

From Steel House to Mass Housing for the Working Class

Architectural Debates in the European Institutions (1952-1967)

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In many ways, the High Authority of the European Coal and Steel Community (ECSC) could be considered as an advisory council dealing with social and economic issues. This fact is not in the least unconstructive but aims at highlighting the work involved in gathering and spreading information in various sectors: the concentration of capital investments, industrial output or workers' living conditions. On this last point, the workers housing construction program has been perceived as the major achievement of the High Authority's social policies.¹ From 1954 to 1979, it contributed to financing 165,511 dwellings of which almost two-thirds were allocated to the Federal Republic of Germany.² However, European programs were not only confined to the financial support for workers' housing construction. At the European level, the High Authority was the instigator of elaborate debates on effective means to reduce the cost of housing and to propose the ideal home for workers. Experts were consulted to promote modern architecture and innovative building techniques which would lead to an improvement of working class living conditions and therefore increase their productivity.³ The post-war shortage of housing was obviously an economic and social concern in European coalfields. Building healthy and modern houses in these industrial areas was seen as an effective means to retain workers who tried to escape from dreadful underground working conditions.

Studying experimental programs and architectural competitions organised by the High Authority, this article explores the contradiction between two architectural designs to solve housing shortage for workers. On one hand, members of the High Authority referred to the Modern Movement to rationalise building techniques and lower construction costs. On the other hand, it was considered essential to preserve the traditional single-family house with a little garden to plough and cultivate. In a few words, these two visions roughly sum up an opposition between advocates of modern high-rise towers and defenders of paternalistic urban planning inherited from the 19th century. Beyond considerations on the impact of housing conditions on workers' behaviour, the High Authority tried to reduce construction costs by promoting materials such as steel and aluminium but also by fostering the exchange of knowledge and information. While fears were expressed concerning a European cultural homogenisation epitomised by the potential creation of a common 'ECSC

1. L. MECHI, *L'action de la Haute Autorité de la CECA dans la construction de maisons ouvrières*, in: *Revue d'histoire de l'intégration européenne*, 1(2000), pp.63-82, here p.63.
2. R. LEBOUTTE, *Histoire économique et sociale de la construction européenne*, Peter Lang, Brussels, 2008, p.647.
3. N. VERSCHUEREN, *Fermer les mines en construisant l'Europe. Une histoire sociale de l'intégration européenne*, Peter Lang, Brussels, 2013, p.114.

house' for all miners and steelworkers, the High Authority encouraged the circulation of techniques and methods to overcome national resistances.

Architecture and town-planning debates provide fertile ground to observe the role of experts hired by the High Authority in their attempts to solve housing shortage in industrial areas, revealing the complexity of institutional and cultural situations in each member state. To improve living conditions for the working class, the members of the High Authority launched a broad survey to identify the best housing policy, which was defined by international institutions specialised in this particular field. More than just getting immersed in European discussions on what could be the ideal home for workers, the position taken here is based on historical research on the role of experts within international organisations.⁴ The purpose of networks of experts (architects, engineers) was to influence the High Authority's approach on working class housing issues, while independent experts (civil servants, sociologists) mandated by the High Authority tried to impose their own interpretation.

Organising the housing policy in the ECSC

In the aftermath of the Second World War, the housing issue was undoubtedly one of the main priorities for the reconstruction of national economies and was considered as a component of Welfare States.⁵ International organisations such as the OEEC, the UN or the European Recovery Program were involved in this effort to rebuild houses. As for many other sectors, the first European institutions pursued initiatives already launched after 1945. Nonetheless, there was no provision in the Treaty of Paris (1952) which allowed ECSC institutions to implement a coherent housing policy. In 1952 already, the Consultative Committee created a group called the 'working class house' sub-commission bringing together 26 trade-unionists, employers and governmental representatives to tackle the housing problem in industrial areas.⁶ Considering themselves unqualified to respond to all aspects of the subject, members of that sub-commission were gathered in a limited group with Paul Finet from the High Authority

