

lecture prof. ir. D.H. Frieling, January 9th 2004

(accessory illustrations are available on demand)

Kennedy's Children

1. Kennedy's children

The tale I will tell you here in a way is a story about unfinished business and lack of confidence of a generation that reached adulthood in the nineteen sixties: the period of the Vietnam War, the period that John Kennedy, his brother Bobby and Martin Luther King were murdered, the years that Rachel Carson published the book Silent Spring that triggered worldwide attention to environmental pollution. The years of Provo in Amsterdam and of the student revolt in Paris; of Constants New Babylon and of the Death and Life of Great American Cities by Jane Jacobs. Then, in 1972 'the limits to growth' was published and 1973 saw the first oil crisis, triggered by OPEC, founded in 1960. The unfinished business is the plan of Lely to enclose and partially reclaim the Zuiderzee from the eighteen nineties. When three quarter of the work had been done, the plan was dropped in the nineteen eighties. As yet nothing came in its place. So the future is open. A new generation may find a new approach to give shape to a water realm that will be a source of joy to future generations.

2. watermachine

The Dutch Lowlands that are the scene of this story can only be understood if you will take this name literally: the Netherlands lie for the largest part below sea level. Water enters from all sides: mainly from the east, the Rhine providing some two thirds of all fresh water entering this country, but also from the south. From the west and the north, by incoming tide into rivers and estuaries and by salt water seeping under dunes and dikes, salinating groundwater from below. A quarter of our annual supply of fresh water falls from heaven, approximately the same amount as does vanish into thin air. All the rest we have to get rid of if we do not want to drown. So, to sustain human life in this delta, the Dutch are living in a vast water machine. By dikes and dams, barriers, locks and sluices, mills and pumps and a huge amount of rules and regulations, measuring and monitoring, they regulate water tables and water quality.

3. major components

The major components of this water machine are land reclamations since the fourteenth century, canalisation of the Rhine since the end of the eighteenth century and the two main projects of the twentieth century: Zuiderzee-project and Delta project. The first reduced the coastline in that area from 300 to 30 kilometres, the second from 700 to some 70.

4. maintenance

Ongoing maintenance of the water machine is necessary, like it is for all machinery. What with climate change, rising sea levels, ongoing urbanization, coating the soft soil with hard surfaces all along the Rhine, the water machine is in for a complete overhaul to fix it for ongoing use in this century. Part of the overhaul will be that we may need larger areas of surface water to collect during winter and to spend in summer. At the same time we may look askance at large water areas as water surfaces evaporate far more water than land surfaces do.

5. unfinished business

The unfinished business I will tell you about is the Lely-plan from 1891, preceded by a whole series of comparable initiatives since 1848 to enclose the Zuiderzee and reclaim the land and by quite a few preliminary designs of Lely himself. I will do so because I assume that some knowledge of history may be helpful in coming to grips with the IJmeer as a design assignment.

6. contents of lecture

The contents of this lecture are first of all to present the physical identity of the Netherlands, that is it being a huge water machine. This I have done just now. Then I will summarize the major developments in land use and land use planning - or the lack of it - we are confronted with today. The main part of the story will be about design proposals for the IJmeer. I will conclude with some remarks on Dutch tradition in landscape design and on my expectations of a new generation of designers to overcome the lack of confidence of the post-war generation to give shape to the world we live in.

7. delta maintenance

As may be clear by now, delta maintenance is of existential importance for the sustainability of the Netherlands as a human habitat. The international Rhine Commission, set up some thirty years ago, has succeeded in desalinating the Rhine and in generally improving water quality of this life artery of the Rhineland. As climatic change will enlarge the differences between wet winters and dry summers, additional storage space has to be provided to accommodate excessive rainfall and to even out seasonal differences.

