

Habraken and Koolhaas: Two Dutchmen Flying over Bijlmermeer

JUNE P. WILLIAMSON
Georgia Institute of Technology

Introduction

THE BIJLMER OFFERS BOREDOM ON A HEROIC SCALE. IN ITS MONOTONY, HARSHNESS, AND EVEN BRUTALITY, IT IS, IRONICALLY, REFRESHING.

—Rem Koolhaas¹

HOW CAN WE DESIGN LARGE PROJECTS WITHOUT NECESSARILY IMPOSING UNIFORMITY AND RIGIDITY WHERE VARIETY AND ADAPTABILITY OVER TIME ARE DESIRED? HOW CAN THE BIG PROJECT NEVERTHELESS DO JUSTICE TO THE SMALL SCALE?

—N. J. Habraken²

This paper examines the differing, though related, attitudes toward scale exhibited by N. John Habraken and Rem Koolhaas, as exemplified by their reactions to the residential district of Bijlmermeer in South Amsterdam. Habraken has consistently advocated for the creation and preservation of fine-grained urban tissue in the built environment. He has observed and described the increasing coarseness of grain that characterizes twentieth century urban projects, particularly mass housing, using figure-ground plans of Amsterdam as a telling example of the transformation. In his latest book *The Structure of the Ordinary*, which represents the synthesis of many years of observation and reflection, Habraken carefully outlines his arguments about structuring scale point by point, grain by grain. Conversely, Koolhaas, Habraken's countryman, polemically argues that the Extra Large is a contemporary reality to be welcomed, not bemoaned. OMA's 1986 project for Bijlmermeer illustrates this position.

A Latter-Day Ville Radieuse

An aerial vantagepoint is required to comprehend the scale and spatial organization of the Bijlmermeer district in the southern sector of Amsterdam. One may also characterize as "top down" the planning process that led to the design and construction of the district. The extension, on a large reclaimed sector of land to the southeast of the central city, was begun in 1966 by the Amsterdam Department of Urban Development and continued into the 1980's. The intention was to ease overcrowding in the central city and other low-income areas by providing housing for up to 120,000 low-income residents. The project was a revision of the final phase of expansion envisioned in the General Extension Plan for Amsterdam from the '30's, which grew out of the ideas and projects of H.P. Berlage.³

The planners carefully aligned their vision with the program of the 1933 CIAM Athens Charter. The very large project, con-

sisting of 4,420 acres of virgin land, provided an opportunity to comprehensively realize the forms and concepts of Le Corbusier's Ville Radieuse. This "retrospective" adherence to ideas of the '20's and '30's is curious. When examining the overall plan and development strategy at Bijlmermeer it is clear that the Ville Radieuse provided a very direct model.

The majority of the housing is concentrated in flats in medium-rise 11 story linear buildings that are placed far apart on open land, to maximize access to natural light and air. Conventional streets are eliminated. Automobile traffic is concentrated on elevated high-speed motorways with direct exits to collective parking garages. Three new metro lines were also planned. Industrial and recreation uses are kept distinctly separated from residential areas. The housing projections anticipated inhabitant densities higher than in other newly built sectors of Amsterdam.⁴ In accordance with Le Corbusier's vision, the open land was intended to be freely accessible landscaped parkland to provide a sense of human scale, crossed by paths for pedestrians and cyclists. The corridors of the long block buildings were intended to serve as "streets in the air" where residents might interact socially, removed from the congestion and grime of 19th century corridor roads. The fixed nature of the plan does not reflect the later calls within CIAM to address open-endedness and capacities for growth and change.

The majority of the buildings adhere to a relentless hexagonal geometry, so striking from the aerial perspective. This geometry is the main deviation in the scheme from the orthogonal orthodoxy of modernism. As Koolhaas notes, the hexagonals extend down in scale to the jungle gyms in the children's' playground.⁵ Only at the periphery of the masterplanned area are there low-rise buildings that do not conform to this monotonous formal theme. The backlash was immediate. The generation of Dutch architects with the most influence in the late '60's and early '70's were protagonists and followers of Team X (organizers of the last CIAM in Dubrovnik, 1956), such as Aldo van

Eyck and his follower Herman Hertzberger.

In its realized form, the Bijlmer provides few of the advantages suggested by the CIAM program. The open space is barren, asphalted, and littered with errant automobiles; the concrete walls of the corridor/streets are covered with graffiti; and the poor immigrant inhabitants are isolated from, rather than directly connected into, the center city life of Amsterdam.

