Territoriality and Surveillance: 
Defensible Space and Low-Rise Public 
Housing Design, 1966-1976

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Abstract

This essay investigates how theories of crime prevention through environmental design influenced the architecture and planning of American public housing in the 1960s and 1970s. In this period, high crime rates were strongly associated with high-rise public housing, exemplified by St. Louis’s notorious Pruitt-Igoe complex. Analyzing four federally-subsidized housing projects, I show how ideas about the environment’s effect on human behavior, exemplified by Oscar Newman’s theory of “defensible space,” motivated experiments with low-rise, high-density public housing as alternatives to crime-ridden high-rises. Newman’s theory held that correct design could solve the crime problem by increasing a sense of territoriality among residents and encouraging their surveillance of public spaces. The projects analyzed here had variable success in preventing crime and fostering community among their residents, raising questions about the efficacy of architecture and planning alone to produce security and constitute community in public housing.

By the mid-1960s, alarm over conditions in high-rise public housing in the United States was acute. Increased crime and deteriorating buildings belied the promise of urban renewal and public housing programs to eliminate blight and improve living standards for the poor and the working class. Fear of crime was widespread among residents of subsidized housing and was strongly associated with the architecture of public housing projects. The high-rise buildings in many public housing projects became the target of considerable critical attention and scholarly research, which linked high rates of criminality with the large size and scale of the complexes. As Oscar Newman asserted in his landmark book of 1972, Defensible Space, a body of social and design studies had concluded that high-rises were “having disastrous effects on their occupants” (xviii). Newman viewed the design of high-rise public housing as the primary cause of crime, not the social and economic conditions under which its residents lived. “Defensible space,” Newman wrote, “is a model for residential environments which inhibit crime by creating the physical expression of a social fabric that defends itself” (Defensible Space 3). His theory of defensible space held that the natural territoriality

1 See National Commission on Urban Problems, Wright 220-39.
2 Among recent critical histories of public housing, see Bloom, Umbach, and Vale; Hunt; Vale.
3 For earlier critiques of the architecture of public housing, see Bauer; Wood, The Small Hard Core; “What’s Wrong with Public Housing?” For a more recent analysis, see Knoblauch, “The Economy of Fear.”
4 Chapter 3 of Joy Knoblauch’s dissertation provides a thorough overview of Defensible Space and its context in social science research of the time. Knoblauch, “Going Soft” 104-56.
of humans could be harnessed, in combination with visual surveillance by residents, a positive image conveyed by the architecture, and a safe milieu, to solve the crime problem through self-policing. Like many architects and planners of the time, he assumed that the physical environment was important to crime prevention because of its effect on social control (Newman, “Defensible Space”). Doubts about the efficacy of housing low-income people in multistory towers became progressively more prevalent as authorities, architects, and planners reconsidered the provision of public housing in high-rise buildings.

The federal government and local redevelopment agencies responded to criticism of high-rise housing and increasing levels of crime and vandalism in public housing projects by privileging low-scale housing in new projects (Bloom and Lasner 193-201). In keeping with changing attitudes toward public housing design, the federal Housing and Urban Development Act of 1968 directed that families with children should not be housed in high-rise buildings unless no other options existed (504). Architects, planners, government officials, and others sought the means to ameliorate conditions in modernist towers and slabs and create new models for publicly subsidized housing that would engender less crime and promote a greater sense of community. Their work was often informed by research on crime prevention through environmental design as well as by criticism of high-rise housing and modernist urban design that emerged during the decade. This research was founded on environmental determinism, which discounted the complex social, economic, and architectural factors of public housing’s problems in favor of a focus on the definition and control of space as a means to modify behavior. Low-rise, high-density housing became the preferred building type for experiments with housing for low-income residents, and the creators of these new housing programs believed they would counter the crime problem in “the projects.” These experiments raise questions about the nature of the public served by subsidized housing and the relationship between its residents and their environment, as expressed in architectural form.

This essay analyzes four federally-subsidized, low-rise, high-density housing projects from the 1960s and 1970s that experimented with smaller-scale buildings to lower crime rates and increase public housing residents’ sense of security and community: Charles Moore and William Turnbull’s Church Street South in New Haven, Connecticut (1966-1969); Louis Sauer’s Harmony House (1967-1970) and Canterbury Gardens in New Haven (1967-1970); and Kenneth Frampton and the I-AUS’s Marcus Garvey Village in Brownsville, Brooklyn (1973-1976). Grounded in the modernist belief that form could modify behavior and design could strengthen civil society, these projects offered low-rise alternatives to crime-ridden high-rises and sought to solve the crime problem by means of good design. These projects were influenced by contemporary theories of environmental crime prevention, the most prominent of which was Oscar Newman’s theory of “defensible space.”

