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Los Angeles

Planning the American Neighborhood: The Science of Sociability

at the Dawning of Desegregation (1933-1965)

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of

Philosophy in Art History

by

Kristina Marie Borrman

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ABSTRACT OF THE DISSERTATION

Planning the American Neighborhood: The Science of Sociability at the Dawning of Desegregation (1933-1965)

by

Kristina Marie Borrman Doctor of Philosophy in Art History University of California, Los Angeles, 2020 Professor Dell Upton, Chair

Segregated housing became a subject for scientific inquiry between the New Deal and Civil Rights eras. In this dissertation, I trace studies of segregated housing to the planned communities that the federal government set in motion by building public housing after the Depression and subsidizing private housing after World War II. My project challenges the traditional separation of public housing and private housing in architecture scholarship, which has overlooked the similar historical concerns that shaped these neighborhoods and their reception, especially in the scientific community. My protagonists are architects and scientists. I define the latter group broadly to include social scientists and domestic scientists who conducted studies of tenant sociability in planned neighborhoods. These studies responded to the concern that planned communities strengthened racial and economic segregation, since public- and private housing were single-class neighborhoods that discouraged racial mixing. I uncover the surprising ways that tenancy studies, a marginalized subfield in the world of applied science,

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found its way into popular debates about segregation in U.S. politics and society. Scientific research on tenants and their dwellings appeared in mainstream literature, such as *Life* magazine, and it figured in national events, such as the famous *Brown v. Board of Education* case, in which the NAACP used studies of integrated public housing to prove that peaceful desegregation was possible in public schools. By recovering the history of tenancy studies, I offer a new account of the struggle to desegregate American neighborhoods before 1965.

This dissertation of Kristina Marie Borrman is approved.

Greg Hise

Steven Nelson

Bronwen Wilson

Dell Upton, Committee Chair

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Travel fellowships enabled me to visit archives all over the country. I studied Catherine Bauer's writings with the assistance of the Bancroft Library Summer Research Award at U.C. Berkeley. The John Nolen Fellowship at Cornell University Library and the Columbia Library Summer Research Fellowship financed my travels to the East Coast. The American Heritage Center Fellowship at the University of Wyoming made it possible for me to study the writings of Oscar Stonorov and Frederick Gutheim, historical figures that would become crucial players in

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resilience in her struggle for affordable housing inspired this project, which provides a historical context for the difficulties she faced acquiring low-income housing in the suburbs.

April 14, 2020 Los Angeles, California

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Introduction

Since World War II many Americans have lived in large-scale residential developments. Architects have referred to these developments as "planned communities," but they are better known by the colloquial terms that people have used to describe them, such as "cookie-cutter neighborhoods" for identical tract housing in suburban developments or "the projects" for government-owned apartments in cities. Whereas pre-World War II neighborhoods developed incrementally over time, postwar neighborhoods appeared suddenly as developers constructed them to provide housing for one or two thousand residents at once. The federal government made large-scale residential developments possible by financing public-housing projects after the Depression and providing significant subsidies for private ones after the War. Today the ubiquity of these planned communities across the United States makes it difficult to imagine that architects once considered them perplexing, since they not only tested an architect's individual ability as a planner, but also challenged the entire architecture profession to prove that they could serve a more diverse population and operate on a much grander scale than ever before.

For many architects, the biggest challenge was to redefine their relationships with clients. Most residential architects designed single-family houses for wealthy clients, with whom they worked directly to address the client's particular needs and desires. But this intimate architectclient relationship was an impossible model for community planning, which required architects to think about their clients in more impersonal, abstract ways. "He [the architect] must now design a dwelling to be repeated indefinitely, low in area and cost, for a statistical person whom he can never hope to meet," remembered architect Robert Woods Kennedy with respect to the

challenge of building government housing during the 1930s.¹ In 1933 Congress passed the National Industrial Recovery Act, which made it possible for architects to design permanent public housing for the first time in U.S. history. Prior to this New Deal legislation, architects in the United States had few opportunities to plan entire neighborhoods, and there was little information on the topic.² So architects asked themselves, how does one design for an invisible client?

Architects looked to tenancy studies for answers. My dissertation chronicles the history of tenancy studies in planned communities between 1933 and 1965. The scientific study of tenants and their dwellings is not unique to this period, as amateur and professional analyses of slum neighborhoods can be traced to the Progressive era (a classic example of an early scientific account of houses is W.E.B. Du Bois's *Philadelphia Negro*, which includes well-known descriptions of the row houses, lodging houses and tenements in Philadelphia's Seventh Ward).³ But the scientific study of tenants in large-scale developments is particular to the planned communities that architects designed after 1933. In the following three decades tenancy studies found that houses and neighborhoods played a significant role in the emotional lives of tenants, including their tolerance for racial and class differences. Tenancy studies raised questions about

¹ Robert Woods Kennedy, "Sociopsychological Problems of Housing Design," in *Social Pressures in Informal Groups*, eds. Leon Festinger, Stanley Schachter and Kurt W. Back (New York: Harper and Bros., 1950), 203.

² Some exceptional early planned communities were the Kansas City Country Club District, Strathmore in Long Island, and WWI defense housing. See Richard M. Candee, *Building Portsmouth: The Neighborhoods and Architecture of New Hampshire's Oldest City* (Portsmouth, NH: Portsmouth Advocates, Inc.: 1992, 2006); William S. Worley, *J.C. Nichols and the Shaping of Kansas City: Innovation in Planned Residential Communities* (Columbia: University of Missouri Press, 1993); Richard Longstreth, "The Levitts, Mass-Produced Houses and Community Planning in the Mid-Twentieth Century," in *Second Suburb: Levittown, Pennsylvania*, ed. Dianne Harris (University of Pittsburgh Press, 2010). For more on WWI defense housing, see Michael Lang, "The Design of Yorkship Garden Village," in *Planning the Twentieth-Century American City*, eds. Mary Corbin Sies and Christopher Silver (Baltimore: Johns Hopkins University Press, 1996).

³ W.E.B. Du Bois, *The Philadelphia Negro* (Philadelphia: University of Pennsylvania Press, 1899, 1995).

the relationship between human psychology and residential architecture that not only shaped the worlds of science and design, but also altered American politics, law, and popular culture.

Housing studies branched into two separate but overlapping fields of inquiry: technological experiments and socio-psychological studies of tenants. Historians have written about the technological aspect of housing research, especially Euro-American architects' studies of prefabricated houses during and after WWII.⁴ Although very few prefabricated houses were actually built for the private housing market, prefabrication was a catchword for the general movement towards standardized houses that began in the New Deal years. As Kennedy reminds us, these houses were "low in area and cost," meaning that what they lacked in size they made up for in affordability. But Americans worried about the real people who inhabited the small houses and apartments designed for "statistical people," so housing researchers included studies of tenants' social lives, too. Studies of tenant morale and family life took place in planned communities—public housing and private ones—in order to assess whether people's experiences aligned with architect's expectations. Whereas historians have paid careful attention to the new building methods and technologies that made large-scale housing possible, they have paid less attention to the anxieties that Americans expressed about living in these planned communities. In this project, I point towards tenancy studies because they addressed these socio-psychological concerns.

⁴ For histories of post-WWII prefabricated houses, see Colin Davies, *The Prefabricated Home* (London: Reaktion Books, 2005); Monique Eleb, "Modernity and Modernization in Postwar France: the Third Type of House," *Journal of Architecture*, Vol. 9, Iss. 4 (Jan. 2004): 495-514; Brenda Vale, *Prefabs: A History of the UK Temporary Housing Programme* (Abingdon, UK: Routledge, 1995); Andrew M. Shanken, "Advertising Nothing, Anticipating Nowhere: Architects and Consumer Culture," in *194X: Architecture, Planning and Consumer Culture on the American Home Front* (Minneapolis: University of Minnesota Press, 2009), 96-158; Richard Anderson, "USA/USSR: Architecture and War," *Grey Room*, Iss. 34 (Jan. 2009): 80-103.

For a pre-WWII history of prefabricated houses, see Amanda Cooke and Avi Friedman, "Ahead of their Time: the Sears Catalogue Prefabricated Houses," *Journal of Design History* 14, no. 1 (2001): 53-70.

The planned community troubled American architects, social scientists and domestic scientists for several reasons. One had to do with the monotony of identical housing, whether it was clusters of apartment buildings, as in public housing, or rows of single-family houses, as in private housing. Another had to do with restricted space, since individual apartment units and single-family houses both conformed to severe guidelines established by the federal government for standardizing square footage.⁵ But the most troubling thing about planned communities was the way they strengthened and reinforced the lines that already separated people by race and class in the built environment. Planned communities were identical and monotonous because they created one-class neighborhoods, which tended to be racially segregated as well. For this reason, housing studies that documented tenants' socio-psychological experiences in planned communities could not avoid discussing the social effects of segregation.

In this dissertation, I explore the tenancy studies that took place in the worlds of science and design between the New Deal and Civil Rights eras. My protagonists are architects and scientists. I define "scientist" broadly to include women who worked at the juncture of scientific/practical knowledge as domestic scientists, and men who studied housing as a specialized subfield of social science. They accomplished this research within the loosely organized field of housing, which bridged the worlds of science and architecture by investigating the social effects of planned communities segregated by race and class. I uncover the surprising ways that the study of tenancy, a marginalized topic for social science, found its way into popular debates about segregation in U.S. politics and society. Scientific research on segregated housing appeared in mainstream literature, such as *Life* magazine, and it figured in national events, such as the famous *Brown v. Board of Education* case, in which the NAACP used studies

⁵ I will discuss the Federal Housing Administration's guidelines for minimum space in Chapters 2 and 4. For a full discussion of this topic, see Greg Hise, *Magnetic Los Angeles: Planning the Twentieth Century Metropolis* (Baltimore: Johns Hopkins University Press, 1997), 56-85.

of integrated public housing to prove that peaceful desegregation was possible in public schools. By recovering tenancy as a scientific field of study, I offer a new account of the struggle to desegregate American neighborhoods before 1965.

My interest in the science behind planned communities started with Catherine Bauer, who was neither an architect nor a scientist but an advocate for tenancy studies between 1933 and 1964. Bauer was a self-proclaimed "houser," meaning someone who advanced affordable housing as a social-justice issue.⁶ She cut her teeth as a housing consultant for Hillside Homes in the Bronx borough of New York, one of the earliest low-income housing developments financed by the National Industrial Recovery Act in 1933 (see Chapter 1). Bauer acted as a liaison between the worlds of science and design in her writings and teaching, which centered on the social questions involved in community planning. She had little patience for architects who puzzled over neighborhood aesthetics, which she dismissed as "the oft-debated questions of curved vs. straight streets or flat vs. peaked roofs."⁷ Instead Bauer partnered with social scientists to explore the question of population diversity in planned communities.

Throughout her career, Bauer preached that planned communities had the potential to dismantle or strengthen the racially and economically segregated landscape of the United States. "One disturbing thing becomes more and more apparent. Namely, that large-scale housing and planning techniques, however enlightened in a physical sense, not only do not automatically improve the social structure: they can (and do, in the absence of a determined conscious effort to

⁶ H. Peter Oberlander, "Preface," *Houser: The Life and Work of Catherine Bauer, 1905-64*, eds. H. Peter Oberlander and Eva M. Newbrun (Vancouver: University of British Columbia Press, 1999), xi – xii.

⁷ Catherine Bauer, "Good Neighborhoods," *The Annals of the American Academy of Political and Social Science*, 242 (1): 104.

prevent it) actually promote and crystallize segregation in a much more blatant, official and efficient form that we've ever known it in the past outside the deep South," cautioned Bauer.⁸ She worried that planned communities, in the hands of conservatives, would deepen the color lines that already separated Americans by neighborhood, school district and polling place. Planned communities threatened to be democracy's undoing if entrusted to the wrong people, but they also heralded social revolution if Americans chose to use these neighborhoods as tools for achieving social diversity:

Courts, laws, political pressures, and the pricks of democratic conscience, are challenging the color-line [...] And progressive planners are promoting the principle that a neighborhood should include "varied" dwelling types and facilities to serve families small and large, with and without children, and in different income groups. This trend derives in part from aesthetic boredom with the dull physical uniformity which prevails over wide areas in most cities, and it is enforced by the social scientists who emphasize the varying needs of families at different stages in their cycle of development. But it rests at base on a growing conviction that some degree of social variety is wholesome and 'right' in a democracy.⁹

Bauer argued that the class and racial composition of planned communities would reflect the state of democracy in America, indicating its relative strengths or weaknesses. I have excerpted Bauer's discussion of planned communities here to demonstrate that these places launched debates about the meaning of democratic life in the postwar era. The people who entered into

⁸ Letter from Catherine Bauer to Reginald Johnson, July 20, 1944. Box 20, Folder 11, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

⁹ Catherine Bauer, "Social Questions in Housing and Community Planning," *Journal of Social Issues*, Vol. VII, Iss. 1-2, (Spring 1951): 1-34.

these debates considered themselves "housing experts," and, as I will discuss, this term included a number of professionals in a wide range of fields.

Unlike some European countries, the United States never established a centralized government program for collecting and disseminating housing research.¹⁰ This meant that there was no fixed location for housing research in the U.S., nor was there a bureaucratic system in place for organizing all of the people involved. Those who studied the technical aspects of community planning-problems related to housing technologies, design and materials-are too numerous to discuss here, and architecture scholarship has already made some progress in this direction anyway. My project is about the people who understood planned communities not just as a technical feat but who recognized them as a social phenomenon, and who inquired about the ways these places might be engineered to improve race and class relations. The people who studied segregated housing did not belong to any particular group, even though they sometimes came together to exchange ideas. These men and women studied tenants' psychological lives under the larger rubric of "housing studies," and they accomplished their work in academic departments, architecture studios, housing institutes, labor unions and municipal-government offices. By setting an anti-segregation discourse in motion, these progressives disseminated ideas that moved beyond housing studies into larger national debates about American politics, society and law.

My project follows a moving, interacting group of protagonists who studied tenants and their houses on the fringes of their respective disciplines. Historians of architecture and planning will be familiar with the names Burnham Kelly, Clarence Stein, Oscar Stonorov, and William

¹⁰ C. Theodore Larson, "Building and Housing Research in the United States," *Housing and Town and Country Planning*, Bulletin 8, (United Nations), Nov. 20, 1953. Box 1, C. Theodore Larson Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

Wurster, whom I discuss for their understudied contribution to the construction and dissemination of scientific knowledge about planned communities. Less familiar is the urban planner and historian Frederick Gutheim, who wrote a well-known history of the Potomac River late in his career, but whom I discuss for his criticism of planned communities, which he published in the architecture section of the New York Herald Tribune in the late 1940s, and in the book *Houses for Family Living* that he wrote shortly after retiring from the newspaper business.¹¹ Historians of social science will recognize the names Leon Festinger and Robert Merton, but will be unfamiliar with their tenancy studies, which academic scholarship has overlooked.¹² To my knowledge, I am the only historian to discuss the writings of Catherine Lansing Oats, who published a study of public housing in New York City during her tenure at the city's housing authority between 1937 and 1946. Oats later adapted her research findings to address similar problems in private housing when she joined the Woman's Foundation Inc., a group of domestic scientists who gave Oats a national platform to voice her ideas. Oats is one of several protagonists who played a shifting role in this history, fading into the background when prospects dwindled and then rising to prominence when some opportunity presented itself to communicate her ideas to the public or test them in an actual neighborhood. These men and women professionalized the study of tenants and their houses as subjects for scientific inquiry between 1933 and 1965. I track this development by treating tenancy studies as a moving target since no monolithic program guided people's studies nor organized their efforts.

¹¹ Frederick Gutheim, *The Potomac* (Baltimore: The Johns Hopkins University Press, 1986); Gutheim, *Houses for Family Living* (New York: Woman's Foundation, 1948).

¹² Craig Calhoun has recently published an excellent history of Robert Merton's life and career, but pays little attention to his housing studies since these were never published. See Calhoun, *Robert K. Merton: Sociology of Science and Sociology as Science* (New York: Columbia University Press, 2010).

Bauer appears most frequently in this story, since she devoted her entire career to promoting the study of tenants in planned communities. Bauer's interest in tenants began as part of a larger fascination with European social housing, which she described for American readers in her book *Modern Housing* in 1934.¹³ Most readers will recognize her name in connection with public housing, since literature about Bauer (and public housing) has documented her crucial role in bringing about the 1937 Housing Act.¹⁴ My project explores a lesser known episode in Bauer's career as a "houser:" I situate her as the lynchpin who fastened together the worlds of science and design to study the social lives of tenants in planned communities. For Bauer, tenancy studies were the catalyst for a network of personal and professional contacts that she made between 1926 and 1964, which brought new perspectives to bear on the matter of livable houses and neighborhoods. In this dissertation, I argue that people who operated on the edges of established disciplines, such as Bauer, were often the best suited to exploring important but neglected questions regarding the social consequences of urban development.

Studies of public housing centered on the everyday lives of residents. Those who researched public housing—architects, government officials and social scientists—shared the belief that the minutiae of everyday life contained clues for ways to improve American houses and neighborhoods, and, by extension, the families and communities that lived in them. Although none of these professionals would have described "everyday life" as a methodology, I

¹³ Catherine Bauer, *Modern Housing* (Boston: Houghton Mifflin Co., 1934; Minneapolis: University of Minnesota Press, 2020).

¹⁴ See Barbara Penner, foreword to *Modern Housing* (Minneapolis: University of Minnesota Press, 2020); Barbara Penner, "The (Still) Dreary Deadlock of Public Housing," *Places Journal*, October 2018; H. Peter Oberlander and Eva Newbrun, *Houser: The Life and Work of Catherine Bauer* (Vancouver: University of British Columbia Press, 1999); Eileen A. Reilly, "Catherine Bauer and the Genesis of the United States Public Housing Program," PhD diss., (Princeton University, 1981); Mary Susan Cole, "Catherine Bauer and the Public Housing Movement, 1926-1937," PhD diss., (George Washington University, 1975).

argue that their work was part of a growing cultural fascination with people's day-to-day experiences that transformed the way midcentury Americans and others thought about architecture and human behavior.¹⁵ My project is itself a product of this cultural turn, in which historians also began to pay attention to the daily experiences and struggles of ordinary people.¹⁶

Bauer pointed social scientists towards the minutiae of tenants' lives in planned communities. "We need to know something about people's actual behavior and the form and quality of social organization in different types of residential developments, and we need to learn more about their attitudes and motives, desires and ideals [...] Fortunately, there is evidence that social scientists are developing new interests and concerns which bring them closer to these questions," wrote Bauer in 1949.¹⁷ For the past decade, social scientists had researched group morale in public housing, a topic that required them to address residents' emotional lives, or, what Bauer referred to as the "attitudes and motives, desires and ideals" that shed light on people's experiences in and expectations about their homes and neighborhoods. But why did people's feelings about public housing matter?

Sociologists in Euro-America have historically explained urban life in emotional terms. Eva Illouz recently argued that some of the best-known scientific accounts of urbanism centered on people's emotional lives.¹⁸ She pointed out that Georg Simmel's early twentieth-century

¹⁵ For a discussion of the relationship between social research and public policy in Britain, see Nick Hubble, *Mass Observation and Everyday Life: Culture, History, Theory* (Basingstoke: Palgrave Macmillan, 2006).

¹⁶ For more on the intersection of architecture and everyday life in recent scholarship, see Dell Upton, "Architecture in Everyday Life," *New Literary History* 33, No. 4 (Autumn 2002): 707-723; Steven Harris and Deborah Berke, eds., *Architecture of the Everyday* (New York: Princeton Architectural Press, 1997).

¹⁷ Catherine Bauer, "Some Notes on Social Research, Re: Community Planning," Feb. 1949, Distributed by Citizens' Council on City Planning in Philadelphia. Box 8, File 6, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

¹⁸ Eva Illouz, Cold Intimacies: The Making of Emotional Capitalism (Malden, Mass.: Polity Press, 2007).

description of the industrial city underlined the sensibilities of urban dwellers, whose alienation and loneliness contrasted with the emotional stability characteristic of family life in smalltowns.¹⁹ Similarly, Emile Durkheim struggled to understand how modern societies functioned despite lacking the "emotional intensity" of preindustrial life.²⁰ In analyzing these foundational writings, Illouz argues that the history of sociology has been marked by perennial concerns about the emotional lives of urban people.

But interest in the day-to-day behavior and emotional lives of ordinary people was not limited to sociologists in the twentieth century. Illouz points to the ways that ordinary Euro-Americans became more attuned to the minutiae of everyday life during this period, since the new language of Freudian psychology equipped them to better understand and interpret the ethics of ordinary choices. She writes that men and women "were made to focus intensely on their emotional life" at home and in the workplace, since a "new culture of emotionality," based on the dissemination of Freudian ideas, permeated the public and private spheres.²¹ Freudian psychology intellectualized everyday life, infusing people's ordinary habits and behaviors with new meanings. Americans' increased awareness of people's everyday behaviors also heightened concerns about social change, since Freud had shown how deviations from routine and tradition could threaten people's psychological wellbeing.

It was common wisdom that the traditional American family and community "changed" in the New Deal years. The President's Research Committee on Recent Social Trends catalogued social changes in America during the Depression, such as rising rates of divorce and increased

¹⁹ Ibid, 1-2.

²⁰ Ibid.

²¹ Ibid, 4.

migration from the farm to the city.²² When popular magazines cited these statistics, it was usually as a cautionary note in the story of the nation's uncertain future. In the book *Middletown*, sociologists Robert and Helen Lynd contrasted the everyday lives of 'average' Americans in Muncie, Indiana, between 1890 and 1929.²³ The Americans who read *Middletown* understood themselves to be different from previous generations, and they made sense of this difference through the language of psychology.

Psychology imbued the daily social interactions in a community with new meaning, and this encouraged architects to study the lives of tenants in their houses. Chapter 1 explores the earliest tenancy studies, financed and supervised by architects interested in better understanding the social lives of the prospective residents for large-scale housing. In this early research, architect Stonorov asked the future residents of his Philadelphia housing project, "What do you do in your spare time? Do you like eating meals in the kitchen? What worries tend to upset [your husband or wife's] mood in the home?"²⁴ These social questions related to architectural design in direct and indirect ways. Architects supervised tenancy studies in the New Deal years, since social scientists did not pay much attention to government housing until after the passage of the Housing Act in 1937.

The MIT architect Burnham Kelly worried that he knew too little about the psychological needs of modern American communities to plan neighborhoods for them. Kelly believed that

²² Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends (New York: Whittlesey House, 1934).

²³ See Sarah Igoe's discussion of Robert and Helen Lynd in *The Averaged American: Surveys, Citizens and the Making of a Mass Public* (Harvard University Press, 2007), 68-103.

²⁴ "Data to be Obtained by Questioning," undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie; "Husbands and Wives," questionnaire, undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

architects could only anticipate people's physical needs, since they were ignorant of the invisible psychosocial dynamics that shaped interpersonal relations in neighborhoods. In 1946 Kelly hired social scientist Leon Festinger at MIT to analyze the social needs of residents living in veteran housing on campus. He reasoned that the scientific method was a "sound technique for the more accurate assessment of [resident] needs," than the common sense that generally guided architects interested in community behavior.²⁵ Chapter 2 discusses Kelly's efforts to deepen architects' understanding of interpersonal relations between residents living in public housing during the postwar years. Festinger accomplished this by finding psychological meaning in mundane social events—such as neighbors chatting in common courtyards—and he attributed these events to the subtle but meaningful ways that architecture organized people in space.

Festinger used group morale as a means to measure the quality of veteran housing. He asked tenants about their feelings of satisfaction and dissatisfaction with the neighborhood, and, in doing so, he recalled Elton Mayo's famous Hawthorne experiment, in which the sociologist asked workers about their level of satisfaction at the Western Electric factory in Chicago. Social science privileged people's emotions when it came to analyzing urban space, even if no one at the time acknowledged the role of affect as a theme in the history of sociology. Whereas Mayo used worker satisfaction as a barometer of good management, Festinger used tenant satisfaction as a means to evaluate architectural design in a veteran-housing project. In studying social relations between neighbors, Festinger wondered if class or racial attitudes played a role in whether or not tenants felt they 'belonged' in their community.

Festinger framed his tenancy study in apolitical terms, but his research provided a methodological framework for later analyses of desegregated public housing that had major

²⁵ Burnham Kelly, "Background of the Group Dynamics Study for the Bemis Foundation," Jan. 29, 1947. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

political consequences. Public housing in the United States was racially segregated in the 1940s, with the exception of some government projects in progressive cities. These integrated housing projects interested social scientists at Columbia and NYU, who used them to explore what would later be referred to as the "contact hypothesis," the claim that feelings of prejudice between interracial groups could be reversed by increased social contact. These scientists claimed that the process of integration decreased white people's bigoted feelings, since it was harder for them to harbor intolerance for neighbors as opposed to an abstract group. In Chapter 2, I trace the impact of this research to the Supreme Court, where the NAACP used tenancy studies to evidence the possibility of peaceful desegregation in the landmark case of *Brown v. Board of Education* in 1954.

Local housing authorities conducted their own studies of tenants in public housing. The Housing Authority of the City of Los Angeles commissioned photographs of Aliso Village because it was the first racially-integrated project in the city when it opened in 1942. In Chapter 3, I discuss ways that photographs of Aliso Village illustrated social interactions between families and neighbors to demonstrate that peaceful integration was possible in the postwar United States. By capturing the mundane details of everyday life, the Aliso Village photographs evinced a specific politics of integration at midcentury.

Psychology raised the stakes for and brought new awareness to the ethics of everyday choices in neighborhoods. It made incidental events—such as waving to a neighbor—into meaningful psychosocial phenomena that, cumulatively, had the power to establish friendships and even to reverse prejudice over time. Social scientists constructed meaning from tenants' experiences in public housing, and they did so by insisting that the incidents of everyday life were the staging grounds for radical changes in group attitudes and social mores.

Architecture histories tend to focus on public or private housing, but rarely discuss them together. Scholarship in the late twentieth century concerned public housing, and documented the national struggle to pass housing legislation in spite of the powerful real-estate industry. In recent decades, architecture historians have paid more attention to private housing developments and we now have a substantial literature on suburban communities. In analyzing tenancy studies in planned communities, my project breaches the public-private housing divide that defines most architecture scholarship. I do this for two reasons.

First, studies of public housing produced ideas that people later applied to private residential developments. Public housing was the first laboratory for scientific research on planned communities, which began in 1933 as amateur surveys commissioned by architects' offices but developed into professional scientific investigations conducted by social scientists. Local housing authorities also spearheaded public-housing research, sometimes even publishing reports written by their staff concerning a particular issue. For example, the New York Housing Authority published the book, *Studies of Community Planning in Terms of the Span of Life*, written by their executive director of community planning: Catherine Lansing Oats.²⁶ As I discuss in Chapter 4, Oats argued that the lack of variety in public-housing apartments (sized to accommodate four-to-five-person families) made it difficult for elderly persons and smaller families to find adequate shelter.

The irony was that public housing officials could not implement the findings from these housing reports. There were a few practical reasons for this. First, public-housing studies took place after the neighborhood in question was already built, so there was little opportunity to

²⁶ Catherine Lansing Oats, *Studies of Community Planning in Terms of the Span of Life* (New York: New York City Housing Authority, 1937).

modify existing buildings. The rationale was that lessons learned in one housing development could be applied to future building projects in other locations. But even the federal government admitted that this was not always possible. In 1945, the Federal Public Housing Authority published a report, "The Livability Problems of 1,000 Families," which collected the results of resident surveys taken in 1,000 public housing projects across the country.²⁷ The report concluded that minimum space standards in public housing were too restrictive. But it also included a foreword by Public Housing Commissioner Philip Klutznick, who regretted that, "due to cost limitations on public housing, available funds will undoubtedly not be adequate to provide the space and facilities families desire and possibly not those required as indicated in the study."²⁸ Public housing was the ideal laboratory for tenancy studies, since it contained a clearly delimited group of residents and management who were generally cooperative with researchers. But financial limitations made it difficult for housing authorities to make the architectural changes necessary to implement research findings. So how could housing researchers actually test their ideas in the built environment?

The scientific research produced in public housing found its way into private housing debates. For example, Oats applied her ideas to private housing developments when she retired from the New York Housing Authority in 1946. She joined a group of domestic scientists at the Woman's Foundation in Midtown Manhattan, where Oats modified the argument she made in *Studies of Community Planning* to suit an audience interested in private housing. Much like public housing, the developers of private residential tracts were also producing uniform housing that narrowly targeted the 'average' sized American family. The Woman's Foundation offered Oats a platform to communicate this problem to a wider audience by organizing the National

²⁷ "The Livability Problems of 1,000 Families," Federal Public Housing Authority, 1945.

²⁸ Ibid, 102.

Conference on Family Life and publishing her ideas as a book. In this way, domestic science offered women opportunities to disseminate lessons learned in public housing to the private housing market.

The architect Stonorov paid special attention to public housing research, hoping for a chance to apply some of these ideas to a private development. He got this opportunity when The Citizen's Redevelopment Committee of Detroit commissioned him to design the community plan for a downtown neighborhood: Gratiot-Orleans. Chapter 5 discusses the development of Gratiot-Orleans, in which the architects Minoru Yamasaki and Victor Gruen collaborated with Stonorov to produce plans for a mixed neighborhood of public and private housing, which, they hoped, would offer a counterexample to the isolation and monotony typical of public housing projects. Inspired by the work of Catherine L. Oats, Stonorov pushed for housing variety in the neighborhood—row houses, high-rise apartment buildings, and single-family houses—so as to accommodate individuals as well as families of all different sizes and incomes. The Gratiot-Orleans plan was a success. *Progressive Architecture* magazine hailed the Gratiot-Orleans project as the democratic solution to the problem of community planning, and awarded the architects first prize in the magazine's 1956 town planning competition.

The second reason I discuss public and private housing together is that some midcentury architects associated this combination with democracy. Stonorov, Gruen, and Yamasaki claimed that their Gratiot-Orleans neighborhood would be a beacon for democracy in Detroit, since their plan encouraged population diversity by offering public housing and private housing in the same tract. In 1955 racial covenants still legally restricted non-white groups from renting or purchasing houses in Detroit's private neighborhoods. One year earlier, Detroit desegregated its public housing in response to the Supreme Court's ruling to uphold a federal court's decision in

the landmark *Davis et al. v. The St. Louis Housing Authority*, which barred the St. Louis Housing Authority from refusing to rent apartments to qualified African-Americans. Detroit was a deeply segregated city at midcentury, populated by white residents in the suburbs and non-white groups who lived downtown. So people paid attention when Stonorov, Gruen, and Yamasaki proposed that their new neighborhood would "bring the suburbs to the city," meaning that Gratiot-Orleans would not just mix downtown architectural features with suburban ones. They would mix downtown and suburban people, too. By building public and private residential buildings in one neighborhood, the Gratiot-Orleans architects could describe their project as open housing, even if this was only partly true.

Tenancy studies became a professional subject for scientific research after 1937. That year, Congress passed the National Housing Act, which provided generous subsidies to local housing authorities for the construction of public housing. This new legislation was also a watershed event for tenancy research. In the following decade, housing institutes appeared on college campuses where architects and scientists collaborated to explore technical and social questions related to the design, construction and maintenance of houses. These housing institutes were the staging grounds for the professionalization of housing, an opportunity for academics to practice some control over who studied large-scale housing and how they went about doing it.

As I have noted, the U.S. government did not have a centralized office for scientific research on housing. Neither did it identify central problems for national study. Instead the nature of research questions depended entirely on the abilities and ambitions of local academics, people who happened to take an interest in housing and wanted to take advantage of the new campus resources available to study it. The scientists working at American housing institutes

were only loosely connected by their commitment to the scientific method, and the shared belief that only reproducible results were conclusive.

We can trace the emergence of housing institutes on U.S. college campuses to two simultaneous events. First, Americans had endured a persistent national housing shortage that began in the Depression years but reached its peak after WWII. Promised prosperity upon their return home, veterans discovered that it was hard enough to find an adequate dwelling to shelter their families. Second, American universities experienced enormous growth after the War, which they owed to the GI Bill as well as a booming national economy. Given the new resources at the disposal of American colleges, it made sense that they attempted to tackle what was, debatably, the biggest threat to the health and safety of American families at the time: the housing crisis.

My project focuses on the questions that social scientists asked about the tenants living in government housing after the War. Of course, the professionals who worked in housing institutes were not only social scientists. Housing institutes enlisted architects, engineers, domestic scientists, and medical practitioners to research a number of problems related to building livable houses, including prefabrication technologies, minimum-space requirements, and heating and cooling systems. Greg Hise has described the pioneering work of the Pierce Foundation at Yale, a housing institute that researched best practices for designing cost-efficient minimum houses for the private housing market.²⁹ More recently, Michael Osman has written about postwar experiments in air conditioning and heating for the house, technologies that he situates within a larger culture of regulation and scientific management in America.³⁰ Certainly, these are crucial episodes in the history of science in housing. I argue that this history of housing standards and

²⁹ Hise, Magnetic Los Angeles, 56-85.

³⁰ Michael Osman, *Modernism's Visible Hand: Architecture and Regulation in America* (Minneapolis: University of Minnesota Press, 2018).

technologies is even better understood when we consider it alongside contemporary sociopsychological studies of people living in large-scale housing, not least of all because social scientists documented their studies of tenants' relationships in a statistical language that reflected the same regulatory impulse that compelled other scientists to quantify the effects of air conditioning and heating. To put it another way, I point towards the construction of emotional knowledge in tenancy studies not to contrast it with technical knowledge, but to demonstrate the ways in which they were mutually constitutive.

American social scientists studied housing as a topic in the field of applied psychology. Before World War II, most social scientists couched their ideas in abstract theory, and few studied group behavior in real-world situations. After the war, the U.S. government enlisted sociologists to "apply" their knowledge of psychology to a number of important but disparate social issues, including communications technologies, air-force training programs, and workplace codes of conduct.³¹ Nevertheless, most social scientists had little or no training in applied psychology and knew even less about its relevance for housing. After all, what did housing have to do with psychology?

Kurt Lewin pioneered the nascent field of applied psychology during his tenure at MIT's Psychology Department, where he supervised a study of veteran housing in Cambridge (among other projects). Like most social scientists of the period, Lewin had trained as a psychologist, but he specialized in group thinking and behavior as opposed to individual psychology. Unlike other social scientists, Lewin chose to explore group behavior in real-world settings with the intention of solving the most pressing social problems of the moment. These interests led him to the topic of housing. Lewin's writings provided a path for psychologists interested in practicing applied

³¹ Calhoun, Robert K. Merton, 8.

and problem-oriented research, and offered an intellectual framework for understanding tenancy as a subject for socio-psychological study.

Chapter 2 focuses on the postwar tenancy studies conducted by Kurt Lewin and Festinger at MIT, but it also discusses similar work conducted by the psychologists Robert Merton at Columbia and Morton Deutsch at NYU. For these practitioners, "housing" was an experimental subfield within the experimental subfield of applied psychology, and, as such, the burden of legitimizing tenancy studies was heavy. How could Lewin and others demonstrate the scientific verifiability of their research in public housing? This question was all the more pressing owing to the controversial content of their tenancy studies, which dealt with sensitive questions related to the psychological effects of class and racial segregation.

One way that Merton and others attempted to secure the scientific veracity of their tenancy studies was to keep illegitimate, or "non-scientific," studies out of the public eye. Chapter 3 explores the professionalization of tenancy studies from a different angle, examining the obstacles that a "non-expert" experienced in the struggle to publish his public-housing research. Merton dissuaded the photographer Leonard Nadel from publishing his photographic study of Los Angeles tenants in government housing, since Merton worried that non-scientific studies of racially integrated housing were not merely uninformed, but were a threat to the legitimacy of the housing studies he was conducting at Columbia. Nadel had recently completed a six-month photography project at Aliso Village, one of the nation's first racially integrated government housing projects, when he met with Merton at the psychologist's New York office in 1949. I revisit the Aliso Village photographs to reckon with the perceived limitations and missed opportunity of picturing racial diversity at midcentury in Chapter 3.

In this dissertation, I tell the story of tenancy research by demonstrating the ways that scientists professionalized the psycho-social study of residential life. I also show how people on the outskirts of the scientific community made a place for themselves in tenancy studies, resisting the exclusivity that typically buttresses the professionalization of any discipline. In Chapters 3 and 4, I discuss the 'amateur' researchers who counted themselves as intellectual workers with an important role to play in the national project of building and improving American housing. Whereas social scientists and architects asked different questions about housing, they shared the confidence that comes from belonging to a recognized professional community. Domestic scientists and staff workers hired by local housing authorities (i.e. Catherine Lansing Oats and Leonard Nadel) carved out their own space within the burgeoning field of housing, but not without some difficulty. Sometimes they found ways to work alongside social scientists and architects who shared their interests, and other times they were pushed out by people who failed to recognize their possible contributions to tenancy studies.

It is important to note that these varied housing professions were gendered, and so was their differential access to public recognition and authority. With few exceptions, the social scientists and architects interested in pursuing questions related to large-scale housing were men, whereas many of the people who managed public housing projects, staffed local housing authorities, and wrote about these neighborhoods for a narrow audience of public housing professionals were women. Women also dominated the field of domestic science, which had a long tradition of publishing affordable ways to build and improve single-family houses that dated back to the early years of the twentieth century. After WWII, these domestic scientists turned their attention to questions of family life in large-scale housing, specifically the problem of building neighborhoods with adequate housing to shelter families through several stages of child

rearing. Among the many women who struggled to find a place for themselves in housing debates, none was as influential as Bauer.

Bauer was exceptional for her work with both recognized housing professionals and less recognized domestic scientists. She leveraged her relationships with architects and scientists to publish in their professional journals but also reached a wider audience of general readers through publishing in mainstream periodicals, including women's magazines. During her lifetime, Bauer incorporated professional and practical knowledge into her writings about tenants, sometimes appealing to 'practical reason' as the obvious solution for overwrought debates about housing issues, such as the minimum square footage necessary for a livable house.

Following Bauer's example, I have defined "science" broadly in this dissertation. I argue that examining science from a wider perspective not only delivers a more inclusive picture of the people involved in postwar housing debates, but also offers a more accurate picture, one that takes into account the different voices who struggled to be heard and jockeyed for power as they made arguments about tenants that were really arguments about the meaning of democratic life in America. One goal of this project is to demonstrate that the term "science" was a cipher for legitimacy in the world of housing. People referred to their tenancy studies as "experiments" not just because they considered their work to be groundbreaking, but because they craved the legitimacy and authority bestowed upon scientific research.

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Chapter 1: Housing Surveys in Two Architecture Offices

The planned community transformed the traditional architect-client relationship. Since the beginning of their profession, American architects had designed single-family houses for wealthy clients, and they accomplished this by translating their clients' needs and desires into built forms. The work of residential architects depended on knowing their clients, but the scale of the planned community and the large number of people to be housed threatened to make prospective residents unknowable. "The most important thing is to avoid the experiment of the speculators. That means to build for an unknown group [...] Before going into any building operation today, thorough and expert surveys of the prospective tenants should be made," wrote architect Stonorov in 1932.¹ Stonorov referred to the tenant surveys that he distributed to Philadelphia hosiery workers in anticipation of designing his latest project, the Carl Mackley Houses in Northeast Philadelphia. The architect looked to tenant surveys for information about the needs and desires of the 1,385 prospective residents in his planned community.²

The first tenant surveys took place at the Carl Mackley Houses and Hillside Homes in the Bronx borough of New York. Aerial views of these residential communities emphasized their grand scale, which distinguished them from the surrounding neighborhood (Figs. 1.1 and 1.2). These were subsidized housing developments built with loans from the Reconstruction Finance Corporation (RFC), which the federal government established to boost the depressed American economy in 1932. Although the RFC initiated these projects, the Public Works Administration

¹ Letter from Oscar Stonorov to John Edelman, February 18, 1932, Box 52, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

² Oscar Stonorov and Alfred Kastner, "Community Development for the American Federation of Factory Workers in Philadelphia," Box 38, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

(PWA) completed them several years later under the supervision of its newly established Housing Division.³ The architects Stonorov and Stein understood these neighborhoods and the tenant surveys that preceded them as models for future PWA housing. Both architects were eager to establish best practices in the new field of community planning, and they upheld tenant surveys as a crucial step in the planning process.

Stein and Stonorov believed that planned communities burdened architects with a new social responsibility. "We must plan [Hillside Homes] so as to facilitate the development of a full community," Stein exhorted.⁴ Stein was an established New York architect who had considerable community planning experience, which included a company town built for miners in Tyrone, New Mexico, and a celebrated commuter suburb in Radburn, New Jersey.⁵ Stonorov had just arrived in the United States when the stock market crashed in 1929, having recently completed his architecture education at the Ecole Polytechnique Federal in Zurich.⁶ He was also an idealist, "The only way we can reanimate the shapeless community life of much of present day America is by the establishment of integrated neighborhoods around the cell of a community center," Stonorov preached.⁷ PWA housing offered an opportunity for these architects to explore the ways architectural design might improve community relations.

³ Gail Radford, *Modern Housing for America: Policy Struggles in the New Deal Era* (Chicago: University of Chicago Press, 1997), 91-96.

⁴ Clarence Stein, "Hillside Homes," American Architect (February 1936): 1-17.

⁵ Letter from Bertram Goodhue to M.A. Mikkelson (*Architecture Record*), July 3, 1918, Box 1, Folder 3, Clarence Stein Papers, Rare and Manuscript Collections, Cornell University Library.

⁶ Katherine Bristol, "Beyond the Pruitt-Igoe Myth: The Development of American High-Rise Public Housing, 1850-1970," (PhD diss., University of California at Berkeley, 1991), 126.

⁷ Stonorov, "Leisure and the Community Center."

Tenant surveys provided architects with guidelines for building socially satisfactory communities. Stein and Stonorov characterized tenant surveys as important tools for learning about people's economic situations as well as their social habits at home and in the neighborhood. These architects hired local social workers, economists and sociologists to conduct tenancy studies that combined questionnaires, interviews and direct observation. Surveyors asked prospective residents at the Carl Mackley Houses questions about their housing needs and desires, such as, "Do you prefer your present home to a good apartment? How many bedrooms do you want? Do you like a home on one floor?"⁸ Surveyors canvassed prospective residents about their housing preferences, and, in doing so, offered architects crucial information for designing neighborhoods fit for a particular community.

This emphasis on the architect-client relationship made PWA housing surveys different from the Progressive era surveys that preceded them. For example, W.E.B. Du Bois surveyed the deplorable housing conditions in Philadelphia's Seventh Ward to document the effects of the city's segregated housing market in 1900.⁹ Three decades later, Stonorov surveyed Philadelphia hosiery workers living in slum tenements about the types of dwellings that they would like to live in. Some aspects of Stonorov's survey recalled Du Bois's earlier study, such as the architect's interest in the average number of inhabitants per slum dwelling. But whereas Du Bois recorded these figures to demonstrate that overcrowding in the Seventh Ward had worsened in the last several decades, Stonorov did so to compare Philadelphians' present housing conditions with their future desires. For PWA architects, tenant surveys were instruments for architectural design.

⁸ "Questionnaire for Reading Hosiery Workers," undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

⁹ W.E.B. Du Bois, *The Philadelphia Negro* (Philadelphia: University of Pennsylvania Press, 1899. Reprint, 1995).

In recent years, architecture historians have begun to document the socio-architectural discourse that shaped urbanization in Euro-America after WWII.¹⁰ Kenny Cupers has argued that the design of mass housing in postwar France developed as the result of production and consumption, since housing ideas were continually refined in a process of "accumulative experimentation" that brought together government officials, construction companies, residents' associations, developers and social scientists.¹¹ In this chapter, I discuss architects' earliest efforts to apply sociological methods of analysis to the problem of mass housing in the United States during the Depression years. Stonorov and Stein confronted the problem of mass housing nearly a decade before the postwar urbanization projects that scholars have credited with widening the scope of Euro-American architectural practice towards a more social-research oriented approach.

The PWA tenant surveys were a mixture of sociological research and consumer feedback. As such, they pioneered new roles for social scientists and residents in the preliminary stages of community planning. Social scientists had their own agenda for tenant studies, and asked Philadelphia hosiery workers questions that had little to do with architectural design, such as, "Do you believe that there are fundamental psychological or temperamental differences between men and women? How do you allow for this in your marriage?"¹² Such tenant surveys indicated the difficulties that architects encountered in harnessing the broad aims of social-science research for the narrow purpose of environmental design. As I will discuss in Chapter 2, this problem persisted for the architects who collaborated with social scientists over the next two decades.

¹⁰ Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014); Arindam Dutta, ed., *A Second Modernism: MIT, Architecture and the 'Techno-Social' Moment* (Cambridge, Mass.: MIT Press, 2013).

¹¹ Cupers, *The Social Project*, xvi.

¹² "Questionnaire for Reading Hosiery Workers," undated.

Tenant surveys also revealed the tensions between government officials and architects, since architects used the surveys to plead for better neighborhoods with bigger houses and more expansive recreational areas. Whereas architects pushed for the small luxuries that survey respondents indicated, government officials often shut down these requests in favor of severe housing on tight budgets. These conflicts shed light on the primary aim of the PWA housing program, which was a stopgap measure to employ construction workers, one of the groups hardest hit by the Depression.¹³ But architects Stein and Stonorov dismissed the idea that planned communities were only important insofar as they provided jobs for the depressed building industry—these architects upheld PWA neighborhoods as opportunities to improve the physical and social lives of workers. Tenant surveys were the battleground in this struggle between architects and government officials because they visualized the gap between the realities of the PWA housing program and the aspirations of architects and residents.

I. Housing Surveys

Stonorov and Stein wanted to know about the economic and social behaviors of their prospective residents. Since their research centered on the traditional nuclear family, they paid attention to the individual needs of husbands, wives and their children. The architects had little difficulty collecting information about family economics, since household income, monthly rent, and spending habits were fairly straightforward. It was more challenging to interview residents about their social lives, since this was a giant and unwieldy topic that threatened to give little insight into concrete architectural solutions. But these interviews were important, since they promised to shed light on the things that residents wanted in their households but may not have

¹³ Diane Ghirardo, *Building New Communities: New Deal America and Fascist Italy* (Princeton: Princeton University Press, 1989), 14.

known to request.¹⁴ This paternalist thinking partially explains architects' interest in documenting and analyzing the social lives of their prospective residents.

Stonorov commissioned a team of consultants to conduct a six-month study of Philadelphia's hosiery workers and their families. The architect hired economists and sociologists to conduct the study, drawing on local expertise from graduate students and faculty at the University of Pennsylvania and Bryn Mawr. Stonorov believed that three types of knowledge were necessary to build successful planned communities: 1) "knowledge of the sociological background of the tenant", 2) "command of engineering knowledge and invention," and 3) "command of architectural expression to create a community which in itself is able to influence city planning in the future."¹⁵ The tenant survey was a tool for collecting a sociological picture of residents, which the architect would then translate into a neighborhood tailored to the group in question and consistent with the latest building methods and technologies.

Stonorov described himself as a liaison between the worlds of sociology and design. He believed that architects needed to partner with sociologists because they had little opportunity to conduct research for themselves. Stonorov explained that:

Under the present competitive system of architectural enterprise there is little time left for the architect to do research work. First hand information, not reading books and copying them, is most expensive though the most important factor in information. If the architect does it, he does it at his own expense. His remuneration makes no allowance outside of preparing the final solution, obtained usually on surprisingly superficial data.¹⁶

¹⁴ Clarence Stein, "An Outline for Community Housing Procedure," Architectural Forum, May 1932.

¹⁵ Stonorov and Kastner, "Community Development for the American Federation of Factory Workers in Philadelphia."

¹⁶ Ibid.

He blamed architecture schools for turning a blind eye to the need for social research in the housing field, criticizing them for their exclusive emphasis on "preparing [architecture] students in the aesthetic of past times."¹⁷ Stonorov preached that American architects needed a different type of training than the traditional architecture education if they wanted to supervise the social surveys necessary for well-planned neighborhoods.

The Philadelphia survey was an ambitious project. Researchers interviewed 1,385 union families in six months. Each interview lasted anywhere from ten minutes to over an hour, depending on the participant's willingness to talk. Reports indicated that discussions with union members and their families often went beyond the scope of housing. The people surveyed wanted to talk about union policy, strikes, unemployment, the depressed economy, and personal financial burdens. In an effort to standardize surveys, Stonorov's research team designed a questionnaire that they distributed to literate workers (those who could not read nor write participated in interviews only).¹⁸

Researchers used the questionnaire to collect numerical data. Hosiery workers described their household demographics, indicating each person's age, sex, marital status, and union affiliation. They also reported the total number of rooms in their dwellings, as well as the number of bedrooms. If they were homeowners, union members disclosed the amount of their monthly mortgage payments and the annual estimated cost of house repairs. Tenants reported the monthly cost of rent, and indicated if they paid an additional expense for automobile storage. Participants wrote down the cost of household amenities: gas, water, heat, electricity, refrigeration and

¹⁷ Ibid.

¹⁸ "Questionnaire for Reading Hosiery Workers," undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

telephone. They also documented their daily commutes, indicating transit expenses and average travel time between home and work. In these ways, Stonorov's research team assembled a statistical portrait of the hosiery workers and their families.

Researchers asked these families about their personal lives and their housing preferences. These interviews gave participants some freedom to discuss their housing needs without the researcher's prompting (as opposed to filling-out questionnaires that looked more or less like tax forms). Some typical interview questions were: "What do you do in your spare time? How do you get to work? How long does it take? Do you like eating meals in the kitchen?"¹⁹ Such questions related to architectural design in direct and indirect ways.

