

Reviving Modernist Housing: Arena District of Renaat Braem

Peer-reviewed author version

MOORS, Marie (2021) Reviving Modernist Housing: Arena District of Renaat Braem.
In: Tostoes, Ana; Yamana, Yoshiyuki (Ed.). The 16th International Docomomo
Conference Tokyo Japan 2020+1 Inheritable Resilience: Sharing Values of Global
Modernities, Docomomo International and Docomomo Japan, p. 372 -377.

Handle: <http://hdl.handle.net/1942/34779>

Reviving Modernist Housing: Arena District of Renaat Braem

Marie Moors¹

¹ Hasselt University, Faculty of Architecture & Arts, Agoralaan Gebouw E Diepenbeek, Belgium, marie.moors@uhasselt.be

Abstract

The modernist housing project 'Arenawijk', in Deurne, Antwerp (BE), is currently threatened with (partial) demolition in order to make place for a new, more contemporary housing development. The initial plans were designed by Renaat Braem (1910–2001), one of the most prominent Belgian modernist architects and urban planners. The Arena district can be considered as an interesting cohesion between the internationally acknowledged CIAM principles and the, sometimes contradictorily, personal theories formulated by Braem himself. Hence, the site is a very significant part of Belgian modernist heritage. Nevertheless, the project is not protected. The demolition plans were initiated due to various reasons. This contribution addresses the historical richness and uniqueness of the Arena district as starting point for research-by-design. It is assumed that precise architectural interventions, based on a process of research-by-design, may herald new possibilities for reuse. The first part of the paper is based on the emergence of the site and illustrates Braem, as polemic figure, in a broader context. A second part will point out the value assessment of the unique characteristics of the site, based on the first historical situation and the new layers added by Braem. In conclusion, some further research suggestions will be made.

1. Introduction and Problem Statement

The housing project 'Arenawijk' (Arena district), in Deurne, Antwerp (BE), one of the most remarkable examples of modernist social housing in Belgium, is currently threatened with (partial) demolition to make place for a new, more contemporary housing development. The buildings are kept more or less in their original architectural appearance, whereas the project is not protected and the construction is in poor condition. Decay, carbonation and cracking of the concrete structures are persistent problems due to the use of materials and techniques that were experimental at the time. Moreover, none of the buildings meets contemporary energy performance regulations, acoustic requirements, fire safety policies or minimum surface standards. In addition, various spaces in between the buildings are neglected and unattended and therefore suffer from illegal dumping of waste. Besides, the lack of meeting places, community initiatives and 'eyes on the street' enhance social problems like street youth and loneliness.

The aim of our research is to investigate how to meet the goals of contemporary redevelopment of the site with the preservation of its heritage values. This will be done by research-by-design, in which we seek how to add a contemporary layer to the existing built fabric. This paper exposes the tangible and intangible heritage values of the site, and the unique character of the Arena district. The definition of the heritage values will be used as starting points for the research-by-design.

The methodology is in first instance based on analysis of primary and secondary literature sources of the Arena district and its leading architect Renaat Braem (1910–2001). Secondly, we interviewed different stakeholders, such as the social housing company, the agency Immovable Heritage, engineers and architects that have been involved in the recent analysis of the site, social workers, and inhabitants. The interviews were recorded and transcribed. This paper is part of a PhD research entitled '*Re-reading modernist housing estates: an inquiry into the value of threatened heritage sites and the possibilities of adaptive reuse as a method for re-evaluation*' at Hasselt University (BE). The research project aims to address the challenges

of modernist post-war housing in Flanders, assuming that precise architectural interventions, based on a process of research by design, may herald new possibilities for reuse. It is necessary for such sites to change and adapt, in order to allow for their ongoing use.¹ By utilising a designer approach, we aim to address the fragility of this post-war housing typology.