4. S. KOTT, *Une communauté épistémique du social? Experts de l'OIT et internationalisation des politiques sociales dans l'entre-deux-guerres*, in: *Genèses*, 71(2008), pp.26-46; J. SCHOT, F. SCHIPPER, *Experts and European Transport Integration, 1945-1958*, in: *Journal of European Public Policy*, 18(2011), pp.274-293.
5. M. ROSEMAN, *Recasting the Ruhr, 1945-1958. Manpower, Economic Recovery and Labour Relations*, Berg, New York-Oxford, 1992; J. DIEFENDORF, *In the Wake of War. The Reconstruction of German Cities after World War II*, Oxford University Press, Oxford, 1993; D. VOLDMAN, *La reconstruction des villes françaises de 1940 à 1954. Histoire d'une politique*, L'Harmattan, Paris, 1997. See also S. EFFOSSE, *L'invention du logement aidé en France. L'immobilier au temps des Trente glorieuses*, Comité pour l'histoire économique et financière de la France, Paris, 2003; B. FINNIMORE, *Houses from the Factory: System Building and the Welfare State, 1942-1974*, Rivers Oram Press, London, 1989.
6. CEAB [Commission européenne, Archives de Bruxelles – ECSC archives] 11, n°1630, Sub-commission 'Working-class house', 28.10.1952.

and Giuseppe Glisenti from the Social Affairs Department and who presided the Italian Institute of Industrial Reconstruction. They proposed setting-up three distinct working groups to speed up the decision-making process.⁷ The general aim of this subdivision was to organise small units of experts sharing the task to obtain precise answers in the shortest time possible.

The three working groups containing six experts, who were considered as the best specialists to collect complete and reliable information. Each group was set up to ensure that the six Member States were represented. The objective of the first working group called 'Besoins' was to evaluate the importance of housing shortage in coal and steel industrial areas and to develop criteria to categorise the types of needs. This working group was chaired by Adrien Spinetta, Director of the Building Department at the French Ministry of Reconstruction and Town Planning.⁸ The second working group called 'Méthode' had the difficult task to find legal and institutional tools to enable the High Authority to develop its own housing policy.⁹ The last working group 'Technique' was chaired by Isidore Smets, a Belgian trade-unionist, leader of the Socialist Building Workers Trade Union.¹⁰

The first working group promptly delivered figures related to the inadequate number of healthy houses in the industrial areas of the ECSC. After discussions on how to define whether the houses were inadequate or unhealthy, experts came to the conclusion that 250,000 new dwellings had to be built for miners and steelworkers. To increase the number of dwellings, the group 'Méthode' proposed two different mechanisms. First, experts encouraged the High Authority to offer loans with reduced interest rates for to finance the construction of houses. The supranational institution therefore attempted to influence capital markets which were essentially interested in the reconstruction of industrial and transport infrastructures.¹¹ Second, it was rapidly decided to use Article 55 of the ECSC Treaty allowing the High Authority to finance, from its own funds, technical research and economic development in the coal and steel sectors.

7. CEAB 13, n°6, Restricted group 'Working-class house', 06.05.1953. Paul Finet, was a Belgian Socialist trade union leader and member of the High Authority from the beginning. He frequently took part to meetings and working groups on labour regulations and social issues at the European level. Giuseppe Glisenti, one of the founders of the Italian Christian Democracy, was deeply involved in the European integration process. He was Director of the Social Affairs Department from 1952 to 1954. In Italy, he serves as President of the Istituto per la Ricostruzione Industriale from 1955 to 1971.
8. This working group was also composed by Luigi Beretta from the INA-CASA and Hendrik Gerrit Van Beusekom representing the Dutch Ministry of Reconstruction.
9. The working group 'Méthode' was chaired by Johann Ernst, Minister of Labour in the German Land of North Rhine-Westphalia.
10. This last working group was very active and proposed several imaginative solutions thanks to the initiative of Léo Mestre, official at the French Ministry of Reconstruction, Ernesto Rogers, Italian architect who had founded the famous Italian architectural partnership BBPR: Gianluigi Banfi (1910-1945), Lodovico Barbiano di Belgiojoso (1909-2004), Enrico Peressutti (1908-1976) and Ernesto Rogers (1909-1968).
11. Interest rates offered by the High Authority were not significantly lower than those in national contexts.

The working-group ‘Technique’ recommended that contacts should be made with existing organisations about the development of new techniques and materials, particularly steel components and pre-manufactured steel sections. Discussions started on what would be the ideal type of home for workers and objections were soon expressed to build tower blocks to lodge miners and steelworkers while the single-family house was preferred by many experts. In addition, apprehension arose faced with potential European architectural (or cultural) uniformity at the expense of cultural regional characteristics.¹² In a note sent to the members of the High Authority, Christian trade-unions clearly expressed their opposition to any attempt to implement a ‘Schuman Plan House’, a similar house for every worker from Groningen to Napoli.¹³ This distrust for European cultural homogenisation continued throughout the 1950s when discussions arose about which architecture and urban planning should be supported by ECSC institutions.

