Guest Editor's Introduction

The Most Common of Buildings: The Design and Construction of U.S. Homes and the Households That Occupy Them

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During our nation's recent housing boom and the subsequent contraction, images of homes of varying size and designs, and in various stages of luxury or disrepair, littered the covers of popular magazines and newspaper articles. Any glimpse at cable television programming devoted solely to consumers' stylistic preferences would extol the latest and greatest in housing size, functional layouts, and architectural finishes. All these images have served as visual markers of their times and, in some recent cases, historical ruins.

Behind the facades and walls, however, the design and construction of housing of all types are manifestations of numerous industrial, economic, and cultural trends as much as they are symbolic of those trends. The physical structure, function, and aesthetics of homes also contribute to numerous social outcomes—not the least of which are resident well-being, household financial outlays, and social status. Indeed, the connections between our physical housing and housing's social and economic import are numerous.

Some of these associations appear obvious. For example, the renaissance of prefabrication and mechanization in home construction during the boom years responded to the difficulty of supplying housing efficiently and rapidly enough to meet the immediate demand fostered by increased mortgage access and rising home values. Other relationships between the physically tangible changes in our housing and broader social and political contexts have been evolving over time but can be measured as easily. One such case is the recent explosion of green building products and practices, which are the fruit of a growing awareness of the constraints on our physical environment—and the implications of those constraints for utility bills and occupant health—that has been steadily growing since taking root during the 1970s oil crisis.

Finally, other connections relate historical transformations in houses to broad demographic and cultural shifts. The amenities and technologies within rooms, the layouts of rooms within homes, and the physical connections between homes within neighborhoods all manifest centuries-long

notions of race, class, and gender and reflect the contemporary realities of household incomes and housing prices. In short, design and construction belie an evolution in both the demographic record of U.S. households and the importance—social, financial, and symbolic—of shelter in the American reality and imagination. Although much of the scholarly record and evidence supporting these connections is compelling, it remains unfortunately slim.

Scholarly Perspectives: Housing Design and Construction

Several scholars have created a foundation of empirical inquiry in relation to the design and construction of the physical American built environment beyond housing. This foundation includes the work of Crawford (1996), Hayden (1997), Jackson (1994), and Jackson (1987) on the design of rural landscapes, suburban communities, and urban neighborhoods. Precious few scholars have focused on housing design, technology, and construction. Many of those few scholars connect broader psychosocial concepts with housing design's symbolic aspects (Rybczynski, 1987). Others have focused on key social, economic, and political phenomena in relation to housing design. For example, Lubove's (1963) seminal book documented how the Progressives of the turn of the 19th century carefully studied tenement house designs' effects on resident well-being. That study led to advocacy, which led to the nation's first health and construction codes for existing buildings.

Other scholars, notably architectural historians, have taken the subject of U.S. housing design and construction and its complex relationship to social and economic change further, beyond basic categorization of design styles. In particular, Wright's (1983) groundbreaking work examined the concept of model homes and home designs with regard to social orders throughout U.S. history—that is, orders defining those with and without the resources and access to occupy these homes. Wright argued that access to and use of key design qualities perpetuated class and racial orders around, and gender orders within, the home. The layout of house plans and functions and their relationship to gender roles was the subject of Hayden's (1981) similarly critical work. Archer (2005) and Isenstadt (2006) further shed light on these connections by studying suburban architectural finishes and home sizes, respectively, in relation to demographic changes. Harris (2013) provided a more recent contribution to this growing body of knowledge by focusing on the difference in the marketing of home design typologies and layouts to White and African-American households in the mid-20th century.