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5 On theories of environmental crime and crime prevention, see Gilling 45-65 and Walker. In The Language of Post-Modern Architecture, architectural critic Charles Jencks summarized many of the arguments against modern architecture with reference to the implosion of the Pruitt-Igoe public housing complex in St. Louis, declaring that “the death of modern architecture” could be dated to this moment in time, 1972 (9).


**Precedents for Defensible Space**

*Defensible Space* drew on and codified research and writing on community building and crime prevention through design that dated to the early 1960s and strongly influenced the discourse on public housing. Newman’s volume brought together ideas developed over the previous decade, which had already begun to inform the work of architects and planners previous to the publication of *Defensible Space*, including several of the case studies in this essay. What Newman termed “defensible space” had precedents in earlier work that linked the design of the built environment to crime or community. Cited by Newman in *Defensible Space*, Elizabeth Wood’s 1961 pamphlet, *Housing Design: A Social Theory*, for example, provided design models and guidelines to “facilitate social fabric” in high-rise projects (Wood 6). Wood had been the executive secretary of the Chicago Housing Authority from 1937 to 1954, which gave her firsthand experience with high-rise public housing design (Vale 282-83). In her study, she sought to discover how “to design to make the projects look and stay nice, and how to design to protect the privacy of families (e.g., protect them from unwanted sights and sounds)” (Wood 4). Her research was directed at high-rise, high-density public housing, which she considered the most difficult design problem facing architects at the time. Current design, she asserted, was oriented at preventing gathering or loitering and facilitating surveillance by the police. Wood believed design could make possible “the development of a social structure by means of which people can create their own social controls, and do their own self-policing” (6). The drawings in her brochure provided models for spaces with a high degree of visibility, in which teenagers could loiter, neighbors could gather in informal groups, and children could play safely while being watched by their mothers. Lobbies should be large and open to encourage use throughout the day. Many of these principles were adopted in Newman’s *Defensible Space*, particularly Wood’s emphasis on self-policing.

Other sources on territoriality, privacy, and community inspired Newman’s notion of defensible space. Among them, Serge Chermayeff and Christopher Alexander’s 1963 *Community and Privacy* advocated for the development of a science of Environmental Design that would produce a new kind of urban order based on hierarchies of privacy (20). The proper separation of realms and appropriate transitions or barriers between them would assure both privacy and commonality, community and privacy, within an urban environment (218). These concepts formed Newman’s emphasis on a hierarchy of public to private space with definite boundaries between each realm.

Jane Jacobs was a prominent critic of modern urban planning and an advocate for using low-rise urban form as a means for crime prevention. In *The Death and Life of Great American Cities*, she offered a powerful critique—what she termed “an attack on orthodox, modern city planning and rebuilding”—of urban renewal policies in the United States (3).
Look at what we have built: Low-income projects that become worse centers of delinquency, vandalism and general social hopelessness than the slums they were supposed to replace. Middle-income housing projects which are truly marvels of dullness and regimentation, sealed against any buoyancy or vitality of city life. Luxury housing projects that mitigate their inanity, or try to, with a vapid vulgarity. [...] This is not the rebuilding of cities. This is the sacking of cities. (4)

She identified social relations and spatial configurations that made the city safer than what she regarded as the vacuous districts created by modern urban planning theory and urban renewal. According to Jacobs, streets, sidewalks, and their users and bordering uses were the most important elements in creating a safe city. What Jacobs referred to as the “propri etorship of the street” was guaranteed by people who notice strangers and observe their activity. “The first thing to understand is that the public peace—the sidewalk and street peace—of cities is not kept primarily by police, necessary as police are. It is kept by an intricate, almost unconscious, network of voluntary controls and standards among the people themselves, and enforced by the people themselves” (31-32). Nor could the problems of crime (or “barbarism”) and insecurity be solved by spreading people out in suburban-style low density. She believed crime is thwarted by “kibitzers” and shopkeepers who watch the streets, leading Jacobs to the conclusion that “a well-used city street is apt to be a safe street” because it is equipped to handle the presence of strangers (34).

Jacobs laid out the qualities of a safe city street:

First, there must be a clear demarcation between what is public space and what is private space. Public and private space cannot ooze into each other as they do typically in suburban settings or in projects.

Second, there must be eyes upon the street, eyes belonging to those we might call the natural proprietors of the street [...].

And third, the sidewalk must have users on it fairly continuously. (35)

By fulfilling these principles, streets would attract users at all hours, handle strangers safely, and produce a condition in which public space is unambiguously public and constantly surveilled. Clear boundaries and limits on areas needing surveillance would generate safer streets and alleviate the fear of crime that permeated cities. By way of contrast, Jacobs evoked high-rise public housing projects, where the elevators and corridors serve the function of streets and are as public as streets, but lack the eyes and the users that keep city streets safe. She condemned them for imitating upper-class apartments without the doormen and elevator men who ensure upper-class residents’ safety (42). The elevators and fire stairs of the buildings and the undefined areas around them become havens for vandalism and crime because they cannot be surveilled—because, in other words, they are not equipped to handle strangers.

