Housing in Harbours in Holland

With harbour activities vanishing from the centre, the Dutch harbour cities have acquired a vast amount of redevelopment land, where the first projects started in the 1970s. The article describes the evolution of conceptional and political attitudes from the 1970s to today, reflected and illustrated in a number of urban and architectural projects in the cities of Amsterdam and Rotterdam. Gradually it becomes obvious that providing housing in harbours is the key to urban revitalization, but that sustainable harbour neighborhoods can only produce a true form of urbanity when they have a carefully developed mixture of functions that also consider the existing structures and activities. To achieve this, a sensible organisation of stakeholder management is indispensable as well as a phasing concept, in which private investment runs parallel and complementary to public investment.

There is a beautiful book on Holland called *The Embarrassment of Riches* by Simon Schama, in which the Dutch culture is described in relation to its relationship with the water. The Dutch people are compared with the people of Israel, who, not once, but continuously have to deal with the Great Flood. One of the penalties in medieval Holland was imprisonment in a room that was continuously flooded by water. The prisoner could only save himself from drowning by constantly pumping the water out.

Indeed, it was not until the second half of the 20th century, after the flood of 1953, when many people drowned, that the Dutch succeeded in turning the water from an enemy into a friend. With the construction of the Delta-Works (Figure 1), where the islands of Zeeland were closed off from the sea creating a gigantic lake- and lagoon-area, a true leisure-culture developed, parallel with the arrival of the welfare state. In the following decades ever more courageous proposals were conceived to transform the land with water-related projects into a blueprint for the eternal leisure society.

These projects consisted either of enormous land-winning projects that created a new dune-wall in front of the North Sea coast, like the Waterman scheme (Figure 2), projects that (re-)flood the grasslands of obsolete agricultural areas, or new housing districts in former harbours. The endless possibilities to create new “rural landscapes” is best shown in the Oostvaardersplassen in the Flevopolders (Figure 3), where hydrotechnical problems resulted in an unintended landscape that developed into one of the most important natural reserves in Europe within 25 years. Apart from many sorts of birds that had long ago disappeared from Holland, the area is now inhabited by buffalo and wild horses. These horses originated from an almost extinct Mongolian breed, only a few of which had survived in zoos. After a breeding programme, they were re-imported by plane to Mongolia to be freed into nature. Being used to taking over the role of the Creator, the debate about authenticity and artificiality in urbanism is not very relevant for the Dutch.

The need for intensive cooperation in the struggle against the water, the early banishment of feudalism and the opportunity for poor people to obtain land concessions in exchange for drainage services, led to a sober society based on common sense. In urbanism, this is reflected in a paradoxical combination: an extremely democratic and decentralised decision-making structure within an extremely centralised spatial planning structure. The “make-ability” of the landscape and the consensus society have turned The Netherlands into a cultural landscape (Figure 4) in which large interventions can be realised quickly with relatively little bureaucracy and resistance. This explains the relative
lack of emotion with which the Dutch view modernisation processes in urbanism.

Rotterdam is developing so fast that after just three years some places are not recognisable any more. The city was originally situated on the north side of the river New Maas, and only expanded to the south bank at the end of the 19th century. In 1940, the most important harbours on both sides of the river were still closely related to the city. Since 1945 however, the harbour has grown over 45 kilometres towards the coast near Hook van Holland. In recent years, the harbour has grown at the rate of 500 hectares per decade towards the North Sea, and occupies a major part of the surface of the city itself. The scale-jump in shipping technology forced the harbour activities, which had had an active exchange with city life until 1940, to leave the smaller harbours. This resulted in the availability of large areas directly adjacent to the centre. The city developed, as did Amsterdam, from a harbour city into a residential and office city with “Venetian” ambitions.

When the first harbour basins became available at the end of the 1970s, few people thought that just fifteen years later the development of housing in former harbour areas would become the key to the revitalisation of our inner cities and even the saviour of a specific form of urbanity. The first areas were generally built with traditional housing types under the influence of local action groups. In the political climate of the 1970s, it was the only place for enough social housing to solve the housing shortage, financed by councils and housing corporations, and supported by city renewal subsidies of the state. An example is the IJ-plein in Amsterdam North designed by OMA in 1980 (Figure 5). On a site that now would be considered a top location, 1400 social housing units with amenities were built. The initial effort by OMA to increase density in the area with high-rise buildings and create a skyline along the waterfront was blocked by a veto of the local residents, who had considerable influence on the programme: half of the
houses consisted of single-family terraced houses. This suburban working-class idyll in the tradition of garden cities on a strategic waterfront location was an unconscious forerunner of the high-density row housing projects of the 1990s, such as Borneo-Sporenburg in Amsterdam (Figure 6) and Müllerpier in Rotterdam (Figure 7).

