

Modern Housing Redux: The (Un)Loved and The (Un)Learned**Theodore H. M. Prudon¹**

Introduction

Two events of the last couple of months have influenced the thoughts about (Un)Loved Modernism reflected here: first, the dialogue and decisions around the review request for listing of Robin Hood Gardens in London and its rejection by the Secretary of State and second, a housing charette organized by the Graduate School of Architecture and Planning at Columbia University in New York. These two events are related in my mind to the subject of this conference. In a statement regarding the heritage listing of Robin Hood Gardens, various arguments against its listing in many ways perpetuates a myth about modern architecture, and particularly housing, by introducing the unavoidable issue of the quality of life.² A common theme in (Un)Loved Modernism discussions, introducing this issue in a listing review de facto places the blame for the (presumed) failure on the architecture.³ The second event was the housing charette, which sought to address the need for public housing in the US and the common misperceptions surrounding it, all in the context of the so-called stimulus funding as approved by the US Congress.⁴ Here the challenge was a discussion as to why public transportation and infrastructure spending was generally found to be acceptable, and yet similar spending on public housing – that is publicly owned housing – was not seen in that same context of infrastructure

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² Letter from The Culture Team of the Department for Culture, Media and Sport on behalf of the Secretary of State dated 13 May 2009 addressed to Jon Wright, Case Officer, Twentieth Century Society and signed by Lauren Warren, Heritage Protection Policy Advisor. See also the end of this paper for a more detailed discussion of some of these aspects.

³ This would, for instance, place it in direct contrast to Alexandra Road Estate in West Hampstead a Grade II* listing and generally liked by its occupants, who were instrumental in its listing. Does that make it better architecture or have more heritage value? See also Andrew Freear, "Alexandra Road: The Last Great Social Housing Project", *AA Files*, 30, Autumn 1995, 35-46.

⁴ The term public housing is used in the US to describe rental housing for less advantaged groups of the population that is owned directly by a government entity. However, most support for housing is done through rent voucher programs, financing or loan guarantees for privately developed properties. Even some of the traditional housing authorities are seeking recourse in private developments, a process that is lauded by some and questioned by others because of fairness, financial incentives and ultimate concerns for real improvements.

improvements.⁵ The latter omission is even more surprising given the fact that all major urban areas have struggled for decades with the need to provide affordable and social housing in order to maintain its economic structure. This then sets the frame work for these thoughts: what and why is housing loved or not, how can it be preserved or improved and, equally important, what is it that we did or did not learn for the future.

When initially considering (Un)Loved Modernism and given changes in the political climate in the United States, it seemed more interesting to focus less on the general issues and aspects of the (lack of) appreciation and therefore preservation potential of modern architecture, but rather on one specific issue: housing. While in the last couple of decades various other modern building typologies have been the subject of great concern and many preservation battles have been fought across the world – this was not any different in the United States – it can easily be argued that housing and especially social or public housing has not yet been part of the general preservation debate.⁶ However, it is important not only to consider how some of these complexes may be saved, but also what they can teach us going forward if once again we are willing to consider housing an integral part of a cultural and social policy debate.

Before dealing with housing, especially in the US, it is important to consider the peculiarity of modernism in the United States and place its preservation in a broader context. Modernism, its acceptance and thus its preservation followed a somewhat different path in the United States than in most of the European countries. Aside from some younger proponents like Wallace Harrison or Edward Durell Stone or the first generation of European immigrants like Richard Neutra or Rudolf Schindler, the architectural, intellectual and philosophical influence of the European émigrés and their modernist ideals was not really felt till after World War II. The Great Depression of the 1930s with its severe financial restrictions and heart wrenching homelessness brought about for the first time an active government interest in housing policies and projects that had not existed previously beyond regulations for health, safety and welfare. Early housing advocates such as Catherine Bauer published extensively about what types of social housing

⁵ One of the arguments made was that all housing in the US is publicly subsidized. The comment originates in the thought that whether a rent voucher is given or a mortgage deduction is taken against income tax – the most important deduction for most middle class families – it all amounts to a government subsidies and results in a so-called two-tier (publicly subsidized) housing system.

⁶ For a general discussion about postwar mass housing in different countries, see DOCOMOMO Journal No. 39, September 2008, edited by Miles Glendinning and for the UK from the same author and Stefan Muthesius, *Tower block: Modern Public Housing in England, Scotland, Wales and Northern Ireland* (New Haven, CT: Yale University Press, 1993).

were being built in Europe.⁷ Though prior to World War II some efforts were made and some housing constructed in the context of various New Deal initiatives, it is the need for housing near war production and armament facilities that forced major changes. As old production methods became obsolete, earlier stylistic interests were abandoned in favor of a more simple and modest modernism not because of style, but for pure pragmatic reasons: need, time and money.. It is against this prewar and wartime background, including the subsequent housing needs for soldiers returning from war and the desire for an aura of efficiency and modernity sought by the growth of the American corporation, that the acceptance of modernism – sometimes with reluctance – takes place. However, it is important to understand that the housing debate in the US always takes place within a struggle over how much the government should or should not be involved in housing and what should be left to the private marketplace. These differences of opinion about ownership – government versus private, individual ownership versus rental – lie at the heart of the discussions that emerge during the Great Depression and continue today with varying outcomes.

Whereas the 1950s saw a great expansion of the American transportation infrastructure, primarily highways and airports, it was not until the 1960s that social infrastructure efforts like large urban renewal projects in cities and the construction of many new civic buildings took place. Part and parcel of this development is the construction of many new housing projects, some only a few stories high but many multistoried examples following European prototypes to some extent. The impetus was to provide decent and affordable housing for many, goals reminiscent of the policy ideals set out in the 1930s. Again, as in the 1930s, American practitioners and policy makers looked towards Europe and especially the UK with its New Town developments for inspiration. With postwar housing developments visually associated with modern architecture, the rejection of massive urban renewal caused a backlash against modern architecture in general in the late 1960s and early 1970s. Resisting the large scale demolition of Victorian and 19th Century neighborhoods to make way for the construction of new urban complexes, American preservationists find their voice and the movement takes shape entering upon an era of intense advocacy. The movement would result in a general public that did not 'like' modern architecture. As far as housing is concerned the social and policy changes, especially in the 1970s and 1980s, created an undeserved aura of failure that directly affected the perception of postwar housing in the US and many other western countries.

⁷ Catherine Bauer, *Modern Housing* (Boston and New York: Houghton Mifflin Company, 1934) describes not only various housing policies and projects in different European countries but she also states on page 213: "Architecture is the Social Art".

Because of this historic legacy, the preservation of modern architecture in the US has not been easy. In this context, however, it is also important to note that preserving the architecture of Frank Lloyd Wright, seen by many as the beginning of modern architecture, was never in question. With the undisputed preservation of Falling Water and the Guggenheim Museum, his projects have not been subjected to the same level of neglect or destruction as the work of more recent architects like Paul Rudolph or Edward Durell Stone. While it may be argued that Wright is quintessentially a modern architect, the preservation of his work probably did influence the idea that preserving more recent architecture was worth considering without extensive discussions of about significance or merit.

The issues involving modern architecture and its preservation in the US can be illustrated with a few general examples from the last decade: the TWA Terminal and 2 Columbus Circle, both in New York. The TWA Terminal at JFK International Airport designed by Eero Saarinen was hailed from the very beginning as important in spite of the fact that the building upon its completion was obsolete because it was designed for smaller propeller planes and was too small for the just introduced wide body jets with their increased height, larger number of passengers and greater amounts of luggage. Nevertheless the general public and the architectural community loved the building and when a new much larger terminal building was proposed for construction behind the original TWA Terminal a long and passionate preservation advocacy battle ensued. The additional building did get built, but forced by the advocacy some changes were made to the design. While the story represents a successful advocacy campaign the actual result today is an empty building that is no longer in use but theoretically can be connected to the new terminal provided a user is found.

The story surrounding 2 Columbus Circle is somewhat different but indicative of the debate. Here from the building's beginning the reviews were not very positive and the architectural critic Ada Louise Huxtable described the structure designed by Edward Durell Stone as the 'Lollipop Building', a nickname that stuck ever since.⁸ The subsequent history of the building did not get better and the use was unfortunately changed from a gallery to an office building, without windows. In the preservation battle the negative reactions based on the change in use and the earlier architectural reviews kept reappearing as arguments as to why the building was not significant. The reaction of both general public and architectural community was very mixed. The New York City Landmarks Preservation Commission refused to landmark the building and, finally

⁸ Ada Louise Huxtable, "Architecture: Huntington Hartford's Museum; Columbus Circle Gallery Will Open in Mid-March", *New York Times*, February 25, 1964. The 'Lollipop' term relates to the shape of the ground floor columns, which in the final design were, somewhat incongruous, incorporated behind a glass wall.

after a decade long battle, the original exterior was stripped in favor of a new skin and the interior remodeled to house a new museum but essentially leaving the structure and thus the volume intact, all with mixed results.⁹

In the debate around these two examples the discussion about whether to preserve or not was peppered with terms as 'I love', 'I like' or 'I hate' and without little or not real dialogue about the actual merit or significance of the building. Other examples of this still on-going debate are the 1960s visitors center at the Gettysburg National Battlefield in Virginia¹⁰, one of the last projects designed by Richard Neutra before his death, the City Hall in Boston by Kallman, McKinnell and Knowles in Boston, MA¹¹, or the Orange County Government Center by Paul Rudolph in Goshen, NY¹². In all three cases the debate is fueled by occupants, owners and the occasional passerby denouncing the buildings in no uncertain terms with phrases ranging from 'leaky', 'bare', 'foreign' or 'intrusion'. Because these particular buildings date from the 1970s it can only be hoped that as time progresses a better understanding and greater appreciation will develop for what, undoubtedly, are important structures, culturally, architecturally and historically.

⁹ It is interesting to note that Ada Louise Huxtable wrote again about the building, almost 45 years later. Ada Louise Huxtable, "Setting the Record Straight About Ed Stone and Brad Cloepfil", *Wall Street Journal*, December 11, 2008. Here she blames the 'bitter controversy' about the demolition of the Edward Durell Stone building as having 'poisoned' the fair evaluation of the renovation by architect Brad Cloepfil. The decision not to landmark was based on a finding made ten years earlier raising the question as to how often and when assessments of modern landmarks are made in order to reflect the changes in opinion that undoubtedly will take place.

¹⁰ The visitor center designed by Richard Neutra is located on an important corner of the historic Gettysburg Civil War Battlefield. Its removal was advocated as an attempt to restore the battle field to its 'original' condition of 'hallowed ground'. In addition the park superintendent stated: "Nothing in the building has worked, virtually from Day One. Neutra's gizmos never worked." The president of the National Trust for Historic Preservation, an organization modeled after the National Trust in the UK, stated in Congressional testimony when referring to the building: "There is no question that serious mistakes were made in the placement and construction of facilities at Gettysburg decades ago." The architectural merit or the significance of the site as a viewing area since the late 19th Century was little discussed. Thomas Hine, "Art/Architecture; Which of All the Pasts to Preserve?", *New York Times*, February 21, 1999. The building is empty at this time (2009) and has not yet been demolished pending the outcome of litigation.

¹¹ The building is often described as a 'hulky, grey concrete box', 'dungeon' or 'fortress' and the mayor, who wants to get city government out, says: "The building is unfriendly, cold, and the way it's structured it has a third floor only one side and it doesn't have a fourth floor", Katie Zezima, "Fighting City Hall, Specifically Its Boxy Design and Empty Plaza", *New York Times*, December 25, 2006.

¹² The county executive is quoted not only as saying that 'all 87 separate roofs' leak but also that: "If I took a poll in town, the building would be demolished tomorrow", Fred Bernstein, "A Road Trip Back to the Future", *New York Times*, June 18, 2009.

Much of the attention focused on the issues surrounding the preservation of modern architecture and the resulting public debate has concerned civic structures, however, other building typologies are also under similar pressures. As noted, one of the building typologies most ignored concerns multistory housing of the period, particularly what is called social or public housing. While landmarking or listing discussions are few, at the same time within public debate the necessity for affordable and publicly supported housing is acknowledged. An objective discussion of the significance of earlier projects, as the Robin Hood Gardens debate illustrates, remains mired in prejudices that are attributed to the architectural design but are as much a function of the social circumstances as the actual design or construction.¹³

Housing in the US: Prior to World War II

The design and construction of social as well as low and middle income housing was a development spurred in the years before World War II. Circumstances and reasons may vary somewhat from country to country. An increase in population and decreasing employment in agriculture in the second half of the 19th century caused migration or immigration to the urban and industrial centers in Europe and America. This result was an ever larger number of people living in destitute and unhealthy circumstances. Unfettered real estate speculation maximized rents by housing as many people as possible within the limits of what could be built. The resulting overcrowded and unsanitary conditions with limited or no access to light and air galvanized housing reformers demanding better services and more decent, affordable housing. Governments gradually interceded in no small amount driven by the need to combat infectious diseases by enacting measures like building codes and zoning laws and providing municipal services such as running water, sanitation and utilities.