While he rarely referred to Jacobs’s book, many aspects of Newman’s theory of defensible space were directly derived from her writings. Both
authors relied on a belief that the physical environment can be held responsible for creating unsafe, crime-ridden places or for preventing crime and making cities safer. Both lay the blame for crime in high-rise housing districts on modernist urban planning practices and their results, the derivatives of Le Corbusier’s Radiant City plan (1930) against which Jacobs inveighed. Their analyses of high-rise public housing projects point to a lack of the doormen and other service personnel who make higher-income high-rises more secure. Most importantly, Newman drew his theory of “natural surveillance” from Jacobs’s notion of “eyes on the street” and the informal policing that results from such surveillance, and his emphasis on distinguishing public from private spaces clearly emerges from her principles on what makes for a safe city street.

Newman’s conception of “territoriality” owed much to work in the behavioral sciences that stressed the connection between territoriality, propriety, and community as natural human attributes. According to Joy Knoblauch, the idea of territory originated in the fifteenth century and related to sovereignty, but became a naturalist term in the nineteenth century. In the 1930s and 1940s, the derivative term “territoriality” was taken up in the field of zoology and, subsequently, human ecology and human geography (“Going Soft” 144-45). Robert Ardrey popularized the idea of human territoriality in two widely read books, African Genesis (1961) and The Territorial Imperative (1966), both of which are cited in Newman’s bibliography. Ardrey, a playwright and anthropologist, made the leap from scientific studies of territorial behavior in animals to the conclusion “that man is a territorial species, and that the behavior so widely observed in animal species is equally characteristic of our own” (Ardrey, The Territorial Imperative x). The Territorial Imperative elaborates on ideas developed in African Genesis, specifically his contention that humans have an inherited instinct to acquire land and defend territory, and that the development of weapons was a fundamental turning point in our evolution (Davies). In The Territorial Imperative, Ardrey emphasized humans’ drive to defend their territory, the “territorial imperative,” and its manifestations in modern society in phenomena such as property ownership and nation building (4). He defined a territory as “an area of space, whether of water or earth or air, which an animal or group of animals defends as an exclusive preserve” and a territorial species of animals as one with “an inherent drive to gain and defend an exclusive property” (3). This assertion led Ardrey to conclude that “ownership of land is scarcely a human invention, as our territorial propensity is something less than a human distinction” (4). As Kenny Cupers has shown, Ardrey’s ideas about human territoriality were taken up by Jane Jacobs and other urban researchers and housing professionals who accepted his assessment that modern societal problems were the consequence of “deterioralizing” humanity and frustrating humans’ natural attachment to property (Cupers 175). Adopting Ardrey’s theory, Newman sought to create “an environment in which latent territoriality
and sense of community in the inhabitants can be translated into responsibility for ensuring a safe, productive, and well-maintained living space (Defensible Space 3). The architect could tap into the territorial imperative by appealing to and sponsoring residents’ sense of proprietorship over their environment.

**Defensible Space**

Funded by the U.S. Justice Department’s National Institute of Law Enforcement and Criminal Justice and drawing on data from the New York City Housing Authority, Newman’s research stressed design as a causal and, therefore, preventive factor in crime: “Architectural design can make evident by the physical layout that an area is the shared extension of the private realms of individuals” (Newman, Defensible Space 2). While Newman critiqued the results of modernist planning theory, his faith that form could modify behavior, prevent crime, and sponsor community derives from the determinism of modern architecture and urban planning. Newman believed the forms of residential areas “contribute to our victimization by criminals” (xiii). According to his theory, architects could strengthen civil society and preclude crime by creating “defensible spaces,” clearly outlined territories that would encourage residents to police their own spaces.

Newman defined defensible space as “a surrogate term for the range of mechanisms—real and symbolic barriers, strongly defined areas of influence, and improved opportunities for surveillance—that combine to bring an environment under the control of its residents” (Defensible Space 3). He gave four characteristics of defensible space: territoriality, natural surveillance, image, and milieu. He defined territoriality as “the capacity of the built environment to create perceived zones of territorial influences” (50). Territoriality measures the degree to which people have a sense that a space is “owned” or is “private,” that it has clearly demarcated divisions and boundaries, and that it sponsors proprietorship. The public spaces (lobbies, corridors, and outdoor spaces) in most high-rise housing created little territoriality because they were shared by too many residents and lacked the physical boundaries that allowed them to be “owned” by the residents (52).