But other questions had little (if anything) to do with architecture. For example, hosiery workers participated in a "Husbands and Wives" survey that assessed the relative strengths or weaknesses of their marriages. Researchers interviewed husbands and wives separately, asking them questions about their partner's health, finances, recreational activities, temperament, decision-making, politics, friendships and hobbies. The interview began with the question, "If you could press a button and not be married would you do so?"²⁰ Presumably, the participant's answer to this early question would be used to interpret the questions that followed, indicating, for example, if the wife's marital dissatisfaction had anything to do with her husband's time spent away from the house.

Stonorov applied survey results to community design in selective ways. Before the survey began, he had already written some general guidelines for good worker housing: minimal

¹⁹ "Data to be Obtained by Questioning," undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

²⁰ "Husbands and Wives," questionnaire, undated, Box 51, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

rent, standards of comfort consistent with scientific planning, improved social conditions (through playgrounds, community club, and kindergartens), and flexible leases that permitted workers to move if they attained a better job elsewhere.²¹ But the Philadelphia survey helped Stonorov to make "standards of comfort" more specific to the needs of hosiery workers. Survey results indicated that hosiery workers needed bigger apartments to accommodate growing families and that they wanted a swimming pool and extra garages added to the preliminary community plan.²² Residents reported that high monthly fees for amenities, such as gas and electricity, were a financial burden. Stonorov solved this problem by suggesting an affordable rental rate at Carl Mackley Houses that included the cost of amenities.²³ In this way, Stonorov integrated survey results with his own thinking about proper worker housing.

Stonorov never referred to the "Husbands and Wives" survey explicitly. It is likely that sociologists created the survey for their own study of marital relationships, which they pursued under Stonorov's general directive to study the "social habits" of hosiery workers and their families. One of the greatest challenges for architect-sociologist partnerships was identifying common territory in the field of housing. Often sociologist's questions had little to do with architect's concerns and vice versa.

The "Husbands and Wives" survey reflected contemporary concerns about American families, which sociologists brought to public attention in their work for the "President's Research Committee on Social Trends" between 1929-34. One of the group's most influential

²¹ Letter from Oscar Stonorov to John Edelman.

²² See "The Carl Mackley Houses," and Richard Pommer, "The Architecture of Urban Housing in the United States during the Early 1930s," *Journal of the Society of Architectural Historians*, Vol. 37, No. 4 (Dec., 1978), 239.

²³ "The Carl Mackley Houses."

studies was "The Family and its Functions," written by Chicago sociologist William F. Ogburn.²⁴ He argued that the twentieth-century migration of rural families into cities had undermined the traditional nuclear family, including women's dependence on their husbands and family farms. Ogburn attributed the rising number of separations and divorces in the United States to the greater independence that city life afforded American women.

Stonorov designed the Carl Mackley Houses for urban families, and his social research reflected this group. His research team interviewed male hosiery workers, as well as their wives and children. Advertisements for the Carl Mackley Houses described the use of statistical data to determine the requirements of the "average member of the hosiery union and his family."²⁵ The earliest PWA projects catered to low-income families, and architects made this clear in their social research as well as their designs for community facilities, parks, and playgrounds.

Hillside Homes was no exception. Like Stonorov, Stein wanted to know about the economic and social details of family life. Stein believed that tenant surveys were necessary, explaining that every architect-planner should "start with human individuals and groups – their habits, their ways, their physical and psychological beings."²⁶ But compared to Stonorov's, Stein's tenant surveys were much narrower. He hired only two consultants, Catherine Bauer and Margaret Stein Morgan, to survey the prospective residents for Hillside Homes in 1933.

Bauer was a budding housing expert whom Stein had met through his close friend, the architecture critic Lewis Mumford. Several years before the Hillside survey, Stein hired Bauer to

²⁴ William F. Ogburn, "The Family and Its Functions," *Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends* New York: Whittlesey House, 1934), 661-708.

²⁵ Ibid.

²⁶ Clarence Stein, "Community Planning: The Architect's Approach," speech, New York University, April 27, 1938, Box 6, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

help him research a book on regionalism.²⁷ For this project, Bauer used mail surveys and field observation to analyze a number of American shopping centers, hoping to determine the designs most beneficial to the landlord, retailer and consumer. While staying at Mumford's apartment in Sunnyside Gardens, New York, Bauer conducted her first tenant survey—interviewing residents about their satisfaction with the neighborhood that Stein had designed.²⁸ Bauer discovered that Sunnyside residents appreciated the "light and air" afforded by the careful arrangement of row houses in the superblock, but complained about the lack of amenities, such as refrigerators, fold-up ironing boards and laundry chutes.²⁹ This experience made Bauer pay close attention to the small luxuries that often distinguish livable housing from less desirable dwellings.

Comparatively little information has survived about Morgan. What we do know is that she partnered with Bauer to conduct preliminary research for Stein's proposed housing developments in Pittsburgh, Los Angeles, San Francisco, Secaucus, and Milwaukee during the New Deal years. Similarly, we have little evidence for the ways Bauer and Morgan conducted social research. But they probably combined interviews, surveys, and fieldwork, as Bauer had learned to do in her earlier work for Stein. They conducted their Bronx tenant survey intermittently for eighteen months, during which time Stein made plans for the Hillside housing development.³⁰

Bauer and Morgan investigated recreational facilities in their tenant survey. "What are the facilities desirable for a neighborhood of 5,000 persons? To what extent are these

²⁷ H. Peter Oberlander and Eva Newbrun, *Houser: The Life and Work of Catherine Bauer* (Vancouver: University of British Columbia Press, 1999), 74.

²⁸ Ibid, 78.

²⁹ Ibid.

³⁰ Stein, "Hillside Homes."

satisfactorily supplied outside the development and available for the Hillside community? What desirable facilities not supplied elsewhere can be afforded?"³¹ Bauer and Morgan catered to young families in their recommendations for community facilities, which included playgrounds and wading pools for toddlers. They reasoned that sports facilities for teens and adults were unnecessary, since existing facilities in the Bronx borough—such as nearby gyms and athletic fields—met the community's need for organized sports. It was also socially desirable to keep noisy teens away from the semi-public garden courtyards, where their activities might disturb other neighbors (although toddlers could also be noisy, their mothers would presumably monitor their play). Other provisions for young children at Hillside included a nursery, storage for baby carriages, and the "sunny and protected" courtyards designed for mothers.

Published photographs of Hillside tended to capture its garden courtyards, which outshone some of the nicest private housing developments (Fig. 1.3). Tenants owed these amenities to the housing surveys conducted by Bauer and Morgan, as well as to the landscape architect Marjorie Sewell Cautley, who prioritized the experiences of young mothers in her design practice. Hillside became a model for future PWA projects, which also catered to the recreational needs of families with young children.

II. Community Planning

Hillside Homes and the Carl Mackley Houses provided something that the speculative housing market did not: public space. During the New Deal era, it was rare for a single developer to build an entire neighborhood, and only the wealthiest communities had landscaping and parks. Most speculative builders sold individual houses on narrow lots, which often led to congestion,

³¹ Ibid, 3-5.

but architects Stonorov and Stein divided the urban grid differently.³² Photographs of garden courtyards illustrate how the architects preserved open space while keeping population densities moderately high (Figs. 1.4 and 1.5). Whereas tenant surveys helped the architects to determine which recreational facilities were most appropriate for a particular group, they offered no guidance for coordinating shopping, parks and housing in the residential landscape. Stonorov and Stein looked for answers in European social housing as well as the latest American sociological research on planned communities.

Hillside Homes and Carl Mackley Houses appeared remarkably similar. These were large-scale developments that consisted of four-story or five-story apartment buildings that occupied minimal ground coverage. Both neighborhoods were fortress-like, since the architects arranged apartment buildings in rows that lined the superblock's perimeter with building entrances facing the street (Fig. 1.6). Whereas Hillside Homes walled itself off from the street, wide gaps between the Carl Mackley Houses broke up the neighborhood's fortress-like appearance on the north and south sides. Stonorov also indented apartment buildings at the center of each row to create some variety. Interior courtyards provided space for parks, playgrounds and landscaping. The architects designed their buildings in a stark European modernist style, which was somewhat softened by Stonorov's use of light brick tile at the Carl Mackley Houses.

The low ground coverage and open spaces at Hillside Homes and the Carl Mackley Houses recalled public housing in Frankfurt, Karlsruhe, London and Rotterdam. Stein discussed these European neighborhoods with other architect-planners at the International Town, City and

³² Clarence Stein, "Public Housing Management," manuscript for unpublished book, undated, Box 5, folder 46, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

Regional Planning Conference held by the American Institute of Architects in 1933.³³ The arrangement of low-rise apartment buildings around semi-private interior courtyards at Amsterdam South and the Tusschendijken housing project in Rotterdam were models for low cost urban housing in Euro-America throughout the 1920s.³⁴ Through keeping building coverage to a minimum, Dutch architects opened up the residential lot for lawns and landscaping.³⁵ But more importantly, they resisted the predictable monotony of the gridiron street system. Stein and Stonorov imitated this perimeter block scheme at Hillside and Carl Mackley. Stein designed Hillside to be "a separate integrated community within the larger pattern of the bigger city," because he associated the feeling of community belonging with architectural boundaries that separated insiders from outsiders.³⁶

This was the rationale for the neighborhood unit, an early guideline for building communities in the United States. "The underlying principle of the scheme is that an urban neighborhood should be regarded both as a unit of a larger whole and as a distinct entity in itself," explained sociologist Clarence Perry in reference to his neighborhood unit concept. Perry's illustration of the neighborhood unit focused on public buildings situated in a grid of interior streets and encircled by shopping and highways at the periphery of a quarter-mile radius

³³ Lewis Mumford, "Address of Lewis Mumford," in panel discussion on the planned community, *Architectural Forum* Vol. LVIII, No. 4 (April 1933): 27-30, Box 5, folder 35, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

³⁴ Kenneth Frampton, "The Evolution of Housing Concepts: 1870-1970," in Another Chance for Housing: Low-Rise Alternatives (New York: The Museum of Modern Art, 1973).

³⁵ Siegfried Giedion argued that Amsterdam South was inspired by the writings of Camillo Sitte (*Space, Time and Architecture* [1941; repr., Cambridge, Mass.: Harvard University Press, 1997], 798). George R. Collins, Christiane Crasemann Collins, and Camillo Sitte, *Camillo Sitte: The Birth of Modern City Planning* (New York: Rizzoli Corp., 1986). Camillo Sitte, *The Art of Building Cities: City Building According to its Artistic Foundamentals*, trans. Charles T. Stewart (New York: Reinhold Publishing Corporation, 1945).

³⁶ Stein, "Hillside Homes."

(Fig. 1.7).³⁷ Perry introduced the neighborhood unit in a treatise written for an extensive plan of metropolitan New York, sponsored by the Russell Sage Foundation and published as *The Regional Plan of New York and Its Environs* in 1929.³⁸ Perry's main objective was to underline the importance of scale in neighborhood planning. He limited the population of neighborhoods to the number of residents necessary for one elementary school, which was located no more than half a mile away from the farthest dwelling. The neighborhood unit was not a prescription for the physical design of urban neighborhoods, but it offered some helpful guidelines for architect-planners. For example, the neighborhood unit was an early model for a functionally integrated community, since it combined housing, shopping, public buildings, and parks into a walkable neighborhood.

American housing experts believed that integrated communities provided the ideal conditions for direct democracy, otherwise known as "face-to-face democracy." One feature of integrated plans was a centralized elementary school, which Perry associated with democratic life, since he reasoned that the school's auditorium, library or gymnasium could be used for civic activities. "With such [community] equipment and an environment possessing so much of interest and service to all the residents, a vigorous local consciousness would be bound to arise and find expression in all sorts of agreeable and useful face-to-face associations," imagined Perry.³⁹ Stein echoed this sentiment in his description of the "face-to-face democracy" at Hillside. The neighborhood had five thousand residents, which was large enough to require community services but small enough to allow some resident participation in their management.

³⁷ Clarence A. Perry, "The Neighborhood Unit, A Scheme of Arrangement for the Family Life Community," Monograph One, Neighborhood and Community Planning, *Regional Plan of New York and Its Environs* (New York: Committee on Regional Plan of New York and Its Environs, 1929), 2-140.

³⁸ Ibid.

³⁹ Ibid.

Stein reasoned that people's interest in local amenities—such as schools, nurseries, and parks were the basis of democracy, since they prompted people to participate in community decisionmaking.⁴⁰ The "face-to-face democracy" was a political and social phenomenon that Stein attributed to Hillside's integrated community plan, which featured a limited population and community facilities that distinguished the neighborhood.

Stonorov associated life in the industrial city with feelings of anonymity and isolation. He worried that these problems disproportionately affected factory workers and their families:

We see endless rows of bleak houses huddled under a blanket of soot and smoke. Here dwells the segregated class of an industrial nation. The father goes to a factory, for 8 hours instead of 12, but he spends those hours on some small mechanical job which can have no meaning to him in terms of satisfaction in the finished product. [...] He doesn't know his neighbors nor does he know any club or community center where he can rub elbows with them and get acquainted. To get away from it all he goes out to a movie. On Sunday night he might take in a football or baseball game; in any case he can't stand to stay at home for any length of time. All these types of recreation are individualistic; they are symptoms of the destruction of family and group life.⁴¹

Stonorov believed that the industrial city had robbed Americans of the opportunity to socialize with neighbors. His writings reflected national fears about urban loneliness, which could be traced back to the nineteenth century, but were ratcheted up by the Depression-era migration of bankrupt farmers to cities in search of jobs.

⁴⁰ Clarence Stein, "Neighborhood Communities as the Basis for Democracy," speech, Cleveland, May 19, 1944, Box 6, Folder 86, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York. "Neighborhood Communities as the Basis for Democracy."

⁴¹ Oscar Stonorov, "Leisure and the Community Center," undated, Box 38, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

Euro-American sociologists discussed urban melancholy in early twentieth-century literature. The German sociologist Georg Simmel theorized that the metropolitan environment inhibited people's ability to form meaningful social relations.⁴² The American sociologist Charles Horton Cooley warned that new technologies of communication (i.e. the telephone) had widened modern man's sphere of social contacts with the result that he was a stranger to his own neighbors and disinterested in local affairs.⁴³ In his writings on human psychology, Cooley claimed that the individual's well-being depended on his sense of belonging to a social group. Cooley's writings provided a theoretical justification for the neighborhood unit and other attempts to divide big cities into smaller communities.

Stein had spent the early years of his career disseminating the message that American cities needed to be decentralized. He accomplished this as the leader of the Regional Planning Association of America (RPAA), a loosely organized group of urban thinkers that included Bauer, Lewis Mumford, Benton MacKaye, Henry Wright, Fritz Gutheim, and Stonorov. Stein organized the first conference of the Garden City and Regional Planning Association (later called the RPAA) in 1923.⁴⁴ This important event signaled the extension of the British Garden City Movement to the United States.

Several decades earlier, the English communitarian reformer Ebenezer Howard had introduced the concept of "Garden Cities" in his influential book, *Tomorrow: A Peaceful Path to*

⁴² Georg Simmel, "The Metropolis and Mental Life," in *Georg Simmel: On Individuality and Social Forms*, ed. D. Levine (Chicago: University of Chicago Press, 1971).

⁴³ Charles Horton Cooley, Social Organization: A Study of the Larger Mind (New York: Charles Scribner and Sons, 1909), 25-31.

⁴⁴ Kristin E. Larsen, *Community Architect: The Life and Vision of Clarence Stein* (Ithaca: Cornell University Press, 2016), 71.

Real Reform.⁴⁵ Howard wrote that the best way to raise the English worker's standard of living was to relocate factories from the city center to satellite towns in more rural areas where workers could benefit from fresh air, clean water, low rents, and improved dwellings. In their ideal form, English Garden Cities combined the best features of the city with the best aspects of the rural town.⁴⁶ Rallied by the Garden City Movement, the RPAA drafted an ambitious program to decentralize the New York metropolitan area.

In recent scholarship, historians have discussed the RPAA's regional planning focus. But scholars have paid little attention to the group's simultaneous effort to promote smaller-scale community planning. Stein published widely on community planning, even writing a basic guideline for people new to the architect-planner profession.⁴⁷ In June 1933, the RPAA requested that Stonorov prepare a community plan for the Tennessee Valley Authority (TVA), a federally owned corporation that produced electric power, controlled floods and generally managed economic development in the area. Stonorov and others interpreted the TVA as a promising sign that Roosevelt's New Deal government was ready to play a larger role in managing American industries and natural resources.

The RPAA wanted to communicate the importance of regional and community planning to David Lilienthal, director of the TVA project.⁴⁸ In his role as the RPAA's urban theorist, Benton MacKaye presented charts and maps to Lilienthal that communicated "the necessity of

⁴⁵ Ebenezer Howard, *Tomorrow a Peaceful Path to Real Reform* (London: Swan Sonnenschein & Co., 1898; Cambridge: Cambridge University Press, 2010).

⁴⁶ For example, the cities of Letchworth and Welwyn demonstrated that some of the advantages of urban life—jobs, schools and community services—could be located on cheap suburban land that preserved much of the natural landscape.

⁴⁷ Clarence Stein, "An Outline for Community Housing Procedure," Architectural Forum (May 1932).

⁴⁸ Letter from Oscar Stonorov to Fritz Gutheim, June 14, 1933, Box 38, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

regional consideration of the whole [Tennessee Valley] problem.³⁴⁹ For his part, Stonorov introduced Lilienthal to the concept of community planning by "stress[ing] the point of pliable communities with standard equipment.³⁵⁰ Stonorov preached that planned communities should have universal and particular qualities, meaning that the best ones were responsive to local conditions but nonetheless offered standardized public facilities.

The RPAA suspended its formal meetings and collaborative activities in the planning field after 1933. At the time, the Carl Mackley Houses were under construction and the Hillside Homes project was in preliminary planning stages. In their designs for PWA housing, Stein and Stonorov responded to the Garden Cities and European social housing promoted by the RPAA in the previous decade. The architects also looked to the neighborhood unit, a new socioarchitectural concept, to describe the social benefits of their PWA projects for individual families and the community. The RPAA was a think tank for regional planning, but the group was most successful in implementing smaller-scale community plans, which forged connections between Stein, Bauer and Stonorov for the purposes of social research.

III. Architects vs. PWA Officials

Historians have credited New Deal government officials with the progressive vision behind PWA planned communities.⁵¹ But this was not always the case. Unlike the architects of planned communities, New Deal officials did not push for the small luxuries that made apartments livable, such as additional rooms, attached patios, and public spaces for indoor and

⁴⁹ Letter from Oscar Stonorov to Fritz Gutheim and Benton MacKaye, June 9, 1933, Box 38, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

⁵⁰ Ibid.

⁵¹ For the most recent account, see Nicholas Dagen Bloom, *Public Housing that Worked: New York in the Twentieth Century* (Philadelphia: University of Pennsylvania Press, 2008).

outdoor recreation. Some government officials opposed these amenities, instead choosing the least expensive (and least appealing) architectural designs for fear of upsetting local real estate interests if government housing 'looked too good.' Government officials declared that the PWA housing program was supposed to create employment, not raise poor people's standard of living.⁵² Stonorov and Stein disagreed. Throughout their careers, they used tenant surveys to push for better amenities and public facilities in government housing, especially community buildings.

These architects collected information about the prospective residents for the Carl Mackley Houses and Hillside Homes on their own initiative. The RFC did not require loan applicants to provide any information about the people whom they intended to shelter. Instead they required information about the project's site: maps of the proposed neighborhood block(s), existing utilities, method of acquisition, valuation of the land, tax rate, and a description of the neighborhood's place within broader city planning schemes.⁵³ Applicants also needed to provide specifics about their buildings: estimated construction period, ground coverage, and architectural drawings indicating the number of stories and individual apartment units. With respect to the prospective residents, loan applications only required an "estimated number of persons to be housed."⁵⁴ The federal government did not expect applicants to research any particular group beyond the question of how many people qualified for government housing. So why did architects concern themselves with obtaining data about the daily habits, monthly budgets and

⁵² Catherine Bauer, "Slums Aren't Necessary," *American Mercury 31* (March 1934): 296-305. Box 7, Folder 17, Catherine Bauer Papers, Bancroft Library, UC Berkeley, California.

⁵³ "Information Required with Preliminary Applications for Loans for Low-Cost Housing or Slum Clearance Projects," Federal Emergency Administration of Public Works, August 11, 1933, Box 9, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

⁵⁴ Ibid.

particular needs of low-income people if this information was unnecessary for obtaining a government loan?

Throughout their careers, Stonorov and Stein promoted tenant surveys as a tool to learn about the social lives of residents. In a speech at New York University, Stein compared architects to theatre directors, "Follow your actors," he told them, "What do they want to make of their lives—of the part of it they are to spend between the walls you are going to plan?" he asked NYU architecture students in 1938.⁵⁵ During the next decade, Stonorov's experience building defense housing for WWII workers would strengthen his belief that the only way to design a successful housing project was to involve workers in the early planning stages. "Democratic participation of defense workers in the actual designing of defense housing projects should be a required rule of procedure by every governmental agency concerned with the project," exhorted Stonorov.⁵⁶ The architect first tested this idea at the Carl Mackley Houses, where the hosiery workers union created a limited-dividend corporation to finance, construct and manage the housing project for themselves. Under the guidance of Stonorov and Edelman, the hosiery workers constructed a housing project that outshone most private housing developments as its impressive number of community facilities included three tennis courts, a garage, stores, a filling station, community center, library and playrooms on the roofs. The garden courts between apartment buildings at the Carl Mackley Houses were even spacious enough for Stonorov to design a swimming pool at the center (Fig. 1.8).

Stein believed that limited-dividend corporations were the best way to build a planned community because they consolidated the architect's power. Limited-dividend corporations

⁵⁵ Clarence Stein, "Community Planning: The Architect's Approach," speech, New York University, April 27, 1938.

⁵⁶ Oscar Stonorov, "Statement by Oscar G. Stonorov," undated, Box 38, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

supervised the site planning, construction and management of RFC housing projects, which, Stein argued, tended to make the architect's job easier, since he worked directly with one corporation.⁵⁷ But the federal government was less optimistic about the decentralized RFC housing program, which worked at an alarmingly slow pace. It took them thirteen months to approve just two loans! The problem was that the leaders in charge of limited-dividend corporations (including architects) had varying degrees of competency in community planning.⁵⁸ Secretary of the Interior Harold Ickes decided to "stop fussing with limited-dividend corporations," and made steps to centralize the RFC's housing program after the PWA took control in the summer of 1933.⁵⁹

The PWA Housing Division made it harder for architects to win approval for community facilities. Once the PWA took over the construction of Hillside Homes, it imposed strict budgets. Stein wanted to build a separate community building for Hillside, but he was unable to justify this expense because the non-residential building could not recuperate construction costs in rents. Since he couldn't finance a separate building for his community center, Stein built public spaces in the basements of his apartment buildings that included a community room with a small stage (Fig. 1.9). Hillside apartments had twelve clubrooms, an auditorium, tenant workshops, and a nursery.⁶⁰ If Stein had charged residents an additional fee for the use of community services, he could have paid for more recreational facilities. But Stein believed that residents should not be

⁵⁷ Stein's attitude reflected his early training with Bertram Goodhue, with whom he designed a company town in Tyrone, New Mexico, that was built by a single corporation working with a single team of architects.

⁵⁸ The high volume of applications and their generally poor conception—over 500 from newly established limiteddividend corporations—overwhelmed the PWA, which approved just seven projects. See Radford, *Modern Housing*, 93.

⁵⁹ Ibid.

⁶⁰ Nicholas Dagen Bloom, *Public Housing that Worked* (Philadelphia: University of Pennsylvania Press, 2008): 99.

expected to pay extra for the use of public space. Despite government opposition, the architects of Hillside Homes and Carl Mackley Houses refused to treat public facilities as indulgences.

Stonorov struggled to finance modest amenities for government housing. Stonorov regretted that the "financial limitations of the PWA Housing Division" had resulted in few projects with adequate community facilities.⁶¹ Several years after completing the Carl Macklev Houses, Stonorov won PWA approval for another low-income housing project: Westfield Acres in Camden, New Jersey. For this project, Stonorov needed to work closely with the PWA's Housing Division since the organization no longer partnered with limited-dividend corporations. Whereas Philadelphia hosiery workers had supervised Stonorov's work at Carl Mackley, the architect needed to convince PWA officials to approve every detail of his plans for Westfield Acres. Stonorov regretted this situation, and criticized the "architect-bureaucrats" at the PWA for making "out-right bad" decisions.⁶² He fought hard to win PWA approval for large picture windows and individual patios at Westfield, since he believed these architectural features would soften the institutional look of the buildings.⁶³ Stonorov found that it was impossible to win government approval for recreational facilities similar to those at Carl Mackley Houses. He complained that PWA officials associated community facilities with communism and thus hesitated to approve such controversial buildings.⁶⁴

Stein and Stonorov fought hard for community buildings because they considered these places to be the heart of social life. "We must plan [Hillside Homes] so as to facilitate the development of a full community [...] To give it unity the neighborhood must be centered

⁶¹ Oscar Stonorov, "Leisure and the Community Center."

⁶² Oscar Stonorov, "...And Housing," Shelter magazine, October 1938, 25-30.

⁶³ Ibid.

⁶⁴ Ibid.

around common interests such as an adequate play space and community facilities," recommended Stein.⁶⁵ Community buildings unified the architect's plan by virtue of their central location in the neighborhood, and, more importantly, they unified residents by providing public space for social interaction.

Stonorov preached that community buildings could reverse negative social trends in American cities. The architect believed that community facilities were crucial for American life because they exploited the country's greatest asset: leisure time. "So far we have patiently allowed the industrial revolution to exert its greatest force on humanity and have failed miserably to take advantage of its greatest compensation, the growth of leisure time. [...] Why not take one of the biggest steps towards saving these wasted human lives by giving everyone an opportunity for normal and healthful recreational expression?"⁶⁶ The Carl Mackley Houses were a step in this direction. Community buildings in the Philadelphia neighborhood provided facilities for drama, movies, music, lectures, crafts, swimming, games and sports.

Stonorov made it his personal goal to raise public support for community buildings. He proposed a model community building for the 1939 World's Fair in New York. As planned, it was an ambitious project.⁶⁷ The community center would be built on eight acres of fairgrounds, and include a 2,000 seat auditorium, library, scientific laboratories, art galleries, workshops and cafeteria. In this V-shaped building, Stonorov also designed a number of sports facilities, such as an indoor swimming pool, gym, and locker room. Outdoor areas for football, baseball, swimming, and tennis would encircle the community building. Stonorov believed it was a "great

⁶⁵ Clarence Stein, "Hillside Homes."

⁶⁶ Oscar Stonorov, "Leisure and the Community Center."

⁶⁷ Ibid.

shame" that so many American neighborhoods lacked such recreational facilities, which he credited for maintaining people's physical and mental health.⁶⁸ Although Stonorov never had the chance to build his model community center, he communicated the importance of recreational facilities in his writings, public speeches, and tenant surveys.

The PWA did not require architects to produce tenant surveys, and included no such provision in their application for loans. But architects made tenant surveys for other reasons. These surveys differentiated architects from speculative builders, who built for unknown groups. They also provided crucial information about the needs and desires of prospective residents. Although architects did not say this explicitly, they probably hoped that tenant surveys could support their fight to build recreational facilities on tight PWA budgets. Of course, Stonorov's experiences at Carl Mackley and Westfield suggest that the individuals who controlled government housing—not tenant surveys—determined whether or not recreational facilities were built.

IV. Standardized Housing Surveys

Stonorov and Stein wanted to help future architects use tenant surveys in their community planning during the New Deal years. Stein established best practices for American architects by producing guidelines for tenant surveys in architecture journals. Whereas Stein educated his fellow architects about tenant surveys as a preliminary phase in community planning, Stonorov directed his attention towards establishing a special bureau in Philadelphia for the purpose of surveying public and private residential projects. In different ways, Stein and Stonorov hoped to standardize tenant surveys in order to make them more consistent with the needs of architects.

⁶⁸ Ibid.

Stonorov wanted a Bureau of Social Architecture in Philadelphia, a single organization for tenant surveys that would serve as "the medium through which for the first time architect and sociological investigation would collaborate."⁶⁹ He imagined that the Bureau would be a non-governmental body sponsored by the Greater Pennsylvania Council. Its small staff would include two supervising architects, four junior draftsmen, six social workers, one structural engineer, and one mechanical engineer.⁷⁰ As a regulatory body, the Bureau would curb the development of speculative housing planned without regard for the needs of working-class residents.

The Bureau would have two primary objectives. First, it would collect data on people's earnings and spending habits, with the intention of estimating how much they could pay for rental housing. Stonorov lamented that so many Philadelphia houses "stood on very weak second mortgages," and wanted to ensure that new homebuilding would produce affordable houses and reasonable apartment rentals.⁷¹ Moreover, he reasoned that architects needed to be careful about the amenities they chose for individual dwellings, since these extra expenses sometimes priced working-class families out of their homes. The Bureau's second objective was less straightforward. Staff would document people's "social habits," defined broadly to include everything from children's games to women's feelings of satisfaction or dissatisfaction with their husbands!⁷² The Bureau would provide crucial information about the prospective residents for public and private housing, namely by using quantitative and qualitative data to create a picture of household economics and social habits. Although the Bureau was never realized, it shed light

- ⁷¹ Ibid.
- 72 Ibid.

⁶⁹ Letter from Oscar Stonorov to John Edelman.

⁷⁰ Ibid.

on Stonorov's desire to systematize and control tenant surveys in Philadelphia by centralizing them within a single organization.

In 1932 Stein published a series of articles in *Architectural Forum* in which he discussed his experiences planning Hillside.⁷³ The result was an illustrated step-by-step guide for planning neighborhoods, "An Outline for Community Planning Procedure." Although his audience was mainly architects, Stein wanted to account for the other professions involved in site selection and planning; hence, he pictured a tripartite division of specializations: social and civic, economic and architectural (Fig. 1.10). In this way, Stein captured the bureaucratic nature of large-scale planning, and educated architects about the work of surveyors and economists.

Stein based his outline on a problem-solving approach generally taught in architecture schools: identify the problem, design test studies, and arrive at a solution. In the American Beaux-Arts system, architecture students often sketched responses to design problems, which were treated as "limbering-up exercises" that lasted a few hours.⁷⁴ Thus, Stein invoked a familiar strategy for architects when he referred to community planning as a "problem" to be solved by sensitive design. But he also expanded the application of this familiar problem-solving approach, suggesting that designing houses for single clients versus communities was not so much a difference in kind but rather one of scale.

At the same time, Stein warned architects that the problem to be worked out in community design was different from building a single house. When architects designed a house, they were required to come up with architectural solutions that would satisfy the demands of

⁷³ Stein, "An Outline for Community Planning Procedure."

⁷⁴ Robert A.M. Stern and Jimmy Stamp, *Pedagogy and Place: 100 Years of Architecture at Yale* (New Haven: Yale University Press, 2016), 43 and 45.

their wealthy client.⁷⁵ But building a neighborhood was a different problem, since it required meeting the needs of a community, and often, these needs were not explicit and required preliminary research.⁷⁶ This work required the surveyor, economist and architect to work in coordination.

Stein identified the resident survey as the first step in community planning. He wanted to identify the housing needs of various groups and the amount they could afford to pay.⁷⁷ But he warned that most cities had little housing data, so he advised architects to do the best they could to commission tenant surveys for themselves. He cautioned against hiring amateurs for survey work, but was unclear about the requirements necessary for the job, simply writing that tenant surveys required a "trained investigator" or "expert observer."⁷⁸ Stein illustrated the surveyor as a giant holding a magnifying glass over the town, sketching notes from his aerial view, and looking down with paternalistic amusement at residents performing a circle dance (Fig. 1.10). Although Stein pictured his surveyor as a cartoonish man in a suit, his surveyors at Hillside were women. This included Louise Blackham, who conducted a number of resident surveys at Hillside while the project was in operation.

Blackham served as Hillside's Recreation-Education Consultant between 1935 and 1945.⁷⁹ Blackham claimed that her work as a community consultant at Hillside differed from social work in several important respects. Consultants were not responsible for solving the

⁷⁵ Stein, "An Outline for Community Planning Procedure."

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Louise P. Blackham, "Life in the Community – Hillside – Its Individual Character," c. 1935-43, Box 2, Folder 13, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

personal problems of tenants, although if such a problem came to their notice, they were supposed to refer the tenant in question to an appropriate social agency. The consultant's main duty was to "promote cooperation and social responsibility" at Hillside, and this meant encouraging residents to take on leadership roles in the community.⁸⁰ Blackham documented recreation at Hillside and took pains to show that residents were responsible for their planning and execution—in one particularly successful year, she counted 168 residents engaged in leadership activities!⁸¹ She interpreted these numbers as proof of Hillside's ability to maximize resident citizenship.

It was important for Blackham to demonstrate that Hillside residents were good citizens, not the irresponsible recipients of government handouts that conservatives often made them out to be. She documented positive reports from residents, especially ones in leadership positions. "In this world rampant with strife, where creed is aligned against creed and one religion is tearing at the heartstrings of another, we in Hillside typify daily that we can live together happily regardless of creed, nationality, or religion. We of the Community Council are charged with the duty of keeping that spirit alive so that we can demonstrate to the world that Democracy is the best form and mode of life as well as of Government," wrote Hillside resident Murray Ehrlich.⁸² Blackham sent her neighborhood surveys to Clarence Stein, with whom she maintained a regular correspondence. Her reports suggested that Stein's social vision for Hillside had been realized.

⁸⁰ Blackham, "Community Activities in a Housing Project," essay for Clarence Stein's "Public Housing Management" manuscript, c. 1938-43, Box 5, Folder 46, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

⁸¹ Blackham, "Life in the Community."

⁸² Erlich quoted in Blackham's "Life in the Community."

In April 1942, the Federal Housing Administration requested that Stein conduct a survey of the community facilities necessary for defense housing projects.⁸³ Stein was expected to "prepare detailed studies, sketches and written standards" for community facilities (among other buildings). He enlisted Blackham to help write his FHA report on recreation in the planned community. For the past seven years, Blackham had made careful surveys of the recreational activities and social development at Hillside, and she synthesized this data in her report. She also presented a moral justification for leisure activities at Hillside. "Important in the life of each man and his family is the need to participate in some freely chosen leisure time pursuit of happiness. This interest may be recreational or cultural or purely social. Sometimes it is a conscious concern for civic matters of public welfare. Whatever it may be, an opportunity for its expression is found in the truly satisfying community," wrote Blackham.⁸⁴ Blackham used tenant surveys to argue that recreation was a basic human need, as opposed to a desire, since Hillside Homes produced a citizen with expanded needs whose welfare was the foundation for democratic life.

V. Conclusion

Historians have either overlooked the social research behind Hillside Homes and Carl Mackley Houses, or dismissed this research as inconsequential.⁸⁵ Richard Pommer briefly

⁸³ See FHA contract with Stein, June 6, 1942, Box 7, Folder 38, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

⁸⁴ Blackham, "Life in the Communities: Their Cultural and Social Life," c. 1935-43, Box 2, Folder 13, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University, Ithaca, New York.

⁸⁵ Recent scholarship on Stonorov has centered on the public buildings he designed for the UAW. See Susan Herrington, "Fraternally Yours: The Union Architecture of Oscar Stonorov and Walter Reuther," *Social History* 40, No. 3 (July 2015): 360-384.

Kristin E. Larsen has written a biography of Clarence Stein, which mostly focuses on the development of his garden suburb ideas. See Larsen, *Community Architect: The Life and Vision of Clarence Stein* (Ithaca: Cornell University Press, 2016).

discussed Stonorov's tenant survey at Carl Mackley in his broader history of PWA housing design. Pommer claimed that the Philadelphia study sometimes "reinforced Stonorov's intentions rather than uncovering the workers' own wishes."⁸⁶ For example, he pointed out that some of the interview questions were closed-ended. Interviewers asked residents if they objected to living in apartments as opposed to inquiring about what types of houses they would prefer. Pommer wrote that the survey was not really intended to include prospective residents in the planning process. Instead he interpreted Stonorov's survey as a scheme to sell union members and government officials on the project despite their worries about its contemporary style or socialist connotations. Pommer suggested that the tenant surveys did little to facilitate communication between architects and clients, since Stonorov only used them to create a sense of consensus about his agenda.

I have argued that tenant surveys transformed the architect-client relationship, which was traditionally defined by personal correspondence but developed into a system of formal communications based on sociological methods. As Pommer suggested, Stonorov probably did use tenant surveys as a tool to convince union members and government officials that hosiery workers wanted the Carl Mackley Houses. Certainly, Stonorov drew on tenant surveys several years later to persuade government officials of the public demand for better amenities at Westfield Acres. But Pommer was incorrect in his assertion that surveyors asked only closed-ended questions in an effort to push Stonorov's existing plan. As I have demonstrated, the Carl Mackley surveyors asked prospective tenants broad questions about their social lives, and for this reason, their findings sometimes resisted application to architectural design at all, let alone a specific planning agenda.

⁸⁶ Pommer, "The Architecture of Urban Housing in the United States during the Early 1930s," 239.

Tenant surveys reflected the traditional architect-client relationship in their emphasis on consumer needs and desires. Sometimes this emphasis on consumers diminished the role of low-income people in the fight for decent housing. For example, Bauer often framed this struggle as a stand off between consumer demand and traditional housing development. "If people want better houses to live in, better gardens for their children to play in, lower rents, more health and convenience, they will have to fight for them [...] Housing is a consumers' problem," she wrote.⁸⁷ In this scheme, homeowners were the most powerful consumers, because they controlled the demand for housing that kept the private building market afloat. Renters were less powerful consumers since speculative builders had little interest in them. Bauer hoped to initiate consumer action by publishing criteria for 'good neighborhoods,' which she distributed to Philadelphia union laborers (who were mostly renters), and the readers of mainstream American magazines.

Bauer and Stonorov established the Labor Housing Conference (LHC) on May 8, 1934. They convinced the Pennsylvania Federation of Labor to sponsor their organization, and invited local hosiery workers to the group's first meeting. Bauer distributed an informational pamphlet in advance of the event, "Housing For, Of, and By Workers."⁸⁸ She criticized the slow pace of the Public Works Administration's new Housing Division, which had only authorized "a handful" of developments despite hundreds of submissions. Clearly, the need for public housing was high but the federal government was generally unresponsive. Bauer asked union workers, "Where is the hitch?"⁸⁹

⁸⁷ Catherine Bauer, "Housing For, Of and By Workers," pamphlet, c. May 1934, Box 52, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie, Wyoming.

⁸⁸ Ibid.

⁸⁹ Ibid.

She answered that American laborers had expressed no organized demand for modern housing. "There is only one condition on which the government can take the measures necessary to insure modern housing for American workers. And that is if the workers and consumers themselves build up an effective demand – a demand strong enough to over-balance the weight of all those "interests," which will necessarily, and naturally, oppose any change in present methods," explained Bauer.⁹⁰ By "interests" Bauer referred to the speculative housing market and its history of opposition to government housing. Fearful of upsetting the national real estate industry, the federal government had left the national housing crisis in the hands of a few wealthy philanthropists, who, for example, might establish a limited-dividend housing corporation in their own cities. If American workers wanted the federal government to establish a comprehensive housing program, they needed to push for it.

The LHC could advocate for consumers in the absence of a national consumers' organization. Bauer complained that the average citizen in the United States had no voice in consumer affairs, since the country lacked a centralized office for handling consumer matters. For this reason, Bauer looked to labor unions for help organizing workers to petition government for better housing. She reasoned that "workers are organized consumers," and, along with Stonorov, hoped to use the LHC as a means to educate workers about the value of good quality housing built in integrated communities.⁹¹

Bauer also taught Americans about the importance of integrated communities in her writings for mainstream magazines. In these publications, she reiterated her belief in the power of consumers to demand better houses and neighborhoods. "We ought to do it [build better

⁹⁰ Ibid.

⁹¹ Ibid.

housing], and we can do it once enough people are convinced of the need and infinite possibilities, and demand for it," she told the readers of *Collier's* magazine.⁹² Readers could purchase working drawings and specifications for a Collier's House, along with an estimator's sheet that itemized the expense of materials and labor. In May 1934, the Collier's House was a two-story Georgian house with an attached garage. Bauer's article, "Land for Your House," advised prospective American homeowners to think carefully about the neighborhoods in which they chose to purchase speculative houses or to build their own Collier's House.

Bauer disseminated the criteria for integrated neighborhoods that architects Stein and Stonorov had tested in PWA housing to the general American reader. How could people judge a good neighborhood? Bauer told them to choose a neighborhood that was "self-sufficient," meaning that it should have all the shopping, entertainment, public buildings, and schools necessary for community life.⁹³ Her advice recalled Stein's instructions for Hillside tenant surveys. Stein told Bauer and Morgan that their surveys should "permit the development of Hillside as a separate integrated community within the larger pattern of the bigger city."⁹⁴ She also told readers that the best neighborhoods grouped housing and public buildings close together, and that houses built in cul-de-sacs or interior streets were safer for children than dwellings that lined major thoroughfares. Stein and Stonorov had worked out these features of integrated, or "self-sufficient" communities at Hillside Homes and the Carl Mackley Houses. But Bauer translated these architectural concepts for the private housing market and an upper-middle class American consumer in her article for *Collier's* magazine.

⁹² Catherine Bauer and Ruth Carson, "Land for Your House," *Collier's* magazine, May 15, 1937, 19, 26-27. Box 7, Folder 24, Catherine Bauer Wurster Papers, Bancroft Library, UC Berkeley.

⁹³ Ibid.

⁹⁴ Stein, "Hillside Homes."

Stein and Stonorov shared a progressive vision for planned communities. Stein described his Hillside Homes neighborhood in the Bronx as an example of "face-to-face democracy," since the community was small enough for everyone to participate in decisions that affected the neighborhood.⁹⁵ He compared local politics in Hillside Homes to the eighteenth-century New England village, which Stein idealized for engendering a purer form of democracy than the representative democracies that would later characterize city, state and national governments. Stonorov's project also underlined the importance of community action, but did so against the backdrop of labor reform. "You live with your friends where the spirit of Unionism is strong and where there will be a real feeling of understanding between the families within the development," described brochures for the new Philadelphia housing development.⁹⁶ In planning communities, Stonorov and Stein hoped to make everyday life in American cities more compatible with democratic ideals.

Tenant surveys revealed the tension between the federal government's goal of recovery and architects' interests in reform. Stonorov and Stein conducted tenant surveys because they understood their New Deal housing projects as more than just job opportunities for the depressed building industry. But when government officials denied these architects the small luxuries that residents reported in surveys, they demonstrated the conflicting aims of emergency funding and social reform. The federal government responded to the Depression with massive public expenditures on construction in an effort to revive the economy and preserve capitalism. PWA officials tightly managed the costs of government housing in fear of upsetting local landlords and real estate developers, whose interests they were ultimately trying to protect. Tenant surveys

⁹⁵ Clarence Stein, "Neighborhood Communities as the Basis for Democracy," speech.

⁹⁶ "The Carl Mackley Houses," Box 52, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

were inconsistent with this goal, as architects asked residents to consider what they wanted from their new communities as opposed to what the government was willing to give them.

Chapter 2: Social Science and Architecture at MIT

Unlike some European countries, the United States did not have a centralized government office that collected and distributed housing research.¹ Housing institutes first emerged on college campuses in the early 1930s, but they gained momentum during WWII in anticipation of a postwar building boom. Institutes for housing research appeared in colleges across the United States: the Small Homes Council at the University of Illinois, the Housing Research Centre at Cornell, the Pierce Foundation at Yale and the Bemis Foundation at the Massachusetts Institute of Technology. These new institutes shared a commitment to small houses, so even though they embarked on a wide range of projects their research was comparable in that it aimed to make American houses cheaper and easier to build.

Housing institutes facilitated the movement of ideas among disciplines, and cracked open housing as a testing ground for scientists interested in the physical and psychological effects of the built environment on people's everyday lives. "These educational establishments offer more than just laboratory facilities and trained personnel. They provide, through what is called 'crosscampus collaboration,' an opportunity to bring together, on problems of mutual interest, the talents and wisdom of specialists from many different fields—sociology, psychology, economics, marketing, finance, law, health, labour, agriculture, and public administration, as well as city planning, architecture, engineering and the basic sciences," wrote the architect

¹ In international housing forums, American architects sometimes complained that their country did not have a centralized government office for housing research. See C. Theodore Larson, "Building and Housing Research in the United States," *Building and Housing Research*, Bulletin 8, Nov. 20, 1953 (United Nations Publication). Box 1, Theodore Larson Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

Theodore Larson in reflecting upon the diversity of housing research on American college campuses.²

Professors across the country shared a concern for the scientific study of small houses, but their theories and methods of analysis varied widely since they were drawn from local groups of academics who brought differing disciplinary knowledge to bear on the question of housing. For example, the Pierce Foundation collaborated with medical students at Yale to pursue housing research centered on human physiological responses to cooling and heating technologies in the home. Compare this with the architects who directed the Bemis Foundation at MIT, which financed research on prefabrication technologies as well as surveys of tenants living in prefabricated houses. Tenant surveys at MIT were only loosely connected to other housing institutes by "science," meaning that they aimed to produce results that could be reproduced with a degree of certainty.

MIT fostered collaborative research between academics and outside organizations during the postwar era.³ The college established sixty-five independent research units, made possible by an emerging framework for business-academia-government partnerships.⁴ Most of this activity took place in the science and technology disciplines, which produced military research for the federal government during the war, and in doing so paved the way to future collaborations between MIT faculty and outside financiers.

² Ibid.

³ Arindam Dutta, "Linguistics, Not Grammatology, Architecture's *A Prioris* and Architecture's Priorities," in *A Second Modernism: MIT, Architecture and the 'Techno-Social' Moment*, ed. Arindam Dutta (Cambridge, Mass.: MIT Press, 2013), 6-10.

⁴ Avigail Sachs, "The Pedagogy of Prefabrication: Building Research at MIT in the Postwar," in A Second Modernism: MIT, Architecture and the 'Techno-Social' Moment, ed. Arindam Dutta (Cambridge, Mass.: MIT Press, 2013), 227.

These partnerships characterized research in numerous departments at MIT when architect William Wurster accepted his first academic administration position as the new dean of the School of Architecture in 1945. As Avigail Sachs has argued, Wurster embraced MIT's collaborative research agenda by encouraging architects to "broaden the base of architecture" through working with experts outside their discipline.⁵ In this way, Wurster argued for a more expansive definition of the architect-as-artist.⁶ Whereas instructors at the École de Beaux-Arts understood science and engineering as threats to architecture's status as fine art, Wurster instructed his students at the School of Architecture to embrace these disciplines, likely because he sought the legitimation associated with scientific research at MIT. The Bemis Foundation financed research in design, engineering and social science, and thereby offered architects the opportunity to direct the type of interdisciplinary research program that Wurster prescribed.

In this chapter, I explore the Bemis Foundation as a case study for the tenant surveys that emerged in American universities after WWII, paying special attention to architects' assertions that these new studies were scientific. Science had special claims to neutrality and objectivity that were especially attractive to Bemis architects, who recognized that scientific research could legitimize tenancy studies, and thereby make them more attractive to the government officials and private developers who financed planned communities. Above all, these architects wanted to do away with the traditional approach to architecture design that they dismissed as mere intuition, exemplified by Beaux-Arts architects trained in the imitation of historical styles but with little actual experience in solving real-world housing problems. "The architect, site-planner

⁵ Ibid, 228.

⁶ For a discussion of the Beaux-Arts architecture tradition in the United States, see Robert A.M. Stern and Jimmy Stamp, "An American Beaux-Arts, 1916-1947," in *Pedagogy and Place: 100 Years of Architecture Education at Yale* (New Haven: Yale University Press, 2016), 19-80.

or builder knows only too well that many of his decisions are based on nothing more firm than intuition, experience, common sense, or rule of thumb. Since his efforts are aimed more or less specifically at the satisfaction of human needs, it follows that the development of any sound technique for the more accurate assessment of these needs will represent a tremendous contribution to his work," wrote Bemis architect Kelly on January 29, 1947.⁷ Kelly looked to social scientists for help developing a "sound technique," or, more precisely, a methodological approach for studying the residents of planned communities, beginning with the local college students living in veteran housing at MIT.

In 2013, MIT architecture historians published a history of the School of Architecture where the innovative role of the social sciences has been overlooked.⁸ These scholars associated their department's history of housing research with a larger "techno-social" movement that shaped departmental activities between 1945 and 1980.⁹ Arindam Dutta has identified this techno-social movement as the philosophy behind MIT architects' application of innovations in science and technology to design. He has attributed this cross-disciplinary atmosphere to the pressures of solving real-world crises, which began with the involvement of MIT academics in military research during the war, but developed into university research programs for solving a number of problems, such as environmental destruction, unemployment, and housing.¹⁰ Although the Bemis Foundation has figured in this recent MIT scholarship, historians have concentrated almost exclusively on the architects' experiments with the materials and

⁷ Burnham Kelly, "Background of the Group Dynamics Study for the Bemis Foundation," Jan. 29, 1947. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁸ Dutta, ed., A Second Modernism.

⁹ Ibid.

¹⁰ Dutta, "Linguistics, Not Grammatology."

technologies of prefabrication.¹¹ Consequently, they have paid little attention to the history of social science at Bemis.

This omission in architecture scholarship might be explained by the fact that Bemis architects themselves were often unsure of what to make of their collaborations with social scientists. Kelly looked to social scientists for help measuring resident satisfaction in government housing between 1946 and 1950. (As I discussed in Chapter 1, this consumerist agenda had roots in the earliest housing surveys directed by architects Stein and Stonorov for PWA housing projects). Whereas Kelly wanted to instrumentalize social science for architecture design, the social scientist he hired, Festinger, had other objectives.

