



Bernard Zehrftuss, Le Haut-du-Lièvre, Nancy, France, 1958-1962. © Joseph Abram, 1976.



## Modernity and housing production in France after WWII

BY JOSEPH ABRAM

After the collapse of 1940 and Occupation (1940-1944), France experienced a remarkable renewal after Liberation in 1944. Through reconstruction and intensive efforts to bring the country out of the housing crisis, the State set up a powerful production system, which based the expansion of the building sector on the concentration of investment in large companies. It was the era of the *grands ensembles*, of heavy prefabrication and giant construction sites. Initially well received by their inhabitants, these large housing complexes rapidly deteriorated and became ghettos. Despite the social difficulties that beset these neighborhoods, how can this important heritage of modernity be preserved today?

### An Industrial housing policy

France was confronted, during the 1950s, with a serious housing crisis. Since 1945, the State had dealt with this emergency. Reconstruction, despite its exceptional dynamism, was unable to stem the mechanisms of a chronic shortage, which, already worrying during the 1930s, had been amplified by the destruction caused by WWII and the demographic surge of Liberation. The increase of population (41.6 million inhabitants in 1950 / 44.5 million in 1958) turned this situation into a nightmare. A real speed race began between the scale of the needs and the national construction effort. The post-war economic policies, based on a powerful interventionism by the State, had fostered investment in basic sectors (industry and transport), in order to create conditions for long-term economic growth, but postponing the massive production of housing. Reconstruction of war-destroyed towns had provided high-quality modern apartment buildings, but the French housing stock (14 million housing units) was generally dilapidated. Only 50% of dwellings had running water, 25% toilets, 10% a bathroom. It was estimated that three million housing units needed to be built immediately. The task was titanic. Since its creation in November 1944, the Ministry of Reconstruction and Urbanism (MRU) had encouraged architects, through a series of technical competitions, to orient their research towards the standardization of construction. What remained to be done was to organize large-scale public procurement in the field of housing. Launched in 1950, the competition of the *Cité Rotterdam* in Strasbourg (800 housing units) was a decisive step. The competition's rules required the integration of architects into teams made up of engineers, contractors, and industrialists, in order to ensure complete control of cost and production deadline. Twenty-nine teams were admitted to compete. The jury, chaired by Minister Eugène Claudius-Petit (1907-1989), included renowned architects – among others, Auguste Perret (1874-1954), André Lurçat (1894-1970), and Georges-Henry Pingusson (1894-1978) –, builders – namely Jean Prouvé (1901-1984) – and representatives of the State. The first prize was awarded to Eugène Beaudouin (1898-1983), associated

with the companies Boussiron and Froment-Clavier. The second prize was awarded to Bernard Zehruss (1911-1996), the third went to Jean-Louis Fayeton (1908-1968), and the fourth to Le Corbusier (1887-1965), who responded to the program by dividing the 800 housing units into two *unités d'habitation* comparable to the one in Marseille (1947-1952, and so then still under construction) and a 50 meter (m) high tower. The winner of the competition, Eugène Beaudouin – who before WWII, together with Marcel Lods (1891-1978) and the engineers Vladimir Bodiansky (1894-1966) and Eugène Mopin (1898-1983), had built the *Cité de la Muette* (1929-1939/1946) in Drancy – had organized his project in a sort of irregular crown around a green area. The standardization of the elements (a single type of slab, a single type of wall, a single type of window, etc.) facilitated the implementation of prefabrication, so that the operation could be delivered in 18 months. Cost and deadline were strictly adhered to. Eugène Beaudouin's rational architecture, with its functional and bright apartments, perfectly matched the quality of housing expected by the MRU.

