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(accessory illustrations are available on demand)

Deltametropolis and Dutch Dilemmas

1. Dutch dilemmas

This lecture will give you an overview and, I hope, some insight in national land use planning in the Netherlands and the dilemma's it is confronted with.

Land use planning as a task for central government is a relatively new phenomenon. At the start of the twentieth century, municipalities were obliged to make formal land use plans for their urban expansions. In the nineteen twenties and thirties, professional planners began to write about regional planning. During the second world war, the Germans introduced national land use planning in the Netherlands. After the war it took another twenty years before, in 1965, an Act of Parliament created a Law on Land use Planning. In 1970 it was decided that in addition to major land use decisions - in Dutch: planologische kernbeslissingen - were to follow a specific procedure, offering all citizens the opportunity to comment.

In the history of land use planning by central government since 1945 one can distinguish four periods:

1945-1955 : reconstruction after WW 2

1955-1970 : strong government, leader of national development

1970-1985 : doubts on influence of government, 'society cannot be created'

1985-present : new orientation on role of national government in EU

What I will do in this lecture is start at this last period, the present situation. I will do so by clarifying the major land use decision now on the agenda, that is the eventual development of a Deltametropolis. This will be the first part. The second part I will show how this particular proposal refers to a series of dilemmas that national land use planning is confronted with and has been confronted with more or less since it began.

2. Holland, Deltametropolis

The emergence of the European Union and ongoing globalization have triggered an initiative of the cities of Amsterdam, Rotterdam, The Hague and Utrecht to join forces in promoting the development of a metropolis of European scope and size in Holland, the western part of the Netherlands. In 1998 these cities issued a Declaration Deltametropolis. This new name refers to the delta of Rhine and Meuse as a natural environment and to metropolis as a type of city, a city that operates on an international level. Deltametropolis replaces the name Randstad - that is 'peripheral city'- around a 'green heart' of meadowland.

3. Deltametropolis and Dutch dilemma's

This lecture will analyse Deltametropolis and Dutch dilemmas. The first part will focus on Deltametropolis as a strategy of change. This strategy consists of improving the conditions for the transformation of the present rather loose pattern of cities, towns and villages into an integrated urban system. To that end we conceived the strategy of two complementary networks. The water system is the network to maintain and enhance the natural quality of the delta: the network of leisure, called Water realm.

The transportation system is the network to condition the human interaction in the metropolis: the network of labour, called Delta net.

In the second part I will focus on the dilemmas a policy to develop this metropolis entails. An assessment of the present position of the Netherlands and an analysis of possible strategies, with the choices these imply, will offer some insights in the dilemma's that form the agenda of present public debate.

4. Association Deltametropolis

As a start, let me introduce you to the organisation that promotes Deltametropolis. It is an association of public and private institutions like municipalities, waterboards, chambers of commerce, housing corporations, nature conservationists, provinces, etc. This Association Deltametropolis does present itself as an Idea Factory. It offers ideas, concepts and proposals to its members in the first place and of course also to the outside world as far as that may serve the purpose.

So the association, consisting of a variety of public and private bodies, in itself is no part of government

in any way. It is a private organisation with no formal authority whatsoever. Its only instrument of influence is the quality of its members and its ideas.

5. Operation Deltametropolis

The association has some 35 members and a small agency of some 8 people, mainly part-timers. So the capacity of the association to produce ideas is quite modest, as well in people as in money.

For this reason it works according to a planning for several years. The structure of this planning can be presented in a diagram, consisting of four layers and three columns. The layers show the four elements of the metropolis as a spatial system: water, land, connections and settlements, or cities. The columns show the three main sources of change in the system: insights and ideas, produced by science and art in the realm of freedom; political decisions, produced by democratic bodies in the realm of equality; and business decisions, made by private companies, private institutions and private citizens, in the realm of brotherhood, that is competition and complementarity.

The association decided to start with the water system, followed, more or less parallel, by the land system. The two concepts were then combined in the concept of Waterrealm, published in 2002. We then started with the transportation system. That is we began to combine and integrate several studies that had been done already, but had ever so many loose ends. A provisional integrated concept has been produced during a workshop of a week in October last year, in which twelve teams worked together on a common proposal.

6. Waterrealm (1): water system

For several reasons, the water system of the Netherlands is in for a serious overhaul. The main reasons are a change of climate, that is predicted, ongoing urbanisation and more serious attention to water systems as natural habitats. It seems there will be two main impacts of this overhaul. The first will be that we will need more space for storage of water during wet winters to have fresh water available during dry summers. The second is that cities will have to store more water inside the built up area than they are used to. The area for water storage may grow from 5 to 10 %, a huge increase. The first step in the concept of Waterrealm, of course, has been to analyse the consequences of this overhaul and to come to grips with the spatial component thereof by making a design.