Festinger wondered if friendships in American neighborhoods were dependent on class and racial homogeneity.¹² Festinger framed his tenancy studies in apolitical terms, but his exploration into socially and racially stratified government housing raised important questions for postwar Americans, namely, why do we defend democracy abroad if we cannot do so in our own neighborhoods? Social scientists were careful not to ask such questions for fear that political biases would delegitimize their studies.¹³ However, they could not get away from the fact that government housing *was* a political subject, so their studies of resident life appealed to progressives interested in dismantling the social and racial segregation of American neighborhoods.

¹¹ Sachs, "The Pedagogy of Prefabrication."

¹² Memo to Burnham Kelly and Lloyd Rodwin from Leon Festinger, Nov. 26, 1946. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

¹³ For example, the sociologist Anthony Wallace was wary of "appearing partisan" when discussing his housing studies for the Philadelphia Housing Authority. Letter from Anthony Wallace to Dorothy Gazzalo, June 27, 1952. Series I, Journal of Housing, Anthony Wallace Papers, American Philosophical Society, Philadelphia, Pennsylvania.

The postwar tenant surveys at MIT were an important step towards later social science research that more explicitly examined the effects of racial and class mixing in neighborhoods, and, in doing so, made an argument for residential diversity. The final section of this chapter explores tenancy studies that tested the possibility of desegregating American neighborhoods through analyzing some isolated examples of integrated public housing. Finally, I trace the impact of this housing research to *Brown v. Board of Education*, in which the NAACP used studies of integrated housing to evidence the possibility of peaceful desegregation. The Bemis Foundation could not possibly have foreseen that their tenant surveys would play a role in civil rights legislation, but their studies of residents' attitudes at MIT established a methodological approach for measuring group cohesion, which social scientists would later use to analyze racially diverse communities. MIT imparted a new professionalism to tenants as a subject of study, and this opened up pressing questions about the social and racial configuration of communities that had long been a problem for American neighborhoods but could now be explored from the ostensibly impartial perspective of science.

I. The Bemis Foundation

The legacy of Albert Farwell Bemis was the study of low-cost housing. Bemis was a successful businessman with a background in civil engineering, which he studied as an undergraduate at MIT. His business interest in affordable housing began after WWI when he established Bemis Industries, a personal holding company that combined the production of housing materials—such as gypsum and metal—with an architecture partnership.¹⁴ After Bemis's death in 1936, his sons established a charity trust in their father's name to fund research

¹⁴ "Albert Farwell Bemis Foundation Records," MIT Archives Space, *MIT Libraries*, accessed Nov. 10, 2019, https://archivesspace.mit.edu/repositories/2/resources/258.

on housing. They reasoned that the Bemis Foundation should be set up at MIT, given their father's history with the school as an alumnus and later as a member of the school's governing body.¹⁵ The architect John Burchard assumed the role of director at the Bemis alongside assistant director Burnham Kelly.¹⁶ Both architects enjoyed relative autonomy at MIT since their organization operated outside academic departments and was directly accountable to the school's president. Burchard and Kelly's only directive was to produce research in keeping with the foundation's aim, namely, the production of low-cost housing. Together they outlined a program of housing research at Bemis that centered on prefabrication, which they considered the most promising technology for producing affordable houses.

Most architects were satisfied to research houses in a purely technological way, but Kelley wondered if his analysis of prefabricated housing could benefit from a sociological perspective. Kelly arranged a meeting with the psychologist Kurt Lewin, in which he proposed a social study of the school's recently built Westgate housing project for veteran students in the spring of 1946.¹⁷ The first phase of the Westgate project included single-family houses arranged around courtyards in a superblock plan (Fig. 2.1). Given that "useful principles in physical planning had not yet come out of purely psychological studies," Kelly believed that any insight that Lewin might have for MIT architects had the potential to be groundbreaking.¹⁸

The Bemis Foundation sponsored studies of mass-produced housing in the 1940s, and this work demanded a new understanding of the architect's client. The new scale of building operations made possible by the vertical integration of the real estate and building industries in

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Kelly, "Background of the Group Dynamics Study."¹⁸ Ibid.

the postwar years involved bigger financial risks for developers in the business of designing whole communities. "A true mass producer, who has a large investment can make a profit only by years of successful operation, cannot safely rely upon intuition and opinion polls in designing products priced to sell in quantity; he will find it necessary to understand the way people live in a house and the relationships between families in a neighborhood in order to predict the reaction of his potential purchasers," wrote Kelly.¹⁹ He reasoned that too many architects did not know how to build successful communities, which required the "continuing satisfaction" of the residents with their houses and neighborhoods.²⁰ Kelly wanted the psychologists at MIT to identify social standards required for community life and then to help architects translate these standards into guidelines for neighborhood design.

The Bemis Foundation was the first housing institute in the United States to research group psychology in 1946. Its pioneering work had to do with a number of factors: the scientific interests of assistant director Kelly, the specific competencies of the Psychology Department at MIT, and the general belief among local housing specialists that community planning was a new phenomenon that required architects to familiarize themselves with scientific procedures for studying groups. The story of tenant research at MIT began with Kelly, but came to involve other local figures whose commitment to low-cost housing brought them to the Bemis Foundation. The MIT architects William Wurster and Robert Woods Kennedy published writings on Bemis research, as did Bauer, who used her connections at Bemis as a launching pad to further collaborations between social scientists and architects across campus communities. In her published writings, Bauer disseminated Bemis research to a wider audience and brought their

¹⁹ Burnham Kelly, "Introduction," Social Pressures in Informal Groups, Leon Festinger, Stanley Schachter, and Kurt Back (New York: Harper and Bros., 1950), vii.

²⁰ Ibid.

findings to bear on a contemporary issue: the political problem that segregated communities posed for democracy.

II. The Research Center for Group Dynamics

The psychologist Kurt Lewin had no record of previous collaborations with architects, much less any special interest in housing, so it was strange that he accepted Kelly's offer to sponsor a tenant study. What did Lewin think that psychology had to offer for studies of prefabricated houses? I will argue that Lewin's willingness to take on the Bemis tenant surveys had to do with his interest in exploring real-life problems. He built his career on the belief that psychological theory alone was inadequate, and that practitioners needed to wander outside the laboratory to study human behavior in everyday life.²¹ The Bemis Foundation gave Lewin and his colleagues at the Research Center for Group Dynamics the opportunity to put this belief into practice.

Lewin pioneered the study of social psychology, which centered on the behavior of groups.²² Lewin first became interested in group behavior at the University of Iowa, where he taught his students that, "the small face-to-face group was a powerful factor in people's lives and the transmission of social forces."²³ His work was based on Charles Horton Cooley's pioneering research into social psychology, but was especially inspired by Ronald Lippitt and Ralph White, who published a study of groups living in "autocratic" and "democratic" regimes during WWII.²⁴

²¹ Leon Festinger, "Looking Backward," in *Retrospections on Social Psychology*, ed. Leon Festinger (Oxford University Press, 1980), 239-240.

²² Festinger, "Looking Backward."

²³ Ibid, 238-239.

²⁴ Ibid, 237.

This research combined Lewin's interests in real-life problems and contemporary social issues, and inspired his decision to establish a Research Center for Group Dynamics at MIT in 1945. Lewin brought several Iowa students to serve as faculty at the Research Center whom he had instructed to analyze "group dynamics" in everyday life.²⁵ One of these students was Festinger, who recalled that group dynamics was a troublesome term because it had a number of possible meanings that were often confused: it could refer to an area of research, aspects of group behavior, or even techniques of leading groups and running conferences.²⁶ Despite its imprecise meaning, group dynamics was a popular catchword in the developing field of social psychology in the postwar years.

The field of social psychology blossomed after World War II. During the war, techniques of surveying group attitudes and opinions received popular attention in the United States and abroad.²⁷ In particular, the question of how Nazism won public approval in Germany motivated some Euro-American psychologists to shift their attention from individual behavior to the analysis of group dynamics. Early studies of group behavior included experiments on voting patterns, political attitudes, and public reactions to real or imagined crises.²⁸ American universities created new faculty positions for social scientists in their eagerness to establish the discipline of social psychology on their campuses. Lewin capitalized on this trend when he founded the Research Center for Group Dynamics at MIT. In addition to Festinger, Lewin

²⁵ Ibid.

²⁶ Leon Festinger, "Implications of Social Research in Group Dynamics," in *Social Work in the Current Scene*, 1950: Selected Papers, 77th Annual Meeting National Conference of Social Work, Atlantic City, New Jersey, April 23-28, 1950 (Books for Libraries Press, 1950). Box 3, Leon Festinger Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

²⁷ Leon Festinger, "Looking Backward," 242.

²⁸ Ibid.

offered faculty positions to former students Ronald Lippitt, Dorwin Cartwright, and Marian Radke. In directing the program of study at the Research Center, Lewin's work reflected a larger cultural interest in explaining the invisible mechanisms behind group behavior in the aftermath of WWII.

Lewin practiced applied psychology, which was an uncharted field in 1944. In reflecting upon those early years at MIT, Festinger wrote that Lewin considered research "important if it made a difference with respect to real problems in the world, real events and processes."²⁹ Lewin called this research "action research" since it was oriented towards solving urgent social problems that demanded action.³⁰ He believed that most psychologists couched their ideas in abstract theory, and "tried to stay away from a too close relation to life."³¹ The researchers who chose to study real-life social conditions outside the controlled environment of the laboratory faced complex problems that often fell outside their realm of expertise. For this reason, the applied psychology method made its practitioners especially receptive to interdisciplinary collaboration, and in Lewin's case, this meant teaming up with MIT architects.

In the summer of 1946 Kelly asked Lewin if he would be interested in studying the social life of Westgate, a new community of veteran housing at MIT. At the time of their meeting, the Research Center for Group Dynamics was only one year old. The Research Center did not enjoy the same autonomy as the Bemis Foundation since it was a degree-granting institution that operated as part of the Department of Economics and Social Science. Students who enrolled in the Research Center's graduate program earned the degree of Doctor of Philosophy in Group

²⁹ Ibid.

³⁰ Ibid, 243.

³¹ Lewin quoted in Festinger, "Looking Backward," 240.

Psychology.³² Given the demands of operating his new Research Center, Lewin could not commit himself to the Westgate study so he volunteered his colleague Festinger for the project.³³

Festinger realized that the isolated location of Westgate in the undeveloped southeastern section of the MIT campus presented an important opportunity for scientific research. The geographic location of Westgate was incidental to MIT architects, who planned veteran housing in the vacant space available on campus, so it was a fortunate coincidence that the site appealed to Festinger. Industrial buildings bounded Westgate to the north and west; to the south it was hemmed in by the highway and Charles River; and a large athletic field separated the community from residential areas to the east (Fig. 2.2). The nearest shopping was two miles away, and the closest bus line was a one-half mile from Westgate. This relative isolation may have been a problem for residents, but Festinger understood it as good fortune: he believed that limited opportunities for social contact outside Westgate ensured that resident attitudes could be traced back to the community, as opposed to an outside influence. He referred to Westgate as a "self-contained group" and treated the community as a research laboratory since campus infrastructure separated the neighborhood from other residential areas in Cambridge.³⁴

III. Veteran Housing at MIT

³² Kurt Lewin, "The Research Center for Group Dynamics at MIT," (undated), 136. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

³³ Letter from John Burchard to Kurt Lewin, June 27, 1946. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

³⁴ Leon Festinger, Social Pressures in Informal Groups, Leon Festinger, Stanley Schachter, and Kurt Back (New York: Harper and Bros., 1950), 14-15.

Westgate was the first university project in the country for veterans when construction started in the fall of 1945.³⁵ The school set aside ten acres for single-family houses, which served as a "laboratory" for architecture and engineering faculty who tested new materials and methods of prefabricated construction. *Architectural Forum* reported that Westgate houses were comprised of traditional and novel building materials: builders combined glass, plywood, steel, plastic and cinder-block construction along with a number of prefab systems.³⁶ MIT architects selected materials that were unusual for homebuilding—such as cinder-block—because they were cheaply produced and readily available. The school needed to accommodate an influx of newly enrolled students who took advantage of the free tuition offered by the GI Bill of Rights, so MIT architects designed low-cost housing that could be built quickly.

Cost-efficiency was important since MIT started construction at Westgate in 1945, before federal aid was available to colleges for financing veteran-student housing. The War had depleted building stocks, and some estimated that homebuilding costs had risen fifty percent in the last five years.³⁷ The school decided that temporary housing amounted to the least expense so MIT architects, supervised by Wurster, designed demountable houses that could later be moved off the site and sold. A published photograph of the demountable house emphasized the screened porch, a small luxury that distracted attention from the house's modest appearance (Fig. 2.3).³⁸ Several years earlier, Wurster had designed defense housing for shipyard workers in Vallejo, California, where he built two-story apartment buildings using a combination of prefabricated

³⁵ Ibid, 13.

³⁶ "Living Laboratory," Architectural Forum, Oct. 1945. Box 3, Folder 2, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

³⁷ William Wurster, "Building Now," House and Garden 89, no. 5 (May 1946): 74-77.

³⁸ Leon Festinger, Social Pressures in Informal Groups, 210.

materials and efficient construction methods.³⁹ For that project, Wurster introduced some variety into an otherwise boring defense project by arranging the apartment blocks up and down the hilly topography to take advantage of dramatic bay views.⁴⁰ But the flat landscape on MIT's campus provided no similar opportunity for Wurster to break up the monotonous rows of cheap tract housing. MIT architects combined inexpensive building materials and standardized component parts to produce veteran housing, which, by some accounts, were some of the cheapest in the country. Wurster boasted that Westgate houses cost as little as \$6.75 per square foot!⁴¹

The houses at Westgate were exceptionally small. MIT architects designed veteran houses based on two basic plans. The first plan was 547 square feet and included an efficiency kitchen, combined living-dining room, and two bedrooms (Fig. 2.4). The second plan was even smaller at 410 square feet and had one less bedroom. To put the sizes of these houses in perspective, "minimum houses" built a few years later for Levittown, New York were 750 square feet. Given these tight living quarters, it was no wonder that nobody pushed for the temporary student housing to be permanent. Architects designed both house types for married veteran students, but the slightly larger one was reserved for couples with children. "The cost must be as low as possible, so the rent will not be too high; and each house must be a minimum size to lessen the cost of furniture and the monthly winter heating bill," explained Wurster.⁴² When Wurster referred to the small dimensions of the Westgate houses as "minimum size" he was referring to a national house type associated with defense neighborhoods that became widespread

⁴² Ibid, 76.

³⁹ For more on Wurster's Carquinez Heights project in Vallejo, see Gwendolyn Wright, "A Partnership: Catherine Bauer and William Wurster," in *An Everyday Modernism: The Houses of William Wurster*, ed. Marc Treib (San Francisco: San Francisco Museum of Modern Art, 1995), 189-90.

⁴⁰ Ibid.

⁴¹ Wurster, "Building Now," 74.

over the next decade as part of the Federal Housing Administration's guidelines for homebuilders.

Between 1931 and 1945 the Federal Housing Administration encouraged builders to reduce the number of rooms in small houses. FHA technicians identified the dining room, basement and attic as outdated rooms that wasted precious homebuilding resources in their reports, which included standardized plans for minimum houses.⁴³ But the reduction of rooms in newly built American houses had more to do with the FHA's financial incentives than its standardized plans alone. Builders had an easier time attaining mortgage insurance from the FHA if they complied with the federal agency's homebuilding guidelines. The agency's *Annual Reports* show that the average number of rooms per house declined precipitously with the advent of FHA mortgage backing. Before 1939 six-room houses dominated the middle-income market, but by 1945 the majority of these houses had only four rooms.⁴⁴

The FHA's guidelines for minimum houses were the result of scientific efforts to produce a low-cost house during the previous decade. Studies of the minimum house, as well as housing research more generally, tended to occur in university settings. For example, the Pierce Foundation at Yale hired technicians to study families and catalogue their activities in order to arrive at the best arrangement of furniture, equipment and individual rooms in a small house. These technicians used photography to document family activities and then analyze the spatial dimensions required to perform them in the household.⁴⁵ In recording family routines, Pierce technicians identified patterns of movement in the household and then re-drew house plans

⁴³ Greg Hise, Magnetic Los Angeles: Planning the Twentieth-Century Metropolis (Baltimore: Johns Hopkins University Press, 1999), 67.

⁴⁴ Ibid, 70.

⁴⁵ Ibid, 62-63.

accordingly, careful to use the least space possible. Founded in 1933, the Pierce Laboratory at Yale was located across the street from the School of Medicine, which was in keeping with the laboratory's emphasis on promoting the physical health of Americans through improving house design and amenities.⁴⁶

Builders sold minimum houses through advertising their modern amenities, not their square footage. "[What we need is] better housing, certainly, for the cliff dwellers as well as for the slum dwellers—and not merely 'minimum standards' that sacrifice space and privacy to better plumbing," complained Bauer.⁴⁷ The FHA's minimum house prototype was severe—it four-rooms-plus-bathroom totaled 624 square feet—and critics alleged that builders exaggerated the minimum house's modern amenities to distract buyers from the cramped living quarters. Westgate houses were rentals, but published descriptions of the project emphasized its modern amenities in much the same way as developers described minimum houses built for sale. In an article for *House and Garden* magazine, Wurster boasted that each Westgate house had air conditioning and radiant heating, meaning that the neighborhood possessed the latest technologies in environmental control.

Wurster was married to America's loudest critic of minimum housing when he set to work on the Westgate project in 1945. He had married Bauer five years earlier in Berkeley, and soon afterward the couple moved across the country to pursue teaching opportunities at Harvard's Department of Regional Planning. Wurster moved his office across the street when he became MIT's Dean of Architecture in 1943, and in that role he supervised the design and

⁴⁶ "About Us," The John B. Pierce Laboratory, accessed Nov. 20, 2019, http://jbpierce.org/about-us/.

⁴⁷ Catherine Bauer, "Cities in Flux: A Challenge to the Postwar Planners," *The American Scholar*, Vol. 13, No. 1 (Winter 1943-44), 70-84. Box 7, Folder 28, Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

construction of the Westgate project. But by the time Wurster's plans for Westgate were underway, his wife had waged a campaign against minimum housing in the press.

Bauer called for "optimum" rather than "minimum" standards for postwar building.⁴⁸ Bauer had made a name for herself outside of Harvard's Planning Department as an advocate for affordable housing, and regularly published her opinions in major newspapers and magazines. During the 1940s, minimum houses became a topic of special interest to Bauer, since she worried that the real estate industry was taking advantage of federal building incentives and constructing cheaply built dwellings unfit for healthy habitation. She urged her contacts in the federal government to raise minimum standards, or at least finance studies of minimum houses with an eye towards the possible health hazards posed by living in such crowded conditions. For example, Bauer enjoined architect Vernon De Mars to make the study of minimum standards a priority when the National Housing Agency hired him as Chief of Housing Standards for their Technical Division in 1943. Bauer believed that "minimum standards have been too low in many respects," but she conceded to De Mars that hers was "an a priori assumption" that needed to be proven and recommended that housing technicians analyze the difference between minimum and optimum standards, taking into account square footage and exterior space (gardens, patios and balconies) in terms of design and cost.⁴⁹

Wurster agreed with Bauer that minimum houses were undesirable, but he considered them a necessary tool in solving the housing shortage. "Speed in building is important, for the veterans and their families are already here, many of them desperate," wrote Wurster. He

⁴⁸ Ibid. See also Bauer, "Housing in the United States: Problem and Policy," pamphlet, reprinted from the National Labour Reivew, Vol. LII, No. 1, July 1945. Box 7, Folder 38, Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

⁴⁹ Letter from Catherine Bauer to Vernon De Mars, Dec. 18, 1943. Carton 4, Folder 3, Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

recognized that the average-sized house in America had become smaller during the War, since inflated building prices had inspired builders to reduce house dimensions. These builders looked to the demountable houses built for war workers for examples of minimum standards, and took note that these houses were 672 square feet with no basement, porch or garage. Of course, even these minimum houses were roomier than those at Westgate, which could run as small as 450 square feet!

In an article for *House and Home* magazine, Wurster admitted that the minimum square footage for a family house should be 1000 square feet, but he defended Westgate on the grounds that it was only temporary.⁵⁰ Moreover, Wurster told *House and Home* readers that the minimum houses he designed for private industry exceeded the 1,000 feet minimum that he considered necessary for healthy family living. Wurster designed a number of ranch houses for California developers that were approximately 1,500 square feet and he called these houses "minimum houses," suggesting that restrictive spatial requirements for permanent houses should be raised.

MIT planned Westgate as temporary housing. So it mattered less that the houses were substandard, or that the neighborhood lacked important community facilities such as a laundry building. Although Westgate was a stopgap measure (it stemmed the tide of a campus housing shortage), the project promised to have a lasting impact on the American building industry by testing cheaper, more efficient methods for residential construction. The United States needed more affordable housing if it was to adequately shelter returning veterans across the country, and the Bemis Foundation looked to new building technologies—especially prefabrication—for answers. "Educational research must lead the way to better housebulding," proclaimed

⁵⁰ Wurster, "Building Now," 75.

Wurster.⁵¹ The college built one-hundred houses and arranged them in U-shaped clusters around nine shared courts. In 1946 Westgate opened to residents and the national housing shortage intensified that year. Thus, MIT architects once again considered how to build veteran housing cheaply and quickly.

This time MIT requested federal aid to develop an extension to the Westgate neighborhood in 1947. The Federal Public Housing Authority offered MIT architects Navy barracks to be converted to apartment buildings for Westgate West.⁵² Architects converted the barracks into seventeen apartment buildings, each two stories with five adjoining units on each floor, and they arranged the buildings in short parallel rows within a superblock. These apartment buildings arranged around central courtyards recalled the residential superblocks in New Deal Greenbelt Towns, and also responded to the tradition of organizing dormitory buildings in quadrangles on American college campuses.⁵³ Individual units at Westgate West were 500 square feet, which was roughly similar to the size of the individual houses built for the original development. This tight square footage meant that the residents of Westgate and Westgate West needed to be judicious in their choice of furniture and belongings.

Wurster tried to prepare residents for life in a minimum house. He put together a furniture questionnaire for new residents, which documented the number and types of furniture that people planned to move in.⁵⁴ He asked students if they were bringing washing machines, sports equipment, musical instruments, record albums and/or a substantial number of books. The idea

⁵¹ Wurster quoted in "Living Laboratory."

⁵² Leon Festinger, Social Pressures in Informal Groups, 211.

⁵³ Carl Yanni, "Quadrangles in the Early Twentieth Century," in An Architectural History of the American Dormitory (Minneapolis: University of Minnesota Press, 2019), 117-152.

⁵⁴ "Westgate: MIT Housing Project for Married Students," information for residents. Box 3, Folder 2, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

was for architects to get a picture of the basic items necessary for student life at MIT, but the questionnaire also worked in another way. It established the resident's expectation about the limitations of space and storage in his new house, since it outlined the exact sizes of closets and built-in cabinets. The smallest of the minimum houses was an L-shaped plan, with a combined living-dining room, central kitchen, bedroom and screened porch (Fig. 2.4). There was no storage with the exception of a few small closets that lined the narrow hallway that joined the living and sleeping areas.

Wurster also distributed a checklist of basic furnishings with the explanation that it would help residents decide what they needed, and, presumably, what they could do without. He encouraged tenants to contact a staff member at the Rotch Architecture Library on campus if they wished to rent furniture from the school, obtain house plans, or acquire an itemized list of household equipment. These materials impressed upon residents the idea that life in a minimum house could be challenging, but the difficulties of small house living diminished if one chose their belongings wisely.

IV. Tenant Satisfaction

Kelly wanted to know how residents felt about Westgate, since he worried with reason that it was challenging to live in minimum houses. His research contract with Festinger was written on June 24, 1946, and stated that the main objective was "to determine the psychological and group factors making for satisfaction or dissatisfaction with prefabricated housing of the type found in the Westgate Housing project."⁵⁵ The project was premised on the belief that architects needed to know more about the consumer of mass-produced housing, and this interest

⁵⁵ "Proposal for Research on the Westgate Housing Project," June 24, 1946. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

in consumerism also shaped studies of minimum houses at Cornell, Yale, and the University of Illinois.⁵⁶ Festinger chose to explore consumer attitudes through collecting data on "tenant satisfaction and dissatisfaction," or, to put it in social-scientific terms, he elected to study group morale. In his research at Westgate, Festinger was the first psychologist to use group morale as a barometer for housing research.

Previous studies of group morale in the United States had focused on the social conditions of the workplace, not the home. The psychologist Elton Mayo pioneered the study of group morale in his famous Hawthorne experiment at Western Electric, which claimed that worker motivation increased if management demonstrated an interest in their employees' wellbeing by introducing rest breaks and modifying factory conditions.⁵⁷ Mayo showed that changes in factory conditions only mattered insofar as they suggested increased management raising and lowering the lights—it did not matter that one provided better working conditions than the other—since workers interpreted this to mean that managers were paying attention. The Hawthorne experiment underscored the importance of invisible social mechanisms for influencing production, and downplayed the effects of the factory setting. This early study of group morale cautioned psychologists against making hasty causal relations between the built environment and people's attitudes, and this warning was important for Festinger as he tried to explain a puzzling situation at Westgate.

⁵⁶ "The Group Dynamics Housing Study," (undated). Box 3, Folder 3, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁵⁷ Gustav J Wickström, Tom Bendix, "The 'Hawthorne effect' – what did the original Hawthorne studies actually show?" *Scandinavian Journal of Work, Environment and Health* 2000; 26 (4): 363-367.

Festinger was surprised to learn that Westgate residents were generally satisfied with their severe minimum houses. "I would tend to a conclusion that the Westgate houses were relatively low in objective adequacy for living," wrote Festinger.⁵⁸ Moreover, the housing development was unfinished when it opened to residents in November 1945, so it was a jumble of dirt roads, unpaved parking lots, and temporary wooden sidewalks.⁵⁹ When asked specific questions about their houses, residents reported problems with heating, insulation, and lack of space. But in spite of these issues, tenants stated that they were "generally satisfied" with the project.⁶⁰ One student reported general satisfaction at Westgate despite living under a leaky roof that was so unstable that it threatened to blow off in a windstorm!⁶¹ It seemed that tenant satisfaction could not be explained simply in terms of the physical size and quality of dwellings. It had to do with something else.⁶²

Tenants attributed their happiness at Westgate to feelings of community belonging. "There are wonderful people in this court. We have a lot of social life and do almost everything together," reported one resident.⁶³ "We don't very often go out of Westgate for amusements. Almost all of our friends are here, and there is really so much to do here," stated one resident in response to an interviewer's question about social contacts outside the neighborhood. It appeared

⁵⁸ Memo to Burnham Kelly and Lloyd Rodwin from Leon Festinger, Nov. 26, 1946.

⁵⁹ "Westgate: MIT Housing Project for Married Students."

⁶⁰ Festinger, Social Pressures in Informal Groups, 27.

⁶¹ Leon Festinger, "Architecture and Group Membership," *Journal of Social Issues*, Vol. VII, nos. 1 and 2 (1951): 152-163. Box 3, Leon Festinger Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

⁶² Festinger hypothesized that MIT students were more willing to put up with substandard living conditions than the average person because they anticipated a short stay. But his interviews with residents were inconclusive on this point. Confusingly, people who had a longer anticipated stay at Westgate tended to express *greater* satisfaction than short-term residents. Memo to Burnham Kelly and Lloyd Rodwin from Leon Festinger, Nov. 26, 1946.

⁶³ Festinger, "Architecture and Group Membership," 158.

that the ease with which residents established friendships at Westgate made the unsightly and substandard physical aspects of the neighborhood more tolerable.⁶⁴ Consequently, Festinger turned his attention to the social life of the community.

V. The Experiment, Part I: Friendship Formation

The term "friendship" did not appear in early communications between Festinger and Kelly, but it became an important index for Westgate residents' feelings about their neighborhood. Festinger wrote a research proposal on June 24, 1946, stating that his main objective was "to determine the psychological and group factors making for satisfaction or dissatisfaction with prefabricated housing of the type found in the Westgate Housing project."⁶⁵ He proposed an eight-month project divided into two stages. During the first two months Festinger and several assistants would conduct interviews with Westgate veterans and their wives, while the next six months would be spent following up on promising leads that turned up during the initial investigation.⁶⁶ In his study of housing satisfaction, Festinger paired informal interviews with more precise "sociometric questionnaires" that measured social relationships at Westgate by asking tenants questions such as, "Which people here do you see most often socially?"⁶⁷ By collecting data on friendship, Festinger mapped which houses and individual apartment units provided the most opportunities for forging social relationships, and, in doing so,

66 Ibid.

⁶⁴ Ibid.

⁶⁵ "Proposal for Research on the Westgate Housing Project."

⁶⁷ Stanley Schachter, "Leon Festinger: 1919-1989, a Biographical Memoir," in *Biographical Memoirs of the National Academy of Sciences*, Vol. 64 (Washington, D.C.: National Academy Press, 1994), 97-110.

he established a new method for studying the relationship between human behavior and community planning.

Investigations into the social effects of community planning were rare. Housing research on university campuses—such as the Small Homes Council at the University of Illinois or the Pierce Foundation at Yale—focused on individual houses, and had little to do with neighborhood planning. But Kelly was insistent that the Bemis Foundation would study individual houses and the surrounding community. "The Bemis Foundation is keenly interested in aiming for results of value to the Architect, the Planner, the Engineer and the Housing Industry as a whole [...] its interests do not lie in improving management by gathering information on tenant reactions and needs," explained Kelly.⁶⁸ The Bemis Foundation did not want to reproduce earlier studies of government housing, which tended to offer guidelines for improving tenant-management relations. Kelly was aware that social scientists had their own agendas, and that they were not necessarily concerned with the physical features of the environment, such as a building's design or a neighborhood's plan. Accordingly, Kelly made it explicit in his letters to Festinger that he wanted social questions at Westgate to be directed towards improving the physical design of the houses and community.

Festinger searched broadly for scientific studies that might set a precedent for his analysis of social life at Westgate. He looked to research that limited its geographic scope to the neighborhood or even residential block, and found inspiration in studies of "residential propinquity." This term had appeared in sociological literature in 1943, which described the effect of geographic proximity—or residential propinquity—in the selection of marital partners. A study of marriages in New Haven had shown that seventy-six percent of marriages in 1940

⁶⁸ Kelly, "Background of the Group Dynamics Study for the Bemis Foundation."

were between men and women who lived within twenty blocks of each other, and thirty-five percent occurred between people living only five blocks away!⁶⁹ This study attracted the attention of professional sociologists, and received some notice in popular media since it stoked growing fears that the mass movement of Americans towards defense industry jobs had upset earlier patterns of living (which, presumably, included traditional ways of meeting one's spouse). I explore residential mobility as a postwar concern in Chapter 3, but suffice it to say that sociological studies in the postwar years were premised on the belief that life was changing in the United States, so scientists tended to concern themselves with entirely new social phenomena or traditional patterns of living that might soon be wiped out.

Life in the Westgate project was a new social phenomenon made possible by the largescale production of housing for WWII veterans in 1946. Before the War, neighborhoods in the United States grew slowly as builders developed a residential tract over several years or even decades that housed a local group from the surrounding community. Conversely, MIT built Westgate in several months and the brand new community served veteran students from all over the country. Festinger saw an opportunity to apply some of the basic premises of propinquity studies, which had been tested in traditional communities, to the new planned community at Westgate. In creating his research program, Festinger decided that his contribution to the burgeoning field of propinquity studies would involve measuring the effect of geographic proximity on friendship formation in a neighborhood context.

How does one treat the built environment as a possible catalyst for friendship? Propinquity studies attributed marriages between people living in the same New Haven neighborhoods to the high frequency of chance encounters that occur among neighbors. Festinger called these chance encounters "passive contacts" which referred to events in which

⁶⁹ Festinger, Social Pressures in Informal Groups, 34.

neighbors greeted each other on the street or chatted while hanging laundry outside their homes. He reasoned that these brief but frequent meetings also sowed the seeds of friendship, since they bred familiarity among residents that could lead to more meaningful forms of association down the road. For Festinger, passive contacts were the key to understanding the ecological basis of friendship, since the design of buildings and neighborhoods directed the movement of residents and thereby facilitated social contact among neighbors.

Festinger measured the built environment's potential for passive contacts according to geographic distance. As its name implied, geographic distance measured the physical distance between two points as when Festinger determined that apartment residents living on the same floor were more likely to become friends due to their physical proximity than residents living on different floors or, even worse, living in different buildings. As in the marriage studies in residential propinquity, Festinger's work indicated that physical proximity mattered when it came to forming social relationships. He discovered that social bonds at Westgate were a function of physical distance since the likelihood of friendships increased if residents lived in buildings that shared a courtyard; friendship was even more likely for people who lived in the same apartment building, and it was almost certain in the case of next-door neighbors. Unlike the marriage studies, Festinger claimed that small differences in distance—as little as 22 feet—could make or break friendships since next-door neighbors were more likely to form social bonds with each other than with anybody else in the building.

But geographic distance was not the only criterion for friendship formation at Westgate. Festinger discovered that passive contacts were a function of geographic distance and functional distance; that is, the ways that buildings and neighborhoods organize people's movements through space. Whereas geographic distance simply measured the physical distance between two

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people's residences, functional distance measured the opportunities that architecture presented for passive contacts—even when people lived far apart. "Passive contacts are determined by the required paths followed in entering or leaving one's home for any purpose. For example, in going from one's door to the stairway one must pass certain apartments; in walking to the butcher shop one must go by certain houses. These specific required paths are determined by the physical structure of the area."⁷⁰ In reading Festinger's analysis of Westgate, the architects at Bemis wanted to know how the built environment shaped social relationships and "functional distance" was the psychology term most directly applicable to design.

Functional distance imparted new social freight to architectural design. Walking paths were practical and aesthetic considerations for architects since they directed pedestrian traffic and offered particular views of buildings in the landscape, but Festinger argued that walking paths were social considerations too, since they determined the likelihood of chance encounters with neighbors. In this way, every physical component of the neighborhood had social import because the location of parking lots or clothes drying racks gathered together neighbors whose paths may otherwise not have crossed. Festinger addressed the Bemis Foundation's agenda through using functional distance as a measure of the relationship between architecture and social life.

Functional distance was a social yardstick that made Festinger pay attention to circulation patterns within apartment buildings. The two-story Westgate West apartments had five units on each floor, joined by outdoor hallways with stairwells located at opposite ends of the building (Fig. 2.5). Festinger discovered that residents whose apartments were adjacent to stairwells had the highest frequency of passive contacts, and therefore were most likely to form friendships with people living on different floors. Although Festinger's findings might seem trivial, they

⁷⁰ Festinger, "The Spatial Ecology of Group Formation," in *Social Pressures in Informal Groups*.

were radical insofar as they argued that architects needed to consider the sociological impact of their designs since decisions as seemingly insignificant as the placement of a stairwell played a significant role in the creation and management of social relationships.

Festinger's study of the residential courts at Westgate provided further evidence of the determining role that physical and functional distance played in friendship formation. MIT architects arranged single-family houses at Westgate into six U-shaped courts with the majority of dwellings facing into the courtyard (Fig. 2.6). Festinger found that friendship was most affected by the sheer distance between houses and the direction in which a house faced, so that friendships developed more frequently between next-door neighbors and those whose houses faced their own. "In order to have the street appear 'lived on,' ten of the houses near the street had been turned so that they faced the street rather than the court area like the other houses. This apparently small change in the direction in which a house faced had a considerable effect on the lives of the people, who, by accident, happened to occupy these end houses. They had less than half as many friends in the project as did those whose houses faced the court area," wrote Festinger.⁷¹ In his study of friendship at Westgate, Festinger's findings questioned traditional architectural ideas about the best way to arrange houses in a community.

Kennedy interpreted Festinger's study to mean that architects needed to understand the social impact of their designs. Kennedy was an MIT architect who had been involved in planning the Westgate community. After reading Festinger's report, Kennedy lamented the decision to orient end houses at Westgate towards the street. "The placing of the houses would now seem to have been a mistake. But at the time the project was planned the designers, unaware of the social implications of this change in direction, faced them outward in order that the main access street

⁷¹ Festinger, "Architecture and Group Membership," 156-157.

should convey the sense of its being lived on—used not only as a thoroughfare but as a setting for houses," wrote Kennedy.⁷² He imagined that if architects had oriented all houses towards the courtyard it would have created a more inclusive community, and perhaps even struck the residents as a more beautiful design since it was truthful to the social life of the project. Kennedy treated the Westgate study as insight into important but little known social standards for buildings and he reconciled these criteria with the modernist dictum that the form of a building or neighborhood should reflect that place's function.

Kennedy imagined that Festinger's methods of analysis could be applied to "all the various building patterns," not just the court plan at Westgate. He wondered if similar studies might shed light on the social effects of ribbon plans where architects arranged rows of houses along curved streets or provide insight into apartment communities organized in geometrical patterns and built in superblocks. Moreover, he wondered if certain building patterns encouraged an insider-outsider mentality, or if this phenomenon was better explained by group size or ethnic identity.⁷³ He asked, "Does the hiding of laundry and service yards from the street affect the nature of social contacts? Do closed vistas, by suggesting close community relationships, actually foster them?"⁷⁴ Such questions reflected the belief that people's everyday experiences were shaped by the built environment, and this message appealed to architects, even though, as I will argue later, Festinger's report was not entirely straightforward on this point.

Kelly distributed the Westgate study to architecture journalists, who were drawn to its analysis of friendship in a planned community. "Apparently minor details of community layout

⁷² Robert Woods Kennedy, "Sociopsychological Problems of Housing Design," in *Social Pressures in Informal Groups*, eds. Leon Festinger, Stanley Schachter and Kurt W. Back (New York: Harper and Bros., 1950), 215-216.

⁷³ Ibid, 206.

⁷⁴ Ibid, 216.

may alter decisively a family's prospects of forming friendships, and hence affect their satisfactions as well as their opinion of the housing development as a desirable place to live," reported Frederick Gutheim in the *New York Herald Tribune*.⁷⁵ The architecture critic Grady Clay discussed Westgate in his article, "Who Lives in the House Next Door?" which compared Festinger's findings with people's experiences in other American neighborhoods.⁷⁶ "The other day I talked to the mayor of Park Forest Village, a sprawling new city of some 15,000 people west of Chicago. He, too, said the same thing happens to the corner families at Park Forest Village. A little out of things, they found," Clay wrote. Clay confirmed the universality of Festinger's findings at Westgate, since he found that the orientation of houses in a Chicago suburb also shaped opportunities for friendship.

The architecture critic Lewis Mumford anticipated that the Westgate study might have the same effect on community planning as previous research on solar energy. Studies of solar heating had famously dictated Frankfurt's plans for Zeilenbau apartments, which German architects carefully arranged in parallel rows so as to take advantage of sunlight. Mumford believed that Westgate offered compelling scientific evidence against row plans, and encouraged architects to arrange houses in clusters that provide "a sense of enclosure, whether produced by

⁷⁵ He approached Frederick Gutheim, the architecture critic at the *New York Herald Tribune*, about writing a pamphlet that would communicate the Westgate findings to professionals involved in city planning. Although Gutheim declined Kelly's job offer, he read the Westgate study and made special mention of it in a *Tribune* article, which described the Festinger report as it was presented by Robert Kennedy at the annual meeting of the National Association of Housing Officials in November 1949. See Frederick Gutheim, "Architects Tell How to Beautify Public Housing," *New York Herald Tribune*, Nov. 15, 1949. Box 3, Folder 5, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts. See also Letter from Frederick Gutheim to Burnham Kelly, Nov. 22, 1949. Box 3, Folder 5, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁷⁶ Grady Clay, "Who Lives in the House Next Door?" *Courier Journal*, Louisville, Kentucky, Jan. 4, 1950. Box 3, Folder 4, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

houses alone or with the aid of walls, hedges, etc," since enclosed plans multiplied one's social contacts and thereby encouraged community life.⁷⁷

Mumford associated Westgate with the face-to-face groups discussed in sociological literature in the twentieth century. Face-to-face groups first appeared in the work of sociologist Charles Horton Cooley who famously coined the term "looking glass self" to reference the role that other people's opinions played in the construction of individual identity in 1902.⁷⁸ Mumford believed that sociologists (including the faculty at the respected Chicago Department of Sociology) had mostly lost interest in face-to-face groups. He reflected that the Chicago sociologists "did a lot of useful ecological research," but they "largely ignored the frame of reference that Cooley had originally provided." Mumford understood the Westgate study as an important contribution to sociological research since it examined the relationship between human behavior and ecology within a small community.

VI. The Experiment, Part II: Homogenous and Heterogeneous Communities

Festinger was troubled with his study of the face-to-face group at Westgate. He had concluded that resident satisfaction at Westgate had everything to do with tenants' sense of belonging in the community, and that this social phenomenon could be traced back to certain ecological forces, namely, measures of geographic and functional distance, which dictated who became friends in the project and who did not.⁷⁹ But he worried that his findings were only

⁷⁷ Letter from Lewis Mumford to Catherine Bauer, Dec. 27, 1948. Box 3, Folder 2, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁷⁸ Charles Horton Cooley taught sociology at the University of Michigan in the early twentieth century. See Cooley, *Human Nature and the Social Order*, 1902. Reprinted. (New York: Charles Scribner and Sons, 1922).

⁷⁹ Festinger also discovered that social groups formed in courts or apartment buildings tended to share similar opinions about community affairs.

applicable to homogenous communities, since the residents of Westgate had few differences to overcome in establishing friendships. The men and women who lived at Westgate were white, young, married, and received some form of government assistance to pay their bills. The men were especially similar since they were all veterans enrolled in MIT's School of Engineering. The homogeneity of the Westgate project threatened to compromise Festinger's study, since a proven scientific theory could be reproduced in multiple situations and still produce the same results. Festinger wondered if the homogeneity of the community was the real reason why tenant satisfaction was so high.

He proposed a plan for the next phase of the Bemis housing study in a memo written to Rodwin and Kelly on November 26, 1946. "Perhaps the most startling thing about the results of the Westgate study was the high level of satisfaction among the tenants who were interviewed," wrote Festinger.⁸⁰ He reasoned that these high levels of satisfaction had little to do with the minimum houses, since they fell below "objective" standards of livability. "If we now reexamine these variables with the question in mind of what has made for the high satisfaction with the Westgate houses and the Westgate project, it would seem that the most reasonable hypothesis is the homogeneity of the Westgate residents which resulted in a high level of spontaneous social activities and an adequate social existence," Festinger explained.⁸¹ But Festinger wanted to test this hypothesis, so he proposed to expand the Bemis study so as to include a comparative analysis of Westgate with another community of similar size and housing quality.⁸²

⁸⁰ Memo to Burnham Kelly and Lloyd Rodwin from Leon Festinger, Nov. 26, 1946.

⁸¹ Ibid.

⁸² Ibid.

Kelly hesitated to approve this new direction for the Westgate study, since it appeared to have little to do with architectural design. In his response to Festinger, Kelly outlined three design-centered objectives for future housing research: 1) to establish facts of importance to design, 2) to test a thesis of importance in design, and 3) to develop a sound technique through which facts of importance to design may eventually be established. The architect wanted to know more about questions of tenant satisfaction that had a direct bearing on community design, such as, "if people preferred small British housing developments with yards and minimum community facilities or something like the Karl Marx houses in Vienna with small apartments, little private space and many community facilities."⁸³ He also told Festinger that modern houses merited study, since architects had compromised resident privacy in their preference for houses with open plans, minimum space and fenestrated walls. Kelly was curious about socially minded ways to improve architectural design, especially when it came to questions of privacy inside and outside the home.

Kelly cared little about improving tenant management, although he realized that Festinger's proposal would likely contribute to research in this field. Thus, Kelly reluctantly added a fourth objective for housing research: "to improve management by gathering information on tenant reactions and needs."⁸⁴ Kelly was less interested in managerial questions because government studies of public housing had already explored tenant management in depth, and he believed that their conclusions had no bearing on the design problems central to the Bemis Foundation's agenda.

⁸³ Memo to Leon Festinger from Burnham Kelly, Feb. 2, 1947. Box 3, Folder 3, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁸⁴ Memo to Leon Festinger from Burnham Kelly, Dec. 9, 1946. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Festinger's second tenant study had little to do with design, despite the explicit instructions he received from Bemis. He wanted to know if the high levels of tenant satisfaction at Westgate had to do with the community's homogeneity, and he reasoned that the best way to test this hypothesis was to conduct a second study in a neighborhood that was: 1) roughly the same size as Westgate, 2) similar in housing quality, and 3) had no organized community activities since Westgate tenants organized their own social events, not management.⁸⁵ Festinger found a neighborhood that satisfied all of these criteria: a defense housing project built for shipyard workers at North Weymouth, Massachusetts. Most importantly, the Office of Naval Research agreed to finance his study, so Festinger was less obligated to pursue the design questions at the heart of the Bemis program.

The residents of Regent Hill in North Weymouth, Massachusetts, reported feelings of dissatisfaction with their community. Festinger was hesitant to believe that the quality of the housing was alone to blame, since the project's 100 single and semi-attached houses were better built and somewhat larger than the ones at Westgate.⁸⁶ He hypothesized that resident dissatisfaction had to do with the impoverished social life of the community, which shaped the way that tenants felt about the physical environment. Regent Hill was originally built as a defense housing project in 1942, but it transitioned into public housing after the War when some former shipyard workers expressed their interest in staying on. When Festinger began interviewing residents in 1947, Regent Hill was a combination of former defense workers and newly arrived tenants in search of affordable housing. The residents distrusted one another, since they expected that people living in government housing "were rather low-class people, and did

⁸⁵ Memo to Burnham Kelly and Lloyd Rodwin from Leon Festinger, Nov. 26, 1946.

⁸⁶ Festinger, "Architecture and Group Membership," 161.

not want to be forced to associate with them," Festinger reported.⁸⁷ He reasoned that statusrelated attitudes were at the center of the neighborhood's social problem, and this had to do with the surrounding community of Weymouth.

Festinger hypothesized that the history of local opposition to government housing in Weymouth had shaped public attitudes inside and outside the Regent Hill neighborhood. Weymouth had opposed government plans for Regent Hill on the premise that the low-quality houses, which community leaders referred to as "shacks," would soon turn into slums.⁸⁸ The town had a population of 30,000 people at the time of the War, most of whom identified as Republican and resented federal government interference in local affairs. The local newspapers circulated the protests of community leaders, who called into question the necessity of building defense housing in their town, that is, until the events of Pearl Harbor pushed the controversial project through local opposition. Festinger believed that the controversy surrounding Regent Hill's construction had lasting effects on people's attitudes inside and outside the project, and he found that public sentiment was strong enough that residents had chosen "self-imposed social isolation" rather than interacting with neighbors (whom they distrusted) or outsiders (who, they assumed, distrusted them). At the heart of the problem was class-based prejudice, which Festinger reasoned might be reversed if he could induce Regent Hill residents to socialize.

Festinger's hypothesis was loosely tied to social-control theory.⁸⁹ Edward Alsworth Ross first proposed that social norms restricted people's behavior, so that crime was not so much an index of individual moral failing but pointed towards a deficient society. This was a

⁸⁷ Ibid.

⁸⁸ Leon Festinger and Harold H. Kelley, *Changing Attitudes through Social Contact* (Ann Arbor: University of Michigan, 1951), 12.

⁸⁹ Ibid, 9-10.

revolutionary idea in the early years of the twentieth-century when even the most progressive thinkers still equated crime with the moral corruption of individuals. Festinger believed that people's attitudes towards their neighbors at Regent Hill could be explained by social control theory, since they reflected the negative opinions of the larger Weymouth community. But he wondered if he could reverse prejudiced feelings at Regent Hill by bringing isolated residents into social contact with members of the community who held more positive attitudes about the project.⁹⁰

Festinger proposed an experiment for Regent Hill, which would assess the effect of community activities on resident attitudes. Kennedy volunteered as a consultant for the experiment, since the project promised to shed light on the important architectural question of which community facilities, if any, should be prioritized in plans for public housing.⁹¹ Kelly invested ten thousand dollars of Bemis funds in the project, which Festinger used to hire a community worker to organize social activities at Regent Hill and pay interviewers who would periodically survey residents to assess when and if tenant attitudes changed between January and September 1947.⁹² Festinger's project promised to reveal whether a community's social life could be manipulated in the interest of reversing class-based prejudices.

The start of the project seemed promising. The new Regent Hill community worker was able to enlist the help of residents in plans for a nursery school, a recreation program for children, and adult education activities. Early interviews with residents indicated public excitement about these new projects, although some people maintained their original feelings of

⁹⁰ Ibid, 10.

⁹¹ Memo to Leon Festinger from Burnham Kelly, Jan. 9, 1947. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

⁹² Ibid.

distrust towards neighbors and chose not to participate in plans for community improvement. Public feelings of distrust were intensified by rumors of communism, specifically, the suspicion that the newly hired community leader intended to rouse communist sympathies. Festinger hoped that public suspicions would subside in response to increased contacts with neighbors at the new nursery school, but he found that resistance was also at its peak, and noted that some residents refused to enroll their children, saying that, "they didn't think this nursery school would be a good one."⁹³ It seemed that the opportunity for social contact alone was not enough to make residents put aside their suspicions of neighbors.

Kelly was not impressed with this new study, so he discouraged Festinger from publishing it. "The results are inconclusive and in fact the community facilities program tended to increase the hostile attitude of one section of the group," wrote Kelly, who advised Festinger to publish the Westgate study without reference to Regent Hill.⁹⁴ For Festinger, the Regent Hill study was conclusive. It simply presented a more complicated picture of group dynamics than he had originally imagined, since increased social contact between residents eased hostility between some neighbors and intensified it for others. He concluded that social contact only reversed group tensions if it occurred under "favorable circumstances," which is to say if residents felt free to choose whether or not to participate. Hostile attitudes in the project were mostly traced to residents who felt that management coerced them into social engagement. Festinger believed that his Regent Hill study was successful, but he nevertheless agreed to publish it separately, if only

⁹³ Festinger, Changing Attitudes through Social Contact, 31.

