

DIAMONDS IN SAHARA
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The title of the Exhibition and this catalogue was inspired by Pi de Bruijn, who first used it as a metaphor to describe the two housing projects under examination and to characterize the dialogue the projects helped establish between METU in Turkey and Nagele in the Netherlands.

NAGELE: A MODERN VILLAGE ON NEW LAND

A. M. Blom | P. J. Timmer

The village of Nagele in the Noordoost polder is an outstanding example of the Nieuwe Bouwen movement (Modern Movement) in the Netherlands. In Nagele, architects, urban planners, landscape architects and sociologists were given the opportunity to implement their ideas about community development in accordance with the principles of functional classification and segregation, and the motto “light, air and space” developed during CIAM meetings in the 1920s and 1930s. In 2011, Nagele was selected as a site of national importance symbolizing the post-war reconstruction period (1940–1965). While the Dutch government wants to conserve the unique characteristics of the village, at the same time, Nagele is facing spatial and social challenges in remaining an attractive village in the future.

Nagele is not only distinctive as a product of the Modern Movement, it also fits perfectly within the Dutch planning tradition. The Netherlands is a man-made land, and spatial planning in the country has always been closely intertwined with the fight against water. The Netherlands lies largely below sea level and is crossed by large rivers, and for centuries, *terpen* (artificial dwelling mounds) and the construction of dikes have been an effective way of allowing habitation and fertile farmland to flourish. By draining the wetlands, the Dutch have managed to elevate the creation of land from water into an art form. Despite the constant threat of water, the Netherlands has always been a densely populated country, which remains as a key reason for proper organization in land use and spatial development.

¹This distinction of four functions often leads to the misconception that modernists wanted to force functional segregation upon urban planning. During the CIAM meeting, they wanted only to research the relationship between and the planning of these functions.

PUBLIC HOUSING

With the rise of industrialization in the last quarter of the 19th century, Dutch cities witnessed rapid expansion, although this growth was unable to absorb the increasing flow of the working-class population, who often lived in miserable and poor sanitary conditions. Under pressure from progressive politicians and medical scientists, the government decided to introduce the Housing Act (1901), aimed primarily at improving public housing by making possible the construction of new dwellings for the working class through expropriation and government subsidies. Consequently, in 1921, local authorities were given the task of drawing up urban expansion plans. Since the establishment of the Housing Act, architects have debated intensively on architecture and new building construction techniques, as well as on their social responsibilities in society. Internationally renowned pre-war neighborhoods such as Vreewijk in Rotterdam (M.J. Granpré Molière, 1916), Plan Zuid in Amsterdam (H.P. Berlage, 1917), Betondorp in Amsterdam (J.B. Lochem, 1923) and The Kiefhoek in Rotterdam (J.J.P. Oud, 1926) demonstrated that their contribution could be more than the simple realization of a beautiful city district, aiming also to “enlighten” the working class by providing them with a congenial and healthy environment. This was supported further through grants to housing associations for the construction of public housing buildings, bringing about a massive rise in the number of new houses after 1918.

In the late 1920s the Western world entered a severe economic crisis, resulting in a cut in budgets that meant costs for the building of public housing needed to be reduced. Especially the young, socially engaged architects of the Modern Movement, known also as functionalists, made efforts to develop low-cost, material- and labor-saving housing types. The second CIAM meeting in Frankfurt (1929) took into account this new situation with the theme “The Minimum Dwelling”. The idea was that the housing shortage could be addressed most effectively by mass production and standardization. At the third CIAM meeting in Brussels (1930) building in strokes and high-rise constructions were considered as a spatial solutions to the housing problem, while in 1933 the theme of CIAM IV was “The Functional City”, organized partly by Cornelis van Eesteren who was preparing the General Expansion Plan (AUP) for Amsterdam at the time. The conference was dedicated to the analysis of the city, and Van Eesteren designed a methodology for the zoning of four distinctive functions: living, working, recreation and traffic.¹

POST-WAR PLANNING

The Second World War left in its aftermath a severe housing shortage, and due to the poor economic situation and the lack of building materials, the national government decided to take control of the construction of houses. The theoretical framework for post-war neighborhoods was the so-called “neighborhood unit concept”, in which neighborhoods and districts were developed from a spatial-functional point of view but with a social approach, with the building of a district considered congruent with building a community. The concept was developed originally by American Clarence Perry in the 1920s in response to the problems resulting from the uncontrolled growth of cities, but was elaborated in the Netherlands during the Second World War by a diverse group of experts led by engineer A. Bos, director of the Housing Department of the Municipality of Rotterdam.² In a large city, an individual person would perish in the mass, in that a community life would be unable to develop in neighborhoods of unlimited growth. It was thought that growth of a city or district should be restricted to certain boundaries, and so prior to the creation of an urban plan a foundation would be required in which the social constellation was designed. This necessitated research to determine the number of homes, schools, churches, shops, etc. required to match the expected demographics, and the design of districts as spatial, functional and social unities that shape the community through the hierarchical sequence of house – residential block – neighborhood – district – city. For this purpose, the “guardians” of the community, being churches, schools, etc., should be given a central position in the district, which is a set-up that is clearly identifiable in Nagele.