After these first considerations on the opportunity of ECSC institutions to act in a concrete way for the improvement of workers’ housing, the proposal related to the use of funds for technical research served as the basis to launch two experimental programs to build dwellings for miners and steelworkers.

Housing workers: a philanthropic or a productivist project?

Formulating intentions in such an antagonist way could suggest a normative response. To assert that housing policies of the post-war period were two sides of the same coin is legitimate. Nevertheless, this duality induced architectural and technical choices reflecting the protagonists’ priorities. As a result, at the first meeting held by the sub-commission ‘working class house’, the main question was ‘what were the investments needed to satisfy housing demand in order to increase industrial output’.¹⁴ A year later, another commission was set up to assess the connection between construction of housing and productivity improvement. According to Giuseppe Glisenti, the High Authority wanted to ‘start construction everywhere but the priority must be allocated to industrial areas where production growth is essential’ and particularly in coalfields rich in coking coal.¹⁵ Finding proof of this correlation was at the heart of the very first housing policy. At the time, the High Authority requested from the Division of Labour Problems an inquiry on the link between the increase of housing possibilities and the growth of productivity.¹⁶

12. CEAB 13, n°8, Minutes of the Working Group ‘Techniques’, 25.09.1953.
13. CEAB 11, n°1658, Note from the International Confederation of Christian Trade Unions, 02.06.1953.
14. CEAB 11, n°1630, Sub-commission « Working-class house », 28.10.1952.
15. CEAB 11, n°1633, Minutes of the meeting of the Working Group ‘Methode’, 29.05.1953.
16. CEAB 11, n°1632, Division of Labour Problems, The relationship between the increase of production and the construction of houses for workers, 17.03.1954.

Nevertheless, the High Authority's members considered as potentially counter-productive to present the ECSC housing policy as a part of the industrial production policy rather than a social policy for the working class. Soon, the philanthropic concern became central to the ECSC housing program in referring to the main mission of the Treaty of Paris which was to improve the standard of living conditions in the Community. This philanthropic impulse was reinforced after members of the Common Assembly had visited coalfields and discovered the deplorable housing conditions, in particular for Italian immigrants in Belgian industrial areas.¹⁷ In spite of this increase in awareness on housing issues, European institutions still did not have any leeway to develop their own housing policy.

From another point of view, the European contribution to build dwellings for workers was rapidly perceived as the best means to highlight the positive social dimension of European integration. Building houses and garden cities would offer a higher visibility in industrial areas where the role and the action of the ECSC remained confused. In addition to the necessity of improving the quality of working class dwellings, the High Authority estimated at 250,000 the number of dwellings to be built over the coming years.¹⁸ The slogan chosen for the first experimental housing program 'without a house, no miner, without a miner, no coal, without coal, no steel' expressed some economic considerations behind this housing program.¹⁹ The possibility of relocating migrant workers closely relied on housing availability in industrial areas. The failure to resettle miners from the South of France to Lorraine was partly explained by the scarcity in housing.²⁰ Similarly, the improvement of workers' living conditions was perceived by the High Authority as an essential factor to increase workers' productivity. The last objective was to increase the High Authority's visibility and legitimacy among the working class. This goal was put forward by German representatives during a session of the working group 'working-class house' in reference to the positive impact of the Marshall Plan on the German population, especially with the American support to the housing rebuilding program.

Experimental programs

The organisation and management of ECSC experimental programs were given to members of the International Council for Building (ICB). This organisation was created under the auspices of the United Nations in 1953 to set-up a network of national experts on techniques and innovations in the construction industry. At its level, the

17. CARDOC [Archives and Documentation Centre], Common Assembly, Ordinary Session, Rapport de la commission des affaires sociales sur la politique à suivre par la Communauté en matière de logement des travailleurs.
18. CEAB 13, n°7, Minutes of the limited group « Working-class house », 06.05.1953.
19. R. LEBOUTTE, op.cit., p.646.
20. D. REID, *The Miners of Decazeville. A Genealogy of Deindustrialization*, toExcel, New York, 1999, p.190.