Habraken's Fly-over

The critique of Modernist planning by Team X was the context for N. John Habraken's intellectual coming of age. His first book, *Supports*, was published in 1962 (English edition in 1972). It is a reactionary polemic against industrialized mass housing (which he abbreviates as MH) as a solution to the postwar European "housing problem." The essence of his argument is that MH eliminates the user/inhabitant from the process of designing housing.

The essay was published without illustrations or specific examples. Instead, the problem is described in terms of the conditions and values that provide the context for MH solutions against which a possible alternative is juxtaposed. This alternative, called "support dwelling," would provide inhabitants the opportunity for involvement in determining the form and configuration of their dwelling units, within a predetermined infrastructure. In contrast to the seductively illustrated manifestos of Modernism and other utopians, Habraken provides only a hypothesis.

Habraken's rhetoric is measured and calm. His focus is on careful descriptions of ideas that support a seemingly modest and eminently sensible proposal, which is that the "conclusion must be that the return of consultation and involvement on the part of the users, in the most literal sense, must be accepted."⁶ Rather than incitement to revolution, the reader is provided with a text of intoxicating reasonableness. Repetition is used to "support" the hypothesis: the arguments are built up point by point, just like the fine-grained urban tissue he was later to advocate. Some found his ideas naïve and over-generalized.⁷ Others were mobilized to concrete action.

In 1964, the SAR (Foundation for Architectural Research) was organized in Eindhoven, Holland to explore the architectural potential of industrialized support dwelling. Habraken was the organization's director until 1975. One of the first design applications of the resulting formal ideas of support and infill structures was at Bijlmermeer. The low-rise Bijlmer support system was developed in 1970 in conjunction with K. Rijnboutt, an architect in the Department of Public Housing of the City of Amsterdam. The dwellings are designed to be accessible from a covered pedestrian street. The building is separated into zones and margins, to structure and control the extent of variation possible in determining the layout of individual units.⁸

Habraken extended the argument in *Supports* to a more general argument against professionalism and towards an appreciation for the territorial complexity of vernacular and self-built urban areas, which he called tissues. He characterizes urban tis-

sues in terms of graining. Finer-grained urban environments are usually territorially more complex. Habraken repeatedly uses aerial photographs or figure-ground plans of the Bijlmer compared to 17th century central Amsterdam, as a leitmotif in his criticism of the coarsening of the urban grain.⁹ He writes, "within areas of the same size we see hundreds of independent physical units in the first and only a few in the latter... The capacity for transformations in the site is of course directly related to the number of configurations that can change independently." And, "density simply cannot be the rationale behind the arrangement. The same density can usually be reached with three or four story buildings along residential streets. The undeniable difference of highrise projects compared to the lowrise solution is the dramatic shift towards full public control of outside space."¹⁰ In other words, the natural desire of those in control (i.e. professionals) to consolidate the amount of territory over which they may exert their control has gone unchecked. But he also admits that "it is...much less simple to develop a close and fine-grained territory than an open coarse-grained territory with the same housing density."¹¹

Explicit in Habraken's argument is the ever-present propensity for change.¹² His set of values assumes the desirability of variety in the urban environment. His theories propose methods and strategies for maximizing the opportunities for individuals to exert control over the physical form of various portions of the built environment. Implicit is a broad acceptance of differing visual and form-making approaches as long as the apparatus of centralized control is dismantled. Therefore, Habraken does not directly critique Bijlmermeer; instead, he addresses the centralized bureaucratic structure of the organizations that planned and designed it. His critique extends a life-rope to the moribund, suggesting that fine-grained interventions over time might transform the site.

Koolhaas's Fly-over

The principles of zoning as a tool for designing adaptable schemes as developed by the SAR group are a significant precedent for the design strategies later reinterpreted by Rem Koolhaas.¹³ The notion of dissecting a building (or a landscape or an urban area) into zones to be considered independently rather than as an integrated whole held enormous appeal both as a tool for analysis and as a methodology for design. Zoning as an analysis tool was explored in the discussion of the Downtown Athletic Club in Koolhaas's 1978 book *Delirious New York*. However, the rhetoric of zoning in this guise is completely different from the charts and diagrams of the SAR; Koolhaas delights in sexual innuendo and the playful use of language and his text is awash in irony and simulacra. "In an abstract choreography, the building's athletes shuttle up and down between its 38 "plots" in a sequence as random as only an elevator man can make it each equipped with techno-psychic apparatus for the men's own redesign."¹⁴

The principles of zoning used as the basis for a design meth-

odology is apparent in the competition design for Parc de la Villette and other OMA projects from the early 1980's. This was also the primary design strategy utilized in OMA's project at Bijlmermeer. As already noted, before it was even completed the Bijlmer district of Amsterdam had become an embarrassment to the city. Proposals were floated to tear the slab buildings down; in search of alternate solutions, officials commissioned OMA in 1986 to propose a plan to revitalize the district.