At the same time, Jean Dubuisson (1914-2011) obtained a commission for 263 housing units in Saint-Germain-en-Laye. Carried out in less than ten months in the garden of a castle, this operation offered a dazzling demonstration of the potential of heavy prefabrication. It consisted of two parts: one of 100 housing units (built in concrete by Félix Dumail (1883-1955) using traditional techniques), the other of 163 housing units (built by Jean Dubuisson using the Camus industrial system that had just been tested in *Quartier du Perrey* (1949-1950), part of the reconstruction plan of Le Havre (1945-1964), by Auguste Perret). Jean Dubuisson redesigned the construction system, eliminating the load-bearing facades and replacing them by load-bearing cross-walls in order to completely open up the interior of the apartments through large bay-windows towards the park. The comparative analysis of the two parts of the operation made it possible to concretely measure productivity gains generated by prefabrication. With this achievement, Jean Dubuisson set the new values for mass housing in



01 Pierre Vivien (architect) and Eugène Mopin (engineer), *Tours du Quai Gambetta*, Boulogne-sur-Mer, France, 1951-1955. Built during the reconstruction of this city. © Joseph Abram, 2020.

France. In a later text, he evoked the hopes of the period:

*We had the strong desire to change the construction. The dwellings had to meet new requirements and a new way of life, they had to offer more comfort and more contact with the surrounding nature. A satisfactory solution could only be given on two conditions: to significantly improve productivity in the building industry and to free up large areas intended to be planted with trees.<sup>1</sup>*

Jean Dubuisson succeeded in clarify the new conditions of housing, articulating in a coherent way, the requirements of heavy prefabrication (with concrete slabs) and the standards of modern domesticity: simple volumes, rigorous plan, generous light, large views to the outside, etc. Other architects, like Jean Ginsberg (1905-1983), developed with talent, the theme of the inhabited park, as can be seen in his works of 200 to 300 flats near Paris, in Palaiseau, Poissy, Garches and Meudon in the 1950s. The *Cité Les Buffets* built in Fontenay-aux-Roses (1958-1959) by LWD studio (Guy Lagneau (1915-1996), Michel Weill (1914-2001) and Jean Dimitrijevic (1926-2010)) or *Château de Louveciennes* (1957-1960), designed by Paul Herbé (1903-1963) and Jean Le Couteur (1916-2010) show the attention paid, during this period, to the high quality of apartments. For *Cité Les Bleuets* (560 flats) in Créteil (1959-1962), Paul Bossard (1928-1998) distributed the housing on the site of a former stone quarry. The interest of this operation lies as much in the comfort offered to the inhabitants (well-equipped kitchen, electric oven, serving hatch, built-in cupboards, forced air heating...), as in the cyclopean aesthetic resulting from constraints of the heavy prefabrication techniques. 3000 drawings were necessary to ensure the construction definition of this housing complex inspired by the last works of Frank Lloyd Wright (1867-1959).

### Large-scale operations

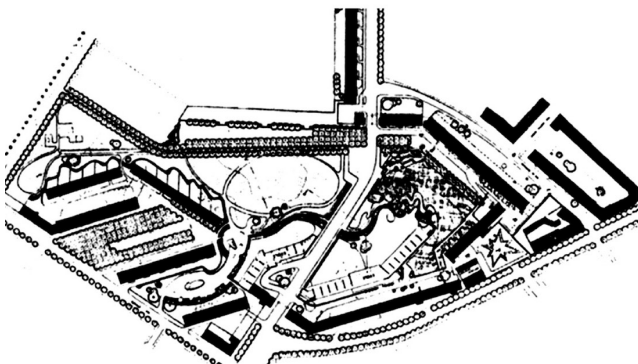
In summer 1953, the French Parliament passed a series of legal measures aimed, on the one hand, at directing massive flows of capital towards the building sector and, on the other hand, at providing the land necessary for construction of large housing programs. Production rose

