through the complex in the 1950s, destroying half the buildings and more than half of the internal garden that was its glory.⁴¹

The introduction of the courtyard parti in Brooklyn established in the metropolitan area a new type of multifamily accommodation with distinct advantages over the tenement. The court was a social amenity, which not only supplied reasonable amounts of light and air to the apartments, but provided a communal oasis away from the teeming streets of a poor section of Brooklyn. Children could play under the watchful eyes of their families, with the children

of other families whom the parents knew and with whom they shared a sense of identity. At night and on weekends, the parents could also relax under the trees in the courtyard. The individual floor-through apartments, of course, also had their advantages. Being double-sided, they probably felt psychologically more like a house than any apartment that the tenants had been able to afford before. In the days before air conditioning, such considerations, combined with those relating to contemporary theories of disease, gave these apartments special significance.

Later advocates of courtyard apartments appreciated these virtues, but they also admired the French associations of the courtyard type. The popularity of the courtyard apartment in America, like that of the duplex, was enhanced by the social cachet attached to all French architecture. White may have discovered the type in London, but it was the French who had raised the courtyard apartment house to its most refined level, and it was this model that was known in America. Architects who did not know the French examples at firsthand were familiar with them from articles in magazines.

Richard Morris Hunt, who was to import to America so many French architectural ideas, was the first well-known architect to advocate the courtyard type. He saw it as a model upon which to base tenement-reform proposals. Commenting on the results of the competition held in 1879 for the design of a model tenement that had produced the dumbbell type, Hunt prophetically pointed out that the problem could not be effectively tackled within the constraints imposed by a narrow lot, and that, in any case, James E. Ware's three-court dumbbell type would be better replaced by a model with one large courtyard.⁴²

Hunt's proposal was realized architecturally, if not sociologically, by the architect Henry J. Hardenbergh in his Vancorlear Apartments,⁴³ built on Seventh Avenue in Manhattan in 1879. A few years later, in 1882, Hardenbergh also built the Dakota Apartments facing Central Park West between West 72nd and 73rd streets.⁴⁴ Both the Vancorlear and the Dakota were based on the Parisian courtyard apartment in which, in the more elaborate examples, the courtyard was often combined with a *porte-cochere* to provide carriage access and turn-around, with the concierge's apartment functioning as a guardhouse. The Vancorlear's courtyard (Fig. 22) was large enough to drive in but, unlike the Parisian prototypes, it was reserved for tradespeople and did not function either as a "yard" or garden for the tenants or as a *cour d'honneur*. At the Dakota, however, the courtyard (Fig. 24) functions admirably as a *cour d'honneur* for all users of the building, giving access at its four corners to the public stairs and elevators and at its midpoints to service entrances. Broad enough to accommodate carriages, the courtyard is guarded from the street by a concierge, is entered through a majestically proportioned gateway, and is embellished by a fountain. Other notable organizational features include the use of an entry system to enhance a sense of privacy; the setting of first-floor apartments well above street level to ensure visual privacy; the introduction of "moats" along all street frontages to increase safety and supply light and air for basement spaces; and the provision of collective spaces (which once included a restaurant, a ballroom, and a suite of bedrooms for guests).

The Dakota is, of course, much more than just the exemplar of a planning type. It is the first American courtyard apartment intended for an affluent tenantry; it makes a truly grand statement of what an apartment house could be—the first to give convincing expression to a new way of living in American cities. The Dakota is as much a paradigm of the organization and iconography of the early twentieth-century social life in New York it anticipates as the great chateau of



Fig. 22. Vancorlear. Henry J. Hardenbergh. 1879. Combined plan of first floor (right) and typical upper floor (left).



Fig. 23. Dakota. Henry J. Hardenbergh. 1882. 1890 view looking north on Central Park West.

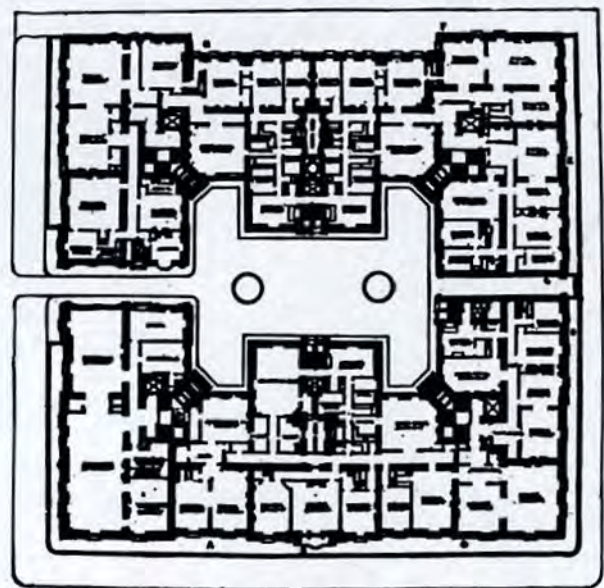


Fig. 24. Dakota. Henry J. Hardenbergh. 1882. Plan of typical floor.

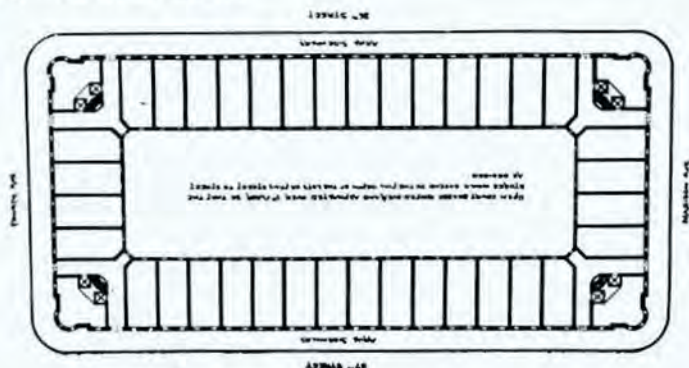


Fig. 25. Madison Square Garden Project. Hubert, Pirsson & Hoddick. Circa 1890. Plan of typical floor.

the Loire were paradigms of their time and place.

From the iconographic point of view, the image of the chateau is splendidly exact (Fig. 23). A great, broad pile of tawny brick trimmed in stone, the Dakota sits behind a moat, guarded by iron railings and crowned by a vigorous roofscape worthy, if not of Blois or Chambord, at least of some outsized mid-Victorian hunting lodge in England, France, or Germany (the remoteness of its location in 1882 surely reinforced this impression). A guarded sentry box screens visitors at the two-story-high archway that leads from the street to the *cour d'honneur* within (a democratic court, as we have seen, shared by servants and those they serve). Though each stack of apartments is virtually identical from top to bottom, different window shapes and the selective use of balconies give the facades a subtle liveliness and variety that lend a measure of individuality to each apartment without compromising the total image.

Despite the fact that the Dakota and the Tower Buildings supply housing for families at opposite ends of the economic spectrum, they are alike in a variety of ways. Though each occupies only a portion of a full block, they initiate a movement to establish the entire city block as the unit of development most appropriate to the street grid of New York. They make it clear that the perimeter-block apartment house is capable of development at different scales and building densities for different social classes; its fundamental organizational features—the courtyard, the entry system, the floor-through apartment—are shown to be both applicable and appropriate at large and small scales, for luxury as well as modest flats. Today, with a marked dwindling of maintenance and security staffs in even the most prestigious buildings, the courtyard organizational system of the Dakota and the Tower Buildings continues to function admirably. The Dakota remains a prestige address, and the Tower Buildings, though somewhat run down, continue to function.⁴⁵

One large apartment-house complex contemporaneous with the Dakota tentatively explored the lessons of the courtyard plan. In 1882, the firm of Hubert, Pirsson & Hoddick designed the Central Park Apartments, or Spanish Flats, as they came to be known.⁴⁶ Eight twelve-story apartment buildings located on a 200- x 425-foot site at the west side of Seventh Avenue between 58th Street and Central Park South, the Central Park Flats were originally planned as a cooperative venture, but when the financing could not be arranged, they were built on a conventional rental basis by a developer named J. Jennings McComb. Constructed from Hubert, Pirsson's plans, the buildings surrounded a long narrow courtyard that was more of an alleyway than a public space. Flamboyantly eclectic in design, with a complex roofline, the Central Park Flats were a notable feature of the skyline until their demolition in 1927.

In about 1890, Hubert and his partners proposed building apartments on the site of the original Madison Square Garden (McKim, Mead & White built a new Garden complex instead).⁴⁷ This premonitory project (Fig. 25), sponsored by William K. Vanderbilt, called for a thirteen-story building running along the perimeter of a full city block, to consist of six layers of "small two-story houses, each 22 x 50 feet, and set one on the top of another." The idea was based in part on Hubert's belief that "the French, except perhaps for the very poorer classes, do not live in apartments, but in *small private dwelling houses, built on one level on the top of one another and reached by a narrow ascending street.*"⁴⁸ Shops were to have been located on the ground floor and to have extended the full depth of the site, their roofs forming the floor of the 80-foot-wide courtyard. The 240 "houses" were to have been connected at their parlor levels by 14-foot-wide "aerial sidewalks," which would have cantilevered beyond the building line by 4 feet. Pairs of elevators at each of the four corners of the building were to provide vertical circulation for tenants and guests, while dumbwaiters situated between each pair of apartments would have handled deliveries and garbage removal. The aerial-sidewalk arrangement, Hubert and his partners wrote, "by making the public access to the houses absolutely open and free, carries out to the utmost the French idea, that the public hall and stairs are a mere continuation of the public street, and that each apartment is in all its essentials a separate and individual home."⁴⁹

The dramatic proposal for the Madison Square Garden site combines two typologies of the apartment house, the perimeter-block and the duplex apartment, with a third, implicit in the tenement: that of the internalized street. These ideas were taken up again in the 1920s by Le Corbusier in his *Immeubles Villa*, which became the model for such disastrous CIAM experiments as the Smithsons' Robin Hood Gardens,⁵⁰ and eventually led to New York City's Riverbend Houses, to be discussed later. As proposed by Hubert, the Madison Square project offered a potentially dazzling antidote to the evils of the tenement apartment house. Its synthesis of the duplex and the courtyard makes it a unique statement. Unfortunately, no documents other than the plans remain, so that the imagery which was no doubt an important part of the proposal (and which, it has been argued by Jencks and others, has contributed so much to the failure of the twentieth century's schemes that employ gallery/streets)⁵¹ remains an unknown quantity.

The passage of the New Law in 1901, the general rise of the economy that accompanied the arrival of the new century, and the political consolidation of New York and Brooklyn in 1898, and innovations in elevator technology all combined to foster an upsurge in apartment-house construction that continued until the first World War. The new wave of activity brought with it not only a revival of the duplex type, as we have seen, but also of the courtyard apartment on a grand scale. For the next three decades, most courtyard apartment houses were built in the image of the palace. This palatial mode, which I call the "imperial" style, originated with the chateaulike Dakota and the castellated Tower Building and was intended to impress the visitor and the passerby with the status of the inhabitants. Four of the most significant imperial courtyard apartments were built by the Astor family: Graham Court, designed by Clinton & Russell and built in 1901;⁵² the Aphorp, designed by the same architects and built in 1908;⁵³ Astor Court, designed by Charles Platt and completed in 1916;⁵⁴ and Astor Concourse, designed by Aymar Embury II and completed in 1926.⁵⁵

The imperial style produced almost as many similarities in style as in organization. Graham Court, located on a 200-



Fig. 26. Graham Court. Clinton & Russell. 1901. Architects' rendering.

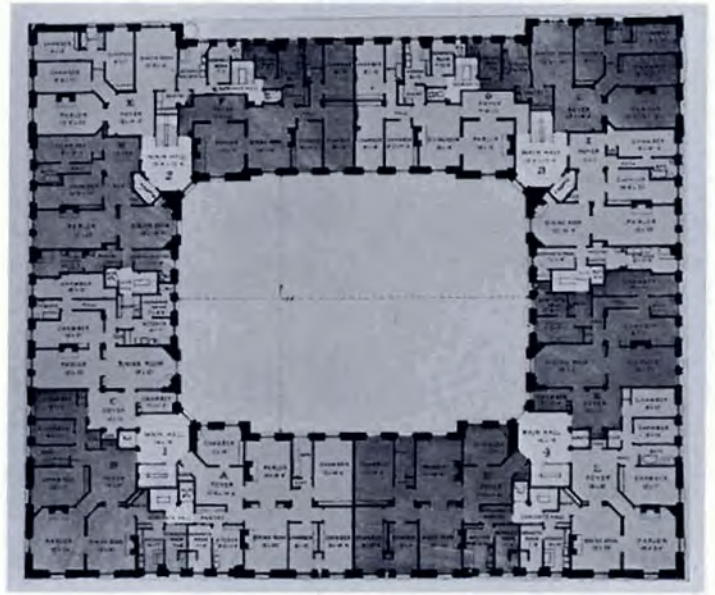


Fig. 27. Graham Court. Clinton & Russell. 1901. Plan of typical floor.



Fig. 28. Graham Court. Clinton & Russell. 1901. View of courtyard.



Fig. 29. The Aphorp. Clinton & Russell. 1908. Architects' rendering.

