Housing and City: Old Problems, New Approaches

BY JOAN BUSQUETS

In the course of the 20th century, housing became a science due to the huge efforts of progressive architects and their great interest in addressing this issue that had been raised with major political impact by Engels in the first half of the 19th century. The concern of modernist architects with these new problems facing the population, prompted advanced designs that are still regarded as exemplary in the history of urbanistics. In the 1930s, housing complexes in Moscow, Berlin, Frankfurt and Rotterdam constituted role models for other cities. They even became banners of housing and a strategy of social innovation in Vienna, with Karl Ehn's Karl-Marx-Hof, and in Amsterdam, with Michel de Klerk's Het Schip. Housing design became something rational, almost like a science, and the CIAM (International Congresses of Modern Architecture) provided the framework of discussion for the functionalist vanguard that channeled this concern. However, the misuse of these models by commercial architecture and the scant adaptation of their proposals have turned this experience into something from the past that requires fresh consideration. In this respect, and in view of present-day society's new paradigms, this article aims to cast some light on new approaches that can be introduced in response to the old problems existing between housing and city.

Today, well into the 21st century, we find ourselves in the presence of a new urban design and environmental culture that requires us to bring a new approach to the question; nonetheless, some aspects of the definition of housing addressed in the course of the last century are still applicable today.

The four sections of this article aim to explain the present-day situation and highlight some points in the recent debate about the construction of mass housing in present-day urban society, which is undergoing a major transformation.

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First, it is important to clarify the way in which the process of modernization of society manifests an evolution that influences the ways in which mass housing takes shape. As an example, in advanced Western societies, the concentration of industrialization was a great draw for the working masses that left the countryside for higher wages and greater expectations for themselves and their families in the medium-term. They were therefore willing to live in slums in the central city, in self-built districts on the outskirts of cities, or in housing that belonged to industrial plants, in most circumstances in very poor conditions. This was happening in Manhattan and Berlin in the latter half of the 19th century, as shown by the photographs of Jacob Riis in New York or, again, the images of Berlin's *Mietskaserne*.

These precedents seem to have been overlooked when looking at the rather unhealthy housing situation of immi-

grant workers in so many cities with strong growth dynamics. The question now is whether we have learned something from the past to help us better to channel this process of evolution in society that modernization still entails in the 21st century. The "solutions" to these housing problems being deployed in various places, be it Shenzhen, Mumbai or Brasilia, are very different, which shows that there are various possible alternatives, though, in general, they cannot be seen as solutions to the need for housing.

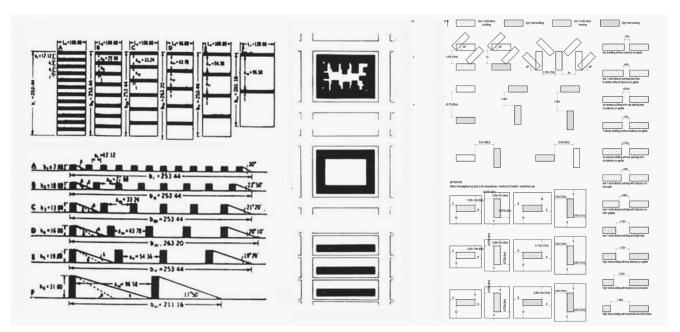
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The 20th century saw the development of the concept of housing associated with the urban working class family as a result of the process of industrialization that had taken place first in Western cities, followed by the rest. The craftsman and the bourgeois houses gave way to the concept of the dwelling assigned to a typical family, consisting of a couple with two or three children, comprising the basic functions of bedroom and living space, equipped with a kitchen and bathroom. Other functions such as education and community relations were provided in other places in the city.

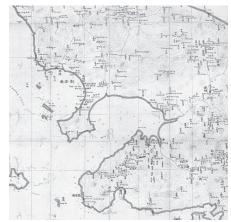
It was an unprecedented social transformation, bearing in mind that craftsman or bourgeois houses internalized a series of functions: the house was partly a place of community life, where some teaching and care of elderly people, etc., were provided.