Natural surveillance, related to Jacobs’s notion of “eyes on the street,” is the “capacity of physical design to provide surveillance opportunities for residents and their agents” (78). High-rise housing mitigated against the natural surveillance necessary for safety because residents could not observe entrances or outdoor spaces. Newman associated features such as walkways lacking surveillance, communal areas, and shared external spaces with crime because they were not “owned” or controlled by residents. Designs facilitating surveillance allowed residents to observe the public areas of their environment and to feel that they were under observation by other residents, which Newman believed sponsored a greater
sense of security. He held that surveillance is most effective when linked with increased territorial subdivision of spaces and stronger connections with streets.

Image and milieu were “the capacity of design to influence the perception of a project’s uniqueness, isolation, and stigma” (Defensible Space 102). When new buildings of greater height and distinctive design are introduced into an existing urban fabric, they can produce a negative image that stigmatizes the project and its residents. In Newman’s view, the idiosyncratic image of many government-sponsored housing projects from their milieu makes them stand out as “easy hits” for criminal activity (102). He analyzed the formal attributes that produced the negative image relative to milieu: interruptions in the urban circulation pattern; building height, size, materials, amenities, and interior finishes; symbolization of lifestyle; and juxtaposition to streets and other uses. He acknowledged that maintenance as well as initial design contributed to the negative image of low-income housing.

Newman used the New York Housing Authority as his main source, but he had also studied inner-city neighborhoods in cities across the United States, notably St. Louis (Knoblauch, “Going Soft” 112). He noted that not all low-income neighborhoods suffered from high levels of crime, and he linked the variation in crime rates to the design of the built environment. Building height, layout of the site plan, types and placement of recreation space, and the relation of buildings and units to streets were crucial factors in creating the opportunity for or in discouraging crime. His analysis concluded that the worst crime-plagued low-income housing consisted of multiple high-rise buildings set in undifferentiated open space at high densities, the “tower in a park” model that was ubiquitous in public housing projects. He compared two adjacent public housing projects in New York City, mid-rise Brownsville Houses and high-rise Van Dyke Houses, that had similar densities and whose demographics had comparable socio-economic and racial compositions, but differed in their physical design and crime rates (Defensible Space 38). According to Newman, high-rise Van Dyke Houses lacked defensible space and had a correspondingly higher crime rate than Brownsville Houses, which had some, if not all, of Newman’s defensible characteristics (47-48).

His alternative to high-rise, high-crime public housing was low-rise housing that clearly delineated private spaces for each unit and defined semi-private, semi-public, and public spaces, creating security by establishing clear boundaries and thresholds (Figure 1). Spaces with boundaries and a defined territorial character would give residents of public housing the ability to determine who belongs (residents) and who does not belong (strangers) and to police their own environment through surveillance. In contrast to a police state, he envisioned residential areas that could be controlled by communities sharing common space. He believed it was the responsibility of every person to participate in this collective policing, which ensured the functioning of the polis (his word).
With adequate thresholds and boundaries to reinforce natural human territoriality, residents could intervene and prevent crime in their spaces. He proposed modifications to existing public housing projects that included installing a closed-circuit TV intended to allow each resident to monitor the lobby on his or her television set. Newman indicates that the lobby and elevator were chosen for surveillance as these areas of high-rise buildings suffered the most crime.

In *Defensible Space*, Newman used the Pruitt-Igoe public housing complex as a prime case of a failed high-rise project. Designed by George Hellmuth and Minoru Yamasaki and completed in 1956, it consisted of 33 eleven-story buildings with a total of 2,870 apartments on a 57-acre site on St. Louis’s lower north side. One of the nation’s largest public housing projects, Pruitt-Igoe, suffered from high crime rates, vandalism, and systems failures resulting from a lack of maintenance. It was demolished with national publicity in the early 1970s. As Washington University faculty members in the 1960s, Newman and sociologist Lee Rainwater, author of *Behind Ghetto Walls: Black Families in a Federal Slum*, had studied Pruitt-Igoe and its pathology as an example of high-rise public housing’s ills. As Newman saw it, the main problem with Pruitt-Igoe was the absence of any spatial threshold between the private and public spheres. The project’s high-rise slabs sat on entirely open grounds, and each building’s elevators opened directly onto these vast public spaces, creating opportunities for un-surveilled crime.

Newman’s assertion of the connection between high-rise housing projects and high crime rates was absorbed into public opinion and professional practice equally. His book received laudatory reviews in the popular press and professional journals, making it one of the most influential interventions in crime prevention discourse. In a 1973 article cover-
Under Section 221(d)(3) and 236 of the Housing Act of 1954, HUD provided mortgage insurance and an interest rate subsidy to private housing providers to enable below-market rents. In exchange, the housing provider provides affordable units to low-income individuals by restricting rents and occupancy (cf. “Overview”).

