

Jaap Bakema, "The Friendship Diagram". © Het Nieuwe Instituut, Rotterdam, Archive of J.B. Bakema.

The survival and resurrection of a “Bakema-experiment” in an Amsterdam garden city

BY TIM NAGTEGAAL

There is a hidden gem in the Amsterdam garden cities. Jaap Bakema was the founder of an experiment in the 1950s. A piece of “Rotterdam in Amsterdam.” Based on the philosophy of an open society and the human scale. Forty years after completion, there is a call for renewal. The architect’s heritage ends up on the demolition list. Due to the economic crisis, demolition has been postponed and there was time for reflection. The neighborhood seems to survive the test of time. The careful renewal proves to be a great success. This is a story about the resurrection of a Bakema experiment.

What is the future of postwar neighborhoods in the Netherlands? Can these neighborhoods survive the ravages of time due to a changing society, concentrated social problems and the changing planning of the city? And what is the tenability of the ideals of a makeable open society? The relatively unknown “Bakema experiment” in the Amsterdam garden city Geuzenveld (also known as: “*Bakemabuurt*”) is central to this essay in order to answer this.

Postwar housing shortage

After WWII, the housing shortage in the Netherlands was the greatest public enemy. Meanwhile, there was a large growth in the Dutch population through the baby boomer generation. At that time, the belief in progress with more prosperity was great and the Dutch were fully committed to building a new, ideal society. A huge housing shortage had also arisen in Amsterdam. The *General Expansion Plan* for the city of Amsterdam, adopted in 1935, offered a solution. The masterpiece of Cornelis van Eesteren (1897-1988) offered space for thousands of new homes in the city. Four new garden cities were planned on the west side of the city: Slotermeer, Geuzenveld, Osdorp and Slotervaart.

The ideals of Bakema

In the years after the war, some architects and urban planners wanted to contribute to shaping a new ideal society. Architect Bakema (1914-1981) was one of them as he was looking for a way in which architecture and urban development could lead to an inclusive and ideal society. He described the social responsibility of an architect and the way in which people could feel better in a good built environment. In addition to the rational and functional, he advocated the emotional experience as an essential aspect of architecture. With the magazine *Forum* Bakema and some colleagues reached a large audience with inspiring ideas. He was one of the first architects to write, in 1951, through CIAM (*Congrès Internationaux d'Architecture Moderne*), that

architecture is relational in order to build friendships. This is an important moment in architectural theory, modernism and also the urban development of CIAM.

According to Bakema, the individual’s living environment must be shaped as part of the community. He emphasized the importance of the transition and interweaving of the structure of the building with the structure of the city. The well-known “friendship model” symbolized this. Architecture, according to him, is a natural play of shapes and space art. The sequence of spaces, their mutual relationship and the relationship with buildings and their environment create an image in which form and space merge. The form frames space and social life takes place in that space. Bakema described this as the “function of the form.” For him, architecture and urban design are a form of expressed social idealism. He liked to experiment and he inspired people with it.

Bakema designed according to the principle of a residential unit in the landscape through a composition of high-rise buildings, low-rise buildings, gallery houses, *maisonnettes* and rows of single-family and retirement homes. Larger residential buildings formed the structure of a residential unit. Residents had the choice to live under the trees, between the trees, or above the trees. Bakema believed that all groups and lifestyles should be given a place in a diverse residential area. A housing unit consisted of an average of 500 homes. Within this, this residential unit could be switched or mirrored, creating larger neighborhoods.

A combative discussion

In 1952, the first urban design was published for the garden city Geuzenveld. From 1953, architects started working on their own part. For the part that is now called the *Bakemabuurt*, a good working relationship was emerging between the designers Bakema, Jan Stokla (1920-2016), Mien Ruys (1904-1999) and Jan Bijhouwer (1898-1974) as a landscape supervisor. The designers were given four months to

develop and present an initial plan. During the following consultation most of the architects adhered to the urban plan of the Amsterdam Urban Development Department. However, the stubborn Rotterdam architects produced an alternative plan.

