Modern Housing Envisaged as a *Patrimonio Vivo* (Living Heritage)

BY JOSEP MARIA MONTANER

To analyze the life and transformation of modern housing is a key subject for architectural knowledge. There are very positive cases of evolution, such as *Casa Bloc* in Barcelona, Spain, by GATCPAC architects, which still functions as living patrimony after two architectural rehabilitations; and disastrous, such as Robin Hood Gardens in London by Alison and Peter Smithson. The article explains why some cases are very alive while others have suffered progressive degradation and will be demolished. A key and decisive element is the design of the corridors, which due to their forms and sizes might be positive. And one of the reasons why these complexes have become obsolete has been the excessive architectural definition of both the exterior and the interior. Also the heritage of the *Villes Nouvelles* in France has been disastrous and, in response to the policy of demolition, architects such as Anne Lacaton and Jean-Philippe Vassal, Roland Castro and Sophie Denissof, or Paul Chemetov, have defended the logic of redoing, remodeling and metamorphosing. The challenge is to project and to build collective housing capable of absorbing transformations.

The great examples of modern collective housing are always studied at the moment when they were proposed, built and inaugurated, but there is little studied and written about the evolution of each building: who and how people live in them, how these buildings have been renovated and updated, what reforms have been needed, until what point they continue working... Housing is for living and its evolution and capacity of transformation is essential.

For example, the Viennese *höffe* are well known as models, but we know almost nothing about who lived and live in them, their living conditions and their current tenants. And, generally this housing is appreciated for its form, but not for the quality of its facilities, which is key for its operation.

Therefore, a researchable theme would be to examine the experiences of all these stellar examples; to test the degree of anticipation by the architects to see if their work was advanced for the time, and if it remains appropriate for its time, as Steen Eiler Rasmussen wrote in *Experiencing Architecture* (1957).

To understand modern collective housing as a living patrimony and understand its transformations, it is necessary to have key information, of at least three types.

It is necessary to know the technology used and its durability, having information of the needed repairs and updates made to the structure, façades, installations, roofs and internal divisions. In that sense, the technical conditions of some housing complexes, for instance when they are affected by serious pathologies, can lead to its necessary substitution by new housing buildings in urban renewal operations.

It is also key to whom the housing was awarded, knowing who has lived and lives in this housing, to understand the modes of life and use, the reforms undertaken, and the level of satisfaction and quality of maintenance. It is important to know what social groups currently live in these housing complexes. For example, in Robin Hood Gardens the highest percentage of residents before its demolition were families of Bengali origin.

Lastly, we need to take into account the urban location, which will be the key for its positive or negative evolution; depending on the nature of the place prior to the project, the evolution of the city, access to facilities and green spaces, and the capacity of the complex to be connected to its environment. The memory of place is very important, which has been positive for the *Casa Bloc* and the housing in the *Barceloneta*, both in Barcelona, and disastrous for Robin Hood Gardens.

These two last factors, the inhabitants and the urban location, are decisive factors that will determine if the area will become a ghetto.

We cannot forget that some historical examples were initially already transformations; for example, *Casa Batlló* in Paseo de Gracia, Barcelona (1904–1907) by Antoni Gaudí, where Gaudí transformed it into an organism with polychrome scaly skin, and with a large interior patio full of light projected by the finished ceramics and sophisticated system of natural ventilation; or the *Maison de Verre* (1928–1932) by Pierre Chareau and Bernard Bijvoet, for the family and the office of Doctor d'Alsace, in the interior of a historical block in Paris, demolishing one part of the existing building, and maintaining the upper floors.

While many of these complexes remain active, in other cases they have been demolished, for instance, the interven-

tion in the area of Southgate in Runcorn New Town (1967) by James Stirling. In that sense, the paradox is that the "high tech" residential complex of Stirling in Runcorn does not exist anymore and, in contrast, another of his interventions from the same time, in the PREVI in Lima, continues standing and working perfectly, conveniently transformed by its users. What people make their own, transform and live in continues standing; what is imposed on people has a short life. For this reason, today, to see housing by James Stirling from the seventies we need to travel to Lima.