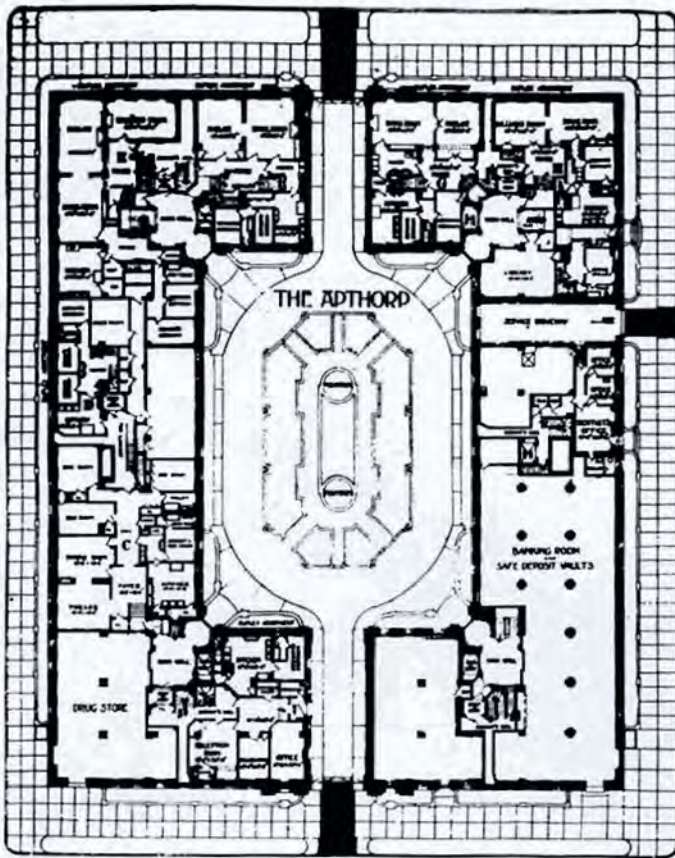


Fig. 30. The Aphorp. Clinton & Russell. 1908. Plan of ground floor.

x 200-foot lot on Seventh Avenue between West 116th and 117th streets in Harlem, is an eight-story-high Florentine palace (Fig. 26), whose splendid arched opening permits tenants and their vehicles to enter a landscaped court from Seventh Avenue; elevators at each of the four corners then give access to the ninety-six apartments above (Figs. 27–28). The Aphorp, built on a full block site from Broadway to West End Avenue between 78th and 79th streets (Fig. 29–30), though similar to Graham Court, is much larger, with even more luxurious flats. However, the increased density unfortunately results in a stark, almost gloomy courtyard, too narrow for its height, and therefore too often shrouded in shadow.

Astor Court is perhaps the loveliest of all the courtyard apartments built between 1900 and the First World War. Located on the east side of Broadway, between West 89th and 90th streets, it is distinguished by an almost plain Italianate facade of red brick (Fig. 1). The Broadway frontage at grade is given over to shops; the courtyard and apartments are entered from the cross streets (Fig. 2). The courtyard is not treated as a *cour d'honneur* but as a garden. Astor Concourse in the Bronx, on the Grand Concourse at 171st Street, is the last of the courtyard apartments built by the Astors and is related in scale and overall design to the first, Graham Court; its tight, classical composition seems old-fashioned in the light of contemporary and more innovative courtyard apartments by Andrew Thomas, which I shall discuss shortly. Though the clarity of its plan is notable, as is the provision for through ventilation in every apartment, the courtyard and the building that defines it are prosaic.

The Belnord (not built by the Astors) is an early example of the imperial type.⁵⁶ Designed in 1908 by H. Hobart Weekes, it occupies a full block between Broadway and Amsterdam Avenue, from 86th to 87th Street. The Belnord's block is larger than the Aphorp's, resulting in a larger courtyard that is better proportioned and also more generously planted, although the building itself is not nearly so elegant. Less successful are 270 Park Avenue, designed by Warren & Wetmore in 1918;⁵⁷ its identical twin across Park Avenue, Number 277 (Figs. 31–32), designed by McKim, Mead & White in 1925;⁵⁸ (both were demolished in the 1950s to make way for office buildings); and Schwartz & Gross's 1185 Park Avenue of 1928.⁵⁹ In these later examples, the courtyards of the enormous apartment buildings function more as vehicular circulation devices and sources of light for the apartments than as parks or gardens (Fig. 33). Farrar & Watmaugh's London Terrace, 1930, can be seen either as a transitional example or as a degeneration of the type. Occupying a full block between Ninth and Tenth avenues, from 23rd to 24th Street, London Terrace is a colossally scaled complex of fourteen buildings containing 1,670 apartments in all.⁶⁰ Its courtyard does not function as a *cour d'honneur*—the individual buildings are entered directly from the street—but is little more than a landscaped alley running down the center of the block. The ten mid-block buildings contain studio and one-bedroom apartments; the larger apartments are located in the four corner buildings. Shops occupy the avenue frontages, and small gardens line West 23rd and 24th streets.

The last of the high-rise, perimeter-block, imperial schemes built in Manhattan is Knickerbocker Village, which unlike the Astor apartments was intended for a middle-class, rather than upper-middle-class, tenantry.⁶¹ It was the first major housing project in New York to receive any federal assistance in financing. Built in 1934 by Van Wart & Ackerman, Knickerbocker Village demonstrates that the courtyard can function as a social amenity in a building of

very large scale, but that the block size must be increased with the number of dwelling units (Fig. 34). Like London Terrace, its population is enormous, but its site is much bigger: 1,600 families are housed in two twelve-story-high perimeter courtyard buildings which occupy a three-acre site, from Catherine to Market streets and from Monroe to Cherry streets, that functions in part as a superblock. The landscaped interior courts provide the sole access to the elevator lobbies; the former right-of-way of an abandoned street separating the two buildings was also originally intended to be landscaped but has now been paved for games.

Although Knickerbocker Village retains the imperial scale of the traditional closed-perimeter courtyard apartments the typical neoclassical vocabulary of earlier models has been abandoned; here, the architecture employs a vocabulary that is largely Amsterdam School and Viennese in inspiration, though free of any specific imagery. It is largely dependent for its effects on the fineness of its overall making and on some nice craftsmanship in brick at the entrance portals. In this respect, Knickerbocker Village initiates the decline in standards that, under the twin banners of economy and modernist minimalism, within a generation's time has reduced the design of the envelopes of multifamily housing to little more than a process of packaging—not the fancy packages of boutiques but the all-too-sensible brown bags of supermarkets.

Medium- and low-density courtyard schemes were reasonably common in the outer boroughs in the 1920s but much less so in the 1930s. An early example that I admire extravagantly is Springsteen & Goldhammer's 3224 Grand Concourse of 1923, which offers wonderful messages about how a single building can enhance a sense of place for the individual and for the general public. The building occupies a more-or-less triangular site, all the edges of which respect the street. The apartments are entered from a courtyard, connected to the Grand Concourse by a tunnel (Fig. 35) but also opening directly onto Mosholu Parkway. The courtyard is filled with architectural magic: a fountain, a tempietto, plantings, small half-timbered, sentry-box entries, and rich red concrete paving combine to produce sheer delight (Fig. 36). From the street, the image is of a late-medieval English country house, or perhaps a country inn. On the Grand Concourse facade, the location of the tunnel is emphasized by treating the window in the apartment above as a balcony. Instead of a cornice, a pitched parapet of slate is used. Identical apartments are given slightly different appearances on the facade; in the courtyard, certain apartments have bay windows, which in combination with the more lavish use of wood and the other features that I have described help establish a cozy domesticity that seems utterly appropriate. These images are very powerful and yet very relaxed; they are so evocative that Charles Moore or Walt Disney might have designed them. The result is good architecture that makes a statement and sets a mood without tyrannizing its users. It seems equally at home to matrons in ranch-mink stoles, young management types in leisure suits, and kids racing about on roller skates and tricycles.

Another exceptional example is Noonan Plaza, built in 1931 and named after its owner, Bernard Noonan.⁶² After a successful career in real estate, including the development of several apartment houses, Noonan wanted a building that would reflect his status and set out to erect "the most advanced structure that modern technology and design could create."⁶³ Having chosen a site, a large lot at the corner of West 168th Street and Nelson Avenue in the Bronx, and an architect, Horace Ginsbern, the next step was to select a distinctive design. The result, a Mayan/Art Deco



Fig. 31. 277 Park Avenue. McKim, Mead & White. 1925. View from northeast.

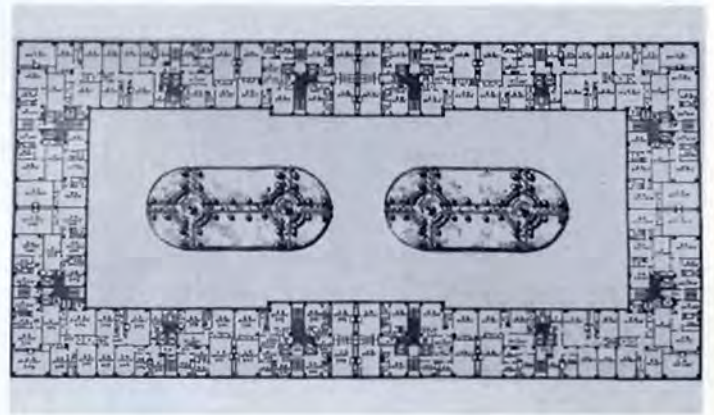


Fig. 32. 277 Park Avenue. McKim, Mead & White. 1925. Plan of typical floor.



Fig. 33. 277 Park Avenue. McKim, Mead & White. 1925. View of courtyard.



Fig. 34. Knickerbocker Village. Van Wart and Ackerman. 1934. Architects' rendering.



Fig. 35. 3224 Grand Concourse. Springsteen & Goldhammer. 1923. View from Grand Concourse.



Fig. 36. 3224 Grand Concourse. Springsteen & Goldhammer. 1923. View of courtyard.

landmark dominated by twin-tower pyramids flanking the entrance (Fig. 37), was one of the most lavish apartment houses yet seen in the Bronx. The 15,000-square-foot interior garden was festooned with shrubbery, fountains, and mosaic walkways. In the center was a pool stocked with swans, goldfish, and water lilies, while in one corner a waterfall flowed into a pool crossed by Japanese-style bridges. Inside the building, the apartments were large and fully equipped; each had two exposures, one of them overlooking the garden. As its rental brochure proclaimed, Noonan Plaza was meant to be "one's permanent home . . . destined to remain ever free from mediocrity."⁶⁴

Other medium-density schemes, though not without interest, are less successful. Flagg Court, built in 1933-36 by Ernest Flagg at 7200 Ridge Boulevard between 72nd and 73rd streets in Brooklyn, is only partially realized.⁶⁵ As built, it is a group of 422 units in six buildings around two-and-one-half sides of a courtyard. Despite a swimming pool served by a diving tower in the form of a Hindu *chatri*, arched passageways at the courtyard's edge, numerous and thoughtful technical innovations, and the provision of an auditorium and other community facilities, Flagg Court seems dry and impersonal when compared with previous courtyard schemes. Such is also the case at the Celtic Park Apartments, situated on a full block in Long Island City between 43rd and 44th streets, and 48th and 50th avenues.⁶⁶ In this project, Flagg designed the end "A" unit, while the remaining six units flanking the central court were designed by Springsteen & Goldhammer. The apartments in both sections of the Celtic Park development are comfortably and competently laid out, but the detailing and the massing of the buildings as a whole are uninspired and dull.

The Garden Apartment

The garden apartment is a variation of the courtyard type. It was introduced around the time of the First World War as a solution to the problem of the wage earner who occupies the lower stratum of the middle-income economic category. Its chief advocate was Andrew J. Thomas, who quite probably was the author of the term "garden apartment," and whose work marks the culmination of the development of the courtyard-apartment house in New York.

Thomas was a self-taught architect whose unusual background and aggressive nature caused him to be regarded with some suspicion by his colleagues in the profession. In his influential book *The New Day in Housing*, Louis H. Pink characterized Thomas as

a genius, an enthusiast, excitable, talkative, always making speeches in favor of better housing and often commanding newspaper space on the first page. Housing is his religion. "What better religion could there be than this?" he often exclaims, pointing to the interior garden with its shrubs and pools, its chaste but tasteful doorways and pleasant brick walls. He is a "good mixer," and is as much at home with plasterers and carpenters and walking delegates as with millionaires. . . .

Thomas's work is much criticized by other architects, but he alone has built model tenements in times of high costs. . . .

Thomas has always been an adventurer. He followed the lure of gold to the Klondike in 1896. He hired out as a carpenter at Skagway. He worked in a jeweler's shop in New York and was bellboy in a hotel in Los Angeles. He collected rents for real-estate speculators, became a speculative builder himself, and got his training in architecture from his daily work. He was the first to

build apartments with a little court or setback in front with some trees in it. This proved popular and the idea of the garden apartment was born. He learned that beauty pays. He also learned that it does not pay to crowd the land. He became a crusader for beauty, light, and air.⁶⁷

Lewis Mumford, who in the 1920s was more favorably disposed to the industrially inspired forms of the modern movement than his later attacks on the International Style might suggest, was among those who were not very enthusiastic about Thomas's work. Nonetheless, he grudgingly acknowledged that "Andrew Thomas's plans for apartment houses . . . are admirable to the last degree, provided one must respect lot lines and provided one does not change the depth of the block."⁶⁸

Thomas's most important work in New York (he also built notable housing projects in Bayonne, New Jersey, and in Chicago, as well as the Princeton Inn at Princeton, New Jersey) was done for large developers such as the Metropolitan Life Insurance Company, the Queensboro Corporation (the developers of Jackson Heights in Queens), and also for John D. Rockefeller, Jr., who assisted in the organization of what is probably Thomas's masterpiece, Thomas Gardens, named after its architect. Under pressure from the black community, Rockefeller also commissioned Thomas's Paul Lawrence Dunbar Houses in Harlem.

Thomas established a key principle in the design of the urban multiple dwelling—that the true unit of planning is the city block and not the individual building.⁶⁹ The New York precedents for this principle can be traced as far back as the Dakota and Tower Buildings and were implicit in the New York City Tenement Act of 1901, which made narrow-lot development virtually impossible. But Thomas took the idea much further, insisting on 50 percent land coverage as opposed to the 70 percent permitted by the 1901 law. He established a new, urban-suburban multiple-dwelling type, in which the courtyard was treated as a continuous green space. Modest garden courts, introduced along the street front and side alleys separating the individual apartment houses, contributed to a reduction in the apparent density of the development, offered an increase in recreational amenities, and introduced into the multiple dwelling more of that sense of individuality characteristic of the single-family house than had the work of any previous designer. At the same time, Thomas jettisoned high-style, imperial neoclassicism in favor of an essentially vernacular vocabulary of ornamental details that can best be described as eclectic. In any one of Thomas's buildings, a strong stylistic association is established at key points of the facade, usually around the principal doorway and at the roofline. Not surprisingly, Thomas's use of the courtyard parti led him to prefer a vocabulary with distinct Mediterranean overtones.⁷⁰

At Jackson Heights, Thomas pursued the garden-apartment idea over and over again in a series of apartment-house projects built in the first half of the 1920s. John Taylor Boyd observed that

in these great developments . . . the use of the block as the unit . . . reached its fullest development. This is possible because the developers, the Queensboro Corporation, owned a large tract of land which they were willing to develop over the period of years as an investment. Providing community amenities as well as housing accommodation, this little-known development is a "sub city within the city."⁷¹

In all of Thomas's work involving groups of buildings, the individual structures are massed to reflect the role of the block as the development unit and at the same time preserve the character, individuality, and domestic scale of the com-



Fig. 37. Noonan Plaza. Horace Ginsbern, 1931. Architect's rendering.