Historians of technology of have also explored the relationship between past home occupants and specific housing materials and methods. For example, Cavanaugh (1997) and Giedion (1941) described the evolving use of the most distinctively American housing material and method: lumber framing. Besides discussing the material's physical properties, both scholars illuminated how social and economic traits contributed to the invention and diffusion of balloon-frame construction in Chicago and the Midwest in the early 1800s. The interplay between social context and physical materials and methods in housing has become the subject of an increasing number of technological histories. Bigott (2001) examined advances in plumbing and mechanical systems that were made more affordable to working class, immigrant households in early 20th century Chicago. Cooper (1998), Ogle (1996), and Tobey (1996) each studied different technical systems—electrical, plumbing, and air-conditioning, respectively—in American homes. Laird (2003) examined the solar

energy advocacy movement, including home solar use. More recently, Wolfson (2013) explored the healthy housing movement of the 1980s. In nearly all this work, the focus was largely on the social and industrial milieu from which technological changes grew. Much of the recent work in the history and sociology of technology collectively argues that physical products and practices inscribe and are inscribed by their social contexts.

Although fewer in number, studies by social scientists—sociologists, planners, environmental psychologists, public health scholars, and economists, in particular—have focused on critical physical housing conditions. These studies have included examinations of severely distressed or inadequate housing (Bashir, 2002); criminal or legal actions related to housing conditions like *physical incivilities*, or violations of visual or maintenance norms in a community (Brown, Perkins, and Brown, 2004; Newman, 1973); the homebuilding and remodeling industry's practices (Abernathy et al., 2011); and changing consumer preferences and affordability with respect to different products and materials (Koebel, 2008).

This collective body of work differs from the historical scholarship in three key ways. First, the work tends to focus on specific techniques, designs, and conditions rather than broader technological and architectural trends. Lead-based paint, disaster mitigation techniques and resilience strategies, aging-in-place and accessibility options for the physically challenged, and energy-efficient and sustainable construction are recent examples of topics among the social scientists. Second, quantitative analysis that relies on measurable indicators and methodical data collection is more common. One consequence of the application of this rigor is that most studies tend to rely on smaller, often nonrepresentative samples such as a few buildings or occupants. Third, and most importantly, much of this work explores how specific physical characteristics cause, albeit partially, specific social or economic changes. This focus contrasts significantly with much of the historical work that focuses on how social and economic patterns yield specific physical and aesthetic products—that is, the inverse causation.

These seemingly divergent views of the relationship between housing's design and construction and housing's social and economic contexts, however, are not in conflict. The one generally accepted hypothesis is simply that a relationship does exist—that is, that the introduction, adoption, and transformation of U.S. housing designs and construction technologies are connected to housing's markets, industries, and social outcomes. Work to date has illuminated the directions of these relationships, yet the magnitude of these relationships and the broader significance of design for household outcomes is still a source of much scholarly—and, more precisely, professional—contention.

The Design and Construction of Subsidized Housing

Perhaps because the social and economic outcomes of its occupants are so carefully considered, subsidized housing in the United States has become a critical recent terrain for this debate. The design, construction, and physical maintenance of U.S. low-income housing—both assisted and market-rate inventories—have seen both remarkable innovation and astounding decay during the past century. Where and when it has been designed, constructed, and maintained well, afford-able housing is a vital economic and social asset (von Hoffman, 1996). Where it has not, it is a symbol of modern urban blight, a contributor to precarious living situations, and a symptom of

bureaucratic inefficiency and market disregard. Perceptions of these scenarios have contributed to the contentiousness of capital renewal and the displacement of residents, particularly in public housing (Vale, 2013, 2002, 2000). The physical condition of the new and existing housing stock occupied by low-income Americans ultimately mirrors housing policy, subsidy and development programs, market fluctuations, and many other considerations.

Analyses of low-income housing, especially publicly assisted housing, make up an evolving subset of the qualitative historical and sociological research on housing design. Much of this work has come about because of the explicit emphasis on design and construction in federal housing policies for example, the introduction of "New Urbanist" design principles in the U.S. Department of Housing and Urban Development's HOPE VI program for revitalizing public housing in the 1990s (Calthorpe, 2009). Scholarly reactions to the quality of design that resulted from the application of specific design criteria in assisted housing (Day, 2003; Hanlon, 2010; Sohmer and Lang, 2000) and to the critical role of community engagement (Jones, Pettus, and Pyatok, 1997) have developed in parallel to the professional debates about the practices and politics of low-income housing development.