ICB tried to promote the quality of housing, lower production costs and increased productivity.²¹ The ICB's main objective, as Article 2 stipulated, met the High Authority's concern on working class housing issues.²² If both interests undeniably converged, they really started to work together after a meeting in 1953 between André Marini, Director of the 'Centre Scientifique et Technique du Bâtiment' (CSTB) and Arthur Theunissen from the Labour Problems Department. Theunissen was enthusiastic after his visit of the CSTB Research Center in Paris where he was impressed by André Marini who, in his opinion, was the expert to be consulted in priority.²³ From then on, the organisation and management of the experimental programs were delegated to the ICB and its network of experts, among whom the most enthusiastic were Jean van Ettinger, Director of the Rotterdam Bouwcentrum and Wolfgang Triebel, Director of the Technical Research at the Building Institute of Hanover and Georges Demarre from the CSTB.

Similar experimental programs were planned by the Economic Cooperation Administration in Germany to build houses for workers, while providing potentially effective measures to promote the standardisation of building materials and methods.²⁴ In addition, the High Authority considered that improving more decent houses for workers would improve psychological conditions and increase coal and steel production in the Community. This industrial housing policy strategy specially targeted mineworkers who were more and more reluctant to work underground. Increasing the number of dwellings would ease the recruitment of a workforce from abroad.²⁵

The architecture of an ideal working class house was defined by a committee of experts gathered by the High Authority. This committee was composed of six experts representing national housing administrations and architects working for coal and steel industries such as Tony Biwer, Chief Architect at Arbed or Stanislas Tugenddresch, architect at the Central Construction Service in the Houillères du Bassin du Nord. This committee considered the minimum sized house for a working class family of five should be not smaller than 87m². They also recommended the required facilities for these houses as well as the technical characteristics for each architectural design. Once these provisions were implemented, the High Authority delegated the organisation of the experimental program to the International Council for Building, which included those experts. To assign the project to a prime contractor, in most cases an architect or a group of architects, joint committees gathering workers and producers' representatives were set up in the various industrial areas of the Community. Often, these committees considered themselves as unqualified for these assign-

21. *Première assemblée générale du Conseil international du bâtiment pour la recherche, l'étude et la documentation*, Genève-Paris, 1953, p.16.
22. The main purpose of the ICB is to stimulate and to develop international cooperation in experimental and applied research, documentation and studies in the building and construction sectors in its technical, economic and social dimensions.
23. CEAB 11, n°1641, Note to Glisenti, Minutes of the meeting with A. Theunissen and A. Marini, 02.03.1954.
24. J. DIEFENDORF, op. cit., pp.142-143.
25. CEAB13, n°32, Minutes of the meeting of the Working Group « working class house », 21.01.1954.

ments and delegated decisions to national housing administrations or to competent persons within the coal and steel industries.

Furthermore, the High Authority subsidy only covered a small part of the construction costs forcing these joint committees to find additional financial support. According to the High Authority members this situation led to two unfortunate consequences. The first one was that the funds assigned by the High Authority had been used to finance projects already launched by architects. So, the experimental dimension of the ECSC program was not as ambitious as initially expected. The second consequence was that some architects appointed as architecture experts were present at every level of the ECSC experimental program from the conception of this project in the European working group to the construction of dwellings with the support of European funds. For instance, Tony Biwer took advantage of his exclusive position as Luxemburg representative to be part of the first expert committee, and later within the International Building Council committee. Finally, he benefited from the construction project of around fifty houses in Luxemburg. He was not the only one. Stanislas Tugendresch, mentioned above, was at the outset of the selection process and at its end when he undertook the construction of houses for miners in the Nord-Pas-de-Calais.

A similar story holds true for the famous Italian architect, Enrico Peressutti who as one of its BBPR collaborators contributed to one of the ECSC working groups, used the funds to build apartments in the suburbs of Napoli, sparking anger among the members of the High Authority. In the same way, Belgian trade unions and producers' representatives transferred management responsibility of the experimental program to the National Institute of Housing, which used ECSC funds for their ongoing building projects such as Houthalen and Leernes.²⁶

In actual fact, architects rarely followed the guidelines given by the International Council for Building. Out of seven German building sites of the experimental program, only one respected the recommendations and two out of the six French building sites followed the original architectural plan. But not all aspects of this first experimental program were negative. For André Marini, the experience showed that the difference in industrial construction costs between Member States came out more reduced than initially expected.²⁷ Moreover, some architects had developed quite ambitious projects by incorporating various steel components in the structure of single-family houses as in Neufchef (Lorraine) where the Filled method was applied or in Ougrée (Wallonia) where a group of Belgian architects, the EGAU Group, tried to combine the planning of a garden-city with the new principles of the Modern Movement.²⁸

26. *Premier programme expérimental de la CECA*, 1957, p.127.