From the point of view of living, it is most important is that they continue functioning as housing, as is the case with the *Weissenhof* in Stuttgart (first restoration in 1977), the *Unité d'Habitation* in Marseille, or the *Casa Bloc* in Barcelona. In these cases it is interesting to study what processes have been followed to maintain the current housing and how, in each case, a small part has been made into a visitable museum.

The *Casa Bloc*

Among the most interesting examples of collective housing are the 206 units, *Casa Bloc* in Barcelona (1933–1943), by GATCPAC architects, Josep Lluís Sert, Joan Torres Clavé and Joan Baptista Subirana, which still functions as living patrimony after two architectural rehabilitations (one initiated in 1986 by Jaume Sanmartí and Raimon Torres Torres and one finished in 2008 by Víctor and Marc Seguí). At the same time, there is one apartment open to the public, under the auspices of the Design Museum of Barcelona, rebuilt to recover the style from the early forties, restoring the original colors of the walls, reinstating the joinery and home appliances and installing some furniture of the era.

The *Casa Bloc*, built between a school and a neighborhood factory, has been one of the few "corbusian redents" made in Europe. If we analyze the complex, we can see that its vitality is explained by the dominant interest in community features and the successful design characteristics of the unit entries and external corridors, which are wide enough to allow residents to stop and chat, hang a clothesline or place plants without obstructing access.

The units have a kitchen, bathroom and living-dining room on the lower floor and three bedrooms on the upper floor, situated alternately. In other words, in one unit there are two bedrooms in the front and one above the corridor, and in another unit there is one in the front and two in the back. The internal staircase is built with the traditional Catalan light brick curved stair which takes up very little space.

Regarding the specialized areas of the units, the solution and distribution of the laundry room and the kitchen, located next to the unit entries to protect privacy, demonstrate little domestic knowledge. In this case, the facilities within the *Casa Bloc*, with its small kitchen, is evidently anachronistic if we compare it with another project ten years prior and built by the thousands, such as the Frankfurt kitchen by Margarete Schütte-Lihotzky.

We should not forget that the *Casa Bloc* could not be finished until the end of the Spanish Civil War. Therefore, the units were not assigned to the groups for whom they were designed. In 1943, when the Franco regime turned over the units of *Casa Bloc*, instead of going to union workers as initially planned, they were given to the families of police and *guardia civiles*.

Radical Examples of Transformation

It is very important to consider the phenomenon of housing transformation, even transformations as radical as the ones at Le Corbusier's *Pessac* housing scheme. The pioneer text in the analysis of this phenomenon was the first book published by architect Philippe Boudon, *Pessac de Le Corbusier* (1969), a sociological study, based on surveys, that evaluated the sense of strong changes introduced by the inhabitants of Le Corbusier's *avant garde* housing such as transforming roofs and façades, reducing the "*fenêtres à longueur*" and adding decorative elements and colors. Boudon argued that these users demonstrated that "inhabiting was an activity", inhabiting actively, introducing qualities, meanings and differences.

Boudon began his text with a clairvoyant quote from Le Corbusier that acknowledged: "You must know that life is always right and it is the architect who is wrong...". We should not forget that Le Corbusier had already been so sly and visionary in his project for the *Plan Obús of Argel* (1931) a long highway, under whose structure each inhabitant could place the housing they wanted with the form they wanted.

The Case of Robin Hood Gardens

Among the cases of modern housing complexes threatened with demolition, the most notorious is Robin Hood Gardens (1969–1975) by Alison and Peter Smithson. It is a symptomatic case, since other social housing complexes, apparently similar in London and its surroundings, were saved, prior to being declared historic monuments.

The Isokon Flats (1930–1934) in Hampstead, by Wells Coates, abandoned for some years from the 1990s was rehabilitated in 2004 by Avanti Architects Limited. The Keeling House (1955) in London by Denys Lasdun, closed by the Greater London Council in 1992 due to structural problems, was declared in 1993, the first post-war listed building and was renovated as private property and luxury housing in 2011. Balfron Tower and Carradale House (1963–1970), by Ernö Goldfinger, was listed in 1996 and rehabilitated in 2011. Trellick Tower (1966–1972), also by Ernö Goldfinger, was listed in 1998, and the tenants could become owners. Finally Park Hill, in Sheffield (1957–1960), designed under the direction of municipal architect J. L. Womersle, Jack Lynn and Ivor Smith, was listed in 1998, and rehabilitated in 2006 by private developers, with housing and office space, maintaining a number of social housing units.