While in the 19th Century attempts made to improve the quality of worker housing often originated as charity or employer-sponsored small settlements, the beginning of the 20th century saw a number of changes. The participation of the design community and the technological advancements revolutionizing and rationalizing the building industry allowed for an increased production of more readily available materials and prefabrication of larger sections to whole buildings and helped to reduce both the time of construction as well as the amount of skilled labor it required. Both the housing needs and their moral and social implications, as well as the technological advancements and how they may serve to alleviate those needs caught the attention of many modern architects. Architecturally materials like reinforced concrete and steel

¹³ Some of this discussion as well as some of the case studies here may be found in the author's book *Preservation of Modern Architecture* (New York, NY: John Wiley & Sons, 2008).

that defined much of modern design not only allowed for changes in construction, but also affected the plan layouts without too many, if any, load-bearing walls, large strip windows and simple detailing ultimately leading to the high rise construction of today.

In many ways, the 1927 Weissenhof housing exhibition in Germany with dwellings by Mies van der Rohe, Le Corbusier, J. J. P. Oud and many others presented contemporary ideas of living in the context of different forms of housing, ranging from freestanding single family residences to row houses and apartments. They would introduce the modernist design aesthetic as well as declare the social benefits and financial advantages of such aesthetics to the half million or so attendees who visited the exhibition in the summer of 1927.¹⁴

The formation of the Congrès International d'Architecture Moderne (International Congresses of Modern Architecture), more commonly known as CIAM in 1928 in La Sarraz, Switzerland and its subsequent focus on the minimum dwelling and urbanism included many of the same architects in dialogues on housing. Josep Lluís Sert (who was later to design Peabody Terrace at Harvard and housing on Roosevelt Island in New York) was one of the early participants. Most governments on the European continent acted to address the housing shortage and standards in the aftermath of World War I, with England and Germany building over a million units, the Netherlands providing housing for one fifth of its population, and the newly established Soviet Union taking on the responsibility of housing its citizens wholesale.¹⁵

In the United States, the construction of massive new housing also resulted from government intervention. Many housing advocates studied the European developments and the role of government. Local and state governments implemented comparable legislative reform and infrastructural upgrades in the early part of the 20th century in response to the housing reformers. Missing the physical devastation or housing shortage from World War I and with an aversion for socialist sounding ideas, housing remained a mainly private enterprise and the work of unions,

¹⁴ The Weissenhof housing exhibition was organized by the Deutscher Werkbund, a German association of architects, designers and industrialists and which was founded in 1907, and financed by the City of Stuttgart, the project was to demonstrate that modern design could be used effectively to address the housing crisis in Germany. Mies van der Rohe, who was in charge, invited 16 architects from around Europe to build prototypes of mass housing using new materials and techniques. The cluster of houses and apartments brought together the work of the some of the most progressive and ultimately some of the influential architects of the 20th Century. See Richard Pommer and Christian F. Otto, *Weissenhof 1927 and the Modern Movement in Architecture* (Chicago: University of Chicago Press, 1991) and Karin Kirsch, *The Weissenhofsiedlung: Experimental Housing Built for the Deutscher Werkbund, Stuttgart, 1927* (New York: Rizzoli, 1989).

¹⁵ Kenneth T. Jackson, *Crabgrass Frontier* (New York, Oxford University Press 1985): 220.

benevolent societies, philanthropists and only a few municipalities like New York City, made some efforts toward addressing the slum conditions through sponsoring model housing projects or other means. However it was the economic collapse of the Great Depression that propelled housing into a national issue in the US and forced the adoption of more progressive ideas and, indirectly, the practical and economical aspects of modern design.¹⁶

With virtually no housing construction in the first few years of the Great Depression, high foreclosure rates and an ever greater number of the unemployed, who could not afford to rent decent housing, the New Deal began to address housing with a three fold program; one, direct building of housing units by the federal government; two, subsidies provided to localities for the purpose of building public housing for the poor; and, thirdly, legislative action to stimulate private investment in the housing market.¹⁷ These programs had the dual purpose of stimulating the economy by providing employment while also building decent housing. The direct federal involvement occurred in the Greenbelt Town Program under the Resettlement Administration to demonstrate Garden City ideals of decentralization and open space living as well as in more incidental initiatives such as housing built as part of programs of the Farm Security Administration or the Tennessee Valley Authority. These projects provided some young architects, many influenced by the modern movement in Europe, to experiment with minimum house plans and economic building methods to create small, mass produced single-family and low-scale multiple residences. Similarly, the public housing of the 1930s and early 1940s, built and operated in cities by local housing authorities through federal subsidies, utilized the suggestions of housing

¹⁶ Jackson, 221: "The National Industrial Recovery Act of 1933 had four goals: to increase employment, to improve housing for the poor, to demonstrate to private industry the feasibility of large-scale community planning efforts, and to eradicate and rehabilitate slum areas 'to check the exodus to the outer limits of cities with consequent costly utility extensions and leaving the centrally located areas unable to pay their way.'" Though the threat of suburbanization to the cities was already apparent in 1933 and a cause for concern, by 1945, the FHA housing policies contradicted the goal stated here.

¹⁷ In many ways the debate in the last decade has surfaced the same issues. A swing to a particular end of the spectrum can partially be claimed to be responsible for the current housing crisis and the renewed attention for building, subsidizing and financing of housing not just as a private market responsibility but as a public obligation represents the exact opposite.

reformers like Catherine Bauer (1905-1964) and Edith Elmer Wood (1871-1945) inspired by European examples, mostly in Scandinavia, Germany and the Netherlands.¹⁸

The Federal Housing Administration became the major agency and with its various loan guarantees obtained the ability to impose minimum design and construction standards ensuring a certain amount of space and amenities, including indoor plumbing, light and air, and electric appliances. These standards, which sought to prevent substandard housing and protect FHA's investment, unfortunately, had the side effect of becoming the norm rather than the challenge to better planning, modern design, or even anti-discrimination. The result in the postwar era was many similar suburban neighborhoods with small traditional looking houses that closely followed the examples published in the various FHA bulletins.¹⁹ The FHA program started to energize the

¹⁸ The primary mechanism for government involvement, and the key to much of the housing developments in the postwar era in the US, was the Federal Housing Administration (FHA). Started in 1934 as part of the National Housing Act, the FHA programs sought not only to stimulate the building of housing by private industry but also to support the hard-hit construction industry and the beleaguered banking industry. To this end FHA insured the loans banks made to builders for home construction, as well as the long-term mortgage loans made to individual homeowners. By limiting the banking risk, it was hoped that this would make more loan funds available for the home building industry and thus bolstering the construction industry. By insuring the mortgage loans, the FHA lowered the risk for the lenders and made it possible to provide more favorable terms that opened the possibility of home ownership to the working class. Jackson 204. Prior to the Depression, mortgages were limited to 40 to 60% the appraised value, meaning a prospective homeowner had to provide at least a 30% down payment and/or apply for a second mortgage. The FHA-insured mortgages covered 80-95% of the value, allowing a down payment of 10%. Additionally, the average length of a mortgage was 5 to 10 years and not fully paid off, or amortized, at the end of the term. Homeowners had to refinance for the remainder of their mortgage, but risked foreclosure if financing was not available. These terms were more favorable for the banks, but made homeownership risky for the owners as well as for the banks, limiting homeownership to the upper and middle classes. See Jackson, 195-205 and Gwendolyn Wright, *Building the Dream*, (New York, Pantheon Book 1981): 240-242.

¹⁹ FHA published guidelines for house and neighborhood design to ensure designers and planners consider certain issues, like space planning, orientation, street layout, etc., in projects that would receive FHA approval. In its 1939 manual *Planning Profitable Neighborhoods*, the FHA recommended against tightly packed, straight grid neighborhoods with narrow 40' x 100' lots in favor of a more park-like subdivision with gently curving streets to ease vehicular traffic, a landscaped park area, and lots of 70'x150' in contrast to what was generally being built privately by merchant builders. The recommended models were based on the suburban models like Radburn, New Jersey by Clarence Stein and Henry Wright, who in turn were influenced by the early 20th century planned Garden City-style communities in England. Subsequent publications focusing on the neighborhood or subdivision units continued to advocate for such planning into the 1940s.

construction industry in the late 1930s and early 1940s, until America's entry into World War II diverted much of the nation's resources toward the war effort. Its full effect in terms of housing would not be felt until after World War II.

Housing in the US: Post World War II

In both Europe and the United States, housing construction came to a virtual standstill during World War II and in the US emphasis shifted to mobilizing the war effort and constructing immediately (semi-permanent) housing next to manufacturing plants, ship yards, and military installations. The experience of the 1930s as well as new and innovative ways of meeting the needed housing quickly during the war were put to use and experimentation with prefabrication and new or unusual materials was encouraged to meet the demands for new buildings, residential and other wise. The wartime efforts with its mass production of standardized parts and their distribution had a direct impact on the postwar housing boom. The whole operation of building had changed to obtain greater efficiency and lower cost. Aside from the big cities where (private) high rise residential construction was prevalent, much of the initial post war developments focused on suburban and single family houses not for rental but homeownership. This was made possible largely through aggressive and government guaranteed financing²⁰ It is not until later, the 1960s and 1970s that in the US multistory social and public housing is once again explored in innovative ways.

FHA also published principles for planning small houses that veered toward the more traditional ideas of house and home as those most successful for housing. Based on the simplified designs of traditional architectural styles such as those available in the early suburbs and through mail-order kits, the designs illustrated in the bulletins included Colonial Revival, Cape Cod, Tudor, Spanish, bungalow and later ranch houses; conspicuously modern design was discouraged as a poor investment. The publications also encourage the use of standardized parts, simple detailing, and thoughtful space planning to maximize livability while minimizing costs in order to keep these houses affordable.

Although the FHA guidelines were not steadfast rules and they originated from a need to protect the interest of residents as much as the developers and banks, it became easier and more cost effective for builders to adhere to the same, if not all the guidelines to acquire quickly FHA approval, obtain loans, and sell the houses. Eventually, the guidelines became more like entrenched standards; projects that deviated from the examples provided either did not receive approval or had to lobby the FHA for consideration. One example is that the neighborhood and subdivision manuals encouraged stabled neighborhoods that were homogenous by age, race, and income, resulting in discriminatory deed restrictions and covenants and a sense of conformity in many postwar suburbs. Another example was the difficulty of houses with modern design vocabulary to achieve approval. The Eichler developments and Mar Vista are two examples from the post World War II period. Also see Jackson, 197.

²⁰ Dolores Hayden, *Building Suburbia* (New York: Vintage Books, 2004), provides a comprehensive discussion of the developments of these suburbs in Chapter Seven: "Sitcom Suburbs," 128–153.

In this context it is important to understand US housing policy as it evolved in the decades before and after the war. It should emphasized the significance of FHA in determining the shape of the built environment by both guaranteeing the security of mortgages and by attaching minimal standards for design and construction to those guarantees. At the same time the introduction of the mortgage interest deduction and the resulting tax break is de facto a middle class housing subsidy creating a two tier housing system. This is what has and continues to drive much of the housing industry in the US.

While the mortgage guarantee is s nationwide policy, other programs even if federally funded operated through state and local agencies and housing authorities. Here funding is used to either fund housing authorities directly or support the private market by rent vouchers for eligible families and individuals. In some states other rent subsidies have been available through state agencies and independent of federal funding. However, most of those projects have been withdrawing from the subsidy programs and have been converted to market rate based developments.

Taking the demolition of the Pruitt-Igoe housing complex in St. Louis as a starting point, a greater focus on public housing has evolved over the last two decades resulting in a HUD program titled Hope VI.²¹ This program has been accepted by many housing authorities across the country including Chicago. The result has been the demolition of a number of older housing projects in favor of lowrise townhouse like developments for public housing. In addition some of the housing has dispersed over a larger area in an attempt to create economic and housing diversity. The result is planning and development with an anti-modern tinge and clearly inspired by New Urbanism. Criticism have called this public housing through gentrification. It is in this light and against the background of those policies that the fate of modern housing, particularly multistory, has to be seen. Their origins in many ways lie the immediate prewar and postwar policies and therefore it is important to take a look at some of those prototypical examples.