27. André Marini was President of the French Centre scientifique et technique du bâtiment and also of the Technical Section for housing in the EEC.

28. The EGAU group was an association of three Belgian architects, Charles Carlier, Hyacinthe Lhoest and Jules Mozin, who collaborated to develop Modern Architecture in Liège during the sixties.

On the whole, the idea of a single-family house, with an independent garden was adopted by all architects. Of course, the working class housing policy had historical explanations in which employers and religious organisations encouraged domestic activities such as rearing pigeons or gardening which would keep workers away from collective meetings and pubs seen as a source of alcoholism and trade unionism.²⁹ But the importance given to gardening stemmed also from the agricultural background of many workers, helping them to preserve contacts with nature, air and light. More than any other category of workers, mineworkers needed to own a house to restore the natural balance broken by inhuman underground working conditions.

The urban planning of Sesto San Giovanni for this first experimental program obviously summarised these concerns. The INA Casa which supervised the project tried to maintain the community spirit of rural populations to reduce the impact of urbanisation and proletarisation on these new workers moving from Southern Italy. Pedestrian circulation was privileged and small housing units were disposed alternately in order to break the monotonous homogeneity of rational urban planning. In other words, following the plan highlighted in an urban planning model, the living environment should approximate an ideal Southern village in an industrial and potentially Communist suburb.

With this first experience yielding mitigated results, the High Authority was not convinced to re-launch another experimental program. But ICB members found in this European institution a potential partner to develop new techniques and to support engineering research from laboratory to building sites.³⁰ They therefore initiated a second program and insisted that the High Authority push forward the first experience. They were not the only ones to see in European housing programs an incentive for other innovating projects. The French engineer Raymond Camus, who developed the famous prefabricated building process named after him, contacted the High Authority to propose his steel prefabricated process for housing miners and steelworkers on a European scale.³¹ More specifically, the two Belgian architects Léon Palm and Willy Van der Meeren proposed a totally prefabricated house for workers explicitly called the ‘ECSC house’.³²

Alongside the action of ICB members, a second incitement came from the European Productivity Agency who had contacts with Paul Finet, member of the High

29. Y. JEANNEAU, *Le logement et le mineur*, in: E. DESBOIS, Y. JEANNEAU, B. MATTEI (eds), *La foi des charbonniers. Les mineurs dans la Bataille du charbon, 1945-1947*, Éditions de la Maison des sciences de l'homme, Paris, 1986, pp.151-178.

30. CEAB 13, n°32, Minutes of the meeting for the organisation of the Second Experimental program, 04.07.1956.

31. Y. DELEMONTEY, *Raymond Camus et l'avènement de la préfabrication lourde en France: vers un nouveau paradigme structurel*, in: *Centraliens. La revue des Arts et Manufactures*, 625(2013), pp.57-62. See also CEAB 1, n°669, Raymond Camus to Giuseppe Pella, President of the Common Assembly, 11.01.1955.

32. M. DE KOONING, *Een huis voor de prijs van een Ford. De saga van de EGKS woning*, in: K. VAN HERCK, T. AVERMAETE (eds), *Wonen in welvaart. Woningbouw en wooncultuur in Vlaanderen, 1948-1973*, Vlaams Architectuurinstituut, Anvers, 2006, pp.164-177.

Authority, to promote the modular coordination technique in the European housing program. The modular coordination, already available before the Second World War, met increased interest after 1945 when architects and engineers inspired by the Modern Movement considered this new building process as an essential prerequisite for mass production and prefabrication.³³ By standardising norms, dimensions and parts, modular coordination could speed-up production and construction on site. Coping with monotony generated by an assembly-line production process, the European Productivity Agency underlined how modular coordination allowed extensive flexibility in the building process and therefore ensured architectural heterogeneity.³⁴ In addition, this building process would reduce the importance of specialised artisans in the construction industry and facilitate the recruitment of unskilled workers. As presented by the European Productivity Agency, the aim here was to replace the shovel and the saw by the screwdriver and the adjustable spanner.³⁵