2. The Emergence of the Arena District

In the aftermath of WWII, the need for housing in post-war Antwerp was prominent as the number of inhabitants of Deurne had more than quadrupled between 1921 and 1960. In this light, the planning and design process for the Arena district was carried out from 1946 onwards. Architect Renaat Braem was commissioned together with urban planner Octave De Koninckx (1914–1967), engineer August Mennes (1884–1953) and architects Geo Brosens (1891–1967), Flor Laforce (1902–1973) and Louis Kuypers (born in 1923) to design a large-scale housing project on the only unbuild site in Deurne at that time. The building site was characterised by a former fortress, constructed as part of the reinforced camp of Antwerp built by the Belgian State around the Spanish ramparts in the mid 19th century, and used as a shelter during World War II. Braem retained the fortress complex and reused it as a community centre. In addition, Braem intended to flank the fortress with seven imposing towers of 20 floors and 80 dwellings each.² Nevertheless, the beforementioned ideas stayed in a conceptual daylight: the Arena fortress never became the centralised cultural institute as Braem had imagined (nowadays it functions as sporting complex) and the towers were never built.

However, medium high housing blocks of circa four floors were built. They follow the irregular outer circumference of the former fortress constructions, and enclose the green area. The buildings in the South and North of the Arena district pursued a different formalistic language; respectively a more organic, longitudinal formation with galleries and two-storey duplex apartments oriented to the park, combined with a more orthogonal emplacement of smaller blocks, in which apartments on one level are organised around communal stairwells. After the completion of the swimming pool in the North of the district, Lode Wouters (born in 1930) together with architects Fons Mostien (1940–2004) and Boud Rombouts (1947–2015) completed the Arena district with another circa 180 dwellings between 1980 and 1982: ten low-rise and middle-rise complexes, in three clusters spread over the terrain (**Fig. 1**). This happened to the dismay of Braem and the environmental movement and action groups who protested against occupying the open green areas.³ In this paper we only zoom in on the first phase of the project, particularly the intentions and constructions of Renaat Braem.