While the IJ-plein was still characterised by an urban sensibility and typological inventiveness, most harbour areas from that period have a monoculture of housing and a “step-mother” relationship with the water. The harbour was considered a rest area, where social problems were being restored. While city renewal in Amsterdam was confined to the inner city, instead of large-scale interventions in the harbour (for the people of Amsterdam the canals are the waterfront), in Rotterdam a revolution in thinking about the city and the harbour took place.

In the middle of the 1970s, the Leuvehaven in the city centre was filled with a monkey-rock-like housing complex as part of the Waterverband concept, which succeeded in filling all vacant sites in the centre with human-scale brick buildings in earth colours, a “critical reconstruction” avant-la-lettre. In the Old Harbour (the oldest harbour basin in Rotterdam), a project by architect Piet Blom was constructed (Figure 8) that consisted of cubic tree-houses and monkey-rocks. Traditional ships were moored in the harbour and the buildings were filled with pizzerias and cafés, turning the place into a popular entertainment centre. The success of this Calvinistic version of Port Grimeaud definitely focused the attention on the potential of an urban culture in the harbour.

Simultaneously with the IJ-plein in Amsterdam, OMA was asked to design a high-rise complex in Rotterdam. The design was a hybrid: a 99 meters tall building of towers contained in a slab. One of the towers was individualised into a panoramic tower in the shape of an elevated segment of the Old Willemsbridge (Figure 9). Through contortions, inclined facades and transparent views, the towers reflected the water in all directions, and, while passing the building along the river, it visually folded in and out like an accordion. The scale contrast caused by its form and height referred to the traditional contrast between grain silos, steamships and warehouses along the quay and the lower residential districts beyond. The OMA building, which was way ahead of its time and was the first design in the Netherlands that consisted of flexible lofts, was never realised. Now, twenty years later, the design has experienced a reincarnation in the shape of the building called The Rotterdam on the other side of the river opposite the former mooring place of the legendary passenger ship New Rotterdam (Figure 10). The big difference from its predecessor is the programmatic mix that turns The Rotterdam into a mini-city, resulting from the increasing consciousness about mixed functionality and urbanity that can be derived from the evolution of successive waterfront projects in Rotterdam and Amsterdam.
In *The History of the City*, Leonardo Benevolo defines the transition from village to city as the point when people begin to practise different professions – in other words, when complex networks develop. By analogy we could now, a thousand years later, define our idea of urbanity as the point when new or unexpected networks arise from the combination of old ones. Among the places where new forms of city life develop are former harbour and railway sites. In many cities, there are indications that such areas are ultimately salvaging the concept of urbanity as we like to see it and are giving it new content. Their ability to do so derives from various factors, such as a location close to the city centre, a good potential for access, and a characteristic mixture of historic and contemporary elements, as well as larger and smaller scales. They allow different uses to develop both informally and officially in a symbiosis of cultural, everyday and commercial activities. Neither the city centre nor the periphery satisfies these conditions. The city centre is made into an adventure park given up to fun shopping and entertainment, and is too expensive. The periphery is too anonymous, too far away, too one-dimensional, and not dense enough. Thus, harbour areas can take over the role that neighborhoods like Greenwich Village played in the 1970s in New York.