A second experimental program was set up on 28 March 1956. This program had to contribute to research in terms of modular coordination, standardisation and the components industrialisation in the building sector.³⁶ The program involved the construction of 2,000 houses in the Community and no longer sought to develop single-family houses but larger structures built on three or four floors. The ICB experts were nonetheless aware of the importance of steel in the High Authority's projects and included these characteristics in the new experimental program. Architects were instructed to incorporate a maximum of steel or cast-iron elements in windows, doors, sinks... As far as the High Authority was concerned, it was important to take advantage of the post-war interest in new materials in architecture by encouraging engineers and steel companies to develop new products for the building industry.³⁷ For the second experimental program, the High Authority members, in coordination with the ICB, promoted the use of metallic joists, window steel frames and metal staircases.

As for the first experimental program, the High Authority and the ICB members noted important implementation problems such as delays, infractions to the guidelines of the experimental program or serious changes to the original plan. Nonetheless, some projects were very ambitious. In 1955 the Domofer building construction started in Florange (Lorraine) and was supported by the High Authority as a part of this second experimental program. The four-floored buildings were almost entirely made of steel: window frames, roofs, staircases and claddings, requiring one ton of steel per room. The important weight of steel was reduced by the rational use of thin metal

33. B. FINNIMORE, op.cit., p.146. M. ELEB, *Modernity and modernisation in postwar France : the third type of house*, in: *The Journal of Architecture*, 14(2004), pp.495-514, here p.511.
34. E.-M. NEUMANN, *Architectural proportion in Britain, 1945-1957*, in: *Architectural History*, 39(1996), pp.197-221, here pp.197-198.
35. Organisation for European Economic Co-operation, European Agency for Productivity, *La coordination modulaire dans le bâtiment*, 1956.
36. CEAB 2, n°1780, Note to the members of the High Authority, Financial contribution to the construction of 'working class houses', 29.05.1956.
37. CEAB 8, n°541, Technical and administrative guidelines for the Second ECSC Experimental program.

sheets, while the construction process was made easier and cheaper by pre-manufactured elements assembled by light machines and low-skilled workers.³⁸

The two experimental programs showed their limits in the promotion of a new form of working class dwelling in which emerged transnational ideas and techniques mainly carried by experts from the ICB. Above all, these programs underlined the disparate and multifaceted project of the High Authority pursuing an improvement of the working class living conditions while reducing the construction costs and developing new techniques and materials based on steel. In addition, this call for modernity was challenged by a more conservative approach of what the ideal living environment for the working class should be. Therefore, the High Authority launched an international architectural competition aiming to develop a modern concept of the ideal urban planning and living conditions for the working class.

Rethinking the urban planning and the architecture for the working class

Earlier on, the idea of using architectural competitions to speed up the international circulation of new techniques, materials and concepts was suggested in working groups set up to propose solutions to the housing shortage in the ECSC. It was hastily rejected as this process was often viewed as too disconnected from reality and brought no tangible results for the European working class. Preference was given to experimental programs. Nonetheless, during the construction of the 10,000th dwelling built in 1957 with the financial support of the ECSC, the High Authority decided to celebrate this event by launching an international architectural competition. As for the two experimental programs, the High Authority delegated the organisation of the competition to an external institution: The International Union of Architects (IUA). Founded in Geneva in 1948, the purpose of this union was to restore networks of architects broken by the war, to contribute to the reconstruction of European towns and to organise architectural competitions.