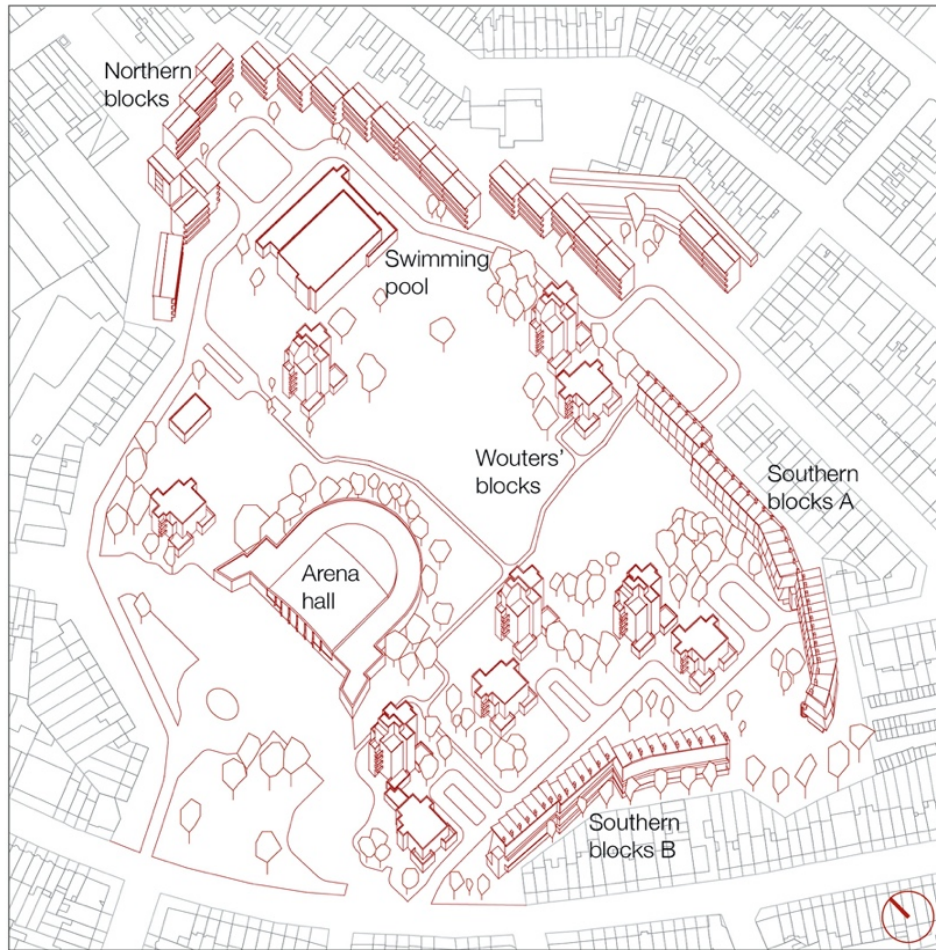


Fig. 1 Renaat Braem, Arena District, Antwerp, Belgium, 1964, Isometric drawing and model of the Arena district in its current appearance 2019. © Credits Marie Moors 2019

3. Braem and the Arena District

3.1. Renaat Braem as Polemic Figure

Renaat Braem played a leading role in the Belgian modern movement. He was the only Belgian architect who did an internship with Le Corbusier (1887–1965) between 1935 and 1937, immediately following his architecture studies in Antwerp. Le Corbusier was a pivotal character in Braem's frame of reference, someone to whom he constantly mirrors himself, but also someone whose ideas he questioned. Le Corbusier appreciated Braem's (radical) work, like his social housing project 'Kiel' in Antwerp, as he published it in *L'Architecture d'Aujourd'hui*,⁴ and it was also Le Corbusier who had introduced him as member of CIAM. Braem took part in the CIAM-congresses of Brussels (BE) on 'Rational Land Development' in 1930 and of Aix-en-Provence (FR) in 1953 on 'Habitat'.⁵ Besides, Braem was a lively representative of socialism, this comes forward in his design of the '*Lijnstad*' or his publication '*Het lelijkste land ter wereld*' (1968),⁶ in which he openly criticized the lack of urban strategies and policies in Belgium. In this book, Braem illustrates a day in the life of a Flemish family where everything goes wrong because the architectural structures do not meet the human needs.⁷ He was persuaded of the social role of architecture to shape the classless society.

3.2. The Values of the Arena district

The Arena district is representative for the modernist social housing through a number of characteristics. Firstly, there is the concept of the self-contained residential 'neighbourhood unit' promoting the community centric lifestyle, organised around a school and surrounded by shopping facilities and green space. A second characteristic is the ensemble-value of the buildings and the open green park structure in which every dwelling has its own terrace oriented to the park, to enlarge the indoor spatial feeling and accentuate direct contact with nature. Thirdly, the use of experimental materials like reinforced concrete in the form of a modular system of load-bearing partition walls (distance between track centres is five meters). In addition, the buildings are raised on *pilotis* to serve as collective carpark in which the car was considered an object of modernity, which should have its place in the public space. Nevertheless, the open space was turned into closed individual garage boxes after a few years.

Besides being representative for the generic modernist social housing concept, the Arena project also touches upon some very unique and exceptional aspects: the historical stratification of the site, the human scale and the formalistic language and iconography.

3.1.1. The Historical Stratification of the Site

The richness of this existing historical layer was the starting point for Braem's concept and vision for the Arena site. Additional to the integral retainment of this fortress complex, an adaptive reuse as a community centre for the South of Deurne was proposed. Different plans and strategies were considered: the inner courtyard of the 'reduit' is like an arena, in which the adjoining semi-circular spaces were suitable to be reused as service spaces. The areas at the front were more appropriate for the main entrances, a caretaker's home, exhibition areas, offices, conference rooms and a café-pavilion. Beside covering the arena with the famous 'glulam-trusses', that manufacturer De Coene had developed in 1955, Braem also had the idea to add a 'stage-tower', so the site was suitable for sportive as well as cultural manifestations. There are even drawings in which he suggests to transform the round shaped part of the fortress into a gigantic sculpture with organic openings in contrasting colours. In addition, there has been a plan to make the rooftop permanently accessible by making 'air-bridges' from the surrounding park. This explains the expressive forms of the chimneys and ventilations shafts on the roof of the Arena hall, openly discussed at the time by Belgian art critic K.N. Elnó (1920–