8. rural areas

The Netherlands belong to the top of world trade in agricultural products. Number six in imports, number three in exports. Ongoing liberalization of world trade may change this when the United States, the European Union and Japan, along with many other nations, will stop subsidizing their agricultural production. This will take another twenty to thirty years. We will need this time to adjust our commercial policy in this field. As some two thirds of the land in the Netherlands is used for agricultural production, we may expect quite a transformation of the Dutch landscape, combining ongoing intensification in some areas, especially Holland, and extensification elsewhere. With ongoing urbanization, more land will be claimed for nature reserves, open air recreation and for living in the remaining countryside.

9. transportation

Since the Middle Ages, the main trading route of western Europe has been between the cities in Northern Italy along the Rhine to Southwest England and London. Shipping lanes in the North Sea are the most intensively used of the world. On the crossroads of European and world trade routes, the Netherlands has to fulfil its role as one of the European centres of distribution. As worldwide competition exacts ever more efficient transportation systems, the time will come that we have to rethink and reinvent the transportation system in the Rhine delta and in Holland especially. Because of the generally low population density of Holland compared to metropolitan areas elsewhere, the present structure of the transportation system is correspondingly weak.

10. urban areas

It is fashionable nowadays to conceive and describe the ongoing development of the city as a transformation into an urban network. There is a nice book by H.G. Wells from 1899, called *Anticipations*, in which he foresees the motorcar must necessarily have this effect. However, technically, economically and territorially this transformation may be going on for something of a century already, socially, culturally and politically people seem to belong to specific places. Far more people than you might expect live and die more or less in the vicinity of where they are born. Economically, we are on our way to become citizens of the world. Culturally however, spots on earth all have their own identity, deeply rooted in history. People living there will experience this identity and enrich it by their own histories. This, I think, is the main dilemma to tackle in the metropolitan transformation that the present generation has to face.

11. different perspectives

Another fashionable observation these days is that because of ongoing internationalisation, national government is less important. The decline of political parties is experienced by many as the end of politics as floating voters will bear floating representatives. It is an article of faith in postmodernism that the great narratives of the last century have spent their energy and that we should be happy they are replaced by the small talk of our own day. My feeling is that this idea is rather superficial, more a sign of cynicism or escapism of the generation that became disoriented in the sixties, of Kennedy's Children so to say, than that it does help us to give shape to our life and the society we live in. My feeling is that great narratives are rooted in history. Socially, culturally and politically it makes more sense to recognize, respect and enrich them than to deny, deride or neglect them.

For that reason we should use these different and often conflicting great narratives as frames of reference for practical day to day decisions on matters of common interest. That was the big idea of Netherlands Now As Design fifteen years ago, echoed ten years later by the Ministry of Planning and lost again in a traditional but useless effort to overcome different great narratives about human society in one and only one general view on the future.

12. planning vademecum

Planning policy in the Netherlands is fairly easy to understand if you replace professional rationality of physical design by political rationality. The mainstream of political preferences in the Netherlands consists of three narratives: social democracy, Christian democracy, and freedom plus democracy. The Labour constituency is concentrated in cities. The freedom plus democracy constituency is concentrated in the West. The Christian democrats live everywhere else. As there are three potential political coalitions it is easy to predict what planning policy they will follow. Socialist - and Christian Democrats will promote national dispersal of people and jobs and regional concentration. Christian - and Freedom Democrats will promote just the opposite: national concentration and regional dispersal. Socialist - and Freedom Democrats will opt for national and regional concentration. But as no coalition will be in power for more than eight years, none of these policies is sustainable. In practice therefore, the 500 odd municipalities reign supreme. That means national dispersal as well as regional dispersal.

13. birds

The character of delta's is to be fertile, flat and soft soil.

All over the world this attracts birds. For the same reason that the everchanging sky above is by far the most beautiful natural environment we have, so birds may be called the glory of the Netherlands. For many species the specific pattern of land and water that this country can offer is an excellent habitat, either to spend the summer or the winter, or to feed and rest during annual migration, or even to stay the whole year round. Therefore the quality of nature protection in a heavily urbanized delta can be assessed by the variety and density of its bird population.

