Willy Van Der Meeren, *Ieder Zijn Huis*, Brussels, Belgium, 1953–1961. North and East façades during renovation. © ORIGIN, Georges De Kinder.

Willy Van Der Meeren's *Ieder Zijn Huis*: Saving a Fragile Giant

BY MAURIZIO COHEN

The project for the renovation of the Willy Van Der Meeren apartment building known as *Ieder Zijn Huis* ["A House for Everyone"], in Brussels, raises a question that is crucial for the conservation of modern work using prefabrication techniques. The debate focuses on the original design and construction values, and above all on how best to keep them alive and contemporary despite the building's age and changing standards and techniques. In the wording of the renovation specifications, the project owner – the public company Beliris – laid stress on the importance of preserving the architectural qualities: "Given the building's importance in the architectural heritage, the renovation must reflect the original ideas of the designer, Willy Van Der Meeren".
The point of the call for tenders was to establish an approach for the work that conserves the structure's architectural principles in terms of appearance and structural articulation, while making renovated apartments available that meet today's standards. The architecture firm Origin decided to focus on the building's values and on the comfort and convenience of the accommodation, while pursuing further the conceptual direction taken by the original designer. This meant exploring all the building's architectural and structural aspects in order to successfully showcase its qualities.

The municipality of Evere and the post-war context

Evere is a municipality on the outskirts of Brussels where housing demand at the end of the World War II was very high. The socialist mayor at the time, Franz Guillaume, became interested in the ideas of modern architecture, especially Le Corbusier. After visiting the *Cité Radieuse* in Marseille, he tried to persuade Le Corbusier to create a similar block of flats for his municipality — in vain.

Guillaume wanted to introduce high-rise collective housing in response to the growing number of applications, but also for ideological reasons. He wanted to get away from the local tradition of individual little houses that typified the Flemish Catholic petty-bourgeoisie. "He wanted the building to have the same symbolic value as the church: it was the secular watchtower of the village"[1].

He therefore asked the social housing company *Iede Zijn Huis* to entrust the design to Willy Van der Meeren. This architect was not yet particularly well known, but was developing progressive ideas similar to those of the mayor: "Decent housing for all in a dynamic society." The order was dated 1953, and the first images of the preliminary plans were published in early 1954[2]. A first development plan from that year enables us to gauge the initial ambition of creating an estate with various different types of buildings, tower blocks, units and lower apartment buildings[3]. Franz Guillaume's death in 1963 put an end to this urban development project. The tender process for the building took place in 1956, but the Brussels World's Fair of 1958 led to substantial price increases, which undermined the project. A second tender process had to be organized in 1958 before construction work could start; the building was completed in 1961.

Willy Van Der Meeren

Van der Meeren is an important figure on the Belgian architectural scene. An architect, designer and publicist, he contributed to study groups on issues of housing and taught at the VUB (*Vrije Universiteit Brussel*) Faculty of Architecture. In 1958, he won the competition organized by the C.E.C.A. (*Communauté Européenne du Charbon et de l'Acier* [European Coal ans Steel Community]) for mass-produced homes. His prototype of a prefabricated worker's house was revolutionary and had a profound impact. However, its production was limited by the prevailing mood in favor of conformist, single-family homes with a more traditional architectural style.

His engagement was radical and generous. He founded and contributed to art and architecture journals and emerged as the spokesman for a progressive modernity that emphasized social values and honesty in construction. His first projects reveal his interest in the ideas of Le Corbusier, but also his ability to reinterpret. In particular, the project for an apartment block at *Fort Jaco* in the municipality of Uccle to the south of Brussels heralded a series of ideas that were to be developed further in the Evere project. These included the use of a passageway on one of the façades — a kind of internal street — along which the apartments were arranged.

01 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. West and North façades after renovation. © ORIGIN, Georges De Kinder.

02 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. Detail of the East façade during renovation. © ORIGIN, Georges De Kinder.

