

The Mutable Landscape: A Permanent Condition

LUCIE FONTEIN
Carleton University

INTRODUCTION

The Dutch landscape is an extreme example of an archipelagic condition. A terrain below sea level, literally carved out of the water, it can be read as a highly compressed set of islands, each bounded by retaining dikes and connected to neighboring islands by bridges. This complex configuration has compelled the Dutch to confront the issue of whole versus parts in a very physical way. Where does each island fit in to the landscape puzzle? What is the character of the land contained within the boundaries? How do the connections between the islands change over time?

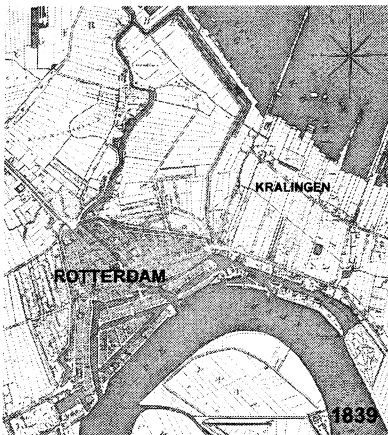


Fig. 1. Rotterdam in 1839.

This paper traces the evolution of an area on the outskirts of the city of Rotterdam from a set of independent land masses into a major urban thoroughfare. As late as 1900, this area remained parcelled pastureland defined by waterways and ditches. Today, it is a thriving neighbourhood on the edge of the downtown core.

Kralingen is a district of Rotterdam located just to the north-east of the city center. Once an independent village, it was

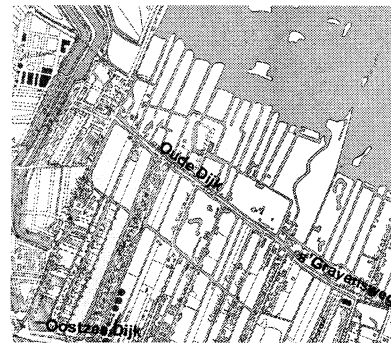


Fig. 2. Kralingen in 1881.

annexed by Rotterdam in 1895. It is situated on the banks of the last remaining lake left by peat excavations of the previous centuries. The north south axes created by the exploitation of peat are clearly evident in early maps of this area, and determine its essential topographical condition (see Figure 1).

The central portion of Kralingen is defined by two dykes running in an east-westerly direction, defending this land between the Maas River and the Lake from flooding. The Oost Zeedijk (East Sea Dyke) is to the south and the Oude Dijk (Old Dike) to the north. Originally a foot path, this last causeway is now known as the s'Gravensweg and has found its way into the urban lore through the saying, "As old as the road through Kralingen."

The area of study for this paper is the land to the north of the Oude Dijk where at the beginning of the 20th century, the shift from town to polder landscape was at its most explicit. One would be hard pressed to find an example of a more malleable boundary condition between land and water. It is unclear whether the land penetrates into the water, or the water penetrates into the land. And peat, being such a sponge-like substance, offers little stability in determining the boundary between water and land in the vertical dimension. How does

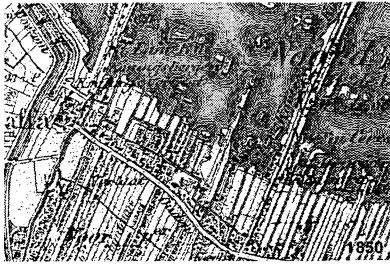


Fig. 3. Kralingen in 1850.

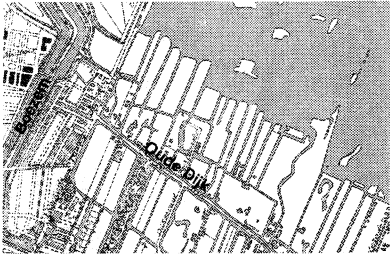


Fig. 4. Kralingen in 1881.

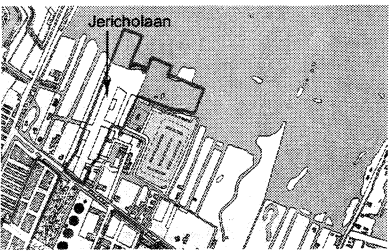


Fig. 5. Kralingen in 1900.