⁹⁴ Letter from Burnham Kelly to Leon Festinger, Jan. 26, 1951. Box 3, Folder 4, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Undated letter with subject line "Changing Attitudes through Social Contact," from unknown author to Burnham Kelly, c. Jan. 1951. Box 3, Folder 4, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

because the Westgate and Regent Hill projects were such colossal endeavors that they deserved separate treatment.

Festinger had difficulty identifying cause-and-effect relationships in his study of resident satisfaction at Westgate. For example, resident surveys showed that architecture affected people's attitudes about their community, but they also showed that people's attitudes about their community affected their perceptions of architecture. Despite living in poorly built minimum houses, Westgate residents expressed general satisfaction with their community since they were content with the social life of the neighborhood. Contrast this situation with the general climate of dissatisfaction at Regent Hill where the social isolation of residents colored their perceptions of housing, which, in objective terms, was superior to Westgate minimum houses, but nevertheless received negative reviews. The upshot for public housing was that tenant attitudes about the project had as much to do with local attitudes about the neighborhood as it did with the actual physical comforts and amenities offered by the dwellings. "[This idea] is extremely painful to me as an architect because it implies that bad design can be satisfactory provided the institution involved has enough prestige, and provided the people in it are happy," wrote architect Kennedy.⁹⁵ The Westgate study tested the limits of environmental determinism, and, in doing so, claimed that people's attitudes about their neighborhood have as much to do with the ideas that they bring to the built environment as with the actual physical landscape around them.

Festinger offered few concrete solutions for improving the physical design of American neighborhoods. "One can hardly claim that any 'answers' to our urgent practical problems have been scientifically demonstrated as yet. But the enormous influence on the quality of social life of everyday planning and design decisions has been demonstrated. And if housing and planning

⁹⁵ Robert Woods Kennedy, "Social Factors in Housing Design," speech, undated. Box 3, Folder 5, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

agencies will follow up the leads suggested by the Festinger survey [...] I am convinced that the results will be extremely helpful," wrote Bauer in a letter to Kelly.⁹⁶ Kelly invited Bauer and Kennedy to collaborate on a Westgate book project, and they agreed to each contribute a chapter about the application of Festinger's study to contemporary questions of housing. Both authors framed the Westgate study as a pilot exploration in tenant research, which pointed the way towards future collaborations between social scientists and architects. The real contribution of the Westgate study was its development of a scientific technique for studying the community life of a neighborhood.

VII. After the Westgate Study

The Westgate Study set in motion a number of scientific publications focused on the problem of social and racial segregation in American neighborhoods. Festinger's research at Westgate and Regent Hill raised questions about the possibility of integration, and indicated that social contact alone was not enough to reverse prejudiced attitudes. Most importantly, Festinger popularized a new methodological framework for studying tenants. He introduced the use of group morale as a test for measuring a neighborhood's social fitness, which he assessed through collecting and analyzing resident interviews. This research method appealed to architects in their perennial search for information about consumer attitudes, but it also paved the way for new scientific studies that examined the psychological health of residents as an important index of housing quality in 1950. The Research Center for Group Dynamics published the Westgate study, which Festinger titled *Social Pressures in Informal Groups* in reference to the power of face-to-face groups to shape public opinion. This book is little known to architects or

⁹⁶ Letter from Catherine Bauer to Coleman Woodbury, Jan. 6, 1950. Box 3, Folder 4, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

sociologists today, and neither is the short-lived genre of applied psychology research in housing that followed closely on its heels. But, as I will argue, these tenancy studies played a critical role in civil-rights legislation, since they provided scientific evidence for the peaceful racial integration of American neighborhoods.

Bauer was quick to understand the political implications of the Westgate study, and she discussed them in her chapter of the *Social Pressures* book in 1951.⁹⁷ Whereas Kennedy's chapter interpreted Westgate narrowly as having some value to architects interested in problems of community design, Bauer tackled the idea of neighborhood homogeneity broadly in her discussion of social and racial segregation in America:

Few would question the [homogeneous] pattern of Westgate as a temporary way of life for students. But a great many people are beginning to question the desirability of maximum homogeneity by districts as a general urban pattern [...] Courts, laws, political pressures, and the pricks of democratic conscience are challenging the color line, and race-restrictive covenants have recently been outlawed by the Supreme Court. And progressive planners are promoting the principle that a neighborhood should include 'varied' dwelling types and facilities to serve families small and large, with and without children, and in different income groups [...] This trend rests at base on the growing conviction that some degree of social variety is wholesome and 'right' in a democracy.⁹⁸ It was easy for Bauer and other progressive to see why American neighborhoods should be integrated, since social and racial segregation pointed to a contradiction between democratic principles and the realities of everyday life. But she had trouble articulating how these places

⁹⁷ Catherine Bauer, "Social Research as a Tool for Community Planning," in *Social Pressures in Informal Groups*, eds. Leon Festinger, Stanley Schachter and Kurt W. Back (New York: Harper and Bros., 1950), 181-201.

⁹⁸ Ibid, 190.

should be de-segregated since there was no major historical precedent, and little evidence in the scientific community that might be used to establish guidelines for peaceful integration.

Bauer wondered about what desegregation might look like in American cities and suburbs. "What should the planners and civic leaders do under such circumstances? Encourage a clear-cut surgical operation [...] or try to invent some gradual steps, starting under favorable conditions?" she asked the readers of *Social Pressures*.⁹⁹ She reported that a recent study by psychologists at Columbia had shown that living in a bi-racial community tended to decrease racial prejudice. Bauer was referring to an unpublished study of an integrated housing project in New Jersey, which was conducted by the psychologists Robert Merton, Patricia West, and Marie Jahoda at Columbia University. Bauer's description of the Columbia group's findings may have been the first published account of this generally unknown research, since their 1949 report, "Social Fictions and Social Facts: The Dynamics of Race Relations in Hilltown," circulated among some social scientists and interested housing professionals but was never published.¹⁰⁰ For Bauer, this report was critical since it promised to shed light on the path towards desegregation.

Merton received financial assistance from the Fred Lavanburg Foundation in New York for his tenant surveys. The Lavanburg Foundation was established in 1927, which made it one of the oldest housing research institutes in the country.¹⁰¹ Its aim was to promote the study of affordable housing, and it did so under the guidance of New York businessmen and of longtime director Clarence Stein. The Lavanburg group financed housing studies conducted by the

⁹⁹ Ibid, 191.

¹⁰⁰ Letter from Catherine Bauer to Robert Merton, Sept. 22, 1948. Box 12, Folder 1, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

¹⁰¹ Abraham Goldfeld, *Practices and Experiences of the Lavanburg Homes* (New York: Lavanburg Foundation, 1941).

managers of New York public housing in the 1930s. During the war, Lavanburg leaders took notice of the housing institutes cropping up on college campuses and turned their attention to the faculty at Columbia. Merton was the new chair of the Psychology Department at Columbia in 1944, and, like Lewin, was one of a small group of American psychologists interested in applied psychology. On November 15, 1944, Merton wrote a research proposal for the Lavanburg group. He proposed a series of studies that would examine tenant morale in planned communities and, in doing so, provide insight into questions of social belonging and exclusion.¹⁰²

Merton's interest in tenant morale was inspired by the work of Elton Mayo, who understood group morale as the outcome of worker-manager relations. "During the last few decades, there has been developed a body of research data dealing with human relations in industry. When Mayo and a group of Harvard associates set about working on this problem it was a new point of departure. In this respect, the Lavanburg studies provide a parallel in the field of housing. For just as the Harvard studies have dealt with patterns of personal association within the work place, we are concerned with discovering the conditions under which there develops, among other things, a continuous and close association between persons in the planned neighborhood," wrote Merton.¹⁰³ Mayo researched group morale in the context of workermanager relations, and this framework was appealing to the psychologists who studied public housing since they imagined that tenant-manager relations could be studied in the same way. This is probably why Festinger could not get away from questions of tenant management at Westgate and Regent Hill, even though Kelly urged him to ignore the managerial aspect of

 ¹⁰² Letter from Robert Merton to the Lavanburg Foundation, "A Proposed Research in Housing Communities," Nov.
 15, 1944. Box 207, Folder 8, Robert Merton Papers, Butler Library, Columbia University, New York City, New York.

¹⁰³ Robert Merton, "The First Year's Work: An Interim Report, 1945-46," Lavanburg-Columbia Research on Human Relations in the Planned Community. Box 209, Folder 6, Robert Merton Papers, Butler Library, Columbia University, New York City, New York.

public housing and pay attention to the built environment. No one pressured Merton to foreground architecture in his research, but the uneven distribution of white and black residents in public housing required him to consider tenant morale in relation to built form.

Merton selected a bi-racial public housing project in Hilltown, New Jersey, for his study. He chose Hilltown for its proximity to Columbia University and for the somewhat even racial configuration of its residents, who were 40 percent African American and 60 percent white. Merton wanted to know if frequency of social contact had anything to do with reversing prejudiced ideas, so he elected to study three apartment buildings in the project, each occupied by white residents but differentiated by their proximity to black-occupied buildings. It was rare for white and black residents to occupy the same apartment buildings in 1945, even in public housing that claimed to be "integrated," such as the one at Hilltown.

Merton wanted to know if residential propinquity had a direct effect on friendship at Hilltown, much as Festinger did at Westgate.¹⁰⁴ It was no accident that the two psychologists established tests in which the independent variable (residential propinquity) and dependent variable (friendship) were the same. "When Festinger and his associates decided to study these [housing] projects, I consulted with him and made our questionnaires, findings and ideas available to them," explained Merton.¹⁰⁵ Merton would later regret that decision, since Festinger appeared to have pioneered the field alone when he published *Social Pressures* in 1950. Later social scientists attributed their tenant research to the model established by Festinger, much to Merton's chagrin.¹⁰⁶

¹⁰⁴ Letter from Robert Merton to Davis McEntire, June 30, 1956. Box 207, Folder 15, Robert Merton Papers, Butler Library, Columbia University, New York City, New York.

¹⁰⁵ Ibid.

¹⁰⁶ Letter from Robert Merton to Catherine Bauer, Aug. 1, 1950. Box 12, Folder 1, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

Postwar studies of racially integrated public housing tended to ask similar questions and produce similar results. Merton asked white residents about interracial living before they moved into Hilltown in 1945, and then interviewed them one year later to see if social contact with black neighbors had any effect on their opinions.¹⁰⁷ Whereas white residents who lived closest to black residents demonstrated a positive change in their attitudes, those who managed to live furthest from black-occupied buildings showed no change or little change in their opinions. Merton's findings at Hilltown were corroborated by similar studies financed by the Marshall Field Foundation and conducted by New York University psychologists. Morton Deutsch and Mary Evans Collins wanted to test Merton's theory in a truly integrated project where black and white residents occupied the same buildings.¹⁰⁸ Similarly, they found that frequency of social contact reversed prejudiced attitudes, since white tenants with black next-door neighbors demonstrated the most positive change in their ideas about interracial living. Studies of interracial public housing in Philadelphia, Pittsburgh, Hartford and Springfield confirmed the "contact hypothesis," that attitudes of the members of one racial group toward the members of another will tend to become more favorable if there is sufficient contact between the two groups, provided that the contacts occur between individuals who do not differ markedly in their social status in the contact situation, and that the contacts do not occur under circumstances in which there is competition for limited good or facilities.¹⁰⁹ This conclusion legitimized the desegregation of public housing, since residents were of the same socio-economic group, but

¹⁰⁷ Merton, "The First Year's Work: An Interim Report, 1945-46."

¹⁰⁸ Morton Deutsch and Mary Evans Collins, *Interracial Housing: A Psychological Evaluation of a Social Experiment* (Minneapolis: University of Minnesota Press, 1951).

¹⁰⁹ Daniel M. Wilner, Rosabelle Price Walkley and Stuart W. Cook, *Human Relations in Interracial Housing: A Study of the Contact Hypothesis* (Minneapolis: University of Minnesota Press, 1955), 4.

also inadvertently justified the segregation of private housing on the basis that mixing race and class was untested and therefore risky.

The U.S. House Committee on Natural Resources preached against the idea of social and racial mixing in the postwar years, even though there was little research to support it. Few studies of interracial living took place outside public housing. One exception was the work of sociologist William Form, who published a study of middle-income housing in which he argued that racial hostility was highest at the borders of white and black neighborhoods in Eastern Michigan.¹¹⁰ Not surprisingly, this hostility stemmed from white residents' fear that black homeowners would decrease property values in their community. In 1951 the National Resources Committee cited no evidence to support its claim that planned communities that are "homogeneous in character" are more likely to be successful than heterogeneous ones.¹¹¹ The NRC upheld Alcoa, Tennessee, as a model industrial town, where "white and colored residents live in separate sections of the neighborhood."¹¹² Merton bristled at the Alcoa report, since it provided no evidence for the conclusion that "this plan has proven very satisfactory and has worked to the advantage of both races.¹¹³ In the absence of contradictory evidence, federal government authorities perpetuated the belief that the "most successful" planned communities were racially segregated.

Early conversations between architects and social scientists treated race and class as inseparable questions for future research on planned communities. Bauer invited Merton to speak

¹¹⁰ William Form, "Stratification in Low and Middle Income Housing Areas," *Journal of Social Issues* 7, nos. 1-2 (Spring 1951): 109-131.

¹¹¹ This NRC quote is cited in, Merton, "The First Year's Work: An Interim Report, 1945-46."

¹¹² Ibid.

¹¹³ Merton, "The First Year's Work: An Interim Report, 1945-46."

about his tenant research before an audience of MIT and Harvard faculty on April 21, 1949.¹¹⁴ Bauer was preparing to write an essay on future directions for housing research, which would be published in a special edition of the Journal of Social Issues (edited by Merton), and she wanted to know the thoughts of her Cambridge colleagues. "It seemed to both of us, that any such selection of the major unanswered 'social' questions in our business would have much more weight if it were a judgment formed by a group of architects, planners and housers, instead of merely one person's opinion," explained Bauer in a letter to Kelly.¹¹⁵ In attendance were Bemis architects Kelly, Wurster and Kennedy, among others. The group offered a number of directions for future housing research, including: studies of residential mobility, family life, neighborhood densities, and citizen participation in planning.¹¹⁶ They also discussed the importance of "democratic" neighborhoods, where different social classes and races mixed, and agreed that they needed to know more about ways to improve "unity," or, group cohesion, in such neighborhoods. Importantly, questions of race and class were bound together in these early discussions between architects and scientists. But during the next decade, "race" and "class" became separate categories of interest and investigation in tenancy studies.

VIII. Conclusion

Although Merton never published his Hilltown study, he discussed it publicly. He summarized his findings as a participant in the nation-wide broadcast of the University of Chicago Roundtable in June 1948, which was subsequently published as the pamphlet, "What

¹¹⁴ "MIT Meeting," April 21, 1949. Box 12, Folder 1, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

¹¹⁵ Letter from Catherine Bauer to Burnham Kelly, April 17, 1949. Box 3, Folder 6, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

¹¹⁶ "MIT Meeting," April 21, 1949.

Do We Know About Prejudice?¹¹⁷ He also edited the only major catalogue of social science research on housing, which was published as a special edition of the *Journal of Social Science* in 1951. Given Merton's visibility in the world of scientific research on race, it is no wonder that the legal staff of the NAACP requested Merton's help in preparing their social science brief in the hearing of the landmark case, *Brown v. Board of Education*.¹¹⁸

NAACP lawyers looked to social scientists for help proving two arguments. First, they needed to convince the Court that legally enforced segregation does psychological damage to majority and minority groups.¹¹⁹ Second, they claimed that segregation could be accomplished without incident if the Court ordered it. The foremost authorities in social science used research from the previous decade to provide expert opinion about both of the NAACP's claims in their brief, "The Social Science Statement."¹²⁰ In this document, studies of racially integrated workplaces and public housing proved the NAACP's second argument: that peaceful desegregation was possible. On May 17, 1954, the Supreme Court ruled that the segregation of public schools was unconstitutional because it violated the Equal Protection Clause of the Fourteenth Amendment. Chief Justice Earl Warren wrote the unanimous opinion, which partially attributed the Court's decision to social science findings.¹²¹ The NAACP's social-science brief described recent research in the field of race relations, including psychological analyses of white

¹²¹ Ibid, 174.

¹¹⁷ Robert Merton, "Publications," by the Columbia-Lavanburg group, undated. Box 207, Folder 8, Robert Merton Papers, Butler Library, Columbia University, New York City, New York.

¹¹⁸ Letter from Robert Merton to Roger Straus, Sept. 29, 1954. Box 207, Folder 8, Robert Merton Papers, Butler Library, Columbia University, New York City, New York.

¹¹⁹ John P. Jackson, Jr., *Social Scientists for Social Justice: Making the Case Against Segregation* (New York: New York University Press), 160.

¹²⁰ Ibid.

and black children living in segregated neighborhoods and studies of racial mixing in public housing. These studies proved that segregation was psychologically harmful to children, and they suggested that public schools could be peacefully desegregated since integration had already occurred without incident in certain public-housing projects.

The *Brown* ruling was followed by later Court hearings that concerned the timeline for desegregation. At the NAACP's request, Merton helped put together a second social science brief, "prepared for use in conjunction with the hearings of the Court soon to be held on means of implementing the decree from last May [1954]."¹²² Merton and others pushed for the immediate desegregation of public schools, as opposed to a more gradual process of desegregation that would follow state programs for educating the public about racial tolerance. In Chapter 3, I discuss the scientific rationale behind the argument for immediate desegregation that public and I analyze the role that public housing and its representations in photography played in this controversy.

The Bemis Foundation did not provide a lasting model for collaborations between architects and social scientists. After the Westgate and Regent Hill studies, Festinger pursued the study of communication between groups (including an analysis of gossip, or "rumors"), which he analyzed outside the worlds of architecture and public housing.¹²³ Social scientists borrowed Festinger's methodology for studying public housing, but they did so on their own initiative, and received neither financial support nor direction from architects at the Bemis Foundation or elsewhere.¹²⁴ The goal of creating partnerships between architects and social scientists fizzled

¹²² Letter from Merton to Straus.

¹²³ Kurt Back, Festinger, L., Hymovitch, B., Kelley, H., Schachter, S., and Thibaut, J., "The Methodology of Studying Rumor Transmission," *Human Relations*, No. 3 (1950), 307-312.

¹²⁴ Nevertheless, the legacy of social science in the School of Architecture at MIT was not completely forgotten. As Arindam Dutta and others have argued, the positivism of the postwar years culminated in the "Design Methods"

out after midcentury, so when Festinger had the opportunity to publish a new edition of *Social Pressures in Informal Groups* he omitted Bauer's and Kennedy's chapters from the 1963 edition.¹²⁵

When social scientists analyzed tenants on their own, they tended to uncouple questions of race and class. This had something to do with the specific social conditions in public housing. Psychologists were attracted to public housing because it was physically and conceptually separate from the larger community, which meant that, in Festinger's words, it was a "self-contained community," where public opinion could be traced back to the face-to-face group. Applied psychology required practitioners to leave the laboratory, but they needed to find real-world conditions that offered them some opportunity to manage their subjects. This is where local housing authorities came in. Published studies of interracial housing acknowledged the local housing authorities who cooperated with psychologists to create satisfactory research conditions. Public housing provided an ideal laboratory for studies of interracial communities, but did not offer any insight into class stratification.

The uncoupling of race and class in tenant research also resulted from the demands of the scientific process. In order to test a hypothesis, scientists needed to isolate independent and dependent variables. So research concerning social contact (independent variable) as a catalyst for interracial friendships (dependent variable) needed to be performed in a socially homogenous place. Presumably, the effect of proximity on interracial friendships and intersocial friendships

group that dominated the Cambridge architecture community in the 1960s (see Dutta, "Linguistics Not Grammatology," 49-50). The group consisted of MIT architects who adopted a kind of lay psychology to describe their humanist design philosophy, which was predicated on using the tools of social science (especially housing surveys) to collect information about residents' experiences. In 1968, the group renamed itself the Environmental Design Research Association. This professional architecture organization is now based in Pinole, California, and continues to promote a social science approach to architecture design through its member conferences, literature and awards.

¹²⁵ Leon Festinger, Social Pressures in Informal Groups: A Study of Human Factors in Housing, 2nd ed. (Stanford, Calif.: Stanford University Press, 1963).

required separate treatment. Most importantly, the verification of scientific findings depended on their reproducibility. Therefore, Merton's initial decision to study race relations at Hilltown established narrow parameters for future tenancy studies, which sought to reproduce his findings in other government housing.

But when social scientists met with architects, they defined the causes of segregation broadly. On April 21, 1949, Merton and Bauer invited Cambridge architects to discuss the housing problems that they would most like social scientists to address.¹²⁶ The architects pointed to the phenomenon of one-class communities, which they attributed to the de facto segregation that resulted from mass tract housing built for single-income groups. They also discussed the problem of legally imposed racial segregation in public and private housing. In her article for the *Journal of Social Issues*, Bauer explained the ways de facto segregation and legally imposed racial covenants work together, writing that racial segregation "is not an isolated issue, related wholly to racial prejudice: it is part of a general tendency to separate different kinds of people and different functions, with resulting standardization of land use over wide areas."¹²⁷ Whereas social scientists were constrained by the scientific method to examine class and race as separate issues, Bauer demonstrated that loosening disciplinary boundaries between architecture and social science could reveal the ways that class and racial homogeneity were mutually constitutive.

The movement of housing research into college campuses in the postwar years widened the number of tenancy studies, but also narrowed the standards for credible research. In analyzing the segregation of Americans by race and class, social scientists dealt with these issues

¹²⁶ "MIT Meeting," April 21, 1949.

¹²⁷ Catherine Bauer, "Social Questions in Housing and Community Planning," *Journal of Social Issues* 7, nos. 1-2 (1951): 21.

separately, and, in doing so, they made scientifically defensible claims that contributed to civil rights legislation. But their research also hardened class and race as separate fields of scientific investigation, and thereby discouraged future attempts to grapple with the systemic questions about discrimination and inequality at the intersection of racial and class identities.

Chapter 3: Picturing Racial Integration at Aliso Village

Leonard Nadel accepted a position as the staff photographer for the Housing Authority of the City of Los Angeles (HACLA) in 1949. Nadel owed his new job to the strength of his portfolio, which included photographs of LA public housing that he had shot as a student at the Art Center School (now the Art Center College of Design in Pasadena).¹ It was an exciting time to work for HACLA, since they had recently expanded their operations in response to the veteran housing crisis.² With the passage of the Housing Act of 1949, HACLA staff had good reason to believe that Americans' aversion towards government housing had subsided. Nadel was especially hopeful that public opinion had turned in favor of public housing, and he wanted to document this important historical moment.³

Nadel paid attention to the national debate about segregated housing in American news. He read Charles Abrams's writings for *The Nation* in the series, "Race Bias in Housing," which discussed eliminating legally imposed segregation in public and private housing in the summer of 1947.⁴ Abrams was encouraged that some public housing projects were already racially integrated, since certain local housing authorities prohibited tenant selection based on race. But he was troubled that so little information existed about the means by which these housing

¹ Letter from Leonard Nadel to John Morris (editor at *Ladies Home Journal*), Sept. 15, 1949, Box 13, Folder 12, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

² Don Parson, "The Decline of Public Housing and the Politics of the Red Scare: The Significance of the LA Public Housing War," *Journal of Urban History*, Vol. 33, No. 3 (March 2007): 400-417.

³ Leonard Nadel, "The Concept," c. 1949, Box 13, Folder 8, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁴ Leonard Nadel copied notes from two articles by Charles Abrams: "Race Bias in Housing I: The Great Hypocrisy," *The Nation*, July 19, 1947, 67-69, and "Our Chance for Democratic Housing," *The Nation*, Aug. 16, 1947, 160-161. Box 8, Folder 1, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

authorities accomplished desegregation, "The successful formula of interracial occupancy, adopted by the many local agencies, should be continued and expanded wherever possible. Information on successful experiences of interracial occupancy should be disseminated for the guidance of all local authorities and to help them in extending such policies," Abrams urged.⁵ Nadel took up this challenge. He scribbled notes about the ways he might represent the successful story of racial integration in Los Angeles's first open housing project: Aliso Village.

Nadel contacted HACLA about his interest in producing a photographic study of the Aliso neighborhood. In his proposal, the photographer upheld Aliso Village as a model for racial integration, "herein is a working laboratory which permits a study of the elements that make-up successful interracial living [...] The study I propose will provide photographic evidence of a positive and concrete nature and will more keenly define the solution to this vital aspect of American living, thereby providing a basis for better understanding between peoples."⁶ Nadel used scientific terms, such as "laboratory," "study," and "evidence," to describe his photography project, which responded to the positivism in Abrams's call for a "successful formula" on interracial living.

By framing his project in scientific terms, Nadel situated his work within a growing body of 'amateur' tenant surveys conducted by staff members at municipal housing authorities during the late 1930s and 1940s.⁷ As I will discuss in Chapter 4, the NYC Housing Authority pioneered some of the earliest published research in this particular genre of housing studies. Generally

⁵ Abrams, "Our Chance for Democratic Housing," 161.

⁶ Nadel, "The Concept."

⁷ The New Haven Housing Authority organized The Committee on the Hygiene of Housing in the late 1930s in collaboration with the American Public Health Association. See *Housing for Health: Papers Presented Under the Auspices of the Committee on the Hygiene of Housing of the American Public Health Association* (Lancaster, Penn.: The Science Press Printing Company, 1941); The NYC Housing Authority published an early study of residential diversity in its public housing projects. See Catherine Lansing Oats, *Studies of Community Planning in Terms of the Span of Life* (New York: New York City Housing Authority, 1937).

speaking, the people who worked for municipal housing authorities were not educated as social scientists, but they developed a lay social science language to legitimize their observations in public housing. Although these tenant surveys were textual, they sometimes included photographs to illustrate their claims. This recent history of 'amateur' research in public housing was one of the contexts for Nadel's photographic study.

The Aliso Village photographs also responded to the visual style of government photography in low-income neighborhoods. Most famously, Farm Security Administration (FSA) photographers, such as Dorothea Lange, pioneered this genre of documentary photography in their pictures of impoverished rural families during the Depression. The publication of FSA photos in mainstream magazines helped establish a visual language for picturing the rural poor and their houses. Staff photographers for local housing authorities borrowed ideas from popular FSA images, but they also developed their own visual style for capturing slum neighborhoods, overcrowded tenements, and the urban poor. This visual style could not be explained by official policy, since local housing authorities did not publish guidelines for photography. Housing authorities published and exchanged illustrated annual reports, with the result that these pictures eventually cohered into a set of familiar representational strategies. Nadel responded to these visual precedents in public housing photography, but also departed from them in crucial ways. I argue that Nadel broke with established methods of picturing public housing for the purpose of pushing a specific integrationist agenda.

Scholars have used Nadel's slum photographs to illustrate histories of urban renewal in Los Angeles. Dana Cuff refers to Nadel's slum photos as "remarkable works of art, anthropology and propaganda," since they evinced an image of the "deserving poor" for the purposes of

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rallying public support for slum clearance at midcentury.⁸ Similarly, Stefano Bloch recognized the propagandistic motives behind Nadel's slum photographs, which, in illustrating HACLA's agenda, were "emblematic of the subtle ways in which policy is as much an artistic endeavor as it is a bureaucratic enterprise."⁹ Whereas this scholarship has focused on Nadel's slum photographs and their effective communication of HACLA's urban renewal policy, I have chosen to investigate Nadel's understudied photographs of Aliso Village, which failed to communicate HACLA's integrationist agenda. Why have the slum photographs attracted audiences at midcentury and scholarship in the present, while the pictures of Aliso Village have merited little attention?

Nadel wanted to publish his Aliso Village photographs for a wide audience. He began photographing Aliso Village with the intention of selling the images to public agencies that published educational materials on race relations.¹⁰ If that did not work, Nadel believed he could sell the photographs to popular magazines, such as *Ladies Home Journal*, whose editors had already demonstrated an interest in stories about American neighborhoods.¹¹ But he had trouble convincing publishers that his photographs of racially integrated public housing would appeal to the average American reader.

Frustrated by rejections, Nadel turned to social scientists, such as Robert Merton, who studied racially integrated public housing. But Merton dismissed Nadel's photographic study as

⁸ Dana Cuff, *The Provisional City: Los Angeles Stories of Architecture and Urbanism* (Cambridge, Mass.: MIT Press, 2002), 272.

⁹ Stefano Bloch, "Considering the Photography of Leonard Nadel," Yearbook of the Association of Pacific Coast Geographers, Vol. 74, No. 1 (Jan. 2012): 80.

¹⁰ Ibid.

¹¹ See *Tomorrow's Small House* exhibition organized by *Ladies Home Journal* and the Museum of Modern Art in New York. May 29 – Sept 30, 1985, Box 9, File 32, Vernon DeMars Papers, College of Environmental Design Archives, U.C. Berkeley.

"unscientific," since the project did not test a hypothesis or otherwise conform to the standards of the scientific method.¹² Merton had spearheaded the professionalization of tenancy studies in the social science community, and he was wary of any project that might compromise the legitimacy of tenants as a new field of scientific inquiry. For this reason, he viewed the Aliso photographs as a threat to social scientists, such as himself, who had staked their reputations on the success of race-relations research in public housing.

Despite Merton's refusal to acknowledge them, the Aliso photographs communicated arguments that social scientists had begun to use in their attack on segregation. In 1945, the NAACP fought an early battle in the struggle to desegregate public schools in Southern California, and they collaborated with social scientists to provide evidence for two key arguments.¹³ First, social scientists needed to demonstrate that segregation was psychologically harmful, even if school facilities were roughly equal. Second, they needed to prove that peaceful desegregation was possible, in spite of racially prejudiced attitudes. The Aliso Village photographs provided evidence for the latter argument by illustrating peaceful integration.

I. The Aliso Village Study

When four families volunteered as subjects for a photographic study of their Los Angeles neighborhood, they were aware that ethnicity would be the basis for their selection. Nadel introduced his project with a photograph of the four families lined up against the whitewashed wall of the Aliso community center in a typological fashion (Fig. 3.1).¹⁴ The Wilsons represented

¹² "Meeting with Robert Merton," Sept. 12, 1949, Box 13, File 13, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

¹³ John P. Jackson, Jr., Social Scientists for Social Justice: Making the Case Against Segregation (New York: New York University Press, 2001), 82-95.

¹⁴ In "Aliso Village," Nadel reported that each of the four families volunteered for the study.

the black residents at Aliso Village; the Ramirez family did the same for Mexican-Americans, as did the Wongs and Taggarts for the "Oriental-Americans" and Anglo-Americans (Fig. 3.2).¹⁵ In accordance with the Federal Housing Administration's slum clearance policy, Los Angeles officials recorded the racial demographics of the site that would become Aliso Village, and then roughly reproduced those demographics when admitting residents. Conservatives were critical of public housing projects that interfered with the demographics of a given site—even though their fear of non-whites settling in predominantly white areas was hardly ever realized. In order to avoid conservative backlash, it was important for Nadel to highlight HACLA's attempt to preserve the racial demographics of the Aliso site; thus, he provided racial statistics for the 3400 residents, which were reportedly 43% Mexican-American, 28% Anglo-American, 27% African-American, and 2% Other (Asian-American and Native American).¹⁶ The four families selected for Nadel's photographic study claimed to illustrate Aliso's ethnic diversity.

Over the course of six months, Nadel followed his subjects and captured the mundane events typical of postwar family life in the United States.¹⁷ He collected these photos (and many others) in a thick manuscript and titled it "Aliso Village."¹⁸ Images showed the families having dinner, fathers relaxing in their living rooms, mothers volunteering at the neighborhood nursery, children attending Boy Scouts meetings, and everyone decorating Christmas trees (Figs. 3.3–

¹⁵ Leonard Nadel, "Aliso Village" manuscript, Box 10, Folder 1, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

¹⁶ The site for Aliso Village was historically known as "The Flats" and had a history of resident diversity. The Chicago School sociologist Pauline Young made resident diversity and immigration in The Flats the subject of her book, *Pilgrims of Russian Town* (Chicago: University of Chicago Press, 1932).

¹⁷ The six months Nadel spent photographing Aliso residents was documented in "The Exhibit on Aliso Village Study," held in the Los Angeles City Public Library, February, 1951. See exhibition brochure in Box 13, File 8, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

¹⁸ Nadel, "Aliso Village" manuscript.

3.5). Nadel wanted his photographs to prove that all families at Aliso Village—no matter their race or ethnicity—shared universal values, or, more accurately, shared certain American values that were taken as universal.

Nadel captioned his photographs with text selected from interviews with residents, and these quotations reinforced the photograph's universalizing message. For example, a photo of white resident Bud Taggart was accompanied by his claim, "Aliso is a damn good help. I've learned a lot in meeting people and finding we're all the same."¹⁹ Similarly, a picture of residents Ramirez and Wong was captioned with the former's statement, "I found that Ruth Wong and I think the same and do things the same way. I found out there's no difference between us."²⁰ And when asked about their participation in Aliso's diverse community, the Wilson family said, "When you know somebody inside, you don't see what they are on the outside."²¹ Nadel combined text with image to create a propagandistic message about racial tolerance in public housing.

The photo essay of Aliso Village reflected the growing market for the genre.²² Full-page photographs illustrated articles in *Life* magazine, which popularized the photo essay format. FSA photographs appeared in a number of publications, including *Land of the Free*, which combined images with the poetry of Archibald MacLeish. Similarly, the novelist Sherwood Anderson used FSA photographs to illustrate *Home Town*, his story of small town America in 1942.²³ The tone

¹⁹ Ibid, 15.

²⁰ Ibid, 18.

²¹ Ibid, 21.

²² James Curtis has argued that the market for photo essays grew during the 1940s. See Curtis, *Mind's Eye, Mind's Truth: FSA Photography Reconsidered* (Philadelphia: Temple University Press, 1991), 104.

²³ Archibald MacLeish, *Land of the Free* (New York: Harcourt, Brace and Co., 1938). Sherwood Anderson, *Home Town* (New York: Alliance Book Corporation, 1940).

of these photo essays was often didactic, and "Aliso Village" was no exception. Nadel pushed the message that peaceful desegregation was possible in the most unambiguous way.

Nadel's images of family life were repetitious in their subject matter but also in their staging. Each scene was carefully orchestrated, with few details left to chance, much like a reallife diorama. The upshot was that the photographs appeared unnatural, as if they did not capture an incidental moment taken from the flow of everyday life. They seemed to be the products of an intervention—where the photographer has stopped the normal course of events, re-arranged the subjects, and then captured them for our visual consumption. Consequently, the Aliso photos were compromised in their ability to communicate everydayness, and the specter of the photographer hovered over the images. Nadel wanted his photographs to communicate an unambiguous message—that routine and tradition formed the crux of family life and that Americans, despite their ethnic diversity, were not so different if they shared the same ritualized activities.²⁴

The Aliso Village photographs preached the integrationist argument that race did not matter. During the postwar years, integrationists took a strong assimilationist position on the question of cultural and racial diversity because they worried that any argument for cultural pluralism could be used to support segregation.²⁵ For this reason, Nadel's photographs and accompanying text avoided even the slightest suggestion of ethnic separatism. This integrationist argument came under attack in the 1960s, when activists and scholars upheld African American culture in spite of its differences with Euro-American culture.²⁶ This shift in cultural thinking

²⁴ Nadel, "The Concept."

²⁵ Jackson Jr., *Social Scientists for Social Justice*, 3.

²⁶ Ibid.

might account for why scholars have paid so little attention to the Aliso Village photos. Scholars have come to understand the integrationist argument—that racial progress was synonymous with assimilation—as naïve and incorrect.

II. Public Housing Photography

During the 1930s, housing authorities in the U.S. constructed a shared visual language for their published photographs of slum clearance and public housing. City housing authorities released annual reports, which nearly always featured photographs of local slum buildings. Like other housing authorities, HACLA collected these annual reports to keep abreast of public housing developments in other cities. No official instruction dictated the photography that illustrated annual reports, but the images nevertheless shared a similar style and choice of subjects. Like other housing authority photographers, Nadel borrowed ideas from public housing photography in other cities.

One popular visual strategy involved juxtaposing slums with capitol buildings. In 1938, the District of Columbia Housing Authority pictured children playing baseball in a slum alley with the U.S. Capitol building in the distance (Fig. 3.6).²⁷ The juxtaposition of slum buildings with the Capitol suggested that it was Washington's responsibility to cleanup its own backyard, and, moreover, that public officials needed to address the social injustices produced by the private housing market. *Collier's* magazine republished the D.C. slum pictures in their article, "Behind the Marble Mask," in September 1938.²⁸ These "marble masks" appeared in Nadel's

²⁷ "In the Shadow of the Capital," the annual report of the Washington Housing Association, 1938, Edith Elmer Wood Papers, Avery Architecture Library, Columbia University.

²⁸ "Behind the Marble Mask," *Collier's* (Sept. 1938): 11 – 14, Box 35, Folder 2, Edith Elmer Wood Papers, Avery Architecture Library, Columbia University.

photographs of downtown Los Angeles too—pictures in which Los Angeles City Hall peeked from behind dilapidated tenements (Fig. 3.7). Housing officials used photography in their annual reports to persuade readers that slum clearance and government housing were complementary processes, and necessary to protect public health. In doing so, they constructed a persuasive visual formula that tied slums to government administration buildings, implying that Americans needed to increase public powers and curb private ones.

The Public Works Administration financed public housing in some American cities as part of their Emergency Housing Corporation (EHC), which was established to speed up the work of municipal governments in 1933.²⁹ The EHC solicited applications from local housing authorities, and favored proposals in which new neighborhoods would replace slums. Consequently, local authorities were encouraged to think of public housing in relation to slum clearance, and their promotional literature reflected this idea.

The representation of public housing attained visual coherence in government literature, where photographs contrasted life before and after slum clearance. The Harlem River Houses opened to African-American residents in 1937, and were one of the first two housing projects in New York City to be funded by the EHC.³⁰ Brochures for the Harlem River Houses showed families eating dinner in their newly appointed dwellings in much the same manner as the Aliso Village photographs (Fig. 3.8).³¹ But unlike the Aliso manuscript, advertisements for Harlem River Houses for Harlem River Houses of empty living

²⁹ Harold L. Ickes, "The Housing Policy of PWA," *Architecture Forum*, Vol. LX, No. 2, Feb., 1934, Box 18, Folder 40, Clarence Stein Papers, The Division of Rare and Manuscript Collections, Cornell University.

³⁰ The other housing development was the Ten Eyck Houses in Brooklyn, which was exclusively for white residents.

³¹ "Harlem River Houses," pamphlet produced by the Federal Emergency Administration of Public Works in association with the New York City Housing Authority, c. 1937, Box 1, Folder 19, Housing Study Guild Papers, The Division of Rare and Manuscript Collections, Cornell University.

rooms, bedrooms and bathrooms (Fig. 3.9). Vacant spaces better emphasized the cleanliness of these brand new apartments, since people would presumably only direct attention away from the white walls, new appliances and tidy furniture. Most importantly, these empty rooms contrasted sharply with pictures of the squalid interiors of tenements that formerly occupied the same site. Representations of the Harlem River Houses told a before-and-after story in which cluttered and unsanitary apartments were replaced by pristine ones, and empty spaces best visualized this transformation. Local housing authorities across the country used pictures of empty apartments to contrast living conditions before-and-after slum clearance.

At the time that Nadel was photographing his Aliso series in 1949, he was also putting the finishing touches on another photo essay, this one depicting a predominantly black housing project in Los Angeles's Central-Alameda neighborhood. Nadel titled this manuscript, "Pueblo del Rio: the Study of a Planned Community," and the opening pages included pictures of slums from downtown Los Angeles.³² One such photograph pictured a small boy in a dirty, cluttered tenement apartment and recalled similar images from the Harlem River House pamphlet (Fig. 3.10). "We are against public housing [...] and feel the right thing to do would be to rehabilitate the old houses," read the photograph's caption.³³ Nadel took this statement and others like it— which captioned several other Pueblo del Rio images—from real estate representatives who testified before congressional committees on the question of public housing. Through pairing photographs of the city's dilapidated housing with the real estate industry, which wanted neither to build for the lower classes nor to allow anyone else to do it. Bent on frustrating efforts for public

³² Nadel, "Pueblo del Rio: the Study of a Planned Community" manuscript, Box 13, Folder 18, Series II.A, Pueblo del Rio, 1947-48, Leonard Nadel Collection, Special Collections, Getty Research Institute.

³³ Ibid, 8.

housing, the real estate industry claimed that the ideal solution for housing the city's poorest residents was for them to occupy houses abandoned by wealthier groups. And these dilapidated buildings they described euphemistically as the "second, third, fourth and fifth hand house."³⁴

In his "Pueblo del Rio" manuscript, Nadel borrowed the before-and-after narrative familiar to housing authority literature. He split the manuscript into two parts: 1) the Unplanned Community, and 2) the Public Housing Community. In the latter half, Nadel pictured all of the components necessary for a planned community—such as nursery, elementary school and healthcare—and the reader was encouraged to contrast these images with the slums shown in earlier pages.

In foregrounding "planning" as a corrective to slum environments, Nadel was in lock step with American city governments, which advocated planned communities as correctives to slums. The historian Andrew Shanken has argued that postwar Americans cultivated a "culture of planning," anticipating that national resources could be redirected towards large-scale construction once they were no longer needed for the war effort.³⁵ When people championed planned communities they were advocating major developments, since planned places were built all at once, while unplanned ones were the result of piecemeal construction over time. Nadel contrasted Pueblo del Rio with Los Angeles slums and emphasized that good planning was the key to urban renewal.

But the 1940s rhetoric of planning managed to sidestep an important fact, which was that slums *were* planned places in so far as they obeyed a simple capitalist logic: tiny rooms in tenements built close together extracted the most profit from a city lot. Very few people

³⁴ Ibid, 10.

³⁵ Andrew Shanken, *194X: Architecture, Planning and Consumer Culture on the Home Front* (Minneapolis, Minn.: University of Minnesota Press, 2009).

questioned the capitalist system that had produced slums and kept them at maximum occupancy—instead they believed that everybody's standard of living would be raised if the use of resources could only be planned more efficiently.

With the passage of the Housing Act in 1937, increased federal dollars were available to municipal governments who submitted plans for urban renewal. The Housing Act encouraged cities across the country to create housing authorities whose job was to identify slums and create practical plans for affordable housing.³⁶ Like the Emergency Housing Corporation that preceded it, the Housing Act made it clear that public housing should go hand in hand with slum clearance. This meant that municipal governments were discouraged from building housing on vacant land, which was left for private developers. Housing authorities targeted the downtown neighborhoods which private developers considered undesirable, since clearing slums was expensive and far less profitable than simply building on empty subdivisions at the city's edge.

By 1937 many Americans agreed that the nation was in the midst of a national housing crisis that dated back at least as far as the start of the Great Depression.³⁷ Some estimated that substandard housing affected two-thirds of the country's population, which meant that the housing crisis was not only a blue collar one—it was a disaster whose effects reached across class divisions.³⁸ But despite the wide scope of the housing problem, federal dollars were narrowly restricted for the lowest income groups living in the "worst" parts of American cities.

Before-and-after pictures of slums and public housing played an important role in visualizing the federal government's approach to the housing crisis. Besides government

³⁶ Catherine Bauer, "The Housing Movement: A Brief Political History," unpublished paper, 1950, Box 8, Folder 10, Catherine Bauer Wurster Papers, Bancroft Library, U.C. Berkeley.

³⁷ Bauer, "Toward Postwar Housing in the U.S.," *Transatlantic*, No. 16, (Dec. 1944): 35 – 44.

 $^{^{38}}$ Ibid, 42 - 43.

literature, these images also appeared in builder's trade magazines. In 1942, *Architect and Engineer* featured the recently built Pueblo del Rio in an article that discussed the tight budgets that restricted builders of public housing. The magazine captioned bird's eye views of Pueblo del Rio with "before" and "after" text which contrasted the partially demolished slum with the completed public housing project (Fig. 3.11). Before-and-after pictures brought home the misery of slum life, and, in doing so, justified government intervention in the housing market.

Nadel chose not to represent the slums that preceded Aliso Village, even though the neighborhood was reputedly one of the worst slums on the West Coast.³⁹ Since the early twentieth century, some of the city's poorest immigrants lived on either side of the Los Angeles River in an area known as "The Flats."⁴⁰ Although immigrant neighborhoods in Los Angeles were generally better off than those on the East Coast, it was a mistaken belief that the city's densities were too low to produce slums. The Flats proved that even Los Angeles was susceptible to slum neighborhoods where overcrowded and unsanitary conditions matched those of any other city, including New York. The photojournalist Jacob Riis brought national attention to the squalid living conditions in New York's Lower East Side with the publication of *How the Other Half Lives* in 1890—a milestone for "muckraking" journalists interested in exposing the physical and moral depravity of slum life. Nearly two decades later, Riis visited The Flats in Los Angeles and remarked, "I have seen larger slums, but never any worse."⁴¹ His reaction was published in the Los Angeles Housing Commission's report in 1910, which identified The Flats as a

³⁹ Nadel, "Aliso Village" manuscript.

⁴⁰ Sophie Spalding, "The Myth of the Classic Slum: Contradictory Perceptions of Boyle Heights Flats, 1900-1991," *Journal of Architectural Education*, Vol. 45, No. 2 (Feb. 1992): 107 – 119.

⁴¹ Los Angeles Municipal Housing Commission, *Annual Report*, 1910 as quoted in Spalding, "The Myth of the Classic Slum," 108.

significant danger for public health (in fact, the neighborhood was already associated with an outbreak of the bubonic plague that had occurred a few years earlier).⁴²

Public fears about the spread of contagious diseases escalated existing racial tensions in Los Angeles. The historian William Deverell has discussed the quarantining of Mexican-Americans during the LA plague epidemic of 1924.⁴³ Deverell demonstrated that public health officials linked the disease to "Mexicanness," which they associated with uncleanliness, ignorance, and poverty. The plague revealed "a Los Angeles desperate to restrict Mexicans—if not by immigration law, then by other means," such as quarantining The Flats.⁴⁴ During the next several decades, The Flats remained a topic of concern in Los Angeles, although scholars have questioned the extent to which government officials may have exaggerated the neighborhood's problems in order to make the case for slum clearance.⁴⁵ In 1938, Los Angeles established HACLA, which fast-tracked plans for clearing and rebuilding The Flats.

The Aliso Village photographs broke with established conventions for picturing public housing and its residents. First, Nadel did not picture slums in his Aliso manuscript, so he failed to deliver the before-and-after narrative typical of public-housing photography. Second, his photographs always depicted people and therefore did not display the "empty" interiors often found in public-housing literature. Nadel's photographs at Pueblo del Rio proved that he was well-versed in these familiar ways of picturing public housing. So why did the photographer deviate from traditional public-housing photography in his representation of Aliso Village?

⁴² Ibid.

⁴³ William Deverell, *Whitewashed Adobe: The Rise of Los Angeles and the Remaking of its Mexican Past* (Berkeley: University of California Press, 2004), 172-206.

⁴⁴ Ibid, 205.

⁴⁵ Spalding, "The Myth of the Classic Slum," 110.

Nadel focused his camera on the representation of social relationships to prove that racial integration had not disrupted normal patterns of living. He represented families at home and neighbors interacting in the public spaces of the neighborhood: the community building, park, lawn, nursery school and even the outdoor hallways that connected apartment units.⁴⁶ Aliso pictures of social life recalled some FSA photographs, which similarly captured the mundane activities of families and neighbors living in small communities.

III. Farm Security Administration Photography

Popular magazines featured FSA photographs of the rural poor and their communities. Established in 1937, the FSA studied farming problems in the U.S. and tested solutions. But the FSA's legacy was its photography program, which launched the careers of Lange, Walker Evans and Russell Lee, among others. These photographers reported to Roy Stryker, head of the Information Division of the FSA, who encouraged them to direct their cameras at America's Depression-era landscape and the farm communities that inhabited it.⁴⁷

"Community" was a contentious topic during the postwar era. For some time, sociologists had taught that neighborliness was a small town value, and that American community life was in decline.⁴⁸ They often attributed this decline to the growth of cities, but some sociologists claimed to see the same problems in small towns. In their book *Middletown*, sociologists Robert and

⁴⁶ Nadel, "Aliso Village" manuscript.

⁴⁷ For more on FSA photography, see James Curtis, *Mind's Eye Mind's Truth: FSA Photography Reconsidered* (Philadelphia: Temple University Press, 1991), and Carl Fleischhauer and Beverly W. Brannan, ed., *Documenting America: 1935-43* (Berkeley: University of California Press, 1989).

⁴⁸ For a sample of this literature, see Donald L. Foley, "Neighbors or Urbanites? The Study of a Rochester Residential District," paper written for the Department of Sociology at the University of Rochester, New York, 1952. Also see Robert C. Angell, "The Moral Integration of American Cities," *American Journal of Sociology* 57, no. 1 (July 1951): 76-81.

Helen Lynd identified a number of small town values in Muncie, Indiana, that all but disappeared between 1890 and 1925. Neighborliness and civic participation were two of the most important.⁴⁹ Stryker met with the Lynds to discuss small town life, and together they identified home, family, church, and community as crucial components of American living and important sites for pictorial investigation.⁵⁰

Following his meeting with the Lynds, Stryker made a "shooting script" that dictated FSA commissions for small town photographs.⁵¹ He wanted pictures of families who spent evenings together in their living rooms, since these images "proved" that modern technology—especially automobiles and movie theatres—had not pulled the American family apart. Stryker also wanted to show that small-town residents were pious, and he did this by photographing them on their way to church. These pictures were at odds with the Lynds's findings in *Middletown*, which indicated that Americans were spending less time with their families and in church than the previous generation. Despite this contradictory visual evidence, Stryker did not want to challenge the Lynds's scholarship; rather, he wanted to document what he believed to be the last vestiges of an earlier American way of life.

