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# <u>Modern Design:</u> <u>Social Commitment</u> & Quality of Life

#### Editors

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CARMEN JORDÁ SUCH MAITE PALOMARES FIGUERES ANA TOSTÕES UTA POTTGIESSER

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## Exploring visual language and typologies in Dutch midrise residential neighbourhoods

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Dutch residential neighbourhoods built after 1965 (Post 65) are characterised by a varied range of housing and living environments. As a reaction to the post-war Reconstruction period, architects and urban designers focussed on quality of life and identification with the living environment. Midrise housing was the compromise between high-rise and low-rise, combining quality and efficiency. Today, Post 65 residential neighbourhoods are not recognised as valuable architecture or cultural heritage. Although academic interest in Post 65 architecture is increasing, attributes of midrise typologies are understudied. Research is necessary to document and assess them, to inform stakeholders and contribute to decision making in renovation processes. The central question in this paper is: What are the urban and architectural attributes (tangible and intangible) of Dutch midrise residential neighbourhoods built after 1965? The paper discusses a comparative analysis of five residential midrise examples, focussing on building typology and visual language. The research applied mixed methods and integrates fieldwork, archival and literature research and uses 2D-matrices, juxtaposing urban and architectural attributes. Results show a variety in terms of typology and use of visual language. Two spatial organisational concepts are identified. A 'snake' shapes the urban space, and creates a front. It refers to a formal urban model in which the urban form is the starting point and the development of the building block a means to that end. A 'mesh' arranges housing units and urban space in a sprawling structure, in which a human scale living environment is the starting point. Regarding visual language, the projects show referencing to various architectural movements. This pluralism applies to the 'collection' of Post 65 midrise complexes but also to single neighbourhoods. The urban and architectural attributes are diverse, with diversity as the common denominator. Following Jencks' definitions, the Post 65 midrise neighbourhoods can therefore be regarded as Post-Modern.

#### 1. Post 65 midrise neighbourhoods

Housing construction in the Netherlands built after 1965 (Post 65) is characterised by a turn away from the urban planning and architecture of the post–war Reconstruction period. The housing shortage had become less acute and rising prosperity allowed for more attention to quality rather than mere quantity. In 1968, the Minister of Housing and Spatial Planning set up an experimental housing programme. Its aim was to promote innovations that would contribute to a better quality of life through a varied range of housing and living environments that reflected the increasing diversity in personal circumstances and preferences. This development was sparked by a broad dissatisfaction with the monotony and uniformity of housing construction in the Reconstruction period [1].

#### **Post 65 Architectural Movements**

Already in 1959, the new board of Forum-magazine accused architects and planners of making The Netherlands 'unliveable' and called for a new architecture that would create 'liveable cities' and coherence between people and things. It was a reaction to CIAM Functionalism, in which the separation between living, working, recreation and traffic was an important starting point [2]. The new movement, in the Netherlands led by protagonists Van Eyck and Hertzberger, was related to Team X and later termed Structuralism. Structuralism proposed inclusive and social space and is recognised by open structures, composition of small units and mixed functions [3]. By the end of the 1970s, new frontrunners like Weeber protested against the small-scale participatory architecture of Structuralism. Weeber advocated a rational and formal urban model with clear hierarchy. This Neo–Rationalism was based on modernist traditions and restored the distinction between urbanism and architecture [4]. In the same period Post-Modernism was internationally propagated by Venturi and Jencks, assuming that architecture is a language of symbols and codes communicating to its users [5]. Post–Modernism uses 'double coding' in which links are established between the present and the past, between new and old techniques, between the elite and the popular [6]. The general picture is that 20<sup>th</sup> century Dutch architecture is strongly rooted in Modernism, explaining why Post–Modernism and Classicism, did not catch on in the Netherlands. However, it is stated that this refers only to the stylistic tradition of form and not to the ideological tradition of Modernism [Van Dijk in: 7]. Soeters, who is often called the only Dutch Post–Modern architect, refutes the claim that the Netherlands has no postmodern architecture. He states that discussing Post-Modernism, actually Post-Modern Classicism is meant. "In the 1980s, there was a Post–Modern condition to which many were trying to respond. (...) I did play a more explicit role in the postmodern circus that experimented with forms that had a kind of cliché–like meaning [Soeters in: 8].