NOORDOOST POLDER

The design for the 48,000-hectare Noordoost polder was presented in 1932 as part of the partial reclamation project of the Zuiderzee (now the IJsselmeer). The Noordoost polder was the second of a total of four reclamation projects known as the Zuiderzee Works, with the first being the Wieringermeer polder (1930) to the south-west of the Afsluitdijk, the 32-kilometre-long dam that closed off the Zuiderzee in 1932. The plan was drawn up by Cornelis Lely (1854–1929), a prominent civil engineer, and also Minister of Water Management.³ Work on the Noordoost polder began in 1936, and the dike-ring was closed in 1940 and the drainage completed at the end of 1942. The island village of Urk, a closed fishing community, became part of the polder, while the island of Schokland was entirely encapsulated by new land.

² A. Bos, et al., *De stad der toekomst, de toekomst der stad*, Rotterdam 1946.

³ Lely was Minister 1891–1894, 1897–1901 and 1913–1918. The major flood of 1916 was the incentive for the Zuiderzee Works, although his first closure plan for the Zuiderzee dated back to 1886.

The development of the Noordoost polder could be characterized as a scientifically-based pioneer work with the primary goal of increasing the supply of food. Optimal soil use was central. Nearly 1,800 farms were built using various standardized building types, with prefabricated concrete components used for most of the barns. Some of the farms were solitary, while others were built in small clusters with scattered groups of houses for farm laborers, and the agricultural functions were complemented with the planting of forest areas for recreation. The Noordoost polder can be considered an example of social engineering, in that a new community had to be built up from nothing, and populated according to a strict procedure. A ring of villages was designed around the centrally located main settlement of Emmeloord, with the geographical position of the villages determined by the road and waterway layouts, more or less equidistant from each other. The urban design and architecture in most of the villages followed traditional principles and styles, aside from those in Nagele.

NAGELE

Nagele was the only village to be built according to the principles of the functionalist Nieuwe Bouwen movement (Modern Movement) that promoted “light, air and space” together with a rational organization of functions. During the seventh CIAM meeting in Bergamo in 1949, dedicated to “human settlement”, the urban design of Nagele was presented as an initiative of the group of Amsterdam architects known as De 8. After the Bergamo conference, the urban designs for Nagele were discussed at the CIAM conference in Hoddeson in 1951, and Nagele was presented for a third time by Aldo van Eyck at the CIAM conference in Dubrovnik

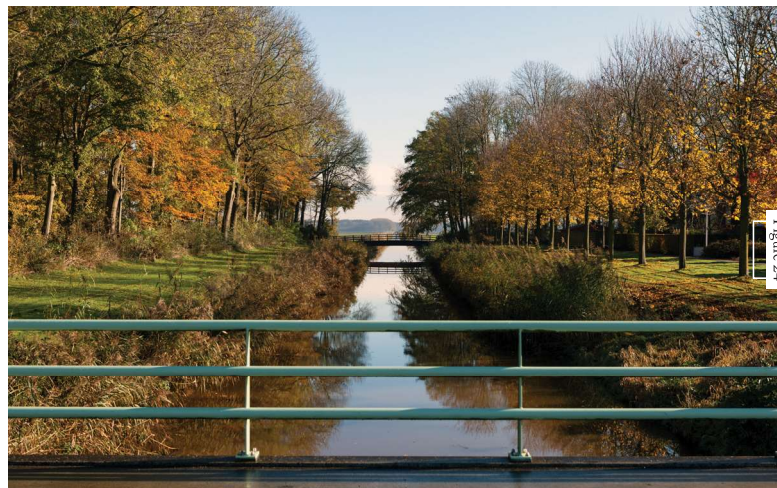


Figure 24

Courtesy: Cultural Heritage Agency of the Netherlands

in 1956. The urban design phase took place between 1947 and 1952,⁴ while the detailing of its development and construction was carried out between 1954 and 1957 by the Rotterdam association of architects Opbouw. Although the final draft plan was drawn up by Aldo van Eyck, De 8 and Opbouw always emphasized that it was a collective plan, and it is precisely this collective process of creation that makes the history of the development of Nagele unique in the urban planning history of the Netherlands.