In this spirit, Stryker called for representations of civic responsibility and communality in small towns. The photographer Lee responded by picturing courthouse meetings in San Augustine, Texas, in which he turned his camera towards the citizens—as opposed to the speaker—to capture the well-attended event. Other pictures of San Augustine's bustling town square testified to the presence of small-town sociability. The historian James Curtis has pointed

⁴⁹ Robert and Helen Lynd, *Middletown* (San Diego, Calif.: Mariner Books, 1959; New York: Harcourt Brace and Co., 1929).

⁵⁰ Curtis, *Mind's Eye*, 101-104.

⁵¹ Ibid, 101.

out that FSA pictures of public space in San Augustine rarely focus on monuments or public buildings.⁵² For Lee, monuments such as Civil War memorials were incidental to the picture—so incidental, in fact, that he sometimes shot them from the rear—since the built environment was only a stage for the crowds he wanted to capture (Fig. 3.12).

Nadel's camera operated in much the same way. Although Aliso Village did not have a main street or town square, it had other public spaces in which neighbors rubbed elbows. One of these places was the community building, where the resident council held regular meetings about local affairs. Aliso's resident council was a democratically elected group of citizens whose purpose was to represent the majority interests of the neighborhood.⁵³ Nadel pictured the resident council in session, and showed that black, white and brown people took an active role in community affairs (Fig. 3.13). His pictures of the resident council recalled Lee's photographs of courthouse meetings in St. Augustine, which also provided a glimpse into the democratic activities of a small community.

It was also common for public housing management to foreground tenant councils in their literature. This was partially in response to conservatives, who alleged that public housing bred political apathy, since it built "political constituencies founded on shelter and put a premium on dependency."⁵⁴ Diverse public housing projects were especially easy targets, since some Americans believed that ethnic diversity posed its own problem for civic participation. The resident council at Aliso Village challenged this widespread belief.

⁵² Ibid, 108.

⁵³ Nadel, "Aliso Village," 10.

⁵⁴ Not surprisingly, conservative agencies such as the NAREB and the U.S. Chamber of Commerce were at the forefront of anti-public housing discourse, since they alleged that government housing threatened private developments. President of the NAREB, Newton Farr, quoted in Robert Merton's "The First Year's Work," Interim Report, June, 1946, Box 209, Folder 6, Robert Merton Papers, Special Collections, Columbia University, New York.

Like Lee, Nadel did not represent architecture for its own sake. It is useful to compare Nadel's photographs with those of the famous photographer Julius Shulman, whose interest in Los Angeles architecture also led him to Aliso Village. Aliso was a series of superblocks in which large lawns connected apartment buildings, and kept out automobile traffic. Neighbors spent time together in these open spaces, where they conversed and watched their children play. In Shulman's photograph, the camera was distant from its human subjects—Aliso children playing in the central green—instead the photographer used a wide-angle lens to organize apartment buildings, sidewalks and lawns into visually interesting geometries (Fig. 3.14). Nadel, in comparison, cropped out Aliso's architecture in order to narrowly focus on a social interaction—mothers and children relaxing on the lawn (Fig. 3.15). Nadel treated the built environment as important only insofar as it staged the social relationships pictured therein.

This attitude did not help Nadel sell his photographs to architecture magazines. Nadel met with Thomas Creighton, the editor of *Progressive Architecture*, about selling his photographs of Aliso Village on November 27, 1950.⁵⁵ Creighton looked at the Aliso Village photographs and demonstrated some enthusiasm for the project, but ultimately decided not to publish it. He informed Nadel that the magazine would publish Shulman's photographs of Channel Heights instead. Nadel's photographs were supposed to shed light on human behavior, not architecture, and, in this way, they recalled the sociological imperatives that undergirded FSA photographs of small towns.

The former FSA photographer Stryker did not want Nadel's photographs either. On October 4, 1949, Nadel met with Stryker to discuss possible opportunities for publishing his

⁵⁵ "Thomas Creighton (editor of *Progressive Architecture*) interview," Nov. 27, 1950. Box 13, Folder 12, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

Aliso project.⁵⁶ Stryker told Nadel that his photographs looked "unfinished," and advised him to put the project aside for a few years. Perhaps Stryker recognized that Nadel had combined two very controversial subjects—public housing and racial integration—and so he reasoned that the best strategy was to wait for cultural attitudes to soften about both topics.

During his career, Stryker had been careful to exclude any subjects that might be considered communist from his FSA photographs.⁵⁷ For example, when Stryker collected photographs of Greenbelt, Maryland—an FSA neighborhood—he avoided pictures of multi-family apartments—which might have recalled similar ones in Soviet Russia. He also chose not to represent Greenbelt's cooperative grocery store or the cooperative meetings held in its community building. In fact, the only published pictures of the community building depicted its exterior, and captions mistakenly identified the structure as an elementary school.⁵⁸

In contrast, Aliso Village could not escape communist associations since government housing was one of communism's primary features. Nadel did not shy away from picturing buildings that might have been construed as proto-communist, such as the Aliso community building or cooperative nursery (Fig. 3.16). These photos provoked Lee Johnson, Director of the National Public Housing Conference (NPHC), to sarcastically refer to the Aliso pictures as "communistic," when he met with the photographer on August 9, 1949.⁵⁹ Johnson chose not publish the controversial images. Whereas traditional public housing photography might have neglected the community building and nursery, these public spaces were crucial for the Aliso

⁵⁸ Ibid.

⁵⁶ "Meeting with Roy Stryker, Oct. 4, 1949. Box 13, Folder 14, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁵⁷ Ibid, 100.

⁵⁹ "Meeting with Lee Johnson, Director of National Public Housing Conference, Aug. 9, 1949." Box 13, Folder 12, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

Village pictures, since they formed the architectural background for a narrative of peaceful desegregation.

One picture was especially representative of Aliso's resident diversity (Fig. 3.17). It showed a black and white woman standing outside their respective apartments, in a shared public hallway on the apartment building's second floor.⁶⁰ Like Nadel's other photographs, the architectural space received little attention. Instead, the picture tightly framed the two women— who seemed to be in pleasant conversation—and the image suggested that they both lived in the same apartment building. This picture was radical, even for progressive cities that claimed to have desegregated their public housing. During the postwar period, some of the public housing projects in the U.S. were partially integrated, meaning that white and non-white groups occupied segregated buildings on the same site. Residents might share certain public amenities, such as parks, laundry, and community centers, but these were often segregated too, even if only informally. It was rare for neighborhoods to be truly integrated, with people of different races living in the same apartment buildings. For this reason, Aliso Village was an exceptional model for interracial living.

IV. Selling "Aliso Village"

Nadel imagined that "Aliso Village" might also appeal to multiple audiences. "The market for such an endeavor would be privately printed and distributed throughout the country by public service agencies, schools, and other educational groups. There is a secondary possibility that this positive theme would appeal to such magazines as *Ladies Home Journal*,

⁶⁰ Nadel, "Aliso Village" manuscript.

Today's Woman, and *Western Family*," wrote Nadel in his personal notes.⁶¹ Like FSA photographers, Nadel was a hired gun for a government agency and his willingness to recast his photos for different markets explained why he was able to traffic them so widely. The problem was that nobody took the bait.

On September 14, 1949, Nadel sought publishing advice from the photographer Edward Steichen.⁶² One decade earlier, Steichen had collected a number of FSA images for a special issue of *U.S. Camera Annual*.⁶³ It must have been exciting for Nadel to meet the famous photographer, especially given Steichen's recent appointment as the Director of the Photography Department at the Museum of Modern Art in New York. But the meeting soured quickly. Steichen criticized Nadel's pictures for their lack of drama, saying that they were "too cold and clinical." When Steichen's *The Family of Man* exhibition opened at MoMA five years later—it showed that the universality of humanity could be captured in extraordinary events, such as birth, love and conflict.⁶⁴

"Aliso Village" deterred the publishers of mainstream magazines because it was historically bounded and particular. It was not a place that could be generalized, since it evinced a specific politics of integration at midcentury. *Woman's Home Companion* claimed that the Aliso photographs would not appeal to their target audience, since the average reader wanted to

⁶¹ Nadel, "The Concept."

⁶² Nadel's notes from his meeting with Steichen on Sept 14, 1949, Box 13, File 13, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁶³ Edward Steichen, "The FSA Photographers," in U.S. Camera Annual 1939, ed. T.J. Maloney (New York: William Morrow, 1938), 43-66.

⁶⁴ Steichen's *The Family of Man* exhibition was shown at the Museum of Modern Art from Jan 24 – May 8, 1955.

identify with people in higher income brackets than their own.⁶⁵ Lifestyle magazines were supposed to be aspirational and readers imagined themselves owning homes, not renting apartments, or worse, living in public housing. *Ladies Home Journal* briefly considered the Aliso study for their 'How America Lives' column, but ultimately decided that the project's "interracial angle" was too didactic for its readers to stomach.⁶⁶

It is unclear whether Nadel consulted sociological texts in preparation for his Aliso Village study, but this literature became crucial in his quest for publication.⁶⁷ He received a list of prominent social scientists in the subfield of race relations from Dorothy Gazzalo, editor of the *Journal of Housing*, the magazine for public housing officials in the U.S. Gazzalo was unwilling to publish the Aliso photos herself, since she feared that they would alienate public housing officials in the South.⁶⁸ Instead, she recommended that he consult a number of American social scientists who published on the topic of race relations.

Robert Merton was one of these social scientists. Merton was interested in the ways neighbors coexisted in public housing, and he believed that the best way to study this was by assessing "tenant morale."⁶⁹ He identified "tenant morale" as a primary concern for the Bureau of Applied Research at Columbia University in 1944. Merton was arguably the first social

⁶⁵ Nadel's notes on *Woman's Home Companion* interview, c. 1950, Box 13, File 15, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute. Nadel's notes on *Ladies Home Journal* interview on Sept. 7, 1949, Box 13, File 13, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁶⁶ Ibid.

⁶⁷ In a 1951 exhibition of the Aliso photos in Los Angeles City Hall, Nadel reported that "research had to be done to get acquainted with the field of inter-racial living," but he did not comment on the specific literature consulted.

⁶⁸ Nadel's notes on Dorothy Gazzolo meeting, July 1949, Box 13, File 11, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁶⁹ Robert Merton, "A Proposed Research in Housing Communities," Nov. 15, 1944, Box 207, Folder 8, Robert Merton Papers, Rare Book and Manuscript Library, Columbia University.

scientist to study racially integrated housing, and he did so in order to understand a component of tenant morale: beliefs about one's neighbors.⁷⁰ He conducted interviews with the residents of Hilltown—a racially integrated public housing project in Pittsburgh—asking them if their experiences in the neighborhood proved or disproved earlier anxieties they held about the prospect of living in a mixed community.⁷¹

The Hilltown study responded to Gunnar Myrdal's well-known book *An American Dilemma*, which reported that between 77 and 87 percent of whites in the U.S. were in favor of residential segregation.⁷² Merton argued that Myrdal's statistics were misleading, "Myrdal made no effort to compare the attitudes of those whites who have actually lived in a bi-racial neighborhood and those whites who have not. [...] The Hilltown case challenges the assumption implicit in studies such as Myrdal's that pro-segregational attitudes can be appraised without concern for whether or not such attitudes are based on experience."⁷³ Merton believed that it was wrong to treat people's bigotries in a static way, ignoring how their attitudes might change in response to circumstances, especially legally imposed desegregation.

Merton's criticism captured a shift in the way social scientists talked about race in the postwar years. Social scientists had traditionally attributed white people's feelings of racial intolerance to an essentialist cause: the natural differences that distinguished the races.⁷⁴ But a new explanation for racial antipathy gained currency in the 1930s, when social scientists rejected

⁷⁰ Letter from Merton to Davis McEntire, April 26, 1957, Box 207, Folder 15, Robert Merton Papers.

⁷¹ Merton, "The Meanings of Hilltown for Negroes and Whites," unpublished paper, c. 1950, Box 215, Folder 6, Robert Merton Papers.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Jackson, Jr., *Social Scientists for Social Justice*, 10.

race differences and invoked the term "racial prejudice" to account for the social construction of intolerance.⁷⁵ Merton was part of a growing number of American social scientists that believed people's ideas about race were rooted in their experiences, as opposed to essentialist differences between ethnic groups.

Merton discovered that life in an integrated neighborhood, such as Hilltown, softened people's racist attitudes. He interviewed residents about their stance on segregation before-and-after moving into Hilltown apartments. Most of his respondents replied that they no longer feared racial mixing, since the "reality" of race relations in Hilltown was much better than what they had anticipated.⁷⁶ Merton used these responses to argue that integrated housing made it difficult for residents to maintain racial stereotypes. And his findings resonated with other contemporary studies, such as Samuel Stouffer's work for the U.S. Army Research Branch in which he discovered that white service men were more likely to be in favor of desegregating the armed forces if they had personal histories of close contact with African Americans.⁷⁷ But it was important that these studies visualized racial integration—or, the prospect of integration—in statistics, not in pictures.

Thus, Merton discouraged Nadel from publishing his Aliso photos in scientific literature.⁷⁸ He worried that photographs were a poor substitute for the scientific method, and was quick to point out that Nadel's project did not test a hypothesis or in any other way conform to established working methods in the scientific community. Moreover, Merton refused to help

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ See Joseph W. Ryan's *Samuel Stouffer and the GI Survey: Sociologists and Soldiers During the Second World War* (Knoxville: University of Tennessee Press, 2013).

⁷⁸ Nadel's notes on Robert Merton meeting, Sept. 12, 1949, Box 13, File 13, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

Nadel find publishers, since he feared that associating himself with such amateurism might interfere with the publication of his own research.

Merton was anxious to prove the legitimacy of his Hilltown study, and his insecurities shed light on the status of applied research in the postwar years. The scientific study of practical problems—such as housing—gained momentum during the 1940s when the federal government commissioned sociological research for the war effort.⁷⁹ Sociologists found themselves at the forefront of national discussions on urbanism, international relations, and family life, to name a few topics of major concern. But applied research was still a nascent subfield within a larger sociological discipline, and scientists worried that their new relevancy would be short-lived. In the previous decade, sociologists witnessed their discipline shrink. Sociologists did not play major roles in New Deal reforms, and membership in the American Sociological Association dwindled by twenty-five percent.⁸⁰ Nobody wanted to return to those unstable times, least of all Merton.

V. Picturing Peaceful Desegregation

Carey McWilliams responded to the Aliso photographs with enthusiasm. McWilliams was a Los Angeles journalist and lawyer who had taken a special interest in the problem of desegregating American neighborhoods. He exclaimed that the photographs were the "best job of its kind that [he] had seen," since the pictures "told a story more eloquently than words."⁸¹ In a letter to Nadel, McWilliams wrote that the photographs should be published immediately, since

⁷⁹ Craig Calhoun, "On Merton's Legacy and Contemporary Sociology," in *Robert K. Merton: Sociology of Science and Sociology as Science*, ed. Craig Calhoun (New York: Columbia University Press, 2017), 1 – 31.

⁸⁰ Ibid.

⁸¹ Letter from Carey McWilliams to Leonard Nadel, May 10, 1949. Box 13, Folder 9, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

they revealed "a most important segment of social life in transition."⁸² This was a subtle but important point. McWilliams praised the Aliso photographs because they illustrated the residents' successful transition from a segregated to a desegregated neighborhood.

Rental contracts occasioned this social transition. The Aliso rental agreements were unlike the contracts in other American public-housing projects. Nadel photographed white resident Bud Taggart signing a lease, in which he acknowledged the mixed race character of the neighborhood, and complied with management's rule that racial intolerance resulted in eviction (Fig. 3.18).⁸³ The staff photographers for local housing authorities did not normally capture residents signing rental agreements, but Nadel introduced this new subject because it illustrated the important concept of legally imposed desegregation. He captioned the photograph with Budd Taggart's reflections on moving to Aliso Village, "We didn't want to move here, but we haven't been sorry we did," he explained.⁸⁴ The photograph of Taggart signing the rental contract, along with captions recounting his initial misgivings about the neighborhood, reflected the emerging cultural belief that people's attitudes—including racist feelings—changed in conformance with new laws. This idea challenged historical court arguments in defense of legally imposed segregation.

The Supreme Court upheld segregation on the grounds that any law imposing desegregation would result in chaos. In 1867, the Court famously ruled in the *West Chester Railway Co. v. Miles* case to segregate all railway cars in order to keep the peace, reasoning that, "If a Negro take his seat beside a white man or his wife or daughter, the law cannot repress the

⁸² Ibid.

⁸³ Nadel, "Aliso Village" manuscript.

⁸⁴ Ibid.

anger or conquer the aversion which some will feel [...] The natural separation of the races is therefore an undeniable fact and all social organizations which lead to their amalgamation are repugnant to the law of nature."⁸⁵ The Supreme Court's opinion was based on the belief that laws could only be successfully imposed if they bore some likeness to existing social attitudes. Therefore, it followed that legally imposed segregation encouraged peace, since the "natural" differences between ethnic groups resulted in racial antipathy.

McWilliams recognized that recent developments in social science could overturn the myth that segregation prevented racially motivated violence. In the article, "Race Discrimination and the Law," McWilliams wrote that lawyers and social scientists should join forces to demonstrate that, "there is no reasonable relation between segregation, as a legal device, and the protection of the public peace, health and security."⁸⁶ He cited the writings of social scientist Louis Wirth, who had pioneered the study of racial prejudice in the 1930s.⁸⁷ Wirth defined racial prejudice as the product of cultural institutions, as opposed to natural instincts, suggesting that segregation laws actually created the racially motivated violence that they were supposed to restrict.

The recent race riots in Detroit were an example of the problems that social scientists had begun to associate with segregation. White rioters attacked the black citizens of Detroit and their houses from the evening of June 20 to the morning of June 22, 1943.⁸⁸ Historians have attributed the Detroit race riots to the competition for limited housing and defense industry jobs that

⁸⁵ Carey McWilliams, "Race Discrimination and the Law," *Science and Society*, Vol. 9, No. 1 (Winter, 1945): 17.
⁸⁶ Ibid. 21.

⁸⁷ Louis Wirth, "Segregation," Encyclopedia of the Social Sciences VII (1937): 643.

⁸⁸ Dominic J. Capeci Jr. and Martha Wilkerson, "The Detroit Rioters of 1943: A Reinterpretation," *Michigan Historical Review*, Vol. 16, No. 1 (Spring, 1990): 49-72.

deepened with the mass migration of African-American and White Southerners to the city in search of work.⁸⁹ Importantly, the riots took place in the segregated neighborhoods of Detroit, and stayed out of the racially mixed neighborhoods. McWilliams interpreted the uneven distribution of racialized violence in Detroit to legally imposed segregation, which, he argued, was "not an instrument of social order" but actually stoked the prejudiced attitudes that motivated racially-targeted violence.⁹⁰

The migration of defense workers to Los Angeles recalled the situation in Detroit. Nadel commented on the relationship between mass migration and prejudice, "The westward flow and flood of migration to Southern California [...] has brought with these migrants to Los Angeles the baseless fears, the groundless suspicions, misunderstandings and intolerances of one group for another."⁹¹ Whereas the mass migration of Southern workers escalated racial tensions in the segregated neighborhoods of Detroit, peaceful race relations existed in the desegregated Aliso Village despite similar migration patterns in Los Angeles. This contrast might explain McWilliams's enthusiasm for the Aliso photographs.

Nadel's writings shed light on his intentions for the Aliso manuscript. In his notes, Nadel described the project as an illustration of "how they [Aliso residents] learned to work and live together because they had to."⁹² Nadel wanted the Aliso photographs to show that residents respected desegregation laws, even if it required them to socialize with people whom they did not normally engage. "When varying racial groups, of the same economic level, are given the

⁸⁹ Ibid.

⁹⁰ McWilliams, "Race Discrimination and the Law," 20.

⁹¹ Nadel, "Aliso Village" manuscript.

⁹² "Leonard Nadel Notations." Box 9, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

opportunity to work together under a wholesome community program, they react and respond to it in a positive manner," he explained in the Aliso manuscript.⁹³ Nadel's statement responded to postwar integrationist strategies, which discouraged mixing people by race and class. This idea reflected the limitations of race studies in public housing, since these were one-class communities that could not speak to the ways people of different races and classes responded to legally imposed desegregation.

Several Aliso photographs emphasized conflict resolution. Pictures of the resident council illustrated the democratic means by which Aliso citizens came to agreements about local affairs. One photograph captured the monthly meeting of Aliso preschool mothers, which Nadel described as a group for "discuss[ing] mutual problems" (Fig. 3.19).⁹⁴ Conflict resolution was also the theme behind the most unusual photograph in the Aliso series (Fig. 3.20). It depicted two boys, one black and the other white, fighting in a front of a small group of onlookers. The accompanying caption read, "People have misunderstandings, disagreements and fights in Aliso Village as they do anywhere else [...] The new resident moving into Aliso Village does not shed his prejudice and racial bias at the front door."⁹⁵ Nadel went on to explain a specific argument between white and black neighbors, which was resolved by the Aliso management's Inter-developmental Council, a group that reported directly to HACLA. It was unheard of to depict violence in public housing photography, since these images were supposed to convince Americans of the benefits associated with these controversial places. But Nadel broke from the

⁹³ Nadel, "Aliso Village" manuscript.

⁹⁴ Ibid.

⁹⁵ Ibid.

conventions of public housing photography to create images that illustrated the means by which peaceful desegregation was accomplished in an integrated project.

Loren Miller referred to the Aliso photographs as "object lessons in democracy" in his introduction to Nadel's book manuscript.⁹⁶ Miller was a Los Angeles civil rights lawyer and personal friend of McWilliams. In 1942, Miller co-wrote the Aliso rental contract, which provided an important framework for legally imposed desegregation.⁹⁷ For Miller, Aliso Village was an object lesson in democracy because the community proved that legally imposed desegregation could happen peacefully, "a concrete reminder that men of diverse races and religions and ways of life can get along together if we have the vision and the will to clear out the underbrush and give them a chance to lead decent lives in decent homes," he praised.⁹⁸ The concept of diverse races "get[ting] along together" might have seemed trite, but Miller's words evoked a specific politics of desegregation at midcentury. As lawyers, Miller and McWilliams recognized that proof of peaceful desegregation could call into question the legal justification for segregation laws.

Southern California had already shown signs of the court's reversal of opinion on this issue. On March 2, 1945, five Mexican-American parents in Orange County filed a suit in federal district court protesting the segregation of their schoolchildren.⁹⁹ *Westminster v. Mendez* was an early example of civil rights lawyers collaborating with social scientists for the purpose of making an argument against segregation. Robert L. Carter contended that segregation did

⁹⁶ Ibid.

⁹⁷ "Meeting with Clarence Johnson (Regional E. Coast Race Relations Advisor for the Federal Housing Authority), Aug. 5, 1949." Box 13, Folder 12, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

⁹⁸ Loren Miller, introduction to "Aliso Village" manuscript, 1 - 2.

⁹⁹ Jackson, Jr., Social Scientists for Social Justice, 83.

psychological harm to children, even if school facilities were equal, and he looked to the writings of social scientists Myrdal, Richard Stenner, and Charles Johnson for evidence.¹⁰⁰ This came to be known as the "psychological damage" argument, which NAACP lawyers also used in the landmark *Brown v. Board of Education* case.¹⁰¹

McWilliams co-wrote the brief for the *Westminster* case, along with the Commission on Law and Social Action (CSLA). Established in 1945, CSLA encouraged collaborations between social scientists and lawyers for the creation of new law.¹⁰² McWilliams argued that the history of segregation legislation was premised on the belief that laws could not change social mores. In the brief, McWilliams referred to social scientists' findings that people did change their attitudes and behaviors in response to regulations for racial integration in public housing and workplaces. This legal argument for peaceful integration would also find its way into the *Brown* case in 1954.

Nadel was aware that Americans were calling into question traditional justifications for segregation. "Legislative acts, Supreme Court decisions, motion pictures, and the return of the veteran have brought this problem into public focus, thereby increasing the aspect of educational timeliness," he wrote in the Aliso manuscript.¹⁰³ McWilliams understood the photographs' significance for public education, but he had no advice about publication. Despite the "educational timeless" of the Aliso photographs, the pictures failed to secure an audience.

VI. Conclusion

¹⁰⁰ Ibid, 86.

¹⁰¹ Ibid, 157.

¹⁰² Ibid, 74.

¹⁰³ Nadel, "Aliso Village" manuscript.

Pictures of public housing had an established iconography that contrasted life before-andafter reconstruction. These pictures were all the more forceful when they juxtaposed slums with city halls, suggesting that government had a responsibility to provide decent housing. Local housing authorities across the country produced pictures that shared a visual vocabulary for representing the urban poor. The upshot was that readers knew how to interpret these pictures, since their iconography transmitted a familiar message.

On August 7, 1949, Nadel met with Louis Wirth to discuss his project.¹⁰⁴ Wirth was the Director of the American Council on Race Relations, and he was interested in publishing educational materials on the topic of integration. But Wirth had trouble seeing the Aliso project outside the conventions of public housing photography. He told Nadel, "that the study [should] introduce pictures of [the Aliso] area before development," meaning that he wanted the photographs to capture the familiar before-and-after narrative of slums followed by public housing.¹⁰⁵ Wirth's suggestion demonstrated the difficulty of understanding the Aliso pictures outside established norms for picturing public housing.

The Aliso photographs were not entirely different from representations of public housing in other cities, but they were strange enough to merit caution. The photographs were too radical for mainstream journalism, since editors shirked at their political implications. Public housing was already a contentious topic at midcentury, not to mention a racially integrated one. Even Gazzolo found the photographs objectionable, explaining that she could not publish them in the *Journal of Housing* because they might offend housing authorities in the South.¹⁰⁶

¹⁰⁴ "Dr. Louis Wirth, Aug. 7, 1949," Box 13, Folder 12, Series II.B, Aliso Village, 1948-1994, Leonard Nadel Collection, Special Collections, Getty Research Institute.

¹⁰⁵ Ibid.

¹⁰⁶ Nadel's notes on Dorothy Gazzolo meeting, July 1949.

Given Merton's research in race relations, it was surprising that he rejected the Aliso photographs too. Merton's scholarship on race relations was influential during his time. His research (including the Hillside study) was one of three sociological studies submitted to President Truman's Civil Rights Committee in 1947, which recommended progressive legislation that included the desegregation of the federal workforce and the armed services.¹⁰⁷ In addition, Merton contributed to the social science briefings for the landmark U.S. Supreme Court case, *Brown v. Board of Education* case in 1954.¹⁰⁸ Merton's sociological research was influential because it calmed the widespread fear that integration inevitably resulted in violence.

But Merton was disinterested in photographic evidence when it came to making the case for desegregation. This was not uncommon in the scientific community. In reflecting upon his work with the FSA, the photographer John Collier wrote that the anthropological value of photography was mostly untested in the 1940s.¹⁰⁹ Cultural anthropologists were wary of photographs because they seemed to produce too much meaning, which is to say that the picture's meaning(s) were in excess of the anthropologist's intended message. In order to make their claims, social scientists and anthropologists believed that they needed to isolate variables and close down meaning. Photographs were just too unwieldy for this work.

But why did civil rights lawyers accept the Aliso photographs when social scientists did not? Unlike civil rights lawyers, social scientists were supposed to be apolitical, nonpartisan observers of society. Their participation in civil rights litigation exposed social scientists to accusations of political bias, and threatened the legitimacy of their research. Merton responded

 ¹⁰⁷ Letter from Robert Merton to Roger Straus, Sept. 29, 1954, Box 207, Folder 8, Robert Merton Papers.
 ¹⁰⁸ Ibid

¹⁰⁹ John Collier, *Visual Anthropology: Photography as a Research Method* (New York: Holt, Rinehart and Winston, 1967; Albuquerque: University of New Mexico Press, 1986).

by tightening the criteria for legitimacy in his tenancy studies, and rejecting research that did not conform to a strict frame of competence. McWilliams and Miller left questions of objectivity to the social scientists, and instead sought arguments for desegregation that were compelling. Photographs were lively, animated and emotional—the power of photography resided in the claims it made on people's feelings. McWilliams and Miller praised the Aliso photographs for being "exciting," and telling a story "more eloquently than words."

Nadel's pictures evinced a specific theory of race relations that emerged in the postwar era. His photographs and text argued that legally imposed desegregation enacted racial tolerance. This message was supposed to reassure Americans that peaceful desegregation was possible. But the images were not reassuring to many Americans. Nadel pictured an integrated community that many Americans were unwilling to see, and in doing so, he illustrated a problem for democracy.

Chapter 4: Against the Minimum House

In July 1950 *Life* magazine published photographs of a model house that had no roof and low walls. *Life* photographed the house from a bird's eye view, which permitted an unobstructed glimpse into its interior spaces (Fig. 4.1).¹ The low walls and missing roof meant that the house had no architectural style. "Oscar Stonorov is far more concerned with the interior design of the home than with its exterior," read the *Life* article.² Philadelphia architect Stonorov built the house as an advertisement for the Gimbel Furniture Corporation, which had a flagship store in his city. In photographing the house from an aerial perspective, *Life* created a totalizing view of Gimbel furniture in the living room, dining room and bedroom. But the house's missing roof and façade functioned as more than just a sales gimmick for the Gimbel Corporation. Pictures of the *Life* house suggested that architectural style mattered little compared to ways in which architects used walls, partitions and furniture to maximize the spaciousness of interiors (Fig. 4.2).

The "House for Family Living" was bigger than most postwar houses advertised in lifestyle magazines. It had four bedrooms, a large living room, dining room, a combination kitchen-playroom, and plenty of room for storage. Whereas most postwar magazines offered advice on how to stretch the limited space in small houses, *Life* argued that nearly every American family needed a large house in July 1950.³ That is, they needed it during the family's "peak years," the stage in which growing children occupy the most household space. With nearly 1,700 square feet of space, the House for Family Living more than doubled the 800-square-foot

¹ "House for Family Living," *Life* magazine, July 1950, 40-44.

² Ibid.

³ Ibid.

houses that dominated the housing market at midcentury. In promoting the large model house, *Life* argued that smaller houses did not meet the psychosocial needs of individuals, especially children. But how did one measure the psychological effects of houses?

The *Life* house was the product of tenancy studies that informed ways that people talked about postwar residential architecture in the United States. Historians have overlooked these studies because they did not generate a particular architectural style nor did they develop in any single architecture school. In Chapter 1, I traced these tenancy studies to the PWA architects Stonorov and Stein, who designed surveys for prospective residents in an effort to better understand their physical and psychological needs. I followed these tenancy studies to the School of Architecture at MIT in Chapter 2, which discussed the ways architects and social scientists conceptualized the relationship between community planning and neighborliness. Generally speaking, architects were interested in the psychological effects of building design and they increasingly looked to social science for answers between 1935 and 1950. But architecture's effects on people's mental and emotional lives.

The *Life* house was an exception to this rule. Stonorov credited the house's design to a new social theory of family development first put forward in public housing literature.⁴ This theory proposed that family development occurred in distinct stages, and that each stage involved different demands on the family's time, money and space. An illustration of the life cycle of U.S. marriage pictured several stages of family development—toddlers, children, teenagers and young adults—around a schematic drawing of a house (Fig. 4.3). The House for Family Living responded to the family's social and psychological needs during its "peak" stage of development,

⁴ "House for Family Living," 40-44. Stonorov attributed this theory of family development to the Conference on Housing for Family Living in November 1946.

when teenage children competed with parents for limited space in the common areas of the house.⁵ In providing a spacious living arrangement, the House for Family Living satisfied the psychological need for privacy among teens and adults. Although the issue of privacy might seem unremarkable, it was a major component of the new tenancy surveys, which architects and social scientists deployed in their attack on the postwar minimum house.⁶

The minimum house was the result of scientific efforts to produce low-cost houses suitable for most families in the United States.⁷ As I discussed in Chapter 2, technicians at the Pierce Foundation studied household activities in order to arrive at the best arrangement of furniture, equipment and individual rooms in a small house.⁸ Founded in 1931, the Housing Research Division of the Pierce Foundation commissioned social scientists to conduct special studies of small houses.⁹ These studies were then used to determine the square footage of the prefabricated houses that the Pierce Foundation built as experiments in new materials and methods of manufacture.¹⁰

Gutheim, Houses for Family Living.

Svend Riemer and N.J. Demerath, "The Role of Social Research in Housing Design," *Land Economics*, Vol. 28, No. 3 (Aug., 1952): 230-243.

C.E.A. Winslow, "Health and Housing," in *Housing for Health: Papers Presented Under the Auspices of The Committee on the Hygiene of Housing of the American Public Health Association* (Lancaster, Penn.: The Science Press Printing Company, 1941).

⁷ For an excellent history of the minimum house, see Hise, *Magnetic Los Angeles*, 56-85.

⁸ Ibid, 62-63.

⁵ Ibid.

⁶ F. Stuart Chapin, "Effects of Slum Clearance and Rehousing on Family and Community Relationships in Minneapolis," *American Journal of Sociology* 43 (March 1938): 744-763.

⁹ John B. Pierce, a vice President at American Radiator Company, founded the Pierce Foundation in 1924 as a research institution.

¹⁰ Burnham Kelly, *The Prefabrication of Houses* (Cambridge, Mass., and New York: Technology Press of MIT and Wiley Corp., 1951), 31.

Public sector initiatives encouraged builders to produce an affordable minimum house suitable for the average American family. In response to the postwar housing crisis, the Federal Housing Administration (FHA) offered generous subsidies to builders who constructed modestly priced minimum houses for a middle-income market. In an effort to control the quality of postwar building, the FHA required builders to construct dwellings no smaller than 800-squarefeet, but some housing advocates complained that these minimum requirements often became maximum standards.

The minimum house has received some attention in architecture scholarship. Greg Hise pioneered the history of minimum houses, tracing the development of minimum house standards in laboratories and their modification in residential developments.¹¹ Recently, James Jacobs discussed the national shift from building minimum houses in the immediate postwar years to the dominance of larger houses in the residential developments of the 1950s and 1960s.¹² Jacobs recounted some of the frustrations that Americans expressed about minimum houses to explain the emergence of larger houses better able to suit the "casual living" ideal, that is, informal domestic environments that permitted some flexibility in the arrangement of household activities.¹³

In this chapter, I dig deeper into anti-minimum house literature. I tell the story of minimum house criticism, which centered on the threat these small houses posed for the mental health of American families, tracing its development in professional circles and its dissemination

¹¹ Greg Hise, *Magnetic Los Angeles: Planning the Twentieth-Century Metropolis* (Baltimore: Johns Hopkins University Press, 1997), 56-85.

¹² James A. Jacobs, *Detached America: Building Houses in Postwar Suburbia* (Charlottesville: University of Virginia Press, 2015).

¹³ Ibid, 133-168.

in popular culture. I point to criticism of the minimum house because it mobilized a socioarchitectural language—premised on promoting awareness of architecture's psychological effects—that changed the ways people imagined and talked about the residential environment.

Housing experts attacked the minimum house between 1946 and 1950. Architects worried that minimum houses were too small for the average-sized American family and resulted in overcrowding.¹⁴ Social scientists claimed that these overcrowded houses threatened the individual's emotional well-being, and disrupted children's psychological development. Domestic scientists interpreted this professional criticism of the minimum house for a general reader, and disseminated it through mainstream magazines and national conferences. The *Life* house was much bigger than the minimum houses that dominated postwar residential building between 1940-50. In designing against overcrowding, the *Life* house offered an alternative to the minimum house market and its perceived threat to the stability of American family life.

I. Houses in Lifestyle Magazines

During the postwar era, *Life* and other popular magazines instructed Americans to prioritize a house's footprint over its architectural style. This was common wisdom in *Ladies Home Journal*, which ran a number of articles on the topic of single-family house design between 1944 and 1945. "The postwar house will be planned from the inside out. Instead of trying to force adequate living quarters into a Cape Cod or so-called Colonial shell, the living quarters, in their best arrangement, will determine the outward form of the house. Houses will be built and bought on the basis of livability—and it is about time," wrote *LHJ* architectural and

¹⁴ Gutheim, Houses for Family Living.

garden editor Richard Pratt.¹⁵ Pratt instructed Americans to evaluate the household space required to perform their daily tasks efficiently, or to "plan from the inside out," which was really a popular spin on the modernist architect's "form follows function" mantra.¹⁶ Such close analysis of building footprints was unnecessary for people who lived in large houses, but the mass production of small houses in the postwar years demanded that new homeowners more carefully analyze their limited space in order to make the most of it.

The "modern" dwellings built after WWII tended to be small. Of course, this is not how they were advertised. Tract housing in suburbs and public housing in cities were modern because they had utilities: water, gas, electricity, telephone, and sewers. These buildings were also modern in appearance, meaning that they had plain facades that lacked ornament. Although this was rarely stated explicitly, life in modern dwellings also meant fitting children and belongings into tight living quarters. Tract houses in Levittown were only 800 square feet. Although residential buildings in public housing projects were growing taller in the 1950s—for example, the apartment towers at Pruitt-Igoe in St. Louis and Cabrini Green in Chicago—the apartment units themselves had small footprints. Many of these individual apartments had fewer square feet than the slum tenement units that they replaced. Although Americans understood private housing as superior to public housing, the problem of limited space was a common phenomenon that attracted the attention of experts interested in private and government housing during the postwar years.

Lifestyle magazines have historically taught homeowners to make the best use of limited space. In analyzing house footprints, readers learned to identify traditional methods of

¹⁵ Richard Pratt, "Practical Plans for the Postwar House," *Ladies Home Journal* (May 1944): 159.

¹⁶ The architect Louis Sullivan famously coined the phrase "form follows function" in his essay, "The Tall Office Building Artistically Considered," originally published in *Lippincott's Magazine*, March 1896.

homebuilding or housekeeping that were outdated, impractical, or otherwise undesirable.¹⁷ For example, *Ladies Home Journal* instructed readers to re-consider the necessity of their dining rooms in January 1919. "The present dining room is the most unthrifty and downright useless room in the house. It is a room that is occupied not to exceed two hours a day; it demands relatively the most expensive furniture in the house—buffets, sideboards and 'China cabinets' [...] But such a display is not good taste today, so why all that furniture designed for no other purpose?"¹⁸ Popular criticism of dining rooms was rooted in the belief that most twentieth-century women did their own cooking and cleaning without the help of servants. Dining rooms were better suited for women of the previous century, who had fewer problems acquiring live-in servants and part-time domestic assistance.¹⁹ In this way, *Ladies Home Journal* identified the house as an important topic for consumer education since they alleged that most houses preserved antiquated ways of living.

The editors of lifestyle magazines aspired to offer expert and unbiased advice in their model-house articles. Some editors believed that the prospect of selling model houses compromised the house's value as an educational tool, since the house could not offer neutral instruction in homebuilding or housekeeping if the ultimate goal was to make a sale. The architectural editor A. Raymond Ellis eschewed the question of sales when he first designed model house plans for *Woman's Home Companion* between 1906 and 1922.²⁰ Ellis was adamant

¹⁷ Sandy Isenstadt, *The Modern American House: Spaciousness and Middle Class Identity* (New York: Cambridge University Press, 2006).

¹⁸ George H. Barrington, "The Home without a Dining Room," *Ladies Home Journal* 36 (Jan. 1919), 66, Ladies Home Journal Collection, Special Collections, New York Public Library.

¹⁹ David M. Katzman, *Seven Days a Week: Women and Domestic Service in Industrializing America* (Oxford University Press, 1978).

²⁰ A. Raymond Ellis, "A Group of 'Companion' Houses Built by 'Companion' Readers from Plans Designed by A. Raymond Ellis," *Woman's Home Companion* (Nov. 1923): 70. Special Collections, New York Public Library.

that the plans were not intended for public sale; rather, readers were supposed to use them as "guidance in formulating plans of their own."²¹ But *Woman's Home Companion* started selling the model house plans in January 1922, and the magazine advised readers to contact its housebuilding department if they wished to purchase the newly available plans.²² When model house plans were sold, the decision to market these plans was often attributed to consumer demand, as when *Woman's Home Companion* claimed that Ellis received over 18,000 inquiries for house plans from readers around the globe.²³

The prospect of prefabricated houses ratcheted up publications on homebuilding during the depression years.²⁴ Industrially produced dwellings were regularly featured in magazines for professional builders, such as *Architectural Forum*, *Architectural Record*, *Real Estate Record*, *Building Reporter*, and *Building Product News*. This new fascination with prefabricated houses was not limited to professional builders. "The women's magazines are more home conscious than ever, even to the extent of supplying readers with blueprints of "model" houses," wrote *Architecture Forum* editor C. Theodore Larson in 1937.²⁵ Although nearly all houses had prefabricated parts, most people interpreted "prefabricated houses" to mean factory built or quickly assembled with large factory made parts. Popular interest in these houses only intensified after WWII as Americans anticipated a postwar building boom. *Ladies Home Journal* featured model houses in nearly every issue of the monthly magazine in 1944 and 1945. Articles titled

²⁵ Ibid, 382.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ C. Theodore Larson, "Packaged Houses," *Survey Graphic*, Vol. XXVI No. 7, July 1937, 377-382. C. Theodore Larson Papers, Bentley Historical Library, University of Michigan, Ann Arbor.

"The House Planned for Peace" and "A Home for the Veteran" encouraged readers to expect homeownership in the postwar years, when prefabrication promised to produce low-cost houses available to all.²⁶

Some popular magazines in the United States made it their goal to prepare readers for a new era of mass housing production and this meant disabusing them of outdated cultural values. Chief among their concerns was the importance Americans ascribed to architectural style. In *Ladies Home Journal*, Pratt advised readers that traditional house facades were a thing of the past. "Period styles, as we know them, will give way to simple, attractive designs in which modern building methods and materials will be the determining factor, due to practicality and cost."²⁷ Pratt directed reader attention to the interior arrangement of household space—as opposed to the building's façade—but the magazine's colorful pictures of house facades told a different story. Photographs of ranch houses with large windows and attached garages illustrated *Ladies Home Journal* in the postwar years and communicated to readers that architectural style remained a concern, even if Pratt downplayed its importance in his articles.

Life magazine went a step further in its dismissal of architectural style. Whereas most popular magazines showcased house elevations and allotted minimal space to building footprints, *Life* used aerial photography to make the interiors of the House for Family Living into the main event: a two-page, full-color spread. Photographs of the model house built in the suburban neighborhood of Chester County, Pennsylvania, attested to the skill and speed of the builders. But given the totalizing perspective of the bird's eye view, *Life* worried that readers would confuse the house with a scale model so they clarified this in their article. "The unique edifice

²⁶ Richard Pratt, "The House Planned for Peace," *Ladies Home Journal* (Jan 1944): 54-59, and Pratt, "A Home for the Veteran, *Ladies Home Journal* (May 1945): 146-147.

²⁷ Richard Pratt, "Practical Plans for the Postwar House," Ladies Home Journal (May 1944): 159.

[...] is no scale model but a full-size house containing living people and real furniture –although its walls are only three feet high," *Life* reported.²⁸ Since the style of the House for Family Living was ambiguous, architect Stonorov instructed readers that they could adapt the design for a "colonial, ranch, or even a stark modernist house."²⁹ His message was that the house's style mattered little when it came to accommodating a family: what mattered was the organization of rooms and the choice of Gimbel furniture.

Stonorov pitched his idea to *Life* magazine as a "sociology treatment" of a model house that would double as an advertisement for Gimbel Bros. Corporation.³⁰ Popular magazines and newspapers often built models houses using free materials and services from furniture and paint companies who jumped at the opportunity to advertise their brand in print. Stonorov had already collaborated with Bernard Gimbel to furnish several prefabricated model houses, which were featured in the *New York Times, Herald Tribune,* and *World Telegram.*³¹ Thus, Stonorov again turned to Gimbel for free furniture when *Life* informed the architect that they would publish his model house and the sociological ideas behind its design. The House for Family Living blurred the lines between advertising and consumer education, and this slippery distinction was a hallmark of the model houses featured in lifestyle magazines despite the publishers' insistence on unbiased and neutral content.

²⁸ Ibid, 41.

²⁹ Ibid.

³⁰ Letter from John Dille to Oscar Stonorov, July 21, 1948. Box 28, Folder 4, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

³¹ Letter from William H. Harman Corporation [prefabricated house developer] to David Aarons [director of publicity at Gimbel Brothers], Dec. 4, 1947. Box 28, Folder 1, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

Ladies Home Journal helped readers to recognize the benefits that standardized houses held for the postwar housing landscape. Pratt especially wanted readers to know that prefabricated houses were compatible with the homeowner's desire for flexibility and individuality. He assured Ladies Home Journal readers that the "bugaboo of sameness and rigidity" that people associate with prefabrication would be eliminated by sectional-unit-systems, which he explained as a kind of modular housing in which the standardized dimensions of rooms made it easy to expand or contract one's house.³² "The house can begin at honeymoon size, with abbreviated living room, separate from dining [room] by double prebuilt fireplace; then kitchen, laundry, heater, bath and a bedroom that can later be changed to children's cubicles. Additions then are simply and inexpensively made, as shown, with standard-size and interchangeable sections [...] The house is easily expandable from young-couple to full-family size."³³ Pratt preached that the best houses were flexible ones, with rooms that could expand or contract to accommodate a family's changing needs. This was one of the benefits of standardized component parts. According to this logic, it mattered little if the average postwar house was small, since its modular design permitted expansion in accordance with increases in family size and budget.

Many of the postwar houses shown in lifestyle magazines had roughly the same number of rooms. They were usually single-story houses with three bedrooms, a living room, a dining room, a kitchen and one or two bathrooms. In the article, "How Much House for Your Money," Stonorov told *Mademoiselle* readers that houses built for the middle-income market had

³² Richard Pratt, "The House Planned for Peace," Ladies Home Journal (Jan. 1944): 54-59.

³³ Richard Pratt, "Every Family's Right," Ladies Home Journal (Sept. 1944): 36-37.

negligible variations in their plan, and were "essentially the same house."³⁴ The only difference was that houses at the higher end of the market had bigger rooms. Whereas the person with a \$4,000 income could purchase a 1,100 square foot house, Stonorov estimated that this same house footprint could be expanded to 1,594 square feet to give "more elbow room" to the person with a \$7,000 income. He also advised readers to be cautious of houses measured in cubic feet, since the added dimensions of a high ceiling did not translate to roomier living spaces. In his writings for lifestyle magazines, Stonorov explained that postwar houses for the middle-income market had negligible differences in style and plan. So he encouraged readers to evaluate houses on the basis of spaciousness.

Spaciousness was a popular solution to the problems faced by midcentury American families. In his article for *Life*, Stonorov reported that the House for Family Living was the product of "research on the changing modes of family living in America."³⁵ He went on to describe the research findings from the Conference on Housing for Family Living, which was held at Rye, New York on November 7-9, 1946. The conference attracted specialists in the fields of sociology, architecture and pediatric medicine, since it provided a platform for sharing tenant research in the complex field of housing. Participants associated the lack of space in postwar American houses with numerous psychological problems, including regressions in children's personality development. When Stonorov designed the House for Family Living, he claimed that the inspiration for his model house came from the Rye conference.

II. The Conference on Housing for Family Living

³⁴ Oscar Stonorov, "How Much House for Your Money," *Mademoiselle* (Jan. 1946): 172-173, 271. Box 38, Folder 13, Oscar Stonorov Papers, American Heritage Center, University of Wyoming.

³⁵ "House for Family Living."

Stonorov spread the word in the architecture community that the Conference on Housing for Family Living would be held in Rye, New York, on November 6-10, 1946.³⁶ It is unknown how Stonorov first met Catherine Lansing Oats, who asked the architect to help organize the conference, but Stonorov's demonstrated interest in social science may have been a factor.³⁷ The conference was supposed to bring together experts in design and science to consider everyday domestic problems, especially minimum houses. Oats volunteered for the newly established Woman's Foundation, which was supposed to "preserve the American way of life" by offering expert advice to homemakers during the uncertain postwar years.³⁸ This technocratic approach to domestic problems shaped the Woman's Foundation's first major event, The Conference on Housing for Family Living.

It was strange that a man established the Woman's Foundation in 1945. But the oddity of a man at the helm of the Woman's Foundation was less remarkable to people acquainted with James M. Wood. Wood had spent his career as the president of Stephens College, a women's college in Columbia, Missouri. During his tenure, Wood transformed Stephens College from a rural school to one of the top names in women's post-secondary education. He attributed the growth of Stephens College to changes in the school's curriculum, which was redesigned to "meet the actual problems [women] encounter in home, community and vocations."³⁹ For example, Stephens College retooled their economics program to focus on the discerning consumer. In discussing the new curriculum, Wood stated that women needed a "sound sense of

³⁶ "Letter of invitation to the Conference on Housing for Family Living," October 4, 1946, Box 27, Folder 6, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

³⁷ See Chapter 1 for Oscar Stonorov's work with social scientists.

³⁸ "New Group Set Up to Assist Women," *The New York Times*, March 3, 1945, 26. The trustees for the Woman's Foundation included public officials, industrialists, financiers, and several presidents of American colleges.

³⁹ "Stephens College Honors its Builder," The New York Times, May 30, 1937, 26.

values" since they were the primary consumers in their households.⁴⁰ Stephens College geared women's education toward practical application in daily living, and this meant sharpening student skills in fields that were already female-dominated, such as homemaking and childcare.

Upon his retirement from Stephens College, Woods established the Woman's Foundation in New York City. On March 2, 1945, the trustees released a public announcement, "that the foundation was established in the belief that the promotion of the welfare of the home and family is the most effective means of ensuring the preservation of the American way of life."⁴¹ Their mission was to educate women about the latest solutions for the problems most troubling postwar American families.

One of these problems was the small house. The sociologist Lawrence K. Frank directed the first meeting of the Woman's Foundation, which included a team of experts in pediatrics, home management and community relations. In March 1945, they discussed issues related to house design and maintenance at Westchester Country Club in Rye, New York. Given the architectural nature of their problems, conference attendees decided that the next meeting should include the architects, builders and manufacturers responsible for constructing "our homes of tomorrow."⁴² The Woman's Foundation consulted the architect Stonorov for his help preparing the group's next big meeting, The Conference on Housing for Family Living.