Church Street South, New Haven, Connecticut

In 1966, architects Charles W. Moore and William Turnbull, partners in the firm Moore Lyndon Turnbull Whitaker (MLTW), were commissioned to design a publicly-subsidized housing project, Church Street South, in New Haven, Connecticut. While it predates Newman’s book, the project was informed both by Moore’s earlier writings on place and the public and by emerging theories of “defensible space” intended to reduce crime through design techniques. The project was part of Mayor Richard Lee’s massive urban renewal schemes, which promised to transform New Haven into a “slumless city” (Kaplan qtd. in Dominski).

On a site that had been the subject of a 1965 scheme for high-rise housing by modernist architect Mies van der Rohe, the project provided 607 units of low- and moderate-income housing built to FHA minimum standards and funded under the Section 221(d)(3) program of the Department of Housing and Urban Development (HUD) interest rate subsidies. The complex included two buildings with 307 units for the elderly. The remaining 300 units were designated for low-income residents; this portion of the project was sponsored by the New Haven Junior Chamber of Commerce. Another section of the site, planned for 100 units for moderate-income residents, was never built. Described by Moore as “nowhere between two somewheres,” the project was located between the New Haven railroad station and the Green downtown (Ryder 75). The site had been occupied by the wholesale market, which was demolished in the 1950s as part of the Church Street urban renewal district. It was bounded by the Oak Street Connector (an incomplete
throughway), the railroad, and heavily trafficked arterial roads. Within the complex, Moore and his associates attempted to give a sense of “place” and boundaries that would define the whole development and individual units within it.

The planning process involved thirty-two site plans and agency reviews before concluding with a final plan that employed only two building types. Moore and Turnbull placed low-rise housing bars around a pedestrian spine that traversed the length of the complex and linked commercial spaces and courtyards that were intended to form neighborhoods within the whole. The commercial space included a supermarket, a laundromat, a child care center, and small offices. The units ranged from two to five bedrooms, including flats and duplexes, arranged in three- or four-story buildings of various sizes. On the basis of information gleaned from earlier Redevelopment Agency housing projects, Moore was convinced that five-bedroom units would be needed, but HUD maximums did not allow extra funding for the fifth bedroom. Moore designated the fifth bedroom in certain units “other habitable room,” thereby gaining the extra bedroom (Ryder 80, 82).

To create “place” in a development employing minimal means, the architects used supergraphics, axial views, named courtyards, and physical addresses to allow residents to identify their units and to generate a sense of community. The courtyards were given names (Malcolm Court, José Martí Court, Station Court, Forum, etc.) to allow each unit to have a city street address. The attention to the address of each unit reflected their concern about countering the anonymity and placelessness of most public housing projects. Paving patterns in asphalt and concrete further distinguish the open spaces: painted curbs and radial paving mark entrances, defining the “territory” of each unit. They used painted supergraphics to distinguish between the courts and give visual interest to the concrete block buildings. Moore and Turnbull sought explicitly to bring the scale and vitality of the traditional street to a low-cost public project, an exercise in what they called “city-building” (Figure 2).
The complex attempted to construct an ordered world with a hierarchy of spaces and a clear demarcation of public and private. In their efforts to create defensible space at Church Street South, Moore and Turnbull put stoops at the entrances of many units. The stoops provided residents with places to sit, watch over the courtyards, and socialize. Like their precedents in brownstone neighborhoods, these stoops would have functioned as intermediate spaces between the private residence and public space and were meant to encourage something like urban street life and “eyes on the street.” The architects worked with limited means to provide a territorial realm of defensible space that would deter crime and sponsor safety. Yet the effectiveness of the site planning and decorative programs was undermined by federal dictates and budget cuts. Rather than pre-cast concrete, as originally designed, the structures were built out of concrete block to stay within FHA maximums. The architects added textured block and rustication at the edges of the buildings and painted over the doorways to relieve the monotony of the concrete block. Mayor Lee and residents, however, felt the result looked more like a barracks than housing, a negative image that persisted (Ryder 82).

As documented by architect Larry Speck in the 1970s, Church Street South was characterized by deserted plazas and graffiti-marked walls. In 1984, David Littlejohn, who wrote a biography of Charles Moore, noted empty communal spaces, broken lamps, and a trash-strewn vacant lot where the moderate-income housing had been planned (245). The project was never beloved by residents, who called it “Cinderblock City” and “The Jungle.” According to architect Jonathan Hopkins, “[f]ueled by its isolation, several design flaws, and a [homogenous low-income population] […] Church Street South Housing became home to one of New Haven’s most violent drug gangs of the 1980s and 1990s, the ‘Jungle Boys’” (“Salimos”). The gang was dismantled in the 1990s, but the complex remained crime-ridden despite its proximity to the New Haven Police Headquarters. Since 1969, a succession of private owners and managers have failed to maintain the housing. As reported by Paul Bass, in the fall of 2015, HUD rated it one of the worst public housing complexes in the country (Bass). Most of its residents have been forced to relocate, and it is scheduled to be demolished to make way for a mixed-use development planned by its current owners, Massachusetts-based Northland Investment Corporation (Ricks and Bass).