The urban plan of Nagele diverges from that of the other villages in the polder, having a rational rectangular layout and surrounded by a green mantle. This green belt serves as a spatial boundary, and serves also to protect the village against the wind blowing across the surrounding flat landscape. The dwelling blocks and other buildings are grouped around a centrally located open, green space. The schedule of requirements was provided by the Directorate of the Wieringermeer,⁵ calling for more than 300 dwellings and various facilities that included shops, churches, schools, a fire station, and a combined cafe-hotel and bus station. The traffic route towards Emmeloord is located on the west side and separates the village from the cemetery, the sports fields and the industrial area. To the north of the industrial area, the Nagelervaart canal widens and turns into a quayside before dwindling to a narrow stream flowing eastwards through the village. The urban pattern, traffic circulation and the green areas are distinguished by their hierarchical set-up.

The buildings in Nagele are characterized by their flat roofs, a characteristic aspect of modern urban architecture. The shops are clustered around the entrance to the village, while the churches and schools are dispersed over the central green area.

⁴ De 8 elaborated on their Nagele project in an article in the journal "Forum" in 1952, providing a good impression of the intentions of De 8 and the evolution of Nagele's urban design.

⁵ Construction and management of the dykes and land reclamation was arranged by the Zuiderzee Works Department. The Directorate of the Wieringermeer was a separate government body and responsible for the land development of the first two polders of the Zuiderzee Works.

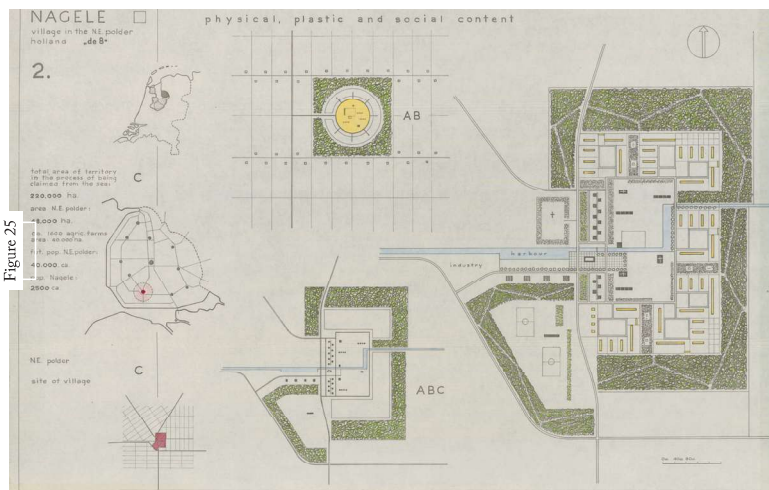


Figure 25
Courtesy: Aldo van Eyck Foundation

The residential areas are grouped on the north, east and south sides, and separated by rows of trees that link the green mantle with the rectangular central space. The residential areas take the form of open-row housing built around a courtyard, designed by different architects such as Gerrit Rietveld and his son Jan Rietveld, Mart Stam and Wim van Bodegraven, and Ernst Groosman and Lotte Stam-Beese. The three schools were designed by Aldo van Eyck and Daniël van Ginkel; the Gereformeerde (Reform) church was a product of Van den Broek and Bakema; the Nederlands Hervormde (Dutch Reform) church and Gereformeerde Vrijgemaakt (Reform Liberated) church were by Nielsen, Spruit and Van der Kuilenand; while the Roman Catholic church (now Museum Nagele) came from the drawing boards of Taen and Nix. The pedestrian zone and the shops on the south side were designed by Van den Broek and Bakema based on the Lijnbaan in Rotterdam, while the northern shops were by Groosman. The landscape plan was designed by Wim Boer and Mien Ruys – and the latter also designed the cemetery. The traffic system in the village has a closed structure with only a single opening to the Emmeloord road, and a ring around the central green area with entrances branching off to each of the residential areas.