Bakema's plan was not enthusiastically received by the "Commission for the New Town" because of the shabby, cheap-looking quality and the mixture of low-rise with high-rise. The *Bakemabuurt* was the source of discussion about the inappropriate use of financial resources. The distinct design of gates, galleries, drying attics, and separate stairwells were interesting, but on the other hand it increased costs enormously for the total construction plan. In order to be able to guarantee the quality of all blocks and to spread the financial resources between them, the committee did not consider it was justifiable to build the gates and separate stairwells. Bakema strongly disagreed with this judgment and adhered to the principle of his expressive details and his relational vision.

A clear quest was visible during Bakema's design process. Several variants were designed in the period between 1953 and 1955. The architect used the ingredients from the "Rotterdam stamp." In 1948, together with Lotte Stam-Beese (1903-1988), he had conducted the first studies on this. He experimented with a combination consisting of low (two levels) and medium to high residential buildings (four to five levels). In addition, it appeared from drawings that Bakema gave a plot, which was formally outside the brief, an interpretation utilizing high-rise buildings (ten stories). He apparently considered this necessary in order to create a spatial composition that matched his ideals. Unfortunately, Bakema had to abandon the plan for high-rise in the final plan. It may have been one of the reasons why he was not completely satisfied with this experiment in Geuzenveld. In October 1953 the architect presented the definitive plan for his neighborhood in Geuzenveld. After many discussions, this plan was finally approved and in 1954 incorporated into the final development plan for the garden city of Geuzenveld.

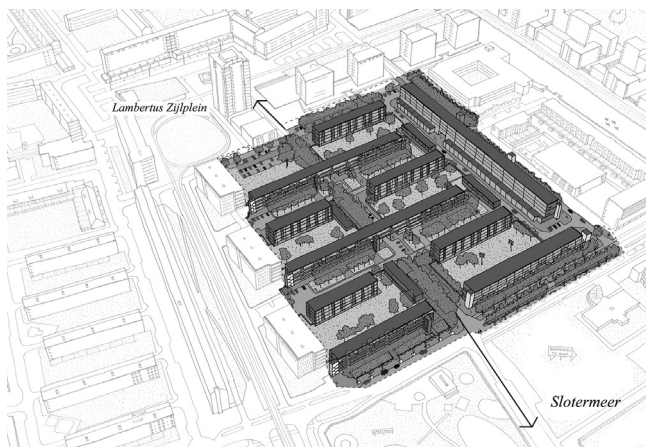
The spatial DNA of the Bakemabuurt

The *Bakemabuurt* is an experimental example of the realization of the ideas of leading designers of the *Nieuwe Bouwen* [New Construction] about public housing and, as such, is of architectural-historical importance. The design for the *Bakemabuurt* distinguishes itself from other housing plans from that time by the cohesion in the elaboration of urban development, architecture, and landscape design. The *Bakemabuurt* in Geuzenveld can be read as a three-dimensional Mondrian, composed of cube-shaped volumes in the form of buildings, stairwells, block-shaped shrubs, tight hedges, and tree blocks. The long gallery flats form the backbone of the spatial composition. Bakema sought to create intimacy in a pleasant human dimension by creating enclosed spaces. The architect does this, for example, by not aligning the building blocks with each other everywhere, which prevents spaces from continuing indefinitely.