1993). Up to the present day the hall is only used as sporting complex (**Fig. 2**). Besides making plans for the adaptive reuse of the former fortress and placing the housing settlements at the periphery of the fortress constructions (and therefore also image-determining for his architecture), he argued to safeguard the valuable trees on the domain. These aspects can easily be linked with projects like Giancarlo De Carlo's (1919–2005) masterplan for Urbino (1958–1964), which was emerging in the same time span and which presents a detailed survey on the existing historical, functional, architectural, and social layers of the city, seeking for a strong sense of continuity between the existing and new architecture.⁸ Another project that aimed at continuity was Golden Lane in London of the Smithsons (1952), in which they proposed 'streets in the sky' that connect clusters of flats, as they cross and add new layers to the topography of the existing city fabric. Also, for their urban study for the Kuwait City (1968–1972), the Smithsons used the characteristics and qualities of the former settlement to create a new identity for the place.⁹ Braem and his design for the Arena district can be considered as 'adaptive-reuse *avant-la-lettre*', in which he openly demonstrates his contextual attitude.



Fig. 2 Renaat Braem, Arena District, Antwerp, Belgium, 1964. Current state 2019 of the Arena hall exterior and interior. © Credits Marie Moors 2019

3.1.2. The Human Scale

*'Braem is often perceived as the socialist architect of the 'second generation of modernists', already reacting on and reinterpreting the radical CIAM- principles, shifting to TEAM X (although he never became a member)'.*¹⁰ Within his socialist persuasions and linked design choices, his connection to TEAM X, and his 'more human approach' to modern architecture appears. When we project this idea to the Arena district, some particular aspects of Braem's search for human scale come to surface. In first instance, we conclude that the partition walls he introduced every five metres in the South blocks, can be interpret as a way to scale the project as individual dwellings. Also, by forming a 'gate' through one of the buildings, the idea of stepping in a 'housing arena' was emphasized. Additionally, Braem wanted to address a varied target audience from young families or single people to artists and the elderly. He does this by pursuing various, vibrant scenographies in his buildings, formed by a variation of different housing typologies (as much as the social housing company *S.M. Tuinwijk* permitted at that time): duplexes, studios, artist top floor apartments, gallery apartments (with personal front doors) etc. (**Fig. 3**). Moreover, withdrawing the towers contributed to the appearance of the lower four-storey volumes. This becomes clear when we compare the Arena district with one of his largest social housing estates 'Kiel' (circa 1955) in which the high-rise volumes define the project's modernist urban character.



Fig. 3 Renaat Braem, Arena District, Antwerp, Belgium, 1964. Current state 2019 of the Southern blocks of the Arena district. © Credits Marie Moors 2019

3.1.3. The Formalistic Language and Iconography

The Arena district was Braem's final social housing project. During the last phase of his career, he renewed his interest for *Art Nouveau* as he evolved to a more sculptural formalistic language, named 'organic brutalism', inspired by the oeuvre of his predecessors like Henry van de Velde (1863–1957), Victor Horta (1861–1947) and Antoni Gaudí (1852–1926). This is clearly visible in the undulating profile of the stacked terraces and the broad overhanging asymmetrically angled roof surfaces with gargoyle of the Northern blocks, on one hand; and the sawtooth shaped two-storey duplex apartments with shifted overhanging roofs, organically shaped loadbearing partition walls, big number of chimneys as 'roof-crowns' and the ribbed structure of the facades of the South blocks, on the other hand. Yet, Braem dedicated publications to his interest for *Art Nouveau*.¹¹ His affection for the neo-styles was even more strengthened by the fact that he actively fought for the preservation of the Antwerp station and the eclectic neighbourhood Zurenburg in Antwerp (particularly the Cogels-Osylei), as active member of the Royal Commission for Monuments and Landscapes from 1970 onwards until 1981. Furthermore, the Arena district is a beautiful example of the '*gesamtkunstwerk*', in which Braem realised a full assimilation between art and architecture, with symbolic statues of his own (**Fig. 4**). These monumental concrete sculptures, integrated into the buildings, are spread over the district as socialist accents of love and happiness. Originally they were intended to be painted in bright colours, but that never happened.¹²