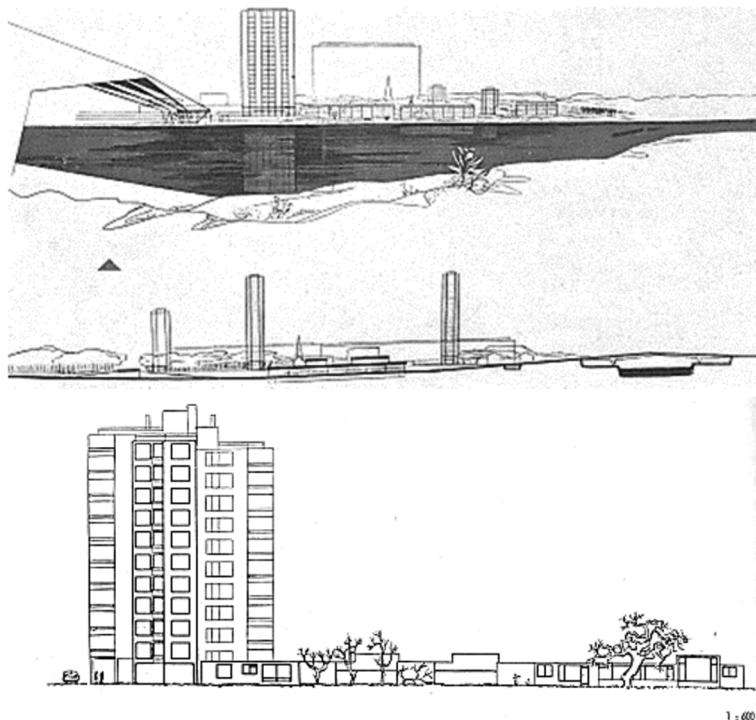
Already organised during the interwar period, architectural competitions took a larger extension after the Second World War, due to the housing shortage and the increased demand for collective dwellings. Furthermore, the emergence of new techniques and the involvement of international organisations in housing issues stimulated the need for architectural competitions.³⁹ In 1957, the ECSC architectural competition named 'A House for the European Worker' sought to combine an old industrial landscape with a modern concept of urban planning. The architects were to incorporate an innovative urban and architectural project for 400 dwellings into a traditional and industrial village of 1,600 inhabitants. With this method, the High Au-

38. Website of the Association Florange-Patrimoine et Culture, Postcard, Collection Werner Porten-siege, www.florangepatrimoineculture.fr/spip.php?article129, (May 2010).
39. A. NICOLAS, *L'apogée des concours d'architecture, l'action de l'IUA, 1948-1975*, A & J Picard, Paris, 2007, p.129.

thority hoped to contribute to the promotion and the circulation of new techniques and ideas in the Community. The question was not to produce similar houses for all workers but to make sure that Dutch architects become acquainted with innovations in France and *vice versa*.

It was hoped this first competition would bring new designs for mass housing in a pre-existing urban configuration in which modern architecture would not be an appendix to this old industrial village but rather an integral part of it. In giving the organisation of the competition to the International Union of Architects where the Modern Movement was predominant, the High Authority implicitly promoted an architectural style.⁴⁰ Almost all projects submitted resulted in a collective housing project in high-rise towers and located their project at the outskirts of the former urban configuration. For the High Authority members, this town-planning and architectural orientation did not correspond to their concept of working class housing and to the geographical distribution of miners and steelworkers in the industrial areas of the European Community. In this competition, another bias came from the experts chosen to analyse the results: Cyril Crappe from the Belgian 'Institut National du Logement' and Bob Frommes, Director of 'Habitations à Bon Marché du Luxembourg'. These two senior officials were strong supporters of the single-family house and the concept of the garden city. According to Cyril Crappe, many of those projects showed a collectivised form of living conditions, giving the impression that their home was just like any other depersonalising machine.⁴¹ The reference to Taylorism production methods was explicit and referred back to the trend in architecture, at the time, taking the car industry as an example, to cut construction costs.⁴² Bob Frommes went further, considering that the human aspect was completely put aside by architects whose high-rise towers would instigate juvenile delinquency and neuro-vegetative diseases.⁴³ The first prizes were won for two different projects illustrating the anxiety of both senior officials. The French architect Jean-Pierre Allain had raised the Jury's interest with his project incorporating the development of a commercial centre in the working class environment (Figure a). The German architect Walter Schwagenscheidt owed his first prize to the high importance he gave to small dimension houses, with a layout reminding those of a classical garden city (Figure b).

40. The Modern Architects Jacob Bakema, Jean Dubuisson or Joseph Moutschen represented the Modern Movement in the Jury.
41. C. CRAPPE, *Étude sur les plans- masses*, in: *Résultats du concours d'architecture*, Haute Autorité de la CECA, Luxembourg, 1959, p.117.
42. N. BULLOCK, *Developing prototypes for France's mass housing programme, 1949-53*', in: *Planning Perspectives*, 22(2007), pp.5-28.
43. B. FROMMES, *Etudes sur les aspects sociaux et humains du concours d'architecture*, in: *Résultats du concours d'architecture*, Haute Autorité de la CECA, Luxembourg, 1959, p.154.