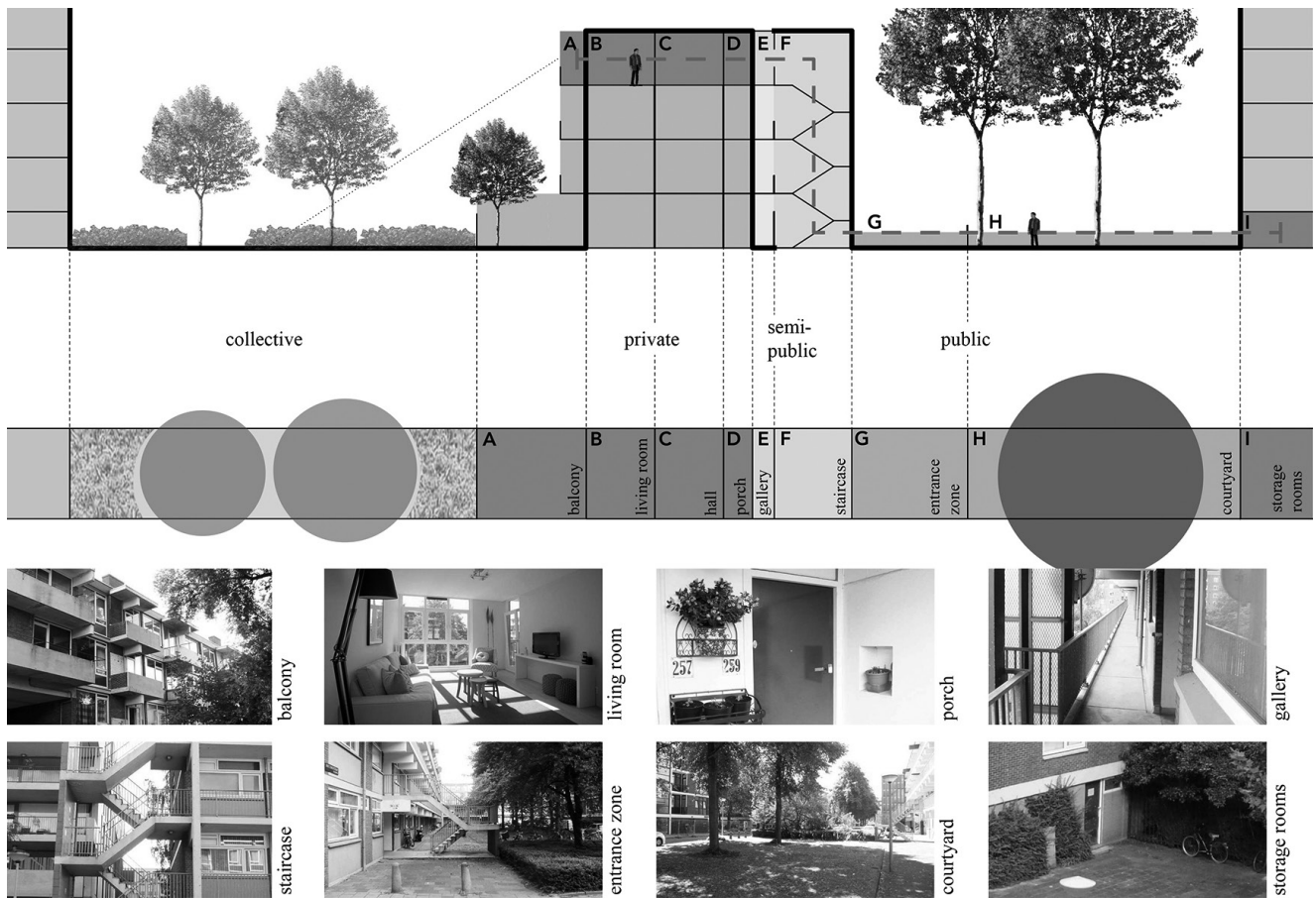
Due to the combination of expressive concrete, the plasticity of the pillars, balconies and the clearly articulated stairwells, the architecture has a heavy solidity that leans towards the characteristics of Brutalism. The image of the architecture is determined by the construction of elements and surfaces, a combination of concrete structures, masonry surfaces, facades, parapets, balconies, stairwells, and galleries. This creates an interesting composition of horizontal and vertical lines.

Bakema's goal was to create relationships between inside and outside and private and public at every level. The interweaving of urban development, architecture, and landscape design is expressed in the *Bakemabuurt* by the articulation of transitions between public space and private space, using the metaphor of "the threshold." It is a gradual transition from the public street to the front doors of the apartments. A special feature of the gallery flats is, for example, the entrances to the houses that are located at the back of the gallery. The *loggia*-like space clarifies the individuality of the home and is an important part of the transition between private and public. This makes the gallery flats look like a hybrid variant between a gallery and a porch. Bakema tries to give his ideas about collectivity a place by, for example, giving the residents of the gallery flats a storage room on the other side of the courtyard.