The concept of housing that is still used in many projects and urban plans represents an abstract conception, associated with an idea of social organization clearly influenced by **01** The Karl-Marx-Hof complex in Vienna's District in 1930 is a project that combines social ambition and modern architectural innovation. © Dreizung, 2009.





02–03 The research of modern architecture introduced some useful instruments for good urban composition. They have not always been well used, however, since the instrument of validation is sometimes confused with the urban proposal. Left: Modernist scales of proportion used to rationalize the distance between blocks. © Walter Gropius, *The New Architecture and The Baubaus*, London, Faber and Faber Limited, 1935. Right: Diagrams of street block composition for today's big Chinese cities. © Ning-Bo Urban Department, 2014.



O4 Historic map of the villages before the urban explosion in Shenzhen. @ Juan Busquets; D. H. Liu, Sbenzben. Designing the Non-Stop Transformation City, Harvard, Harvard University Graduate School of Design, 2010.



05 The villages within Shenzhen. The densification of former villages offers very central residential space for workers in this dynamic metropolis. © Juan Busquets; D. H. Liu, Shenzhen. Designing the Non-Stop Transformation City, Harvard, Harvard University Graduate School of Design, 2010.

mass industrial production in accordance with the needs of the economic system.

Modernist architects sought to define this dwelling product, with a discussion of the minimum kitchen and rational housing, introducing diagrams, functional scales of proportion, and so on, with the aim of ensuring minimum hygienic and functional conditions, and preventing the repetition of the overcrowded city-centre slums.

There was, then, a rationalizing endeavor, while housing became institutionalized as a solution to dwelling needs, organized in the form of housing estates that were often associated with the productive sectors in which the principal users worked. In many instances, residential developments were fixed assets to ensure the continuing operation of the enterprises in question.

At the same time, housing became independent of city: each dwelling contained "everything" necessary, an independent container relating to the city. It is important to remember that popular housing shared spaces and services in the neighborhood. Some rationalist proposals tried to reinterpret these collective spaces — laundry, child care, collective kitchens — though the idea of the independent cell was increasingly accepted, and collective services abandoned.

This idea of the dwelling as an autonomous unit produces a twofold reading between interior and exterior that was to have a major impact in the medium-term. The logic and the rigor of the interior create very precise, innovative architectural and distributive types (functional organization: day and nighttime areas, cross ventilation, concentrating services to reduce installations, etc.), not always translated with the same analytical richness to the exterior. Thus, the form of the block, whether in a row, a vertical tower or a street block, or the alternative ways of grouping dwellings (around stairs, along corridors, etc.) — that is research into morphological organization — is less convincing than the rigor of typological discussion. This was to lead to some of the most serious gaps in so many European experiences, now being reproduced in other places. For example, the endless repetition of the same type of dwelling ultimately produced a very rigid and socially harmful system over the

The experience of the 21st century would appear to lie in the contrast between the repetition of the characteristic mechanisms of the 20th century, described above, and the detection of major evolution in the idea of the typical family as a couple with two children ceasing to be the dominant trend in social distribution. Women have acquired an important role in the labor market, and forms of work are increasingly diversified: the employee who works 40 hours a week and stays with the same company for 40 years is no longer the norm.

Further, today's dwelling can be equipped with very powerful communication systems, such as the internet, cell phones and interactive television, which enable domestic space to acquire functions not envisaged in the early types of the 20th century: working from home, preparatory work meetings, home studios, etc. Accordingly, the space

required per inhabitant is larger than 50 years ago, and an "urban" location is a value in itself.

The dwelling is also a space of relationships, not so much with neighbors as with friends and others of the same profession, becoming a more social place and recovering functions of the home described by Walter Benjamin, but now situated in connection with a much larger space due to today's powerful means of communication.

This form of dwelling is more complex; the fact that it is more connected makes it difficult to regard it as an isolated object or cell, since it is subject to the sensors used by television and internet to try to understand and gauge lifestyles and consumer patterns in a dangerous path towards the colonization of the private realm.