Stonorov circulated invitations to interested architects and other housing professionals in October 1946.⁴³ He wrote letters to men and women who had published housing literature,

⁴⁰ Ibid.

⁴¹ "New Group Set Up to Assist Women," The New York Times, March 3, 1945, 26.

⁴² Women's Foundation letter of invitation from Nell P. Hutchinson (Assistant to the President), October 4, 1946. Box 27, Folder 6, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

⁴³ Letter from Virginia Jones to Oscar Stonorov, October 4, 1946, Box 27, Folder 6, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

including the Chicago government officials Elizabeth Wood and Herbert Emmerich. Bauer was an especially important author, since she was interested in the problem of applying social research to house design.⁴⁴ Next on Stonorov's invitation list were architects who shared his commitment to affordable housing: Henry Wright, Elizabeth Coit, Joseph Hudnut and Robert Mitchell. The letter of invitation underlined the importance of coordinating science and design to solve America's housing crisis: Stonorov's name (along with the caption "architect") appeared second on the list of conference planners, right below the name of the sociologist and conference chairman Frank.⁴⁵

The Conference on Housing for Family Living had broad objectives, but Stonorov interpreted them narrowly in his letters of invitation to friends and colleagues. Whereas official conference invitations promised to examine the house's "effectiveness for family living in terms of the many needs and functions of family life today and tomorrow," Stonorov's personal letters identified minimum house standards as the subject of the conference.⁴⁶ He believed that the sociological concerns expressed by Frank and others promised to "arrive at an entirely new and fresh formulation of 'American minimum standards' quite different in character, because of their derivation [social science], from the ones used in our housing lingo in the past."⁴⁷ Stonorov believed that the minimum house standards dictated by the Federal Housing Administration were

⁴⁴ Besides her work as the director of the Chicago Housing Authority, Elizabeth Wood was also the editor of the *Journal of Housing*, the national public housing publication. Herbert Emmerich was chairman of the governing board of the Public Administration Service in Chicago (1945-1954), and served as the director of the Public Administration Clearing House, also in Chicago (1945-57).

⁴⁵ "Letter of invitation to the Conference on Housing for Family Living," October 4, 1946.

⁴⁶ Ibid.

⁴⁷ Stonorov's letters of invitation to Henry Wright, Catherine Bauer, Herbert Emmerick, Robert Mitchell, Elizabeth Coit, Joseph Hudnut, Elizabeth Wood, Samuel Radbill, and James Johnson Sweeney, October 7, 1946, Box 27, Folder 6, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

too severe, and looked to social science for a means to prove that these small houses had damaging psychological effects.

Oats bridged the worlds of social science and architectural design at the Conference on Housing for Family Living. Oats was a recently retired public housing official in New York, and she devoted her energies to planning the conference with Frank and Stonorov.⁴⁸ They decided that conference participants would attend six different workshops—child care, home management and equipment, costs and budgets, community relations, family relations, health and nutrition—during the four-day event, held November 6-10, 1946. There was no "architecture" committee because the organizers wanted the architects in attendance to grapple with the social questions put forward by housing research before proposing design solutions. This was familiar territory to public housing officials, who researched population demographics before slum clearance and then made plans with architects for urban renewal. Oats wrote the first draft of a manuscript on the conference proceedings and then handed it off to Frederick Gutheim who would be the principal author.

Gutheim was an architecture journalist with previous experience in federal housing offices. Gutheim was the housing editor for the *New York Herald Tribune* between 1947-50, where he published articles in favor of expanding federal public housing programs.⁴⁹ Before his work at the *Tribune*, Gutheim served in administrative positions at the U.S. Housing Authority and the National Housing Agency, and these experiences enabled him to sort out the

⁴⁸ "Catherine L. Oats of Housing Agency," *New York Times*, August 14, 1969, 35; Letter from Virginia Jones (Assistant to James Wood, President of Woman's Foundation) to Oscar Stonorov, June 19, 1946. Box 27, Folder 4, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

⁴⁹ Frederick Gutheim Resume, Box 2 (unprocessed), Frederick Gutheim Papers, Avery Library, Columbia University, New York.

complexities of federal housing legislation for the general reader.⁵⁰ Gutheim had turned his interests in architecture and public education into a professional career in journalism, so he was an obvious choice for authoring a book manuscript based on the housing conference proceedings at Rye. It was also important that Gutheim's architecture journalism facilitated his correspondence with likeminded architects who shared his commitment to affordable housing in the United States. When the Woman's Foundation commissioned Gutheim to write a book based on the Rye conference, he solicited the help of sociologist Frank as well as the architects Stonorov and Hudnut to serve on the editorial committee.⁵¹

Hudnut believed that the modern family was fundamentally different from those of earlier generations and architects needed to know this if they were to design suitable houses.⁵² Hudnut was the Dean of Architecture at Harvard University, and many of his public lectures focused on recent changes in family life, especially the new relations between family and community occasioned by urban neighborhoods. This same concern carried over into his writings for the Woman's Foundation, in which Hudnut told readers that "no human institution has changed so widely [as the family] and none in our day is changing so rapidly."⁵³ These words introduced Hudnut's essay, "The Changing Pattern of the Family," which he submitted to Gutheim as an introduction to the Woman's Foundation book manuscript.⁵⁴ In that essay, Hudnut outlined a

⁵⁰ Ibid.

⁵¹ See "acknowledgments" in *Houses for Family Living*.

⁵² Joseph Hudnut, "The Changing Patterns of the Family," May 7, 1947, Box 38, Folder 8, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

⁵³ Ibid.

⁵⁴ Ibid.

history of family life in the United States, which he described as a slow march towards the independence and self-actualization of women and children.

Hudnut described frontier settlement as the first episode in the history of the American family.⁵⁵ "In that cavalcade the family, not the individual, was pioneer, and [...] men and women together cleared the land, put up the first rude shelters and established along the savage frontier the way of life formed in the white security of New England towns."⁵⁶ The farm family was an economic institution that brought husband and wife into a business partnership that informed their decisions, most importantly, the decision to birth multiple children for the purpose of enlisting them as free laborers. For Hudnut, the emancipation of women and children from the nineteenth century.

Families living in cities adapted to a "machine economy," which transformed gender relations in the household.⁵⁷ The shift from farming to wage labor had no greater impact than on the American women who sought work opportunities outside the home. Young women no longer looked to marriage as their only means of financial support. Moreover, machines had replaced some of the work that rural women had done at home: food, clothing and medicines could be bought cheaply in the city. Hudnut claimed that women's work as wage laborers had made a new, democratic family life possible. "Democracy, born in the market place, entered the home

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

through the door opened by women," wrote Hudnut.⁵⁸ Whereas the agrarian economy gave rise to the patriarchal family, the machine economy made possible the modern democratic family.

The hallmark of the democratic family was the new liberty granted to children. During the twentieth century, Americans witnessed the expansion of children's rights under the law. Compulsory school attendance and restrictions against child labor shifted the responsibility of child protection from the family to the state. Changes in cultural practices also resulted in new freedoms for children; for example, loosened restrictions on teenage dating enabled many girls to choose their own suitors. Given recent transformations in family life—from the working mother to the state-educated child—the purpose of the American family had become unclear. But Hudnut reassured his readers that families still played an important role in nurturing the emotional lives of individuals, especially children. "We must treat our children as personalities, giving them as they develop the greatest possible liberty," concluded Hudnut in his introduction.⁵⁹

Gutheim chose not to include Hudnut's introduction in his book, *Houses for Family Living*, but he agreed with the architect's basic premises. Namely, Gutheim shared the view that American families had changed with the shift from agrarian to urban life in one especially important way: the economic incentive to have children had been replaced with an emotional one. "The family is the unique producer of the generation of tomorrow, and the major influence in forming the personality of our future citizens. This today is the family's primary reason for being," wrote Gutheim.⁶⁰ This definition of the modern family reflected the writings of

58 Ibid.

⁵⁹ Ibid.

⁶⁰ See "introduction" in *Houses for Family Living*.

sociologist Ernest Burgess, who argued that the American family's principal function was to promote emotional relationships and nurture children's personalities.⁶¹ This idea crept into Gutheim's housing literature, which argued that a family's psychological health depended on their environment. But how could houses be made to better serve the emotional needs of modern families? This question moved Gutheim to write *Houses for Family Living*.

III. Toward a Natural History of Family Living

Houses for Family Living taught readers to be concerned with more than their physical security in the home. Gutheim wrote that house designers in the last century had developed accepted standards for keeping out the weather and protecting families from intruders. But these standards did not go far enough. If the modern family's primary function was to "form the personality of future citizens," then houses needed to do more than just ensure physical safety.⁶² For Gutheim, the solution was to adopt new standards for house design "based on advances in medicine, psychology, home economics, family relations, and other sciences."⁶³ But what would these standards be?

Gutheim outlined four stages of family development with corresponding guidelines for house design. He wrote that the average marriage was forty years, and that the typical family passed through four stages of development during this period. The "early years" of marriage lasted between one and three years, or until the first baby was born. These young couples tended to live in apartments where they began to acquire the furniture and other belongings required to

⁶¹ Ernest W. Burgess and Harvey J. Locke, *The Family, from Institution to Companionship* (New York: American Book Company, 1945).

⁶² Gutheim, Houses for Family Living, 9.

⁶³ Ibid, 6.

furnish a house. The next ten to fifteen years were the "crowded years" of family life, when three children (the national average) were born. This stage involved the movement of the family into a small house where they could more comfortably accommodate growing children and nursery equipment. During the "peak" stage of development, children became teenagers and crowded out adults from the common spaces of a small house. Since Gutheim calculated that a family's peak years corresponded with their highest annual income, he recommended that the family acquire a large house during this period in order to secure the privacy necessary for children's proper psychological development. The "late years" of marriage involved the movement of young adults out of the house, and the resulting need for older couples to downsize their house and belongings. *Houses for Family Living* instructed readers that each stage of family development—early, crowded, peak and late years—made different demands on household space. So no

The stages of family development described in *Houses for Family Living* had major implications for neighborhood design. Gutheim warned his readers that community life in tract suburbs was subject to constant disruption. Families were forced to leave the community when they outgrew their houses, since houses in tract suburbs were all the same. He calculated that American families moved out of their neighborhoods an average of six times, and this meant that the psychosocial health of individuals—especially children—was compromised by changes in school, church, and friendship groups. Gutheim offered two solutions that would minimize the problem of outgrowing one's house. First, he advised families to choose a neighborhood with a variety of house types. That way, families could remain in the same neighborhood for the duration of their lifetimes and avoid the disruption of moving to a new community each time they outgrew their house. Second, he told readers that properly designed houses reduce the

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number of times that families needed to move. In these ways, Gutheim proposed to solve the modern problem of resident mobility.

The sociologists Robert Park and Ernest Burgess first identified residential mobility as an urban problem in their writings at the University of Chicago in the 1920s.⁶⁴ As the historian Howard Chudacoff has noted, the Chicago students who studied with Park and Burgess inflamed the residential mobility issue by linking it to nearly every social ill, including juvenile delinquency, mental disorders, divorce, and suicide.⁶⁵ The pejorative meanings of residential mobility first emerged in these early studies of low-income neighborhoods. But it was difficult to determine whether residential mobility caused social disorder or if unstable individuals were just more likely to change residences more frequently.

Oats was the first author to associate residential mobility with inadequate housing. She raised the issue in *Studies of Community Planning in Terms of Span of Life*, which was published by the New York Housing Authority (NYHA) in 1937.⁶⁶ During her tenure at NYHA, Oats successively held positions in tenant relations, community planning and management between 1937 and 1946.⁶⁷ In her book, she called attention to the problem of resident mobility in New York's public housing, blaming high rates of resident turnover on the homogeneity of apartment

⁶⁴ Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie, *The City* (Chicago: University of Chicago Press, 1925), 153.

⁶⁵ See Chudacoff, *Mobile Americans: Residential and Social Mobility in Omaha, 1880-1920* (Oxford University Press, 1972), 6. Some examples of this anti-mobility research: Elsa Longmoor, Elsa Schneider, and Erle Fiske Young, "Ecological Interrelationships of Juvenile Delinquency, Dependency, and Social Mobility: A Cartographic Analysis of Data from Long Beach, California," *American Journal of Sociology, XLI* (March 1936):588-610; Ernest W. Mowrer, *Disorganization: Personal and Social* (Philadelphia: J.B. Lippincott Co., 1942); Clifford R. Shaw, *Delinquency Areas* (Chicago: University of Chicago Press, 1929); Johannes Stuart, "Mobility and Delinquency," *American Journal of Orthopsychiatry, VI* (October 1936):486-93.

⁶⁶ Catherine F. Lansing, *Studies of Community Planning in Terms of the Span of Life* (New York: NYC Housing Authority, 1937).

⁶⁷ "Catherine L. Oats of Housing Agency," obituary, New York Times, Aug 14, 1969, 35.

units. Oats complained that public housing catered to young families, and did not offer dwellings sized for aging adults. She urged public housing authorities to familiarize themselves with forecast trends in resident demographics. For example, a recent government study found that the number of persons aged 65 and over in the United States had doubled between 1840 and 1930, and it was expected that these numbers would double again in the next few decades.⁶⁸ The problem of resident mobility centered on the elderly whose rising numbers threatened to escalate a housing shortage which was already affecting retired persons in disproportionate numbers.

The solution to was to offer a mix of dwellings for a cross-section of the American public. "Buildings to house a community must provide apartments of varying sizes in a ratio that will enable individuals entering it in youth to raise their families, live their middle years and old age there, and only leave it when they die," wrote Oats.⁶⁹ The first problem was to sort out resident demographics into groups according to their family size. In tackling this issue, Oats looked to English government housing for answers.

Social housing in England categorized residents into four family types: young married couples, couples with young children, couples with older children, and the aged.⁷⁰ If these categories sound familiar, it was not coincidental. Oats wrote a preliminary draft of *Houses for Family Living* in which she appropriated the four categories of families described in English social housing literature.⁷¹ Oats was an active member of the Woman's Foundation and co-planned the conference at Rye, where she chaired a committee on Costs and Budgets. In her

⁶⁸ Lansing, Studies of Community Planning, 16.

⁶⁹ Ibid, 19.

⁷⁰ Ibid, 23-24.

⁷¹ See "Acknowledgments" in *Houses for Family Living*.

work with the Woman's Foundation and Gutheim, Oats retooled the lessons she learned in social housing for the private housing market.

Whereas Oats had argued that it was the responsibility of city government to provide mixed housing types in *Studies of Community Planning*, Gutheim made it the consumer's responsibility to choose a neighborhood "with diverse house types" in *Houses for Family Living*. Moreover, Gutheim underlined the importance of house planning—as opposed to neighborhood planning—since the former activity was within the control of the consumer. In this context, resident mobility was not a problem for city government or private developers, but the result of poor consumer judgment in the selection of a house. *Houses for Family Living* addressed a consumer audience interested in making the most out of homeownership. Gutheim told readers that the best houses were spacious enough to accommodate family life during several stages of development.

Gutheim was a part-time lecturer in Cornell's Home Economics Department where he taught students that a house plan should be based on the day-to-day activities of the housewife. Much like the home economists of previous decades, Gutheim analyzed women's routines in order to improve the flow of household labor and thereby save time, space and money. But *Houses for Family Living* placed special emphasis on the *changing* needs of families over time, and visualized these changes as "shapes of the day." He wrote that in the first few years of a marriage, the housewife's days were shaped like a dumbbell, with household activity concentrated in the morning and evening when one or both partners prepared for work and return home. But as soon as children were born, the shape of the day became more egg-shaped with continuous activity throughout the morning, midday, and evening. How could one house accommodate the housewife's changing activities over time? *Houses for Family Living*

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recommended houses that were flexible in plan and arrangement. Gutheim preached that houses with open plans enabled housewives to choose where to perform domestic tasks whereas houses with single-purpose rooms often wasted space. Families needed to visualize their house as a continuous area of "activity zones" as opposed to a collection of individual rooms.

Stonorov's model house illustrated the flexible-house ideal described in *Houses for Family Living.* Movable screens and partitions in the model house enabled the family to increase or decrease the size of rooms: draw curtains separated the living and dining rooms, an accordion wall split the kitchen from the adjacent playroom, and a movable partition divided the master bedroom from the guest room (Fig. 4.4). "Working from this concept, [the house] shows the possibility of maintaining a shell of exterior walls during a whole generation of family life and adapting the interior to satisfy the crescendo of children's needs within that shell," wrote the architect. Stonorov's model house accommodated the growing family during several stages of development, particularly the "crowded" and "peak" years. For example, a play space adjacent to the kitchen allowed mothers to monitor young children while they worked. This same space could be transformed into a separate recreation room for teenagers-who required less supervision—with the help of an accordion wall. The House for Family Living communicated the virtues of the flexible house, which could be reconfigured to suit the needs of a growing family. Gutheim approved Stonorov's design and facilitated the publication of his model house in *Life* magazine.

Not every expandable house satisfied Gutheim's criteria for family living. For example, Gutheim publicly criticized Marcel Breuer's "House in the Museum Garden," designed for the Museum of Modern Art in 1949. Breuer designed his model house so that it could be easily expanded to include an extra bedroom, bath and garage. But Gutheim complained in a *Tribune*

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article that, "the house contradicts all the most important recommendations of the most competent experts in family life and relationships."⁷² The open plan situated the master bedroom on a balcony above the living room, which created a continuous space. Gutheim was alarmed at the "total lack of privacy" in the open plan, which elevated the master bedroom on a balcony above the living room in order to create a continuous space. Only a draw curtain separated parents from "living room noises, [kitchen] smoke and odors," he complained.⁷³ Moreover, he wrote that locating the parents' room at the opposite end of the house from the children's room encouraged negligent parenting.

In Gutheim's view, the museum house was just too small. He protested that the children's room was too cramped to prevent the spread of contagious disease, nor was it big enough for children's entertainment during the winter months when the backyard could no longer be used. But no room was worse than the kitchen. Gutheim protested that the kitchen did not provide sufficient work surfaces, storage or dining space. Women were supposed to watch their children through an "observation hatch" that separated the kitchen from an adjacent playroom. Gutheim objected to this arrangement, stating that, "children don't want to see but be with."⁷⁴ He concluded that the Museum House was handsome, but poorly planned for family living.

Gutheim taught people that even the handsomest houses were unsuitable for families if they were too small. In the "crowded" and "peak" years of development, families had difficulty finding space for growing children and their belongings. Bassinets, cribs and playpens crowded limited household space. In order to create a livable home environment, Gutheim advised readers

 ⁷² Frederick Gutheim, "Museum House is Romantic, but Has Its Flaws," *New York Herald Tribune*, April 17, 1949,
 1.

⁷³ Ibid.

⁷⁴ Ibid.

to take inventory of their existing furniture and space. He told readers to plot their floor plans and furniture on graph paper and then assess the best way to organize objects for space maximization. Gutheim reasoned that even the most efficient houses would remain cluttered and disorderly if there was not sufficient space. In this way, his advice departed from other postwar housing professionals who regularly taught women to make the best use of a small house.

IV. The Anti-Minimum House Campaign

Gutheim worried that most postwar Americans were poorly housed. "Too much of our national housing inventory is composed of houses built originally for moderately well-to-do families with servants that have finally "trickled down" to the point where they are occupied in whole or in part by families of very modest circumstances with no servants whatsoever. Obviously, they don't work. Substantially all the rest of the homes we have, those more recently built, have minimum standards of space, whether apartments or houses, and seldom have provided enough room for a normal family of five people. They hardly accommodate the "statistically average" household of 3.8 persons!"⁷⁵ Neither the old houses passed down to low-income families nor the new "minimum houses" built cheaply for the lower end of the private housing market met Gutheim's standards for family living. In his view, the minimum house was especially troubling.

Houses for Family Living was an argument against minimum houses built in tract suburbs. When Gutheim denounced minimum houses as substandard, he called into question research conducted in the previous decade that favored minimum space requirements.

⁷⁵ Gutheim, *Houses for Family Living*, 41.

Specifically, he questioned the logic of American technicians who had spent the interwar era arguing that modern families required fewer rooms in their houses.

Between 1931 and 1945 the FHA encouraged builders to reduce the number of rooms in small houses. FHA technicians identified the dining room, basement, and attic as outdated rooms that wasted precious homebuilding resources in their reports, which included standardized plans for minimum houses.⁷⁶ But the reduction of rooms in newly built American houses had more to do with the FHA's financial incentives than with its standardized plans alone. Builders had an easier time attaining mortgage insurance from the FHA if they complied with the federal agency's homebuilding guidelines. The agency's Annual Reports show that the average number of rooms per house declined precipitously with the advent of FHA mortgage backing. Before 1939 six-room houses dominated the middle-income market, but by 1945 the majority of these houses had only four rooms.⁷⁷ The FHA's minimum house prototype was severe: its four-roomsplus-bathroom totaled 624 square feet. "[What we need is] better housing, certainly, for the cliff dwellers as well as for the slum dwellers-and not merely 'minimum standards' that sacrifice space and privacy to better plumbing," wrote Bauer.⁷⁸ Advertisements for minimum houses tended to highlight their modern equipment, and critics alleged that these amenities were meant to distract from the house's cramped living quarters.

Bauer protested minimum houses based on their substandard living conditions. She expressed her opposition to these houses in published articles and letters to colleagues. In a letter to architect Vernon DeMars, she recommended that he prioritize the difference between

⁷⁶ Hise, "The Minimum House," 67.

⁷⁷ Ibid, 70.

⁷⁸ Catherine Bauer, "Cities in Flux: A Challenge to the Postwar Planners," *The American Scholar*, Vol. 13, No. 1 (Winter 1943-44), 70-84. Box 7, Folder 28, Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

"minimum" and "optimum" standards in the housing studies that he conducted for the National Housing Agency's Technical Division.⁷⁹ She was convinced that minimum standards "were probably too low" and that the NHA needed to recalibrate their standards for low-cost housing that was actually livable. Since the minimum house was the product of scientific study, it was especially vulnerable to critics who alleged that its space requirements were miscalculated.

Gutheim traced the problem of the minimum house back to scientific errors in housing research during the previous decade. "One would like to see a fresh start on the question of space needed for activities that the Pierce Foundation let run so into the ground," he wrote to Bauer in May 1949.⁸⁰ Gutheim's negative assessment of the Pierce Foundation was surprising, given that his methods for analyzing houses were not so different from Pierce technicians. For example, Gutheim and Pierce technicians imagined the house as a series of "activity zones" as opposed to individual rooms, and they prioritized flexibility in their house programming. But their objectives were different. Whereas Gutheim searched for optimum housing standards in an effort to counter the social problem of resident mobility, Pierce technicians wanted to know the minimum square feet of living space possible to solve the technical problem of creating standardized measurements for the mass production of low-cost, prefabricated houses. Therefore, Pierce technicians justified the elimination of rooms in minimum houses by arguing that modern families already used rooms in diverse ways. Their research showed that the living room was an equally if not more appropriate space for meals than the dining room. Gutheim criticized these

⁷⁹ Letter from Catherine Bauer to Vernon DeMars, Dec 18, 1943, Carton 4, Folder 3. Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

⁸⁰ Letter from Frederick Gutheim to Catherine Bauer, May 2, 1949, Box 18, Folder 22, Catherine Bauer Wurster Papers, Special Collections, Bancroft Library, University of California at Berkeley.

research findings. He believed that the quest to design one affordable house had blinded public and private institutions to the changing needs of families as they develop over time.

Criticism of the minimum house intensified at the National Conference on Family Living, held in Washington, D.C., from May 5 to 8, 1948. "Who can look at the Sunday real estate supplements, with their shoebox two-bedroom houses, without remembering that we are the nation which was able to produce hundred-million dollar warships by the score and half-million dollar bombers by the thousands?" asked Coleman Woodbury.⁸¹ Woodbury served as chairman of the housing committee at the National Conference on Family Living, and in that role he identified minimum housing as a chief concern. "We should look forward to the day when the economy of scarcity is so far behind us that 'minimum space standards' is bracketed in Webster as Obsolete or Medieval," wrote Woodbury.⁸² He attributed the insufficient space in minimum houses to the builder's desire to trim construction costs in an inflated postwar economy.

Housing was one of several "action areas" that merited expert attention at the National Conference on Family Living. Other areas included community participation, counseling and guidance, economic welfare, education, health and medical care, home management, legal problems, recreation and social welfare. "The conference will make specific recommendations for strengthening the American family, which is the basic unit of democracy. Threats to its stability come from the rising rates of divorce, of juvenile delinquency, housing inadequacies, and other grave problems of family living," read the press release.⁸³ The National Conference was the brainchild of the American Home Economics Association and the Woman's Foundation,

⁸¹ Coleman Woodbury, "Housing Standards," report for National Conference on Family Life, c. 1948, pg 12. Box 224, Family Life Folder, Frederick Gutheim Papers, American Heritage Center, Laramie, Wyoming.

⁸² Ibid.

⁸³ NCFL Press Release, May 2, 1949. Box 97, Frederick Gutheim Papers, American Heritage Center, Laramie, Wyoming.

who invited hundreds of organizations to attend the conference in the hopes of "getting a realistic and well-rounded picture of today's family."⁸⁴ For the housing professionals who attended the conference, the primary problem that threatened American family life was the overcrowded minimum house.

Many of the people concerned about minimum houses had learned about them through their work for local housing authorities and federal housing agencies. Woodbury was no different.⁸⁵ During WWII, he facilitated construction of defense houses in his role as the Assistant Administrator of the National Housing Agency. Although Woodbury had overseen the application of "minimum standards" to defense housing, he was appalled that these same standards had dictated the construction of postwar houses.

Woodbury held up *Houses for Family Living* as a guideline for building houses with optimum space requirements. He was confident that no universal house could suit the American family because even the most typical families underwent successive stages of development that made different demands on household space. "If home building is to reflect a realistic measure of family needs, we must recognize the great variety of dwellings that are needed to fit varying stages of family life. Homes for the beginning family, the expanding family, and the contracting family are needed."⁸⁶ In this way, the cycles of family life described at the Rye conference resurfaced in Washington. Not surprisingly, the author and several editors of *Houses for Family Living* attended the National Conference in anticipation of communicating their ideas to a wider

⁸⁴ NCFL brochure, c. 1948. Box 224, Frederick Gutheim Papers, American Heritage Center, Laramie, Wyoming.

⁸⁵ He held successive positions as the Executive Secretary of the Illinois Housing Commission, the Associate Director of the National Association of Housing Officials, and Assistant Administrator of the National Housing Agency.

⁸⁶ NCFL Proposed Report of Housing Committee, c. 1948. Box 97, Frederick Gutheim Papers, American Heritage Center, Laramie, Wyoming.

audience: Gutheim, Hudnut, Stonorov and Frank reunited for their second Woman's Foundation event.⁸⁷

Sociologists played a major role in establishing the housing agenda at the National Conference. With the exception of government housing officials Woodbury and Dorothy Gazzolo, sociologists dominated the steering committee responsible for housing reports.⁸⁸ Most notable were the well-known Chicago School sociologists Burgess and Louis Wirth. Less familiar names were those of Stuart Chapin from the University of Minnesota and Svend Riemer from the University of Wisconsin-Madison. Chapin and Riemer had conducted studies of residents living in government housing in an attempt to measure the psychological effects of the domestic environment. Their research appeared in the National Conference's housing reports, which detailed the emotional stress associated with overcrowded houses.

The National Conference drew attention to the individual's psychological need for privacy in the household. Although housing professionals identified a number of problems associated with substandard dwellings—such as structural deficiencies, inadequate equipment and poor location—they highlighted the emotional problems associated with overcrowding. One report warned that adolescents living in overcrowded dwellings were more likely to develop psycho-pathological conditions.⁸⁹ The preservation of the teenager's "sound mental hygiene" required private bedrooms. Moreover, the report recommended floor plans that used architectural

⁸⁷ Other notable participants included Ernest Burgess and Louis Wirth, Svend Riemer, Stuart Chapin and Dorothy Gazzolo.

⁸⁸ Dorothy Gazzolo was the editor of the *Journal of Housing*, a monthly magazine that featured the latest public housing news.

⁸⁹ "The Mutual Relationships of Housing and Family Life," NCFL report, Feb. 1948. Box 224, Frederick Gutheim, American Heritage Center, Laramie, Wyoming.

buffers to protect the privacy of family members from each other and the outside world.⁹⁰ Hallways secured the privacy of individual family members when they created a buffer between a living room and bedroom. Similarly, small entrance halls protected the family's privacy from guests who would otherwise directly enter into the living room. In this way, the National Conference argued for preserving the hallways commonly sacrificed in minimum houses.

The National Conference strengthened the association between minimum houses and residential mobility that the Woman's Foundation had made several years earlier. One housing report explained that resident mobility had negative psychological effects on children, "Lack of stability in the children's physical environment must not be underestimated as an adverse factor in their personality development [...] Not only is the child challenged, again and again, to reorientation in ever changing physical environments, thus losing perspective and feeling a loss even of security in inter-personal relations, the child is deprived also, of those crude substitutes for a feeling of social security which – at times of family separations – he seeks and finds by establishing identity with specific attributes of the physical environment," explained Woodbury.⁹¹ Families could stay in the same community if neighborhoods offered a mix of dwellings: apartments, row houses, small, and large houses. Moreover, Woodbury argued that every community should give residents the choice to buy or rent, since "no sound housing program" offered only homes for sale.⁹²

In their attack on minimum houses, housing experts borrowed from the existing literature on residential mobility. Few studies existed that explored people's experiences living in

⁹⁰ Ibid.

⁹¹ Ibid.

⁹² "Housing Standards," NCFL report, March 1948. Box 224, Frederick Gutheim, American Heritage Center, Laramie, Wyoming.

minimum houses, whereas the sociological literature on residential mobility was massive. The problem of residential mobility first appeared in Chicago slums, but it found its way into Gutheim's work on suburban tract housing. Gutheim appropriated the pejorative connotations of residential mobility for his criticism of minimum houses in suburbs, where the inflexibility of single-class tract housing caused American families to change residences frequently. In this way, decades of research that linked residential mobility to crime and psychosis in urban, lower-class neighborhoods came to be associated with the emotional wellbeing of children living in white, middle-class suburbs.

V. Conclusion

Concerns about the problem of insufficient space temporarily bridged the separate spheres of public and private housing after the War. The National Conference preached that overcrowded living conditions affected the majority of American families. The issue of overcrowding appeared in government studies of public housing, where social scientists interviewed tenants about their experiences living in these new communities.⁹³ This research identified design problems whose effects were exacerbated within small apartments: no built-in storage, little ventilation, and sometimes a badly placed door or window that compromised the residents' privacy. Housing professionals reported similar problems in minimum houses, where cramped living conditions also compromised the resident's health and privacy.⁹⁴

⁹³ See Catherine Lansing Oats, Studies of Community Planning in Terms of the Span of Life and The Livability Problems of 1,000 Families (Washington, D.C.: FPHA, 1945).

⁹⁴ Catherine Bauer, "Housing and Health: The Provision of Good Housing," *American Journal of Public Health* 39, no. 4 (April 1949): 462-466. Box 8, Folder 2, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley. Also see Gutheim's *Houses for Family Living*.

Despite the shared problem of limited space, public and private housing received different treatment. Municipal housing authorities were aware that apartments in public housing were too small, but they realized that recommendations for improvement had to be modest, given the tight federal budget.⁹⁵ Oats recommended building more studio apartments for the elderly as a practical way to diversify the dwelling types in public housing and thereby enable residents to stay in the same community that they raised their children.⁹⁶ But when Oats and others confronted overcrowding and resident mobility in private housing, they claimed that bigger, expandable houses were the solution, as opposed to dwelling diversity in the neighborhood. She imagined that once American consumers were educated about the importance of spacious houses they would demand bigger houses from homebuilders.

The problem with the minimum house was that builders treated it as the maximum standard for family living. The Federal Housing Administration enabled more Americans to become first-time homeowners in the 1940s. But the minimum houses that they purchased were often too small to accommodate growing families. Some critics attributed the minimum house problem to government ideology: American politicians treated decent housing as a privilege, not a basic citizen's right.⁹⁷ Moreover, housing reports distributed at the National Conference on Family Living warned that many Americans were "forced" into buying homes, since construction for apartment buildings stalled in the 1940s and there were few rentals available in the immediate postwar years. Woodbury warned Americans that minimum houses were only

⁹⁵ Philip Klutznick warned that, "due to cost limitations on public housing, available funds will undoubtedly not be adequate to provide the space and facilities families desire," in *The Livability Problems of 1,000 Families*.

⁹⁶ Oats, Studies of Community Planning.

⁹⁷ Catherine Bauer, "The History of American Housing," c. 1945. Box 7, Folder 36, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

good for the building industry, since people struggled to pay mortgages for minimum houses that ultimately proved to be bad investments.⁹⁸

The greatest danger posed by the minimum house was the psychological harm that resulted from overcrowded family living. Housing reports distributed at the National Conference cautioned readers about the lack of privacy in minimum houses, which jeopardized the social development of children.⁹⁹ Although it was impossible to isolate the house as the sole determinant of children's behavior, social scientists at the National Conference did their best to convince Americans that overcrowded houses strained family relationships and encouraged children to spend more time away from home, where they were vulnerable to the influence of their peers. Gutheim warned that when families traded up their minimum houses for larger ones, they also risked harming their children's mental health since moving to a bigger house usually meant leaving the community where children had developed friendships.

Gutheim's theory of family development proved to be influential for housing literature marketed to consumers in the following decades. Illustrations in *Houses for Family Living* simplified the four stages of family development for the general reader (Fig. 4.5). Kate Rogers cited Gutheim's four stages of family life in her popular book, *The Modern House, USA*, written for prospective homeowners in 1962.¹⁰⁰ Rogers blamed small, poorly designed houses for increased rates of residential mobility, which she associated with community disruption, "A move usually means new neighbors and new service people—people who do not remember Jack and Barbara when they were youngsters, who were not part of the civic groups that so improved

^{98 &}quot;Housing Standards."

⁹⁹ "The Mutual Relationships of Housing and Family Life."

¹⁰⁰ Kate Ellen Rogers, Modern House, U.S.A.: Its Design and Decoration (New York: Harper Inc., 1962), 5.

the old neighborhood," Rogers lamented.¹⁰¹ Rogers conceded that dwelling variety was a possible solution for residential mobility, but she cautioned that it was a "touchy subject," since many people feared that multi-class neighborhoods would lower real estate prices.¹⁰² Like Gutheim, Rogers upheld expandable-contractable houses as a means to keep Americans in their houses longer, hoping that these designer houses might inspire residential developers to create their own imitations.¹⁰³ Gutheim's legacy at the Woman's Foundation was the way he packaged sociological ideas for consumers, arguing that Americans needed to demand spacious, flexibly-designed houses in order to avoid the psycho-social disruptions caused by residential mobility.

Gutheim's theory of family development anticipated changes in sociological studies of residential mobility for the next two decades. Gutheim was not a sociologist. But he used a lay social science language to reshape existing studies of residential mobility for his own purposes, namely, to argue that inadequate dwellings were the principal reason why people changed residences. Several years later, this theory gained currency as sociologists widened the geographic scope of residential mobility studies, which had been limited to inner cities. In the 1950s, sociologist Peter Rossi and demographer Sidney Goldstein attributed residential mobility to the changing economic status of families and their corresponding ability to purchase better houses.¹⁰⁴ Over the next several decades, the pejorative connotations of residential mobility weakened as it came to be understood as a middle-class phenomenon.

Lifestyle magazines taught readers to analyze their house's footprints as a means to assess its suitability for long-term living. Aerial photographs of the roofless House for Family

¹⁰¹ Ibid, 8.

¹⁰² Ibid, 39.

¹⁰³ For example, Rogers praised Marcel Breuer's model house for MOMA as an elegant example of a single dwelling able to accommodate multiple stages of family life. See Rogers, *Modern House*, 124-125.

¹⁰⁴ Chudacoff, *Mobile Americans*, 8.

Living functioned as a giant, colorful footprint, and these images directed *Life*'s readers to the model house's program. The House for Family Living demonstrated the importance of spaciousness for growing families, and also modeled the virtues of flexible space, such as rooms designated for a variety of uses. *Life* magazine cautioned readers against living in one house for too long since every family required multiple houses, each one programmed for specific episodes in the long durée of family life. Close analysis of house footprints was supposed to show that no single house could possibly accommodate a family's changing needs over time, and this was especially true for minimum houses. These magazines encouraged people to prioritize the livability of the house's plan over other considerations.

How did *Life* magazine communicate the psychosocial importance newly ascribed to houses in 1950? Its burden was to demonstrate that the American family's defunct economic function could be substituted for a new model of family life based on interpersonal and emotional relationships. But the *Life* house actually demonstrated the impossibility of separating emotional and economic behaviors since the house itself was the product of consumer and psychosocial discourses. For example, the psychological effects of overcrowding became an object of scientific interest only after the mass production of minimum houses after WWII. The *Life* house was supposed to prevent the emotional disruptions that resulted from the substandard housing and geographic dislocations typical of life at midcentury.

Popular ideas about the economy and emotions mutually shaped one another in postwar housing studies. Concerns about the emotional lives of families sometimes blurred the disparities in health and economics that separated the residents of public and private housing, as when people looked to research conducted in public housing to assess the problems found in tract suburban developments. But this disparity would reappear when housing professionals proposed

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different solutions to solve the same problems found in public housing and private ones. The *Life* house was a model house based on a social theory of family development and it was an advertisement for Gimbel Furniture in Philadelphia. If the model house gave families the opportunity to focus on their emotional lives, this opportunity was conceived and carried out within the world of economic relations and consumerism.

Chapter 5: A Suburb in the Heart of Detroit

On June 7, 1996, the historic preservationist Kathryn B. Eckert nominated Lafayette Park, Detroit, for the National Register of Historic Places.¹ Eckert claimed that the postwar neighborhood was one of America's only urban renewal projects to have successfully revitalized residential development in a downtown area. "That it is today an attractive, well-maintained neighborhood more racially mixed than when it was built is especially remarkable in view of the social and economic problems Detroit has experienced since the 1960s," wrote Eckert.² Her remarks pointed to another goal that motivated Lafayette Park's creators, "to attract people of diverse backgrounds."³ Whereas every American urban renewal project aimed to boost downtown real estate at midcentury, very few considered the social or ethnic makeup of its residents. Most interestingly, Eckert attributed resident diversity at Lafayette Park to the community plan, citing the architecture, layout, and landscape design as key ingredients in its diversity scheme. How did architectural design encourage social and racial diversity at Lafayette Park?

Lafayette Park was based on an earlier plan for the same site that received national attention in the architecture community for its social progressivism. In January 1956, *Progressive Architecture* announced that the Gratiot-Orleans Redevelopment Plan had won first prize in the magazine's annual town-planning competition and published a photograph of the

¹ Kathryn B. Eckert, "Mies van der Rohe Residential District, Lafayette Park," June 7, 1996, National Register of Historic Places Registration Form, United States Department of the Interior, National Park Service.

² Ibid.

³ Ibid.

neighborhood model (Fig. 5.1).⁴ The Gratiot-Orleans plan was named after Gratiot Avenue and Orleans Street, which bounded the future Lafayette Park neighborhood on the north and east sides. The architects Oscar Stonorov, Victor Gruen, and Minoru Yamasaki had designed Gratiot-Orleans as a superblock plan with a mixture of high-rise apartments and two-story townhouses in a well-landscaped park centered on an elementary school. *Progressive Architecture* praised the architects for designing a socially diverse community, which earned them their first-prize award.

The Gratiot-Orleans architects promised to revitalize downtown Detroit, but, more importantly, they promised to democratize it, too. Stonorov, Gruen, and Yamasaki claimed they wanted to create "a true democratic community ready to serve all races and income levels."⁵ The architects planned for social diversity in two ways: by providing a mixture of private housing to suit different incomes, and through building some racially integrated public housing in the Gratiot neighborhood. They characterized community planning as the determinant of economic diversity by arguing that dwelling variety brought a mixture of income groups to the same neighborhood and discouraged residential mobility. Accordingly, their neighborhood model included apartments, row houses, and detached dwellings in a superblock plan (Fig. 5.2). By associating social diversity with the variety of residential buildings, the architects created a measurable index of democracy in the built environment.

The rapid growth of tract suburbs intensified Stonorov's existing concerns about residential mobility at midcentury. As I described in Chapter 4, Stonorov teamed up with domestic scientists to promote awareness of residential mobility as the chief problem associated with homogenous neighborhoods in the immediate postwar years. The Woman's Foundation

⁴ "First Design Award: Urban Redevelopment, Detroit Michigan," *Progressive Architecture* 37 (Jan. 1956): 76-77. Box 28, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

⁵ Oscar Stonorov, Victor Gruen and Minoru Yamasaki, "Introduction," in *Urban Redevelopment U.R. Michigan 1-1*, 1. Box 53, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

provided important opportunities to communicate the issue of residential mobility to Americans by publishing *Houses for Family Living* and sponsoring the National Conference on Family Life, where speakers claimed that the best way to reverse residential mobility was to build neighborhoods with a variety of dwellings.⁶ Urban renewal in midcentury Detroit provided an opportunity for Stonorov to solve the problem of residential mobility, an issue that he had brought to public consciousness in the previous decade.

Histories of postwar Detroit have shown that urban renewal resulted in the eviction of low-income, non-white groups with little or no attempt to properly re-house them.⁷ The historian Thomas Sugrue has traced the persistence of racialized poverty in Detroit to 1950s urban renewal policies that strengthened geographic barriers between white and black groups, effectively barring black citizens' access to good neighborhoods, schools, and jobs.⁸ Whereas Sugrue examined the aftermath of urban renewal in Detroit, I am interested in the community planning that preceded the mass urban displacement that reached its apex in the postwar era. The Gratiot-Orleans plan included 1,100 units of public housing, but it was several decades before Detroit built any affordable housing in the Lafayette Park neighborhood. The struggle for social integration at Lafayette Park is a long, ongoing story, which began with the racial covenants that first separated black neighborhoods from white ones in Detroit during the late nineteenth century. In this chapter, I examine the Gratiot-Orleans plan as one understudied episode in this

⁶ Frederick Gutheim, *Houses for Family Living* (New York: Woman's Foundation, 1948); NCFL brochure, c. 1948. Box 224, Frederick Gutheim Papers, American Heritage Center, Laramie, Wyoming.

⁷ Wilma Woods Hendrickson, Detroit Perspectives: Crossroads and Turning Points (Detroit: Wayne State University Press, 1990); Herb Boyd, Black Detroit: A People's History of Self-Determination (New York: Harper Collins, 2017).

⁸ Thomas J. Sugrue, *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit* (Princeton, N.J.: Princeton University Press, 1996).

greater history of economic and racial discrimination, paying special attention to claims about Lafayette Park's exceptionalism as a multi-class, ethnically diverse neighborhood.

This history of the Gratiot-Orleans plan contradicts the traditional separation of public and private housing in architecture scholarship. Historians have restricted their analysis of residential architecture in the postwar United States to suburban tract housing or "conventional" public-housing projects.⁹ Katherine Bristol has used the term "conventional" to describe the housing developments entirely owned and operated by public agencies, such as the well-known Pruitt-Igoe project built in St. Louis, Missouri.¹⁰ But this term elides the fact that many urban renewal projects in the United States mixed public and private financing, often using federal dollars for slum clearance and some limited public housing while turning over the majority of the site to private developers. By turning away from the familiar story of Pruitt Igoe, this history of Gratiot-Orleans points to the muddy distinctions between public and private residential development that characterized many urban renewal projects across the United States at midcentury.

The Gratiot-Orleans plan resulted from the struggle to coordinate public financing and private building in downtown Detroit. Since World War II municipal officials in Detroit had

⁹ Notable examples of scholarship on postwar suburbia in the United States include: Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States* (Oxford: Oxford University Press, 1985); Greg Hise, *Magnetic Los Angeles: Planning the Twentieth-Century Metropolis* (Baltimore: The Johns Hopkins University Press, 1997); Andrew Shanken, *194X: Architecture, Planning, and Consumer Culture on the American Home Front* (University of Minnesota Press, 2009); Richard Longstreth, "The Levitts, Mass-Produced Houses, and Community Planning in the Mid-twentieth Century," in *Second Suburb: Levittown, Pennsylvania*, ed. Dianne Harris (Pittsburgh, Pa; University of Pittsburgh Press, 2010).

Recent examples of scholarship on public housing include: Nicholas Dagen Bloom, *Public Housing that Worked: New York in the Twentieth Century* (Philadelphia: University Pennsylvania Press, 2008); Devereux Bowly Jr., *The Poorhouse: Subsidized Housing in Chicago* (Carbondale: Southern Illinois University Press, 1978; Carbondale: Southern Illinois University Press, 2012); Ben Austen, *High-Risers: Cabrini-Green and the Fate of American Public Housing* (New York: Harper Collins, 2018).

¹⁰ Katherine G. Bristol, "Beyond the Pruitt-Igoe Myth: The Development of American High-Rise Public Housing, 1850-1970," (PhD diss., University of California at Berkeley, 1991), 9.

discussed clearing and rebuilding the Gratiot-Orleans neighborhood, but they did not want to do it alone. For nearly a decade, the city unsuccessfully solicited private developers to propose plans for the neighborhood's redevelopment.¹¹ On July 19, 1954, the Detroit mayor appointed a Citizens Redevelopment Committee (CRC) to supervise the sale of the Gratiot-Orleans tract.¹² The CRC consisted of local businessman and financiers with the exception of Walter Reuther, the well-known leader of the United Auto Workers (UAW) union. Reuther was friendly with architect Stonorov and the two men shared the belief that the best way to improve Gratiot-Orleans was for a major developer to rebuild the entire community. In order to attract developers, the CRC cleared Gratiot-Orleans with public funds and commissioned Stonorov, Gruen, and Yamasaki to design a plan that would visualize the distribution of public and private housing on the single tract.

The architects tested ideas at Gratiot-Orleans that had recently emerged in professional debates about private and public housing. One of these debates involved the relative merits of single- versus multi-class communities and centered on new research about the social effects of residential mobility on families, especially children.¹³ Another controversy involved high- versus low-rise public housing, with some housing experts claiming that low-rise living was the only way to properly raise children.¹⁴ American architects also debated the wisdom of building large tracts of public housing at midcentury, and suggested limiting the number of public housing in

¹¹ "The Detroit Plan: A Program for Blight Elimination," Detroit Housing Commission, 1946. Box 3, Folder 24, Cal Almblad Papers, Walter Reuther Library, Detroit, Michigan.

¹² "Taskforce of 12 Urged," *The Detroit News*, July 12, 1954. Box 72, Leo Goodman Papers, Library of Congress, Washington, D.C.

¹³ Gutheim, Houses for Family Living.

¹⁴ Catherine Bauer, "Supertenements: Does the Low-Income Tenant Want Them?" *Town and Country Planning* (Oct. 1952): 458-464. Box 8, Folder 19, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

neighborhoods and buffering them with private residences in order to reduce the social and economic impact of low-income groups. The Gratiot-Orleans plan received high praise in *Progressive Architecture* because of the way it responded to American architects' concerns about the most desirable variety and height of residential buildings, as well as the ideal ratio of public housing to private ones. In this way, Gratiot-Orleans advanced new social theories about community planning in 1956.

I. Building Variety

The rapid growth of tract suburbs alarmed some architects, who worried about the growth of socially homogenous communities at midcentury. Stonorov, Gruen, and Yamasaki promoted building variety as the solution to the problem of single-class communities in Detroit. Their Gratiot-Orleans plan was a mixture of townhouses and apartment buildings built to house 1,800 families on a 50-acre site.¹⁵ They proposed that social diversity occurred in neighborhoods with a good mix of residential buildings offered for rent and sale. The Gratiot-Orleans plan was a pseudo-suburb in downtown Detroit that did not have the homogenous tract housing found in most suburban developments. By designing a neighborhood with a variety of dwellings—ten building types!—the architects countered the typical suburb while still preserving its best features: open spaces and parks.

Gratiot-Orleans was a small neighborhood in a landscaped superblock that appealed to American architects because it promised to make downtown life more livable, which, at midcentury, translated to more suburban. Stonorov, Gruen, and Yamasaki wrote that their plan had, "the advantages of living on the suburban lot with the desirability of being close to the

¹⁵ Frank Beckman, "Gratiot Plan Approved by U.S.," *Detroit Free Press*, January 14, 1955. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

center of a big city."¹⁶ The buildings occupied minimal ground coverage, which opened up seventeen acres of public space. Aside from general landscaping, each dwelling had its own plot of greenery. Later advertisements for Lafayette Park described the neighborhood as a "suburb in the city."¹⁷

Stonorov, Gruen, and Yamasaki were all late-career architects who had recently completed building projects in Detroit. Yamasaki was a partner in the Detroit office of Yamasaki, Leinweber and Associates, which had built a number of houses, schools, and commercial buildings in the city's metropolitan area.¹⁸ The famous architect Gruen was an obvious choice, since he had recently designed the Northland Shopping Center, a giant shopping mall just eight miles north of downtown Detroit that had received attention in the national media.¹⁹ Stonorov was involved in several projects for the United Auto Workers in Detroit. He participated in a public ceremony on September 19, 1954 to dedicate an eleven-foot bronze statue of an autoworker that he designed to stand outside the UAW headquarters at Solidarity House on Jefferson Avenue. Shortly after, UAW leader Reuther commissioned Stonorov to create an addition to Solidarity House, which the architect described as a "new face" for the national organization.²⁰ The location of Stonorov's projects in downtown Detroit was

¹⁶ "Wins Top National Architectural Award," *Michigan Contractor and Builder*, Feb. 11, 1956, 48, 114. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

¹⁷ "Live in a Suburb in the City," Lafayette Park brochure, (undated). Box 6, Carl Almblad Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

¹⁸ "In this issue…" [Progressive Architecture or Architectural Forum?], c. 1954-55. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

¹⁹ Victor Gruen discussed his Northland Shopping Center in the article "Downtown Needs a Lesson from the Suburbs," *Business Week*, Oct. 22, 1955, 64-66. Box 28, Victor Gruen Papers, American Heritage Center, University of Wyoming, Laramie. See also M. Jeffrey Hardwick, *Mall Maker: Victor Gruen, Architect of an American Dream* (Philadelphia: University of Pennsylvania Press, 2004), 107-112.