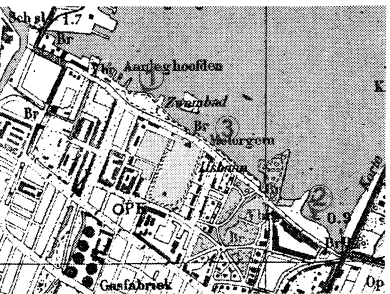


Fig. 6. Kralingen in 1939.

such a tenuous physical condition end up today as a definitive façade to the city of Rotterdam?

EVOLUTION OF THE LANDSCAPE

In the 1850's only 2 roads penetrated into the terrain north of the Oude Dijk: The Vlietlaan to the west and the Korte Kade to the east both extended on extremely narrow causeways across the lake in the direction of Gouda.

In 1881 we observe only slight changes to the landscape to the north of the Oude Dijk with the addition of the Park Jerusalemlaan. At this time, it is the area to the west of the Vlietlaan that is being encroached by urban development as the beginnings of a grid system of roads indicate the first urban planning strategies this side of the Boezem canal.

Immediately following the annexation of Kralingen in 1895, however, Rotterdam started building houses on a large scale. The country seats that originally occupied this land (Woudensteyn, Rozenhof, Jerusalem, Jericho, Het Paradijs, Vredenhof, Vredenoord) exist now only in the street names.¹

The 1900 map of Kralingen shows the very first plans for development of the water edge. The map delineates an area that appears to completely supersede the existing waterway system and introduces roadways and building sites. The first north/south urban inroad into this area is the Jericholaan which established the initial inhabitation of the lakefront in the first decade of the 20th century. To the east of Jericholaan we see the first evidence of the Ice Club which remains an important institution in Kralingen for the next 5 decades.

By the start of World War 2 (1939), the waterfront has been established as an edge; quite a dramatic change from the situation at the beginning of the century. Figure 7 shows the section of the street façade identified in Figure 6 as View 1. At the eastern end of the lake, a long row of 4 story dwellings was built during the 1910's and early 1920's as a termination to the garden city development to the south (See Figure 8, View 2 in Figure 6). These last houses were all built between 1914 and 1924.

Both residential developments reflect an interesting declaration of "urban" intent in the establishment of the northern edge of this new area of Rotterdam. A more conservative planning strategy might have been to develop each existing parcel of land with a greater density of individual houses. Looking at the pre-existing topology, introducing a long row perpendicular to the dominant geometry is a rather ambitious undertaking. But the population was growing rapidly and a cooperative housing union had been established in 1908 followed by a more powerful public housing corporation in 1918 that was set the task of providing housing to the massive influx of workers coming to Rotterdam after the First World War.² The northern section of Kralingen, however, was seen primarily as an area for the aspiring middle class. The "fashionable" place to live remained the downtown area of Rotterdam around the de Heuvel Park.

The Kralingse Plas (Kralingen Lake) was consolidated as a defined lake during the construction of The Kralingsebos (Kralingen Woods) started in 1909 (See Figure 9). This recreational area, designed by Prof. J.T.P. Bijhouwer, used the mud from the excavation of the Merwede and Waal harbours in the Alexander polder (which lies 6m below sea level) to create



Fig. 7. View 1.

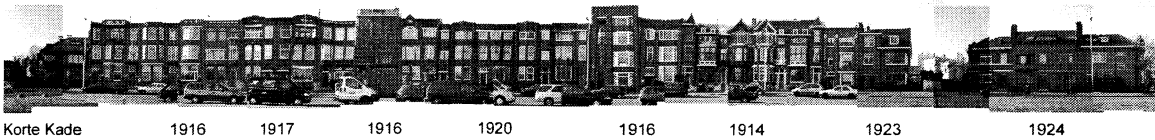
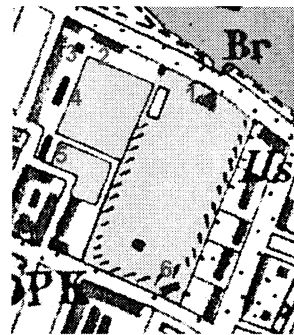


Fig. 8. View 2.



Fig. 9. The Kralingsebos.



1. Underpass from the lake
2. Club house and restaurant
3. Guard House
4. Adult change house
5. Children's change house
6. Snack bar

Fig. 11. Plan of the Ice Club.