The architects of Church Street South aspired to bring humanistic design to a large-scale public housing project. Yet the effectiveness of their site planning and architectural innovations were undermined by federal standards and budget cuts, producing a project that required ephemeral decoration, such as supergraphics, to ameliorate its low-budget construction and stark appearance. Instead of a vibrant urban environment, Church Street South presented an image that reinforced the stigmatization of public housing.
Harmony House and Canterbury Gardens, New Haven, Connecticut

Predating Newman’s book, Louis Sauer’s Harmony House (22 units) and Canterbury Gardens (34 units) were church-sponsored, low-rise projects developed by the New Haven Redevelopment Agency and financed under the HUD 221(d)(3) and 236 programs. They were initiated at the same time (May 1967) and were developed together, using essentially the same plan, with Harmony House as the prototype. Sauer, whose firm was based in Philadelphia, questioned the causal link between architecture and social control in public housing. His extensive experience with low-rise housing in Philadelphia’s urban renewal districts had led him to be skeptical that “physical design alone could determine the ultimate success of a housing project.” He renounced an attachment to architectural determinism and looked to nonphysical factors as “preconditions to a more humanely responsive and lasting architecture” (26).11 For Sauer, the architecture of a housing project could not be the root cause of its failure, for vandalism or neglect or lack of community feeling among its residents. Changing the design of housing was an inadequate response when architects had little knowledge of how management, neighborhood structure, and tenant population—factors cited by Sauer as needing more research—affected housing outcomes. His vision for Harmony House and Canterbury Gardens shifted when he delved into what residents actually needed.

Before construction began, Sauer made a limited study of six families to “determine their thoughts about their own housing” (Murphy 106). His study found that future residents needed another half bathroom, a separate living area for adult entertaining, and larger, more open and informal kitchen / dining spaces, because that area serves as the focus of most activities. Private yards, nearly public porches, and parking space in front of the house were requested. Sauer sacrificed the porches for additional inside spaces but succeeded in gaining out-front parking despite opposition from city planners (Figure 3). Sauer incorporated these features into revised plans for both projects (Murphy 106). They anticipate aspects of Newman’s hierarchy of private to public spaces, although their details emerged out of his “pre-occupancy” survey rather than defensible space theory. The textured plywood siding on Harmony House was painted in a single color, which Sauer considered a design mistake that came from middle-class standards; Canterbury Gardens had three wall colors, two trim colors, and four bright door colors (Murphy 109).

A few years after completion, Sauer revisited the New Haven projects and assessed their success. Harmony House was a “mess.” Garbage and trash were strewn around the area, buildings and site furniture had been vandalized, and an abandoned car sat in the middle of the site. At Canterbury Gardens, he saw the same signs of wear and tear but no

11 On Sauer’s career, see Saggio.
Newhallville had been an Irish neighborhood until the 1950s, when residents began moving to the surrounding suburbs. During the late 1950s and 1960s, African Americans displaced from New Haven urban renewal districts moved into Newhallville. See Hopkins, “Which One’s Goatville? Newhallville?”

When Sauer asked Jim Drazen, director of housing for the New Haven Redevelopment Agency, about the reasons for the differences between the projects, Drazen cited the higher bedroom density, the physical, social, and economic characteristics of the neighborhood, the high percentage of single head of household families, and the lack of facilities in the Dwight urban renewal area where Harmony House was built. Canterbury Gardens, by contrast, was located in a stable, well-established neighborhood, Newhallville, with a variety of facilities for children and adults. In Sauer and Drazen’s view, however, the way the people in the projects were chosen was an even more critical factor. NHRA, in trying to reduce the number of families to be relocated from urban renewal areas, placed many large households headed by women on welfare in Harmony House, which led to a high concentration of three- and four-bedroom units in the project program and a large number of children. For Canterbury Gardens, there was less pressure to reduce NHRA relocation workloads, so fewer three- and four-bedroom units were provided, and the complex was more balanced with fewer children (Sauer 26–27). In an article on Church Street South, Drazen compared Moore and Turnbull’s design with “the more detached suburban image
in massing and materials” of Sauer’s projects, which he believed caused them to be better received by occupants and neighbors (Ryder 82).