Therefore, why has Robin Hood Gardens suffered progressive degradation, never been listed, and been impossible to save?

There are several reasons. We are going to highlight two. First of all, was its ghetto character surrounded by heavy traffic on three of its four sides. As Alan Powers explained, the area where Robin Hood Gardens was built already had a bad reputation: "Already in the decade of 1970 it

was identified as a slum. It had the reputation of being the center of local crime". In addition, following a less than transparent process of surveying the inhabitants, with a high percentage of inhabitants of Bengali origin, 80% of residents were in favor of demolition. In the survey, the information obtained was incomplete and only 9 families of 250 residents voted.

Secondly, its strategic situation, in the axis of urban investments from Canary Wharf to Stratford and the area of the 2012 Olympic Games, made it an appetizing site for urban renewal.

A positive factor for the housing complex was its powerful building system that was made with the high quality Swedish SUNDH prefabricated system, which represented a major cost overrun in the original project. This demonstrated that with political will, Robin Hood Gardens could have been redone and saved.

Even its raised streets or access decks, so emblematic of the modern social housing architecture, were not sufficient for recognition. Park Hill received the Grade II listing from English Heritage for being "the most significant example of access to housing by deck".

Overall, a key and decisive element was the design of the corridors, the solution to economize staircases and elevators in social housing, which, because of its forms and sizes can be positive (*Casa Bloc* in Barcelona, *Nemausus* in Nimes) or negative (Robin Hood Gardens).

The End of Modernity

Robin Hood Gardens is not the only example reflecting the mistakes of modern architecture.

The Pruitt-Igoe complex of 33 buildings of 11 floors in Saint Louis (1954–1955) by Monoru Yamasaki, built to accommodate African-American tenants, was a huge failure. The occupancy never exceeded 60%. In 1971, 16 of 33 buildings were boarded up. Between 1972 and 1974 all buildings were demolished. This incident, was used by Charles Jencks to declare the death of modern architecture and the beginning of postmodernism in his book *The Language of Post-Modern Architecture* (1977).

Also *Toulouse-le-Mirail* (initiated in 1961) by Candilis, Josic and Woods, initially viewed as a role model of Team X urbanism has suffered an unfortunate evolution. Some of the most violent scenes of neighborhood self-destruction took place there during the French street riots of 2005. In 2002 a controversial regeneration of the neighborhood project began, involving a number of buildings being demolished. This process that was accelerated after 2005.

In fact, the social and urban heritage of the *Villes Nouvelles* and the French HLM has been so disastrous that in 2003 the minister of Employment, Social Cohesion and Housing in France, Jean-Louis Borloo, proposed the demolition of 200,000 social housing units in a period of 5 years. In response to this policy, teams of architects such as Anne Lacaton and Jean-Philippe Vassal, Roland Castro and Sophie Denissof, and Paul Chemetov, have defended the logic of redoing, remodeling and metamorphosing before considering the brutality of demolition.

Lacaton & Vassal, with Frédéric Druot, have elaborated these presuppositions of preserving the existing modern architecture of the buildings and towers of the *Grandes Ensembles* and French HLM, adding volumes, creating façades with vegetation, generating new openings and making main floors more transparent, in projects such as the Tower *Bois-le-Prêtre*, Paris (2005–2011) and the housing tower in Saint-Nazaire (2006–2012).

Roland Castro and Sophie Denissof have developed intervention programs in the *Tour Arc-en-Ciel* in Les Minguettes, Vénissieux (1986), and in the rehabilitation of some buildings of the Quai-de-Rohan en Lorient (1988–1995), adding apartments while diminishing their number and introducing balconies and gardens.