REALIZATION

Construction started in 1954 and continued in phases until 1972 – a period in which rural areas in the Netherlands were undergoing major social changes. The mechanization of agriculture resulted into fewer jobs for farm laborers, although mopeds and cars made it possible for them to look for job opportunities over a wider area. Nagele turned gradually into a village of commuters, which demanded fewer houses and shops, and brought about the need for minor adjustments to the final urban design of the village. Despite these changes, the principles of the Modern Movement continued to serve as a starting point for all developments. In the 1980s, plans were made for a new residential area to the south of the green mantle, which was designed by Sam van Embden of bureau OD 205 and was constructed between 1982 and 1990. The urban layout of this new quarter followed, more or less, the original design of Nagele, including tiny courtyards and a new green mantle as a southern completion of the village. However, potential buyers for lots in the new residential area were hard to find, which raised discussions of whether housing types with pitched roofs, which are considered more attractive to buyers, needed to be built. Following protests from architects, scholars and architectural historians, this proposal was never realized, and Nagele remained as a village of flat roofs.



Figure 27a

Courtesy: National Archives of the Netherlands



Figure 27b

Courtesy: Rijkswaterstaat, Ministry of Infrastructure and Water Management

Another crucial development in Nagele's recent history occurred in 1998 when Museum Nagele opened its doors with a permanent exhibition charting the history of the village. The museum found a home in the former Catholic church, which had become vacant after a merging of parishes, and demolition looked to be inevitable until local volunteers took the initiative to transform the former church into a museum. This gave Nagele a place where people can learn more about the impressive history of this modern village.

NEW CHALLENGES

At the beginning of the 21st century it became clear that Nagele had greater challenges to cope with in the form of a declining population and a deterioration of its buildings. Mirroring the problems of other rural areas in the Netherlands, the village of Nagele has an aging population, houses that do not fit present-day demands on space and energetics, schools and churches that need to adapt and shops that are experiencing reduced economic viability. Time has also left its mark on the appearance of the village, with extensions to buildings and individual construction works that did not always take original features into account. Without a proper, integrated and area-based response, Nagele's unique character was in danger of being lost altogether. The Dutch government and the municipality of the Noordoostpolder came to the conclusion that Nagele needed to be revived. Revitalization plans started with a "Research Lab" in 2010, in which young architects who were given the chance to study the village put forward their ideas of how to give its cultural heritage a new future. As a follow-up project, a "Design Lab" (2011) was established, and several ideas were elaborated upon. This resulted in a co-creation that involved architects, architectural historians, public and private stakeholders, and the local community.

In 2011, the Ministry of Culture recognized Nagele as one of the 30 areas symbolizing the post-war reconstruction period (1940–1965),⁶ earmarking for the village a budget allocation that served as a breakthrough for the revitalization plans. Today several stakeholders are working together to achieve the ambitions of the Design Lab, and are providing guidance and focus to ensure all efforts are complementary. The cooperation is based on a common vision, tied to the outcomes of the earlier labs, that is quite simple: Nagele should remain an attractive village for living, working and recreation, and its heritage should be an asset for its future development. The first phase of the program is currently under construction, and involves home improvement projects, the restoration of the original landscaping features, the adaptive reuse of a school, and the revival and reconstruction of the shopping area. Other more complicated projects, such as the construction of a new supermarket with apartments on the upper floors, and the restoration of dwelling blocks as a whole, with the addition of a bed and breakfast and an exhibition house, will follow in the near future. The next phase of the program includes a plan to invite other parties to participate, and to identify new economic incentives, and includes promotion and marketing factors, as well as stimulating activities and events that will strengthen the unique position of Nagele as a showcase of the post-war reconstruction era.

⁶ This selection was made in the vision for heritage and spatial planning "Character in Focus" of the national government of the Netherlands.

Figure 28a



Courtesy: Cultural Heritage Agency of the Netherlands, Siebe Swart



Figure 28b

Courtesy: Cultural Heritage Agency of the Netherlands

MODERNISTIC LEGACY

Nagele has attracted much national and international attention, especially from architects, historians and scholars, being a product of, and also a testimony to, an entire group or generation of architects of the Modern Movement who designed the village to be a model of urban and social planning as a collaborative effort. The objective in promoting the national recognition of Nagele as a heritage site is not to freeze or mothball the village in time, but to take its historical assets into account and consider its cultural heritage as a source of inspiration for future developments. The current plans for Nagele accommodate this way of thinking, and the collective process in the drawing up of these plans has made many realize that there is more to it than only looking at such physical attributes as the urban layout and buildings. Traditional conservation management, in which rules and regulations must be followed, does not apply to Nagele, in that cooperation between all stakeholders is necessary if the village is to succeed in facing the challenges of today, and those of the future. The entire village of Nagele can be considered a symbol of forward-thinking, modernistic beliefs and the incorporation of social ambitions through the use of new ideas and techniques.

Nagele will not become a “museum village”, but is to be seen as a “living village” in which innovative ideas and co-creation are encouraged. In doing so, the legacy of Nagele, in both its tangible and intangible forms, will find its way into today’s society.

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