Housing in the US: Suburban Communities

In order to understand the evolution and dynamics of the housing market and how it will affect the preservation and design of multistory residential structures and public housing, it is important to

²¹ The program was the outcome of a report issued by the National Commission on Severely Distressed Public Housing, a federal commission established in 1989. The program was enacted into law in 1992. The approach recommended was based on the actions around the Columbia Point Housing in Boston built in 1954. Here the solution had been to turn the project to a private development firm, who demolished the housing and built a new complex.

take a brief look at the postwar suburban development by way of three examples. None of these – with very few exceptions – concerned rental housing and most of these communities or neighborhoods are reflections of the primary American goal of home ownership, the so-called American dream, that generations of American politicians have been touting.²²

Greenbelt. Maryland

Greenbelt was planned and built by the federal government between 1935 and 1938 about 15 miles northeast of Washington, DC: a rare example of clear social housing policies in the United States; a model of the comprehensive planning of a new community; and an early use of a – mostly – modernist residential style in the United States.²³ While some 20 greenbelt towns were authorized only three were constructed: Greenbelt, Maryland; Greenhills, Ohio, and Greendale, Wisconsin, sites in proximity to a large urban or industrial center.²⁴

²² While expansion of cities and the construction of new residential units was taking place across Europe in the decades after the war, the suburban subdivision was quintessential American in its scale, design, planning and financing. The policies and ideals leading up to these developments have been the subject of a great deal of study in the last two decades. See for instance Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States*, (New York: Oxford University Press, 1985) up to Dolores Hayden, *Building Suburbia: Green Fields and Urban Growth, 1820-2000*, (New York: Vintage Books, 2003). Also of note are studies that examine the suburbanization phenomenon in relation to the development of housing from a social history perspective see Dolores Hayden, *Redesigning The American Dream: The Future of Housing, Work and Family Life* (New York, W. W. Norton 1984) or Gwendolyn Wright, *Building The Dream: A Social History of Housing in America* (New York, Pantheon Books 1981). For a discussion about sprawl, See Dolores Hayden: *A Field Guide to Sprawl* (New York, W.W. Norton 2004) details different forms of sprawl including some more recent residential developments. Hayden in this and her earlier writings points to, among others, to the policies of the Federal Housing Administration (FHA) as reasons for the continued development. For a more comprehensive history of sprawl and its positives and negatives, see Robert Bruegmann, *Sprawl* (Chicago, University of Chicago Press 2005). In the US attempts have made to develop criteria for listing suburban developments, see David L. Ames and Linda Flint McClelland, *Historic Residential Suburbs* (Washington DC, US Department of the Interior, National Park Service 2002) National Register Bulletin.

²³ For more on the original intent of the greenbelt towns, see Gilbert A. Cam, "United States Government Activity in Low-Cost Housing, 1932-38," *Journal of Political Economy*, 47, n. 3 (June 1939): 369-370.

²⁴ The overt social objectives of the greenbelt towns made some uncomfortable and was viewed by the private sector a threat moreso than the other New Deal programs. This attitude contributed to the lack of funds for the 20 planned towns and eventually led to RA and its projects being folded into the Farm Security Administration on January 1, 1937. See Cathy D. Knepper, *Greenbelt, Maryland: A Living Legacy of the New Deal*, (Baltimore: John Hopkins University Press, 2001):25-29.

In the Maryland Greenbelt town, housing would be rental only and was managed by a non-profit organization or local cooperative society intent on preserving the original character of the development. While the underlying concept of a collective community for low- and moderate-income families surrounded by a greenbelt of open land was controversial then and to some extent remains so today, it is the continued cooperative feature of the town that has allowed it to survive real estate pressures. The significance of Greenbelt, Maryland was declared in 1997 a National Historic Landmark.²⁵ While the historic town has largely survived through the efforts of the cooperative, continued development directly surrounding the town has affected much of the original green belt in which many new residential units were constructed.²⁶

Hale Walker as the town planner, Reginald J. Wadsworth and Douglas D. Ellington (1886-1960) as the architects and Harold Bursley (1891-1967) as the engineer designed the final plan of the town in the summer of 1935. The various super blocks, or neighborhood units, which are placed in a crescent shaped plan, are connected to each other and to the center of the town by pedestrian pathways that are separated from vehicular circulation; where the paths and the roads intersect, pedestrian underpasses were created. The town center included all such the amenities as stores and public services. Of the total of 885 units constructed, 574 were attached two-story townhouses, 306 in four-story apartments and 5 prefabricated detached single family residences.²⁷

In line with the original mission of the program to provide both employment and affordable housing, the construction methods and materials were kept simple so as to allow as much as possible for unskilled labor to be used. Considerable monies could probably have been saved if less manual labor had been used.²⁸ The original housing stock was significantly expanded in 1941 and 1942 with an additional 1000 residential units as defense housing.

²⁵ See Deborah Sheiman Shprentz: "Greenbelt, Maryland: Preservation of a Historic Planned Community", in: *CRM Bulletin* 22, n. 8 (1999): 53-56.

²⁶ A recent real estate article in the real estate section of the *New York Times* quotes a local planning official as having studied the merits of the old plan of Greenbelt in planning a new major development directly adjacent, which is replacing an earlier development from the 1960's. See C. J. Hughes, "Merging the Old With the New in a Washington Suburb", *The New York Times*, (January 28, 2007), Real Estate, 11

²⁷ See Laurence E. Coffin and Beatriz de Winthuysen Coffin: "Greenbelt: A Maryland 'New Town' Turns 50", in: *Landscape Architecture*, June 1988, 48-53. Aside from a description of the original plan, plans for changes to the town center are outlined.

²⁸ The potential savings were estimated at 5 million but the site employed 13,000 people, who otherwise would have received unemployment or other benefits. See Laurence E. Coffin and Beatriz de Winthuysen Coffin: "Greenbelt: A Maryland 'New Town' Turns 50", in: *Landscape Architecture*, June 1988, 49.

After the war government agencies retreated from such direct housing ownership and management, the greenbelt towns were transferred to non-profit or local housing authorities, which in Greenbelt's case consisted of the non-profit housing association Greenbelt Veterans Housing Cooperative (GVHC).²⁹ The area surrounding Greenbelt with its large open spaces and with its location in close proximity to Baltimore and Washington became a desired location and saw a tenfold increase in population between 1940 and 1990.³⁰ In the last decades significant changes have occurred. In 1993, Greenbelt was connected to the Washington DC metro system, making it even easier to reach than before.

Greenbelt is an important example of the early attempts to provide affordable housing and projects undertaken under the New Deal with government taking a direct role. Designed as affordable housing at a time when housing standards were minimal (and no longer standard), currently the population is more likely to be middle class rather than lower income. The Maryland National Park and Planning Commission wrote in 1956: "Greenbelt may fall short of present day standards of housing design, and the row house may not be the dwelling type now most in demand, butin many respects it is still, after 20 years, the best example of suburban community designed for the automobile age".³¹ The influence of Greenbelt as a planning example continued in the 1960s and 1970s when James Rouse established his new towns Reston, VA and Columbia, MD.

²⁹ GVHC was a cooperative following an earlier initiative in Greenbelt of 1941 when a small group started a cooperative for building private residences. The group retained Henry Klumb as architect. Klumb, a German immigrant who had changed his name from Heinrich to Henry during the war, had worked with Frank Lloyd Wright. By the end of the war he had moved to Puerto Rico where he opened his office and where Tugwell had become governor. He continued for the next two decades to build significant modernist work, for instance, the Rio Piedras campus of the University of Puerto Rico has a great many buildings designed by him. See Enrique Vivoni-Farage, "Modern Puerto Rico and Henry Klumb", *DOCOMOMO Journal*, n. 33 (September 2005): 28-37.

³⁰ *Greenbelt: History of a New Town 1937-1987*, (Greenbelt, MD: The Donning Company Publishers, 1997), Mary Lou Williamson (General Editor) with "The Sixth Decade: 1987-1997", Sandra A. Lange (Editor), p. 190. This publication is mostly a social and political history that provides a good insight in the community as it evolved over time. Knepper, *Greenbelt, Maryland: A Living Legacy of the New Deal*, describes in great detail the various development related issues in that period using the archives of the local newspaper as a primary source. Her perspective is very much that the cohesion of the community – she describes this as the 'Greenbelt' spirit survives. This sentiment is reflected in Williamson's *Greenbelt: A History of a New Town*, op. cit., which was written on the occasion of the 50th anniversary and expanded at the time of the 60th anniversary of the town.

³¹ As quoted in Cathy D. Knepper, *Greenbelt, Maryland: A Living Legacy of the New Deal*, (Baltimore: John Hopkins University Press, 2001) 122

Levittown, Long Island, New York

In stark contrast to the prewar example of Greenbelt, Levittown was an entirely private development that became synonymous with what is good and bad about postwar suburban development in America. Built between 1947 and 1951 on former potato farms on Long Island, New York, the original Levittown provided some 17,000 affordable, if humble houses for returning World War II veterans and their young families when housing was scarce and out of reach for most people.³²

Many of the features Levitt & Sons, the developers of Levittown, were celebrated and denigrated for, such as the assembly-line type construction process, use of a few standard models for hundreds of 'cookie-cutter' houses, and realigning mass housing expectations from mixed-use multi-family apartment living to single-family residential communities, were employed by many other postwar developers all around the United States. On a community-wide level, these subdivisions have been accused of fostering homogeneity and banality while isolating families from neighbors as well as from extended families, solidifying women's role at home, and creating a dependence on automobiles, among other problems.

For preservationists, examining the significance of suburban developments, especially early ones like Levittown, raise the question of significance from an architectural point of view. Unlike Greenbelt, which was a planned community, the plotting of Levittown lacks cohesion as new acres of land were added for development as they became available with little thought to planning, landscaping, or design. Thus, while Levittown is undoubtedly important in the 20th century history of the United States, it highlights the difficulty of recognizing, much less preserving the aspects that make Levittown, and other similar postwar suburbs, significant to the built environment.

The first Levittown located on Long Island, New York was built in two stages. Started in 1947 to address the postwar housing shortage, the initial 2,000 rental units, Cape Cod-style houses with a 25'x30' floor plan on a 6,000 square feet lot, along gently curving streets conformed to the Federal Housing Administration's (FHA) guidelines for good neighborhoods. The Cape Cod was

³² Barbara M. Kelly, *Expanding the American Dream*, (Stonybrook, NY: State University of New York, 1993) 17 for figures. She also talks about Levittown as being for working/lower middle class at first, striped down to basics for housing, but opening the idea of ownership and American dream to a larger group that then took the opportunity to change/gain equity and mold the house to their needs over the years.

one of many reinterpretations of a traditional New England house, simplified to a bare minimum to provide easy, affordable yet comfortably familiar and seemingly middle-class housing.³³

In the second phase of the Long Island Levittown development, a new house model, so-called “ranch” for the more modern design elements borrowed from the California houses of the period, was designed in the fall of 1948 and offered for sale in 1949 when the crunch of the housing shortage had begun to lessen and a greater quantity of affordable tract houses had become available. On the outside, the Levitt ranch was more complex but still had a great deal in common with the earlier Cape Cod. Some 11,500 ranch model houses were built in the second phase between 1949 and 1951, almost double the 6,000 Cape Cods built in the first phase. Levitt and Sons applied many of the techniques that were developed just before and during the war in the construction of emergency housing to speed up production and reduce the cost of labor. Basements were eliminated in favor of slabs on grade, dimensional coordination, control of the material supplies, maximizing the off site preparation of materials and finally controlling the labor costs.³⁴ One of the claimed innovations was turning the construction process into a reverse assembly line: the workers were brought to the location where the materials and parts were. Workers, specializing in one or two tasks, like framing or painting, completed their particular task at one house and moved on to the next to allow the following trade to proceed. The production line technique used to build this new development was so successful that, by July of 1948, the Levitts claimed to be turning out thirty houses a day. Even at this pace, the Levitts couldn't keep up with the demand.³⁵ The ranch houses were offered in 1949 for \$7,990, with a monthly mortgage payment of \$58 and a down-payment of \$90, less than the earlier monthly rent. Not surprising the demand for the new Levitt ranches was overwhelming.

Using guidelines that would ensure FHA approval on their construction loan insurance and on their buyer's mortgage insurance, but also to enforce a code of acceptable behavior and taste for

³³ The Levittown Cape Cod was very similar to the Cape Cod kit named “The Nantucket” offered through the mail by Sears Roebuck twenty years prior. See Hayden, *Building Suburbia*, 108.

³⁴ The houses of Levittown were designed with dimensions that were multiple of four to take advantage of the 4 feet by 8 feet dimensions of sheet materials like sheetrock and plywood. This principle is found in many of the prefabricated housing systems developed just before and during the war. All of the lumber was pre-cut and shipped from a lumber yard William Levitt purchased in Blue Lake, California, where they erected a nail factory as well, which was to some extent a concept already found in the many of the kit houses of the early 20th Century. Finally an abandoned rail line was re-opened to bring construction materials to Island Trees. To reduce the costs of labor, although met with heavy opposition, non-union contractors were used and William Levitt employed workers directly as subcontractors (rather than through a construction company), offering them payment based on units produced rather than the standard hourly wage scale. See Kelly, *Expanding the American Dream*, 26 and note #12 on p.188

³⁵ Kelly, *Expanding the American Dream*, 30-32.

a harmonious community, 25 year deed restrictions were included on the properties that not only limited the sale by race but restricted such activities as hanging laundry out to dry on the weekend - when men where home from work – to banning fences enclosing backyards and limiting the size, shape, and color of additions and remodeling.³⁶ Many elements of the covenants were quickly abandoned or ignored by new residents, but the Levittown Property Owners Association continued to enforce some aspects of the earlier restrictions affecting community appearance.³⁷

The adaptation and expansion of the community has not been limited to its communal facilities. The individual owners of Levitt's very basic Cape Code and ranch houses have adapted and expanded almost each house, sometimes within the original covenants, sometimes not. Today, nearly all of the 17,447 Levitt houses have been expanded and remodeled, and additions, roofs, stories and dormers have been added to reflect the changing profile of Levittown's residents turning it into an attractive community that retains little of the collection of identical houses that made its original reputation.