14. birdwatchers

In this delta, not only birds but also birdwatchers abound. A whole army of enthusiastic amateurs will use sunrise and sunset to watch and count migrating birds. Most times a pair of binoculars will do. For the high flying birds special sky scanners are needed to follow the birds on their intercontinental routes.

15. bird habitat

Birdwatchers form an international community. They are a fine example of a network in today's urbanized society. As they love birds they want to protect their habitat. And they know the golden rule of management: what gets measured gets done. So they count and register, make maps and exchange these in their international network and exert political pressure to sustain this wildlife on wings. Thanks to the birdwatchers we have atlases that show the Netherlands as an intercontinental HUB for bird migration. Thanks to birdwatchers the cormorants (aalscholvers), in the sixties reduced to not more than one thousand pairs in the whole of western Europe - 800 in the Netherlands, 200 in Denmark - have been protected. In 1993 the population has grown spectacularly to 60.000 pairs. Nowadays 10.000 pairs commonly hibernate in the Netherlands.

So my message is clear: whoever wants to change something in the arrangement of water and land in this delta and assess its effects, look at the sky.

16. design proposals

After this general overview of the main planning issues of the Netherlands today it is time to focus attention to the IJmeer. I will do so by presenting you a selection of some 25 different design proposals for this particular spot on earth, more often than not embedded in designs for larger areas.

17. formation of the Netherlands

Before doing so, we should spend some minutes on the formation of this part of the Netherlands. When we take a few giant steps back in history, we see that the Rhine, after the last ice-age but one, discharged its waters via three branches of its delta. The main one is the southern one, what we call today Waal and Merwede. The middle one, going westward what we call Nederrijn today, split in two branches, the 'Old Rhine' and the Vecht. The third one goes north, called IJssel nowadays. The two main branches discharged in the North Sea, Vecht and IJssel discharged in what was later called the Almere. The primeval IJ is the link between this Almere and the sea.

Somewhere between 500 and 700 BC the sea destroyed the northern coastline and broke in from the north. Then, in de Middle Ages, around the year 1000, the coastline settles in a new ridge of dunes west of the original one and large lakes emerge in the marshlands at the inside. The primeval IJ is cut off from the sea by these new dunes.

18. the IJ and the geomorphology of the landscape

When we analyse the geomorphologic formation in more detail we have to start with the peat-ridge running from north to south behind the sand dunes on the coast and the fork of Old Rhine and Vecht at the east-side. This peat-ridge drained by rivulets running from the higher parts in the centre down to all sides. In this windswept plains, attacked from all sides by heavy rains from above and the sea breaking in, much of the peat bog drowned and was replaced by water. The IJ, the original outlet of the Almere, divided the peat-ridge in two parts. Stabilized between the sand dunes in the west and a ridge of hills at the eastside, this is more or less the ground floor of the landscape of today.

19. 1808: Stelling van Amsterdam

Apart from its main function as drinking water for all living organisms that need fresh water to stay alive, in Holland water has also been used as a means of defence. The rise of the Dutch Republic in the seventeenth century made Holland attractive to foreign invaders. A Water Defence Line was built from north to south between the mouth of the Vecht and the southern branch of the Rhine. The delta environment of Amsterdam made it feasible to use the same technique to strengthen the military position of its main city.

20. 1700-1900: different ways to the sea

The accessibility of Amsterdam from the sea became a major concern when the south bank of the IJ silted up and the entrance to the harbour had to be dredged continually to keep it open for the ever larger vessels of the merchant navy of Amsterdam. The entrance via the island of Pampus had always been an problem and the shallow Zuiderzee became ever more of a problem. In 1805 a competition was organised by the Dutch Society of Sciences to find a solution. The price was won by Jan Blanken, then Inspector General of water management of the Netherlands, at that time part of the French Empire under Napoleon. He proposed to cut off the IJ from the Zuiderzee and dig a canal to the north. Amsterdam opposed the idea, but after a change of regime, Blanken persuaded King William the First to agree to the project, be it mainly for military reasons. The Great North-Holland Canal was opened in 1824. The canal was a vast improvement, because drawn by horses, the ships could make the journey between Amsterdam and Den Helder in 16 hours, whereas sailing the Zuiderzee might take weeks for lack of wind. It was a pity that in the year the canal was ready, the first steamship sailed the ocean. As these steamships soon became far bigger than sailing ships, the new canal was more or less out of date from the day it was put in use. Nevertheless, it took more than fifty years before the North Sea Canal was opened in 1876. this new access to the sea marked the beginning of a new boom period in the economy of Amsterdam.