Fig. 38. Cambridge Court. George H. Wells, 1918. View.

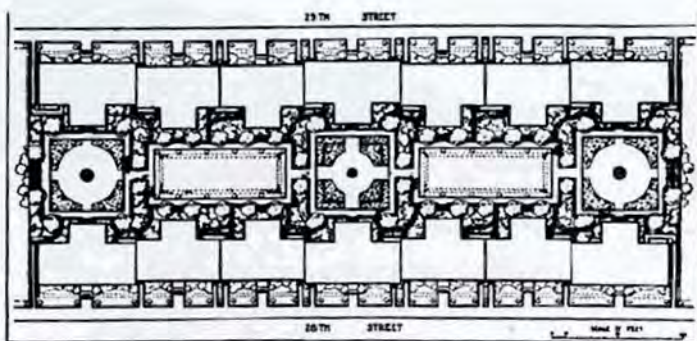


Fig. 39. Cambridge Court. George H. Wells, 1918. Site plan.

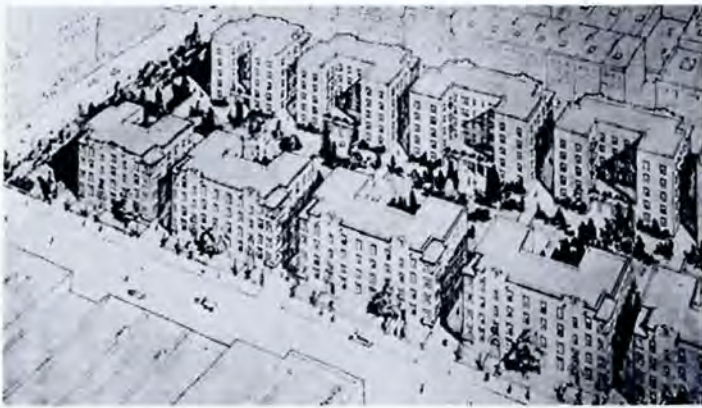


Fig. 40. Operation No. 8. Andrew J. Thomas. 1920. Architect's rendering.

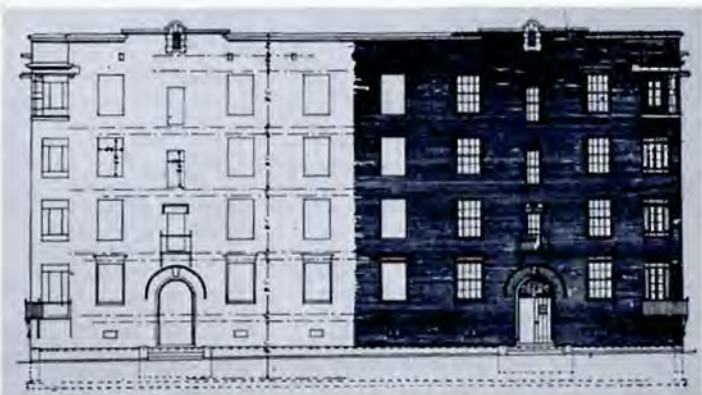


Fig. 41. Operation No. 8. Andrew J. Thomas. 1920. Street elevation.

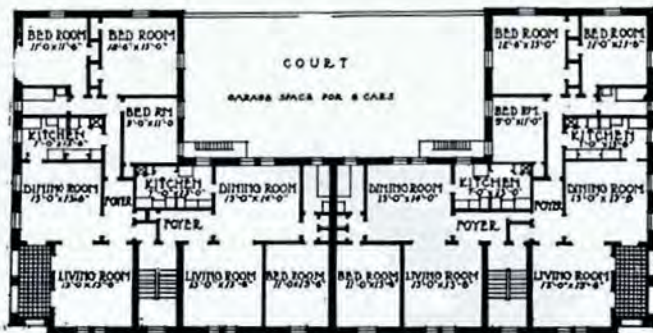


Fig. 42. Operation No. 8. Andrew J. Thomas. 1920. Plan of typical floor.

ponents. Corners are emphasized by towers and act as terminating masses for the elevations of the block. The towers and the horizontal moldings on the lower stories of the buildings help tie the groups together, while the use of specific historical styles not only helps to distinguish one group from another but also makes it possible to particularize each building in a given complex.

Thomas's compactly planned buildings give up some perimeter along the street and thereby lose some of the sense of frontality traditionally associated with high-density housing. The introduction of a planned garden in the interior of the block provides recreational amenities and makes the rear apartments at least as desirable as those in the front. Thomas's courtyards are distinguished in a number of important respects: they separate garden space from service space and often include limited amounts of covered garage space reached by the service alleys that separate the individual buildings in the group. These alleys have other advantages: they break up the street facade and thereby break down the scale of development, they permit each apartment to have at least two exposures, and by increasing the number of corners they increase first-floor as well as exterior walls, roofs, stairwells, and elevator cores.

Thomas's work demonstrated that economy and high density were not necessarily two sides of the same coin. He made the idea of neighborhood planning more glamorous than it had ever been before and established new and practical standards for the physical organization of the city, comparable in quality and popular appeal to prevailing suburban models. Earlier projects at Jackson Heights designed by George H. Wells had also explored the garden-apartment idea (Figs. 38-39), but Wells failed to go as far as Thomas to break up the perimeter wall into individual buildings.⁷² It was Thomas's design for Operation No. 8 of the Queensboro Corporation, completed in 1920, that marked the decisive turning point in the evolution of the garden-apartment idea. According to Boyd, it established Thomas as the author

of the first true garden apartment group in a city block that has been designed as a whole. In it the garden is an integral part of the scheme: the rooms are planned to take full advantage of the garden outlook, and, besides, elevations on the garden are as attractive as those on the street fronts. . . .

There is not that dreary, mechanical, institutionalized aspect of the whole block by which row housing has sucked out all the character and individuality from the streets of American cities. Each individual building of Operation No. 8 has something of individuality, of "homeness," that one does not expect to find in apartment houses, and surely, cannot find in the row type. Their appearance at the rear . . . is also far better than the row type, for the alleys between the buildings break up the length of the court giving it character and form.⁷³

The first of Thomas's projects for the Queensboro Corporation (Figs. 40-42) consisted of four-story walk-up apartments grouped around a continuous courtyard.⁷⁴ Of their innovations, surely the inclusion of garage space was the most prophetic. The construction is wood frame, sheathed in common red brick trimmed with Indiana limestone; the imagery is a loosely conceived emulation of the Spanish Renaissance.

Thomas's next project for Queensboro was the Chateau, a group of sixteen five-story apartment houses (Fig. 43), in which the newly devised automatic elevator is used to advantage.⁷⁵ At the Chateau, the space between the buildings is 19½ feet, a marked increase over Thomas's previous effort. The Towers (Fig. 44) carried these ideas even further.⁷⁶ With eight six-story-high buildings in the



Fig. 43. *The Chateau*. Andrew J. Thomas. 1922. Architect's rendering.

group, the site coverage is reduced to 25 percent. The courtyard is sunk below grade, making it possible to introduce additional apartments at the basement level and set the courtyard apart from the life of the street (Fig. 45).

Not all of Thomas's buildings at Jackson Heights were remarkable. Cedar Court occupies a higher percentage of its site and does not fully enclose its courtyard, which is open to the street.⁷⁷ The Spanish Gardens apartment house is also a U-shaped building surrounding a courtyard opening to the street.⁷⁸ Its use of Spanish architectural motifs is quite successful, especially in the interior public spaces.

In 1924, Thomas designed his largest single project, in association with D. Everett Waid, and under the sponsorship of the Metropolitan Life Insurance Company.⁷⁹ All in all, there were fifty-four buildings in different parts of Queens; thirty buildings were built on three blocks in Long Island City, ten more buildings were built on a block in Woodside, and a last group of fourteen was built on two blocks along Ditmars Avenue in Astoria.

Thomas and Waid's scheme consists of five-story U-shaped buildings opening to a central mall (Figs. 46–47). The court formed by the U is narrow, as is the thirty-foot-wide central court or mall. The narrow courts combine with the rather mean architectural expression to give a somewhat gloomy character—though it should be noted that the Metropolitan Life apartments originally rented for only nine dollars a month per room, considerably less than those at Jackson Heights. Moreover, other aspects keep the Metropolitan project from being easily dismissed. Compared with working class tenements there is a sense of spaciousness (50 percent of the site is open space), and the apartments, though small, are admirably planned (Fig. 48). The entry sequence to each apartment, which leads through an arched passage to the interior court from which four entranceways lead to stair halls, is clear and effective in securing the project from unwanted intruders.

The Paul Lawrence Dunbar Houses in Harlem, on Fifth Avenue between 142nd and 143rd streets, is Thomas's only garden apartment complex in Manhattan.⁸⁰ The construction of Dunbar was the result of pressure brought to bear on John D. Rockefeller, Jr., by the Urban League to help blacks secure decent housing. It represents the final example of the type initiated by Thomas at Jackson Heights, that is, the double file of independent buildings grouped along a continuous courtyard.

Thomas experimented with a second, more traditional type that I have associated with the imperial style, in which a single building fully encloses a courtyard, or at least defines it on three sides. His contributions to the evolution of



Fig. 44. *The Towers*. Andrew J. Thomas. 1924. View from northwest.



Fig. 45. *The Towers*. Andrew J. Thomas. 1924. View of garden.



Fig. 46. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Architect's rendering.

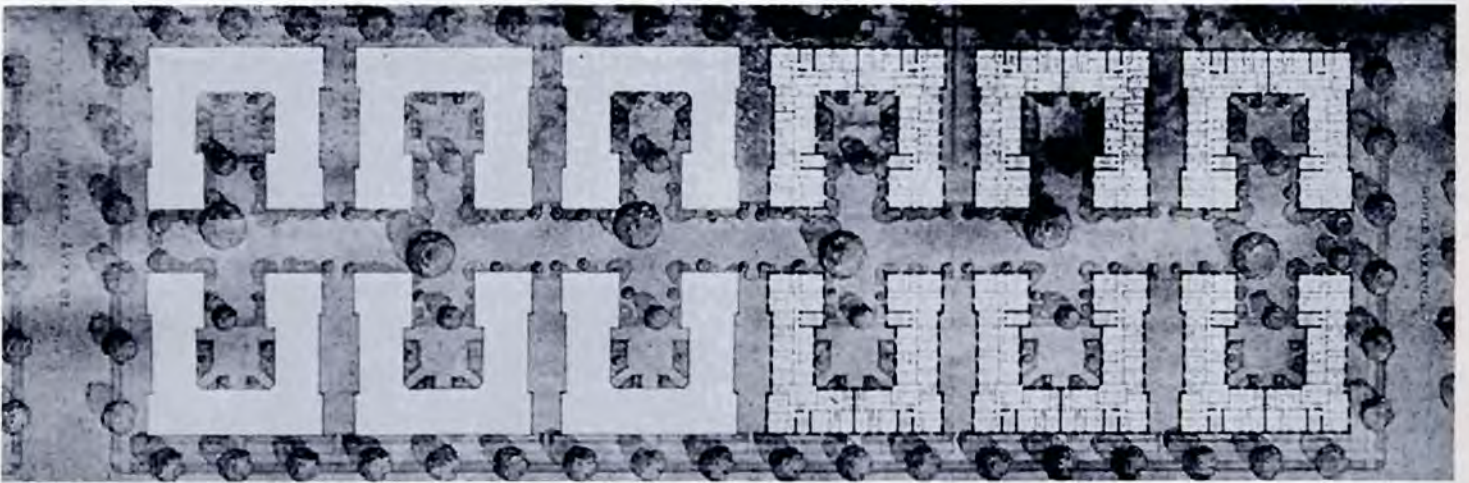


Fig. 47. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Block plan.

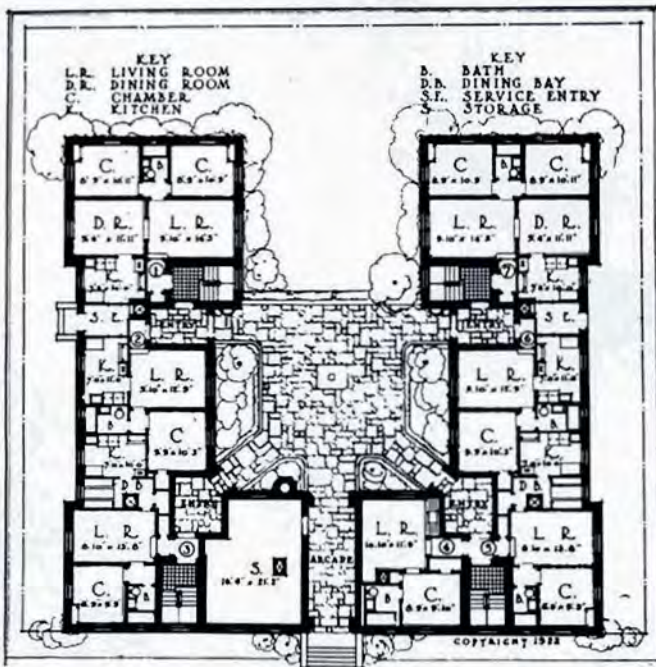


Fig. 48. Metropolitan Life Apartment Houses. Andrew J. Thomas. 1924. Plan of typical ground floor.

this type consisted of a drastic reduction of the height of the buildings as compared to earlier examples such as 270 Park Avenue, and of the introduction of the relaxed and domestic imagery which characterized his best work. Thomas's first continuous-perimeter-block development was the Homewood Garden Apartments, built in Brooklyn in 1919 by the City and Suburban Homes Company on a site on 17th Avenue between 73rd and 74th streets.⁸¹ The original design for Homewood is even more inventive in its handling of the open spaces than the work at Jackson Heights, though the complex as executed seems rather dry. The Hayes Court Apartments is his sole experiment at Jackson Heights with the perimeter block, and perhaps Thomas's most traditional scheme.⁸² The relatively small site, between 23rd and 26th streets on Hayes Avenue, seems to have encouraged him to revert in plan and style to a miniaturized example of the imperial mode: the building looks like a toytown Dakota (Figs. 49–50).