in a few years from 100,000 housing units per year (1953) to 300,000 (1958), reaching 445,000 in 1968 to the record of 542,000 in 1973. The increase in the size of operations (1,000/2,000/5,000 flats) and the extreme rationalization of construction made it possible to obtain spectacular productivity gains, while maintaining a high quality of housing. The *Les Grandes Terres* housing complex in Marly-le-Roi (1955-1958), with 1,500 housing units, built by Marcel Lods, Jean-Jacques Honegger (1903-1985), Xavier Arsène-Henry (1919-2009) and Luc Arsène-Henry (1923-1998) appears exemplary from this point of view. Located on a *plateau* overlooking the Seine river, it consists of five-story buildings using prefabricated elements (facade panels, slab with integrated heating...) to form an excellent neighborhood unit with well-articulated public spaces. In just a few years, the State had acquired a powerful production system, which based the expansion of the building sector on the concentration of investments in big companies (through the heavy prefabrication and giant construction sites) and on the efficient control of land for building. It was the period of the *grands ensembles*. Large scale operations multiplied throughout the country: 1,000 housing units in Marseille, by Georges Candilis (1913-1995), Alexis Josic (1921-2011) and Shadrach Woods (1923-1973); 1,100 housing units in Bayonne, by Marcel Breuer (1902-1981) and Robert Gatje (1927-2018); 1,200 housing units in Chevilly, by Jean-Louis Fayeton; 1,600 housing units in Villiers-le-Bel, by Daniel Badani (1914-2006) and Pierre Roux-Dorlut (1919-1995); 2,600 housing units in Bron-Parilly, by Pierre Bourdeix (1906-1987), Franck Grimal (1912-2003) and René Gagès (1921-2008); 3,800 housing units in Créteil, by Gustave Stoskopf (1907-2004); 4,000 housing units in Aubervilliers, by Henri Delacroix (1907-1974) and Clément Tambuté (1905-1992); and 10,000 housing units in Sarcelles, by Roger Boileau (1909-1989) and Jacques-Henry Labourdette (1915-2003).

For Haut-du-Lièvre (1958-1962) in Nancy, Bernard Zehruss built two gigantic buildings, one 400 m long with 15 floors, the other 300 m long with 17 floors, three large perpendicular buildings and two big towers, with a total of 3,500 housing units. A few standard elements (slab, walls, facade panels, staircase, etc.) prefabricated in large series were enough to build the entire district. The local newspapers were enthusiastic about this grandiose project, which made it possible to “reduce industrial costs,”<sup>2</sup> and it was with pride that people were talking at that time about “the longest housing buildings in Europe.”<sup>3</sup> In Pantin, for the *Cité des Courtillères* (1955-1960) with 1,600 flats, Émile Aillaud (1902-1988) designed a huge green space, planted with tall trees, surrounded by a 1500 m long building, flanked by groups of 13-story towers. In Meudon-la-Forêt (1955-1962), with 2,600 flats, Fernand Pouillon (1912-1986) used stone (combining it with concrete) to build solid residential buildings. Despite the scale of the program, this operation demonstrated perfect architectural mastery. The outdoor spaces, organized in classic sequences (alleys, basins, gardens), have acquired their strength and identity through this rigorous geometry. Unlike many large housing complexes of that time, Meudon-la-Forêt has aged well, thanks to the durability of the materials. Fernand



**02** Jean Dubuisson, Shape Village, Saint-Germain-en-Laye (Île-de-France), France, 1951-1952. © Joseph Abram, 1997.

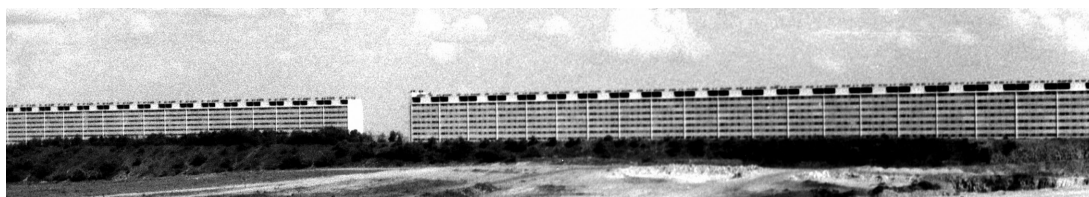


**03** Eugène Beaudouin, Cité Rotterdam, Strasbourg (Grand Est), France, 1951-1953. © Joseph Abram, 1996.





**04** Fernand Pouillon, *Grand Ensemble* of Meudon-la-Forêt, Meudon-la-Forêt (Île-de-France), France, 1955-1962. © Joseph Abram, 1996.