21. 1924: twaalfde provincie

I will skip the whole story of all the initiatives to enclose and reclaim the Zuiderzee in the nineteenth century that arose as soon as it was decided to reclaim the Haarlemmermeer halfway that century. Neither will I dwell on the history of the Association Zuiderzee and its remarkable employee, Cornelis Lely. That would take a lecture in itself.

So I start in 1924, when parliament had decided on the project and work had begun. The picture is a pamphlet, distributed privately by a participant in the international town planning conference, showing the most recent proposal of the Zuiderzee Project Agency. The Agency of the Ministry of Public Works itself, then as now, did not want to participate in conferences on town planning or landscape planning or any such vague pursuits.

22. 1934: AUP - ontspanning

In the General Extension Plan of Amsterdam, the area between Amsterdam-Rhine Canal and IJmeer was appropriated as nature reserve and a park, whereas the IJmeer itself was to be an area for water recreation, sailing and boating. This part of the plan was meant as an indirect hint to central government that a sole use of the polders for agriculture should be reconsidered.

Notice also, however, the seaplane on Zeeburg. At that time it was predicted that transatlantic flights might become feasible in the near future. It was expected that these intercontinental connections would be maintained by hydroplanes. So for that reason the IJmeer area between Amsterdam and Pampus should be reserved for an eventual hydroplane airport.

23. 1938: Vechtplassen

As an answer to the economical crisis of the nineteen thirties the jobless in the Netherlands were

employed on a vast scale to transform then still existing natural environments into cultivated land. Large tracts of land were opened up, drained and parcelled out for agricultural use. The Zuiderzee project did the same, but then for a large stretch of water. Naturally nature conservationists were alarmed and started opposition against the destruction of the identity and character of the landscape, transforming it into what they called an agricultural steppe. Especially young and local nature conservation organisations, like the Vechtplassen Committee, were active. I refer to them here because to this very day all major nature conservationist organisations have their headquarters on the line Amsterdam - Vechtplassen - Utrecht. Also to this very day these organisations judge any proposal on connections between Holland and the new polders on its impact on the Vechtplassen-district. They also connect any proposal for the IJmeer to the future of this district with regard to nature and recreation, as this district is considered to be the main link between the water realm of the Green Heart in the south and the water realm of the Markermeer environment in the north.

24. 1942: borderlakes

Already in the early thirties water sport enthusiasts were aware of the recreational potential of the border lakes that would appear around the southern polders and the opportunities they would offer for connecting the lakes in Holland and those in Friesland. The Zuiderzee Project Agency considered ideas like these as unsolicited interference with their work and turned a cold shoulder to the initiators. At the end of the decade Amsterdam started to make its own studies and the Royal Dutch Water sports Association set up a Zuiderzee-commission. One of the main issues on the agenda was the huge size of these border lakes, compared to that of lakes in Holland and Friesland. During the war proposals were made to downsize these border lakes by way of islands. Up to 40 islands, quite a few of them in the IJmeer, would create a pattern of different water areas that would be more attractive and safe for small sailing boats.

25. 1944: woodbeltsystem

In the thirties also the nature conservationists joined forces in what was called Contact Committee on Nature- and Landscape Protection. Just before the war this committee took the strategic decision to make a difference in their position with regard to the old land and the new. In the old land they often preferred conservation of existing landscapes with well-established values above new landscapes with risky values. In the new land however, where the existing environment was irretrievably lost, they chose a creative approach by proposals for landscaping the agricultural 'steppe' as well as landscaping the border lakes to fit them for recreational use.