Brooklyn Garden Apartments (1929), at Fourth Avenue between 23rd and 24th streets,⁸³ is bigger than Homewood or the Hayes Court, though it is not as interesting, as what I believe to be Thomas's best work of the late 1920s—Thomas Gardens (Fig. 51), in the Bronx at 158th Street and the Grand Concourse, completed in 1927.⁸⁴ This complex is an exception in Thomas's oeuvre: though occupying a full city block of unusually large dimensions, the courtyard is not continuously enclosed but opens to the Grand Concourse at



Fig. 49. Hayes Court. Andrew J. Thomas. 1924. Architects' rendering.

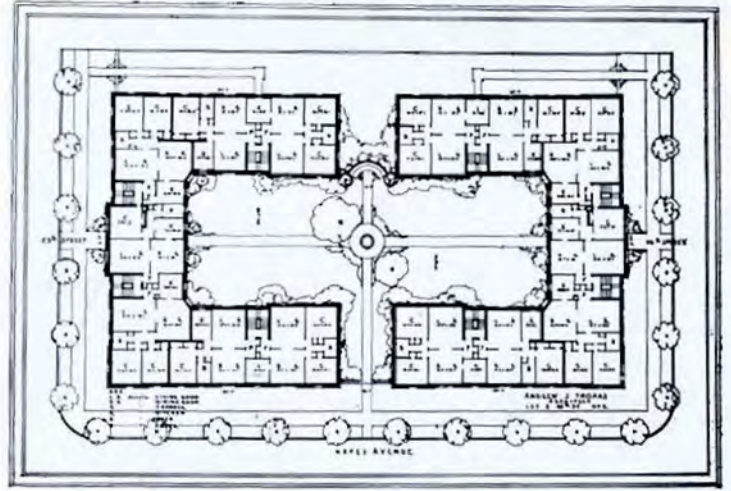


Fig. 50. Hayes Court. Andrew J. Thomas. 1924. Plan of typical floor.

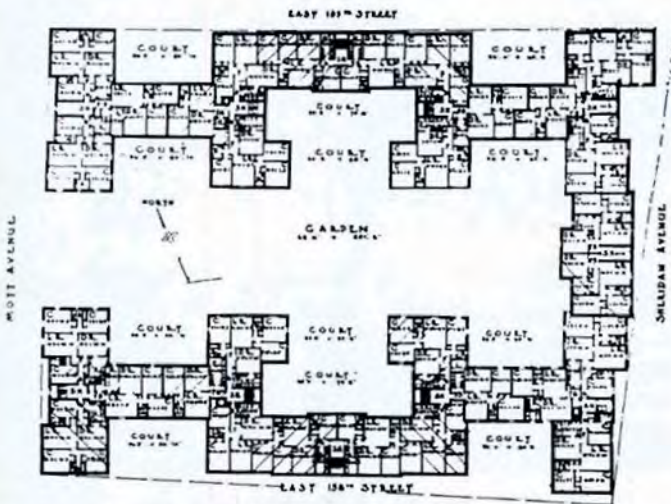


Fig. 51. Thomas Gardens. Andrew J. Thomas. 1927. View on Sheridan Avenue from northeast.
Fig. 53. Plan of typical floor.



Fig. 52. Thomas Gardens. Andrew J. Thomas. 1927. View of courtyard from Grand Concourse.
Fig. 54. Courtyard detail.



Fig. 55. *Amalgamated Dwellings*. Springsteen & Goldhammer, 1930. Courtyard view looking north.



Fig. 56. *Amalgamated Dwellings*. Springsteen & Goldhammer, 1930. Entryway detail.

the raised, upper end of the site (Figs. 52–53). The large court is delightful, with Japanese-style lanterns and a lovely four-way footbridge at the center (Fig. 54). The site's change in level permitted Thomas to gain extra apartments without increasing apparent bulk, but the six-story walk-ups (a type soon to be rendered illegal by the Multiple Dwelling Law) seem incongruous, particularly considering the generosity of the overall conception.

Thomas's continuous-perimeter-block type was more influential on later garden apartments than the interrupted block type, because it did not require large sites, such as had been available at Jackson Heights. Its impact on middle- and low-income housing can be seen in the work of less theoretical architects such as Springsteen & Goldhammer, who produced a number of interesting continuous-perimeter-block garden apartments in the 1920s and 1930s. The best known of these, the 1930 *Amalgamated Dwellings* at 504–520 Grand Street (Fig. 55) on Manhattan's Lower East Side, bears stylistic witness to the influence of the Amsterdam School housing of the late 1920s.⁸⁵ The detailing throughout is inventive and stylish, especially the wonderful illuminated keystones in the doorway surrounds (Fig. 56). Several measures were taken to separate the tenants from the noise of Grand Street: community rooms are placed between that street on the south and the courtyard, which is furthermore set a level below the street. The courtyard is entered through a parabolic tunnel on axis at its northern end or from the east and west by a deliberately circuitous path and tunnel system.

Earlier projects of Springsteen & Goldhammer's are also worth noting. In addition to 3224 Grand Concourse, which I have already discussed, the Sedgwick Avenue Apartments function so admirably and are so eminently likable that Louis H. Pink observed that they are "perhaps the finest tenements erected by anybody."⁸⁶ The first housing built by the *Amalgamated Clothing Workers' Cooperative*, the Sedgwick Avenue Apartments bear strong resemblance in plan, though regrettably not in elevation, to Thomas's Dunbar Apartments. The *Alhambra Gardens*, on Pelham Parkway in the Bronx, contain an eccentric but charming courtyard.⁸⁷

The last significant perimeter-courtyard projects were designed by Clarence S. Stein, who skillfully adapted Thomas's ideals to the reduced circumstances of wage-earners' housing built at the depth of the Depression and seized the opportunity for development at a scale hitherto unexplored even by Thomas. Though trained at the *Ecole des Beaux Arts* and apprenticed in the office of Bertram G. Goodhue, Stein was not a strong designer. He was, however, a solid synthesizer, who absorbed ideas from Ebenezer Howard, Patrick Geddes, Raymond Unwin, Henry Wright, as well as Andrew Thomas. Plagued by ill health in the late 1930s and the 1940s, Stein's career was prematurely cut off, yet his succession of projects, beginning with the two-family houses on West 239th Street, attests to a serious purpose, imagination, and determination, if not much wit. His work was thoroughly decent and ethical, in the best sense of those terms.

Stein's West 239th Street project is a variation of the Thomas Garden apartment type: it is a building housing six families in a T-shaped configuration.⁸⁸ The location of the broad arms of the T at the rear permits this small apartment house, a kind of hybrid between a group house and a garden apartment, to read from the street almost like a single-family dwelling. Set on a 65 x 100-foot lot, it could, as Boyd notes,

replace three houses of the block semi-detached type or else two isolated houses with one apartment house containing quarters for six families. And, since each family has its separate entrance, the old American

small town ideal of individuality and privacy is thus preserved to a degree, which is why the dwellings are only two stories high.⁸⁹

Stein also proposed to combine these units with another U-shaped one that would surround three sides of a courtyard facing the street, thereby providing in a single block a considerable variety of house types at a density of about twenty families to the acre.

Stein's first courtyard apartment, the Phipps Garden Apartments of 1931, was built as part of his work at Sunnyside Gardens.⁹⁰ Interestingly enough, they conform quite closely to the imperial courtyard mode that I have previously discussed. Louis Pink felt that Stein's low-rise work at Sunnyside has

none of the artistry of Forest Hills or Mariemont. It has no Grosvenor Atterbury to insure architectural beauty and mounting expenses. It lacks grace and charm. The flat roof predominates. There is little variety. The buildings are square boxes relieved only by good proportion. But for the tree and shrub planting and occasional window boxes and awnings, Sunnyside would be somber as well as plain. What it lacks in art it makes up in intelligence.⁹¹

The Phipps Garden Apartments are the architectural jewel of the Sunnyside complex. Because they were intended to house white-collar workers rather than the lower-income workers housed at the rest of Sunnyside, the sponsors "wanted exteriors less severe in appearance than the Sunnyside houses," and so Stein used brick laid up in exuberant patterns (Fig. 57) which he was later to regret.⁹² At Phipps, six-story elevator units were combined with four-story walk-ups, all focused on the great court (Figs. 58-59), or "central park," as Stein preferred to call it. All the apartment units are entered from the court, which all balconies and most living rooms face. The sloping site permitted the introduction of apartments with private terraces and enclosed gardens, a strategy first used by Thomas but further developed by Stein at his later Hillside Homes.

Phipps demonstrated to Stein's satisfaction that elevator apartments were less efficient and less desirable than walk-ups from the point of view of privacy and ventilation. Later he was to become highly critical of the twelve- to fourteen-story towers built by the New York City Housing Authority and various life insurance companies, which he believed would have been more efficient and more amenable had they been less high.⁹³ Stein's walk-up apartment buildings were in fact cheaper to build, cheaper to operate and maintain, and more livable than equivalent unit-plan elevator buildings.⁹⁴

Hillside Homes is Stein's masterpiece, perhaps the best of the continuous-perimeter projects.⁹⁵ Begun in 1932 and completed in 1935, it began as "an architect's abstract conception," without site, client, local precedent, or financing—just an idea "for a self-contained residential neighborhood for desirable community living in apartments" that would be available at very low rentals (far lower than Phipps).⁹⁶

Nathan Strauss finally made available a twenty-six acre site in the northeast Bronx, on which Stein built the last great monument of the courtyard tradition. He wanted to push the unit of planning beyond the city block to superblock, but he was prevented from doing so by the City's refusal to close mapped but unbuilt streets (Fig. 60). Stein was therefore forced to maintain the orthogonal relationship of the grid (Fig. 61), and to keep the very clear relationship between building and street that had been characteristic of housing development since White and Hardenbergh, but which in the early 1930s was already under assault by



Fig. 57. Phipps Garden Apartments. Clarence S. Stein. 1931. View on 39th (Middleburg) Avenue looking north.

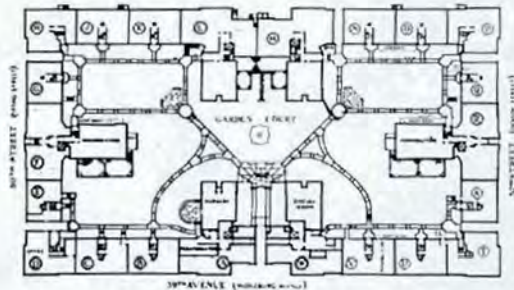


Fig. 58. Phipps Garden Apartments. Clarence S. Stein. 1931. Plan of ground floor.



Fig. 59. Phipps Garden Apartments. Clarence S. Stein. 1931. View of courtyard.



Fig. 60. Hillside Homes. Clarence S. Stein. 1932-1935. Preliminary site plans.

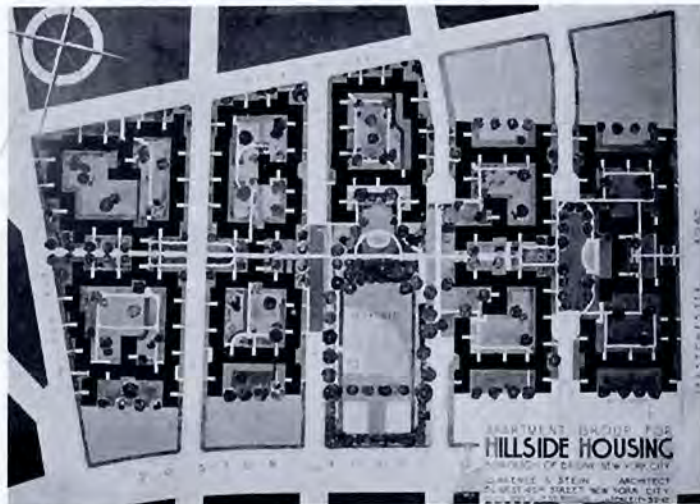


Fig. 61. Hillside Homes. Clarence S. Stein. 1932-1935. Final site plan.



Fig. 62. Hillside Homes. Clarence S. Stein. 1932-1935. View of courtyard.

advocates of the tower-in-the-park as the appropriately contemporary housing model.

Stein built 1400 apartments in eight continuous buildings. Because the site was ample and the population density relatively low, the courtyards are the most generous of all the examples within the tradition: some are large enough for active sports, though the continuous wall of buildings and the splendidly framed gateways that connect one with the other contribute to the sense of security one feels throughout even the most expansive public open spaces in the development (Fig. 62). Taking advantage of the sloping site, Stein was able to provide a number of apartments at grade suitable for the elderly. These have private gardens abutting the sunken interior courts from which they can be entered; the gardens can also be entered from the public stair serving the upper-level apartments.

The Impact of Modernism

Though certain subsequent projects of the late 1930s attempt to draw upon the experiences of Hillside Homes, the energy, the focus, and, most importantly, the artistic cohesion that seem to be inherent to the courtyard system collapsed as the more informal compositional modes derived from European modernist prototypes were introduced. This can be seen to some extent in the extravagantly praised Harlem River Houses, designed for the New York City Housing Authority by a large team headed by Archibald Brown and built in 1937 between West 151st and 153rd streets and between West Macombs Place and the Harlem River Drive.⁹⁷ Mumford wrote that this, the first federally funded, owned, and built housing project in the city, contained "the equipment for decent living that every modern neighborhood needs: sunlight, air, safe play space, meeting space, and living space. The families in the Harlem River Houses have higher standards of housing in tangible benefits, than most of those on Park Avenue."⁹⁸ The tendency toward loose composition suggested by the site plan of Harlem River Houses is even more pronounced at the Williamsburg Houses, also built in 1937 and designed by a large team of architects, this time headed by Richmond H. Shreve.⁹⁹ At Williamsburg, located in Brooklyn on Bushwick Avenue between Maujer and Scholes streets, the use of the super-block combines with an almost obsessive concern for establishing an orientation for the project's site that is totally removed from the neighborhood context: the open space is unassigned and therefore public only in the pejorative sense. Whereas the Harlem River Houses seem underappreciated, Williamsburg seems overrated. Talbot Hamlin was one of the few to criticize the design:¹⁰⁰ White and Wilensky's characterization in the *AIA Guide* of Williamsburg as "the best public housing ever built" is more common, though I think their admiration stems from its use of modernist formal and site planning conventions.