While many early preservationists seeing the decline of cities and older areas in the 1960s and 1970s may have harshly criticized the construction of Levittown style communities by blaming all types of social woes on suburbanization, millions of American did embrace the movement. Instead of remaining undistinguishable tract houses, residents of Levittown started individualizing their homes almost immediately, making them more efficient or by adding space and amenities. *Thousand Lanes*, a magazine devoted to the decorating, expanding, and remodeling of Levitt homes became a medium through which residents saw and could purchase almost off-the-shelf options creating a second layer of similarities, which combined with some houses that have changed radically in appearance and scale has resulted in a community with a visual complexity far removed from the original homogeneity.

³⁶ While FHA guidelines did not specifically segregate by race, it did provide guidelines that sought homogeneity in income, race, and age for a successful community through restrictive covenants. See Kelly, *Expanding the American Dream*, 60-65. Even after such covenants were ruled unenforceable, FHA underwriting guidelines continued to favor developments that were not racially mixed based on a belief of financial and social stability for neighborhoods. See Robert E. Mitchell and Richard A. Smith, "Race and Housing: A Review and Comments on the Content and Effects of Federal Policy," *Annals of the American Academy of Political and Social Science*, v.441, January 1979, p. 168-185

³⁷ Herbert J. Gans, *The Levittowners: How People Live and Politic in Suburbia* (New York: Pantheon Books, 1967) is an early study about life in the suburb that played an important role in establishing the early perceptions of suburban living.

The town has changed and no longer reflects the ideals of the time. Remodeling has created more space and added more real estate value to the houses resulting in higher prices and property taxes placing the houses out of the reach of the very group the town was envisioned for. As seen in other suburbs, some of the houses have been modified with rental units to address the needs of seniors, empty-nesters, single-parent families, and single persons, providing different types of housing that is more reflective of our society but also carries the danger of future absentee landlords and resulting changes.³⁸

What makes Levittown significant in the history of the country may not have an easy or tangible way of being recognized or preserved. Continuing to save one or two of the houses in their original settings as museum type facilities through the effort of local historical societies may be the best and only way to continue to interpret this suburb.³⁹

Mar Vista, Los Angeles, California

The Mar Vista development, designed by the architect Gregory Ain, a second generation California modernist following in the footsteps of earlier modernists like Richard Neutra and Rudolf Schindler, is an example of well-designed and affordable tract housing using modern architectural elements in contrast to the traditional image towns like Levittown. Unlike other tract housing, though, Ain managed to create a diverse yet cohesive streetscape through variations on a single basic plan and variety in siting vis-à-vis the street as well as in incorporating public landscaping by Garret Eckbo (1910-2000), one of the preeminent modern landscape architects.

The Mar Vista houses showed that modern architecture was affordable, and that using the same elements prevalent in the postwar suburban housing boom, could provide a socially responsible, well-designed, and affordable alternative to Levittown-style developments. The houses were marketed under the interesting name 'Modernique Homes' to emphasis their modern and unique features, are clearly modern, with their horizontality expressed in flat roofs, ribbons of clerestory windows and lack of exterior decorative detailing visible in the various incarnations of the same

³⁸ Bruce Lambert, "Rethinking the Nation's First Suburb," *New York Times*, December 25, 2005, Section L1, p.14.

³⁹ The Levittown Historical Society was formed in 1988(?) and established its educational center in 1997 on the 50th Anniversary of the community. Establishing such centers on the occasion of anniversaries is not an uncommon method and may be found in other communities like Greenbelt, MD.

plan.⁴⁰ The exteriors were painted in muted reds, browns, blues, and greens from the newly created modernist Plochere color system. The same system was used to select colors for the interiors.⁴¹

The initial plan envisioned some 100 houses but in seeking Federal Housing Administration (FHA) approval, and thus loan guarantees for prospective buyers, FHA was reluctant to approve modern house designs for fear that modern houses would not resell well. Only 52 homes were approved to gauge interest and marketability in sales.⁴² While priced roughly similar to other houses in the area when compared on the square foot cost in 1948, the \$12,000 price for Ain's Mar Vista homes was far more than the other houses for sale.⁴³ In comparison, the smaller ranch houses offered in Levittown in the 1949 went for about \$8,000.⁴⁴ The relatively high total price, and possibly the non-traditional design, contributed to slow sales as a result FHA did not approve the second half.⁴⁵

⁴⁰ For a description of the plan, see: "One Convertible Plan", in: *Architectural Forum*, 1949, April, pp. 126-128. and Esther McCoy *The Second Generation*, (Layton, UT: Gibbs M. Smith Inc., 1984). For the work of Garrett Eckbo, see Marc Treib and Dorothee Imbert, *Garrett Eckbo: Modern Landscapes for Living*, (Berkeley and Los Angeles, CA: University of California Press, 1997). Eckbo is responsible for hundreds of projects around Southern California. He taught at USC and in 1963, returned to UC Berkeley to head its Department of Landscape Architecture. The firm he established with Francis Dean, Don Austin and Edward Williams in 1964, EDAW, continues today and focused on larger planning projects..

⁴¹ The Plochere System was an early color notation system brought out in 1948 and was based on the color system developed by Wilhelm Ostwald (1853-1932), a Nobel Prize winning German scientist, and was available and used in the Bauhaus. See Augustine Hope and Margaret Walch, *The Color Compendium* (New York, Van Nostrand Reinhold 1990):226 and 292-294.

⁴² One of the major impediments listed at the time was financing. The FHA had their own design guidelines about what they would fund, with lower scores for modern designs they believed to be a fad. (Paul Adamson, *Eichler: Modernism Rebuilds the American Dream*, p.57) "The builders were told time and again to intermingle "colonial, Cape Cod, Italian, Spanish and what have you" with a few modern dwellings. After months of plugging, the project was finally accepted on condition that only half of it be built at a time, to see how the houses sold". See "One Convertible Plan", op. cit. p. 128.

⁴³ Based on review of advertisements for home sales in the same period the Mar Vista "Modernique" homes were marketed and seen in the *Los Angeles Times* between November 1948 and June of 1949.

⁴⁴ The ranch house in Levittown was approximately 800 square feet, while the Mar Vista houses measured closely to 1100 square feet and included a two car garage making the price per square feet 10 versus 11 dollars.

⁴⁵ Esther McCoy, Ester, *The Second Generation*, (Layton, UT: Gibbs M. Smith Inc., 1984):129-130.

Over time, individual homeowners at Mar Vista have made changes to the houses to reflect individual tastes in color, landscape design, or a desire for more space by turning garages into additional bedrooms or baths, or adding on in the rear of the house. The Mar Vista tract was locally designated as a Historic Preservation Overlay Zone in 2003, of the 52 original houses 49 retained sufficient elements of the original design and its intent and only 3 were so altered as to be considered non-contributing to the historic district, a tribute to both the sensibility of the original design and an indication that postwar suburban subdivision can be adapted and still be preserved.

Whereas the small house plans at Levittown and other developments stayed as closely as possible to FHA's guidelines to assure approval and minimize costs, the plans for the houses at Mar Vista explored and demonstrated the possibilities of innovative and thoughtful design to improve the livability and quality of such small dwellings. Where changes have occurred they seem to not significantly affect the overall appearance of the individual house from the street. The significance of the design is not only apparent in the architecture of the individual houses but also in the overall planning and siting of the houses providing the streetscape as well as the landscape, which together set an important standard for innovative planning. Landscaping is one of the many aspects of modern design that has not yet received adequate attention.

The significance of the mid 20th Century suburban housing development has been well recognized, although it remains one of the most challenging issues facing preservation involving large numbers of similar individual buildings, many similarly developed neighborhoods. This is contrary to some of the later and larger multistory housing where much that appreciation still needs to emerge. Rarity of the object is not an adequate argument for preservation. The justification has to be found in the integrity and quality of the overall complex because the compact plans of the individual houses originally have undergone substantial changes, expansions and additions obscuring or even obliterating the original design and its materials. It also represents an on-going approach and desire in housing in the US that is counter to a more concentrated urban living, one that is affordable and in many ways is not sustainable.

Multi-story residential buildings

In the 19th Century with the influx of many into urban areas, multi-family multi-story residential structures became an important part of urban housing. The speculative and uncontrolled building that followed, maximized every inch of lot space and absolutely minimized amenities resulting in overcrowded, dank and unhealthy conditions. Eventually concerns for health, safety and welfare led to the establishment of minimum standards for planning and housing that were incorporated in

various codes and regulations. In urban areas like New York the other side of the economic spectrum saw the widespread acceptance of new apartment hotel buildings because of incorporated amenities and conveniences.

By the early 20th century, multi-story residential buildings, from the midsize walk-up tenements to the 15 to 20 story apartment houses, had become important as urban housing including early attempts to improve the housing of the urban poor.⁴⁶ Nonetheless, living in unregulated dense, substandard multi-unit developments remained prevalent in cities, until catastrophes, health emergencies and humanitarian concerns began to foster housing activism resulting in better housing regulations. In Europe after World War I, the acute need for housing created the political will for significant governmental action. Many of the younger European architects became deeply involved in the design and planning of social housing that was well-constructed and well planned units as quickly, efficiently and cost-effectively as possible. The prewar period in both Europe and the US are characterized by concerns for the design and construction of housing to provide decent and healthy living conditions including access to light and air.⁴⁷ In that context, as noted earlier, the 1920s and 1930s activities of CIAM in general and the visions of Le Corbusier in particular become important in shaping the design of postwar housing and its construction.⁴⁸ The highrise housing seen in Le Corbusier's urban design vision and the tall rectangular slabs

⁴⁶ Many of the philanthropic and union organizations sponsored model housing tenement projects to demonstrate that modern, clean, and well-ventilated housing with affordable rents could improve the lives and behaviors of the working poor. Examples of these type philanthropic endeavors can be found in many of the large urban centers like New York or London.

⁴⁷ This concept of what was called 'zeilenbau' in German was widely accepted and described/illustrated in Gropius. Henry Wright, *Rehousing Urban America* (New York, Columbia University Press 1935) as quoted in Gail Radford, *Modern Housing for America: Policy Struggles in the New Deal Era* (Chicago, University of Chicago Press 1996): 62. The original design for the Carl Mackley Houses in Philadelphia by Oskar Stonorov (1905-1970) for the Modern Architecture show at the Museum of Modern Art is a good example and shows three parallel rows of highrise apartment buildings. See Radford, *Modern Housing for America*, 127, Fig. 5.2. The project as ultimately built was quite different and the rows received various offsets to break the monotony of the row.

⁴⁸ While initially CIAM was concerned with housing, this quickly changed into an interest into the broader implications and urban planning. For a more detailed overview of CIAM and its evolution, see Eric Mumford, *The CIAM Discourse on Urbanism, 1928-1960* (Cambridge, MIT Press 2002). For a general introduction of Le Corbusier and his 'Ville Radieuse', see Kenneth Frampton, *Modern Architecture: A Critical History* (London, Thames & Hudson 1992): 178-185. An overview of the urban design and housing projects designed by the various CIAM participants may be found in: Auke van der Woud, *CIAM: Housing, Town Planning* (Delft, Delft University Press 1983). This is a publication that accompanied an exhibition at the Museum Kröller-Müller in Otterloo, The Netherlands.

advocated by Walter Gropius to achieve higher density without losing access to light and air were proposed during this period but only a few were constructed before World War II.⁴⁹

The role of government was also a major deciding factor in the application of multi-story residential buildings for social housing and modern aesthetics. Whereas European governments directly sponsored mass housing projects, in the United States, such government involvement conjured ideas of a socialist or even communist government in direct competition with the private free market. Despite a modest foray into subsidized multi-unit housing in the New Deal era, as epitomized by Greenbelt, it was not until the 1950s and 1960s that federally subsidized and municipal owned housing was politically viable on a wide scale. Instead, the United States government sought indirect means of encouraging housing production and its social agenda, resulting in the mass suburbanization of the country following World War II.⁵⁰

In the US the subsidized housing that did occur before World War II was multi-story and primarily aimed at improvement of urban housing conditions for the 'deserving' working poor. In 1937, the United States Housing Authority was established to provide subsidies for slum clearance and housing construction in the urban centers. This spurred the creation of local housing authorities like New York City or Chicago to receive the federal funds and build clean, decent, modern housing. The public housing that was built tended toward simplified and less ornate masonry apartment houses of small to medium scale utilizing labor intensive and simple trade construction methods in order to provide as many jobs as possible. However, compared to Europe, only a minor amount of subsidized housing was built in the United States before World War II.⁵¹

⁴⁹ For some of the proposals prepared by Walter Gropius including diagrams showing the relationship between building height and spacing between the rows to achieve proper illumination, see Sigfried Gideon, *Walter Gropius* (New York, Dover Books 1992): 201-208. This is a reprint of a book published earlier in 1954.