Jean-Pierre Allain Project (above) and Walter Schwagenscheidt Project (below), Winners of the First ECSC Architectural Competition⁴⁴

This first competition had two main consequences. First, its success was unexpected, a total of 1,153 participants registered for the competition and more than 200 projects were finally submitted. Furthermore, this competition was supported by the International Union of Architects who regarded this ECSC project as the continuation of the architectural competition for the European individual house held at the Gent exhibition in 1957.⁴⁵ Second, in the eyes of the High Authority members, the ECSC competition highlighted the unsuitability of mass housing for an idealised working class way of life. The single-family house with its own garden responded to the High Authority members' concerns about promiscuity, social stability and health recovery. In fact, mass housing projects submitted to the ECSC architectural competition seemed more appropriate to reduce population density in European cities, building new cities, roads and dwellings in the suburb of the old one.⁴⁶ Architects failed to integrate their modern perspectives in a pre-existing urban and industrial configuration. In spite of the High Authority's recommendations, solutions proposed by most architects externalised the new working class neighbourhood and simply ignored the industrial

44. *Résultats du concours d'architecture de la CECA*, Luxembourg, 1960, pp.12 and p.18.

45. A. NICOLAS, op.cit., p.134.

46. A. FOURCAUT, *Les grands ensembles ont-ils été conçus comme des villes nouvelles?*, in: *Histoire urbaine*, 17(2006), pp.7-25.

specificities of mining and steel cities and communities. Nevertheless, the success in numbers of this first competition prompted the High Authority to repeat the experience, focusing on innovations and on the use of steel items as already prescribed in the second experimental program. To avoid the same misinterpretation which occurred with the first competition, the rules stipulated that projects had to concentrate on single-family houses and no longer on multiple-story buildings. These targets of the second competition were clearly on the research and innovation of steel products potentially manufactured on an industrial scale. The emphasis on the use of basic steel items was confirmed by the specialists within this jury beside Modern architects such as Pierre Vago, Léon Stynen or Ignazio Gardella, sat engineers and representatives of steel companies.

This second architectural competition also earned an unexpected success. The High Authority counted 3,128 registrations from over fifty countries and 487 projects were received. Once more, recommendations were hardly followed by the participants and new guidelines were given for the first ten pre-selected projects. The promotion of steel products in the construction sector, their elegant and light-weight qualities were praised. The competition was won by the young German architect Jochen Brandi who proposed 13 different houses with an optimal use of steel allowing a manufacturing process for some building parts. Another project submitted by the Italian architect Renato Severino and two Italian engineers, Bruno Conti and Marcello Indiati who proposed a completely single-family house made of steel also captured the Jury's attention. Once again, this project seemed, at the least, unrealistic, underlining how this architectural competition looked more like a competition on ideas or hypothetical future developments in techniques and building materials. Indeed, as with the first competition, the winner of the first prize did not have the opportunity to make this project concrete. For the High Authority, these two architectural competitions were to be considered as a laboratory to exchange ideas or to enable the emergence of new ideas, concepts or methods.

Conclusion

Getting involved in discussions on the post-war housing issue, the High Authority got involved in a process that highly exceeded the frame of its official competences. Prefabrication and industrialisation processes in the construction sector were both perceived as structural innovations that could lower the production costs and offer new opportunities for the European steel industry. Architectural competitions had to allow for the acceleration of cultural and technical exchanges in the Community and served as a platform for inventive projects in the industrialisation, construction and the increased use of steel in this sector. But these innovations hardly fit in with traditional views of what the ideal living environment or the ideal dwelling for the working class needed to be. The question at the time was whether architectural solutions addressed to the housing shortage in Paris, Rome or Rotterdam could be ap-

plied to the problems encountered in mining and steel regions. The solutions proposed obviously differed depending on experts, architects, and engineers chosen by the High Authority, providing a variety of architectural and urban planning projects from mass housing to garden city, from traditional working class one-story brick house to steel-frame building and even the development of a steel house. As was the case for experimental projects, the need to rely on external financing partly explains why the High Authority could not control all the architectural process from the original design to the building site. Yet, the ambition of some members of the High Authority and their open-mindedness to innovations drew the attention of young architects and engineers who saw in the initiatives taken at the ECSC level a possible fulfilment of their projects. Hence, surprisingly, an institution set up to ensure the good functioning of a common market for coal and steel found itself at the cross-roads of debates on the social and economic implications of architecture and urban planning for the working class in the 1950s and 1960s.