The best apartment houses of the period were neither for the poor nor of the traditional courtyard type. The cult of the skyscraper, combined with the Multiple Dwelling Law of 1929, brought about a courtyard/tower hybrid ideally suited to the dense land pattern and skyline of Manhattan. The Multiple Dwelling Law imposed new restrictions that were to affect the housing of lower-income families, but in the reckless prosperity that prevailed when it was passed the law was more influential in spurring on the construction of the high-density apartment houses built for the affluent in Manhattan: in particular, it permitted mechanically vented public hallways and staircases, and mechanically vented kitchens and bathrooms in the windowless depths of the apartments. The San Remo (Figs. 63-64), built by Emory Roth in 1930 at 145-46 Central Park West;¹⁰¹ River House,

designed by Bottomley, Wagner & White and completed in 1931 at 435 East 52nd on the East River;¹⁰² the Majestic, 115 Central Park West, 1930,¹⁰³ and the Century (Figs. 3–4) 25 Central Park West, 1931¹⁰⁴—the latter two both by Irwin S. Chanin and Jacques Delamarre—are wonderful examples of the new hybrid.

The courtyards in these examples are regrettably much too small, but the parti these buildings share is exemplary: it consists of one or two towers atop a U-shaped perimeter-block base, which forms a courtyard to supply light and air for the larger apartments at the base of the building and is potentially useful as recreation space. The towers, being free of the city grid, can deflect toward desirable orientations. Such a typology, though complex to design and expensive to construct because of structural difficulties arising from the nonrepetitive nature of the plans, is nonetheless rewarding—the Century has fifty-two types of apartments, ranging from one-room flats to eleven-room suites, with a good number of one-bedroom duplexes.

After the collapse of the real-estate market in the Depression, the type was never again seriously pursued, except at 240 Central Park South, which despite the limitations of its courtyard remains a paradigm of the contextually responsible high-rise apartment in Manhattan.¹⁰⁵ Designed by Mayer & Whittlesey in 1941, 240 Central Park South comes at the point when the transition between traditional and modernist styles strongly affected American practice and produced a number of interesting buildings which, because of the ideological positions the shift forced architects and critics alike to take, have been largely overlooked. Two hundred and forty Central Park South sits at a most complex point of transition in the character of the city as well: it faces Columbus Circle, Central Park South, and the diagonal of Broadway and West 58th Street, each of which has its own distinct character, ranging from one that can be likened to the Champs Elysees at the Etoile to another resembling a quiet backwater at the edge of the metropolis.

It is not its facades that lend 240 Central Park South distinction—they are in fact even blander than those at Knickerbocker Village—but the shaping of the two buildings, particularly the northern one, in response to the complex perimeter of the site (Figs. 65–66). Aspects of the courtyard type are combined with those of the tower to establish a horizontal and vertical response to the character of the city. Terraces begin only above the level of the trees in Central Park (high enough to be free of the street fumes); roofs are set back to conform to zoning, to solar orientation, and to views; chimneys and mechanical equipment combine with the penthouse suites to ensure a lively skyline. At the street level the building respects the varied nature of its locale: a deep, planted courtyard on Central Park South creates an elegant pocket of shade, while a vigorous one-story commercial strip along Broadway uses curved corners to define the diagonal of the street.

In 1950, the architects of 240 Central Park South worked with Skidmore, Owings & Merrill to design Manhattan House, located on East 65th and 66th streets between Third and Second avenues.¹⁰⁶ The lessons of 240 Central Park South were largely forgotten in favor of one of the two new apartment-house models which were becoming established. One was a slab configuration, as seen at Manhattan House: New York examples of the type include Washington Square Village, designed by S. J. Kessler and Paul Lester Weiner in 1958, built between West Third and Bleecker streets on West Broadway;¹⁰⁷ and Kips Bay Plaza, designed by I. M. Pei & Associates and S. J. Kessler in 1960 and built between East 30th and 33rd streets and First and Second avenues.¹⁰⁸ As used in these examples the slab was a descendant of the work of Le Corbusier, Gropius, and canonical modernism's

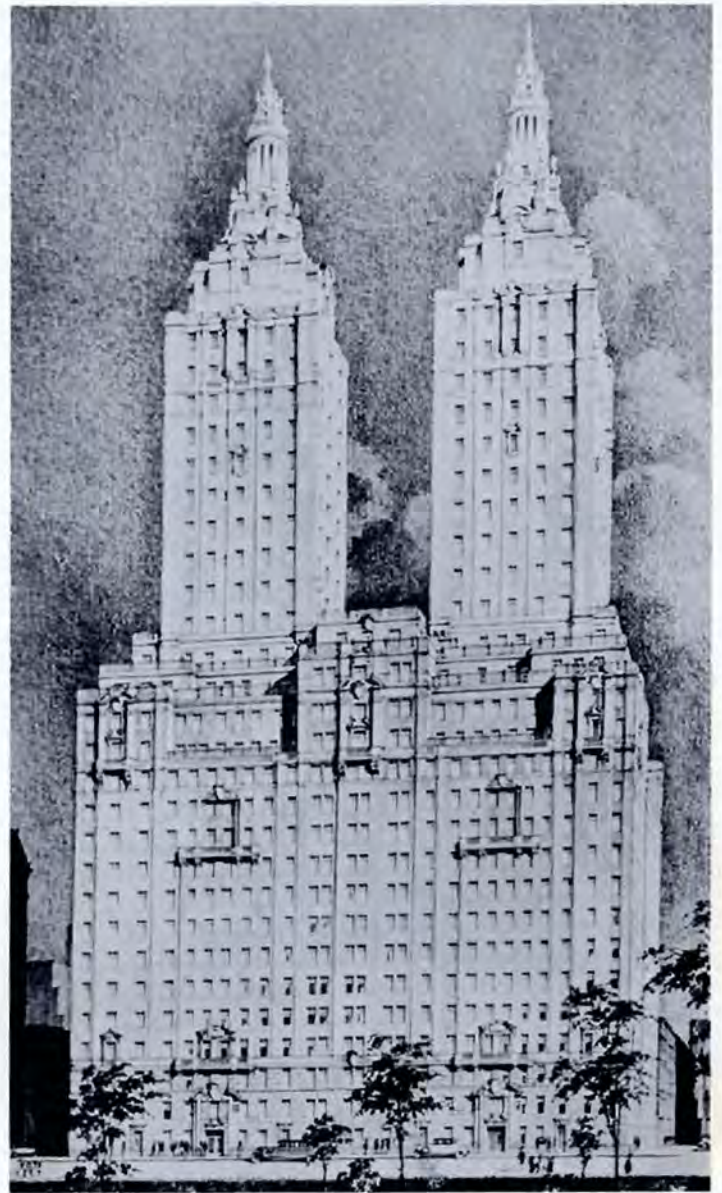


Fig. 63. *The San Remo*. Emory Roth, 1930. Architect's rendering.

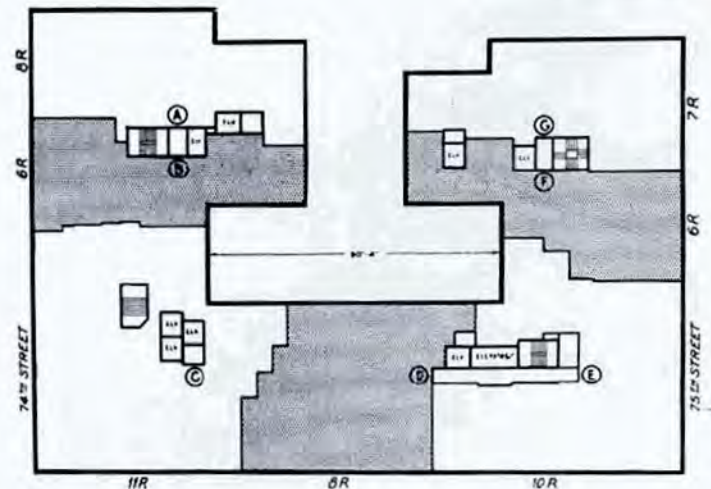


Fig. 64. *The San Remo*. Emory Roth, 1930. Diagram of typical base floor.



Fig. 65. 240 Central Park South. Mayer & Whittlesey. 1941. View on Broadway from southwest.

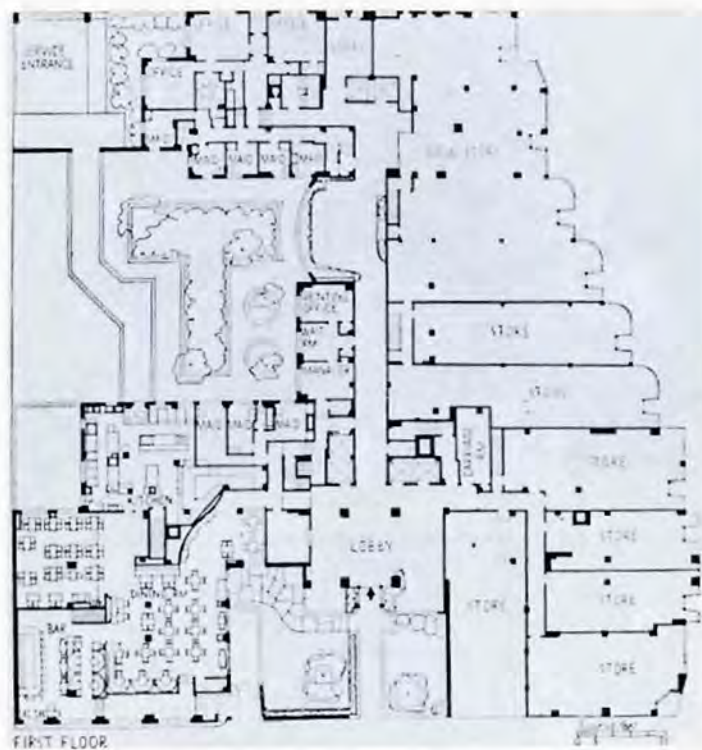


Fig. 66. 240 Central Park South. Mayer & Whittlesey. 1941. Plan of ground floor.

polemical arm, the *Congres International d'Architecture Moderne* (CIAM), although it had been used more sensitively in some of the open-ended courtyard apartments we have seen.

The second model was the tower-in-the-park, also related in form to the work of Le Corbusier, although it did not originate there. Le Corbusier had never intended the tower-in-the-park to be used for housing;¹⁰⁹ moreover, the cruciform-apartment tower-in-the-park had been found as early as 1913 at the Wardman Park Tower in Washington, D.C., and was undoubtedly given important impetus by Frank Lloyd Wright's unrealized New York apartment house, *St. Mark's-in-the-Bouwerie* of 1929.¹¹⁰ Apartment towers with cruciform plans were soon built in several cities; two notable early examples were Edwyn Rorke's six towers in historical dress built in Alden Park, Philadelphia in 1920,¹¹¹ and Boilots and Lauck's *The Walnuts*, a complex of three ten-story towers completed in Kansas City in 1930.¹¹² The "idealized" site planning that is characteristic of these apartment tower groupings, in which the towers relate to each other and the solar orientation rather than the existing street pattern, can also be seen in other American examples. Henry Atterbury Smith's partially realized *La Mesa Verde* at Jackson Heights is an early case (1926) of its use in a courtyard scheme.¹¹³

In any case, by the 1940s and 1950s groupings of free-standing towers-in-the-park had become the almost ubiquitous solution for large-scale urban renewal/slum clearance projects. New York examples include *Stuyvesant Town* designed by Irwin Clavan and Gilmore Clarke in 1947 (between East 14th and 20th streets and from First Avenue to F.D.R. Drive);¹¹⁴ the *Governor Alfred E. Smith Houses*, *Eggers and Higgins*, 1952 (between South, Madison, and Catherine streets and Robert F. Wagner Sr. Place);¹¹⁵ *Penn Station South*, *Herman Jessor*, 1962 (West 23rd to 29th streets, Eighth to Ninth avenues);¹¹⁶ and *Co-op City*, *Herman Jessor*, 1968–70 (built on filled marshland between the New England Thruway and the Hutchinson River Parkway on what was once the site of an amusement park called *Freedomland*).¹¹⁷ *University Village*, by I. M. Pei & Associates, built in 1966 on the block bounded by La Guardia Place and Bleecker, Mercer, and West Houston streets, is less common because of its relatively small site and elegant design.¹¹⁸

In the mid-1960s, architects began to sense the inadequacies of the prevailing tower-in-the-park typology. Their response was a return to the courtyard type. Davis, Brody's *Riverbend Houses*, built on Fifth Avenue between East 138th and 142nd streets in 1967, is one of the most interesting of these late courtyard buildings, not only because of its quality, but also because of its inherent contradictions.¹¹⁹ Though *Riverbend's* design is undoubtedly based on a close reading of Le Corbusier's and CIAM's work, its sociological earnestness seems more in the tradition of Sir Sydney Waterlow and Alfred T. White, while its organization comes quite close to Hubert, Pirsson & Hoddick's 1890 proposal for apartments on the site of *Madison Square Garden*. Moreover, though *Riverbend* is probably intended to be "kitchen-sink Brutalist," its unusually patterned elevations are strongly evocative of Sir Edwin Lutyens's idiosyncratic *Page Street Houses* of 1930–31.¹²⁰

Not so notably glamorous as Davis, Brody's subsequent and less innovative *Waterside Apartments* of 1974,¹²¹ *Riverbend* suffers from a lack both of sporting silhouette and of a strong relationship to its riverfront site. Tall buildings contain small apartments for singles and childless couples; lower buildings, defining rectangular courtyards, contain duplex apartments with front "porches" accessible from continuous open galleries, which occur on alternate floors and connect to the elevators. The galleries are screened from

the porches; they overlook the courtyard, which is in effect a roof-deck play space covering the garage at grade. By deliberate intent, the decks do not cover all the cars, so that the relationship of car to owner within the complex is clearly revealed. The galleries are not conceived of as "streets-in-the-sky" but as discontinuous alleys—more like culs-de-sac—serving only ten apartments, and thereby fostering a sense of neighborhood.