²⁰ Letter from Stonorov to Reuther, May 13, 1955. Box 168, Walter Reuther Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

exceptional at midcentury. Most architectural opportunities were in Detroit's suburbs, where the consolidation of middle-class wealth made the new schools, houses, commercial buildings and malls designed by Yamasaki and Gruen possible.

Americans left their dwellings in the city for suburban ones in the postwar years, and many people traced the phenomenon of suburban flight to Detroit. "In the past 50 years the 115 million automobiles produced in and near Detroit have driven the middle-income population of hundreds of U.S. cities outward beyond the city limits to the suburbs," claimed *Architectural Forum* magazine in March 1955.²¹ The mass movement of middle-class people into suburbia deepened poverty in downtown Detroit and other American cities, which suffered reduced rents and rising joblessness at midcentury.²² It was significant that architects in Detroit promised to revitalize downtown since the automobile city was where suburban flight first started.

Stonorov, Gruen, and Yamasaki claimed that their Gratiot-Orleans plan would draw suburbanites back to inner-city Detroit by offering a residential community that combined the "rest and quiet" typical of suburban life with the cultural attractions of city living.²³ Gruen was especially keen on finding an architectural solution for America's depressed downtowns, a phenomenon that he had partially accelerated with the invention of the suburban shopping mall.²⁴ The architects' plan combined the low-density housing, parks and recreational facilities typical of suburbs with the high-density apartment buildings and maintenance services characteristic of

²¹ "Redevelopment f.o.b. Detroit," Architectural Forum (March 1955): 116-125. Box 28, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

²² William Julius Wilson, *The Truly Disadvantaged: The Inner City, The Underclass and Public Policy* (Chicago: University of Chicago Press, 1987), 158.

²³ Oscar Stonorov, Victor Gruen and Minoru Yamasaki, "Introduction," in Urban Redevelopment U.R. Michigan 1-1, 1. Box 53, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

²⁴ Hardwick, *Mall Maker*, 163.

cities. Local magazines reported that if the Gratiot-Orleans project was feasible, it could serve as a model for twenty-five similar developments planned for the city.²⁵ In this way, the architects hoped that Gratiot-Orleans would restore Detroit to its rightful place as the center of metropolitan activity and set a national example for the declining population of urban America.²⁶

Stonorov, Gruen, and Yamasaki designed several types of housing for their model community. The architects imagined that most of the neighborhood would live in 20-story apartment buildings, which provided 2,680 units of housing.²⁷ They designed three basic plans for these individual units that ranged from one-room efficiencies to two-bedroom apartments. Each unit had a loggia type porch that afforded views of the low-rise buildings and greenery below (Fig. 5.3). The architects interspersed two-story buildings and high-rise towers, totaling 670 units. "We have designed a large variety of units, from single freestanding houses, three-bedroom rental row houses, semi-detached houses with enclosed yards and commons, to four-bedroom ownership type houses," wrote the architects.²⁸ The Gratiot-Orleans architects did more than bring suburbia to downtown Detroit, they improved suburban living by doing away with the monotonous tract housing typical of these neighborhoods at midcentury.

Variety was an architectural concept that came to signify stability in the context of postwar community planning. "Look for variety," Gutheim advised his readers in *Houses for Family Living*, which warned Americans that identical houses in homogenous communities

²⁵ "Wins Top National Architectural Award."

²⁶ Ibid.

²⁷ "Citizens Committee Recommends Changes in Redevelopment Planning," in *Monthly Report to the Commissioners*, Vol. XII, No. 11, Detroit Housing Commission, Nov.—Dec. 1954. Box 42, Detroit Urban League Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

²⁸ "Urban Redevelopment UR-Michigan 1-1," Citizens Redevelopment Committee, Oscar Stonorov, Victor Gruen and Minoru Yamasaki, c. 1954. Box 53, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

forced families to move far away when they outgrew their houses.²⁹ "Here is a neighborhood in which you can move easily from one house or apartment to another as your family requirements change, without having to move to a different part of town," advised Gutheim.³⁰ *Houses for Family Living* preached that dwelling variety ensured the long-term success of the community since it enabled growing families with growing incomes to change houses but nevertheless stay in the same neighborhood.

Architectural variety also meant social diversity. Stonorov, Gruen, and Yamasaki designed multi-story buildings for 1,100 units of public housing in the northeast and southeast corners of Gratiot-Orleans.³¹ *Architectural Forum* associated the neighborhood's unique mixture of housing types with the neighborhood's progressivism, "Diversity of houses is deliberately pushed to reflect the diversity hoped for in the economic structure of the project," the magazine editors explained.³² The architectural variety at Gratiot-Orleans was remarkable for midcentury housing developments, which tended to offer one type of housing that targeted a narrow income group.

The Gratiot-Orleans architects designed a neighborhood that catered not only to diverse incomes, but also to diverse lifestyles and tastes. "The Gratiot neighborhood will provide for people who like gardening and for those who hate it; for people with children of all ages and for those without children; for people who enjoy views from high up and for those who like to be near the ground," claimed Stonorov, Gruen, and Yamasaki.³³ The architects arranged their two-

²⁹ Gutheim, Houses for Family Living, 27.

³⁰ Ibid, 28.

³¹ "Urban Redevelopment UR-Michigan 1-1."

³² "Redevelopment f.o.b. Detroit."

³³ Ibid.

story garden apartments around common courtyards for children's outdoor play, and they provided some private yards for the more expensive four-bedroom units (Fig. 5.4).³⁴ The Gratiot plan included a variety of building types, densities, and heights with differential access to private outdoor space—all in one neighborhood.

II. The CRC and its Master Plan

Mayor Albert Cobo appointed a "task force" of twelve men to spearhead the sale of Gratiot-Orleans in July 1954.³⁵ For the past decade, the city had incrementally cleared the neighborhood and evicted residents in the hopes of attracting private developers to buy various sections of the larger site. Exasperated by the slow progress at Gratiot-Orleans, Cobo looked to the task force for new schemes to sell the land at public auction. In the next few months, the group established the Citizens Redevelopment Committee (CRC), a non-profit holding company to steer the Gratiot-Orleans redevelopment project. They produced a master plan for the Gratiot-Orleans project in the hopes of selling the tract to a single developer. In developing its master plan, the CRC responded to the Detroit government's antipathy toward public housing, the new directives for slum clearance set forth in the 1949 Housing Act, and Stonorov's socio-architectural concerns. The Gratiot-Orleans plan reflected this particular collision of federal-housing policy, Detroit politics, and one architect's social theory of design between 1954 and 1956.

³⁴ "Urban neighborhood redevelopment," *Progressive Architecture* 36 (August 1955): 100-103. Box OV6, Victor Gruen Papers, Library of Congress, Washington, D.C.

³⁵ "Taskforce of 12 Urged."

Despite some initial difficulty, the CRC won approval from the Housing and Home Finance Agency. This federal organization questioned the CRC's role at Gratiot-Orleans, since the 1949 Housing Act authorized housing authorities to sell public lands to developers, but there was no precedent for nonprofits acting as go-betweens. "The CRC for the Gratiot-Orleans project had hardly got started before being told that its plan for a nonprofit corporation was impossible under federal law," reported the *Detroit News* in January 1955.³⁶ That same month Albert Cole and other members of the Housing and Home Finance Agency visited Detroit.³⁷ "We intend to see that local communities, in developing their renewal programs for federal assistance, seek first to utilize private resources in solving their relocation problems," reported Cole.³⁸ After some discussion, Cole agreed to recognize the CRC as a developer so that Gratiot-Orleans would remain qualified for federal financing. Cole approved the CRC because it upheld private ownership, and thereby advanced the federal government's primary directive for urban renewal.

The 1949 Housing Act authorized municipal authorities to sell slums to private developers. It also relieved municipal authorities of financial burden by providing federal funds for two-thirds of slum-clearance costs. "Governmental assistance shall be utilized where feasible to enable private enterprise to serve more of the total need," read the new legislation.³⁹ This was an important provision since it legitimized the growing belief that public housing was a risky investment. Practically speaking, conservatives alleged that government housing fell into blight

³⁶ "Undiscouraged," *The Detroit News*, Jan. 14, 1955. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

³⁷ "Legal Barriers Hurdled in Gratiot Housing Plan," *The Detroit News*, Jan. 13, 1955. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

³⁸ "Builders Hear Housing Chief Hail Detroit's Rebuilding Job," *The Detroit News*, January 19, 1955. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

³⁹ "Housing Act of 1949," Library of Congress, accessed November 20, 2019, https://www.loc.gov/law/help/statutes-at-large/81st-congress/session-1/c81s1ch338.pdf.

more rapidly than private buildings, and ideologically speaking, they claimed that increased government involvement in urban real estate encouraged socialism. The new federal legislation encouraged Detroit and other cities to clear downtown slums and then sell the land at bargain rates to private developers.

Mayor Cobo bulldozed staff members who opposed the transfer of public tracts to private hands. Cobo made his commitment to private enterprise and opposition to public housing a major campaign promise in 1949.⁴⁰ As Director of the Detroit Housing Commission, James Inglis interpreted Cobo's election that year as a major blow. Inglis had campaigned for the Taft-Ellender-Wagner bill, which expanded the number of public housing units nationwide. In December 1948, he drafted a statement for release by the governors of Michigan, Ohio, Indiana and Illinois urging Congress to consider doubling the 500,000 units of public housing promised by the TEW bill.⁴¹ Inglis cited differences of opinion with Cobo when he resigned from the Detroit Housing Commission in December 1949.⁴² "Private enterprise never has, is not, and never will supply good low-rent housing," Inglis exhorted.⁴³ Cobo replaced Inglis with the real estate developer Harry Durbin, who shared the mayor's enthusiasm for slum clearance followed

⁴⁰ Sugrue, *The Origins of the Urban Crisis*, 84-85.

⁴¹ Letter from James Inglis to Leo Goodman, December 1, 1948. Box 71, Leo Goodman Papers, Library of Congress, Washington, D.C.

⁴² "James Inglis Resigns as Housing Directory-Secretary," Monthly Report to the Commissioners, Vol. VII, No. 11, Detroit Housing Commission, Nov-Dec 1949. Box 41, Detroit Urban League Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

⁴³ "Housing Commission Presents Picture of Housing Problems to Mayor-Elect Cobo," c. December 1950. Box 41, Detroit Urban League Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

by private development.⁴⁴ Several years later, Durbin supported the CRC and their scheme to attract a single developer for the Gratiot-Orleans site.

Private developers had the power to shape downtown development, but they could not build whatever they pleased. If these developers purchased sites cleared with federal dollars, they were legally obligated to redevelop the land in accordance with the city's planning agenda. "When land acquired by the local public agency in connection with the project is sold or leased, the purchasers or lesees shall be obligated to devote such land to the uses specified in the redevelopment plan for the project area," read the 1949 Housing Act.⁴⁵ This directive was the most important position of the new housing legislation, since it specified the terms by which public and private groups would clear and rebuild America's downtowns. The 1949 Housing Act safeguarded city plans for redeveloping slums, even if the land would later be turned over to private developers.

This legislation created the framework for the CRC's master plan, which the city of Detroit would enforce even after selling Gratiot-Orleans. The CRC would sell the tract at a bargain rate, but only if developers agreed to build according to their master plan.⁴⁶ Since the 1949 Housing Act, housing authorities across the country had sold off their property piece by piece to multiple developers, since, generally speaking, no single developer could afford to buy the entire tract. The outcome was that municipal restrictions only loosely governed inner-city redevelopment. The CRC hoped to impose greater control over urban development by creating a

⁴⁴ "Harry Durbin Appointed Housing Commission Director-Secretary, and Mayor Cobo Outlines Housing and Slum Clearance Policy," Monthly Report to the Commissioners, Vol. VII, No. 11, Detroit Housing Commission, Dec 1949. Box 41, Detroit Urban League Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

⁴⁵ "1949 Housing Act."

⁴⁶ "City OK's Criticizes Project," *The Detroit Free Press*, Dec. 23, 1954. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

master plan for Gratiot-Orleans and selling the tract to one developer. They requested contributions from Detroit's industrial tycoons in amounts between \$250,000 and \$500,000 to prepare Gratiot-Orleans for sale and put together a master plan. Upon the sale of the property, money would go back into a revolving fund that the CRC would use to kickstart other redevelopment projects.⁴⁷ In this way, the Gratiot-Orleans plan would be the model for public-private partnership in Detroit's urban renewal.

The name "Walter Reuther" legitimized the fledgling CRC. Reuther had spent his career campaigning for labor rights (including affordable housing) during his tenure as president of the UAW. The CRC appointed Reuther to the four-man executive team responsible for steering the Gratiot-Orleans redevelopment project. "When Walter Reuther, the president of the United Automobile Workers, sits at a table—not across the table—with Foster Winter of the J.L. Hudson Co., Banker Walter Gehrke, Broker Walter J. Gessell, and executives from all the great auto producers, it is news in Detroit's class-conscious climate," reported *Architectural Forum* in March 1955.⁴⁸ Reuther put aside his political conflicts with the auto executives at the CRC to focus on creating a master plan for the Gratiot-Orleans site. He reached out to Stonorov for the architect's help conceptualizing a design for the future community.

Before their collaboration at Gratiot-Orleans, Reuther and Stonorov had built a partnership based on their shared commitment to affordable housing. Their first project was "Defense City," a plan to shelter fifty-five thousand workers at Willow Run, a town just forty

⁴⁷ James Ransom, "Gratiot Housing OK'd by Council," *The Detroit Free Press*, Dec. 21, 1954. Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

⁴⁸ Architectural Forum, March 1955 (?). Box OV 6, Victor Gruen Papers, Library of Congress, Washington, D.C.

miles north of Detroit where the Ford bomber plant was under construction in 1941.⁴⁹ Stonorov designed a master plan for Defense City that provided affordable housing to defense workers in addition to schools, shopping and parks for their families. But Detroit real-estate interests shut down Defense City before any attempt to implement it could get underway. Nevertheless, the project initiated Reuther's longtime interest in Detroit's housing problems.

Reuther earned a reputation as a whistleblower in Detroit's corrupt housing market at midcentury. He led the CIO's battle to stop the sale of poorly built shell houses financed with government-insured mortgages in the spring of 1952.⁵⁰ Private developers had made a killing selling cheaply built "shell houses" with no interior finishing to Detroit buyers after World War II. The CIO received thousands of complaints from union members about these houses, which were so badly built that they were not worth homeowners' investment in supplying the floor coverings, lighting, wall and ceiling treatments necessary to make the dwelling livable.⁵¹ On May 14, 1952, the *Detroit Times* announced that a House banking subcommittee would visit Detroit in response to the CIO's calls for a congressional inquiry into housing corruption in the city.⁵² "Serious abuses have developed both in the FHA and in the Veterans Administration," reported Reuther.⁵³ He urged Congress to establish a federal service for inspection and require builders to provide two-year warranties on their houses.

⁵¹ Ibid.

⁵² Ibid.

⁴⁹ R. Clancy, "Detroit: A City Where Housing Emergencies are Nothing New," *Architectural Forum* 76, no. 4 (April 1942): 195-97. Box 1, Theodore C. Larson Papers, Bentley Library, University of Michigan, Ann Arbor, Michigan.

⁵⁰ Don O'Connor, "Congress Plans Housing Probe," *The Detroit Times*, May 14, 1952. Box 72, Leo Goodman Papers, Library of Congress, Washington, D.C.

⁵³ "Statement of Walter Reuther to the Housing Sub-Committee of the House Banking and Currency Committee," c. June 1952. Box 72, Leo Goodman Papers, Library of Congress, Washington, D.C.

Reuther recalled the broken promise of Defense City in his address to members of Congress in June 1952. Private developers had acquired Willow Run, the proposed site for Reuther's Defense City, several years earlier and built it up with shell houses. "Today we have shacks out at Willow Run instead of a model community which could have been an example to the world of the higher standard of living that American policy and productiveness can achieve," admonished Reuther.⁵⁴ In evidencing his concerns, Reuther introduced two Michigan sociologists, Drs. Lowell J. Carr and James E. Stermer, who had recently published a book that chronicled the profiteering and corruption waged by private developers at Willow Run.⁵⁵ Carr and Stermer testified that private developers were taking advantage of Detroit veterans by selling them cheap, poorly built houses that did not hold up to FHA standards.⁵⁶ At midcentury Reuther was one of the most influential men in Detroit, and he used his influence to push forward a progressive housing agenda that addressed the concerns voiced by architects and sociologists in the postwar years.

Stonorov kept his friend informed about the latest housing news after Reuther became president of the UAW in 1945. This new appointment left little time for Reuther to investigate housing matters for himself, so he worked out a deal with Stonorov in which the UAW would finance the architect's trips to national housing events in exchange for informal reports about them.⁵⁷ Stonorov involved Reuther in a selective housing agenda put forward by the Woman's

⁵⁴ Ibid.

⁵⁵ Ibid. O'Connor, "Congress Plans Housing Probe."

⁵⁶ L.J. Carr and James Edison Stermer, Willow Run: A Study of Industrialization and Cultural Inadequacy (New York: Harper, 1952).

⁵⁷ Letter from Stonorov to Reuther, March 4, 1955. Box 31, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming. Letter from Reuther to Stonorov, March 10, 1955. Box 31, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

Foundation. For example, Stonorov solicited Reuther for union support when the Woman's Foundation announced its plans for a national conference, "The participation of the CIO is not what it could be and what the importance of the event would ask for," urged Stonorov.⁵⁸ The architect requested Reuther's attendance at the event, and suggested that the CIO make a donation as well. When the Woman's Foundation published *Houses for Family Living*, Stonorov sent Reuther a copy. In this way, Reuther learned about the problem of residential mobility and the way Stonorov and others proposed to solve it—by building a variety of housing. Reuther was enthusiastic about the Woman's Foundation's message, and considered publishing a special issue of the book for UAW members.⁵⁹

Reuther stressed the importance of building variety when he presented the CRC's plan for Gratiot-Orleans to Detroit government officials in December 1954.⁶⁰ As Chairman of the Subcommittee on Design and Planning, Reuther outlined the CRC's objectives for the urban renewal project. First the Gratiot area needed to attract the middle and upper-income Detroiters lost to the suburbs in the previous decade, and Reuther reasoned that the best way to do that was to combine the open spaces of the suburbs with the entertainment and convenience of city life. Secondly, the CRC wanted to blend public and private housing, but to avoid the "institutional look" of a typical residential development.⁶¹ The architects countered this effect by designing ten different residential buildings, a combination of low-rise dwellings and high-rise apartments. In

⁵⁸ Letter from Stonorov to Reuther, Dec 4, 1947. Box 28, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

⁵⁹ Letter from Reuther to Stonorov, March 10, 1955.

⁶⁰ "Citizens Committee Recommends Changes in Redevelopment Planning."

⁶¹ Ibid.

doing so, the CRC and its architects engaged current debates over the social desirability of highversus low-rise housing.

III. High-Rise or Low-Rise Buildings

The most conspicuous feature of the Gratiot concept was the mixture of high-rise and low-rise buildings in close proximity. Illustrations of Gratiot showed women in high-rise towers looking down upon a well-landscaped park with townhouses (Fig. 5.3). "We have placed small groups of high-rise buildings in carefully chosen locations through the development to give the high-rise buildings an opportunity for unimpeded views over the one and two-story buildings toward the skyline of downtown Detroit," wrote Stonorov, Gruen, and Yamasaki.⁶² But the significance of residential towers and low-rise buildings at Gratiot-Orleans was not only a matter of dramatic views from the windows of apartments. These pictures recalled recent debates about the social effects of high- versus low-rise living in architecture conferences and magazines. Yamasaki and Stonorov each played leading roles in the high- versus low-rise debates between 1952 and 1954.

Yamasaki first discussed the merits of low-rise and high-rise apartments in an address at the annual meeting of the National Association of Housing Officials (NAHO) in May 1952.⁶³ "As an architect, if I had no economic or social limitations, I'd solve all my problems with onestory buildings. Imagine how pleasant it would be to always work and play in spaces overlooking lovely gardens. Yet we know that within the framework of our present cities, this is impossible to

⁶² Oscar Stonorov, Victor Gruen and Minoru Yamasaki, "Planning Considerations," in Urban Redevelopment U.R. Michigan 1-1, 1. Box 53, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

⁶³ Minoru Yamasaki, "High Buildings for Public Housing?" *Journal of Housing* 9, no. 7 (July 1952): 226, 229-232. *ZAN-11903, Milstein Microform Reading Room, Schwarzman Building, New York Public Library, New York City, New York.

achieve," explained Yamasaki.⁶⁴ Yamasaki admitted that low-rise buildings were more desirable, but that he was constrained by economic limitations, since the high cost of urban land forced architects to build up. There were also social requirements to consider. Downtown jobs required high numbers of employees in the vicinity, and it made sense to house them in apartment towers that opened up space for recreational areas. In Yamasaki's view, high-rise buildings in urban renewal projects were not so much a decision as a necessity.

The high-rise versus low-rise public housing controversy received significant attention in architecture publications. The architect William Vladeck had raised the issue when he presented a paper on the virtues of low-rise public housing at the annual NAHO Middle Atlantic Conference in 1951.⁶⁵ The subject inspired debates in architecture publications the following year: *Architectural Forum* contrasted opposed viewpoints in their January 1952 issue with "The Case for the Low Apartment" by architect Elizabeth Wood, and "The Case for High Apartments," by magazine editor Douglas Haskell.⁶⁶ In spring, *Progressive Architecture* published Bauer's "Supertenements: Does the Low-Income Tenant Want Them?" and *Town and Country Planning* reprinted the same article in October. Bauer suspected that Yamasaki's NAHO speech was a not-so-subtle response to her "Supertenements" article, in which she criticized the architect's Pruitt-Igoe project.

Bauer worried that Pruitt Igoe signaled a high-rise epoch for American public housing. She realized that the passage of the 1949 Housing Act had rocketed the numbers of high-rise

⁶⁴ Ibid.

⁶⁵ Letter from Catherine Bauer to Bill Vladeck, Jan. 29, 1952. Carton 2, Folder 39, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

⁶⁶ Elizabeth Wood and Douglas Haskell, "High Apartments or Low," Architectural Forum 96 (Jan. 1952): 100-117.

building, which she referred to as "skyscrapomania."⁶⁷ Over two-thirds of the public housing submitted for federal government approval by municipal housing authorities contained elevator buildings.⁶⁸ This was a new phenomenon. Before the War, the only American city that contained high-rise public housing was New York. "St Louis, considered by itself, is a kind of curiosity, the most unlikely city to have suddenly gone on a Le Corbusier drag," criticized Bauer.⁶⁹ Bauer puzzled at St. Louis's decision to build thirteen-story apartment buildings at Pruitt-Igoe, given the low-density neighborhood surrounding the public-housing tract.

It was no coincidence that Yamasaki upheld tall apartment buildings as the solution to urban renewal in a NAHO speech given the same month as the publication of Bauer's anti-highrise article.⁷⁰ In attendance at the NAHO meeting was Dorothy Gazzolo, who was eager to publish the emerging high-rise versus low-rise debate between Bauer and Yamasaki (Gazzolo was the longtime editor of the *Journal of Housing*, the only publication devoted to chronicling America's public housing news). Gazzolo invited Yamasaki and Bauer to square off in the *Journal of Housing*'s July 1952 issue.⁷¹ The cover page featured two public housing projects designed by Yamasaki's office: Pruitt Igoe apartment towers in St. Louis, Missouri and twostory garden apartments in Benton Harbor, Michigan. Under these building photographs read the caption, "Shall We Build Them High or Low?"

69 Ibid.

⁶⁷ Catherine Bauer, "Supertenements: Does the Low-Income Tenant Want Them?" *Town and Country Planning* (Oct. 1952): 458-464.

⁶⁸ Ibid.

⁷⁰ Yamasaki, "High Buildings for Public Housing?"

⁷¹ Letter from Dorothy Gazzolo to Catherine Bauer, June 17, 1952. Carton 2, Folder 39, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, Berkeley, California.

Bauer and Yamasaki agreed on the social reasons for low-rise living, but took issue with the political ones. For example, Yamasaki praised the quality of life in garden apartments, "Nearness to the trees, the flowers and the earth itself offers security that cannot be found from a 12-story window," he lamented.⁷² But Yamasaki believed that it was necessary to maintain high population densities at the sites of former slums in order to maintain people's access to downtown jobs. "The argument that skyscrapers are justified because slum dwellers must be rehoused in central areas in order to be near their employment [...] just doesn't hold water," Bauer argued.⁷³ She explained that midcentury jobs had spread across the metropolitan landscape and that suburbia had plenty of employment opportunities. The real problem was that cities did not want to build public housing in the suburbs. Real-estate professionals had a stranglehold on local housing decisions, and they convinced government officials that public housing in suburbia posed a real threat to the private housing market.

Yamasaki invoked a traditional conservative argument in his defense of high-rise public housing. He wrote that the high cost of downtown land made it economically impractical to build low-rise residences. The architect supported this claim by contrasting the land prices in downtown St. Louis to those in Benton Harbor, Michigan. "Land cost in the St. Louis slums where we are presently building and planning more than 7000 units—has all been in excess of \$60,000 per acre, with some as high as \$105,000. Compare that figure to the \$300 per acre cost in our Benton Harbor, Michigan project," he explained.⁷⁴ Bauer responded by pointing out that inflation had driven developers to build skyscrapers, and that these high prices had to do with

⁷² Yamasaki, "High Buildings for Public Housing?"

 ⁷³ Catherine Bauer, "Low Buildings? Catherine Bauer Questions Mr. Yamasaki's Arguments," *Journal of Housing* 9, no. 7 (July 1952): 227, 232, 246. *ZAN-11903, Milstein Microform Reading Room, Schwarzman Building, New York Public Library, New York City, New York.

⁷⁴ Yamasaki, "High Buildings for Public Housing?"

abnormal conditions, including the postwar housing shortage and relaxed rent control. In regards to land costs in St. Louis and Benton Harbor, Bauer asked, "Where on earth is Title I in this picture?"⁷⁵ She explained that the Housing Act of 1949 was designed as a response to inflated real estate prices downtown, since it subsidized the cost of slum clearance with the goal of redeveloping these neighborhoods at lower densities. Bauer argued that local housing authorities should use the 1949 Housing Act as a tool for decentralization, since the only solution to America's housing crisis was to build low-rise government housing in cities and suburbia.

The social anthropologist Anthony Wallace weighed in on the high-rise versus low-rise controversy.⁷⁶ Dorothy Gazzolo invited Wallace to submit an article for the same issue of *Journal of Housing* that featured the opposed views of Bauer and Yamasaki.⁷⁷ Wallace had conducted tenant research for the Philadelphia Housing Authority in 1951, in which he "studied the human problems involved in the use of elevator apartments."⁷⁸ The Philadelphia Housing Authority had promised citizens that they would build 20,000 units of low-rise public housing by 1955. But the city had trouble acquiring the land necessary to implement the program, so it considered the possibility of building high-rise apartments on fewer acres.⁷⁹ Before moving forward with this idea, the Philadelphia Housing Authority decided that it was important to consult a social scientist about the effects of high-rise construction on family life, child

79 Ibid.

⁷⁵ Catherine Bauer, "Low Buildings?"

⁷⁶ Anthony Wallace, "Why the Argument? The High-Rise, Low-Rise Question is Rooted in Differences of Goals," *Journal of Housing* 9, no. 7 (July 1952): 228. *ZAN-11903, Milstein Microform Reading Room, Schwarzman Building, New York Public Library, New York City, New York.

⁷⁷ Letter from Dorothy Gazzolo to Anthony Wallace, June 26, 1952. Series 1, Journal of Housing, Anthony Wallace Papers, American Philosophical Society, Philadelphia, Pennsylvania.

⁷⁸ Anthony Wallace, "Foreword," in *Housing and Social Structure, a preliminary survey, with particular reference to multi-storey, low rent, public housing projects* (Philadelphia: Philadelphia Housing Authority, 1952).

development and race relations. So they commissioned the University of Pennsylvania anthropologist Wallace to study two public housing projects in Philadelphia: the high-rise Jacob Riis Homes and the low-rise Tasker project.

Wallace based his Philadelphia research on earlier tenancy studies in public housing. He looked for precedents in the work of Robert Merton at Columbia, the Research Center for Group Dynamics at MIT, and the Research Center for Human Relations at NYU, who were similarly interested in the relationship between architecture and tenant satisfaction.⁸⁰ Wallace borrowed the term "functional distance" from these studies as a measurement of the opportunities for social contact made possible by architectural design. He challenged the hypothesis put forward by Merton and others that increased frequencies of social contact—especially through architectural design—tended to result in neighborhood friendships.

Wallace reasoned that the neighborliness facilitated by social contact had a tipping point. His research at the high-rise Jacob Riis Homes showed that excessive social contact between neighbors living in apartment towers made people withdraw from community activities, arguing that "there exists a critical [population] density beyond which individual and social disintegration will ensue."⁸¹ Wallace observed that the Jacob Riis Homes compromised tenant privacy in multiple ways: party walls provided minimal noise protection from neighbors next-door, above and below; a single building entrance funneled tenants into one overcrowded space; and elevators forced neighbors into unwanted social contact multiple times a day. In interviewing tenants at Jacob Riis Homes, Wallace discovered that residents reacted to high-rise life by protecting their privacy, eschewing friendships, and spurning community activities. Conversely,

⁸¹ Ibid, 96.

⁸⁰ Wallace, *Housing and Social Structure*, v.

he found that the residents of the lower density Tasker project reported higher levels of neighborly interaction and communication. In this way, Wallace used the methodological approaches pioneered by Robert Merton and Leon Festinger to demonstrate the limits of the contact hypothesis. He reported that low-rise living was superior to high-rise life, since earlier tenancy studies failed to consider the effects of overcrowding on communities. The Philadelphia Housing Authority heeded his advice.

The low-rise public housing in Philadelphia was exceptional at midcentury. Unlike most housing authorities, the Philadelphia Housing Authority regularly built public housing on vacant land, rather than strictly within depressed downtowns.⁸² By building on cheaper land at the urban periphery, the Philadelphia Housing Authority was free to choose lower-density dwellings as opposed to the skyscrapers typical of inner-city neighborhoods. In her history of public housing, Bristol has attributed the progressivism of the Philadelphia Housing Authority to two citizens' organizations that supervised the activities of their local housing authority, not unlike the CRC in Detroit.⁸³ Stonorov participated in these watchdog groups, which persuaded the Philadelphia Housing Authority to commission Wallace's study, and then publicized his negative conclusions about high-rise housing.⁸⁴ Between 1949 and 1958, the Philadelphia Housing Authority built eleven projects and only one of them consisted solely of high-rise buildings.⁸⁵

Stonorov engineered a compromise in the high- versus low-rise housing debate in his work for the Philadelphia Housing Authority. In 1953 the group hired Stonorov to design their

⁸² Bristol, "Beyond the Pruitt-Igoe Myth," 131-150.

⁸³ Bristol has attributed the progressivism of the public housing program in Detroit to the City Planning Commission and the Philadelphia Housing Association. See Bristol, "Beyond the Pruitt-Igoe Myth," 131-150.

⁸⁴ Ibid, 140.

⁸⁵ Ibid, 136.

newest public housing project, Schuylkill Falls. The architect combined two apartment towers with 32 low-rise buildings in a superblock with picturesque streets and landscaping on 27 acres. Much like the Gratiot-Orleans plan, Stonorov designed Schuylkill Falls as a mix of residential buildings in a park-like landscape centered on an elementary school. The majority of low-rise housing at Schuylkill Falls reflected the architects' belief that low-rise housing, "the smallest unit of community design," was more conducive to social life than high-rise apartments.⁸⁶ Despite Stonorov's enthusiasm for low-rise living, he was also a pragmatist. He designed two apartment towers at Schuylkill Falls in order to meet the requirement for 716 housing units on little more than a few dozen acres. "Large families live near the ground in low buildings and small families live in tall buildings," observed the British architect A.A. Bellamy on his visit to Schuylkill Falls in 1958.⁸⁷ By combining high- and low-rise housing, Stonorov satisfied Philadelphians' demand for housing without conceding the living conditions he thought most desirable for growing families. When Stonorov began his work at Gratiot-Orleans in 1955, he applied the ideas that he had worked out several years earlier at Schuylkill Falls.

As the editor of *Progressive Architecture*, Tom Creighton created a public platform for the high- versus low-rise debate. Creighton bemoaned the tall, identical buildings in repetitious arrangements that characterized government housing in his own city, New York. He protested this issue with the Citizens' Housing and Planning Council, which explored the question, "Must Large Scale Housing Be Monotonous?" as the theme of their Spring 1953 meeting.⁸⁸ Given Creighton's concerns about New York public housing, it is unsurprising that *Progressive*

⁸⁶ Ibid, 141.

⁸⁷ A.A. Bellamy, "Housing in Large Cities in the U.S.A.," *Town Planning Review*, Vol. 29, No. 3 (Oct. 1958): 186.

⁸⁸ Letter from Douglas Haskell to Catherine Bauer, May 19, 1953. Box 11, Folder 11, Catherine Bauer Papers, Bancroft Library, U.C. Berkeley, California.

Architecture awarded Gratiot-Orleans the top prize in the magazine's inaugural town planning competition. The building diversity at Gratiot-Orleans contrasted sharply with the trend towards identical apartment towers in New-York public housing and elsewhere at midcentury.

The Gratiot-Orleans plan appeared to solve the high-rise problem that American architects debated in conferences and professional literature between 1952 and 1954. By mixing low- and high-rise buildings, the Gratiot-Orleans architects met the public demand for housing without building at unhealthy densities (Fig. 5.2). The misgivings that Yamasaki and Stonorov expressed about high-rise buildings responded to tenant research at midcentury, as did the architects' pragmatic choices to build tall apartments as opposed to nothing at all. The "skyscrapomania" that swept the nation stemmed from local housing authorities' making the politically expeditious decision to concentrate government housing in the urban core. Whereas the Philadelphia Housing Authority disrupted this trend by building on vacant land, the more conservative DHC refused to construct public housing anywhere but downtown Detroit. American architects took special notice of Gratiot-Orleans for this reason, since the mixture of high- and low-rise buildings offered an unusual solution to the problem of building an attractive community in the urban core.

IV. Limiting Public Housing

Stonorov, Gruen, and Yamasaki limited the number of public-housing buildings in order to better integrate them with private apartments, row houses and detached dwellings. Many people considered this to be one of the most promising aspects of the Gratiot-Orleans plan. *Architectural Forum* reported that the neighborhood's "public housing (about 1,100 units) would

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be dispersed into several areas, instead of one ghetto.³⁸⁹ The term "ghetto" is important here, because it proves that even public housing advocates at *Architectural Forum* had accepted a long-held conservative argument by midcentury: the belief that every public housing project would return to slum conditions. American architects reasoned that restricting the number of public-housing buildings and integrating them with private ones was the best way to counter this natural regression.

The DHC used zoning regulations as a tool to ensure that Gratiot-Orleans would become a majority-for-sale development. In a bid for federal dollars, the DHC sent its zoning regulations to the Division of Slum Clearance and Urban Renewal in August 1950.⁹⁰ The DHC divided the Gratiot-Orleans tract into 21 parcels of land, with 18 parcels zoned for low-rise private development, and three for high-rise public housing.⁹¹ Restrictions for low- and high-density buildings at Gratiot reflected the DHC's desire to build private housing with federal dollars and minimal public housing. While the CRC would later determine the number and types of housing at Gratiot, the uneven ratio of public and private housing in the neighborhood reflected these earlier zoning restrictions.

The CRC reduced the number of public housing units originally planned for Gratiot-Orleans. The DHC had intended to build 3,600 public housing units for the neighborhood as part of the Detroit Plan in 1946.⁹² But Detroit had trouble raising enough local money to demolish the

⁸⁹ Detroit Unveils Redevelopment to Cure Auto Age Problems," *Architectural Forum* (Jan. 1955): 9. Box OV6, Victor Gruen, Library of Congress, Washington, D.C.

⁹⁰ "Untitled Gratiot-Orleans Report," February 16, 1951. Box 71, Leo Goodman Papers, Library of Congress, Washington, D.C.

⁹¹ "Answers to Questions and Comments Relating to Gratiot Redevelopment Project DM-1, Detroit, Michigan, Detroit Housing Commission, February 19, 1951. Box 72, Leo Goodman Papers, Library of Congress, Washington, D.C.

⁹² "ULI Report," *The Detroit News*, Feb. 22, 1955. Box OV6, Victor Gruen, Library of Congress, Washington, D.C.

slums. After the passage of the 1949 Housing Act, the DHC suddenly had federal dollars for slum clearance, but they had difficulty attracting private developers willing to purchase the cleared land and rebuild according to the city's plan. When the CRC acquired Gratiot-Orleans, they made a number of changes to the neighborhood plan in coordination with the DHC.⁹³ First, they reduced the number of public housing units to 1,100. Second, they sorted these apartment buildings into two different areas (Fig. 5.5). Third, they buffered public housing with private apartments, row houses and detached dwellings. The CRC understood this strategy as the best way to boost tax revenues at the urban renewal site.

Sunken tax revenues were at the heart of municipal slum-clearance efforts across the country. Gratiot-Orleans was a typical example. The 100-acre neighborhood produced a total of \$66,450 in tax revenue during 1944-45, and housing officials estimated that the redeveloped area would yield \$200,650 in city revenues.⁹⁴ Public notices about slum clearance underlined the high levels of infant mortality, disease, and crime in these Detroit neighborhoods. They hardly ever mentioned depressed tax revenues. But Detroit's political leaders responded to these depressed tax revenues at Gratiot-Orleans when they initiated plans for urban renewal. City governments publicized their concern that slum neighborhoods posed dangers for public health, but privately they also worried that these communities dragged down the local economy.

The CRC's decision to reduce the number of public housing at Gratiot-Orleans was in accord with Detroit real estate interests. The Urban Land Institute (ULI) was the voice of the American real estate industry, and published articles on local housing developments across the country. In February 1955, the ULI produced a report about Gratiot-Orleans, in which it

^{93 &}quot;Citizens Committee Recommends Changes in Redevelopment Planning."

⁹⁴ "ULI Report."

cautioned against building too much government housing in the neighborhood. "Should the project be constructed to provide only the lowest rent type property it again will become a slum district in the next 10 or 15 years," predicted the ULI.⁹⁵ They recommended reducing the number of public housing units planned for Gratiot-Orleans from 3,600 units to 900 units.⁹⁶ This proposal confirmed the attitudes of the CRC, which had already instructed Stonorov, Gruen, and Yamasaki to reduce public housing in the neighborhood to 1,100 units.⁹⁷

The ULI stoked fears about the rise of American socialism in order to push their private housing agenda. Real estate interests had bitterly opposed the 1949 Housing Act on the grounds that it was a socialist policy that would upset the capitalist forces that drove the housing market. After the legislation passed, real estate men fought hard to limit public housing to the inner city and to turn slum sites over for private development whenever possible. As I have discussed, Detroit was no exception to this rule. "It is a bad thing for government to be in too large a degree a landlord to its own citizens [...] it is our general judgment that too much public housing is a beachhead for socialism," the realtors at the ULI warned the CRC.⁹⁸ Detroit planned Gratiot-Orleans at the height of McCarthyism, the anti-socialist movement that cracked down on U.S. government spending across the board, but took special aim at public housing.

The CRC's main objective was to sell Gratiot-Orleans to one developer. Stonorov reasoned that this was the only way to ensure that the city's plan would be implemented in its entirety. If the DHC sold individual parcels to multiple developers, they risked waging time-

98 "ULI Report."

^{95 &}quot;ULI Report."

⁹⁶ Ibid.

⁹⁷ "Urban Land Institute's Report on the Gratiot Redevelopment Site," in *Monthly Report to the Commissioners*, Vol. XIII, No. 2, Detroit Housing Commission, Feb-March 1955. Box 42, Detroit Urban League, Bentley Library, University of Michigan, Ann Arbor, Michigan.

consuming and expensive battles over land development. The CRC was much better equipped to work closely with a single developer who shared the group's progressive vision for the neighborhood. Stonorov "gave a strong note of warning" against the "evils of parceling off the development to interested builders" when the CRC considered breaking Gratiot-Orleans into smaller parcels in October 1955.⁹⁹ A few months later, the Chicago developer Herbert Greenwald purchased Gratiot-Orleans from the CRC. Upon receiving this news, Stonorov was en route to an awards dinner organized by *Progressive Architecture* to celebrate the prize-winning Detroit neighborhood plan.¹⁰⁰

On January 19, 1956, Reuther gave a speech about the relationship between democracy and community planning at the architects' awards dinner. He described the Gratiot-Orleans project as a new approach to the problem of building a socially balanced and racially integrated neighborhood.¹⁰¹ Reuther explained that large blocks of public housing had a history of "dragging down" nearby private neighborhoods, so he praised Stonorov, Gruen, and Yamasaki for solving this problem by breaking up public housing into smaller blocks buffered by middle-income housing.¹⁰² He anticipated that limiting the number of public-housing buildings and situating them in lower ratios to private housing would result in raised standards of safety, cleanliness, and livability for the neighborhood.

⁹⁹ "Notes on Gratiot Development," Oct. 11, 1954. Box 4, Folder 1, Oscar Stonorov Papers, American Heritage Center, Laramie, Wyoming.

¹⁰⁰ "Three Architects Honored for Gratiot Project," *Detroit Free Press*, Jan. 20, 1956. Box 3, Folder 31, Carl Almblad Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

¹⁰¹ Richard Lyman, "Detroit Plan to Test New City Pattern: Seek Integration for Public Suites," *New York Herald Tribune*, February 8, 1956. Box OV6, Victor Gruen Papers, Library of Congress, Washington, D.C.

¹⁰² Ibid.

Reuther concluded his speech by confirming the open occupancy policy at Gratiot-Orleans, which would "meet the problem of narrowing the gap that exists in America between American democracy's noble promises and its ugly performance in the field of race relations."¹⁰³ But Reuther did not acknowledge the undemocratic decision to condemn the majority-black Gratiot-Orleans neighborhood—one of the poorest neighborhoods in the city—and replace it with a majority-white community able to pay higher rental prices and buy single-family dwellings. As Sugrue has argued, Reuther often placed economic issues that affected the majority of UAW members ahead of race-specific considerations, as when he failed to press General Motors for an anti-discrimination clause in its union contracts.¹⁰⁴ Similarly, Reuther hoped to secure economic benefits for the union's majority by creating a plan for slum clearance and urban renewal at Gratiot-Orleans.

The decision to reduce the number of public housing units at Gratiot-Orleans (which, presumably, would have been occupied by a majority of black tenants) reflected the state of civil rights legislation at midcentury. Federal courts had newly desegregated public housing, but provided no such protections for minorities in private developments. In 1955 federal judges in Detroit and St. Louis struck down public-housing segregation rules, reasoning that the Supreme Court's decision in *Brown v. Board of Education* applied to government housing as well. If the Supreme Court could not justify public money spent on segregated schools, it followed that public money should not be spent on segregated housing either. After the anti-segregation court rulings in their own city, Detroit housing officials were careful to include provisions for open housing in their urban-renewal plans for Gratiot-Orleans. The Gratiot-Orleans plan conformed to new legislative imperatives for integrated public housing, and it took desegregation one step

¹⁰³ Ibid.

¹⁰⁴ Sugrue, Origins of the Urban Crisis, 102.

further by mixing government housing with private ones. Nevertheless, the uneven ratio of public-private housing ensured that the new neighborhood would not be minority dominated.

Slum clearance at Gratiot-Orleans had occurred in waves since the first eviction notices were distributed after the "Detroit Plan" in 1946.¹⁰⁵ Relocation was a struggle for neighborhood residents, who could ill afford to pay for rentals elsewhere. The DHC offered evicted residents aid in finding adequate housing in the private market, since they had insufficient numbers of public housing in the city to relocate everyone. But the relocation assistance offered by the DHC was inadequate.¹⁰⁶ Only one-third of Gratiot residents moved to public housing.¹⁰⁷ Those fortunate enough to secure public housing still had to leave the neighborhood, since the DHC had dropped plans for public housing at Gratiot-Orleans by 1960.¹⁰⁸ It is not known what became of the remaining residents, but it is likely that they found shelter in more dilapidated housing located within a mile of the Gratiot-site.¹⁰⁹ Some of them ended up living in dwellings that were more over-crowded than the ones they had left behind.

The genre of public-housing history in architecture scholarship has obscured the fact that some local housing authorities built very little public housing at all. Instead they used slum clearance dollars to clear downtown tracts and sell them at bargain rates to private developers. Congress encouraged local housing authorities to sell their urban tracts to private developers, advising them that private industry should "serve more of the total need" in the 1949 Housing

¹⁰⁹ Ibid.

¹⁰⁵ "The Detroit Plan: A Program for Blight Elimination," Detroit Housing Commission, 1946. Box 3, Folder 24, Carl Almblad Papers, Walter Reuther Library, Detroit, Michigan.

¹⁰⁶ Sugrue, Origins of the Urban Crisis, 51.

¹⁰⁷ Ibid.

¹⁰⁸ Hendrickson, *Detroit Perspectives*, 470.

Act.¹¹⁰ This federal legislation expanded the national housing program, but also reflected contemporary concerns about the construction of public-housing islands in the centers of American cities. As it turned out, some local housing authorities shared these apprehensions. The DHC expressed suspicions about public housing, a surprising attitude given that these projects were the housing authority's entire purpose. I have argued that the DHC's limited public housing was the consequence of a private-housing directive that motivated urban renewal in Detroit.

V. Conclusion

On the night that Stonorov, Gruen, and Yamasaki accepted *Progressive Architecture*'s first prize in town planning, they knew that their vision for Gratiot-Orleans was on the chopping block.¹¹¹ One day earlier, Greenwald had announced that he would hire his own architectural team to draw up plans for the newly purchased neighborhood. He selected the famous Ludwig Mies van der Rohe with whom he had collaborated on a recent apartment building project in Chicago to be the chief architect.¹¹² The news must have inspired mixed feelings in Stonorov, Gruen, and Yamasaki. After all, the architects had succeeded in their primary mission—to attract one wealthy developer to the project—but they feared this developer and his favorite architect might scrap all of their hard work.

Mies changed little about the Stonorov, Gruen, and Yamasaki plan. He preserved the superblock system as well as the number and location of high-density and low-density buildings

¹¹⁰ "Housing Act of 1949."

¹¹¹ "Three Architects Honored for Gratiot Project."

¹¹² "Greenwald and Katzin Ready to Build Detroit Project by Mies van der Rohe," Architectural Forum (March 1956): 9. Box OV6, Victor Gruen Papers, Library of Congress, Washington, D.C.

in the landscaped park.¹¹³ The only real change was Mies's decision to do away with the central boulevard that bisected the Gratiot-Orleans site, instead widening the superblock system to create a 17-acre park strip.¹¹⁴ The Detroit Housing Commission advised federal housing officials that Mies's plan bore few differences from the earlier one. "This new plan does, however, have basic similarity to the scheme which had been prepared by the City Plan Commission and was submitted to the Washington Office of Urban Renewal in 1954," the DHC explained to the Division of Slum Clearance and Urban Renewal.¹¹⁵ In their new application for federal assistance, the DHC advised federal officials that Mies's plan for Gratiot-Orleans showed few differences from the earlier one.

But why did Mies choose to duplicate the earlier community plan? Mies may have appreciated the Stonorov, Gruen, and Yamasaki plan (after all, it did receive a national award). But the architect also had little choice in the matter. As I have discussed, the 1949 Housing Act specified that private developers (and their architects) work in accordance with the city plan, which meant that Greenwald and Mies needed to adhere to the zoning restrictions outlined by the DHC as well as federal guidelines for urban redevelopment. Given these options, Greenwald and Mies made the most economically expeditious choice. They proposed a model community, Lafayette Park, based on earlier plans that had already received local and federal approval.

¹¹³ "Plan Street Safety for Gratiot Project," *Detroit News*, Jan. 20, 1956. Box 3, Folder 31, Carl Almblad Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

¹¹⁴ "Greenwald and Katzin Ready to Build."

¹¹⁵ "Final Plan UR-Michigan 1-1," c. 1956. Box 11, Carl Almblad Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

On January 19, 1956, the CRC held a meeting with Detroit government officials in which they revisited their vision for the Gratiot-Orleans community.¹¹⁶ Secretary James Bell presented the CRC's goals for the future of the neighborhood, which required restatement in light of its recent sale to Greenwald. The CRC had spent its resources supervising slum clearance and preparing architectural plans in anticipation of selling the land. What did the CRC hope to accomplish after the neighborhood had been sold to Greenwald? Bell described the CRC's role at Gratiot-Orleans as "the conscience of the community."¹¹⁷ By this he meant that the CRC was a watchdog organization, supervising the development of the neighborhood with an eye towards the common welfare. In describing the CRC's vision for Gratiot-Orleans, Bell underlined the role of conscientious design in promoting neighborhood diversity and stability.

The CRC imagined that it could enforce conscientious design in three ways. First, it would compel Greenwald to build housing at Gratiot-Orleans according to maximum—not minimum—standards. "Every effort must be made to avoid designing dwelling units to minimum standards," warned Bell.¹¹⁸ He argued that minimum standards threatened neighborhood stability, since people needed comfortable dwellings if the community were to survive the next 50 to 100 years. Second, the CRC would encourage "dwelling units for all economic groups" in the newly developed neighborhood.¹¹⁹ The diverse building program at Gratiot-Orleans would provide the framework for a multi-class neighborhood. Third and last, the CRC would make Gratiot-Orleans available on an open-occupancy basis. "Discrimination

¹¹⁹ Ibid.