Fig. 4 Renaat Braem, Arena District, Antwerp, Belgium, 1964, Sculptures of Braem in the Arena district representing love and luck: respectively flowers blossoming from a star and a flower growing through an abstract representation of a head. © Credits Marie Moors 2019

4. Conclusion

The conclusion can be found in the discovered heritage values and the deployment of these values for the site's regeneration. The Arena district has undergone a critical shift in meaning: what was once a unique representation of a socialist answer to a military apparatus, is today a fragile and vulnerable projection of modernist social housing. In this light, a significant part of the Arena district, more specifically the Northern blocks, will be demolished in the upcoming future. However, we are convinced that research by design heralds many opportunities to not only preserve the present heritage values, but also add new layers and dimensions. There is already an extensive amount of research material on regeneration of projects with minimal to no heritage values.¹³ But dealing with housing projects in a heritage context brings up new complexities. Suggestions for further research are, in first instance, a more in-depth analysis of Renaat Braem and his work in the international context of Team X and La Tendenza. It is important to mention that almost none of Braem's publications have been translated to English or French. Only some fragmented aspects of his work have been positioned in a broader context.¹⁴ The aim of developing this broader framework is to understand the projects in time and space but also to argument new possible interventions and strategies in a research-by-design perspective, in which various scenarios could be developed, for the site's ongoing use.

5. Endnotes and quotations

¹ DE LONG, David, "To save history by design." *Society of Architectural Historians* 58 (1), 1999, 4–5.; PRUDON, Theodore H. M., 2008. *Preservation of Modern Architecture* Hoboken: John Wiley & Sons.

² BREAKEN, Jo, *Renaat Braem 1910–2001*, Brussel, ASA Publishers, Vlaams Instituut voor het Onroerend Erfgoed, 2010.

³ Ibid.

⁴ *L'Architecture d'Aujourd'hui* was a magazine of architecture of the Modern Movement in France and the rest of the world, founded by sculptor André Bloc (1896–1966) and engineer/architect Marcel Eugène Cahen (1883–1930).

⁵ STRAUVEN, Francis, *Renaat Braem architect*, Brussel: Archief voor moderne architectuur, 1983.; STRAUVEN, Francis, "Bekaert versus Braem," *De Witte Raaf*, 2010, accessed on January 15, <https://www.dewitteraaf.be/artikel/detail/nl/3656>.

⁶ 'The ugliest country in the world' (free translation in English).

⁷ BRAEM, Renaat, & STRAUVEN, Francis, *Het lelijkste land ter wereld*. Brussel, ASP Academic & Scientific Publishers, 2010.

⁸ RISSELADA, Max, & VAN DEN HEUVEL, Dirk, *TEAM 10. 1953–1981 In Search of a Utopia of the Present*, Rotterdam: NAI Uitgevers, 2005.

⁹ Some more detailed information can be found in the other participating paper 'Modernist housing in Kuwait, Adaptive Reuse of Al Sawaber Housing Complex' written by Diana Mosquera M. and Marie Moors.

¹⁰ MOORS, Marie, & PLEVOETS, Bie, "Re-reading the visions of the modernists of CIAM," *REHAB 2019 — The 4th International Conference on Preservation, Maintenance and Rehabilitation of Historic Buildings and Structures*, Guimaraes, Portugal, 2019.