Though the ideas exemplified by Riverbend were only tentatively carried forward by Davis, Brody in their next project, East Midtown Plaza,¹²² and largely abandoned by them in such later work as Waterside, other architects working in the late 1960s were quick to see the continuing validity of the courtyard parti. A number of proposals were made, many of which were never realized, owing to the collapse of the housing-subsidy programs and the general economic downturn in the early 1970s. Richard Kaplan's Crown Gardens of 1971, on Nostrand Avenue between President and Carroll streets in Brooklyn, is one which did get built, though as executed it is rather disappointingly severe.¹²³ William Pedersen & Associates' proposal for housing at Seward Park Extension, only a few doors away from the Amalgamated Dwellings of 1930, is conceived at the scale of Knickerbocker Village and is notable for the vigor of its massing and its responsiveness to the problem of orientation to view and sun.¹²⁴ The courtyard type was revived in a different, though related, context by Lawrence Halprin, who proposed to use low-rise apartments to connect the free-standing towers of Penn Station South and thereby attempt to reweave the urban fabric that had been so horribly rent by the redevelopment patterns of the 1950s.¹²⁵

All of these late courtyard apartment houses were improvements on the prevailing norm, but though they go beyond mere functional accommodation or technological innovation to provide good urban environments, they suffer in comparison with their more traditional equivalents of thirty or forty years earlier.

The Lessons of History

I have written this essay to offer a number of lessons. The first, always worth repeating, concerns the use of history by architects. We have lost the habit of thinking of individual buildings as fragments of a larger totality, not merely in the physical sense but in the sociological, functional, and cultural sense as well. Architects should look at old buildings, not so much to copy them literally (though I am certain there are appropriate times to do that), but to rediscover in the present the kinds of things architects did better in the past—things done for people, for cities, for the landscape, for the sake of art. This retrospection is particularly urgent now, when the public, with justification, seems to have lost confidence in our abilities to do as well as our colleagues of two or three generations ago.

Another lesson concerns the symbolic nature of housing typologies. In this essay I have emphasized one building type, the courtyard apartment house, because I believe in its continuing viability. But as one reviews its history in New York, it becomes clear that examples of this type fall into two distinct categories of symbolic meaning. Many examples, especially those from before the First World War, are palaces of privilege that are not really domestic in character, in the sense that the freestanding suburban houses of their time were, or even the brownstones: like the great townhouses that lined Fifth Avenue and Riverside Drive, these palaces were intended to function as architecture with a capital A, to represent, even to monumentalize, the collective wealth and status of the inhabitants. This monumentalizing of the collective is true even of working-class developments, such as

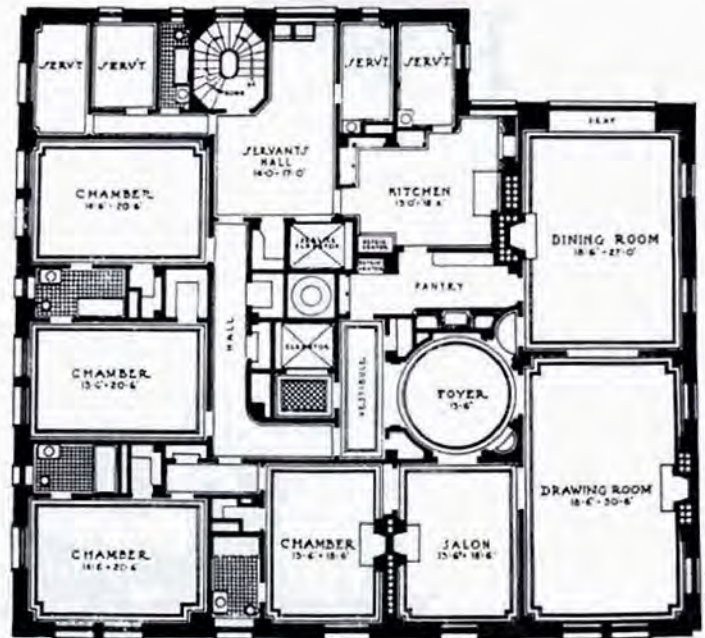


Fig. 67. 635 Park Avenue. J.E.R. Carpenter. 1912. Plan of typical floor.



Fig. 68. 733 Park Avenue. Kahn & Jacobs. 1971. Plan of typical floor.

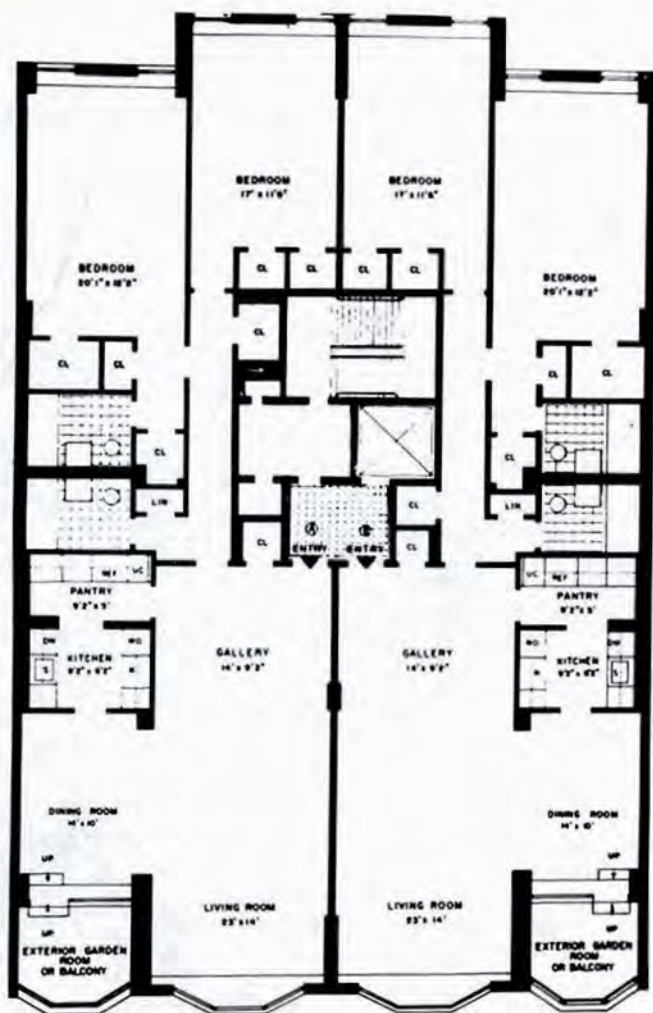


Fig. 69. Butterfield House. Mayer, Whittlesey & Glass. 1972. Plan of typical floor.

those commissioned by Alfred T. White: like such later European examples as the Karl Marx Hof at Vienna by Karl Ehn, they are exemplars of class consciousness—though of course White's is the product of capitalistic do-goodism, and Ehn's of socialist revolution.

The second category of symbolism that was explored in conjunction with the courtyard type seeks to be much more overtly domestic in its character. It takes the single-family house on a freestanding lot as the standard of measurement and combines it with the domesticity of early twentieth-century house design as exemplified in the work of Frank Lloyd Wright, C. F. A. Voysey, Barry Parker, and others. This type, more prevalent after the First World War, is also more frankly democratic and middle-class in its aspirations. It is adequately exemplified in the work of Andrew Thomas and Clarence Stein. While it may recognize the issues of social status and class, it prefers to ignore them and turn its attention to those qualities that can be characterized as "human," "friendly," or even "cozy"—terms that currently make many architects wince. The work of Thomas and others should make it perfectly clear that architecture can incorporate these characteristics without sacrifice of compositional discipline or appropriate technological innovation. Careful study of Thomas's work makes Ernst May's accomplishments in Frankfurt, though staggering in the number of individual buildings constructed and of neighborhoods designed, seem as aesthetically dry as dust. In offering a glimpse of a "brave new world," May and other modernists shouted their hopes for a new social state but barely whispered about those components of day-to-day life in a city that must be endured. Not so, of course, should we compare Thomas with Michel De Klerk and his followers in Amsterdam, who were far more accomplished stylists than Thomas and fairly equal to him as urbanists, but whose work has also been ignored until recently.

The third lesson has to do with the design of individual apartments or "dwelling units"—a loathsome and revealing pseudo-scientific term arising out of a production, as opposed to a consumption, mentality. Architects have lost touch with the skills necessary to design well at a small scale. Practice as represented by the office building has focused on the large-scale project and ignored the design of the habitable realm, responsibility for which has been gradually surrendered by the architect to the interior designer (who is not even a decorator, but a professional called in to do what the architect used to do). Because of the agglomeration implicit in the apartment-house type, the design of the individual apartment is even more complex than that of the house. It is true that the modern movement has contributed to the rational design of the apartment unit, though its emphasis on efficient planning and adequate ventilation have too often been viewed as enough to ensure success.

The problem is compounded by the fact that, whereas the American practitioners of the academic styles loosely labeled "Beaux-Arts" saw the housing problem as one in which it was necessary to raise the standards of accommodation for the poor up toward those of the rich, the modernists, for reasons no doubt related to their political beliefs, set out to perfect the design of minimal housing on its own terms: *existenz minimum* became not only inevitable, but also, in some peculiar way, desirable. Ultimately, the modernist principles of abstraction and minimalism have served to legitimize the mediocre commercial apartment as luxury housing for a society that accepts that "less is more," provided that the less is air-conditioned, free of cockroaches, and near a Bloomingdale's.¹²⁶ Rich man and poor man still live in similar buildings, but the role model has been reversed.

A contrast of two super-luxury apartments of comparable size and in buildings of similar location, 635 Park Avenue (Fig. 67) and 733 Park Avenue (Fig. 68), is instructive (the former was designed by J. E. R. Carpenter in 1912,¹²⁷ the latter by Kahn & Jacobs in 1971).¹²⁸ The rich spatial characteristics and hierarchical sequences that characterize the earlier plan are in no way echoed in the later, whose thin-walled minimalism has drained it of all energy. A similar lack of detail in the vertical plane will require major intervention on the owner's part in order to render the space comfortably habitable. The same lack of richness is found in comparing two less luxurious apartments, a one-bedroom duplex from the Century (Fig. 4) and a two-bedroom flat from Butterfield House (Fig. 69),¹²⁹ built in 1962 at 37 West 12th Street by Mayer, Whittlesey & Glass, and like 733 Park Avenue, an above average modern apartment house.

All of these lessons concern values: in the area of housing, we have become obsessed with the production of shelter and have lost the sense of the house as a place to live. In our fixation upon the dwelling unit and the constructional matrix, we have lost the sense of the collective implicit in the apartment-house type. At the same time, we have lost the ability to design simultaneously at the big and the small scales which constitute the dual nature of the housing problem. We have dealt so long in gross masses that we have lost a sense of detail, especially of detail that does not grow directly out of the construction process. Our palette of materials has been virtually wiped clean, leaving us with a very few crude techniques: we have made a cult of brutality. Perhaps the Modern Movement was a necessary purgation, but as Bruce Alsopp writes, "We can't live in the loo forever."¹³⁰ Our wealth and our technology should free us, they should permit us to live better than our ancestors. How strange that they have done the opposite, and that we are the first culture to reject ornament and fine craftsmanship; that ours is the first culture to believe that the subject of architecture is its own process and not the relationship of individuals to each other, to their city, to their history, and their culture.

ACKNOWLEDGMENTS

I wish to thank John Massengale, who not only helped me with the research but also supplied valuable critical insights to the text. In addition, I am grateful to Christopher Gray of the Office for Metropolitan History for helping with the documentation. Further thanks are due to my colleague Richard Plunz for making available to me portions of his manuscript for what will surely be a major work, *Housing Form in New York City, 1850-1950*, to be published by Mardoga, Paris. I have read portions of the second half of Plunz's manuscript, "The Institutionalization of Housing Form in New York City, 1920-1950" which will appear as a chapter in *Housing Form and Public Policy in the United States*, edited by Richard Plunz, Columbia Monographs on Architecture, Preservation, and Planning (New York, Praeger, 1979). N.B. The most useful general sources are listed after the notes.

NOTES

1. Paul Goldberger, "Ruling Against Model High-Rise Disputes Federal Housing Ideas," *New York Times*, October 8, 1978, pp. A-1, A-14.
2. See, for example, David Watkin, *Architecture and Morality* (London: Oxford University Press, 1977).
3. Sigfried Giedion, *Space, Time and Architecture* (Cambridge, Mass.: Harvard University Press, 1941), pp. 493-95; David H. Pinkney, *Napoleon III and the Rebuilding of Paris* (Princeton: Princeton University Press, 1958), especially pp. 8-9.
4. Andrew Alpern, *Apartments for the Affluent* (New York: McGraw-Hill, 1975), pp. 12-13. Alpern suggests that the Stuyvesant, razed in 1957, may have been a reconstruction of several older houses. In an introduction to Alpern's book, Harmon Goldstone states that Hunt changed affluent New York's attitude toward the apartment-house concept which he "imported from Paris. . . . No doubt the impeccable social credentials of Rutherford Stuyvesant, who financed the venture, were also helpful in making the project a success" (p. 1). See also "The Apartment Houses of New York: With an Example from Berlin in Comparison," *Real Estate Record and Guide* 85 (March 26, 1910): 644-46; R. W. Sexton, *Apartment Houses, Hotels, and Apartment Houses of Today* (New York: Architectural Book Publishing Co., 1929), p. 3; Anthony Jackson, *A Place Called Home* (Cambridge, Mass.: The MIT Press, 1976), p. 86; Charles Lockwood, *Manhattan Moves Uptown* (Boston: Houghton Mifflin, 1976), p. 294.
5. "The Modern Apartment House in Paris," *Architectural Record* 2 (January-March 1893): 324-31. Also see Helene Lipstadt, "Housing the Bourgeoisie: Cesar Daly and the Ideal Home," *Oppositions* 8 (Spring 1977): 33-47.
6. Among others are Sarah Gilman Young, *European Modes of Living, or, The Question of the Apartment House* (New York: Putnam, 1881); Hubert, Pirsson & Hoddick, "New York Flats and French Flats," *Architectural Record* 2 (July-September 1892): 55-64; "The Modern Apartment House in Paris," and Fernand Mazade, "How and Where to Live in Paris on \$3000 a Year," *Architectural Record* 13-Part I (April 1903): 349-57, Part II (May 1903): 423-32, Part III (June 1903): 548-54; and Jean Schopfer, "City Apartments in Paris," *Architectural Review* (Boston) 10 (July 1903): 91-97. In addition, general articles of the period on the apartment house usually included comparative French examples; see, for example, Irving K. Pond, "Architecture of Apartment Buildings," *Brickbuilder* 7-Part I (June 1898): 116-18, Part II (July 1898): 139-41, Part III (December 1898): 249-52; "Apartment Houses," *American Architect and Building News* 29-Part I (September 27, 1890): 194-95; 30-Part II (November 15, 1890): 97-100; 31-Part III (January 10, 1891): 20-23; Ernest Flagg, "Apartment Houses and Tenements," *Architectural Review* (Boston) 10 (July 1903): 85-93. See also E. D. Lindsay's "French Flats" (New York, 18-), prospectus for his cooperative apartment house.
7. Edith Wharton, *The Age of Innocence* (New York: D. Appleton, 1920), pp. 25-26.
8. "The Duplex Apartment House: A Comparison of the Newest Buildings of this Type," *Architectural Record* 29 (March 1911): 326-34; C. Matlack Price, "A Pioneer in Apartment House Architecture: Memoir on