26. 1958-1959: from rural to urban

After the war there have been major shifts in the sequence of building the polders. Work on the western polder, Markerwaard, had already started in 1940 but had been stopped. After the war it was decided to start with the eastern polder, to stimulate employment in that part of the country. Schemes were drawn to structuralize the main infrastructure connecting the different parts of the country in combination with the logical position for the primary and the secondary centres in this rural region. Compare the structure scheme of 1958 on the left with the scheme of 1959 on the right and remark that three new towns have been added, two on the southwest of the southern polder, one east of Marken in the western polder. Remark also that in 1958 the main motorway from the north through the southern polder stopped at road A1, whereas in 1959 it was connected to road A2. This major shift in land use policy was made on request of the National Commission for the West of the country.

27. 1961: masterplan

Then, in 1961, a master plan for the Southern Polders is published. The plan is remarkable for its bold allocation of large wooded areas. One opposite Amsterdam, extending the environment of the Gooi region right up to the coast of Waterland. The other along the north-eastern dike of the western polder, from Enkhuizen to Lelystad. By the road structure the new land is nicely embedded in the old, thereby fulfilling one of the original aims of the project: to improve interconnectedness of the provinces around the Zuiderzee. Remark also how the urban areas opposite Amsterdam are connected with that city on both sides of the IJmeer and how Marken is part of the polder.

28. 1962: southern border lakes

In 1962 the Contact Commission for Nature- and Landscape Protection that had been active since the nineteen thirties published a proposal for the southern border lakes, specifying additional facilities for the

recreational use of the lakes like beaches, islands, marina's and what else may be needed for various watersports. It can be seen as supporting the master plan, highlighting the recreational potential of the border lakes. Marken, like in the master plan, is still part of the western polder.

29. 1965: plan Pampus

Then, in 1965, van den Broek en Bakema, with a series of designs for the environment of Amsterdam, proposed an alternative approach to urban and regional planning, breaking through the traditional separation of city and landscape. One of their proposals was to integrate water and city by turning the axis of urban development at the eastside of Amsterdam from a tangential position southeast - northwest to a radial position from west to east.

30. 1966: Randstad radiating outward to Lelystad

In 1966 van Eesteren made a sketch for the Randstad radiating outward to Lelystad. This was in the period population forecasts for the Netherlands are 20 million in the year 2000. The new city opposite Amsterdam is surrounded by three lakes: Gooimeer, IJmeer and a lake around Marken. Notice the way both cities are linked to each other by rail system and primary and secondary road systems.

31. 1967: western borderlakes

A brochure of the Contact Commission in 1967 on the western border lakes combines suggestions for larger lakes - near Hoorn, but this time also around Marken - with woodlands on its borders: opposite Hoorn, opposite Marken and on new land in the IJmeer, next to Amsterdam, like in the General Extension Plan of 1934. More generally, the design proposes to use the borders of the western polder completely for recreational purposes and limit agricultural use to the core area. This is in accordance with the second report on national planning published the year before. Difficult to see on the map, but of some importance with regard to water management, are the lines some distance from the coastline east of Amsterdam. These are dams to separate fresh water from the western border lakes and more or less salinated water coming out of the polders through the Oostvaardersdiep and to leave the country via the North Sea Canal.

32. 1971: second national airport

In the nineteen sixties the central government expects increasing growth of air traffic and so it sets up a committee to search for a site that can accommodate an airport for 80 million passengers per year. The committee analyses some 13 different sites and a location in the western polders seems to be the most suitable one. Of course there is a huge outcry of protest from people living in the neighbourhood. As the most effective way to prevent this disaster is to oppose the western polder as such, protesters join forces in an Association for Conservation of the IJsselmeer. In the same year 'Limits to Growth' is published, a study committed by the Club of Rome, a club of European industrialists. This report led to a complete change of mind of Sicco Mansholt, then European Commissioner for Agriculture, the post-war architect of industrialization of agricultural production and scaling up of farm size all over Europe. More or less overnight he concluded that Europe should not increase but reduce its agricultural production.