Another emblematic case, because of its difficulties and failures, is the *Bijlmer (Bijlmermeer)* housing complex in Southwest Amsterdam, Holland, from the 1970s, that not only became dilapidated and ghettoized, but also suffered a serious accident that triggered its thorough rehabilitation in the 1980s.

And another relevant episode is the rehabilitation of the high-density residential areas in Spain, called polígonos. In the case of Barcelona, while high-density residential areas such as *Montbau* continue to work perfectly, due to its typological, construction and urban quality; others, such as La Mina, have been rehabilitated in part, without achieving all the objectives, or the residential areas of *polígono La Pau*, which has been reinforced with external structures.

Excessive Functional Accuracy

One of the reasons why these complexes have become obsolete, beyond their urban, construction and social characteristics, has been the excessive architectural definition of both the exterior and the interior. In the same way that modern architecture is strongly conditioned by its materials and technologies, it is also conditioned by its extreme functional accuracy, by the close relationship between playing with forms, colors and details, and with exact and adjusted measures for each activity. This has generated machine spaces that worked well in the first instance, but that were difficult to adapt to new activities and habits without transforming its distribution. The original buildings had maximum specialized spaces reduced to the most precise measurements: the ceilings were lowered to the limit; the measurements of the spaces were adjusted, especially the hallways, which were inspired by the tight forms of the trains and ships; the bathroom spaces and fixtures were specialized to increase the functional efficacy. This led to an advanced machine architecture that was extremely functional and efficient for the habits of the moment and the then available technology, making a momentous jump in the improvement of the hygienic conditions and the quality of life. But it also created too much rigidity and subdivisions to absorb new uses, behaviors and installations. The precision of modern architecture implies great fragility in front of future changes.

01 Rogelio Salmona, Towers of the Park, Bogotá, 1964–1970 © Montaner Muxí arquitectes, 2009.

02 GATPAC, Casa Bloc, Barcelona, 1933–1943 © Montaner Muxí arquitectes, 2011.

Contemporary Proposals

The critiques and proposals of the 1970s marked the end of a modern conception of housing that was excessively closed and finished, and highly defined by its conformation, subdivisions and technical details; The 1970s were also the beginning of a new era characterized by new epistemologies, such as flexibility, a contribution made by Supports' theory of John Habraken or the participatory processes defended by John Turner. Since that time housing has no longer been understood as a finished perfect machine, that risked becoming obsolete with time, but as a living, improvable and transforming process. The flexible architecture advocated in the Supports' theory and the evolutionary architecture of participation is the most capable of permitting transformations due to time, people and nature, which are the great challenge of contemporary architecture and housing.

Here we can provide three final considerations.

Housing based on organic functionalism has survived better over time because it is more capable of accommodating life and its associated changes, as exemplified by the building in Hansaviertel, Berlin, by Alvar Aalto and Elsa Kaisa Makiniemi; the two towers of Romeo and Juliet in Stuttgart by Hans Scharoun; or the Towers of the Park in Bogotá by Rogelio Salmona.

A key element for the present and the future is the rehabilitation and revitalization of modern housing *polígonos*, as is happening in France, with the theorizations and praxis of Lacaton and Vassal, or Castro and Denissof; or as happened in the neighborhood of Augustenborg in Mälmo, Sweden, which has been remodeled integrally, beginning with the introduction of vegetation and water in the spaces, and culminating with the remodeling of roofs, façades and services.

Finally, the new popular neighborhood of *Malagueira* in Évora (started in 1975), by Álvaro Siza Vieira, marked a considered point of inflection: an urban and landscape proposal, inspired by both modern architecture and by popular and informal architecture, that defines strong urban, typological and formal patterns that leave a wide leeway for transformation by users, without devaluing the coherence and quality of the housing complex; demonstrating that the challenge is to design and build collective housing capable of absorbing transformation. ■

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Josep Maria Montaner

(b. Barcelona, Spain, 1954). Permanent professor of Theory of Architecture at the School of Architecture of Barcelona at the Polytechnic University of Catalunya, Spain. Lecturer in different universities in Europe, America and Asia. Author of more than 40 books on the theory of architecture. Writer in the newspapers *El Pais* and *La Vanguardia.*