⁵⁰ Without the immediacy of postwar destruction, the Depression-era housing shortage in the United States was alleviated more through legislation that encourage job creation through loan insurance for private developments rather than direct federal subsidies to build and own housing. These programs established through the 1936 Federal Housing Act were continued and expanded through subsequent housing acts in the post-World War II years to fuel the suburban development of the 1950s.

⁵¹ During the interwar period, over a million houses were built by the local authorities in England and Wales while in the four years before the outbreak of World War II, only 130,000 new units were sponsored by the USHA. See Kenneth T. Jackson, *Crabgrass Frontier: The Suburbanization of the United States*, (New York: Oxford University Press 1985):190-230 for more on the New Deal housing programs.

After World War II, the United States government continued to focus on providing subsidies for municipalities to construct low-income, medium to high density housing, but less than the support for suburban development. Because the funds were tied to slum clearance in Title III of the 1949 Housing Act, much of this public housing remained in the urban areas, where the tight space and density requirements necessitated multi-story apartment buildings that became increasingly taller and larger in scope throughout the 1950s. By then, the tall towers in cruciform or star-shape plans with a central core, seen in Le Corbusier's *Plan Voisin* of the 1920s, and in narrow slabs with double-loaded corridors or an open-air gallery proposed by Gropius in his 1929 and 1930 lectures at CIAM, became technologically and materially possible, not to mention more economical.⁵²

Although they were only a fraction of the total housing constructed in the 1950s, and did not represent the typical public housing type, the simply and similarly detailed high-rise apartment towers grouped on a superblock came to signify public housing in the minds of many in the general public.⁵³ The upheavals caused by the demolition of existing, if blighted, neighborhoods, the declining quality of the replicated designs and inexpensive building materials, demographic and societal changes and lack of (economic) diversity and opportunity contributed to the change from an initially positive association with modern housing for the 'deserving' poor into a negative one by the end of the 1960s.⁵⁴ This negative perception and discomfort with high-rise housing

⁵² For a discussion of the evolution of highrise housing in the US, see Eric Mumford, "The 'tower in the park' in America: theory and practice, 1920-1960", *Planning Perspectives* 10 (1995): 17-41. He notes the influence of both the European modernist and the already existing American practice of building multistory residential structures. See also Robert A. M. Stern, Gregory Gilmartin and Thomas Mellins, *New York 1930* (New York, Rizzoli 1987): 428-447 for a summary of building housing in New York City in the two decades before World War II. Most of the projects noted are multistory structures in cruciform typologies. Only the Christie-Forsyth Street development proposal by Howe & Lescaze of 1931-1932 shows a pure modern scheme.

⁵³ Most of the public housing units were built as two- to four-story structures. See Alexander von Hoffman, "A Study in Contradictions: The Origins and Legacy of the Housing Act of 1949," *Housing Policy Debate*, 11 (2), 299-326.

⁵⁴ The issues surrounding the design of modern highrise housing and their success or lack thereof remain an important subject of discussion and controversy with very divergent points of view, which continues to affect preservation not only where it will concern these buildings directly but also as it concerns the general perception of modern architecture. In her conclusion Radford, *Modern Housing for America*, 208-209, argues that some of it did work and serve well. One of the culprits identified is the so-called 'two-tier' housing policy in the US. That opinion is echoed in J. S. Fuerst, *When Public Housing Was Paradise: Building Community in Chicago* (Westport, Praeger 2003) comes to a somewhat similar conclusion when discussing the Chicago Housing Authority. Peter Hall, *Cities of Tomorrow* (Oxford, Blackwell Publishers 2000) 239-240 in discussing Pruitt-Igoe in St. Louis sees its failure not the result of a 'planning mistake' but of the arrogance of the 'Corbusians', who did not understand what was needed for the population inhabiting the buildings. A point of view to some extent echoed in D. Bradford Hunt, "Public Housing in America: Lost Opportunities", in: *Reviews in American History* 25, n. 4 (1997): 637-642 in his review of Radford's *Modern Housing*.

extended as well to moderate income projects, such as Chatham Towers in New York and Marina City in Chicago privately constructed often in part with land acquired through the Title I provision in the 1949 Housing Act, which allowed funds for cities to acquire blighted or slum areas for urban renewal projects that sought to entice private developers into the revitalization of dilapidated neighborhoods through new office buildings, cultural centers, and generally middle-income high-rise housing in attempts to attract the middle class lured by suburban life back to the cities. Unfortunately, it is the backlash against that destruction of both literally and figuratively thriving and blighted communities and the new construction that emerged that fueled the preservation movement in the US.

Much of the more innovative multi-story housing built in the US in the decades after the war is only to a small intent aimed at housing the 'deserving' poor but rather to provide affordable housing for the lower and middle class in urban areas, a fundamental problem that remains or has only acerbated. Various states and municipalities also sought to stimulate construction of affordable housing like Roosevelt Island in New York City or Cedar Riverside in Minneapolis, both examples of an interesting mixed income housing development in the spirit of the English new towns.⁵⁵

High rise construction of multifamily housing for middle to upper middle class (private) urban living until recently continued in the major urban areas in the U.S but the use of this building type for lower income and social housing was, with a few exceptions, already largely abandoned by the middle of the 1970s and replaced mostly with rent subsidies and in the last decade with more townhouse-type low rise buildings almost as an amalgamation of the suburban development and the 19th Century townhouse.

In Europe in the years immediately following World War II, again the housing shortage was severe as a result of physical destruction and no new construction during the war. With high-rises technologically possible and more economical using reinforced concrete, the high-rise towers and slab apartments became possible. Le Corbusier, for instance, realized some of his theories of urban building in the vertical stacking of module housing units in his 1946-1952 Unités d'Habitation project in Marseilles, France, while the 1957 Interbau Exhibition in the Hansa quarter of Berlin adjacent to the old Tiergarten demonstrated the new urban housing possibilities in some 45 new residential buildings designed by as many as 51 architects, including Alvar Aalto, Le

⁵⁵ A good summary of the history of the development of Roosevelt Island may be found in Robert A. M. Stern, *New York 1960* (New York, The Monacelli Press 1995): 641-659. An overview of housing and their design and design methodologies for both low rise and highrise for the 1960's and early 1970's may be found in John Macsai, *Housing* (New York, John Wiley & Sons 1976).

Corbusier, and Oscar Niemeyer from 30 different countries.⁵⁶ Both private and public sector housing increased exponentially in the 1960s typically as high-rise modern towers aided by public monies or policies for both low and middle income populations.⁵⁷ In the 1950s and 1960s, some countries, notably England, Germany and the United States also began to engage more actively.⁵⁸

The 1972 demolition of the Pruitt-Igoe development in St. Louis became an icon of failed public housing and signaled the end of high-rise public housing in the US.⁵⁹ The destruction of projects in Chicago (Cabrini Green),⁶⁰ Glasgow (Red Road) or Amsterdam (Bijlmermeer) demonstrates

⁵⁶ The area has since been landmarked. See Gabi Dolff-Bonekämper and Franziska Schmidt, *Das Hansaviertel: Internationale Nachkriegsmoderne in Berlin* (Berlin, Bauwesen 1999).

⁵⁷ Martin Wynn, "Introduction," in *Housing in Europe*, Martin Wynn, ed. (New York: St. Martin's Press, 1984), 2-3.

⁵⁸ The amount of historic fabric loss, though, depended on how much power the governments had in acquiring land through eminent domain. For instance, eminent domain was limited in France and therefore more of the historic fabric was retained while West Germany utilized eminent domain to redevelop large areas of its cities in the 1960s and 1970s. See Jon Pearsall, "France," and Declan Kennedy, "West Germany," in *Housing in Europe*, Martin Wynn, ed. (New York: St. Martin's Press, 1984), 24 and 59-64.

⁵⁹ According to the US Department of Housing and Urban Development since 2006 some 195,000 units of public housing have been demolished and another 230,000 are scheduled for demolition. See Robbie Brown, "Atlanta is Making Way For New Public Housing", *New York Times*, June 21, 2009. Here demolition of the typical brick structures – dating from 1936 – are being demolished to make way for quasi-colonial lowrise housing dispersed in presumably mixed neighborhoods developed by private developers. A similar actions have been taking in New Orleans and Newark. For Newark, see Antoinette Martin, "End Nears for Unloved Housing", *New York Times*, October 12, 2008 and for New Orleans, see Susan Saulnay, "5,000 Public Housing Units in New Orleans Are To Be Razed", *New York Times*, June 15, 2006 or Nicolai Ouroussoff, "High Noon in New Orleans, LA The Bulldozers Are Ready", *New York Times*, December 19, 2007.. This included the Lafitte Houses built in 1941. Architectural critic Nicolai Ouroussoff said about this public housing that: "Some rank among the best early examples of public housing built in the United States, both in design and in quality of construction". The housing was demolished and as of March 2009 no new construction on the site had commenced.

⁶⁰ In 1999 the Chicago Housing Authority adopted the Plan For Transformation reflecting HUD's Hope VI program. The viability of each high rise was assessed to determine whether it was physically and financially feasible to rehabilitate the buildings. While all housing for seniors (including Hilliard) was remodeled, for family developments demolition and rebuilding (in lowrise quasi historic) ways was considered more cost effective. By 2001 22 of the some 51 family highrises had already been demolished. Today only 9 of those highrises remain. See Janine Wilkosz, "Chicago Highrise Residential", *DOCOMOMO-US Newsletter*, Spring 2009, 13.

how widespread that failure is perceived to be.⁶¹ Postwar multistory housing regardless of country presents one of the most difficult problems in the preservation of modern architecture. The lack of maintenance or the initial lack of quality combined with the minimal standards for size and amenities, the subsequent social issues such as isolation, crime and lack of social services and employment opportunities in communities that are not economically diverse are a powerful combination of negative factors. However, the continued growing need for housing, the rise in real estate values and a general population return to cities has created more opportunities for safeguarding and preserving this architecture in a meaningful and useful way. These factors combined with the current emphasis on infrastructure investment in the US, has once again placed a focus on public or social housing as an economic necessity as well as a moral obligation. It is here that the preservation of modern architecture can play a role not only in helping to keep a substantial portion of the existing housing stock (that can and should be improved) but also (and probably even more importantly) as teaching lessons of past public housing endeavors.

Many of these housing schemes are not individual buildings but concern significant urban areas making preservation not only a building issue but also a planning and possibly consideration as a historic district or conservation area issue. Many of the entire new towns or areas constructed after the war are in danger of being severely remodeled without much regard to the original design and character as well as the urban design underpinnings, which may have been declared wanting and unwanted. However, in recognition of their historic significance the landmark designation process has started in some cases.⁶² Overall, good and comprehensive strategies for

⁶¹ See, for instance, Rob Doctor, "Postwar town planning in its mid-life crisis: developments in conservancy policy in the Netherlands", *DOCOMOMO Journal* n. 16 (March 1997): 39-43. He discusses the neighborhood Bijlmermeer just outside Amsterdam and the changes necessary or Edwin S. Brierley, "Park Hill, Sheffield (Lynn & Smith, 1953-60): The social impact of a deck housing prototype", *DOCOMOMO Journal* n. 16 (March 1997): 44-47.

⁶² An interesting case in point is the new town Cumbernauld, just outside Glasgow and was started in the 1950's but mostly built in the 1960' and 1970's as a self contained town. While originally hailed as a significant development, in 2001 the town was awarded a 'Carbuncle Award' as being dreary and ugly by a Scottish business magazine. Many factors did contribute to the economic downturn. In 2002 ICOMOS placed Cumbernauld together with several other new towns on its list of 20th Century Heritage at Risk when several buildings were scheduled for demolition. For a contemporary summary of the development of new towns, see Frank Schaffer, *The New Town Story* (1970). For the significance of new towns in general and their influence on planning, see Miles Glendinning, "The New Town 'Tradition': Past, Present – and Future?", in *Back from Utopia: The Challenge of the Modern Movement* (Rotterdam, 010 Publishers 2002), Hubert-Jan Henket and Hilde Heynen (editors) 206-215. For a more recent update on the activities in Cumbernauld, see Diane M. Watters and Jessica Taylor, "The Cumbernauld New Town Research and Inventory Project, 2006-9", *DOCOMOMO Journal* 39, September 2008, 40-43.

preserving the significant portions of the postwar urban landscape from the large scale infrastructure and urban planning initiatives to the small plaza remain to be developed along side similar examination of the housing within these mid-20th century urban planning initiatives.

Aside from some cultural rejection or negative perception attached to the housing complexes, the preservation of the individual building faces considerable limitations when compared with low-rise residential architecture. The early to mid-20th century multi-story building's unit sizes are often small, its structure is rigid, its services fixed, its amenities are limited and no expansion possibilities out onto the site are possible in contrast to so many suburban houses that could expand to adapt to new needs. As a result the preservation and continued use of many of these buildings is possible only by accepting the existing configurations and implementing technical and physical upgrades where possible but with only limited changes in the original configurations.