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A third reflection centers more on city than on housing. The two are not contradictory, though this can be seen as a blurring of functionalism, by associating growth with housing as a dominant factor instead of understanding how to produce the city, even if it means using evolving elements.

Finally, it is important to highlight the idea of the time process in the construction of the city. Traditional city production was based on the construction of streets, often in grid form, where different fragments and plots allowed the development of houses with different briefs and initiatives.

The dynamic of industrial development and its huge housing demand prompted the idea that housing, like objects, could be mass-produced, leading to mass housing production in accordance with the typological organization and morphological mechanisms outlined above.

However, little attention was paid to the fact that this mass-production of dwellings was deficient, since it did not meet the demand, thereby leaving out a large number of families that had to resort to irregular or informal means of finding a dwelling. Further, the "dwelling as an object" response was perhaps excessively rigid, since it did not allow its evolution or changes in the extent to which the social user — the family — might require an adaptability that was not envisaged in the original typological project.

This is where new reflection is called for on the changing or evolving dwelling. The reflection offered by this article seeks to go beyond a simple comparison between formal and informal systems that can be rather restricting. Listed below are some forms of evolving residence:

1. Recycling the old town. Traditional dwellings in the old sectors of cities have been and may continue to be a place of transition for immigrants arriving in the city. This is the case of non-monumental historic centers abandoned by their former residents, who move to new districts in search of more comfortable forms of residence in newer areas of the city. These emptied districts, duly renovated or improved, can provide spaces of adoption for immigrants in the early stages of urban insertion. Particular care is needed to prevent them simply becoming slums without the basic conditions of habitability.

A special case is the intensification of the "urban villages" in some Asian cities that act as spaces of arrival for urban

immigrants. Their urban centrality gives them an added value that is greatly appreciated by workers with limited mobility in the initial stages. The multiple villages of Shenzhen should be studied critically in this respect.

- 2. The transitory dwelling as a space of provisional shelter until other more definitive solutions are found. This principle was considered in some of the hypotheses of the Modern Movement, and Le Corbusier even proposed it as a solution "between" an initial state and a final condition that took a long time to achieve. The advantage is that it can be dismantled when it is no longer required; the problem is that this stop-gap solution may become permanent, as has happened on some occasions.
- 3. In "seed" dwellings, a minimum component serves as the nucleus of a dwelling that develops with time. Based on a very simple urban organization and well-proportioned plots, the construction of a basic nucleus allows for the development and growth of a house according to the needs and possibilities of the family unit.

Many attempts of this kind have been made, particularly self-constructed housing in a self-managed process; both are important and, without going into detail, they introduce the discussion launched by John Turner in the 1960s and continued by Horacio Caminos, among others, and given a more solid body of theory by Nicholas Habraken. It is also important to value the design and morphological aspects behind the best practices in these cases in order to learn from them. Why is PREVI, in Lima, regarded as an exercise in composition with limited capacity to impact the real problem? Why is Villa El Salvador, in the same city, such a huge undertaking, a little off scale due to the exaggerated dimension of its spaces and an excessively peripheral location?

- 4. The "shell" dwelling and successive development. The kind of dwelling regarded as conventional can be seen as a process in which, on the basis of the organization and construction of the basics, the completion of the dwelling is entrusted to the user, who is offered a catalogue of solutions and aids, like an easy-use toolkit. The fact that the initial communal part is reduced to a shell, like the hull of a ship, means that the financial impact is low and future development will be the product of the initiative and capacity of the future residents. Coordination of the overall complex is required, and the project's greater residential density guarantees the sustainability of the essential local facilities in the medium-term.
- **5.** Interventions that combine various forms within the same strategies, like Sert and Le Corbusier's project for Barcelona called "A Window, A Tree", within the framework of the 1932 $Maci\grave{a}$ Plan. It consists of the interpretation of a 400×400 metre maxi-grid, which establishes the overall urban structure for the city and serves to house the different forms or functional pieces of the "formal" development, creating an experience of evolving or informal process. The project breaks down the site into street blocks of varying sizes made up of plots that are very narrow and deep (approximately 3.5 metres of façade with a depth of 14 metres). With this width, the construction of a simple