- Philip G. Hubert's Work," *Architectural Record* 36 (July 1914): 74-76.
9. "The Duplex Apartment House," p. 326; Price, p. 75; Alpern, pp. 14-15; Norval White and Elliot Willensky, *AIA Guide to New York City*, rev. ed. (New York: Collier Macmillan, 1978 [hereinafter referred to as *AIA Guide*]), p. 117.
 10. *The Dalhousie, Elegant Apartment House* (New York: 1884); "Fifty-Seven Years of Progress in Apartment Building," *New York Herald Tribune*, June 29, 1941, pp. 1-2.
 11. Hubert, Pirsson & Hoddick, p. 62.
 12. Alan Burnham, "The New York Architecture of Richard Morris Hunt," *Journal of the Society of Architectural Historians* 11 (May 1952): 9-14; Alpern, p. 11.
 13. "Apartment Houses," Part III, p. 21.
 14. Andrew Saint, *Richard Norman Shaw* (New Haven: Yale University Press, 1976), p. 195.
 15. Saint, p. 197.
 16. "The Duplex Apartment House," pp. 326, 328; C. Matlack Price, "The Apartment House Today," *Arts and Decoration* 3 (January 1913): 86-88.
 17. "Studio Apartment House at 70 Central Park West, New York City," *Architectural Review* (Boston) 27 (February 1920): 33-34.
 18. "Bryant Park Studio Building," *American Architect and Building News* (International Edition) 64 (October 5, 1901): plates; "Bryant Park Studio Building," *American Architect and Building News* 109 (January 19, 1916): plates; *AIA Guide*, p. 136.
 19. "Apartment Houses of Duplex and Studio Plan in New York City," *Architects' and Builders' Magazine*, n.s. 10 (March 1909): 222-61; "The Gainsborough Studio," *American Architect and Building News* 100 (November 29, 1911): plates and plans; *AIA Guide*, p. 172.
 20. "Studio Apartment House," *Architects' and Builders' Magazine*, n.s. 10 (October 1909): 379-82; "An Apartment House Aberration," *Architectural Record* 25 (June 1909): 434-37; Alpern, pp. 60-61; *AIA Guide*, p. 199.
 21. Alpern, pp. 90-91; *AIA Guide*, p. 199. Pollard also built an earlier (1907) studio building on the same block at 33 West 67th Street; see "Sixty-Seventh Street Atelier Building, New York," *American Architect and Building News* 91 (January 5, 1907): plates and plans; "Some Interesting Studio Apartments in the Atelier Building, 33 W. 67th St., N.Y.," *Architectural Record* 21 (May 1907): 385-88; "Atelier Building," *Architecture* 15 (April 4, 1907): pl. 37; *AIA Guide*, p. 199.
 22. Richard Morton, "An Essay on Duplex Apartments in General and Those at 471 Park Avenue in Particular," *Apartment Houses of the Metropolis* (New York: Hesselgren, 1908), pp. 5-6; "Apartment Houses of Duplex and Studio Plan in New York City," pp. 222-23; Charles W. Buckham, "Duplex Co-Operative Apartment Houses," *American Architect* 96 (December 22, 1909): 266-67.
 23. "A Co-Operative Apartment House in New York Designed by Charles Platt," *Architectural Record* 24 (July 1908): 1-18; "What A Cooperative Apartment Is," *Real Estate Record and Guide* 82 (July 4, 1908): 7; "Studio Apartments, 131 and 135 East 66th Street, New York City," *Architectural Review* (Boston) 67 (March 1930): 220-21; "131 and 135 E. 66th St., N.Y.," *Architectural Review* (Boston) 16 (February 1909): 19-20, pl. 13-14, 16-20; Alpern, pp. 44-45; *AIA Guide*, p. 224.
 24. "An Apartment House on Park Avenue, New York," *American Architect* 128 (September 9, 1925): 216; R. W. Sexton, *American Apartment Houses of Today—City and Suburban* (New York: Architectural Book Publishing Co., 1926), pp. 77-78; Alpern, pp. 100-101.
 25. Sexton (1929), p. 24.
 26. Electus D. Litchfield, "Cooperative Apartments," *Architectural Forum* 53 (September 1930): 313-49; Sexton (1926), pp. 99-100; Alpern, pp. 102-3.
 27. Alpern, pp. 106-7.
 28. Aline Lewis Goldstone and Harmon Goldstone, *Lafayette A. Goldstone: A Career in Architecture* (New York: Eagle, 1964), pp. 82-85, 134; Alpern, pp. 108-11; *AIA Guide*, p. 239.
 29. "Superb Microcity in the Middle of a Block," *Interiors* 135 (November 1975): 76-79; "1 + 1 = 3: A New Equation for Counting a Building's Costs," *Architectural Record* 158 (December 1975): 68-69, 76-79; "Mixed-Use Buildings: Microcosms of Urbanity," *Progressive Architecture* 56 (December 1975): 37-43; *AIA Guide*, p. 218.
 30. Ernest Flagg, "The New York Tenement House Evil and Its Cure," *Scribner's Magazine* 16 (July 1894): 108-17.
 31. Jackson, pp. 107-9.
 32. See "The Works of Ernest Flagg," *Architectural Record* 11 (April 1902): 11-104. Flagg's Mills House No. 1, at 160 Bleecker Street, is a remarkable example of the use of the courtyard, here glazed, to provide light and air to the interior rooms. Though built as a hotel, it was remodeled in the 1970s and is now an apartment building, the Atrium. See "The Works of Ernest Flagg," pp. 42-43; Steven Greenhouse, "Down-At-Heels Hotel Gets a Natty New Identity," *New York Times*, September 28, 1975, section 8, pp. 1, 12; *AIA Guide*, pp. 69, 563.
 33. "The Works of Ernest Flagg," pp. 38-39; Ernest Flagg, "Fireproof Tenements and the Building Law," letter to the editor, *New York Architect* 5 (February 1911): 13-14.
 34. Jackson, pp. 107-8.
 35. "What A Tenant Gets For \$10,000," *Real Estate Record and Guide* 74 (December 6, 1909): 807-8; "Alwyn Court," *Architects' and Builders' Magazine*, n.s. 10 (June 1910): 336-40; Alpern, pp. 54-55; *AIA Guide*, p. 173.
 36. "No. 998 Fifth Avenue," *Architecture and Building* 42 (February 1912): 91-102; "998 Fifth Avenue," *The Architect* 6 (March 1912): 218-22, plus plates; Alpern, pp. 74-75; *AIA Guide*, p. 234.
 37. Elizabeth Hawes, "The Annals of Apartments: Courtyards," *The New York Times*, September 12, 1976, section 8, pp. 1, 6; Alpern, pp. 82-83.
 38. "Building For Health: Sensible and Hygienic House Plans Are One Significant Result of the Present Campaigning Against Disease," *The Craftsman* 19 (March 1910): 552-61; Henry Atterbury Smith, "Open-Stair Apartments: A New Development in City Architecture," *The Craftsman* 20 (July 1911): 364-71; "Prize Winning Houses," *Real Estate Record and Guide* 89 (February 24, 1912): 386-87; H. A. Smith, "Some Facts and Figures About Some Successful Housing Schemes," *Architecture* 37 (March 1918): 72-74; *AIA Guide*, p. 245.
 39. Alfred T. White, *Improved Dwellings for the Laboring*

- Classes (New York: Improved Model Dwelling Co., 1879); Louis H. Pink, *The New Day in Housing* (New York: John Day, 1928), p. 99; Edith Elmer Wood, *Recent Trends in American Housing* (New York: Macmillan, 1931), p. 11; Jackson, p. 55; Charles Lockwood, "Quintessential Housing of the Past: Tenements Built for the Poor," *New York Times*, July 23, 1978, section 8, pp. 1, 6; *AIA Guide*, p. 397.
40. Jackson, p. 41.
 41. Alfred T. White, *The Riverside Buildings of the Improved Model Dwelling Co.* (New York: Improved Model Dwellings Co., 1890); *AIA Guide*, p. 376.
 42. Jackson, p. 55. Ware was the winner of both the 1879 and 1896 competitions.
 43. "Apartment Houses," *American Architect and Building News* 31—Part IV (January 17, 1891): 37–39.
 44. "The Dakota Apartment House," *American Architect*, 20 (July 24, 1886): plate; "Apartment Houses," Part IV, pp. 38–39; Alpern, pp. 20–21; *AIA Guide*, pp. 200–201.
 45. Just as Alfred T. White and his architects, William Field & Sons, felt the need to supply an appropriate neighborhood context to the Tower Buildings and therefore introduced the mews houses, so Edward Severin Clark, the developer of the Dakota, in order to provide it with an appropriate setting commissioned Hardenbergh to design a continuous row of town houses along the north side of West 73rd Street between Central Park West and Columbus Avenue. Many of the Dakota's town houses have given way to apartments, but the Tower Mews, now called Warren Place, remain splendidly intact.
 46. "The Central Park Apartments," *Building* 2 (December 1883): 32, plate; "The Duplex Apartment House," p. 326; Price, "A Pioneer in Apartment House Architecture," p. 75; "Street That Has Maintained Its Character, Central Park South, Where Some of the First Apartment Houses Were Erected, Still Retains Its Hold As a Residential Center," *Real Estate Record and Guide* 96 (August 7, 1915): 225; Alpern, pp. 16–17.
 47. Hubert, Pirsson & Hoddick, pp. 55–64.
 48. Hubert, Pirsson & Hoddick, p. 58.
 49. Hubert, Pirsson & Hoddick, p. 63.
 50. Peter Eisenman, "From Golden Lane to Robin Hood Gardens; or, If You Follow the Yellow Brick Road, It May Not Lead to Golders Green," *Oppositions* 1 (September 1973): 27–56.
 51. Charles Jencks, *The Language of Post-Modern Architecture* (New York: Rizzoli, 1977), pp. 21–25.
 52. "New York Apartment Houses," *Architectural Record* 11 (July 1901): 476–508; Charles H. Israels, "The Metropolitan Apartment House and Hotel," *Real Estate Record and Guide* 73 (June 11, 1904): 1464–73; Alpern, pp. 26–27; *AIA Guide*, p. 272.
 53. "The Aphorp," *American Architect and Building News* 91 (January 5, 1907): plates; "What A Tenant Gets for \$6000 A Year," *Real Estate Record and Guide* 82 (July 4, 1908): 20–21; "The Aphorp," *Architects' and Builders' Magazine*, n.s. 9 (September 1908): 531–33; "Aphorp," *American Architect* 98 (January 19, 1919): plates; Hawes, pp. 1, 4; Alpern, pp. 52–53; *AIA Guide*, pp. 192–93.
 54. "Astor Court," *Architecture and Building* 49 (March 1916): pls. 26–29; "Astor Court Apartments," *Architecture* 34 (September 1916): pls. 134–45; "The Latest High Class Apartment House" (advertisement), *Real Estate Record and Guide* 98 (September 16, 1916): 395; "The Development of the Apartment House," *American Architect* 110 (November 29, 1916): 331–36; "A Half Century of Progress in the Development of Distinctive Types of Buildings in the United States," *American Architect* 129 (January 5, 1926): 73–95; Hawes, pp. 1, 4.
 55. "Astor Concourse Apartments," *Architecture and Building* 58 (October 1926): 117, pls. 199–200; "New York's Prize Winning Apartment Houses for 1927," *Architecture* 57 (May 1928): 253–56.
 56. "The Belnord To Have Interesting Features," *Real Estate Record and Guide* 132 (November 7, 1908): 873–75; "The Belnord," *Real Estate Record and Guide* 82 (December 19, 1908): 1215; "Apartment Houses of Duplex and Studio Plan," pp. 248–49; "The Belnord Apartment House," *Architects' and Builders' Magazine* 42 (November 1909): 111–13; "Three Typical Buildings in Manhattan and How They Might Be Rebuilt," *Real Estate Record and Guide* 97 (April 29, 1916): 651.
 57. "270 Park Avenue: The Largest of Apartment Houses," *Architecture* 37 (May 1918): 143, plates; Werner Hegeman and Elbert Peets, *Civic Art* (New York: Architecture Book Publishing Co., 1922), pp. 194–95.
 58. "Apartment House, 277 Park Avenue," *Architecture and Building* 57 (January 1925): 4, 10, pls. 22–24.
 59. "An Apartment House, 1185 Park Avenue, New York City," *Architecture and Building* 64 (January 1932): 23–24, pl. 31; Hawes, pp. 1, 4; Alpern, pp. 116–17.
 60. "London Terrace Apartments, New York City," *Architecture and Building* 62 (July 1930): 194, pls. 205–8; "Recent Apartment Houses in New York," *Architectural Forum* 53 (September 1930): 283–84; Alpern, pp. 124–25; *AIA Guide*, p. 109.
 61. "Knickerbocker Village Housing Project," *Architectural Record* 75 (February 1934): 122–23; "Budget of Cost, Financing, and Operating Knickerbocker Village," *Architectural Forum* 61 (December 1934): 224–26; Albert Mayer, "A Critique of Knickerbocker Village," *Architecture* 71 (January 1935): 5–10; *AIA Guide*, p. 37.
 62. Brian Danforth and Donald Sullivan, *Bronx Art Deco Architecture: An Exposition* (New York: Hunter College, 1976), pp. 14–19; Judy Klemesrud, "Money Coming to Restore A Lived in Art Form in the Bronx," *New York Times*, August 20, 1976, p. B-1; *AIA Guide*, p. 333.
 63. Danforth, p. 15.
 64. Danforth, pp. 17–18; quoted from rental brochure.
 65. "Apartment Houses at Bay Ridge, Brooklyn, N.Y.," *Architectural Forum* 66 (May 1937): 414–15; *AIA Guide*, p. 479.
 66. "Celtic Park Apartments," *Architectural Record* 71 (March 1932): 167–68.
 67. Pink, pp. 154–56. A good statement of Thomas's philosophy is provided in Andrew J. Thomas, *Industrial Housing* (Bayonne, N.J.: Bayonne Housing Corp., 1925), passim.
 68. "American Architecture Today," *Architectural Record* 58 (April–June 1928): 181–204.
 69. John Taylor Boyd, Jr., "Garden Apartments in Cities," *Architectural Record* 48—Part I (July 1920): 53–74, Part II (August 1920): 121–35; Frank Chouteau Brown, "Tendencies in Apartment House Design: Part XI, The Unit Apartment Building and Its Grouping," *Architectural Record* 51 (May 1922): 435–46; A. E. MacDougall, "New Features in Apartment House Building," *Architectural Forum* 43