33. 1972: variants for the western polder

So there were several reasons to reconsider the feasibility of making the last polder. In the meantime, population forecasts had diminished to some 14 million inhabitants in the year 2000. The cabinet in 1970 had introduced a system of 'core planning decisions' and the western polder was to be the first of this new type of strategic decisions. The Zuiderzee Project Agency published a report with six variants, according to different proposals in discussion at the time. Remark that in all variants the salinated water of the southern polders is separated from the fresh water on the westside.

34. 1975: recreational perspective

As there is no political urgency to decide on this matter, the IJsselmeerpolders Development Agency, another branch of the Ministry of Public works, starts a study to be called Explorations Markerwaard in the hope to speed up the decision process. In this study the western polder is shaped more or less as a square of 20 to 20 kilometre that could accommodate several scenario's, such as metropolitan, urban, recreational or simply rural, using new agricultural land to ease transformation processes elsewhere by offering farmers new farmland. The discussion drags on till 1986 and by then everybody is sick of it. The cabinet draws the boundaries of the twelfth province established that same year to include the potential polder and closes the decision process by lack of agreement on any of the variants.

35. 1974-1985: change of policy

A remarkable change in spatial policy of Amsterdam happened in the same period as the reassessment of the western polder of the Zuiderzee-project. The first part of the periodic structure plan was published in 1974. It shows the part of the IJmeer within the municipal boundaries of Amsterdam as a recreational area, just as the General Extension Plan had done forty years before. In 1985 this idea is dropped and one can see a new urban extension has been drawn in its place.

36. 1977: provisional master plan for Almere

In 1977 the IJselmeerpolders Development Agency produced a provisional master plan for Almere, a design by Teun Koolhaas. In line with the uncertainty at that time about the western polder the plan refrained from any proposals in that direction and concentrated on the potential of urban development on the extended boundaries of the IJmeer and the need of a direct connection with Amsterdam.

37. 1982: WIRAA (1): four scenario's

In the eighties the regional directors of the Rijkswaterstaat, the National Public Works Agency, had associated themselves in what they called the Randstad Committee. This Committee assigned the Zuiderzee Project Agency to make a comprehensive study of the IJmeer. It was the first and, to my knowledge, the only time the IJmeer in itself has been subject of design. First and foremost issues of the study were related to the water system: whether or not separate salinated and fresh water; what to do with shipping lanes and capacities of locks; water levels in the different compartments of the water system; safety of the dikes, etc. An analytical approach of all relevant issues led to four scenario's in which different weights are given to different sets of requirements and potentials. Whether or not to combine dams to separate fresh from salinated water with a road and/or railroad connection between Almere and Amsterdam is part of this study.

38.1982: WIRAA (2): locks and canals

An interesting item of the study with regard to the present resurgence of freight traffic by boat and the rise of recreational water traffic are ideas to disentangle the various shipping lanes at the mouth of the Amsterdam-Rijn-kanaal and the locks between IJ en IJmeer, the 'Oranjesluizen'.

39. 1982: WIRAA (3): recreation

An important part of the study was what might be done to improve the recreational value of the IJmeer. The working group remarks that 'in general the IJmeer is but poorly accessible for water sports'.

40. 1985: sketch of Markerwaard

In national discussions on major infrastructure, always when public authorities hesitate about what to do, there are calls for public - private partnerships. The political risks are translated in financial risks and the authorities hope to create political support by engaging the business community in the issue. So in the endgame of the discussions on the western polder a private group of initiators in the new land tried to influence the debate in favour of a polder, that at least would make use of the underwater landscape known as Enkhuizerzand.

41. 1987: NNAO, dynamic scenario

An interesting variation on the various proposals to use the border of the IJmeer was a design by Jos Jacobs and company to make a city-district of houseboats on the eastern edge of the IJmeer. This proposal is part of the Dynamic Scenario for the Netherlands halfway the present century, one of four scenario's developed for the Netherlands Now As Design project, referred to earlier.