As Fritz Umbach and Alexander Gerould have shown, a high number of children per household is among the factors that recent research has determined causes higher crime rates in public housing projects. Crime is closely correlated to family size, an indication of child-to-adult ratios, rather than building height. Umbach and Gerould point out that Newman’s own data showed this to be the case, but the numbers did not accord with his polemic against modernist design and high-rise housing, and he ignored them (64–120). While the difference in the number of children in the two projects might not have been a decisive cause of the relatively poor conditions at Harmony House, Drazen and Sauer believed tenant selection and demographics added a social dimension that design alone could not overcome.

**Marcus Garvey Village**

Directly influenced by Newman’s theories, Marcus Garvey Village was the product of a collaboration between New York State’s Urban Development Corporation (UDC) and the Institute for Architecture and Urbanism (IAUS). The Brooklyn site, in one of New York’s most troubled urban areas, comprised twelve acres within a Title 1 Urban Renewal and Model Cities area. Marcus Garvey Village has 626 units at a density of about fifty per acre; 540 have two bedrooms or more, of which 248 are larger family units of three or more bedrooms, and 86 are one-bedroom or one-room units. The development as planned also included a community center, a day care center, commercial space on a perimeter shopping street, and 300 parking spaces (Morton 61). According to Karen Kubey, the complex was designed to seven design criteria promulgated by the UDC: “sense of community, child supervision, security, maintenance, livability, responsiveness to context, and flexibility.”

Marcus Garvey Village was based on a prototype developed by the UDC and IAUS that used two basic units, one on the street and the other on mews within the blocks. The prototype was presented in a 1973 Museum of Modern Art exhibition, “Another Chance for Housing: Low-Rise Alternatives.” According to Anthony Pangaro of the UDC and Kenneth Frampton of the IAUS, the designers of the prototype aimed to establish “a physical environment capable of inducing […] a sense of community and a sense of propriety, at a number of different scales.” Echoing Newman’s formula, they evoked the necessity of promoting “a sense of ownership” throughout the complex and “provid[ing] for adequate surveillance.” Inspired by Atelier 5’s Siedlung Halen in Bern, Switzerland (1955–61), they used the scale of the urban row house and sought to “achieve a sense of territoriality by striving for outdoor spaces that would clearly differentiate between private, semi-private and public space” (Pangaro and Frampton 13).
The site planning and unit design of Marcus Garvey Village were designed with careful attention to the hierarchy of public, semi-public, semi-private, and private spaces. Entrances are either on the street or accessed through stoops, with a maximum of four units sharing an entrance. Outdoor public areas and porches were organized to provide control over who may and may not enter. Semi-public through-block passages are guarded by stoops and laundries at their entrances. In addition, each family dwelling is oriented so that a living space, either the living or dining space, is given a view to the street or to the private garden (New York State Urban Development). When the Village was built, cost-cutting and design alterations forced a number of changes to the prototype that compromised access to private space, as when many balconies were eliminated, or changed the character of the private space, as when the lower floors and gardens were sunk a half-level to create more conventional layouts in the duplexes. Almost half the units lack the access to private space its architects considered essential to promoting territoriality. The four-story buildings are clad in buff-colored brick, their facades designed with what critic Suzanne Stephens called “a repetitive serial quality” that she noted evoked a barracks (52; Figure 4).

According to a 2005 study by Kym Liebman, Lauren Tenney, and Susan Saegert, Marcus Garvey Village achieved some of its goals of decreasing crime and increasing a sense of community among its residents: “In particular, we found the hallmark feature of this design, the mews and courtyards, was successful […]. These semi-public spaces promote interaction and community development among neighbors and consequently provide a milieu of safety, affording children greater autonomy to play outside of their homes.” Despite problems with maintenance and lower standards for tenant selection, most residents reported high levels of satisfaction with their living conditions. In the 1980s, how-
ever, the mews were the site of drug dealing and attendant criminality. The authors quote a press release from the Department of Justice: “The insular nature of Marcus Garvey Village made the investigation particularly challenging—and dangerous. The apartment buildings open into private courtyard areas, shielded from public access and view, where the defendants routinely conducted their business” (Liebman, Tenney, and Saegert). In that period, Ginia Bellafante reports, the defined territoriality of the mews served to encourage crime rather than prevent it because they could not be surveilled from outside the complex. This problem has been alleviated by its current owners, who installed security gates when the buildings were renovated and rebranded as Marcus Garvey Apartments.

As an experiment using the UDC’s experience in housing development and the IAUS’s research on low-rise housing design, Marcus Garvey Village brought the latest thinking on public housing to bear on the problem. Explicitly deploying Newman’s concepts in its spatial organization, the architects hoped to create a sequence of public and private spaces that could be overseen by residents, but changes to the units and site planning exigencies diminished the prototype’s clarity. In one regard, Marcus Garvey was a success: its residents found the mews and courtyard spaces amenable to safe social interaction. External factors, such as the crack cocaine epidemic and associated crime, however, eroded the sense of community and security in the interior semi-public spaces, negating the anticipated safety gained by “defensible space.” A “compromised ideal,” in Stephens’s words, Marcus Garvey did not achieve the status of prototype for emulation that its creators desired.