Koolhaas and his partners were already familiar with the site; in a 1976 essay entitled "Las Vegas of the Welfare State" Koolhaas had characterized the Bijlmer as a socialist spectacle, embodying the extreme result of the themes of "equality, puritanism, physical and mental health, a New Age."¹⁵ In its excesses he identified a retroactive polemic against the "postmodernist, anti-CIAM principles" of van Eyck, Hertzberger and other Team X influenced architects in Holland whom he accused of a "fetishistic concern with the ineffable and the qualitative" that equaled CIAM's concern with the objective and the quantifiable.¹⁶ The Bijlmer offered "boredom on a heroic scale," and Koolhaas found this refreshing, just as Venturi and Scott Brown delighted in the signs and symbols of Las Vegas. When teaching at the Architectural Association in London in 1978 he and his partners used the Bijlmer as a site for a studio in which students proposed large building interventions.¹⁷

In their alternate plan, Koolhaas and OMA proposed to learn from the Bijlmer, rather than reject it. In the 1976 essay Koolhaas had accused the major Dutch architects of the time as having turned to an architecture of "social remedy" and described their output, such as Hertzberger's De Drie Hoven (Old People's Home) and van Eyck's Orphanage, as a "soft-core gulag for the vulnerable."¹⁸ In contrast, OMA proposed that the district needed increased urbanization, not removal and replacement. Interestingly this strategy, if not its motivation, aligns with the goals of Habraken.

They proposed to infill the site by adding new, overlapped zones of programming across the barren open space, which had become underutilized no-man's land. First would be added street-like bands of parking rather than centralized garages, followed by the introduction of an international marketplace/boulevard in the empty space below the elevated metro tracks. The green space would contract into intensely landscaped bands, meandering paths would become direct, and a process of "typological bombardment" would introduce new uses interspersed between the housing slabs to provide new focus and identity to each hexagonal courtyard within the project. But the project was not implemented, nor was the Bijlmer demolished.

Collision Course

Koolhaas' story of his involvement with the Bijlmer ends with the disastrous El Al freight plane crash of '92. "Then one day a jumbo jet fell from the air and made a start with the destruction. The other side had won."¹⁹ The airplane crashed dramatically into one of the housing slabs, causing the loss of 250 lives and

renewed focus on the plight of the majority immigrant population (from Surinam) who live there, and on the attempts by Dutch culture to come to terms with multiple ethnicities. Inquiries into the crash and memorials for the victims continue. One notable recent project at the site is a memorial garden by Descombes Architects with Architectuurstudio Herman Hertzberger.²⁰

The ideas of Habraken and Koolhaas collide over the issue of control in the design and planning process. The issue of control, regardless of political ideology, was at the center of Habraken's critique of mass housing. Koolhaas chooses to address ideology directly when blaming (or praising?) the welfare state for the refreshing boredom of the Bijlmer. The essential difference is that Habraken seeks to recreate variety within the ordinary, regardless of the ideology, while Koolhaas, a member of the post-68 generation, cannot escape it. Habraken writes, "I have yet to succeed in demonstrating the morphological differences between the public housing products of capitalism and those of Marxism as long as the process in both cases is not the process of the fine-grained division of power."²¹ Conversely, Koolhaas encourages the simulation of variety, rather than its actuality, through the vehicle of the spectacle. He is too cynical to accept Habraken's line: "Whatever variety exists is obviously a simulated variety that attempts to reproduce synthetically an Umwelt free from all the controls that are responsible for its very formation."²²

Subsequent Trajectories

Since 1986, Koolhaas has increasingly embraced the ideology and ethics of late capitalism. He has announced, "The city is no longer."²³ It seems that it is now his desire to build fast, build big, build NOW, for yesterday and tomorrow are of no concern if one has access to control today. Added to his advocacy of large-scale projects with centralized control is the recognition that current building practices do not guarantee a life span for a building of more than thirty years, especially in Asia. He suggests that larger spatial sizes are accompanied by shorter temporal intervals. Entire areas will be wiped out and rebuilt as required by the forces of capital rather than accrued piecemeal over time.