¹¹ Braem wrote an article, entitled: 'De "Art Nouveau" en wij' (free translation in English: 'The Art Nouveau and us') for 'Paleis Der Academieën Brussel'.; BRAEM, Renaat, "De "Art Nouveau" en wij." *Mededelingen van de Koninklijke Vlaamse Academie voor Wetenschappen, Letteren en Schone Kunsten van België: Klasse der Schone Kunsten*, 31, 1969, 1.

¹² BREAKEN, Jo, *Renaat Braem 1910–2001*, Brussel, ASA Publishers, Vlaams Instituut voor het Onroerend Erfgoed, 2010.; MOORS, Marie, & PLEVOETS, Bie, “Re-reading the visions of the modernists of CIAM,” *REHAB 2019 — The 4th International Conference on Preservation, Maintenance and Rehabilitation of Historic Buildings and Structures*, Guimaraes, Portugal, 2019.

¹³ MOORS, Marie, “Reviving the modernist utopia,” *TRACE — Notes on Adaptive Reuse*, Vol. 2, 2019.

¹⁴ DE VOS, Els, “Living with High-Rise Modernity: The Modernist Kiel Housing Estate of Renaat Braem, A Catalyst to a Socialist Modern Way of Life?” *Home Cultures* 7 (2), 2015, 134–158. doi: 10.2752/175174210X12663437526098.

6. Bibliography

BRAEM, Renaat, “De “Art Nouveau” en wij.” *Mededelingen van de Koninklijke Vlaamse Academie voor Wetenschappen, Letteren en Schone Kunsten van België: Klasse der Schone Kunsten*, 31, 1969, 1.

BRAEM, Renaat, & STRAUVEN, Francis, *Het lelijkste land ter wereld*. Brussel, ASP Academic & Scientific Publishers, 2010.

BREAKEN, Jo, *Renaat Braem 1910–2001*, Brussel, ASA Publishers, Vlaams Instituut voor het Onroerend Erfgoed, 2010.

DE LONG, David, “To save history by design.” *Society of Architectural Historians* 58 (1), 1999, 4–5.

DE VOS, Els, “Living with High-Rise Modernity: The Modernist Kiel Housing Estate of Renaat Braem, A Catalyst to a Socialist Modern Way of Life?” *Home Cultures* 7 (2), 2015, 134–158. doi: 10.2752/175174210X12663437526098.

MOORS, Marie, & PLEVOETS, Bie, “Re-reading the visions of the modernists of CIAM,” *REHAB 2019 — The 4th International Conference on Preservation, Maintenance and Rehabilitation of Historic Buildings and Structures*, Guimaraes, Portugal, 2019.

MOORS, Marie, “Reviving the modernist utopia,” *TRACE — Notes on Adaptive Reuse*, Vol. 2, 2019.

PRUDON, Theodore H. M., 2008. *Preservation of Modern Architecture* Hoboken: John Wiley & Sons.

RISSELADA, Max, & VAN DEN HEUVEL, Dirk, *TEAM 10. 1953–1981 In Search of a Utopia of the Present*, Rotterdam: NAI Uitgevers, 2005.

STRAUVEN, Francis, *Renaat Braem architect*, Brussel: Archief voor moderne architectuur, 1983.

STRAUVEN, Francis, “Bekaert versus Braem,” *De Witte Raaf*, 2010, accessed on January 15, <https://www.dewitteraaf.be/artikel/detail/nl/3656>.

7. Biography

Marie Moors studied architecture at Hasselt University. Her master project was on display at the Biennale Architettura 2018 in Venice in the light of the Young Talent Architecture Award by the Fundació Mies van der Rohe (finalist). In 2018, she held a one-year internship at the TeamvanMeer! office in Hasselt, which specialises in restoration projects and heritage throughout Belgium. Currently, she is engaged in a PhD (FWO fundamental research) entitled ‘Re-reading modernist housing estates: An inquiry into the value of threatened heritage sites and the possibilities of adaptive reuse as a method for re-evaluation’ and part of the research group TRACE.