Fig. 10. The Ice Club. 1935.

this 200 hectare (500 acre) piece of land. After a couple of years of growing clover to prepare the soil, the first trees were planted in 1925. By this time also, the Park Rozenburg, the remaining grounds of a country seat manor house pulled down long before, was also clearly designated as a public recreational space.³

But prior to any of these residential and recreational areas being established, a rather unusual institution developed adjacent to the lake front. This was the Ice Club, an area of land just above the lake water level, into which water was pumped to

create a series of skating rinks. Because of its shallow depth, this water remained frozen for a longer season and was less dangerous to skate on than the frozen lake. The Ice Club could be accessed from the lake on skates through a small underpass under the roadway. The shapes shown in the 1900 map (Figure 5) within this area were small islands left to rise above the water level to prevent the ice from cracking. The club consisted of three skating sections: the adult recreational area in the northwest corner, the smaller children's area just south of it, and the large speed skating area to the east. On occasion, one or two hockey rinks were delineated (using four inch high boards) within the larger speed skating section for competitive play. In addition, two change rooms (one for adults, one for children) a club house with a restaurant (see figure 10 behind the skaters), a guard house, and another snack bar were built at the perimeter of the club. Often, an area of ice in front of the club house restaurant was cleared to make room for ice dancing.

The Ice Club was run as a non-profit membership club. It served not only the Kralingen neighborhood, but the entire City

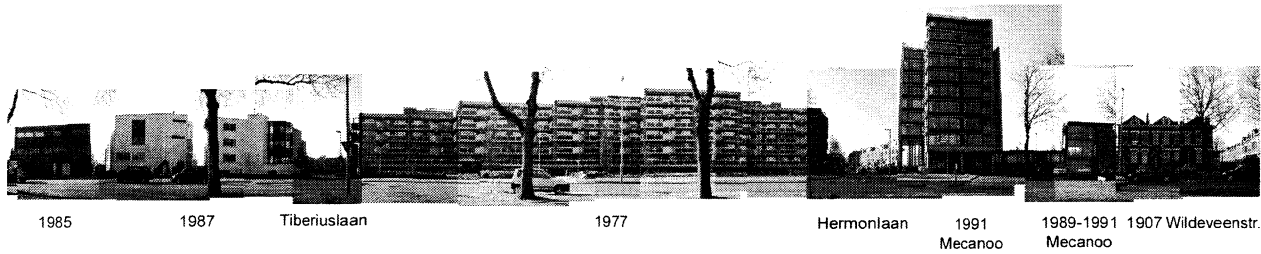


Fig. 12. Stretch of Kralingse Plaslaan formerly occupied by the Ice Club.

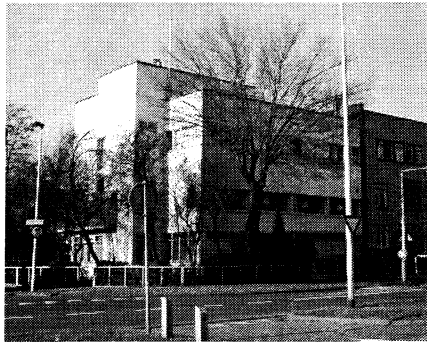


Fig. 13. Woonhuis van der Leeuw. Bergman & van der Vlugt. 1927.

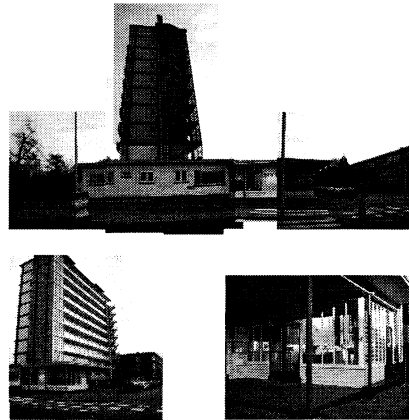


Fig. 15. Plaslaanflat. Maaskant & van Tijen.