Several case studies selected may help to elucidate both the challenges and the opportunities of preserving modern housing, which is an extremely complicated issue tied to social and financial policies. In the last decades attempts have been made to privatize much of the originally social and subsidized housing by either turning it over to the occupants or to investors.⁶³

Chatham Towers

On the border of Manhattan's Chinatown and Civic Center, two medium-height concrete towers rise from the street as Brutalist and are quite unique to New York City and unlike many of other buildings of this period or style, Chatham Towers has not suffered from a lack of appreciation. While not planned as public housing, the project was intended to provide affordable housing in lower Manhattan and was one of the many private but subsidized initiatives of the time. Design started as early as 1960 and opened in 1965 as the second of three major housing initiatives in a notorious area close to New York's City Hall, Chatham Towers was created under Title 1 of the 1949 Housing Act, which financed slum clearance and urban renewal.⁶⁴ A non-profit organization, the Association for Middle Income Housing, with sponsorship of the Municipal Credit Union and the New York State Credit Union League, which had also sponsored a large housing project

⁶³ Mark Landler, "Public Housing in Private Hands", *The New York Times* May 5, 2006, C1 and C11 describes the purchase of housing units in Dresden, Germany by outside investors and refers to similar purchases in cities like Berlin. For a – somewhat – comparative discussion between the US and Europe, see Jan van Weesp and Hugo Priemus, "The Dismantling of Public Housing in the USA", *Netherlands Journal of Housing and the Built Environment*, 14, n. 1 (1999) 3-12.

⁶⁴ See "Twin-Tower Co-op Development Rises in a Once-Seamy Section of Lower Manhattan" *New York Times*, April 12, 1964, R1.

directly to the east, Chatham Green, a 420-unit serpentine-shaped Chatham Green targeted to middle-income residents. The Association for Middle Income Housing Inc. was established as a nonprofit sponsor and developer of cooperative housing for families of moderate incomes in 1961 by the two credit unions. The group sponsored many projects in the city including the I.M. Pei designed apartments for NYU. Through Title 1 of the Federal Housing Act, AMIHI purchased the property at below market rates with the city and federal governments contributing the difference with the actual value. The Mayor's Committee on Slum Clearance, which administered the Title 1 Act at the local level, condemned the site and the thirty-one buildings that occupied it.⁶⁵ The never-built third development was slated for a lower-middle-income population, while Chatham Towers aimed a more upper-middle income level, with the unit size, finishes, and amenities to match.

A group of younger architects at Kelly and Gruzen successfully created a powerful architectural statement for middle-income housing. The landscape design of the plaza and adjoining playground, a creation of modernist landscape architect, M. Paul Friedberg, provided the transition from the towers to the street. Chatham Towers is not representative of design and planning techniques typically associated with publicly-aided housing, but rather represents a singular individual statement that continues to resonate well on its own and within the surrounding streetscape and the integrity of the site and the buildings remain largely intact.

The complex is constructed in poured in place reinforced concrete and is textured by the intentional markings of fir form boards. The overall composition is quite sculptural and plays with the solids and voids of the concrete and glazing and the light and shadow created by the balconies. The original landscape designed by M. Paul Friedberg incorporated a formal plaza and an adjoining playground are characteristic of his work with the landscape defined by a sense of depth and variation, innovative play forms, benches and niches.⁶⁶ Each tower houses one hundred and twenty residential units ranging in size from 500 square foot studios to upwards of 1200 square feet for apartments with three bedrooms. The five apartments on each floor are arranged around a central core with two elevators and a scissor stair.

Chatham Towers was acclaimed for its design and, for instance, received awards from the New York AIA for its "originality of concept and use of materials in the planning and design." Buildings

⁶⁵ For a brief summary of the history of AMIHI, see Richard Siegler and Herbert J. Levy, "Brief History of Cooperative Housing", in: *Cooperative Housing Bulletin* ... p.5 published by the National Association of Housing Cooperatives.

⁶⁶ See "Middle Income Project in Lower Manhattan" *Progressive Architecture* 47, n. 2 (February 1966) 132-139.

were viewed as innovative and attractive response to public-sponsored housing, as well as being recognized as one of thirty-eight most important buildings constructed since 1850 in New York.⁶⁷ Fifteen years following the completion of the towers, the critical acclaim remained constant. The New York Times architecture critic, Paul Goldberger described the buildings as "...powerfully articulated towers of raw concrete [that has] aged well." Giving the building credit despite their "heavy-handed Corbusier" inspiration, Goldberger noted that the complex as "well scaled, comfortable, and visually attractive—qualities which help any building survive the passage of time".⁶⁸ As part of the acclaim for this project, the firm was awarded a Bard Award when Chatham Towers received first honors.⁶⁹ While Chatham Towers continues to be acclaimed architecturally, it has not received any local or national designation as a historic resource as a result of the reluctance of the residents about additional regulations that comes with local designation.⁷⁰ Although the local preservation community has recognized the significance of Chatham Towers, these buildings have not been designated landmarks because of opposition of the owners and occupants.⁷¹ Likely the most influential factor in that the survival of Chatham Towers is that it is not owned or managed by an institutional or governmental organization. Because the residents have a direct stake in the buildings, maintenance is continual and turnover rare; in fact, many of the original owners from 1965 or their heirs still reside at Chatham Towers thirty years later. Without a doubt residents have altered interiors as their expectations and tastes have changed and made possible by the sheetrock interior partitions.⁷² Finally, the demand for housing in New

⁶⁷ See "Chatham Towers Is Given Award". *New York Times*. July 17, 1966, 228 and Joseph P. Fried, "Designers Savor a Century of Architecture". *New York Times*; September 24, 1967, 390.

⁶⁸ Paul Goldberger. *The City Observed: New York a guide to the architecture of Manhattan*. (New York: Vintage, 1979.) 33.

⁶⁹ "The establishment of the playground parks in the Jacob Riis Houses are/is nothing short of a revolution. The crowds that come—from many block beyond the project—prove the inadequacies of our present parks. This park has steps, benches, mountains, bridges, tree houses, fountains, theaters, pergolas, eight kinds of paying, and above all, architectural sequence-facing, variety and ingenuity" in: David Bird. "Bard Awards Made for Four Projects." *New York Times*. May 4, 1967, 44.

⁷⁰ Chatham Towers was originally a limited-equity cooperative but became a private co-op in the 1990s when the city property tax abatements for the non-profit Association for Middle Income Housing, Inc. ended. As a private co-op, the cooperative owns the buildings and the residents occupy the apartments under the terms of a lease, which in effect works as ownership. While the NYC landmarks law does not specifically require owner consent, it has been part of the operative procedures for the last decade to not designate without it.

⁷¹ Fred A. Bernstein, "40-year watch: Chatham Towers by Kelly & Gruzen", *Oculus* 66, n. 2 (Summer 2004) 49.

⁷² Tracie Rozhon, "Chatham Towers: Heir to 60's Apartment Reworks It," *New York Times*, September 25, 1994, A.6.

York remains so large that Chatham Towers will retain its value while the regulations underlying its co-op ownership so far have moderated any future extensive exterior alterations.

Peabody Terrace, Cambridge, MA

The Francis Greenwood Peabody Terrace was not designed as social or public housing or dormitory but was intended for married students at Harvard University and is the work of Josep Lluís Sert (1901-1983) then dean of the Graduate School of Design and a practicing architect.⁷³ As Sert's first large housing project in the US, it showed a distinct European influence particularly from Le Corbusier, which was not surprising given Sert's work with Le Corbusier and his active involvement in CIAM, notably as the president from 1947 to 1956. Peabody Terrace was widely acclaimed upon its completion; it received many design awards and continues to be greatly liked by architects and designers. Mixed reviews from former occupants and mostly negative feelings from the surrounding neighborhood, nonetheless still seems to linger but should detract from the significance the project has achieved and how it has been integrated into the university community.⁷⁴ Peabody Terrace, while not to be considered public housing in the true sense of the word, is representative of institutional rental housing and, in many ways, is closer to European style housing than some other projects. It also becomes the prototype for later public housing in both Boston and Roosevelt Island in New York City.

⁷³ José Luis Sert (1901–1983) was born in Barcelona, Spain and studied architecture there from 1922 to 1929.⁷³ From 1929 to 1939 he practiced in his native city until the Spanish Civil War forced him to leave. Among his early projects in Barcelona are a number of apartment houses but he became best known initially for the design of the Spanish Pavilion for the 1937 World's Fair in Paris, where Pablo Picasso's *Guernica* was first displayed. In that period before World War II, he worked extensively with Le Corbusier in Europe and was an active participant in CIAM, of which he served as the president from 1947 to 1956. He immigrated to the United States in 1941. He continued his interest in urban planning in the New York from 1941 until 1958 through his practice, Town Planning Associates (TPA). Together with his partners Paul L. Wiener and Paul Schulz, Sert was actively working throughout Latin America; the practice's numerous projects included a never implemented city plan for Havana, Cuba. See also, Josep M. Rovira, *José Luis Sert 1901- 1983* (Milan, Electa Architecture 2003) provides the most detailed general discussion of Sert's work. Joseph Rovira (editor), *Sert, 1928-1979 Complete Work: Half a Century of Architecture* (Barcelona, Fundació Joan Miró n.d.) contains detailed descriptions of the most of Sert's projects.

⁷⁴ The magazine *Architecture Boston* in 2003 dedicated its July-August issue (Vol 6, No.4) to Peabody Terrace. Different architects are interviewed and asked their opinions as are previous tenants and people that grew up as children in the complex. Also, Jonathan Hale's "Ten Years Past at Peabody Terrace," *Progressive Architecture*, 55, October 1974, 72-77 mention some of the functional issues residents had with the skip-stop system and the inalterable heating system, though the residents seemed to think they had adequate space.

Peabody Terrace, located along the Charles River in Cambridge, Massachusetts, is a complex with close to 500 residential units. The design began in 1962 and the first units were completed in 1964. The urban plan and setting are important design features and while maybe not all of the original urban assumptions have materialized or were put into place as intended, the complex today still remains an excellent example of modernist urban planning and represents a search to create a new urban neighborhood linked to its surroundings in a meaningful and successful way. The massing with the three high-rise residential buildings connected by low rise wing containing housing and community facilities are creating stepped volumes that establish a thoughtful transition between the complex and the surrounding low rise residential context. The massing was deliberately created to achieve the most economic solution possible with a density of 60 to 80 units per acre. The intention was for the complex and its amenities to be inviting and accessible to the surrounding neighborhood.

Sert's plan for the residential buildings uses a basic structural unit to maximize the number of units possible while minimizing the cost of construction.⁷⁵ Each three story module contains two apartments per floor with a total of six. The middle floor has an enclosed gallery, which provides access to the center stair embedded in the unit, the elevator, and the two apartments on that particular floor. The apartments on the floors below and above are only accessible from the center stair and have no direct elevator access. As a result the elevator stops on every third floor only, hence the name skip-stop for the system. Done at the time to reduce cost it continues to be the one item that annoys tenants the most. This module—three bays wide and three stories high with a stair in the middle—is repeated and stacked in low and high rise alike, allowing for the differentiation in heights. While this solution was adopted to offset the cost of the elevators and to avoid a slab-like configuration, it became and continues to be the primary source of aggravation and contention.⁷⁶

⁷⁵ A detailed description of the original project and its various components is found in "Harvard's New Married Student Housing," *Progressive Architecture* 45 (1964): 122–133.

⁷⁶ Sert used the skip-stop elevator in a number of his housing commissions. The system was a cost savings device not only in the cost of the elevator but also because of the elimination of galleries and corridors on every floor. Sert undoubtedly was familiar with Le Corbusier's use of the system. While it may have saved capital costs, it forced two thirds of the residents to walk and carry everything up and down two flights of stairs. Sert was not the only architect in the US to utilize this system. John Macsai, Eugene P. Holland, Harry S. Nachman and Julius Y. Yacker, *Housing* (New York, NY: John Wiley & Sons, 1976) 382-395, show a number of different projects. Of the approximately 500 apartments, 15% are efficiencies (studios) measure 415 square feet, 40% has one bedroom but is still only 487 square feet, 40% are two bedrooms and 766 square feet, and 5% are three bedrooms and 960 square feet. See: "Harvard's New Married Student Housing," 124. A different mixture of apartment sizes is given in, "Married Students' Residence Completed at Harvard," *Architectural Record* 136 (1964): 12–13, which also gives the rents charged at the time.

The balconies, in addition to providing outdoor space, served another less obvious, but critical function because the majority of the units were entered from the internal enclosed central fire stair, the primary means of egress, a second means of egress as required by the building code was created by connecting the balconies allowing for the internal stair of an adjacent or adjoining module to be reached.

The experience of Peabody Terrace had important ramifications for Sert, Jackson & Gourley and resulted in several other housing commissions from the Urban Development Corporation in New York State, which was headed at the time by Edward J. Logue. Logue, formerly the director of the Boston Redevelopment Agency, was familiar with Peabody Terrace and brought Sert to New York State. The additional commissions are also testimony as to how well the Peabody Terrace project was viewed and accepted in the housing community. Between 1970 and 1976 Sert built two housing complexes on Roosevelt Island, Eastwood and Westview.⁷⁷ In addition to the two Roosevelt Island projects, Sert and his partners designed East Hills in Ithaca (never built) and Riverview in Yonkers, New York in 1970.⁷⁸ While the urban design and massing is distinct in each project, the building organization and apartment layouts follow similar concepts and all are floor through units serviced by the skip-stop elevator system. While in Peabody Terrace apartments are limited to one floor, at the Roosevelt Island buildings, larger apartments and duplexes were designed to take advantage of the basic three story module.