Since the featuring of design in housing policy in the mid-1990s, a variety of documentary reviews of assisted housing projects and professional practices have also been published (Architecture for Humanity, 2012; Bell and Wakeford, 2008; Davis, 1995; Schmitz, 2005). With this professional scholarship has come a growing kit of professional tools, the organization, format, and content of which outline the unique relationships between assisted housing design and construction, professional designers and builders, and occupants. These tools include the online Affordable Housing Design Advisor, begun in the late 1990s, and Enterprise Community Partners' multifaceted design efforts, including the Rose Architectural Fellowship and Affordable Housing Design Leadership Institute. The dialectic between practice and scholarly research in this subject area has been and will continue to be one that shapes the broader debate regarding the relationship of design and construction to individual, household, and community outcomes.

The Symposium

It is into many of these gaps that this *Cityscape* symposium ventures. Rather than showcase current practices and products in housing design, this symposium focuses on continuing the exploration of historical and social science analyses of the form, materials, means, and methods of housing, with a particular focus on low-income housing. The articles presented here cover a wide range of relationships within this subject area.

Vinit Mukhija's article, "The Value of Incremental Development and Design in Affordable Housing," considers the informal design interventions that residents produce, focusing on a single design technique and housing strategy—that is, incremental housing. Mukhija specifically explores the potential of self-help housing efforts and their physical outputs regarding housing designs and construction by assessing the U.S. Department of Agriculture's Mutual Self-Help Housing (MSHH) program. Although his article is critical of certain terms and changes in the program's regulations, Mukhija attempts to demonstrate how programs like MSHH that circumvent formal housing production practices can expand housing supply appropriate for low-income households' financial capacity and design functions.

To elaborate on the ways in which housing policy and design interact, the articles "What Affordable Housing Should Afford: Housing for Resilient Cities," by Lawrence J. Vale, Shomon Shamsuddin, Annemarie Gray, and Kassie Bertumen, and "Disaster Recovery and Community Renewal: Housing Approaches," by Mary C. Comerio, focus on a single design and policy issue as it plays out in different national contexts. Vale et al. take on a broad topic of contemporary interest in the housing design world: *resilience*. Building on Vale's past analysis of U.S. public housing design and social policy outcomes and on his comparative international work on postdisaster housing recovery, Vale et al. argue that affordable housing should afford a variety of key social and economic benefits beyond the provision of shelter. The article puts forth four case studies in contexts ranging from a U.S. public housing redevelopment and the regularization of an informal settlement in Chile to postdisaster environments in the United States and Indonesia. In these varying contexts, resilience, defined across economic, social, physical, and governance dimensions, then becomes a simultaneous design and a policy imperative.

To further contribute an international perspective that shares the context of disaster-related housing, Comerio scans the globe for housing policies that have served to either enable or challenge the broader social and policy goals of recovery. Comerio distinguishes housing—its design, construction, and reconstruction—from other types of physical investments to demonstrate how recovery is informed as much by national and local definitions of the social contract as by the physical quality of the housing stock. As such, Comerio grounds the concept of resilience in specific, current policies (and policy gaps) that will shape and incentivize housing design and construction in the near future.

Gwendolyn Wright's article, "Design and Affordable American Housing," summarizes where the early architectural histories of popular housing—including her own previous groundbreaking work—leave off. Wright continues to place contemporary affordable housing design and policies in historical context. In paying particular attention to the longstanding appeal of homeownership in the United States, for example, Wright emphasizes the critical interplay between the housing demands of different demographic groups and the market forces and policies that often do not supply them. Wright's broad survey and reflective commentary on housing design trends reengages a subject that has received scant scholarly attention despite the pressing nature of housing affordability today.

As I noted in the literature review, the scholarship on housing design's import is often interspersed with reviews and exhibitions of actual housing designs, particularly of U.S. assisted housing. This symposium purposely seeks not to duplicate those efforts. Rather, we hope to place those efforts in context by including pieces written by either the original developers or current leaders of the most noteworthy assisted housing design practice efforts.