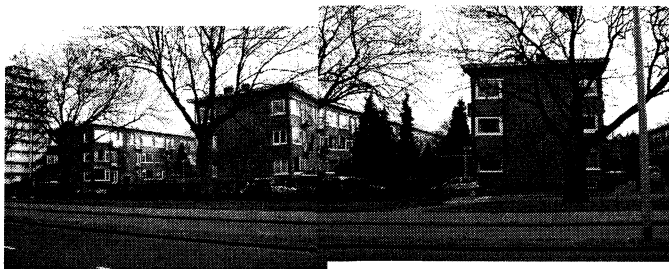
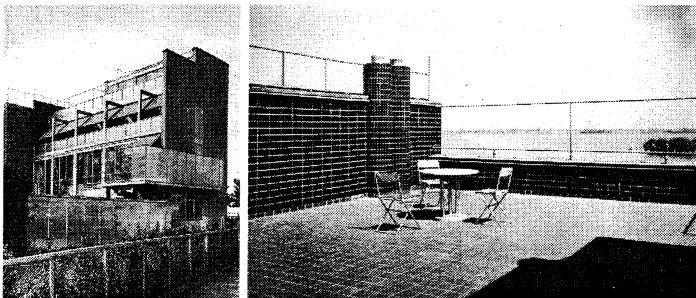


Fig. 14. Jaffa Neighborhood. W. Th. H. ten Bosch. 1936.

of Rotterdam. A remarkable institution considering that it was open at most, for four weeks per year. In milder years it did not open at all. During the early 1930's it became clear that the land could be adapted to other uses during the summer months and a few concrete tennis courts were built. (These were flooded along with the other ice surfaces in the winter.) For a number of years, the winter and summer clubs co-existed,

however in the 1970's a large parcel of land representing the entire lake frontage was developed as a large apartment complex, effectively turning the remaining tennis courts into a more exclusive and private tennis club, hidden from public view. This marked the closing of the Ice Club.

Perhaps the most architecturally interesting project to happen on the Kralingse Plaslaan was the extremely innovative villa by Bergman and van der Vlugt that was built for the owner of the van Nelle Factory in 1927. Constructed only a year after Rietveld's Schroeder House and two years before Le Corbusier's Villa Savoye, it was the first of a series of stunning International Style houses that the firm was to build in Rotterdam during the next few years. Originally, this was intended as a free-standing house, but due to the relatively small lot size, the house shares a party wall with a modernist but less distinguished villa built simultaneously to the west. We can see the influence that this project had on subsequent development on the street. The Bentham and Crowel Villa of 1985, and the Mecanoo Villa 1991 (See Figure 12 above), both take their cues from this original 1927 villa.

The main living space of the house is situated on the second floor with a wide view towards the Kralingse Plas. This space is connected to the ground floor (internal garage, service and kitchen areas) via a steel spiral staircase in the two storey winter-garden on the south side of the house. The heroic view from the roof terrace over the Plas speaks to the Dutch



Fig. 16. Halfway House Block.

propensity for expansive and unbounded light and vistas, intrinsic to the Dutch landscape.⁴

In 1936, the westernmost end of the Kralingse Plaslaan, the area known as Jaffa, was developed by architect, W. Th. H. ten Bosch. In a rather unusual configuration, ten Bosch set up 5 north-south rows of through walk-up row houses with front doors on one street and back yards on the adjacent street. In other words, the facades of each street are made up of front doors on the east façade and back yards (usually defined by hedges) on the west. At the time that this area was planned, the major artery along the waterfront had not been connected by bridge through to the other side of the Boezem Canal and so it remained a community somewhat unto itself at the north western tip of the Kralingen "island." To this day, this remains a very tightly knit community, no doubt conditioned by the unique urban morphology that establishes a rather interesting public/private condition of backyard to street.⁵

Immediately to the east of this neighbourhood, and confirming its isolation, stands the Plaslaanflat of 1937-38 by architects, H. A. Maaskant, W. van Tijen. This is a virtual clone of an earlier project by the same architects, the Bergpolderflat of 1932-34.⁶ One of the first high-rise buildings in the Netherlands, the Bergpolderflat was built as an experiment in worker housing and became the prototype for post-war apartment buildings. The use of steel for the structure is unusual and has rarely been used since. Prefabrication and the standardization of the dwellings made it possible to build economically, so that the working class for which the building was intended, could actually afford to live there.

The Plaslaanflat has virtually an identical footprint and construction, however the flats are double the size of those of the Bergpolderflat, each occupying 2 bays of structure as opposed to one. Where the Bergpolderflat has eight apartments per floor, the Plaslaanflat has four. The flats are accessed by an exterior gallery on the west side of the building with living spaces and balconies on the east façade; the identical configuration to the above mentioned Jaffa housing to the west, but in this case in a 10 story stacked formation. The apartment tower overlooks one of the few original north-south waterways that

creates a boundary between it and the adjacent Botanical Garden.



Fig. 17. Rotterdam in 2000.