In 1993 after some 30 years and with occupancy declining the entire Peabody Terrace complex needed renovation.⁷⁹ The renovation, which included work on the exterior and upgrading of the kitchens, bathrooms and interior finishes was also necessitated to improve the perception that the buildings, apparently, had acquired.⁸⁰ The infrastructure systems remained largely unchanged.

⁷⁷ For Sert's Roosevelt Island work, Joan Ockman, "Roosevelt Island 1970", in: Rovira, *Sert, 1928-1979 Complete Work: Half a Century of Architecture*, 333-345. For a general history of the development of Roosevelt Island, Robert A. M. Stern, Thomas Mellins and David Fishman, *New York 1960: Architecture and Urbanism Between the Second World War and the Bicentennial* (New York, NY: Monacelli Press, 1995) 640-659.

⁷⁸ Carolina B. Garcia, "East Hills 1969" and Jordi Pesuto, "Riverview 1970", in: Rovira, *Sert, 1928-1979 Complete Work: Half a Century of Architecture*, respectively 328-329 and 348-349.

⁷⁹ I am indebted to Leland Cott, FAIA, who provided much of the detail contained in the restoration section. His firm of Bruner/Cott & Associates in Cambridge, MA was the architect for the renovation of Peabody Terrace.

⁸⁰ See John Morris Dixon, "Yesterday's Paradigm, Today's Problem," *Progressive Architecture* 75, (June 1994): 100-108. The article states that the renovation was necessary not only because of the physical conditions, but also because of negative opinions voiced by the students.

Sprinklers had been added earlier to comply with fire safety codes. Because there are no concealed spaces, vertical chases or dropped ceilings, upgrades to sprinkler and fire alarm systems, electrical conduit for security lighting or cabling for data and communications had to be surface mounted whether on the exterior or the interior.

There is little doubt in the minds of the design community that the complex deserves preservation, but the praise and criticism that surrounded the project four decades ago seems to have somewhat abated today and appears to center on the inconvenience of the skip-stop elevator system. The critique leveled against the project today is indicative of arguments that are heard in the preservation of modern architecture in general. While Peabody Terrace was widely praised in the architectural press at the time of completion, it quickly became the subject of significant criticism, which seems ironic now that Peabody Terrace has become worthy of preservation. The lack of direct access to elevators for about two thirds of the apartments as a result of the skip-stop system was probably what provoked the most complaints. Although these concerns persist today, the renovations made have brought the units more in-line with the increasingly demanding housing standards for an ever changing student population.

Contemporary opinions around Peabody Terrace incorporate many of the mixed opinions expressed about modern architecture and modern housing. The complex is still generally liked and admired by architects and designers, but found less attractive by many others.⁸¹ Vegetation both in and around the complex has matured and also the neighborhood seems changed with many new additions.⁸² Much of the contemporary criticism seems more the result of the changed perception of urban housing and its concomitant social problems than the buildings themselves. The desire to provide decent affordable housing, once seen as an opportunity for both architects and institutions, has in many ways changed toward the negative.⁸³ The testimonials of occupants or children growing up in the complex, however, are far more positive.⁸⁴

⁸¹ Lee Cott, "Why Architects Love Peabody Terrace," *Architecture Boston* 6, no.4 (July-Aug 2003), 20-25.

⁸² See Jonathan Hale, "Ten Years Past at Peabody Terrace", in: *Progressive Architecture* 55, October 1974, 72-77. The complaints center on the town-gown issues and the lack of community within the complex itself. The later is not entirely surprising given the fact that the occupants are an extremely transient population: graduate students.

⁸³ See "Imposing Architecture: the problem of design politics", in: *Architecture Boston* 6, no.4 (July-Aug 2003), 37-41 for a discussion about public housing and high rise buildings between Lawrence J. Vale and Hubert Murray, head of Urban Studies at MIT.

⁸⁴ See Erin Graves, "Family Affairs: The Children of Peabody Terrace", *Architecture Boston* 6, no.4 July-August 2003, p. 34. Or Edward Young, "Other Voices", in: *Architecture Boston*, July-August 2003, p. 48.

Raymond M. Hilliard Center, Chicago, IL

Standing well apart from public housing's stereotypical image of drab high-rise slab towers are the circular and curved towers of the Raymond M. Hilliard Center in Chicago, IL designed by Bertrand Goldberg (1913-1997).⁸⁵ Built from 1962 to 1966, Hilliard Houses, as it was known, consists of four residential towers for families and seniors and one low-rise community building on a 12.5 acre site located 3 miles south of Chicago's downtown Loop. The residential towers have distinct round forms that are reminiscent of Goldberg's celebrated corn-cob shaped Marina City towers along Chicago's waterfront or his Prentice Women's Hospital of Northwestern University. However, his aim was not to make an artistic statement per sé but, instead, he was seeking to create more efficient buildings, in terms of finances, material usage, stress tolerance, and construction while still achieving thoughtful, human, and aesthetically striking design. The Hilliard Center is a statement not only about Goldberg's architectural and engineering ingenuity but also his views on the important role of architecture in society. The hallway and common spaces were meant to foster community and mutual aid to the senior residents who may require physical or emotional support.⁸⁶ In contrast to the Harold L. Ickes Homes, another public housing project designed by SOM across the street, the buildings, driveway, and pathways of the Raymond M. Hilliard Center do not conform to Chicago's dominant rectilinear grid of streets.

By the time Bertrand Goldberg began designing the Raymond M. Hilliard Center, the public housing in Chicago had already come under scrutiny for its poor management, institutional design, racial configuration, and patronizing approach toward the population it was seeking to serve. The New Deal-era public housing projects in Chicago had combined progressive goals with practical job creation for architects and construction workers. The resulting superblocks, filled with multiple high-rise buildings covering only 10% to 20% of the sites, reflected the 'towers in the park' image in the belief that a change in environment would improve the behavior of the residents.⁸⁷ Early in the decade the problems connected to racial desegregation, poverty, and lack of economic opportunities manifested itself as increased crime and destruction at many of

⁸⁵ Thomas Buck, "CHA Project Styled like Marina Towers," *Chicago Tribune*, February 11, 1964, B9.

⁸⁶ Betty J. Blum, "Bertrand Goldberg," Chicago Architects Oral History Project, transcript at Architecture Department, Art Institute of Chicago, 193-94.

⁸⁷ Such a moralistic attitude toward the poor was a large part of the housing advocates' campaign to gather support for improved housing conditions since the 19th century. See Gwendolyn Wright, *Building the Dream: A Social History of Housing in America* (New York: Pantheon Books, 1981), 234.

the high-rise projects. Combined with these problems were criticisms about the design and the ineffective management and poor maintenance by the Chicago Housing Authority (CHA) led to the stigmatization of public housing as unsafe and undesirable and bad architecture. Because of earlier projects in the 1950s and early 1960s in the mold of Chicago's infamous Cabrini-Green project, the Hilliard Center was met with some resistance at the onset of its approval as "extending a ghetto" of public housing concentrated along South State Street in the South Side of Chicago, where many other public housing project had replaced dilapidated low-rise housing along State Street.⁸⁸

Bertrand Goldberg received the commission in 1963, not long after his corn cob resembling Marina City towers caused a sensation. Built for a labor union seeking to keep residents in the central city as a way to retain jobs for its workers, Goldberg was able to incorporate his strong social and political beliefs into his architecture with that project. When attending the Bauhaus and later working for Mies van der Rohe in 1930s Germany, he had begun with examining shapes and forms structurally superior to rectangles.⁸⁹ He could design a space as needed and "the line of enclosure is drawn around it."⁹⁰

The Hilliard Center was a public housing project, owned and operated by the Chicago Housing Authority but financed by federal housing sources, which imposed minimum requirements for unit sizes, quality of amenities, and design innovations.⁹¹ The unorthodox design met strong resistance from the federal public housing authorities, which apparently characterized the design as "too good for the poor." This was as much a reflection on the attitude of governmental agencies as a complement on Goldberg's design, who was told to redesign the project and for which he was even offered an additional fee. Charles Swibel, the head of the CHA, who had been involved with obtaining the land for Marina City, convinced the federal authorities to allow design to proceed.⁹² Despite the attempt to use good design to salvage the image of high-rise family housing, the Hilliard Center was the last significant tall family housing built by the Chicago

⁸⁸ Thomas Buck, "CHA Approves Marina Type Twin Towers: T.M. Mann Assails 'New Ghetto,'" *Chicago Daily Tribune*, February 14, 1963, E4.

⁸⁹ Blum, "Bertrand Goldberg," 151. See also "Bertrand Goldberg," in John W. Cook and Heinrich Klotz, *Conversations with Architects*, (New York: Praeger Publishers, 1973) 122-146.

⁹⁰ Bertrand Goldberg, "Low Rent Housing for the Indigent, Chicago Housing Authority," *Lotus*, 1969, 258.

⁹¹ Unlike Hilliard Center Marina City was a moderate income project, with minimum unit sizes dictated by Federal Housing Authority (FHA) guidelines, cost limits and rents lowered to overcome the perceived prejudice to living downtown in non-standard, high-rise housing during the height of suburban flight.

⁹² Blum, "Bertrand Goldberg," 196.

Housing Authority. When offered a choice only a handful of original residents agreed to return after the rehabilitation.⁹³ Currently of 654 available units, some 55% or 350 units remain classified as affordable low-income housing and some 45% or 305 units as public housing, which continues to serve the same population of seniors and families as before.⁹⁴ In an effort to distinguish the buildings from its earlier public housing image, the complex was renamed Hilliard Towers Apartments.

While Hilliard Center was not without its share of problems, it never did attract the contempt seen at other CHA projects. In fact, in the overhaul of CHA's housing projects that began in the late 1990s in response to the dilapidated and crime-ridden conditions exposed in the media, the towers at Hilliard Center were the only CHA high-rise residential buildings not slated for demolition. When in 1999 Holsten Real Estate approached the CHA about acquiring the Hilliard Center, the buildings at Hilliard, like much of the public housing in Chicago, was in a dilapidated state. One of the family towers had been mothballed due to low occupancy, as had the upper floors of the other three towers. Initially retained as the outside management company, Holsten now owns and operates the complex, while the CHA retains a land lease, which has covenants to ensure affordability of the housing as well as address the historic significance of the buildings, which were listed on the National Register in 1999 as part of the Raymond M. Hilliard Center Historic District.

The original landscaping by Alfred Caldwell (1903-1998), a noted Chicago landscape architect and frequent Goldberg collaborator who also designed the landscape at Marina City, was maintained and many of the original trees remained though additional plantings were installed.⁹⁵

⁹³ Based on interview by Flora Chou with Peter Holsten, January 19, 2006.

⁹⁴ Both the affordable units (55% of the project units) and the CHA public housing units (45%) limit the income of the occupants to 60% of median income, which for a family of 4 in Chicago is approximately \$75,000. The difference is that the CHA units cannot rent for more than 30% of the occupant's income while the affordable units have a set rent based on the requirements of other funding sources. The units are not physically designed public housing or affordable; instead, the percentage of the units for each category is maintained as they become available in both the family and senior towers.

⁹⁵ Blum, 176. Caldwell worked for the Chicago Park District during the Depression and was responsible for many of the city's well-known landscapes, including the 1937 Rookery at Lincoln Park Zoo and Promontory Point on the city's lakefront. He was influenced by the Midwest works of Frank Lloyd Wright and Jens Jensen. Caldwell taught at Illinois Institute of Technology from 1944 to 1959 while Mies van der Rohe was director and designed much of the campus landscaping as part of Mies's masterplan. Blair Kamin, "Alfred Caldwell, 95, Architect, IIT Teacher," *Chicago Tribune*, July 8, 1998, 10.

The Hilliard Center rehabilitation strikes a careful balance between practical use and historic preservation has been struck. The simplicity of these buildings, the result on one hand of the public housing guidelines and attitudes of the 1960s and on the other hand caused by the structural and design experimentation of the architect, makes its significance and preservation relatively easy but adaptation to current expectations of residential comfort more difficult. The minimal budget that guided the original construction still applies in the amounts allotted currently for a subsidized housing project. The rigidity of the original structure as witnessed in the poured in place concrete walls between bedrooms and the living room made dismantling the partitions to create more spacious rooms difficult and costly.

Cedar Riverside, Minneapolis, MN⁹⁶ and Roosevelt Island New York, NY: New Town-in-Towns⁹⁷

The redevelopment of the Cedar Riverside neighborhood in Minneapolis had been under discussion for some time. While a thriving area earlier in the century significant changes occurred not the least of which was the expansion of such academic institutions like the University of Minnesota. Several local developers began purchasing property in the neighborhood as early as 1962 and Ralph Rapson, then the dean of the architecture school at the University of Minnesota, was retained as the project architect.⁹⁸ In the meantime the city began to conduct studies for redevelopment as early as 1965 with a final plan adopted several years later. The design team included urban planners Barton-Aschman and landscape architect Lawrence Halprin in addition to others. The first plan was unveiled in 1968, which was further developed in the following years.