#### **Midrise Alternatives**

Almost a third of the Dutch housing stock dates from 1965–1985 [9]. Although low–rise is the dominant urban typology in numbers (69%) [10], midrise residential typologies embody an essential change in ideology. In 1976, an article announced the revival of midrise typology in alternative forms. Its title "Stacked low-rise buildings: multi-family houses, but cosy" expressed the idealisation of low-rise and the resistance to stacked housing. The development of new midrise models is explained from a re-valuation of the urban and natural environment, decrease in the quantitative housing shortage, and increase in land costs and land use. The objectives include an increase in density, commercial and community facilities, public transport, a mix of living and working, and opportunities for social contact [11]. In the Post 65 period, various forms of midrise have developed, which can be found in central areas of suburban new towns and satellite towns, as well as in renewal areas of 19th century inner cities.

#### **Research** approach

Today, Post 65 residential neighbourhoods are not yet recognised as valuable architecture or cultural heritage. In recent years, academic interest in Post 65 architecture is increasing and heritage institutes have started its exploration. The Dutch Cultural Heritage Agency has defined 1965–1990 as the Post 65 period and identifies the urgency for its research from the upcoming energy transition and demographic changes [12]. Studies on low–rise 'woonerf' neighbourhoods have been published [13, 14]. However, not many evaluations of midrise typologies are available and especially their architectural attributes are understudied. Research is necessary to document and assess them, to inform stakeholders and contribute to decision making in renovation processes.

The central question in this paper is: What are the urban and architectural attributes of Dutch midrise residential neighbourhoods built after 1965? This paper presents and discusses the results of a comparative analysis of residential midrise examples, to reveal the characteristics, ideologies and influences. The emphasis in this paper is on identifying building typologies and visual language. To this end, the objectives of midrise alternatives and the Post 65 architectural movements described in the introduction serve as an analytical framework.

This research applied mixed methods derived from the 1976 exhibition 'Signs of Life: Symbols of the American City' by Venturi and Scott Brown. The method for data collection integrates fieldwork, archival and literature research. Data visualisation uses 2D-matrices, juxtaposing urban and architectural elements. First, the cases will be described, highlighting their main characteristics and design motives. Secondly, the cases will be compared on building type and visual language. Finally, analysis results are related to the theory and the research question.

#### 2. A range of midrise typologies

The examples share functional and social objectives and present midrise as model for urban and architectural quality as promoted by the architectural movements. But taking a closer look at each neighbourhood and midrise complex, one can observe differences in urban structure, building type, articulation of form, façade composition and use of elements and materials. These attributes are illustrated in this paper by discussing and comparing five case studies (Fig. 1)



Figure 1. Matrix of urban and architectural physical attributes.

#### De Bergen

Against the backdrop of high-rise blocks, this midrise complex 'De Bergen' in new town Capelle aan den IJssel, was designed by the architect Benno Stegeman and completed in 1978. It comprises 878 dwellings in 65 residential towers of 3 or 4 layers on an elevated deck. Centrally placed lifts in every tower connect the ground floor parking and pedestrian zone to the dwellings of a variety of sizes and shapes. De Bergen exemplifies a design strategy to create a larger whole by putting together small parts. The external space and built form of the complex is derived from linking geometric shapes [15], which is typical for Structuralism. The façades and balconies echo the octagonal design of the floorplan and are made of reddish-brown brickwork with a serration at the corners as ornament. The craftsman-like appearance and the plasticity of the brick facades are reminiscent of the Amsterdam School. The architect aimed for recognisability and an environment where residents can feel 'whole', in contrast to flat façades with identical doors assuming that people are all the same [16].