The final project to be built before the start of the war was the half-way house for delinquent youth that occupies the north-east corner of the Botanical Garden lot. Not surprisingly, it has a somewhat opaque façade to the street at grade.

All three projects built in the late 1930's to the west of Jericholaan began as more isolated projects, following the original north-south oriented island topology, and without the connection across the Boezem Canal, remained quite detached from the rest of the city and for that matter, from the rest of Kralingen. It was not until after the early 1960's that the connection west to the Crooswijk district was made and these projects became more integrated into the community as a whole. The bombing of central Rotterdam in 1940 was, needless to say, a definitive moment in the cultural development of the city of Rotterdam, and by extension in the rest of the country. The complete and utter flattening of the city core



Fig. 18. Through views on Kralingse Plaslaan.

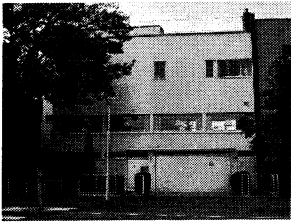


Fig. 19. van der Leeuw villa.

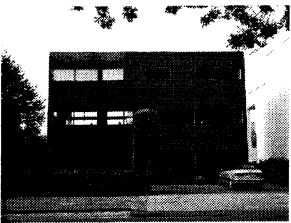


Fig. 20. Bentham & Crowell.

resulted in a condition in which no heritage remained out of which the city's architectural identity could grow. H. A. Maaskant, the architect of the Plaslaanflat, is said to have observed without nostalgia: "It has lost its middle-classness."⁷ He dismissed all that was small, cosy, and overly detailed, and by implication was critical of much of the architecture put forth by his reconstruction era colleagues. Rotterdam, by contrast, was free to mould its own urban identity. In Kralingen, two major changes to the topology took place at this time:

1. The edge of the lake, which had until now remained a natural marsh, was taken over as a solution for what to do with the massive mounds of rubble resulting from the devastation of the city center. With the rubble as its foundation, a park was created by extending the land out into the lake and adding new islands connected by a network of paths and pedestrian bridges.

2. A bridge (indicated on Figure 17 by a circle) was built over the Boezem Canal, finally connecting the north end of Kralingen to the rest of Rotterdam. Its ultimate point of isolation had finally been breached. Today the Kralingse Plaslaan comprises one segment of a ring road that parallels the major intercity artery that circles Rotterdam (indicated by the dotted line on Figure 17).

THEORETICAL READINGS

The conference 'call for papers' proposes "the archipelago as a metaphor for the context and state of contemporary architectural production." This paper proposes the transformation of the Kralingen archipelago as a metaphor for Dutch cultural identity as expressed by the evolution of the landscape into an urban condition.

Three characteristics stand out in the evolution of the Kralingen area:

1. From the earliest tendency towards urbanization, the creation and establishment of public recreational space has been intimately linked to the particularities of the Dutch landscape.

The Ice Club alone occupied approximately 12 acres of land. Capitalizing upon the existing (though dangerous) use of the Kralingse Plas for skating, the urban planners of the late 19th century made a significant commitment to extending and formalizing this activity as part of the newly developing urban experience. This was a way to establish the new Kralingen community as part of the larger Rotterdam metropolis. From a landscape perspective, this celebration of public life hovered at the plane of the water level, revealing and elaborating upon the already fine line between water and land that is at the root of Dutch cultural identity.

The Kralingse Bos (500 acre wooded park) was also the result of landscape manipulation. Created from the dredging of the Merwede and Waal harbours, the exchange of land from below water level to above water level positively impacted both conditions by clarifying and consolidating what had previously been murky, and by extension unusable, edge conditions.

Only two topographic elements remain from the original pre 20th century landscape: the Rozenburg Park with its picturesque garden waterway, originally created as part of the Rozenburg family country seat, and the waterway at the Botanical Gardens towards the western end of the lake. (These gardens were established for the use of biology pupils from all the municipal schools and continue as an instructional facility to this day.) Both are celebrated through their designation as public landscape.