**05** Bernard Zehruss, *Le Haut-du-Lièvre*, Nancy, France, 1958-1962. © Joseph Abram, 1976.

Pouillon had understood very early that modernity resided neither in particular formal stylistics, nor in pre-established spatial models. He managed to prove that traditional materials were not disqualified by modern architecture as rational production processes could make their costs acceptable.

### Debates and controversies – Cultural values

The vigorous policy undertaken by the State to resolve the housing crisis was at the origin of the very large operations of the 1960s. At first well received by the French population, satisfied to have access to modern and comfortable houses, these operations gradually became the subject of diffuse criticism and finally sparked violent controversies. The most famous is the one that broke out about the 10,000 housing units complex built by Roger Boileau and Jacques-Henry Labourdette in Sarcelles. This *grand ensemble*, with its rectangular grid made up of five-story buildings, punctuated here and there with 16-story towers, was amongst the best of this period. “What made life difficult for the first inhabitants of Sarcelles was the lack, for many years, of the most basic facilities. There was no school, no shop, no bus.”<sup>4</sup> Television and major newspapers echoed the residents’ dissatisfaction. But instead of blaming the organizational problems of this city still under construction, they condemned modern architecture as monotonous and unlivable for the inhabitants. The media reported in 1960 about a strange disease of *grands ensembles*, which they ironically called “*sarcellite*.” The eminent town planner Raymond Lopez (1904-1966) tried to respond with humor to these virulent criticisms “disseminated by the press to a public opinion with prefabricated reactions” ready to believe “that to live in a high-rise building exposes you to be asthmatic from the eighth floor, anemic from the twelfth, hypochondriac from the fifteenth, and a candidate for suicide above.”<sup>5</sup> Not only did the controversy of large housing complexes persist in the media during the 1970s, they intensified. At the same time, the debate became clearer among specialists (architects, sociologists, city planners) to the point of focusing on an important problem: the lack of a regional planning policy in France. Already in 1950, Minister Eugène Claudius-Petit, at the very moment he launched the production of the large housing complexes, warned against the pragmatic temptation of building them “anywhere”. Influenced by his friend Le Corbusier, he advocated that housing policy should be part of an overall restructuring of the national territory, in order to improve the quality of life and well-being of the French population. These humanist concerns were soon swept away in the productionist whirlwind that gripped the country, destroying any political will for town planning in its path. The sociologist Henri Lefebvre (1901-1991) spoke, 30 years later, about the large housing complexes of the Parisian suburbs “established without a global project” as a “disaster.”<sup>6</sup> This negative judgment anticipated that of the architects most directly involved in the massive housing production of the post-war period. As André Gutton (1904-2002) said, “large amounts of dwellings had to be built where land was not expensive. There was no town planning.”<sup>7</sup> Jean Dubuisson, who built



06 Marcel Lods, Jean-Jacques Honegger, Xavier and Luc Arsène Henry, *Les Grandes Terres*, Marly-Le-Roi (Île-de-France), France, 1952-1960. © Joseph Abram, 1997.

20,000 homes during his career, confirmed it: “If, each year, we built an increasing number of homes, we had to realize that the problem had been badly posed in France. We were not building new towns, not even new neighborhoods, but only *grands ensembles* in which life did not develop.”<sup>8</sup> Bernard Zehruss deplored the same failure: “At that time, we were mainly looking to reduce costs. We had to build quickly. What was missing was a real town planning program.”<sup>9</sup> The modern quarter he had built in Nancy had become, in his own words, “a dormitory town.” Like many other French suburbs, it was soon to turn into a “ghetto.”