#### Woondekken

Also in new town Zoetermeer, the rejection of high–rise gave way to a testing ground for new forms of living. The project Woondekken, designed by architect Alberts and completed in 1975, applies the principle of dual land use. It contains 239 dwellings in three types. Split–level units are situated on the edges of semi–underground car parks, bordering both the deck and the ground. In the central area on top of the deck are smaller patio houses. Surrounding these complexes, regular terraced housing has been arranged [17]. The dual land use with parking under the residential deck was intended to achieve a high housing density at low cost. The architect strives for mixture of urban and rural character by stony, busy narrow streets on the deck with broad, peaceful green areas on the outer edges. Craftmanship, exposed masonry, irregularly staggered façades, large and small sloping roof surfaces are applied to create a differentiation of spaces and to give each house its own identity [18].

#### Bijlmerplein

The architectural design by Atelier Pro includes 137 dwellings, 8.000 m2 of retail space, a district library (today a supermarket), 5.500 m2 office space and a parking garage. The buildings were completed in 1987 as part of the larger entity 'Amsterdamse Poort' which is the main shopping area of satellite town Bijlmermeer, now called Amsterdam Zuidoost [19]. Its urban designers Van den Broek and Bakema aimed at an 'urban' spatial experience, meaning that it should correspond more to traditional city centres than to the CIAM based design of the high–rise part of Bijlmermeer. The offices along the edges of the scheme are located on elevated highways that give access to elevated courtyards where the entrances to the housing units are located. Within the urban fabric, there is a varied alternation of pedestrian streets and squares

with buildings up to five storeys with dwellings on a plinth of shops [20]. The blocks have flat roofs and feature white brick facades with white-yellow patterns. The facades are characterised by a strong relief due to canopies, balconies and alcoves of different shapes.

#### Centrum Almere-Haven

Almere–Haven was the first neighbourhood of new town Almere, built on reclaimed land. Almere–Haven was designed as a suburban area with mostly low–rise neighbourhoods. The urban plan for its centre refers to the traditional Dutch city with characteristic urban attributes like canals, canal houses and narrow street profiles. The architecture firm ABBT designed a main building block that was completed in 1979 and contains 125 dwelling units of different sizes on a plinth with 40 shops and office spaces. This mixed–use model was based on old city centres. The volumes are shifted in position and vary in height, each being articulated by a gabled roof [21]. The front of the block borders on a pedestrian area and the block encloses a car park and shipping area at the back. The facades feature red brick with white ornaments and the entrances to the dwellings are indicated by concrete arches. By carefully constructing a continuous 'wall' that bends a few times, following the canal profile and forming the main square, the architects aimed at providing guidance in the multitude of spatial forms and accents [22].

#### Hoptille

The Hoptille neighbourhood in Bijlmermeer was completed in 1981 and has 333 homes of various types, ranging from studios and two-room flats accessed from an internal corridor to five-room duplexes at ground floor level. The architects Rijnboutt en Soeters were allowed to introduce a novel urban typology that was presented as a 'correction' to the prevailing high-rise. Hoptille not only represented a different type of building, but created a new image for the Bijlmermeer [20]. The ten-storey building height prescribed in the zoning plan was divided, at the same density, into a 300 m long wall of five storeys with small-scale low-rise buildings sheltered behind it. Also architecturally, Hoptille is a reaction to the high-rise buildings. Based on an observed lack of identification possibilities pertinent to common high-rises, the architects were looking for new symbols for the home and living environment. The 'wall' has a contrasting front and back façade, explicit use of colour, a top floor designed as a cornice, gates that are accentuated by volumes with a pink-painted arch and expressive concrete slabs with round holes dividing the rounded balconies [23].