The construction and development of the building

Van Der Meeren developed the project on the basis of three priorities: creating innovative solutions to keep costs down through the systematic use of prefabricated and modular elements, the application to the apartments of the principles of the "free plan" devised by Le Corbusier, and the use of color in the many collective spaces to signal their social role.

Cost control played a critical role, and led Van Der Meeren to devise a building in which most of the elements required little or no finishing after installation. This project is a clear example of the construction rationalism advocated by Van Der Meeren. He was developing a concept that he called "building design", preferring this term to "architecture" to describe his approach.

The building has 105 apartments for 2 to 5 people, divided into 9 types and distributed by 2 stairwells over 12 stories. Galleries — "streets in the air" — on the east façade each serve three stories.

Much of the building is raised above the ground on piers. The ground floor consists of the entrances and service areas. Just like the passageways, the entrance halls and landings are spacious, illustrating the desire to apportion a significant floor space (almost a third of the building's 10,000 square meters or so) to meeting areas. As in Le Corbusier's housing units, the roof terrace is accessible to all and is used for collective purposes. The first story is a technical gallery with storage rooms for all the apartments.

The building's layout is made intelligible by its clear structure and the explicit distribution of materials according to function. The stair towers — which pass through the volume at each end and emphasize its groundedness — and the gables are of exposed brick; the porticos are of poured concrete; the façades are made of prefabricated washed concrete panels in which the window frames are inserted; and the louvers, railings and metal pillars on the east façade form a latticework pattern that accentuates the recessed terraces.

Only the porticos and the reinforced concrete beams were cast on site, in smooth formwork. The portico columns grow more slender from floor to floor. The other elements are prefabricated and designed on the basis of Le Corbusier's *Modulor* dimensions. They consist of slabs, façade panels and stairs.

The hollow slabs are linked to the porticos. Their dimensions are constant (15.5 cm thick and 56.5 cm wide) and they were made with a metal formwork to obtain a smooth lower face that could be left exposed. The upper reinforcement of the portico beams is connected to the slabs' hollow cells by means of integrated metal rebars, thus providing longitudinal bracing.

The façade panels are self-supporting, all the same size (4.52 m by 2.56 m) and designed in 5 variants according to the configuration of the apartments' doors and windows. Consisting of two 5 cm concrete sheets around a 2 cm layer of insulation, they were all produced with the same mould. The outer surface is made of fortified concrete to withstand rain and frost, whereas lean concrete was used for the interior.

During the analysis of the building, the question came up of how the façade panels were installed and secured. Details of the technique used do not appear in any archive document or in any picture of the construction work. This point was to prove decisive for the direction of the renovation project.

The building's common areas are immaculate. In line with a common practise at the time, work was commissioned from artists to underline the importance of these areas. In the South entrance hall, one wall is covered with a large mosaic by Jo Delahaut, while the North entrance hall features a work by Jean-Pierre Turlinckx based on a Venetian mosaic. In front of the building, an abstract concrete sculpture by Rik Poot was set up in honor of the mayor. The

03 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. Recomposition of the façade with the new prefabricated sandwich panels. © ORIGIN, Georges De Kinder.

04 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. A typical storey dismantled during renovation. © ORIGIN, Georges De Kinder.

South entrance was enhanced by a cast concrete awning, partly painted blue, with a free and dynamic form.

Bright colors are used in the entrance halls and access passageways, making it easier to identify different areas and find one's way around. The apartment doors are also different colors, adding to the mood of vitality and reinforcing identity. Despite the obviously economical use of materials, Van Der Meeren drew attention to certain details that remind us of his work as a designer, such as the curved metal tubes used for the front-door handles to the apartments.

The renovation philosophy

Despite its fame and its qualities which have been recognized right from the start, the building has not been subject to any protection by the authorities. It was entered on the **docomomo** register in 2004.