⁹⁶ A good summary of the project, its design and development can be found in Jane King Hession, Rip Rapson and Bruce N. Wright, *Ralph Rapson: 60 Years of Modern Design* (Afton, MN: Afton Historical Society Press, 1999), 192-201.

⁹⁷ A good summary of the history of the development of Roosevelt Island may be found in Stern, *New York 1960*, 641-659.

⁹⁸ For a tribute to Rapson, see, for instance, Linda Mack, "The Hand of Ralph Rapson", *Minneapolis Star-Tribune*, April 4, 2008. The architectural office was located in the Cedar Riverside neighborhood across from the project and continues today under the direction his son Rip.

The master plan called for 12,500 residential units, 1.5 million square feet of commercial space and extensive recreational space and park land, all of it located in five neighborhoods. However, only some 1299 units were actually built before the project was halted. No further construction took place because the program under which the financing was provided was cancelled in 1974. Financing for the plan was largely obtained from US Department of Housing and Urban Development initially in the form of loan guarantees. In 1973 additional financing was extended under a program titled New Town-in Town.⁹⁹

Because the project was envisioned as much larger all utilities and services were planned on a much larger scale, which today presents a number of challenges in both maintenance and repair but also in terms of efficiencies. As in so many projects Cedar Riverside was built as inexpensively as possible. Much of the improvements necessary today are the result of inexpensive construction or are related to utilities and waterproofing repairs. An anecdote used to illustrate all the attempts at cost savings are the balconies. Because the exterior walls were constructed using spray on concrete (Gunitite) the work had to be done from the inside out to avoid the construction of scaffolding as a result it was less expensive to add a narrow balcony that today serves as minimal outdoor and storage space for the occupants. Nevertheless the development has struggled with financing over the two decades.

After several changes and financial transactions that involved refinancing and payment of outstanding guaranties, HUD had completely withdrawn from the project except for rent subsidies through its voucher programs. Today the project is owned and operated by a private developer under a recently renewed agreement with HUD to maintain the rent subsidized apartments. In the current economic climate this actually presents an interesting irony. The voucher program in essence gives the private owner a guaranteed cash flow, which today in the event of a fully commercial project would be much more difficult to achieve.

Today the project serves an important purpose, albeit different from the one envisioned of social and economic diversity in the original development plans and the apartment size distribution but was never realized. The project is now probably the largest Somali community in the country?. This cultural and social homogeneity of the project presents its own challenges and makes the site distinctly different from the surrounding neighborhood of the nearby academic and cultural

⁹⁹ In 1966 the US Department of Housing and Urban Development established the Model Cities initiative made possible by legislation enacted by Congress. The program was part of President Lyndon Johnson's Great Society and War on Poverty initiative and redirected urban renewal efforts to pay attention to improvements of both the physical and the social infrastructure. While the Model Cities Initiative was abandoned in 1974 it underwent a number of changes and additions in the following years including a program called "New Town in Town".

institutions. The housing project is physically separated from the surrounding neighborhood because the interior urban spaces are elevated above street level to accommodate the extensive parking garage underneath. Physical connections (bridges and paths) into the surrounding community were never completed because of the other so-called neighborhoods (as described in the original master plan) were never built and entrances and stairs designed to reach the elevated inner urban spaces are closed either for security or dilapidated conditions. The urban spaces themselves have lost many of the original features elements that are typical for an interior urban environment designed and envisioned by Lawrence Halprin.

Cedar Riverside was one of two New Town-in Town projects authorized under this initiative of the Model Cities program, the other one being Roosevelt Island in New York City. The two projects have fared quite differently. The master plan for the island developed by Philip Johnson and John Burgee in 1969 also was much larger than originally completed. The first phase, Northtown I, to the designs of the firm of Sert (of Peabody Terrace at Harvard University) and the practice of Johansen and Bhavnani was completed and followed subsequently in 1989 by the construction of Northtown II to the designs of Gruzen Samton. Finally Southtown also by Gruzen Samton was completed in 2004. This last phase included luxury condominiums. Overall management of the project and the island is in the hands of a separate agency, which is part of New York State's government. Of the two Roosevelt Island resembled originally the ideals of the program the closest. The proximity to New York City – the island is right across the East River from the United Nations – and the expansion of the housing stock over the decades allowed for a vibrant community. While the census in 2000 still reflects that ideal of the economically and racially diverse community, the subsequent completion of the luxury housing has changed the original mix.¹⁰⁰ Cedar Riverside is in no immediate danger and seems to fulfilling its basic function. However, the need for investment to complete infrastructure and architectural upgrades will put in the future considerable pressure on the complex and possibly its occupants.

Robin Hood Gardens, Tower Hamlets, London¹⁰¹

¹⁰⁰ Nadine Brozan, "The Changing Landscape of Roosevelt Island", *New York Times*, December 4, 2005 provides some interesting statistics. At that time the total population was a little under 10,000 with a mixture of approximately 45% white, 27% black and some 11% Asian. With regards to income 37% earned less than US\$ 37,000, 40% between 37,000 and 100,000 and 23% more than 100,000.

¹⁰¹ A summary of the project may be found in Max Risselada and Dirk van den Heuvel, editors, *TEAM 10, 1953-81, In Search of a Utopia of the Present* (Rotterdam: NAI Publishers, 2005), 174-177. For some urban aspects, Alison and Peter Smithson, *The Charged Void: Urbanism* (New York, NY: The Monacelli Press, 2005), 176-177. A more detailed expose of the design and its various features is found in Alison and Peter Smithson, *The Charged Void: Architecture* (New York, NY: The Monacelli Press, 2001), 296-313.

Designed in the late 1960s by Alison and Peter Smithson this public housing or council housing complex has been scheduled for demolition. The ensuing preservation battle has been instructive in precisely the areas of discussion here in showing both the many opinions and the differences between the proponents and detractors of the public housing in particular and the preservation of modern architecture in general. The project was refused for listing or landmark status and in addition, a Certificate of Immunity was granted, which prevents for the next five years the possibility of listing.¹⁰² Many of the issues and arguments in the debate can be applied to other public and multistory housing projects and not just to those in the UK, which is why it is useful to consider them here.

After completing architecture school, Alison and Peter Smithson joined the London County Council at the end of the 1940s before establishing their own practice in 1950. The design for the Robin Hood Gardens Complex was started at the end of the 1960s but did not proceed without its complications and aggravations.¹⁰³

The project consists of two long more or less parallel rows flanking a large open area in the middle. This open area is the subject of considerable study in the design process and many of the early illustrations feature a variety of activities in this area, which was conceived as a 'stress free zone' away from the noise and action of the surrounding city. Many of the early studies focus on the acoustics and sightlines in the communal area.

The buildings themselves are stacks of mostly duplex units with an internal stair reached from broad galleries every three floors. Referred as a 'streets in the sky', the galleries are reminiscent of other earlier projects. All the exteriors are constructed out of high quality precast concrete panels reflecting the Brutalism stylistically prevalent in the UK at the time and which can be found in use in other postwar housing projects in London.¹⁰⁴

¹⁰² The preservation advocacy efforts were instigated by the Twentieth Century Society in cooperation with the magazine *Building Design*.

¹⁰³ Apparently Alison Smithson complained bitterly about the "Labour Union Society" in 1974 and the bureaucratic egalitarianism. See Risselada and van den Heuvel, *TEAM 10, 1953-81, In Search of a Utopia of the Present*, 174.

¹⁰⁴ The 'street in the sky' concept can be found in other housing estates most notably the Barbican and Golden Lane Estate both in London and by Chamberlin, Powell & Bon. To that extent Bertrand Goldberg used the same concept in his Hilliard Towers project in Chicago.

The rationale given for refusing listing is what is of interest most in the context of these writings about housing. Aside from the discussion of criteria that recognize the prominence of the Smithsons, the intellectual underpinnings and the interest of the internal urban space with its evocative landscaping, most of the critique is directed on the relative significance of the work in the context of the Smithson's oeuvre, the uniqueness of the project as housing and under the category "Influence and critical evaluation" a discussion of the flaws of the project. It is in that section a critique of public housing is embedded and which is to be of the most concern.

One particular aspect stands out:

"He (the Secretary of State) considers that it would be contradictory to provide social housing that was not a good place to live. He also notes that the Smithsons' intended to foster a sense of community, particularly with their use of street decks, which further persuades him to conclude that the overarching aim of Robin Hood Gardens as a social housing project was to provide a decent place to live. Whether Robin Hood Gardens was a decent place to live is consequently relevant to his review."¹⁰⁵

In this context two aspects are discussed further, one, vandalism (not specifically defined) and the effectiveness of the design and, two, the views of the residents, which in most instances are more focused on on-going safety and maintenance issues. The vandalism aspect seems incongruous and it is odd to attribute vandalism to the design of the building. It was noted at the time and even by Alison Smithson and remains an aspect in dispute. The greater concern is that by inference, the failure to improve social behavior can be assigned to the design of the building. It is this argument that reappears every time in the discussion of early public or social housing. The critique of the design also focuses on the design of the stairwells, considering them 'a grim element of the design'. Once again preservation does not require buildings to be static and design improvements and changes can and often should be made as time progresses.

While the suggestion that the opinions of the residents should be taken into account may be a politically expedient idea, it presents several serious problems. First, the residents today, a community with different backgrounds, are not the ones, for which the complex was designed nor is it likely to be one living there a decade from now. This does not preclude improvements to bring housing to contemporary standards as much as possible. Second, heritage decisions should not become post-occupancy evaluations by ever changing groups of occupants.

¹⁰⁵ As contained in the previously quoted letter from The Culture Team of the Department for Culture, Media and Sport dated 13 May 2009 addressed to Jon Wright, Case Officer, Twentieth Century Society and signed by Lauren Warren, Heritage Protection Policy Advisor.

Third, by placing any consideration of listing outside the possibilities for 5 years, the very fact that thinking about the recent past evolves is negated. Fourth and finally, changes to the design can be made and conditions can be adapted as Nicolai Ouroussoff, the architectural critic of the New York Times writes:

"Architecture attains much of its power from the emotional exchange among an architect, a client, a site and the object itself. A spirited renovation of Robin Hood Gardens would be a chance to extend that discourse across generations".¹⁰⁶

It is precisely these arguments that has continued the perception of (Un)Loved architecture.

Housing Charette: Graduate School of Architecture, Planning and Preservation, Columbia University, New York, June 12, 2009

The purpose of the charette was to initiate a debate and dialogue about public housing in the original sense of the word. Aside from the acknowledgement that the term 'public housing' needed to be de-stigmatized, the main question to be addressed was why could public housing not be interpreted in the same vein that is infrastructure improvements like public transportation and what should the government do to stimulate the construction of – as agreed by everyone – much needed affordable housing. Several conclusions came out of that dialogue and search for architectural solutions, which to a large extent attempted to address density, one, that there was an emergency (mortgage defaults) and two, a long term crisis (need for affordable housing). The ideas explored were both on a policy level and architectural implementation and was part of an on-going discussion has been running in the US from the 1930s onwards throughout the 1970s.

Conclusion

While much of the analysis has been addressing the aspect of housing and preservation, the question of what needs to be (Un)Learned remains to be placed in the on-going housing debate. While there may be differences in financing and ownership structures, it does not change the basic requirements either socially or economically. Here are some of these considerations based upon the lessons from the past and which may give preservation, redesign and new design some guidance:

1. The need for public or affordable housing is not any different from the 1960s or 1970s and is both an economic and moral imperative.

¹⁰⁶ Nicolai Ouroussoff, "Rethinking Postwar Design in London", *New York Times*, March 18, 2009. The article describes his visit to Robin Hood Gardens.

2. Not all earlier housing is bad or inadequate but deserves improvements (not necessarily demolition) to reflect current standards.
3. Modern and modernist housing are an important resource and demolition to make way for New Urbanist low rise development do not solve the density or social-economic issues.
4. The question of de-stigmatization of public, social or affordable housing is necessary to make it successful as shelter. Placing large numbers of a particular group in one location or project is likely to continue to stereotype that has led to the demolition of so many units. Erasing the past does not necessarily make the future successful unless the basic conditions are dealt with. The most effective communities appear to be those that are mixed in their economic, social and racial make up in a sense reflecting the urban environment. While such communities can not directly be designed, policies and practices as well as physical design can stimulate that process.
5. Housing in any form that is affordable is an economic necessity for any urban environment and locations close to public transportation extends the range of serviceability? and adds to the sustainability.
6. The ever increasing density necessary to house new residents makes renovation of existing large scale housing stock imperative.
7. Most of the problems encountered in the future are the results of quasi cost savings during design and construction.
8. Renovating and changing housing to maintain their livability can be accomplished without obliterating the special character of that community.
9. Public open spaces are important but are difficult to maintain as many of the earlier examples have shown, for instance, Robin Hood Gardens or Cedar Riverside demonstrate. However, it does not diminish their importance or the attention.
10. (Un)Loved now may become Loved in the future.