While the apartment towers of young offices like Mecanoo in the harbour of Rotterdam (Figure 11) pushed the architectonic illiteracy from the 1970s into the background, in the East Harbour Area in Amsterdam a smouldering fire of urbanity emerged. The KNSM Island in Amsterdam, designed by Jo Coenen (Figure 12), would originally have been built with new buildings into a cliché, a mono-cultural housing development. This did not happen because some existing buildings and warehouses were occupied by informal activities: a sailboat restoration co-operative, a theatre company, several carpet dealers, a club, squatters, and other less attractive uses. The city and investors were forced to leave standing some of the old buildings that were actually not worth preserving, along with their residents, and to integrate them into the new architecture. One large hall was left for a small sum to a young investor who rented it out for low-budget high culture activities because the official investors did not believe that it would be a marketing success. This initial mixture of different activities ultimately led KNSM Island to become, not a parasite on the urbanity of the inner city, but an urban centre in itself. The sailing freaks turned into a respectable yachting business and the large hall has become a major start-up centre and has attained cult status with well-known galleries, designer shops and an Albert Heijn supermarket, the symbol of the Dutch business establishment.

In analogy with the existing buildings, the KNSM Island forms a harbour pier with large buildings like warehouses (ocean steamers) along a central boulevard highlighted by the Piraeus apartment building by the architects Kollhoff.

![Figure 13: Jo Coenen: KNSM Island, Amsterdam](image)

![Figure 14: Hans Kollhoff with Christian Rapp: Piraeus, Amsterdam](image)
with Rapp: a splendid example of cultural recycling, in which references to harbour and industrial architecture and the Amsterdam School return in a new interpretation as an idiosyncratic sculpture (Figure 13). Next to the KNSM Island, the Java Island was planned according to a completely different concept. Designed by Sjoerd Soeters, the pier was cut into five pieces, divided by real canals, and projected middle-European perimeter blocks with internal courtyards onto the islands (Figure 14). Along the canals, private canal houses were built and along the quays apartment buildings with courtyards. The buildings were designed as modules by several architects and distributed in a random way across the site in order to give an impression of complexity and generation. Despite the flabbergasting result and the pub-like spaces on the corners of the blocks, Java Island is merely a housing neighbourhood due to the lack of businesses and existing users.

This is also the case with Borneo-Sporenburg, designed by West 8 (Figure 15). The traditional scale-contrast between harbour utilities and urban districts is thematicised in extremely dense and low patio-type single-family houses, accentuated by several very large buildings, among which is KCAP’s loft building, Fountainhead (Figure 16). A big step forward towards a certain degree of mixed functionality is the allotment of private patio houses that make living-working activities at street level possible (Figure 17). A real mix of functions is being accomplished in the meantime along the Oostelijke Handelskade. Here, a large number of warehouses have been turned into lofts, business space, clubs or shops, where next to and on top of them new buildings emerge, varying from a cruise terminal with hotel and theatre to social housing, exclusive offices, living-working units for start ups and expensive penthouses (Figure 18). The official investors have focused their marketing strategies, under the influence of the informal users of the art and club scene, on mixing low budget/high culture and high budget/low culture programmes.

Meanwhile, a project is underway in Amsterdam North, connected to our research project, Urban Catalysts, where the development process no longer originates with shareholders (who are only financially involved in the project), but with stakeholders (who have vested interests in local business). The careful direction of the activities on site, interests, financial analyses and other factors are initiating a sustainable development that permits an urban mixture of poor and rich, business and visionary activities.

A simple, but illustrative comparison can be made between the neighbourhood participation processes of the 1970s and 1980s, and the stakeholder management that we employ nowadays. In the 1970s, the squatters, residents and local politicians dominated the decision-making process over the investors and central politics, a situation that was, of course, not real and therefore was rejected. This led in the 1990s to a revolution: investors and central politicians regained power, parallel to the growth of the new economy. Now we have a more balanced method: stakeholder management that places all participants, capitalists as well as activists, in an integrated model of communication in which the influence of each stakeholder is agreed in advance.

The East Harbour Area fell apart into independent projects after an attempt for a general design vision for the IJ-oever failed. This was commissioned by the city and the ING Bank, under the name of Amsterdam Waterfront, and designed in 1991 by OMA, KCAP, West 8, and UN-Studio en Neutelings-Riedijk (Figure 19). However, the most important conclusion of the project was that the consciousness that the waterfront should not be an attempt to harmonise urbanism, but rather a multi-coloured archipelago of different urban concepts, became the leitmotiv for future policies. This appears to be a general principle, not only for a waterfront, but also for other urban areas. The unpredictability of urban development appears to be only controllable by the archipelago city, consisting of islands with clearly recognisable urban and functional characteristics. This phenomenon can also be observed in Rotterdam with...
the successive development of different peninsulas in the harbour.