- (September 1925): 153-60.
70. Not only were there historical precedents for the garden apartment, but there were also contemporary examples in Europe that influenced Thomas and the officers of the Queensboro Corporation as well, who were particularly impressed by their use in the new suburbs of the German cities, especially the Charlottenburg section of Berlin. See Boyd, "Garden Apartments," Part II, p. 122. Boyd points out that the inspiration for the details was also found elsewhere: "The idea of the court, of course, is as old as architecture. The 'open stair' in apartments is a London device, and was found reproduced in Brooklyn years ago. Mr. Thomas developed the idea of using Loggias, though this practice is many years old in Chicago. Planning apartments two rooms deep had long been a characteristic of apartments for the rich, though Mr. Thomas was one of the first to employ it in wage-earner's housing. Even that arrangement of plan, of having separate entrances for each apartment and eliminating both public and private corridors—which Mr. Thomas has so well worked out in apartments—is old in college dormitories, going back even to the cloisters of Oxford, though naturally on account of the greater number of rooms and kitchens, it is a much more difficult matter to introduce into apartments." What, Boyd exclaims, are "American university dormitories arranged around a yard or campus . . . but garden apartments!" (pp. 122-23). Also see "The Apartment Houses of New York: With An Example From Berlin in Comparison," pp. 645-46. An interesting anticipation of the courtyard type at the garden apartment scale is the proposal for "patio tenements" by Mary N. Gannon and Alice J. Hands in 1898. See James Ford, *Slums and Housing* (Cambridge, Mass.: Harvard University Press, 1936), p. 681, 885, figs. 118b-c, pl. 7G.
 71. Boyd, "Garden Apartments," Part II, p. 131.
 72. "Cambridge Court, Jackson Heights, Queens, Long Island," *Architecture* 48 (September 1923): 309-10; "The Garden Homes at Jackson Heights, Long Island," *Architecture and Building* 56 (June 1924): 55-56, pls. 123-24. Another project by Wells at Jackson Heights is discussed and illustrated in C. Stanley Taylor's "Recent Progress in Developing Co-Operative Apartment Buildings," *Architectural Forum* 37 (November 1922): 219-24. A contemporaneous garden apartment which partially but unsuccessfully broke the perimeter wall by making light courts was James Meehan's "Theodore Roosevelt Apartment House, Grand Concourse and 171st Street, New York City," *Architecture and Building* 55 (February 1923): pls. 22-24. See also, "Apartment Building at Jackson Heights," *Real Estate Record and Guide* 100 (July 7, 1917): 6 11-12, which discusses the garden-apartment idea and illustrates an apartment house by an unidentified architect.
 73. Boyd, "Garden Apartments," Part II, p. 134.
 74. "New Garden Apartments, Queens County, New York City: A Group of Buildings Now Under Construction Showing Economy of Plan and New Principles of Land Development," *Architectural Forum* 30 (June 1919): 187-91; "Garden Apartment Buildings for the Queensboro Corp., Jackson Heights, Queens, New York," *Architecture* 62 (September 1920): pls. 128-30; "Revolutionizing the Apartment House," *House Beautiful* 49 (March 1921): 186-87; Clarence S. Stein, "Amsterdam—Old and New: Queensboro Heights, N.Y., Jackson Heights, N.Y., Andrew J. Thomas, architect," *AIA Journal* 10 (1922): 310-28. Thomas's study for an "improved development of five-story tenements" for a New York City block is similar to Operation No. 8; see Boyd, "Garden Apartments," Part I, diagram G. See also "Designs for Model Tenement," *Architecture* 41 (April 1920): 117.
 75. "The Button-Control Elevator in a New Type of Moderate Price Apartment Building at Jackson Heights, New York City," *Architectural Record* 51 (June 1922): 486-90; "The Chateau Apartments, Jackson Heights, N.Y.," *Architecture and Building* 55 (February 1923), pls. 22-26; "The Chateau Apartments," *Architecture* 48 (September 1923): 310-14; "The Garden Homes at Jackson Heights," pl. 121; Sexton (1926), pp. 87-88, pls. 10, 18, 31.
 76. "The Towers, Jackson Heights, L.I.," *The Architect* 2 (July 1924): pls. 87-88, plans; "The Garden Homes at Jackson Heights," pp. 56-57, pl. 120; Sexton (1926), pp. 201-2, pls. 36, 39, 45.
 77. Sexton (1926), pp. 203-4.
 78. Sexton (1926), pp. 205-6.
 79. John Taylor Boyd, Jr., "A Departure in Housing Finance: The Metropolitan Life to Build Four Blocks of Apartments in New York City," *Architectural Record* 52 (August 1922): 133-42; "The Metropolitan Houses in Long Island City, N.Y.," *Architecture and Building* 56 (May 1924): 42-44, pls. 99-104, plan; Frank Chouteau Brown, "The Low-Rental Apartment—An Economic Fallacy," *Architectural Record* 55 (May 1924): 405-15. For a comparison by Henry Wright of Thomas's Metropolitan Life and Paul Lawrence Dunbar Houses with Clarence Stein's Monroe Court at Sunnyside Gardens, see Wright's "The Modern Apartment House," *Architectural Record* 65 (March 1929): 213-88. Wright was Stein's partner and a frequent contributor to *Architecture* and *Architectural Record*, particularly the latter's March apartment issues. He was a trenchant critic who had a profound influence on a generation of critics including Charles Abrams and Charles Ascher; see Charles Ascher, letter to the editor, *New York Times*, October 20, 1977, p. 24.
 80. "Paul Lawrence Dunbar Garden Apartment, New York City," *Architectural Record* 63 (March 1928): 272-75; Sexton (1929), pp. 90-94; John Taylor Boyd, Jr., "Opportunity in the Garden Apartment," *Architectural Forum* 53 (September 1930): 353-64. See also "New York's Prize Winning Apartment Houses of 1927," p. 255. Another prize-winning apartment house designed by Thomas and built by Rockefeller in Manhattan, although not for socially or economically disadvantaged tenantry, was 115 East 67th Street, 116 East 68th Street; see "Prize Winning Apartments in New York," *Architectural Record* 71 (March 1932): 199-208. For other Manhattan apartment houses by Thomas see "Apartment House at Avenue A (York Avenue) and 65th St., New York City," in Sexton (1926), pp. 87-88; "49 East 61st Street, New York City," in Sexton (1926), pp. 89-90.
 81. *Model City and Suburban Homes* (New York: City and Suburban Homes Co., 1905); Boyd, "Garden Apartments," Part I, pp. 59-65.
 82. Brown, "Tendencies in Apartment House Design: Part XI," pp. 442-46; "Hayes Court, Jackson Heights, Long Island," *Architecture* 48 (September 1923): 305; "Hayes Court Apartments, Jackson Heights, New York," *The Architect* 1 (October 1923): pl. 27. Thomas built an apartment house with a similar plan in the

- Bronx; see "Apartment House, Concourse and 183rd Street, Bronx, New York," *Architectural Forum* 33 (September 1920): pl. 46.
83. Sexton (1929), p. 103; Boyd, "Opportunity in the Garden Apartment," p. 359.
 84. *Thomas Garden Apartments* (New York: Thomas Garden Apartments Inc., n.d.); "Thomas Garden Apartments, New York City," *Architecture and Building* 59 (April 1927): 111-12, pls. 76-77; "Garden Apartment Building, East 158th Street, New York City," *Architectural Record* 63 (March 1928): 273; Boyd, "Opportunity in the Garden Apartment," pp. 353-54.
 85. Henry Wright, "The Place of the Apartment House in the Modern Community," *Architectural Record* 68 (March 1930): 207-60; Wright, "The Modern Apartment House: A Review and Forecast," *Architectural Record* 69 (March 1931): 187-224; A. T. North, "Cooperative Plan, One Answer to the Low Cost Housing Problem: The Grand Street Apartments, New York City," *Architectural Forum* 54 (February 1931): 241-46; Talbot Hamlin, "The Prize Winning Buildings of 1931," *Architectural Record* 71 (January 1932): 10-36; Wood, pp. 183-84; *AIA Guide*, pp. 56-57.
 86. *New Day in Housing*, p. 183. See also Sexton (1926), pp. 106-7; Wood, pp. 180-83; Calvin Trillin, "U.S. Journal. The Bronx. The Coops," *New Yorker*, 53 (August 1, 1977): 49-54.
 87. Sexton (1929), pp. 162-63.
 88. Boyd, "Garden Apartments," Part I, pp. 69-74.
 89. "Garden Apartments," Part I, p. 70.
 90. I. Rosenfield, "Phipps Garden Apartments, Long Island City, New York," *Architectural Forum* 53 (September 1930): 353-60; "Phipps Garden Apartments," *Architectural Record* 71 (March 1932): 201-7; Stein, *New Towns in America*, rev. ed. (New York: Reinhold, 1957), pp. 87-92, 109-13; *AIA Guide*, p. 507.
 91. *New Day in Housing*, p. 86.
 92. Stein, *New Towns in America*, p. 89. Stein's rather stodgy nature is evident in his statement that "the vari-colored brick was attractive, but my puritanical sense of economy has since led me back to our local common Hudson brick."
 93. Stein, *New Towns in America*, pp. 89-90.
 94. Mumford shares this view. For forty years or more he has argued against the "skyscraper apartment" which he characterized as a "naive modernism that was new way back in 1880." His analysis finds this type of dwelling accommodation wanting from the point of view of family life as well as from the point of view of developmental and maintenance costs. The tall apartment house not only requires great capital investment at the outset but also considerable ongoing maintenance costs as a result of the considerable amount of internal public space (corridors, elevators, fire stairs) and the amount of sophisticated mechanical equipment necessary to run the building. See "East End Urbanity" (Ch. 2, pp. 26-34) and "The Marseille 'Folly'" (Ch. 6, pp. 68-81) Mumford, *The Highway and the City* (New York: Harcourt, Brace & World, 1963).
 95. Clarence S. Stein, "Hillside Homes," *American Architect* 148 (February 1936): 17-33; Stein, *New Towns in America*, pp. 93-108; *AIA Guide*, p. 359.
 96. Stein, *New Towns in America*, p. 93.
 97. Talbot F. Hamlin, "New York Housing, Harlem River Homes and Williamsburg Houses," *Pencil Points* 19 (May 1938): 281-92; Paul Goldberger, "Design Notebook," *New York Times*, May 12, 1977, p. C-12; *AIA Guide*, p. 285.
 98. Lewis Mumford, "The Sky Line. The New Order," *New Yorker* 41 (February 26, 1938): 42-44.
 99. Hamlin, "New York Housing," passim; "Williamsburg House, Brooklyn," *Architectural Forum* 68 (May 1938): 356-59; Mumford, "The Sky Line," passim; *AIA Guide*, p. 467.
 100. "The most obvious thing in the plan illustration of Williamsburg is the placing of the buildings on an angle with the street layout. Strangely enough, this fact, so important in the plan, in the actual group is not apparent except in a few places; so great is the number of buildings, and so large the area they cover, that the impression, as one crosses the two streets that divide the whole into three major blocks, is merely a fleeting wonder as to why the streets were laid out crooked. . . . The reasons for this change of angle are obscure. Good orientation is an obvious rationalization, for following the street pattern would have given as much actual sun in the rooms; and the present layout converts the courts into perfect channels for our most vicious northwest winds, and blocks off the southwest winds that are so important in summer" (New York Housing," p. 286).
 101. "San Remo Apartment House, 74th Street and Central Park West, New York City," *Architecture and Building* 62 (October 1930): 283, pls. 163-64; *AIA Guide*, p. 201.
 102. "River House, New York," *Arts and Decoration* 36 (January 1932): 30-32; "River House, A Cooperative Apartment," *Architectural Forum* 56 (May 1932): 431-40; "River House," *Architecture and Building* 64 (March 1932): pls. 9-10; Alpern, pp. 126-27; *AIA Guide*, p. 160.
 103. Alpern, pp. 128-29; *AIA Guide*, p. 200.
 104. "Century Apartments," *Architectural Record* 81 (March 1932): pp. 190-91; Alpern, pp. 130-31; *AIA Guide*, p. 197.
 105. "240 Central Park South," *Architectural Forum* 74 (May 1941): 311-19; Goldberger, "The City's Top Ten Apartment Buildings," *New York Times*, October 6, 1977, Section C, pp. 1-2; *AIA Guide*, p. 172. The Rockefeller Apartments, built in 1936 by Harrison and Fonilhoux at 17 West 54th Street, are like 240 Central Park South, in that they are admirable but a trivialization of the courtyard idea. See "The Rockefeller Apartments," *Architectural Forum* 66 (January 1937): pp. 4-12; *AIA Guide*, p. 167.
 106. "Manhattan House Replaces Old Car Barns," *Architectural Record* 105 (May 1949): 106-7; "Manhattan House, a Full Block of Swank New York Apartments," *Architectural Forum* 97 (July 1952): 140-51; *AIA Guide*, pp. 246-47.
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Fig. 70. Gainsborough Studio. Charles Buckham. 1908. View.