**Public Space, Private Space, and Defensible Space**

The projects analyzed here produced mixed results in reducing crime and fostering community among their residents, outcomes mirrored in critical studies of defensible space theory that found little correlation between architectural form and crime prevention. In 1977, for example, British criminologist R.I. Mawby tested Newman’s assertions that the location of crime is determined by the physical environment and that crime patterns vary with design features by looking at data from Sheffield public housing projects. Mawby criticized Newman’s methods as flawed and crude, particularly because he failed to distinguish between types of crimes and whether they were committed by residents or non-residents. In looking at data collected on various types of housing in Sheffield (private, public, high-rise, and low-rise), Mawby concluded that “Newman’s theory gains no support from the data” (173). He pointed out that increased territoriality might actually increase the potential for violence among residents and that visibility and reduced opportunity for crime is not always produced by making a space more private, as in a garden where crime might be screened from observers. In conclusion,
he stated that “it seems that modified design will not prove a panacea for crime control” (178).

The hierarchy of public, semi-public, semi-private, and private spaces required by defensible space theory conveyed a value system. Underlying Newman’s work was the central premise that private space was safer than public space because it sponsored a greater sense of territoriality—“ownership”—and control of space. In a later work, *Creating Defensible Space* (1996), Newman concluded that public spaces shared by too many people were the least safe type and extrapolated the principle that “[a] family’s claim to a territory diminishes proportionally as the number of families who share that claim increases. The larger the number of people who share a territory, the less each individual feels rights to it” (17). Private spaces were safest because they sponsored the greatest sense of territoriality and surveillance. The areas around and within high-rise buildings that were public and open to anyone were dangerous because they were unclaimed by residents. In his work, Newman valorized nineteenth-century precedents for private space, like the row house and the single-family detached house, that sponsored a heightened sense of territoriality. Like Jacobs, he lauded the social cohesion of White ethnic neighborhoods like Greenwich Village and Boston’s West End. Middle-class models of privacy and private property, therefore, form an unacknowledged base for Newman’s and Jacobs’s theories and other efforts to solve the crime problem in high-rise public housing towers with design. Sociologist Herbert Gans criticized Jacobs for romanticizing working-class life and succumbing to a “physical fallacy” of determinism that led her to believe small-scale, low-rise development would produce a social system similar to what existed in older neighborhoods (36).

Newman’s emphasis on surveillance created an equivalence between the appearance of order and a lack of crime, an assumption that informs “Broken Windows” policing theory today (Wilson and Kelling). To his credit, Newman believed that defensible space would result in more humane social environments, not the private, gated spaces advocated by current practitioners of Crime Prevention Through Environmental Design. As Knoblauch notes, however, the theory of defensible space rests “on the flawed assumption that reducing visual signs of blight […] is an acceptable substitute for solving the structural and social problems facing black Americans” (Knoblauch, “Defensible” 2). The belief that architecture could modify behavior and strengthen civil society allowed theorists, architects, and planners to ignore other factors, such as racial discrimination, urban poverty, and economic inequality, in favor of a focus on the definition and control of space as a means to modify behavior and generate secure environments. Their perception that an architectural type—the high-rise tower—encouraged criminal activity and produced the high crime rates in public housing complexes discounted the interconnected social, economic, and political causes of a broader urban crisis.
What type of public is constituted by a public housing project? Charles Moore raised this issue in regard to his own sense of inadequacy in providing a “place” for the residents of housing: “I’ve done government-sponsored low-income housing work, and it’s like working in the dark. I don’t know who the people living there will be” (qtd. in Littlejohn 242). The only architect among these case studies who asked residents about their preferences, Sauer, took another approach. He called on architects to relinquish their fascination with architectural determinism and study the factors beyond physical design that can support or diminish human life, especially in the case of those who have limited choices in places to live. “The important point, of course, is to find out what can be done if these basic factors—neighborhoods, populations and management—are so important to the success or failure of housing projects” (Sauer 48).

In the low-rise, high-density public projects discussed in this essay, architects attempted to provide secure housing to hundreds of unknown clients through forms related to defensible space theory: low-scale buildings, semi-private stoops and entrances, courtyards or mews with distinguishing features, and spaces that related directly to streets for increased visibility. Defensible space theory’s privilege of private, bounded space, however, exacerbated the constraints of site, budget, and resident demographics, factors outside the architects’ control. The result was often a racially segregated enclave, isolated from the surrounding neighborhood, that devolved from a model of “defensible space” into a new variety of crime-ridden slum.

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