In "Bringing the Power of Design to Affordable Housing: The History and Evolution of the Affordable Housing Design Advisor," Deane Evans, creator of the Affordable Housing Design Advisor, looks back on the original goals and purpose of the effort, its key challenges, and its contemporary significance. Launched in the midst of the housing boom of the early 2000s, the Design Advisor website was framed by the increasing media attention paid to housing design in market-rate housing and, more significantly, by the increasing need to preserve and expand assisted housing. Design often became the vehicle for promoting housing assistance in the midst of reductions in public resources and increases in local market pressures and local popular resistance to assisted housing development. Housing affordability problems nonetheless persist—particularly among low-income renters. Likewise, as Evans suggests, affordable housing design's importance and opportunities remain.

As Vice President for National Design Initiatives at Enterprise Community Partners, Katie Swenson has a distinct vantage point as a current advocate for assisted housing design excellence. In "Designing Better Designers: Families First," Swenson reviews a broad list of key outcomes that she has observed from Enterprise's design and design practice interventions, ranging from household health and building performance improvements to neighborhood transformation and community engagement. Swenson also discusses the practical challenges that the assisted housing development community faces, however, not the least of which is the necessary socialization of the profession.

A central theme emerges across Wright's broad sweep of housing design trends and Mukhija's focused assessment of a national housing policy with explicit design implications; through Vale et al.'s expanded definition of assisted housing's global aspirations and Comerio's review of contemporary housing recovery policies; and to Evans' and Swenson's presentations of design practitioners' current and future opportunities. All the articles in this symposium collectively affirm the ongoing hypothesis that housing design and construction are intrinsically and inextricably connected to household social, economic, and political contexts. Design scholars will enjoy the variety and timeliness of subjects covered in this symposium but will not be surprised by the underlying premise that design matters. To them, this symposium is a call to arms for further research on housing design that employs a variety of rigorous methods in an expanding list of topic areas. More to the point, however, I hope that housing scholars in other disciplines, whose focus has not been on the physical production and condition of housing nationally and globally, may become aware of this body of work. The subject of housing design and construction has often received short shrift in the world of housing scholarship, including from *Cityscape*. This symposium serves as a herald for potential collaboration in the future and a siren for calling much-needed attention to the scholarly subject of housing design.

Guest Editor

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References

Abernathy, Frederick, Kent Colton, Kermit Baker, and David Weil. 2011. Bigger Isn't Necessarily Better: Lessons From the Harvard Home Builder Study. Lexington, MA: Lexington Books.

Archer, John. 2005. Architecture and Suburbia: From English Villa to American Dream House, 1690–2000. Minneapolis: University of Minnesota Press.

Architecture for Humanity. 2012. Design Like You Give a Damn (2): Building Change From the Ground Up. New York: Abrams Books.

Bashir, Samiya A. 2002. "Home Is Where the Harm Is: Inadequate Housing As a Public Health Crisis," *American Journal of Public Health* 92 (5): 733–738.

Bell, Bryan, and Katie Wakeford. 2008. *Expanding Architecture: Design As Activism*. New York: Metropolis Books.

Bigott, Joseph. 2001. From Cottage to Bungalow, Housing and the Working Class in Metropolitan Chicago, 1869–1929. Chicago: University of Chicago Press.

Brown, Barbara B., Douglas D. Perkins, and Graham Brown. 2004. "Crime, New Housing, and Housing Incivilities in a First-Ring Suburb: Multilevel Relationships Across Time," *Housing Policy Debate* 15 (2): 301–347.

Calthorpe, Peter. 2009. "Hope VI and the New Urbanism." In *From Despair to Hope: Hope VI and the New Promise of Public Housing in America's Cities*, edited by Henry G. Cisneros and Lora Engdahl. Washington, DC: Brookings Institution Press.

Cavanaugh, Ted. 1997. "Balloon Houses: The Original Aspects of Conventional Wood-Frame Construction Revisited," *Journal of Architectural Education* 51 (1): 5–15.

Cooper, Gail. 1998. Air Conditioning America: Engineers and the Control of the Environment. Baltimore: Johns Hopkins University Press.