Mien Ruys was an influential and modern landscape architect in the mid-20th century and had an important role in the landscape design of the Amsterdam Garden Cities. Mien Ruys believed that landscape design should symbolize identity and diversity. Just as Bakema experimented with architecture, Mien Ruys experimented with landscape design. The *Bakemabuurt* is known at Mien Ruys for the so-called "*confectieborders*" ["ready-to-wear borders"].² She designed a color scheme with different ornamental values so that every place was different, and the residents can identify with a place in the neighborhood. Landscape design also pays a great deal of attention to the transition between public and private. The landscape design of trees, hedges, shrubs, and planting areas, together with the buildings, form a careful total composition.



01 Jaap Bakema, Jan Stokla, Mien Ruys and Jan Bijhouwer, *Bakemabuurt*, Geuzenveld, Amsterdam, 1953-1957. Bird's eye view of the *Bakemabuurt*, situation before renewal. © Tim Nagtegaal, 2014, City of Amsterdam.



02 Jaap Bakema, Jan Stokla, Mien Ruys and Jan Bijhouwer, *Bakemabuur*, Geuzenveld, Amsterdam, 1953-1957. Diagram of the "threshold principle" in the *Bakemabuur*. © Tim Nagtegaal, 2014, City of Amsterdam.

Living in the Bakemabuur

The *Bakemabuur* was completed in 1957. There is plenty of room for young families. After completion, the *Bakemabuur* consisted of 570 homes, 20 retail spaces (18 of which are on Sam van Houtenstraat) and 17 workshops/storage rooms for entrepreneurs. Stories from the first generation of residents show that the neighborhood was a very pleasant living environment. The society and togetherness was very strong due to the architectural design and the close proximity of the school and the church. The heart of the *Bakemabuur*, especially in the early years, was formed by the "room" in the *Dirk Sonoystraat*. This cozy meeting/function room with a multifunctional space is important for the neighborhood and contributes to social cohesion.

The architect's social ideas did not always turn out to be practical in practice. For example, residents find it inconvenient to have to walk to the other side of the street to get their bicycle from the storage room. The drying attics for drying the laundry also turned out to be impractical. Residents do not like to walk to the drying attics with their heavy wet laundry every time. That is also the reason why the drying attics were converted into homes after a few years. According to residents, this forced meeting is not necessary because the social cohesion in the neighborhood functions well. In the end, landscape architect Mien Ruys was not completely satisfied with the result of the applied

landscape design in the *Bakemabuur*. There were all kinds of problems at that time, such as lack of money and lack of materials. The large number of children playing caused damage to the plantings. In response to this, thorn bushes were planted in some places to keep the children out of the planted areas.

Change and decline

Due to increasing prosperity, native inhabitants in the 1960s and 1970s gradually move to better places and make way for labor migrants in particular. The neighborhood is gradually falling into a negative spiral due to various social problems. For a group of young people from Geuzenveld in 1970 the patience was exhausted. Bundled complaints are handed over to the mayor. Geuzenveld clearly does not meet the requirements of the welfare society for the youth and, because in the same period the youth is rebelling, the charge against the ruling system comes from the young. The degree of society is under increasing pressure. The neighborhood is in a bad condition due to burglaries and crime in those years. Residents feel less safe. In response, the inner gardens in the *Bakemabuur* are locked by high fences. Placing the fences almost seems to mark a changing society. However, the closure of the inner gardens goes against the principles of the original garden architect Mien Ruys. She was absolutely not in favor of defensive fences and fencing around inner



03 Jaap Bakema and Jan Stokla, *Bakemabuurtt*, Geuzenveld, Amsterdam, 1953-1957. Gallery flat building, situation after rebuilding by Gert Jan te Velde and Klaas Waarheid. © Tim Nagtegaal, 2019, City of Amsterdam.



04 Jaap Bakema and Jan Stokla, *Bakemabuurtt*, Geuzenveld, Amsterdam, 1953-1957. Porch flat building, situation before renewal. © Tim Nagtegaal, 2014, City of Amsterdam.