Habraken, meanwhile, has doggedly continued applied research into ideas growing out of the initial premises of *Supports*. He has retained his optimism about the power of careful description and about the potential for designers of the built environment to learn through recognizing the processes that "structure the ordinary." He writes:

The pedestrian realm moves into the shopping mall, the office tower, the institutional complex or residential apartment complex. Atria, escalators, and corridors begin to articulate hierarchy in an exclusively pedestrian three-dimensional net form. [...] Intensive relations between form and use, familiar to us from the historic pedestrian fabric, may be reinterpreted in the large building, the result may ultimately create richer hierarchy within city form.²⁴

He has continued to pursue variable housing methodologies that utilize the potentials of industrialized mass production. He is involved with the "Open Building" group, which has piloted projects in Japan and Holland with the cooperation of industrial manufacturers. The focus has shifted to improved infrastructure systems that may be easily separated from the main building support structure and selectively replaced or reconfigured. One promising example is the Matura infill system, which includes a matrix tile layer above the floor that holds water, heating and sewage (pressurized to run horizontally), coupled with a base-board for electrical conduit.²⁵ These very small elements have the capacity to radically alter how large housing projects are conceived, designed and delivered.

Meanwhile, the future trajectory of the Bijlmer remains indeterminate.

NOTES

- ¹ Rem Koolhaas, "Las Vegas of the Welfare State," *O.M.A., Rem Koolhaas and Bruce Mau, S, M, L, XL (New York: Monacelli Press, Inc., 1996) 871.*
- ² N. John Habraken, "The Control of Complexity," *Places 4:2 (1987): 3.*
- ³ D.A. Pinder, "Urban Expansion and the Bijlmermeer Project in Amsterdam," *Housing and Planning Review 28:1 (1972): 17-20.*
- ⁴ Hugh McClintock and Michael Fox, "The Bijlmermeer development and the expansion of Amsterdam," *Royal Town Planning Institute Journal 57:7 (1971): 313-316.*
- ⁵ Koolhaas, *S, M, L, XL 866, 876.*
- ⁶ Habraken, *Supports: An Alternative to Mass Housing (New York: Praeger Publishers, 1972) 3.*
- ⁷ Robert Gutman, "Simple-Minded Utopianism And Autocratic Non-sense," *Landscape Architecture 63:2 (1973): 166-169.*
- ⁸ Habraken, J.T. Boekholt, A.P. Thijssen and P.J.M. Dinjens, *Variations: The Systematic Design of Supports (Cambridge, MA: MIT Laboratory of Architecture and Planning, 1976) 126-135.*
- ⁹ Habraken, "The Limits of Professionalism," *AA Quarterly 8:1 (1976) 52-59; Habraken, Transformations of the Site (Awater Press, 1988) plate xi; Habraken, The Structure of the Ordinary (Cambridge, MA: MIT Press, 1998) 324.*
- ¹⁰ Habraken, *Transformations of the Site, 182.*
- ¹¹ Habraken, "The Limits of Professionalism," 57.
- ¹² Habraken, *The Structure of the Ordinary, 7.*
- ¹³ Bernard Leupen, Christoph Grafe, Nicola Kornig, Marc Lampe and Peter de Zeeuw, *Design and Analysis (New York: Van Nostrand Reinhold, 1997) 64-65.*
- ¹⁴ Koolhaas, *Delirious New York (1978; New York: The Monacelli Press, Inc., 1994) 157.*
- ¹⁵ Koolhaas, *S, M, L, XL, 863.*
- ¹⁶ Koolhaas, *S, M, L, XL, 867.*
- ¹⁷ *Catalog of work at the Architectural Association during the 1978-79 school year.*
- ¹⁸ Koolhaas, *S, M, L, XL, 867.*
- ¹⁹ Koolhaas, *S, M, L, XL, 886.*
- ²⁰ "The Growing Monument," *Werk, Bauen + Wohnen 6 (1999): 42-45.* See also "Dal Suriname a Bijlmermeer," *Space and Society 67 (1994): 70-71.*
- ²¹ Habraken, "The Limits of Professionalism," 57.
- ²² Koolhaas, *S, M, L, XL, 871.*
- ²³ Koolhaas, "The Generic City," *S, M, L, XL, 1264.*
- ²⁴ Habraken, *The Structure of the Ordinary, 121.*
- ²⁵ Habraken, "The Open Building Approach: Examples and Principles," paper delivered at the Housing Seminar, Taipei R.O.C., 1994.