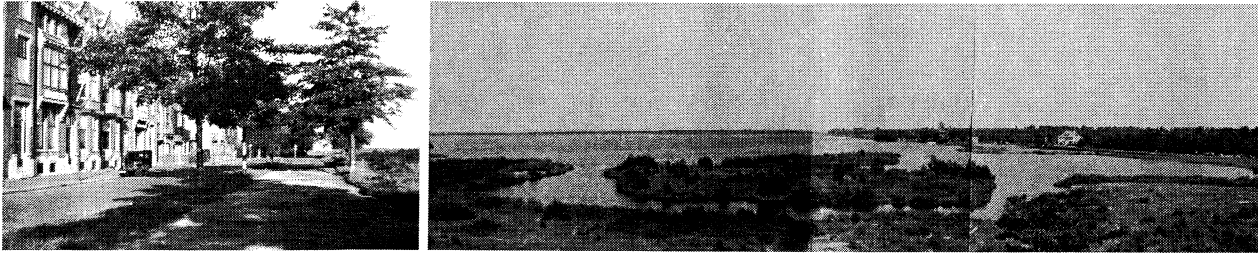


Fig. 21. Kralingse Plaslaan during the war.

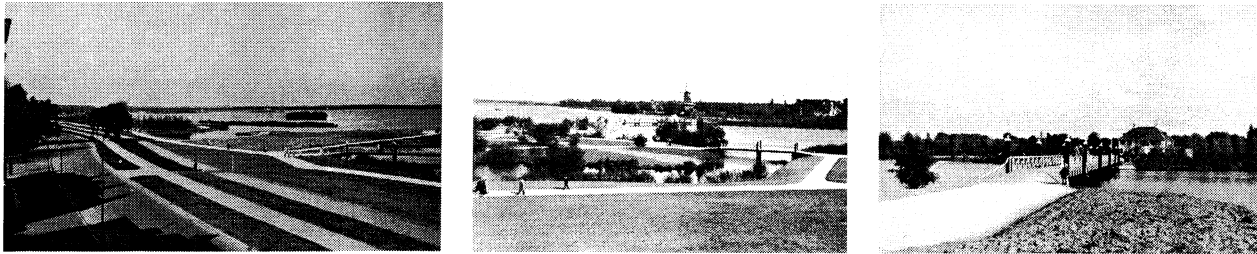


Fig. 22. Kralingse Plaslaan after the war.

Finally, the southern edge of the Kralingse Plas becomes formally integrated into the larger recreational network of municipal bicycle and horse paths through the necessary landfill resulting from the bombardment of the city center; a particularly poignant version of reclaimed land.

2. Despite the fact that this area developed in a very short period of time (1910-1939), a very diverse set of programs and building types was achieved, each with its particular relationship to the landscape.

By comparison with new communities being built at a comparable time in North America and elsewhere in Europe, the diversity of building morphology and program of this area is quite remarkable. In less than a one kilometer stretch of the Kralingse Plaslaan, we find (from east to west): a traditional Dutch row of 3-4 story row housing, an English picturesque park, a thatched roofed garden house, some 4plex units, an outstanding example of an International Style villa, a low security prison for youth, an instructional botanical garden, a 10 story early modernist apartment building and an unusually configured housing development. Although the development of this area had to be a coordinated effort in order to transform the isolated island landscape into a consolidated whole, amidst this planning, there was clearly a cultural disposition towards experimentation and innovation.

Of particular note again is the relationship of the each of the building types to the landscape. The earliest row houses all display the traditional "transparent" ground floor, particular to the Dutch urban tradition.⁴ The living/dining rooms are contained by large windows both to the street and to the back garden, placing the interiors on vivid display to passers-by. From the dweller's perspective, the experience of the landscape

is expansive; in the Kralingen case, particularly in the direction of the Plas. However, in typical Dutch fashion, the actual relationship to the landscape continues to be in flux. While the houses, which are constructed on pile foundations, remain structurally stable, the unstable soil beneath the roadway and sidewalks continues to compress and sink, resulting in a slow but clearly evident change in the relationship between the sidewalk and the ground floor. Since the initial construction in the 1910's, two steps have had to be added to reach the front door from the sidewalk. This relationship demands constant reinterpretation.

The 1927 van der Leeuw villa introduced a novel relationship to the landscape. Here, the main living floor was designed as a piano nobile above the ground service floor. The essential transparency of the Dutch dwelling is maintained, but in this case at the second level. Atypically, the ground floor remains opaque to public view. At the upper levels, and particularly on the roof terrace, however, the importance of the expansive vista intrinsic to the Dutch psyche, is made particularly explicit. This new paradigm has since been reinterpreted in a number of more recent villas including the 1985 villa by Bentham and Crowel

Both the Maaskant apartment tower and the ten Bosch housing development are aligned with the original north-south "island" topography. In these cases the through views are in the east-westerly direction.