Crawford, Margaret. 1996. Building the Workingman's Paradise: The Design of American Company Towns (Haymarket Series). London, United Kingdom: Verso Press.

Davis, Sam. 1995. The Architecture of Affordable Housing. Berkeley, CA: University of California Press.

Day, Kristen. 2003. "New Urbanism and the Challenges of Designing for Diversity," *Journal of Planning Education and Research* 23 (1): 83–95.

Giedion, Sigfried. 1941. *Space, Time and Architecture: The Growth of a New Tradition*. Cambridge, MA: Harvard University Press.

Hanlon, James. 2010. "Success by Design: HOPE VI, New Urbanism, and the Neoliberal Transformation of Public Housing in the United States," *Environment and Planning A* 42 (1): 80–98.

Harris, Dianne. 2013. Little White Houses: How the Postwar Home Constructed Race in America. Minneapolis: University of Minnesota Press.

Hayden, Dolores. 1997. *The Power of Place: Urban Landscapes As Public History*. Cambridge, MA: The MIT Press.

——. 1981. The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities. Cambridge, MA: The MIT Press.

Isenstadt, Sandy. 2006. The Modern American House: Spaciousness and Middle Class Identity. Cambridge, United Kingdom: Cambridge University Press.

Jackson, John Brinckerhoff. 1994. A Sense of Place, A Sense of Time. New Haven, CT: Yale University Press.

Jackson, Kenneth T. 1987. *Crabgrass Frontier: The Suburbanization of the United States*. Oxford, United Kingdom: Oxford University Press.

Jones, R. Thomas, William Pettus, and Michael Pyatok. 1997. *Good Neighbors: Affordable Family Housing*. Mulgrave, Australia: Images Publishing Group.

Koebel, C. Theodore. 2008. "Innovation in Homebuilding and the Future of Housing," *Journal of the American Planning Association* 74 (1): 45–58.

Laird, Frank N. 2003. "Constructing the Future: Advocating Energy Technologies in the Cold War," *Technology and Culture* 44 (1): 27–49.

Lubove, Roy. 1963. The Progressives and the Slums: Tenement House Reform in New York City, 1890–1917. Pittsburgh: University of Pittsburgh Press.

Newman, Oscar. 1973. Defensible Space: Crime Prevention Through Urban Design. New York: Macmillan.

Ogle, Maureen. 1996. All the Modern Conveniences: American Household Plumbing, 1840–1890. Baltimore: Johns Hopkins University Press.

Rybczynski, Witold. 1987. Home: A Short History of an Idea. New York: Penguin Books.

Schmitz, Adrienne. 2005. Affordable Housing: Designing an American Asset. Washington, DC: Urban Land Institute.

Sohmer, Rebecca R., and Robert E. Lang. 2000. "From Seaside to Southside: New Urbanism's Quest To Save the Inner City," *Housing Policy Debate* 11 (4): 751–760.

Tobey, Ronald C. 1996. *Technology As Freedom: The New Deal and the Electrical Modernization of the American Home.* Berkeley, CA: University of California Press.

Vale, Lawrence. 2013. Purging the Poorest: Public Housing and the Design Politics of Twice-Cleared Communities. Chicago: University of Chicago Press.

———. 2002. Reclaiming Public Housing: A Half Century of Struggle in Three Public Neighborhoods. Cambridge, MA: Harvard University Press.

———. 2000. From the Puritans to the Projects: Public Housing and Public Neighbors. Cambridge, MA: Harvard University Press.

von Hoffman, Alexander. 1996. "High Ambitions: American Low-Income Housing Policy," *Housing Policy Debate* 7 (3): 423–446.

Wolfson, Mariel. 2013. Defining Healthy Housing: The Competing Priorities of Energy and Indoor Air Quality in the Early 1980s. Working paper. Cambridge, MA: Joint Center for Housing Studies of Harvard University.

Wright, Gwendolyn. 1983. Building the Dream: A Social History of Housing in America. Cambridge, MA: The MIT Press.