#### Comparison

Hoptille and Centrum Almere–Haven are elongated buildings with a complex section involving various housing types. The wall–like structures can be

identified as a 'snake', shaping the urban space, separating environments and creating a front. It refers to a formal urban model in which the urban form is the starting point and the development of the building block a means to that end. De Bergen and Woondekken are compositions of repetitive smaller elements into larger structures. They also include a variety of housing types, but organised around an elevated deck. The deck character varies from semi-private outdoor space in De Bergen to extended public space in Woondekken. These sprawling complexes can be identified as a 'mesh' in which housing units, spaces, transitions, greenery, vistas, stairs, entrances and passageways are arranged. The human scale living environment is the goal and the building form the result.

Bijlmerplein is a hybrid of 'snake' and 'mesh'. The building blocks are shaped to form a sequence of squares and streets. On the other hand, it has ingredients of a 'mesh', such as the elevated deck that provides a human living environment, collective outdoor space and infrastructural connections to the surroundings. De Bergen and Hoptille are most autonomous, turning away from their urban context as fortresses. Also in terms of architectural expression, however different, they contrast with the surrounding architecture. The other cases rather mediate between human–scale residential qualities and the larger scale of an urban area.

Comparing the projects on visual language, the palette is very diverse. The expression and materialisation of De Bergen was inspired by both Structuralism and the Amsterdam School of the interbellum. Also in Woondekken, irregular Structuralist form is an attribute, although the implementation is more functional, drawing on traditional craftmanship. In Bijlmerplein and Centrum Almere–Haven archetypical features have been applied, such as a shopping arcade supported by columns alongside the building and the arches marking entrances, linking Classical codes with new techniques as means of communication and identification. Centrum Almere-Haven shows codes of the traditional Dutch town, both in its architecture and urban attributes, whereas in Bijlmerplein has both Classical and Modernist formal attributes. Both cases reintroduce the traditional city in terms of mixed use and sequences of urban spaces. In Hoptille the expression of Post-Modern codes is more explicit, using clear shapes, colours and archetypical attributes as gate, tympanum and arch as symbol for identification. Regarding visual language, the projects show referencing to various previous architectural movements and related elements, resulting in a diversity of attributes at an urban, building, or material level or combinations thereof (Fig. 2). This applies to the range of examples and to the individual cases. There is no dominant style but a plurality of visual languages.

#### 3. Conclusions

The examples have shown a range of building types and visual languages. Their objectives are identical, focussing on quality of life and identification



Figure 2. Collage of archetypal attributes

as a reaction to the repetitive and uniform architecture of the post-war Reconstruction period, but the means to achieve them differ. For example, the need for identification has been responded in De Bergen and Woondekken by an irregularity of spaces providing individual shelter and identity, while at Hoptille and Centrum Almere–Haven it is by recognition of symbols. However, the traditional brickwork and the gabled roofs in Woondekken are also symbols of the archetypical house, while Centrum Almere–Haven also has alcoves for shelter. Regarding building typology, the 'snake' and the 'mesh' are identified as alternatives of traditional midrise. These typologies make use of a diversity of functions and housing types and dual land use, while still providing a high–quality living environment. In many cases typological and visual means are combined.

This mixing can be named 'Pluralism' in the sequence of the –isms discussed in the introduction of architectural movements. However, Pluralism was not a preconceived ideology but the result of harking back to earlier ideologies. This pluralism applies to the 'collection' of Post 65 midrise complexes as a whole but is also identified within the context of one neighbourhood. The urban and architectural attributes are diverse, with diversity as the common denominator. The statement by Charles Jencks that 'Pluralism is the Post– Modern ideology above all others (...) there is simply no dominant cultural style or ethos' [5] is reflected in the stock of Post 65 midrise residential buildings. Following Jencks' line, and based on the cases discussed in this paper, the Post 65 midrise neighbourhoods can be regarded as Post–Modern.

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