In 2007, the last residents left the building and were rehoused by the housing corporation. Studies began in order to arrive at a precise diagnosis of the problems. The structure was damaged, the various technical systems were ageing and inadequate, and a series of alterations had modified the original architecture in an ill-considered fashion, sometimes with temporary solutions. In addition, changing views of housing due to societal and economic developments made it necessary to rethink the status of the original structure.
By 2008, the overall nature of the work to be done was becoming clear. The architects and heritage specialists De Meyer, Verdonck and Verswijvermade presented the following proposal in a long text on the history of the building:

> *Rather than adapt it in its current state, it would be preferable to bring the renovation back into line with Van der Meeren's initial ideas and devise a project that both reflects those intentions and translates them into modern solutions based on the architectural plan. The conservation of the original building seems to us in this case to involve an unjustifiable restoration cost and to jeopardize the standard of life expected in public housing. (...) Most of the damage and the main shortcomings are related to the physical behavior of the façade, the current state of the technical systems and the small size of the apartments*[4].

Discussions about the right approach were informed by a number of consultations which began in early 2000 when the building was registered by **docomomo**, and numerous studies carried out at institutes and faculties of architecture that highlighted the figure and architectural work of Willy van Der Meeren.

The firm ORIGIN summarized the problem as follows:

> *Willy Van Der Meeren's holistic architectural philosophy gives the building a soul, while imposing strict marginal conditions for its renovation. Taking all these principles into account involves striking a delicate balance — one, however, that is as fragile as a house of cards in which each element is connected to the others. (...) A renovation is necessary for reasons of safety and comfort, and the building's heritage value is an important factor. (...) Should the building be adapted to current standards, or should its use be adapted to the qualities of the building? Or to put it another way: are the ideas of progress and modernity and the functional and rational approach of the project's creator more important than conserving the original materials? At the time of the building's completion, everything was very innovative in technical terms. The architect and project owner genuinely intended to create opportunities for social progress, in order to give people dignity through the quality of their environment. Today, the building has become 'non-user-friendly', because energy costs are particularly high and the level of comfort is poor. The search for social progress, the idea of giving people dignity through high-quality progressive housing, is still on the agenda. It was therefore decided that the idea of progress and modernity developed by Willy Van Der Meeren was at least as important as the decision to adapt the building to the current requirements of comfort, fire resistance and insulation*[5].

05 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. Restoration of the roof level. © ORIGIN, Georges De Kinder.

06 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. "The street in the sky". A gallery after restoration. © ORIGIN, Georges De Kinder.

A decision has therefore been made to keep the elements cast in concrete as well as the slabs, ducts and stairs, and to completely replace the façade panels in order to remedy the various problems from which the building has suffered, while preserving intact Van Der Meeren's philosophy and strategies of architectural composition. The new panels are in line with new standards of fire resistance and thermal performance requirements, thanks to more effective insulation and the removal of numerous thermal bridges.

A crucial debate runs through the entire history of heritage conservation, concerning the question of authenticity. In this project the decision has been made — as often for modern architecture, especially from the post-war period — to place more emphasis on the value of the concept over the conservation of original characteristics which are no longer adequate. The problem that then arises is how to proceed in order to maintain an acceptable degree of consistency and avoid disfiguring the work.

It should be stressed that this renovation project was well received because ORIGIN had already established a solid reputation for its technical skills and thoughtful approach, not just to 20th century heritage, but to older buildings too. Equally, the role played by the public project owner, which stressed the need to focus on the cultural problem of the project's heritage aspect and its role in local and national history, is symptomatic of the desire to preserve a property representing a set of values we wish to perpetuate as part of our heritage.

The work

The ORIGIN team identified and decided on the relative priority of the issues: the buildings' physical shortcomings, with façades serving as large thermal bridges and poor insulation resulting in significant heating costs for tenants. Inadequate ventilation and high levels of humidity had caused damage from condensation in several places.

The entire building fails to meet fire legislation standards, particularly with regard to compartmentalisation, the fire resistance of the building materials and the risk of fire spreading by the façades.