42. 1989: water quality

The impact on water quality of any proposal for the IJmeer is of course one of the main measure sticks to judge its feasibility. Don't think that the present situation is perfect or even optimal. Don't think either that whatever you might propose for the IJmeer will not change the existing balance: quantitative change will influence quality.

43. 1988-1997: from New East to IJburg

As the western polder sailed away on the prevailing political winds, Amsterdam lost sight of it and started to make plans of its own. The extension plans for the New East were already part of the IJmeer study of

1982 commissioned by the Randstad Committee of Rijkswaterstaat. Now, twenty years later, IJburg is already inhabited and an inner-city beach this summer added a new attraction to city life. Notice however the change of name. A name like New East is generated by the traditional concept of a central city in which any new development is seen as an extension of the original centre. IJburg is generated by a concept of genius loci, the autonomous identity of a place on earth.

44. 1994: IJmeer

Just for fun let me show you a proposal I submitted in the provincial procedure to decide on IJburg. Notice the combination of islands and bridges.

45. 2000: bird protection areas

Already in the nineteen-eighties the European Community had become quite active with regard to the protection of the natural habitat of rare species of plants and animals. This policy has been intensified following the UN-conference on the environment in 1992 in Rio de Janeiro. The European Union presently pursues a policy called Natura 2000 that integrates the original Habitat-directive with an additional bird-directive, protecting for example areas where a certain percentage of the populations of migratory birds assemble on their annual continental or intercontinental travels. These directives do not completely forbid any kind of change in these protection areas. However, any proposal to transform the prevailing conditions for the survival of the protected species can only be permitted if they do not diminish those qualities.

46. 2002: studio Deltametropolis

Last year, the National Architect, Jo Coenen, commissioned a design studio on Deltametropolis. Four teams of designers were engaged. Three Dutch teams each worked on a part of the whole metropolitan region. A Swiss - Italian team submitted a design for the metropolis as one unit. A team led by Teun Koolhaas worked on the region Hoofddorp - Almere - Utrecht. Here also islands are used to give structure and shape to the IJmeer.

47. 2003: Schiphol Airport

During the seventies it became evident that Schiphol Airport opposed a new international airport somewhere in the neighbourhood and that it would be politically impossible to use the western polder of the Lely-project for that purpose, even if the provincial government of North-Holland lobbied heavily for that solution. More generally, the economic outlook had become more moderate, in the wake of several oil crises. Central government decided to keep the airport where it is, implicitly accepting that future extensions were to be accommodated at that same spot. To anchor Schiphol to its place, the Schiphol railway line was built at the end of the seventies and opened in 1981.

At the end of that decade central government, in its fourth report on national planning policy, embarked on a Main port strategy, in which Schiphol Airport, together with Rotterdam harbour, were to be the two main ports of European size and scope. In 1995 it was decided to expand the capacity of Schiphol with a fifth runway. That was put into use in 2003. A recent design project of Arjen van Susteren, a student of the Faculty of Architecture shows that further expansion may be possible. Another configuration of runways might even diminish noise nuisance.

48. 2003: the way out

This year, a combination of public authorities and private organisations for nature conservation have tried to find a way out of the discussion that is going on since 1959 about the connections between North-Holland and the southern polders, between old and new land. One can see that the designers could see a way out only as a tortuous path between a wide variety of conflicts of interests.

49. 2003: total development Almere

One would not expect that in the cultural setting of post-modern society anybody would dare to use the word 'total development' or 'total plan' any more. Like the Way Out study I just have shown, I don't think this map of 'total development of Almere' should be considered as a plan at all, much less a serious design proposal. It is a visual presentation of a conflict between aims and means. What it says is: if ones aim is a bigger Almere than the means are better connections.