¹¹⁶ "Planning for People: The Gratiot-Orleans Redevelopment Project," *The Detroit Focus* (Jan.-Feb. 1956): 1. Box 3, Folder 31, Carl Almblad Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

because of race, color or creed will not be tolerated. Neither will we tolerate segregation within the redevelopment area. A socially integrated neighborhood is not one that provides certain buildings for Negroes and certain buildings for whites," stated Bell.¹²⁰ Bell made it clear that the CRC interpreted integration in the narrowest sense: meaning that the group would not tolerate segregation of any kind in their model community.

The CRC's agenda for Gratiot-Orleans had a history. Their decision to build at maximum standards, offer a variety of residential buildings, and promote economic and racial integration stemmed from the previous decade's tenant research. During the postwar years, Stonorov and the Woman's Foundation preached against minimum-housing standards and single-class communities. In their literature and conferences, the Woman's Foundation encouraged developers to build a variety of dwellings for different income groups. This building strategy reappeared in correspondences between Stonorov and Reuther, who shaped the CRC's vision for a multi-class neighborhood at Gratiot-Orleans.

The Gratiot-Orleans plan integrated features of the built environment that did not normally belong together. It combined the open landscaping typical of suburban life with the conveniences of a downtown location. It mixed high-rise apartments with low-rise detached dwellings to create aesthetic variety and attract diverse income groups. It brought together public housing and private housing in a scheme to reduce the socio-economic impact of the former. But the Gratiot-Orleans plan did little to alleviate the housing crisis that deepened the segregation of citizens by race and class in metropolitan Detroit. For this reason, Stonorov, Gruen, and Yamasaki often found themselves in the awkward position of advertising their project's social progressivism, while denying the desperate need for more public housing in Detroit.

¹²⁰ Ibid.

Conclusion

Tenancy studies contributed to the growth of the planning discipline because they demonstrated the importance of synthesizing architectural design and the social sciences. By 1968, the American Institute of Planners had 5,000 members compared to only 300 at the close of the war; during the same period, the number of schools offering graduate planning programs increased from 6 to 45.1 The curriculum at planning schools required students to know about design, but equally impressed upon students the importance of the social sciences for planning "good neighborhoods."² Dean of Architecture Arthur Gallion emphasized the importance of social knowledge in his new planning curriculum for the University of Southern California. "The planner cannot be an expert in everything, but he must be such a generalist in human affairs that he can take data from a variety of sources [...] Consequently, we have laid stress on such social sciences as psychology, sociology, economics and geography in setting up the prerequisites for entrance into the graduate curriculum, which itself has a social science orientation," wrote Gallion in 1957.³ The professionalization of planning in the United States depended on broadening the architect-planner's education to include empirical knowledge of human behavior and institutions. The rationale behind this curriculum was simple: training in the social sciences would help architect-planners understand the prospective tenants for new communities.

¹ Mark Heyman, "Proposal for Master of Community Planning Curriculum," Pennsylvania State University, Middletown, Oct. 1, 1968. Charles Abrams Papers, Box 131, Folder 4, The Division of Rare and Manuscript Collections, Cornell University.

² Arthur Gallion (Dean of Architecture School), and Henry Reining Jr. (Dean of Public Administration School), "The Planning Curriculum at University of Southern California," (c. 1957), G. Coleman Woodbury Papers, Box 12, Folder 1, The Division of Rare and Manuscript Collections, Cornell University.

The planned community transformed the traditional architect-client relationship. Since the early years of their profession, American architects had designed single-family houses for wealthy clients, and they accomplished this by translating their clients' needs and desires into built forms. The work of residential architects depended on knowing their clients, but the scale of the planned community and the large number of people to be housed threatened to make prospective residents unknowable. The architect Kennedy explained that planned communities separated architects from their clients, "He [the architect] can no longer find out for himself what the need of his new clients are," Kennedy explained in 1950.⁴ Instead the planned community required architects to build low-cost, mass housing for a statistical client that the architect could never hope to meet. The prospect of building American neighborhoods in a bigger, faster, and more comprehensive way required architects to anticipate their clients' needs from the outset, since it was no longer possible to depend on future generations to build stores, schools and community buildings. But Kennedy wondered, "On what basis can the architect decide those social questions for which he has no such information?"⁵

Tenancy studies helped to answer this question. The architects Stein and Stonorov commissioned surveys of prospective residents for their PWA projects in an effort to build the most suitable housing, recreational facilities, and community buildings for a particular group. "We consider the unique accomplishment of a survey directed by an architectural office with the help of neighboring universities with pride. It shows for the first time to our knowledge what social responsibility 'housing architects' will have to face in the future," boasted Stonorov in

⁴ Robert Woods Kennedy, "Sociopsychological Problems of Housing Design," in *Social Pressures in Informal Groups*, eds. Leon Festinger, Stanley Schachter and Kurt Back (New York: Harper and Brothers, 1950), 203.

⁵ Ibid, 205.

reference to his resident surveys for the Carl Mackley Houses.⁶ Tenancy surveys provided important information about Carl Mackley residents, including their daily routines, spending patterns, monthly income, recreational activities and family dynamics. Stonorov described tenancy surveys as the architect's social responsibility because they created a statistical picture of their clients' physical and socio-psychological needs.

Women conducted tenancy studies during the New Deal years. Bauer and Morgan spent one year interviewing residents of the Bronx, collecting data about their spending habits, family sizes, building amenities, and furniture arrangements. Stein used this information to design Hillside Homes, and, after several years, commissioned Blackham to create a survey of current residents in the interest of improving future community projects. Stonorov recruited recently graduated social workers, economists and sociologists from Bryn Mawr (among other institutions of higher learning) for his six-month study of tenants living in Northeast Philadelphia's poorest neighborhoods. Oats produced the first study of residential mobility in public housing, which she published in her role as Director of Community Planning for the New York City Housing Authority. Women dominated this early episode in the professionalization of tenancy studies, since very few professionals in the fields of social science or psychology were interested in housing before World War II.

The women who pioneered the scientific study of tenants during the New Deal years were part of a longer tradition of housing reform in the United States. This tradition reached at least as far back as the Progressive era, in which women created their own 'amateur' surveys of

⁶ Oscar Stonorov, "Project of a Community Development for the American Federation of Full Fashioned Hosiery Workers in Philadelphia, Pennsylvania," August 30, 1932. Box 2, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

low-income groups, such as Jane Addams's writings about Hull-House in Chicago.⁷ Bauer, Blackham, and Oats were housing reformers who had enough training in social work or experience in government housing to use the tools of social science—observation, interviews, and questionnaires—to conduct their own studies of tenants. Bauer introduced herself as a writer, who, "far from being a respectable social scientist, is frankly a reformer in the field of housing in particular and man-made environment in general," she explained in an article about social research and housing in 1949.⁸ But there was an important difference between the New Deal women who conducted tenant surveys, such as Bauer, and the Progressive women who pioneered the field of housing reform in the United States. Whereas Addams wrote an anecdotal account of Hull House residents on her own initiative, Bauer wrote tenancy surveys for the architect Stein. Her ultimate goal was to create guidelines for architectural design.

Architects still hoped to attract professionals in the social sciences, even though they were satisfied to hire people with different educational backgrounds. Stonorov proposed a Bureau for Social Research to coordinate the efforts of Philadelphia architects and social scientists in the field of housing. Although Philadelphia never built a Bureau for Social Research, Stonorov's proposal was an early indication of what American architects hoped to gain from social science in 1932. He believed that social surveys of housing "did not exist" in Philadelphia and that the city needed a "medium through which for the first time architect and sociological investigation could collaborate."⁹ Whereas social scientists would collect relevant information about the community in question, architects would apply this research to the problem of

⁷ Jane Addams, *Twenty Years at Hull-House* (New York: Macmillan Co., 1910; New York: Empire Books, 2011).

⁸ Catherine Bauer, "Some Notes on Social Research, Re: Community Planning," February 1949, Distributed by the Citizens' Council on City Planning, Philadelphia, 1.

⁹ Letter from Oscar Stonorov to John Edelman, February 18, 1932. Box 52, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

community planning. Kennedy imagined the architect-scientist relationship in a similar way, "I think the most valuable thing the social psychologists could do would be somehow to take the place of the architect's lost client [...] The sort of help to be most valuable would be of a sort to create vivid pictures of how the people to be housed operate socially and psychologically almost in the way a painting or a novel describes a given situation," explained Kennedy in 1949.¹⁰ This ideal description of the working relationship between American architects and social scientists persisted in architecture discourse during the New Deal, WWII, and postwar eras.

Architects and social scientists agreed that planned communities improved social conditions in cities through creating smaller neighborhoods that enabled the kinds of "face-to-face" interactions associated with pre-industrial life. Stein associated face-to-face groups with the pre-industrial New England village, which he (like many other Americans) romanticized as the birthplace of democracy in the United States. Stein upheld the planned community because it provided an architecturally delimited space for the practice of face-to-face democracy, which he contrasted with the impersonal nature of representative democracy. National interest in the politics of everyday life ratcheted up after World War II, since Americans worried about the state of democracy in their own country after witnessing the rise of fascism in Europe. Bauer identified the face-to-face group as the "common field between social science and community planning," since it referred to a population defined by the architectural boundaries of a neighborhood as well as the feelings of group belonging associated with a small community.¹¹

¹⁰ Robert Woods Kennedy quoted in Bauer's notes from MIT meeting on April 21, 1949. Box 12, Folder 1, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

¹¹ Bauer, "Some Notes on Social Research."

socio-political potentialities of planned communities, and, in doing so, it created a common problem for architects and social scientists to investigate.

Festinger pioneered a program for tenant research that was a peculiar combination of sociology and consumerism. Festinger used "resident satisfaction" as a barometer to measure social relationships in MIT veteran housing. This term belonged to Mayo's famous Hawthorne study (which measured worker satisfaction) and also came from architect Kelly, who directed Festinger to investigate the "satisfaction of human needs" at Westgate.¹² Kelly realized that planned communities required major investments, and he looked to resident surveys as a means to guarantee the consumer's satisfaction and thereby ensure the long-term success of the neighborhood. During the 1950s, social scientists borrowed Festinger's methodology for studying people in public housing. Morton Deutsch and Mary Evans Collins measured racial tolerance in integrated public housing projects according to "resident satisfaction," thereby adapting this consumerist language for their own purposes.¹³ Social scientists appropriated and distorted the consumer interests at the heart of Kelly's research program in order to explore the question of segregation in planned communities.

Social scientists conducted tenancy studies on the fringes of their discipline, and they legitimized this new research by adhering to the scientific method. Importantly, the scientific method required social scientists to study class segregation and race segregation separately. If social scientists wanted to know if geographic proximity had any bearing on a white person's willingness to befriend a non-white person, they needed to isolate both the independent variable

¹² Burnham Kelly, "Background of the Group Dynamics Study for the Bemis Foundation," Jan. 29, 1947. Box 3, Folder 1, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

¹³ Morton Deutsch and Mary Evans Collins, *Interracial Housing: A Psychological Evaluation of a Social Experiment* (Minneapolis: University of Minnesota Press, 1951).

(proximity) and the dependent variable (interracial friendship). It was not feasible to measure the effects of classism and racism in the same experiment. Public housing was an ideal laboratory for studying race relations because its residents were homogenously classed, meaning that social class was a controlled variable that would not confound with the independent variable (proximity) in studies of race relations. Racially integrated housing was a divisive topic in the United States, so social scientists exercised special caution to conduct research that held up in the face of criticism.

Merton discouraged tenancy studies that failed to meet the standards of the scientific method. When Merton dismissed the Aliso Village photographs as "unscientific," he did so because they did not test a hypothesis and therefore could not contribute to existing studies of race relations in public housing. But in rejecting these photographs, he also refused to acknowledge the Housing Authority of the City of Los Angeles, which commissioned the Aliso photographs. Local housing authorities pioneered some of the earliest studies of tenants in the United States, and they accomplished this with little or no assistance from professionals in the social sciences.

The stories of Nadel and Oats centered on the opportunities for publishing tenancy studies in the absence of support from the scientific community. Nadel and Oats produced studies of the residents in public housing while working for local housing authorities in Los Angeles and New York, and they both sought ways to disseminate this research for a mainstream audience. Nadel wanted to publish his Aliso Village photographs in mainstream magazines, such as *Ladies' Home Journal*, but editors told him that these images did not appeal to the middleclass aspirations of their readers. So he turned to social scientists in the hopes that his photographs might illustrate their studies of racially integrated housing. But they rejected him

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too. Conversely, Oats succeeded in disseminating her tenancy study to a general audience. Her research on residential mobility inspired Stonorov's "House for Family Living" published in *Life* magazine. She also convinced the Woman's Foundation of New York to organize a special conference for architects and medical practitioners that centered on the social effects of residential mobility. Eventually, these ideas found their way into the National Conference on Family Life, which publicized the negative social effects of residential mobility on American families in May 1948. Whereas Nadel's photographs remained generally unknown, Oats's writings set in motion a national conversation about the increasingly unstable American population, who regularly abandoned their houses and neighborhoods in search of better ones. In what ways can we make sense of the different trajectories for these two studies, which both began in public housing?

Very few places existed where writers and photographers could publish their research on public housing. Generally speaking, mainstream magazines did not publish articles on public housing. Instead they ran articles about the newest building methods and technologies in the private housing market. Nevertheless, Nadel hoped that the recent passage of the 1948 Housing Act would encourage magazine editors to weigh in on the national conversation about public housing, and maybe even discuss the contentious subject of racial integration. He was wrong. Nadel could not even convince the editor of America's public housing magazine—*The Journal of Housing*—to publish his photographs, since Gazzalo worried that pictures of a racially integrated neighborhood might offend local housing authorities in the South. Nadel could not find publishers in mainstream literature either, since, unlike Oats, he was unable to modify his public housing study to better suit the concerns of the private housing market.

Oats first identified the problem of residential mobility in public housing, but she soon came to realize that it affected all planned communities. She found that most public housing in New York catered to the "average" four-person family, and these two-bedroom apartments were unsuitable for young couples, big families and, most importantly, the elderly citizens who represented over 30% of the city's low-income residents. Oats observed that building homogeneity in public housing disrupted the social lives of individual families and the community, since people were forced to leave when their families no longer conformed to the four-person standard. She argued that the best way to solve the residential mobility problem was to build a variety of public housing units that could accommodate low-income people at every stage of the life cycle in her book, Studies in Community Planning in Terms of the Span of Life, published in 1937.¹⁴ Over the next decade, the FHA subsidized suburban tract houses for the private market, and these homogenous dwellings caused the same residential mobility problem that Oats had witnessed in public housing. Oats responded by modifying her original study of residential mobility for the private housing market, and she found platforms to address prospective homeowners, architects, and residential developers in national conferences and mainstream literature.

The concept of residential mobility touched upon class segregation in a subtle way. When private developers built planned communities they narrowly targeted a single income group, and the homogeneity of dwellings in these neighborhoods reflected that objective. The issue of residential mobility was really about class segregation, since private developers believed it was risky to build a variety of dwelling types—apartments, row houses, and single-family houses because they anticipated difficulties selling the higher-priced houses in a mixed-class

¹⁴ Catherine Lansing Oats, *Studies in Community Planning in Terms of the Span of Life* (New York: New York City Housing Authority, 1937).

neighborhood. Even though this was the crux of the problem, Oats, and later, Gutheim, did not criticize private developers for building one-class communities. Instead they criticized them for disrupting the "natural" progression of family life by failing to provide suitable dwellings for young couples, families, and elderly persons. This proved to be a successful strategy, since the issue of residential mobility amplified the federal government's existing concerns about the postwar family. On May 6, 1948, the National Conference on Family Life took place at the White House, and its organizers asked attendees, "How do poor housing and town planning snarl family relationships?"¹⁵

One architect offered an answer to this question. Stonorov believed that residential mobility was the most pressing issue in American communities, and he had a plan to stop it. He had worked with Oats and Gutheim at the Woman's Foundation to promote the group's conferences in the architecture community, and he co-edited their book, *Houses for Family Living*, which centered on the social problems resulting from homogenous tract housing.¹⁶ Stonorov imagined that the best way to keep people in their neighborhoods was to build a variety of housing that could accommodate everyone's needs during the long durée of family life.

This was the idea behind the Gratiot-Orleans project, which *Architectural Forum* praised for its diversity of dwelling types, meaning its mixture of high-rise apartments, row houses, and single-family houses, "The Gratiot neighborhood will provide for people who like gardening and for those who hate it; for people with children of all ages and for those without children; for people who enjoy views from high up and for those who like to be near the ground," explained

¹⁵ "National Conference on Family Life," brochure, Washington, D.C. May 6-8, 1948. Box 224, Frederick Gutheim Papers, American Heritage Center, University of Wyoming, Laramie.

¹⁶ Frederick Gutheim, *Houses for Family Living* (New York: Woman's Foundation, 1948).

the architects Stonorov, Gruen and Yamasaki in their March 1955 article.¹⁷ The Gratiot-Orleans neighborhood not only accommodated different types of families, but also catered to diverse lifestyles and tastes in Detroit.

Detroit brought together a number of historical strategies for American housing reform when it established the Citizens Redevelopment Committee (CRC) in 1952. It recalled the ambitions of the Labor Housing Committee to put labor union leadership in charge of community planning (even if Reuther was a token progressive among the industrial tycoons that dominated the CRC). The CRC and its team of architects revived the single-corporation and single-architect model put forward in the writings of Stein, and typified by Hillside Homes and the Carl Mackley Houses. It also set an example for citizens' participation in community planning, a problem that Bauer had described as "the great political challenge of our time" in 1944.¹⁸ Most importantly, the CRC promised to curb the speculative real estate industry by managing private development in downtown Detroit, and, in doing so, it renewed the longstanding but generally unproven claim that private builders could solve America's housing crisis.

The architects hoped to accomplish this by building a variety of housing at Gratiot-Orleans. They believed that the combination of apartments, row houses and single-family dwellings in their community plan would result in a multi-class and racially diverse neighborhood. The architects promised, "a true democratic community ready to serve all races and income levels," in the proposal they presented to the CRC.¹⁹ The Gratiot-Orleans plan was

¹⁷ "Redevelopment f.o.b. Detroit," Architectural Forum, March 1955.

¹⁸ Catherine Bauer, "Planning is Politics but are Planners Politicians?" Pencil Points, XXV (March 1944), 66-70.

¹⁹ Oscar Stonorov, Victor Gruen and Minoru Yamasaki, "Introduction," in Urban Redevelopment U.R. Michigan 1-1, 1. Box 53, Victor Gruen Papers, American Heritage Center, Laramie, Wyoming.

dominated by private housing, but nevertheless included several apartment buildings for public housing on the site's periphery. This mixture of public and private housing reflected midcentury Americans' concerns about the wisdom of building large "islands" of public housing in downtown neighborhoods. By building fewer public housing units and locating them close to private housing, the architects reasoned that they could prevent the sinking property values sometimes associated with public housing. Moreover, architects upheld Gratiot-Orleans as a racially integrated neighborhood, since it mixed the non-white residents of public housing with white residents in privately owned dwellings.

The Gratiot-Orleans project demonstrated the limits of racial progress in America's housing market at midcentury. In 1955 federal judges in Detroit and St. Louis struck down public housing segregation rules, reasoning that the Supreme Court's decision in *Brown v. Board of Education* applied to government housing, too. The Gratiot-Orleans plan conformed to new legislative imperatives for racially integrated public housing, but it underestimated the number of apartments needed to meet the city's inner-city housing problem. When the CRC sold the site to Greenwald, the group negotiated with Detroit government officials to drop plans for public housing altogether. The CRC supervised the eviction of black residents at Gratiot-Orleans for the purposes of building a mixed-income, racially diverse neighborhood. Lafayette Park captured the compromised vision of democracy that dictated even the most progressive planned communities in the postwar era.

Between 1933 and 1965, American consumers learned about two models for planned communities that stemmed from the tenancy studies conducted by architects and social scientists. The first model was the *integrated community*, which coordinated public and private buildings into a visually pleasing landscape. The second model focused on a particular aspect of the

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planned community: *residential variety*. Bauer and others disseminated these separate but overlapping models for well-planned communities in the hopes of encouraging discernment among American homebuyers.

Bauer preached that Americans needed to exercise caution in the selection of their houses and neighborhoods. She advised the readers of *Collier's* to purchase houses in "self-sufficient" communities that included all of the housing, recreation, shopping and public buildings necessary for everyday life.²⁰ Bauer had learned about functionally integrated-neighborhoods from her travels to Europe, where she marveled at social housing in Frankfurt and Karlsruhe.²¹ But she also borrowed ideas from the American sociologist Clarence Perry, whose writings on the "neighborhood unit" offered a socio-psychological rationale for integration. In her *Collier's* article, Bauer explained the architectural features of the integrated neighborhood using sociological language, demonstrating that architecture and social science could be combined to construct a consumer message. This would prove to be a popular strategy.

One problem was that consumer literature tended to focus on individual houses, not neighborhoods. This issue made it difficult to discuss residential variety as a model for community planning, as opposed to a principle for house design. In his book *Houses for Family Living*, Gutheim argued that no universal house could accommodate the American family's changing needs over time. Gutheim told prospective homeowners to choose "a neighborhood where you can move easily from one house or apartment to another as your family requirements change, without having to move to a different part of town."²² Gutheim recommended more

²⁰ Catherine Bauer and Ruth Carson, "Land for Your House," *Collier's*, May 15, 1937, Box 7, Folder 24, Catherine Bauer Wurster Papers, Bancroft Library, UC Berkeley.

²¹ Catherine Bauer, "Slums Aren't Necessary," *American Mercury 31*, March 1934, Box 7, Folder 17, Catherine Bauer Wurster Papers, Bancroft Library, UC Berkeley.

²² Gutheim, Houses for Family Living, 28.

building variety in neighborhoods, but he offered no further details about the dwellings one might expect in such a community or if they would be offered for rent or sale. Instead Gutheim described the modest ways that Americans could modify their individual dwellings to suit their family's changing needs over time.

Similarly, Stonorov reinterpreted the concept of residential variety for a consumer audience. Whereas he told his fellow architects that residential mobility could be reversed by building a variety of houses for different income groups, Stonorov reframed residential mobility as a problem for single-family house design when he addressed the general consumer. When Stonorov inquired about writing an article on residential variety for *Life* magazine, the editors approved his proposal on the condition that the architect would illustrate the concept with a design for a single-family house.²³ Stonorov's "House for Family Living" had movable partitions that people could adjust to accommodate their family's changing needs, and thereby minimize some of the social disruption caused by outgrowing one's house. The original concept of residential variety had more to do with community planning than house design, but the latter emphasis took precedence in mainstream publications because it better fit within the established canon of consumer literature on home improvement.

Bauer and Stonorov transmitted their progressive vision for American housing through labor unions, which were better organized than existing groups for consumer advocacy. Bauer reasoned that "workers are organized consumers," and, along with Stonorov, she established the Labor Housing Conference in Philadelphia as a means to educate workers about the value of

²³ Letter from John Dille to Oscar Stonorov, July 21, 1948. Box 28, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie.

good quality housing built in integrated communities.²⁴ The Labor Housing Conference never became the nationally organized consumer advocacy group that Bauer and Stonorov had imagined, and the group dissolved by WWII. But Bauer's writings for the Labor Housing Conference reappeared in national literature published by the United Automobile, Aircraft, and Agricultural Implement Workers of America (UAW), which established a Housing Department during the War. "There will never be a realistic housing movement in this country until the workers and consumers themselves take a hand in the solution of this problem," Bauer advised UAW members.²⁵ The UAW Housing Division advised workers to choose houses in integrated planned communities, and to be wary of the "minimum standards" for house design that too often became maximum standards for (non) livability.²⁶ Their objective was to improve American houses and neighborhoods by creating a discerning consumer.

Stonorov wanted to establish partnerships between union leaders and federal housing officials for the purposes of building affordable housing. The Carl Mackley Houses served as a prototype for this idea, since the Philadelphia Hosiery Workers designed and managed the neighborhood through a limited-divided corporation established with federal financing. But this model for affordable housing proved impossible to duplicate after the PWA stopped working with limited-dividend corporations, and instead took on the design and construction of public housing themselves. Stonorov hoped that World War II defense housing might provide another opportunity for collaboration between federal officials and union leaders. So he approached UAW leader Reuther about designing a city for 55,000 defense workers at the Ford bomber plant

²⁴ Catherine Bauer, "Housing For, Of and By Workers," pamphlet, c. May 1934, Box 52, Oscar Stonorov Papers, American Heritage Center, University of Wyoming, Laramie, Wyoming.

²⁵ Catherine Bauer quoted in "Homes for Workers in Planned Communities through Collective Action," booklet published by the UAW-CIO, 1943. Box 9, Walter Reuther Papers, Walter Reuther Library, Wayne State University, Detroit, Michigan.

in Willow Run, Michigan, in 1941. But Detroit real estate interests shut down Stonorov's Defense City before any attempt to implement it could get underway. Throughout his career, Stonorov hoped that the Carl Mackley Houses would set an example for housing reform, but it remained an exceptional American neighborhood as opposed to the new rule.

Stonorov paved the way for future collaborations between architects and social scientists that explored the question of tenant satisfaction, even if social scientists sometimes collected information that had little to do with architects' concerns. This was true for the "Husbands and Wives" questionnaire at Carl Mackley Houses, which had no direct bearing on architectural design. It was also true for the Regent Hill study, which strayed from its original objective: to analyze the social effects of community buildings. For this reason, architect Kelly discouraged social scientist Festinger from publishing the study, arguing that "the results [were] inconclusive" because the study failed to prove that community buildings alone improved resident satisfaction than any building.²⁷ (In some cases, Festinger showed that community recreation actually increased hostile attitudes between groups!) Whereas Kelly understood sociology narrowly (as a means to improve and defend architectural design), Festinger had a broader research agenda that sometimes misaligned with the architect's goals.

The legacy of the tenant surveys produced between 1933 and 1955 was the expectation that American neighborhoods should meet people's socio-psychological needs. This expectation motivated the architecture critic Jane Jacobs and the city planner Kevin Lynch to ask questions about the ways people imagined and inhabited their neighborhoods in the 1960s. Lynch's *The Image of the City* was a psychological study of the mental maps that helped people navigate

²⁷ Letter from Burnham Kelly to Leon Festinger, Jan. 26, 1951. Box 3, Folder 4, Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology, Cambridge, Massachusetts.

urban districts, in which the author identified five built forms that oriented people in their environment.²⁸ Jacobs's *The Death and Life of the Great American City* responded to the phenomenon of suburban flight by offering an account of the social pleasures involved in city living, even and especially for families.²⁹ She famously upheld Greenwich Village as the ideal neighborhood for raising children, since the community offered entertainment for stay-at-home mothers, as well as the security of informal surveillance, or "eyes on the street," for children playing under the watch of neighbors and shopkeepers. *Image of the City* and *Death and Life* became instant classics in the fields of architecture and city planning upon their publications between 1960 and 1961.

We can trace the socio-psychological methods in Lynch's groundbreaking study to the emergence of social science in Cambridge architecture schools during the postwar era. Lynch attended the group discussion organized by Bauer and Merton for architects and urban planners in Cambridge, Massachusetts on April 21, 1949. Bauer and Merton solicited participants' ideas for a special edition of the *Journal of Social Issues*, which would discuss the most troubling problems in the architecture and planning disciplines for a social science readership. In that meeting, Kennedy discussed the problem of residential mobility with Lynch, who shared his interest in the *psychological* effects of moving from one house to another. Lynch also wanted social scientists to investigate the psychological effects of other living situations, such as inhabiting open space, urban space, or even the monotonous spaces of Levittown.³⁰ In their collaborations with social scientists, Bauer and the Bemis Foundation architects created a

²⁸ Kevin Lynch, *The Image of the City* (Cambridge: MIT Press, 1960).

²⁹ Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1961, 1992).

³⁰ Kevin Lynch quoted in Bauer's notes from MIT meeting on April 21, 1949. Box 12, Folder 1, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

discursive framework for studying architecture that shaped the types of questions that people at Harvard and MIT asked about buildings in the postwar years. Lynch's socio-psychological approach to urban planning emerged from this particular moment in the history of architecture education in Cambridge.

Jacobs challenged the decentralized model for city planning promoted by Bauer and other members of the RPAA. The mass migration of people from cities to suburbs—a phenomenon known as "white flight"—affected most American cities by 1960. The endless rows of tract housing in American suburbs realized the worst fears of the RPAA decentrists, who attributed suburban sprawl to the unchecked power of the speculative real estate industry. Jacobs and Bauer exchanged letters in which they discussed the wastefulness of unplanned metropolitan growth, but they differed in their proposed solutions.³¹ Whereas Bauer wanted local governments to take greater control over regional planning, Jacobs wanted to prevent municipal officials, such as Robert Moses, from building highways through urban neighborhoods. In *Death and Life*, Jacobs criticized Bauer for popularizing an idea that threatened American cities: "the street is a bad place for humans."³² *Death and Life* called attention to the forms of neighborliness that occurred on urban streets, and promoted a laissez-faire approach to city planning based on the belief that the best way to protect urban ways of life was to prevent government interference.

Although Jacobs preached against Bauer's ideas, she addressed the general American reader in a manner that recalled Bauer's writing style, which combined social science, architecture and housing reform language. Bauer and Jacobs regularly published in architecture journals and women's magazines, where they hoped to produce a discerning American consumer

³¹ Letter from Jane Jacobs to Catherine Bauer, Dec. 6, 1957. Box 11, Folder 9, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.

³² Jacobs, *The Death and Life*, 20.

by educating readers about the best neighborhoods. They accomplished this by using observational analysis—a tool borrowed from social science—to describe the social effects of particular features of the built environment, such as streets, cul-de-sacs, and high-rise housing. But, unlike social scientists, Bauer and Jacobs did not study neighborhood sociability for the purposes of testing a hypothesis. Instead they analyzed social life in neighborhoods with an eye towards creating guidelines for architect-planners. Jacobs described *Death and Life* as, "an attempt to introduce new principles of city planning and rebuilding, different and even opposite from those now taught in everything from schools of architecture and planning to the Sunday supplements and women's magazines."³³ Like Bauer, Jacobs believed it was her responsibility to communicate the social consequences of community planning to professionals and general readers.

I have demonstrated that this social-minded approach to the twin problems of mass housing and neighborhood design has a history in tenant studies. It began with the tenant surveys that New Deal architects commissioned for their PWA neighborhoods. It developed in studies of the residents living in public housing, where architects, social scientists and local housing authorities identified residential mobility and population homogeneity as problems for community planning. It spread to the private housing market through conferences and literature produced by domestic scientists, who disseminated and modified findings from tenant studies in public housing to suit an imagined readership of prospective homeowners. And it inspired a midcentury plan for one downtown neighborhood in Detroit, where architects proposed to solve the problems of residential mobility and social homogeneity through community planning.

³³ Ibid, 3.

The planned community was political. Bauer warned that these new neighborhoods could either deepen segregation or dismantle the economic and racial barriers that separated Americans in the built environment.³⁴ Social scientists responded by studying the social effects of racial diversity in public housing, but they were hesitant to discuss the political implications of their research for fear of appearing biased and compromising the legitimacy of their work. Although architects could speak more freely about their political opinions, they addressed the prospective residents of their planned communities—in public and private housing—as consumers instead of citizens. I have argued that postwar debates about who would live in these new communities were really debates over what it meant to be a citizen-consumer in a democratic society.

"Residential propinquity" and "residential mobility" lost currency in architecture and planning schools in the second half of the twentieth century. But these terms from *Social Pressures in Informal Groups* and *Houses for Family Living* were significant in the early history of tenancy studies and contributed towards a psychosocial turn in architectural literature that made the everyday lives of residents an important subject for midcentury research. Jacobs and Lynch popularized this resident-centered approach to urban planning in their classic books about American life in cities. Today we carry forward the legacy of tenancy studies when we turn our attention to the ways that residents use and construe the built environment.

³⁴ Letter from Catherine Bauer to Reginald Johnson, July 20, 1944. Box 20, Folder 11, Catherine Bauer Wurster Papers, Bancroft Library, University of California at Berkeley.



Fig. 1.1 Illustration of Hillside Homes, April 1934 (Clarence Stein Papers, The Division of Rare and Manuscript Collections at Cornell University)



Fig. 1.2 Aerial View of Carl Mackley Houses, c. 1934 (Oscar Stonorov Papers, American Heritage Center)



Fig. 1.3 Toddler Park in Hillside Homes (Clarence Stein, "Hillside Homes," *American Architect*, February 1936)



Fig. 1.4 Garden Court in Hillside Homes (Clarence Stein, "Hillside Homes," *American Architect*, February 1936)



Fig. 1.5 Interior Courtyards at Carl Mackley Houses, c. 2000 (photographer: Jenna Fagan, Historical Society of Pennsylvania)



Fig. 1.6 Superblock at Hillside Homes, c. 1936 (Clarence Stein Papers, Division of Rare and Manuscript Collections at Cornell University)

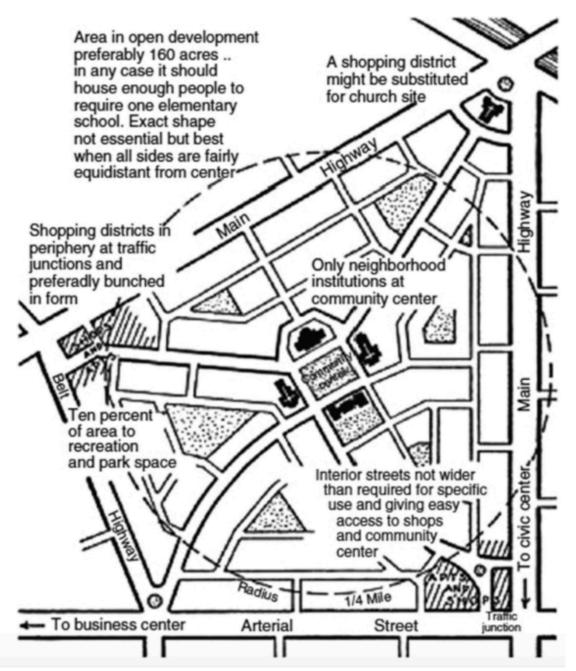


Fig. 1.7 Clarence Perry's Neighborhood Unit (Clarence A. Perry, "The Neighborhood Unit, A Scheme of Arrangement for the Family Life Community," in *Regional Plan of New York and Its Environs*, New York: Committee on Regional Plan of New York and Its Environs, 1929)



Fig. 1.8 Swimming Pool at Carl Mackley Houses, c. 1940 (Historical Society of Pennsylvania)



Fig. 1.9 Community Room in Hillside Homes (Clarence Stein, "Hillside Homes," *American Architect*, February 1936)



Fig. 1.10 "An Outline for Community Housing Procedure" (Clarence Stein, "An Outline for Community Housing Procedure," *Architectural Forum*, May 1932)

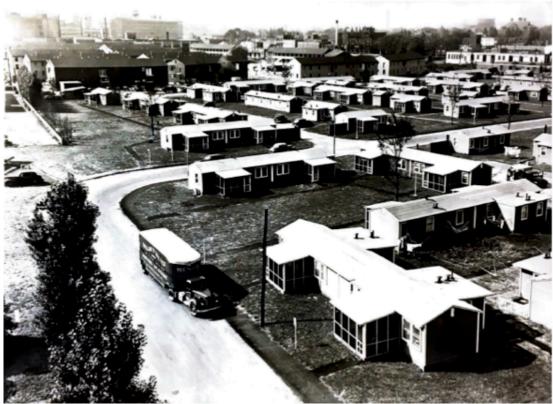


Fig. 2.1 MIT Westgate Housing for Students (Leon Festinger Papers, Bentley Library, University of Michigan)



Fig. 2.2 Westgate Single-Family Houses and Apartments (Leon Festinger Papers, Bentley Library, University of Michigan)

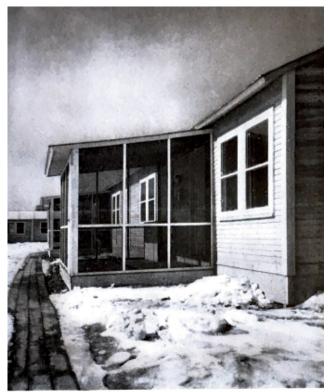
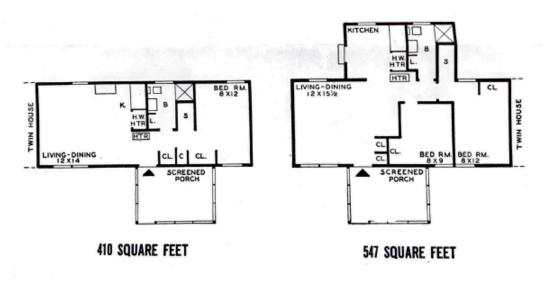


Fig. 2.3 Westgate Single-Family Demountable House (William Wurster, "Building Now," *House and Garden* 89, no. 5, May 1946)



THESE ARE THE TWO BASIC PLANS USED IN THE M.I.T. HOUSES

Fig. 2.4 Westgate Plans for Single-Family Houses (William Wurster, "Building Now," *House and Garden* 89, no. 5, May 1946)



Fig. 2.5 Westgate Apartment Building (Bemis Foundation Papers, Distinctive Collections, Massachusetts Institute of Technology)

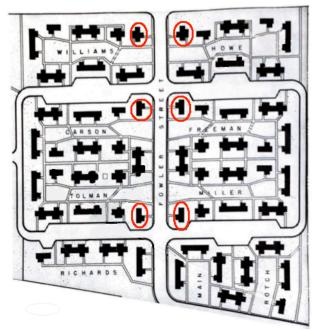


Fig. 2.6 End houses have fewest social contacts in Westgate Courts (Leon Festinger Papers, Bentley Library, University of Michigan)



Fig. 3.1 Four families in the Aliso study (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.2 Portraits of the Four Families (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.3 Wilson and Wong Families in their Living Rooms (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.4 Wilson and Taggart Families at Dinner (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.5 Taggart and Ramirez Families at Christmas (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.6 "In the Shadow of the Capitol: Annual Report of the Washington Housing Association," 1938 (Edith Elmer Wood Papers, Avery Architecture Library, Columbia University)



Fig. 3.7 Slums near Los Angeles City Hall (*There's Nothing Sentimental About Your Cash Register*, LA City Planning Commission, 1948)



Fig. 3.8 Residents in Harlem River House Apartment, c. 1937 (Housing Study Guild Papers, Division of Rare and Manuscript Collections, Cornell University)



Fig. 3.9 Before-and-after photos in Harlem River House apartment, c. 1937 (Housing Study Guild Papers, Division of Rare and Manuscript Collections, Cornell University)



Fig. 3.10 Boy in Los Angeles slum apartment (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.11 Before-and-after Photo of Pueblo del Rio ("Pueblo del Rio—Los Angeles's Most Recent Housing Project," *Architect and Engineer*, Vol. 150, no. 3, Sept. 1942)



Fig. 3.12 San Augustine, Texas, c. 1939 (photographer: Russell Lee, Farm Security Administration Collection, Library of Congress)



Fig. 3.13 Resident Council at Aliso Village (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.14 Julius Shulman photograph of Aliso Village, c. 1942 (Julius Shulman Collection, Special Collections, Getty Research Institute)



Fig. 3.15 Families at Aliso Village (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.16 Cooperative Nursery at Aliso Village (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.17 Aliso building neighbors (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.18 Aliso resident Bud Taggart signing rental contract (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.19 Mother's Club in Aliso Village (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 3.20 Dispute at Aliso Village (Leonard Nadel Papers, Special Collections, Getty Research Institute)



Fig. 4.1 Aerial View of Life House for Family Living (*Life* magazine, July 1950)



Fig. 4.2 Photograph of the Life House for Family Living (*Life* magazine, July 1950)



Fig. 4.3 Life Cycle of U.S. Marriage (*Life* magazine, July 1950)

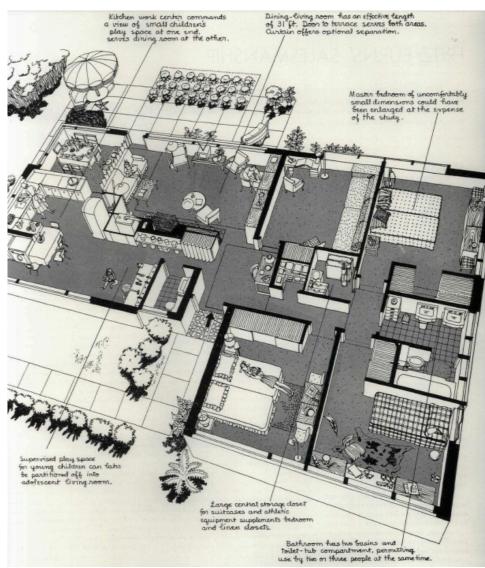


Fig. 4.4 Illustration of the Life House for Family Living ("Planning for Complete Flexibility," *Architectural Forum*, April 1950)

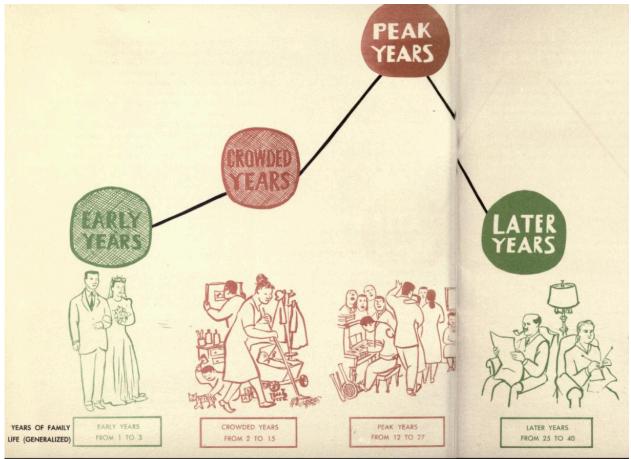


Fig. 4.5 Years of Family Life (Frederick Gutheim, *Houses for Family Living*, New York: Woman's Foundation, 1948)



Fig. 5.1 Gratiot-Orleans Wins First Design Award ("Wins Top National Architectural Award," *Michigan Contractor and Builder*, February 11, 1956, Victor Gruen Papers, Library of Congress, Washington, D.C.)

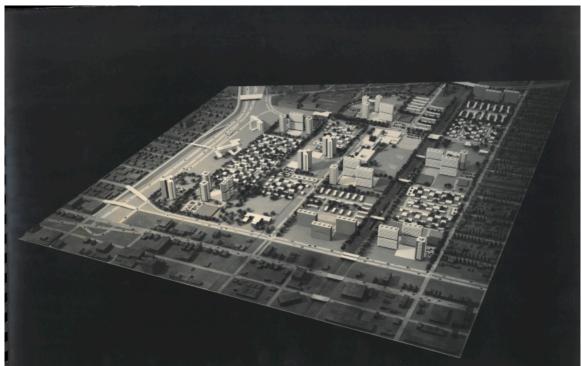


Fig. 5.2 Mixing High and Low-Rise Buildings at Gratiot-Orleans (Victor Gruen Papers, American Heritage Center)



Fig. 5.3 View from Apartment Towers at Gratiot-Orleans (Victor Gruen Papers, American Heritage Center)



Fig. 5.4 Typical Courtyard at Gratiot-Orleans (Victor Gruen Papers, American Heritage Center)

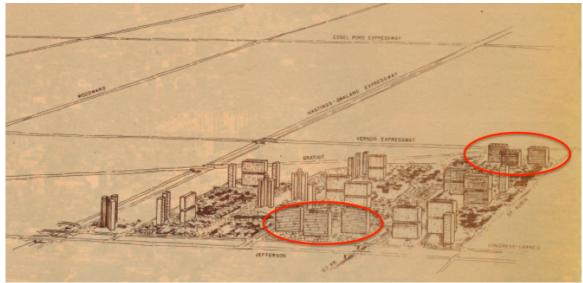


Fig. 5.5 Public Housing at Gratiot-Orleans (Victor Gruen Papers, American Heritage Center)

Bibliography

Primary Sources

This project required visits to a number of archives across the United States. Although I focused primarily on the collected papers of architects and social scientists, I also studied the records of local housing authorities, nonprofit organizations, and, of course, the influential Catherine Bauer Wurster. The following is a summary of those archives and the types of materials that I encountered in each.

Chapter 1: Housing Surveys in Two Architecture Offices

The main sources of documents for this chapter were the Clarence Stein and Oscar Stonorov collections. The Clarence Stein papers in the Division of Rare and Manuscript Collections at Cornell University provided information about the architect's work on Hillside Homes. This collection also included Stein's speeches on community planning, and his correspondence with Hillside's Director of Recreation, Louise Blackham. I also encountered useful information about Hillside Homes in the collection of architect Henry Wright. His papers are located at Cornell University's Division of Rare and Manuscript Collections as well.

My discussion of the Carl Mackley House surveys was based on the Oscar Stonorov papers, which are located at the American Heritage Center in the University of Wyoming. The Stonorov papers included the original questionnaires distributed to Philadelphia hosiery workers, the prospective residents for the Mackley Houses. The architect's correspondence with hosieryunion organizer John Edelman also provided insight into Stonorov's rationale for housing surveys, including his plans for a Bureau of Social Research in Philadelphia.

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Catherine Bauer Wurster exchanged letters with Stein and Stonorov while the architects built their PWA housing projects. The Catherine Bauer Wurster papers in the Bancroft Library at the University of California contained a significant volume of relevant material on PWA architects, the Regional Planning Association of America, the Labor Housing Conference and European social housing. The most significant material for this chapter was Bauer's publications on housing for general readers.

Chapter 2: Social Science and Architecture at MIT

The best source of information about the Westgate Housing Studies is the Bemis Foundation collection at the Massachusetts Institute of Technology. The most relevant materials for my project were letters exchanged between architect Burnham Kelly and social scientist Leon Festinger. The Bemis Foundation collection has also preserved information about the Research Center for Group Dynamics, which operated at MIT in the immediate postwar years and dissolved when Festinger took a faculty position at the University of Michigan. The Leon Festinger papers in the Bentley Library at the University of Michigan provided further information about the Westgate study, as well as useful information about Festinger's other projects during the postwar era.

In exploring the "aftermath" of the Westgate study, I consulted papers in the Catherine Bauer Wurster and Robert Merton collections. The Robert Merton papers are located in the Butler Library at Columbia University. Merton's unpublished studies of racially-integrated housing were useful, as well as his correspondence with Bauer about the sociological questions involved in planned communities. Their correspondence provided a timeline for new developments in the separate but related fields of race-relations and community planning.

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Chapter 3: Picturing Racial Integration at Aliso Village

The Leonard Nadel collection in the Getty Research Institute at Los Angeles contains all of the photographer's work on Aliso Village. It includes photographs that Nadel compiled for his Aliso manuscript, as well as images that he chose not to include. Most revealing were his records of meetings held with Robert Merton, Edward Steichen, Roy Stryker and the editors of women's magazines. Nadel described these meetings in detail, hoping that these people would offer helpful suggestions for publishing his photographs. The Robert Merton papers at Columbia University were of secondary importance. Although the Merton papers did not include documentation of the social scientist's meeting with Nadel, they offered insight into Merton's life at the time of their meeting. Merton regularly spoke out against segregation in popular media, and he kept track of these events in his personal papers.

Chapter 4: Against the Minimum House

Several archives were important for the development of my discussion of minimum houses. The Ladies Home Journal collection at New York Public Library was crucial, since it provided a glimpse into popular ideas about the size(s) of the postwar house. My description of the Woman's Foundation and its "Houses for Family Living" conference was based on records in the Oscar Stonorov papers. Letters exchanged between Stonorov and Catherine Lansing Oats in preparation for the event revealed their expected outcomes. The Frederick Gutheim papers in the American Heritage Center at the University of Wyoming contained correspondence with the Woman's Foundation about his book, *Houses for Family Living*, and included sources of material for the foundation's next event: The National Conference on Family Life. I am grateful to the staff at the Avery Library at Columbia for allowing me to review their unprocessed collection of Frederick Gutheim papers. The Gutheim collection at Columbia includes an unfinished and unpublished autobiography, which helped me to create a timeline for his years at the *New York Herald Tribune* and his subsequent work for the Woman's Foundation. Finally, the Catherine Bauer Wurster papers shed light on her anti-minimum house battle that she waged in architecture journals and mainstream magazines.

Chapter 5: A Suburb in the Heart of Detroit

The history of community planning at Gratiot-Orleans in Detroit spans several archived collections. My discussion of the architects involved in the Gratiot-Orleans plan is primarily drawn from documents in the Victor Gruen collections. This architect's papers are located at the American Heritage Center at the University of Wyoming and the Library of Congress in Washington, D.C. Records of the Citizens Redevelopment Committee (CRC) that supervised the Gratiot-Orleans plan were in multiple collections as well. The papers of UAW leaders Walter Reuther and Leo Goodman described the development of the CRC. The Walter Reuther papers are located in the Walter Reuther Library at Wayne State University in Detroit, and the Leo Goodman papers are at the Library of Congress in Washington, D.C. The history of the Detroit Housing Commission (DHC) provided an important context for the Gratiot-Orleans plan. For the DHC's annual reports, I consulted the Carl Almblad papers at the Reuther Library and the Detroit Urban League papers in the Bentley Library at the University of Michigan.

Once again, the Catherine Bauer Wurster collection was crucial. Her manuscript collection at the Bancroft Library revealed a short-lived debate about the merits of high-rise vs. low-rise living in architecture publications. Her correspondence with the editors of the *Journal of*

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Housing and *Progressive Architecture* provided useful background information about the highrise vs. low-rise debate published in architecture journals between 1952 and 1954.

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