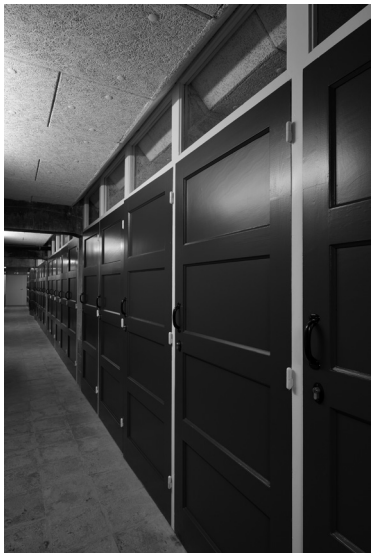
The acoustic performance is also inadequate, due certain functional choices that were made that are no longer suited to modern lifestyles. None of the technical systems meet the required standards of comfort and convenience, and in most cases they have deteriorated due to ageing, humidity and lack of ventilation.

The final major problem is the clearance height of 2.5 meters under the slabs and 2 m under the porticos, leaving little flexibility to alter the thickness of the screed.

The building has been carefully measured and surveyed in order to identify any differences between the project's documentation, the structure as built and alterations made over the years. In particular, checks were performed of the condition of the structural elements, the positioning of the reinforcement in the concrete, the state of the foundations and the building's transverse rigidity. This last point is crucial, because both the literature and the architect himself had stressed the link between the porticos and the hollow slabs, but gave no explanation about the concrete beams that connect the porticos horizontally. In-depth analysis revealed that these beams that run around the building are used to hold the façade panels in place, and do not contribute to the horizontal rigidity.

The operational focus of ORIGIN's plans is on creating new façade panels which, while consistent with the original façade design, are thicker, giving them qualities that the original panels lacked. It will therefore be necessary to demolish the beams that run around the building and pour new ones to secure the new panels.
The original layout of the apartments will be kept, with adaptations to meet normative and technical requirements. Van Der Meeren's initial idea of arranging the living areas

07 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. The lower space of an apartment after renovation. © ORIGIN, Georges De Kinder.



08 Willy Van Der Meeren, ***Ieder Zijn Huis***, Brussels, Belgium, 1953–1961. The street in the sky". A gallery after restoration. © ORIGIN, Georges De Kinder.

diagonally in order to bring in more light throughout the day is typical of his innovative approach. He regarded the conventional day/night separation as outdated, and plans were devised to adapt to possible changes.

Conclusion

The building's history is complex and has much to teach us about the importance of taking account of evolving techniques and architects' ambitions to invent new solutions. *Ieder Zijn Huis* embodies a wealth of social and spatial intentions. It has been conserved and renovated in line with the spirit and principles of Van Der Meeren: elements which were characteristic of the original architectural style have been replaced in a bold yet reasonable manner, while remaining faithful to Van Der Meeren's design. The achievement in this case is to have completed the entire process for a publicly-owned social housing building without any form of heritage protection. ▮

Notes

1 Mil De Kooning, *Willy Van Der Meeren. Architectuur Stedenbouw Design Research Onderwijs*, doctoral thesis (unpublished), Department of Architecture and Urban Planning, University of Ghent, 1997, 118.
2 *Architecture,* 13, December 1954, 508.
3 This plan was illustrated in a model exhibited at EXPO 58 in Brussels.
4 Ann Verdonck, Koen Verswijver, Ronny De Meyer, "*Intelligence architecturale et subtilité sociale dans un projet haut en couleur. L'immeuble de Willy Van Der Meeren pour Ieder Zijn Huis à Evere (1952 – 1961)*", Paula Dumont, Brigitte Vander Brugghen (dir.), *L' Architecture Depuis la Seconde Guerre Mondiale*, Brussels-Capital Region, Brussels, 2008, 153 – 154.
5 Charlotte Nys, Jan de Moffarts, "*Ieder Zijn Huis : la préfabrication appliquée à un immeuble de logements sociaux. 1960 – 2014*", Jean-François Denoël, Bernard Espion, Armande Hellebois, Michel Provost (dir.), *Histoires de Béton Armé. Patrimoine, Durabilité et Innovations*, Bruxelles, FABI and FEBELCEM, 2013, 112 – 113.

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