05 Jaap Bakema and Jan Stokla, *Bakemabuurtt*, Geuzenveld, Amsterdam, 1953-1957. Porch flat building, situation after renewal by Seth de Rooij. © Tim Nagtegaal, 2016, City of Amsterdam.



06 Jaap Bakema and Jan Stokla, *Bakemabuurtt*, Geuzenveld, Amsterdam, 1953-1957. Gallery flat building, situation before renewal. © Tim Nagtegaal, 2014, City of Amsterdam.

gardens because of the undesirable reference to the labor camps from the war. The placement of the fences also went against Bakema's collective ideas of the open society.

A paradise that needs adjustment

On 20th September 1995, the local *Parool* newspaper headlined with: "Garden city is a paradise that needs adjustment." Substantial investments are required to make the Western Garden Cities future-proof and to break the negative spiral. The *Bureau Parkstad* was established to give shape to this innovation. The *Bakemabuurtt* was one of those neighborhoods slated for demolition. It would then have taken years before there would have been a plan for renewal. Subsequently, discussions were held for years and a plan for renewal was signed. In 2005 a European competition was organized, and the winner came up with a plan for high-density patio housing; an idea that ultimately satisfied no-one. The idea of a *tabula rasa* turned out to be too easy a choice.

Renovation of a hidden gem

Once there was a plan for the new *Bakemabuurtt* and the first blocks (north of Sam van Houtenstraat) were demolished in 2008, the economic crisis broke out. This crisis turned out to be the salvation for this special Bakema heritage. The crisis led to a time of reflection. At that time, the *Stadgenoot* housing corporation saw opportunities in the preservation and restoration of the *Bakemabuurtt*. Between 2013 and 2019, the municipality of Amsterdam and *Stadgenoot* gradually worked on a careful, restoration and renewal approach. Plans were prepared for high-quality renovation, carefully fitted new construction and a fresh new landscape design.

As a first step, two porch flat buildings will be renovated to a high-quality design by Van Zwieten architects. The process for this renovation plan worked well and formed a starting point for the approach to the other three porch flat buildings. High-quality renovation is also being considered for the gallery flat buildings, but due to construction problems and an awkward shell, a plan for new construction

is being investigated as an alternative. Van Schagen architects are working on this challenging assignment. They ultimately managed to realize a successful design for a new construction. The restoration approach was done in a careful manner and has strong references to the striking features of the now-demolished gallery flat buildings. The architects are also working on the design of the new buildings at the Willem Baerdesenstraat, Sam van Houtenstraat and Dr. Colijnstraat. The last homes will be completed in 2022 and then the renovation of the *Bakemabuurtt* will be ready.

A new future

Stadgenoot offers housing in the new *Bakemabuurtt* as social housing, private sector rental housing and in the owner-occupied segment. From studio to large family home, there is room for everyone. The principle of mixing groups and lifestyles is in line with Bakema's original ideas. Residents from the gallery flat buildings still have their storage room in the porch flat building across the street. As a result, the architect's social ideology will remain alive for the time being. Bakema enthusiasts can be happy with the survival and resurrection of the Bakema experiment in Amsterdam's garden cities. It is a good example of a well thought-out social urban design concept that seems to stand the test of time. The question is for how long and whether the ideals of the open society of the architect in the *Bakemabuurtt* will be sustainable in the long term in an individualizing society. It will probably not pose a threat to the quality of life because the size of the neighborhood is compact and the mix of groups and lifestyles forms a strong foundation. Time will tell.

Notes

- 1 The "friendship model" is "a three-dimensional sociological diagram, symbolizing ideal human relationships. According to him [Bakema], 'it is about the way in which low, high, large and small buildings are spatially related, can be a means of making people feel at home in the total space.'", in CRIMSON architectural historians, *De Lijnbaan. Cultuurhistorische verkenning van het Lijnbaan ensemble*, December 2004, 45.
- 2 "Confectieborders" is a typical Dutch word, referring to a planting plan standardized by Mien Ruys.

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