Regardless of the typology, however, the elevated water table dictates that all buildings are set onto rather than into the landscape, thereby responding to and reflecting the persistent Dutch themes of the expansive landscape and the fluctuating ground plane.

3. History is not seen as a burden, rather it is considered as an opportunity.

Rotterdammers have always had a fluid relationship with history. While this tendency was irrevocably confirmed with the 1940 bombardment of the downtown core, much has been written about this characteristic more as a predisposition than as the result of misfortune. "There had always been a certain freedom regarding the moulding of Rotterdam's urban identity. This fact had already acquired precise contours at the end of the 19th century when it was determined that the city would follow the economic logic of its expanding port: defining itself as a city of labour, of industry and services and especially as the centre of logistics in the Dutch territory."⁸ There was little opposition, for instance to the proposal in the 1860's to wipe out the city's history by filling in the Rotte river itself, in order to make way for an elevated railway line right through the center of the city.

In the case of Kralingen, a couple of the original waterways are left as boundaries between blocks and carefully integrated into the new landscape (the Rozenburg Park and the Botanical Gardens), but the majority are simply filled in and the water rerouted as necessary. There is a pragmatism to the Dutch psyche that deals with this most malleable of landscapes in a very down to earth way (pun intended). Earth is moved around and manipulated as required for practical purposes. It is introduced to prevent the ice from cracking at the Ice Club and removed to allow the passage of a boat at other locations. A dramatic example of this pragmatic relationship to history is the building of the beautiful water-edge park upon the rubble of the bombardment. Following the destruction of the downtown core, the rubble had to be put somewhere. Why not use it to extend the Kralingsebos and consolidate the final side of the Kralingse Plas with additional recreational space? This was a time to look forward, not back.

The fluid relationship to history applies equally to the architectural project. Even prior to the bombardment, there was excitement rather than fear at the introduction of radically different building types and styles into the streetscape. It would appear that these tendencies continue right up to the present: two of Netherlands current internationally renowned architects, Mecanoo Architects (Francine Houben and E. van Egeraat) (Figure 23) and OMA (Rem Koolhaas) (Figure 24) have both built projects on the Kralingse Plaslaan.⁹

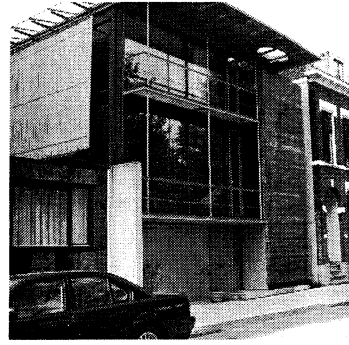


Fig. 23. *Woonhuis Mecanoo*, 1991.

CONCLUSION

Returning to the observation of the Dutch landscape as a compressed archipelago, I would argue that the resulting perpetual challenge to define boundaries and build bridges has had a definitive effect upon the development of the urban and architectural landscape of Rotterdam in particular, which in turn has influenced attitudes towards architecture in the Netherlands as a whole.

The constant in the Dutch context is the fact that the landscape is mutable; completely fluid in every sense of the word. The islands that comprise this compressed archipelago are constantly shifting, appearing and disappearing. The result is a culture that very pragmatically experiments with various configurations without the burden of irrevocability. Connections are made without sacrificing individual character. Boundaries are constantly challenged.

NOTES

¹ *Trees in Rotterdam*, Foundation Arboretum Trompenburg.

² Marijke Snepvangers, *Onze Woning*, Snepvangers & Soree, Amsterdam, 1993, pp. 6-10.

³ *Groen in Rotterdam*, Ad Donker, Rotterdam, 1985.

⁴ This was the subject of an earlier paper entitled, "Dutch Domestic Architecture: Cultural Identity Revealed," presented at the ACSA International Conference in Cuba, 2002.

⁵ NAI, *Buurten in Trek*, 1998, pp. 62-67.

⁶ So similar are the two projects in fact, that when doing my research, I discovered that the typical floor plans for the two projects in the book on the architect H. A. Maaskant had been mistakenly interchanged.

⁷ *Post.Rotterdam: Architecture and City after the tabula rasa*. 010 Publishers, Porto, 2001

⁸ *Ibid.*

⁹ This is the topic of a future paper.