party wall serves to enclose the first house using the wall of its neighbor; the beams are of manageable dimensions, and the courtyards or vertical elements are the product of the empty spaces between floor slabs. The façade is of minimum space and would eventually be closed in, but the rule was to plant a tree in front of each window; if the tree stands four metres away from the future façade, it defines the pavement space where the future installations of urban utilities were to be housed. The tree also provides shade and protects the façade during the initial phases. This project has yet to be constructed, though today's conditions would probably require the dimensions to be altered in keeping with environmental demands, combining self-management with a precise design of basic aspects such as density and a reserve of communal spaces for services to ensure urbanity in the medium-term.

The evolving residential forms outlined here are all based on the understanding that the city is produced over time and is a condition of the very nature of the urban phenomenon. Considering the construction of the city as a closed, completed design object would be an error that only the baroque monumental city could afford.

Today, tackling the construction of a residential district means to assess its position in the city; trying to achieve the minimum urbanity that a living, active settlement requires, and considering the characteristics of its users in order to identify the mobility needs for social and/or labor movement. At the same time, the size of the development, if very large, seems to call for strategies that combine various forms of residence and processes of development. Moderate-cost housing has tended historically to be situated on the periphery — that is, outside the conditions of urbanity and density that ensure desirable civic coexistence. The good city seems always to take into account the previous city, and considering relations of continuity and pedestrian access between parts of the city guarantees the good functioning of the urban sectors.

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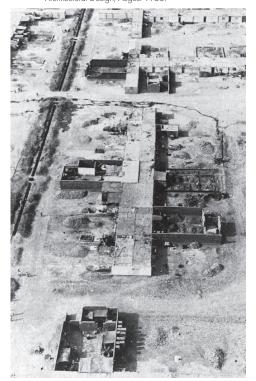
The fourth and final block outlines some recent strategies for constructing the city on the basis of housing.

While the consolidation of the abstract concept of the "typical dwelling" involves the entire discipline of urbanism and forms part of our common standards, the formalization of society's new residential demands and their interpretation by the urban project discipline is still incipient. A close examination of some recent urban projects may serve to illustrate research that is still being conducted.

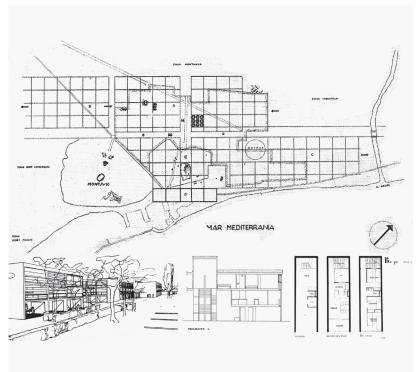
Certain characteristics emerge from an examination of some of these projects and manifest endeavors to construct the city by using new urban strategies, based on residential program issues.

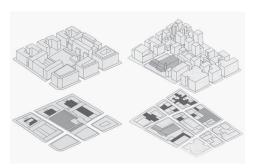
First, there is the idea of urban recycling — reusing obsolete wasteland such as former industrial or port areas — as a way of exploiting a better urban location and at the same time contributing to an improved use of the existing urban territory. The existence of previous urbanization or colonization seems to be a guarantee of good development.

O6 The self-constructed dwelling theorized by Turner in the 1960s, which was the paradigm of the informal city.
© The John Turner Archive: The Squatter Settlement:
An Architecture that Works Architecture of Democracy, Architectural Design, August 1968.



7 The Macià Plan, 1932. Perspective of the project. The concept of self-management is included in the project, but the project aims to guarantee future evolution. Sketch for the westward extension of Barcelona, by means of the "A House, A Tree" project. © Joan Busquets, Barcelona: The Urban Evolution of a Compact City, Applied Research & Design Publishing, 2014.