Far from implying the quality of their architecture, the failure of the *grands ensembles* was primarily political and administrative. Their disastrous fate played out in the 1970s. Their population, which was initially socially diverse, quickly became uniform. The middle classes, attracted by the purchase of single-family houses (financially encouraged by a law passed in 1977), have left these districts, which were beginning to deteriorate. Only the poorest classes (endlessly increased by the inflow of immigrants) remained “captive”. The social pyramid collapsed. To these difficulties, have been added, since the 1980s, other plagues such as drug trafficking, religious fanaticism, crime... Despite State policies to improve these urban areas, the situation has constantly worsened. To speak of architectural heritage under such conditions may seem incongruous. And yet, beyond all these social ills, the *grands ensembles* represent a remarkable testimony to the post-war period. They have contributed, in full economic growth, to the deployment of modern culture. While nothing, in theory, should hinder the preservation of this heritage of recent history, in practice everything, in fact, stands in the way. The negative image attached to these districts, their continuous degradation despite the colossal means allocated to their transformation, the predatory effects of these transformations (which most often result in their disfigurement or even destruction) constitute obstacles to an eventual protection.





07 Bernard Zehruss, *Le Haut-du-Lièvre*, Nancy, France, 1958-1962. © L'Est Républicain, 1966.



08 Roger Boileau and Jacques-Henry Labourdette, *grand ensemble* of Sarcelles, France, 1955-1970. © Le Parisien, 1980.

The extent of the housing stock raises questions of method. From the neighborhood unit of Saint-Germain-en-Laye to the huge housing complex of Sarcelles, the cases are very different. The list of sites to be protected must be understood as a coherent landscape able to offer collective memory: a selective, but relevant medium in relation to the immensity of the heritage of the 1950s and 1960s. Any patrimonialization supposes a broad awareness of the general public. Large-scale cultural actions (prestigious exhibitions, publications, films, etc.) could be organized for this purpose. Likewise, an ambitious campaign to award “20<sup>th</sup> century heritage” labels (created by the Ministry of Culture in 1999) to the best housing complexes of this period could contribute to the symbolic rehabilitation of all this devalued architecture. The award of this label to the *grands ensembles* of Sarcelles (Roger Boileau and Jacques-Henry Labourdette), Meudon-la-Forêt (Fernand Pouillon), Grigny (Émile Aillaud), Saint-Étienne (Henri Gouyon (1902-1975) and Edouard Hur (1903-1974)), Firminy-Vert (André Sive (1899-1958), Marcel Roux (1909-1993), Charles Delfante (1926-2012) and Jean Kling (1925-2001)) are very encouraging signs. In recent years, a change in attitude towards the large housing complexes can be observed, in particular among the architects in charge of their rehabilitation. As the work of Lacaton & Vassal – Anne Lacaton (1955-) and Jean-Philippe Vassal (1954-) –, Frédéric Druot (1958-) and Christophe Hutin (1974-) shows, apartment buildings from the 1950s and 1960s offer excellent potential for adaptation to current comfort and environmental requirements. The transformation of 530 housing units that they have carried out in the *Grand Parc* district in Bordeaux (2014-2017) offers a remarkable demonstration of this. A development of historical research on the architecture of the *grands ensembles*, much richer and more diversified than it seems at first glance, is necessary to give these new rehabilitation practices a real cultural depth.

## Notes

- 1 See Jean Dubuisson, “Ces ensembles qu’on voulait grands”, in *Les années 1950*, Centre Pompidou, Paris, 1988, 530-534.
- 2 *L’Est Républicain*, Nancy, 3<sup>rd</sup> March 1957, 7<sup>th</sup> January 1959 and 20<sup>th</sup> March 1959.
- 3 *Idem*.
- 4 Henry Canacos, conversation with the author, Sarcelles Town Hall, Summer 1980.
- 5 See Raymond Lopez, *L’avenir des villes*, Paris, Robert Laffont, 1964.
- 6 See Henri Lefebvre, “Autour de deux dates”, in *Paris-Paris. 1937-1957*, Centre Pompidou, Paris, 1981, 617-625.
- 7 See André Gutton, *De l’aurore à la nuit*, Zodiaque, Paris, 1985, Vol. 1, 240.
- 8 See Jean Dubuisson, *op. cit.*
- 9 Bernard Zehrfuss, conversation with the author, Paris, Summer 1980.

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