Most remarkable in the Rotterdam case is the successful leap across the river, symbolised by the Erasmus Bridge (Figure 20). Cities mostly lie on one side of a river, like Amsterdam, or grow onto two banks over the centuries, like Paris. Contrary to this rule, Rotterdam succeeded in transforming from a city on the river into a city where the river runs through. This is especially the result of the Dutch consensus attitude (the “poldermodel”). Knowing that no investor would dare to take the first step in such an enterprise, but would wait until a critical mass was generated, Rotterdam made a deal with the State and a consortium of developers. Civil services, like the court, the tax and customs office, the Luxor Theatre and the Port Authority were moved artificially to the other side of the river as long-lease tenants of buildings built by the consortium. The next step was the realisation of several thousands of housing units for different income groups, financed by an artificially low land price and subsidies for social and private housing. This partly explains the presence of luxury town-houses. The construction of spacious houses with flexible ground floors near the city centre, such as those built on Kop van Zuid (Figure 21) and the Müllerpier (Figure 22) in Rotterdam, is not only the result of increasing demand from the well-to-do who want to move back to town, there is also a growing awareness that precisely these residents will function as catalysts for a sustainable urban culture. The phenomenon is demonstrated in London, which has one of the most successful urban cultures in the world, and is mainly based on terrace houses.

Despite all this, these designs are not radical enough to create anything more than traditional patterns of use, especially during periods of shrinking demand for real estate due to the stagnation of the economy. Also the difficulty in stimulating the freedom of the individual lot, due to the large-scale organisation of the Dutch building industry, has frustrated the ambitions to realise “lofty” living-working units on the Müllerpier. Therefore, new experiments have been initiated, for instance, at Lloydpier (Figure 23), where tall towers with rental apartments built by investors are mixed with small-scale projects for “personal housing”, an extreme contrast that is becoming normal in the Rotterdam skyline.

However, all these schemes lack a radical mixture of traditional “urban” functions with large-scale elements of contemporary society, like distribution centres, clean and transparent production facilities and transport logistics. Of all places, the harbour is the best breeding ground for this exciting potential for real contemporary urbanity. For the Waalhaven in Rotterdam and the waterfront in Oslo (Figure 24), KCAP has developed a phasable structure of city blocks. Apart from the obligatory commercial functions, up-market townhouses and cultural amenities, there is place for a transferium, a distribution centre in combination with a small container terminal, or an Ikea centre.

Finally, there are the original ambitions for the Müllerpier from “The City as Loft” (Figure 25): The key concept here is “loft.” The concept of the loft implies a space for living and working used by culturally committed and globally thinking people. It is a space with character and large dimensions that can be occupied with few but effective means. No wonder that when we design a new building for sites as described above, we say we have designed an “occupied attic.” Buildings in these sites are flexible; they have a lot of light, large sur-

Figure 19: OMA, KCAP, West 8, UN-Studio, Neutelings Riedijk: Waterfront Amsterdam

Figure 20: Kop van Zuid, Rotterdam

Figure 21: KCAP: Stadstuinen, Rotterdam. Photo: Hans Werlemann

Figure 22: KCAP: Müllerpier, Rotterdam. Rendering: Group A
faces and high ceilings. Yet they are not flexible in the usual sense that leads to conventional structures lacking in quality. Instead, they provide powerful, adaptable architectural spaces.

In these sites, one can observe that the concept of the loft is also applicable to the larger urban planning context. Regardless of the exact shape taken by the buildings, open space creates a powerful, architectonic spatial unit that gives a site a clear orientation and fixes it in the city. It is partly formal, partly available for occupation. Both the open space and the buildings can be made of materials that show the contrast between new and old recycled materials from that piece of land, such as cobblestones, parts of railway tracks and other found objects. The re-used materials acquire a new interpretation and provide historical depth at the same time. The buildings can be free-standing sculptures or blocks of urban spatial units. This “flip-flop” effect conveys a completely new kind of feeling for urban space. The depth of the buildings creates specific typologies, often with semi-public inner realms that give the urban architectural context a two-fold basis. These spatial conditions make it possible to apply the loft’s properties outdoors and to cause its spacious, dynamic and functionally varied qualities to take effect in the city.