50. Virtual landscape

One of the weaknesses all people seem to share is the difficulty we have to imagine the world to change. Even if we see it changing more or less continually, it is hard to envisage its eventual future shape. In a way, because of this, we are prisoners of the visual environment we live in. It looks sort of natural, even if it has been completely manmade. As soon as a change has been made, it is as hard to remember how things looked before they were changed as it is to imagine how they may look after a next change.

So, as a key to unlock our mental prison of the IJmeer in its present shape, I offer a virtual landscape that is shaped by a simple repetition of lakes nearby. This virtual landscape shows the IJmeer no longer as the remains of the former Zuiderzee, but as the extension of the Water Realm along the Vecht.

This landscape will never come true. Nevertheless, one may ask oneself: what if this were the existing landscape? Who would think the IJmeer in its present shape an improvement?

51. new generation

It is time to draw some conclusions and to share with you what I learned from this exploration of the history of ideas on the IJmeer.

When I summarize my feelings in one sentence, it is: what we need is a new generation of designs. This years harvest of plans clarify a problem, more than they offer any solutions. And even the presentation of that problem is rather superficial. So I think these proposals should be interpreted as a political cry for help. Show us the Way Out! Give us a Total Plan!

So the thing serious professionals should do is exactly that: show a way out by designing a unifying concept.

What I will do to conclude this lecture is to specify what I mean with a new generation of designs. I will then finish with three remarks that may help to restore confidence in our common ability to give shape to the world we live in.

52. fine Dutch tradition

A new generation of designs, first of all, should fit in what the landscape architects of the Faculty of Architecture in Delft call a 'fine Dutch tradition'. This design tradition is to conceive unity in a set of mutually contrary requirements, which are: utility of aims, economy of means, identity of site and clarity of form.

53. ongoing transformation

A new generation of designs, secondly, should be born from a relaxed attitude. That is: not primarily bent on solving problems, but on creating possibilities. What is being done in the Zuiderzee project on the territorial scale of a complete province and the time scale of a century is just that. If you like to intensify use of space the course of action in design is to compartmentalize, differentiate, parcel out, differentiate again and so on. If you prefer to extensify use of space then of course you go the opposite way and combine existing compartments, homogenize its use, combine again, etc. Notice that I do not use notions like program or function. Design as a unifying concept can only start with form, more specifically with the interaction between identity of site and clarity of form.

54. design strategies

A new generation of designs, thirdly, should be aware of the sources of transformation, acknowledging that transformation is an ongoing process in which any human generation is but a temporary participant. To give an idea what I mean by speaking of sources or transformation I will give some examples from the Zuiderzee project.

Intensification of present use has been the leading strategy in the enlargement of airport capacity in the Netherlands. Given the choice between expansion of Schiphol Airport plus a large lake east of North-Holland or transform the lake in a site for a large international airport, parliament did choose the first possibility. Little has been done however, to intensify the use of that large lake as a nature reserve and recreational area.

Endogenous transformation has been the leading strategy in the development of the Oostvaardersplassen, a completely new bird sanctuary in the new land. Each successive polder has had a bird sanctuary like that, as the lowest parts of the polder are the latest to reclaim. This experience and the design strategy to show what new land has to offer by way of adding to environment quality and values of nature have been decisive in this case.

Exogenous transformation has been the leading strategy in the development of Almere. National policy

has aimed at outward expansion of the urbanized west since the end of the fifties. I think the example does not need any further explanation.

55. final remarks (1)

Three final remarks.

The first is that to my knowledge there has never been made a design of the IJmeer, in which transformation is mainly driven by endogenous sources. The question to be asked in that case would be: what can we do to improve its role in the water system and to enrich its potential as a bird sanctuary and recreational water landscape?

56. final remarks (2)

My second remark is that to conceive unity in a set of contrary requirements one has to start with form, not with function. The question to be asked is what form, that is what composition of water and land, will offer the richest choice of opportunities to combine different uses in ongoing transformation.

57. final marks (3)

My last remark is that the biggest gift this generation can present to future generations living around the IJmeer is a water realm of perfect shape and size. For that reason a good design for the IJmeer to me seems more important and more urgent than a good design for Almere. First things first.