78 The development of the Masséna operation in Paris as of 1996. © Jacques Lucan, Où va la Ville Aujourd'bui?: Formes Urbaines et Mixités, Éditions de la Villette, 2012.



Projects for eastern Amsterdam. Borneo, Java and Ypenburg, among others, show the spatial wealth of projects with a residential component that aim to create a diversity of urban forms and residential briefs, in an attempt to restore urban vitality using up-to-date patterns. © Joan Busquets, Cities X Lines: A New Lens for the Urbanistic Project, Harvard, Harvard Graduate School of Design, 2007.

The idea of programmatic diversity is also a way of ensuring richness of functions or uses. Sometimes it is sufficient to mix different types of housing, forms of ownership or architecture to create an urban vitality that is very difficult to achieve in districts are more uniform. It must involve spaces that can evolve, bearing in mind that uses should not be managed rigidly and spaces must always be able to adapt to new functions, such as those on ground-level floors where functions of a collective nature can easily evolve.

Further, the size of the operation, the intervention of multiple operators and the role of the public sector can have a major influence on the success and evolution of these operations. Outstanding among the different models is the tendency in France or the Netherlands of appointing companies with a clearly public focus to manage the land and the project, leaving intervention to private operators,

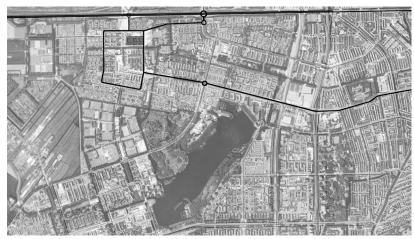
having established the various different types of offer required. *Boulogne-Billancourt* on the former *Renault* site is a good example of new variables of environmental sustainability that are emerging. In the eastern Amsterdam, the districts of *Ypenburg*, *Java* and so on are more excellent examples of the programmatic diversity and urban richness that are produced by such endeavors.

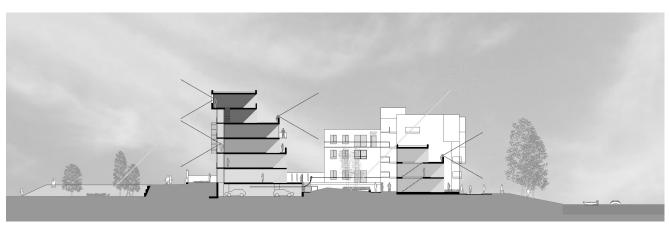
It remains to be considered whether the monolithic mass housing districts of the 1960s and 1970s should be regarded as wasteland or spaces for recycling, where these new strategies can be introduced, with some parts being addressed by integrative rehabilitation and others by transformation and new construction, as described in this article. The huge expansion of *Van Eesteren* in Amsterdam-West and the transformations under way provide the subject of a potential case study in this respect.

10 The development of Boulogne-Billancourt on the Paris outskirts, 2005-2014. Residential diversity combines with a response to the pressing demands of sustainability.
© Joan Busquets, 2014.

11 Amsterdam West, showing the process of rehabilitation and substitution of low-cost districts in the sector developed in the post-war years. © Joan Busquets, 2014.







12 Amsterdam West, showing the process of rehabilitation and substitution of low-cost districts in the sector developed in the post-war years. © Joan Busquets, 2014.

The question of housing remains as urgent and open as ever, but the determination to associate it with more complex strategies for the city as a whole might help to provide more effective solutions in the medium-term.

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Joan Busquets

Architect and urban planner. Professor at GSD Harvard since 2002 and before at Barcelona UPC-ETSAB.

Founder of LUB Barcelona. Author of urban projects in The Hague, Delft, Geneva, Rotterdam, Toulouse, Toledo and Lisbon, among others around the world like Singapore, Shanghai, Ningbo and São Paulo.

2012 Paris $\mathit{Grand\,Prix\,Sp\acute{e}cial\,de\,FUrbanisme}$ (France) and 2011 Erasmus Prize (The Netherlands).