7. Waterrealm (2): historical landscapes

The second step in the design process has been to inventorise the historical context of the Waterrealm. For that we could use a recent government report called Belvedere. In this report historical landscapes and some major historical military constructions are designated for conservation. To these have to be added the water systems of historical urban centres, for which these are of international renown.

8. Waterrealm (3): main recreational network

The big idea of Waterrealm is to use the network of the water system as the backbone of the main recreational network for boating, cycling and walking. This recreational network then has to provide the interconnectedness of the various landscapes, nature reserves and recreational areas, such as the many lakes in Holland, so that these together are perceived and experienced as a vast metropolitan park system.

9. Waterrealm (4): water machine

Of course, the association is not the only organisation trying to invent ways to improve the recreational quality of the metropolitan landscape of Holland. Here I will show you some proposals made by a team of the landscape architects H+N+S in a design studio on Deltametropolis, organized by the Ministry of Housing, Planning and Environment. A very serious issue in the public debate on these matters is if the additional storage capacity may be found, at least partially, by raising water levels in meadowland. As one may expect, farmers totally oppose this idea. They prefer a solution, where additional storage is provided in extra basins, if this extra storage capacity is necessary at all. It may be that raising the winter level of existing storage basins, such as the IJsselmeer, may enlarge the storage capacity. In the design presented here, extra storage capacity is provided by raising water levels in meadowland and by creating a secondary system for water storage on an intermediate level between polder level and outside level.

10. Waterrealm (5): room to roam

In this design also the landscape is conceived as an opportunity for leisure activities. Focus here is on a

fine-meshed network of footpaths and room to roam in meadowland. As you will understand, this proposal fits nicely in the concept of Waterrealm as a vast metropolitan park system. A huge psychological difficulty is, of course, that farmers don't see their land as a park for leisure of city dwellers, but as a production area, to work and earn income. And they expect, not incorrectly, I think, that this recreational function may interfere with its agricultural function.

11. Waterrealm (6): ribbon development

Another hot issue of public debate is the idea to offer more opportunities for urban inhabitants to live in the countryside. Market preferences seem to be that a considerable amount of city dwellers would love to do so. At the same time the prospects of farming seem to be bleak, with ever growing pressure on the rich countries of the world to stop subsidizing their farmers. The proposal of HNS is quite modest: existing ribbon development along rivers are expanded and intensified.

12. Waterrealm (7): new rural estates

A more innovative approach of living in the countryside is offered by the design studio of landscape architecture of the Faculty of Architecture in Delft. In the analysis of the Dutch landscape this studio distinguishes between the natural organic forms of the original landscape and the artificial geometric forms of the manmade polders. By enhancing the differences between these two different forms in the landscape the design offers a frame of reference to condition new and old types of land use on a scale of more or less completely natural to completely artificial.

13. Waterrealm (8): subdivisions

A major decision to be made if Waterrealm is to be used as a guiding principle for the future development of the meadowland is to distinguish the various landscape unities within it. Up till now the so-called 'green heart' has always been presented in policy documents as one huge agricultural landscape. This concept of meadowland as one entity fails with regard to its identity and character that offers a rich variety of different landscapes that differ in soil structure, water system, parcellation and history of human occupation. It fails also for operational reasons. Looked upon from that angle, meadowland consists of at least some sixty municipalities, divided over three provinces. Operationally, this means that landscape planning in an area of some 200.000 hectares, or 2000 sqkm and with some 700.000 inhabitants (that is approximately the population of Amsterdam with a size of 200 sqkm) is coordinated by a so-called Platform Green Heart with no formal authority at all. To put the theory of the Water realm into practice, it will be necessary to forget about the green heart as a landscape entity and decide on a subdivision that is more consistent with the variety in landscapes and with the requirements of practical organisation.

14. Deltanet (1): main networks

Now to the second network. As everybody knows, transportation networks can be distinguished according to their function to offer connections on a local up to an intercontinental scale. For Deltanet we concentrate on the metropolitan scale and the interconnectedness of the urban centres, large and small, in this urban constellation. Focusing on this metropolitan scale, we then may decide where and how this network is connected to networks up and down the network hierarchy. So we start with the existing network of highways and railways on this metropolitan level. That network contains some 130 railway stations and nearly 200 highway accesses.

15. Deltanet (2): inventory of planning proposals

We then inventoried all the plans and proposals of the different public authorities on the development of nodes in these networks. A remarkable outcome of this inventory is that the road network is completely neglected, while this network accommodates 80% of all passenger kilometres, as against 20% by the rail network. The focus is on railway systems and on railway systems only. A second outcome is that planners use a rather crude typology of nodes, most times not more than distinguishing primary and secondary nodes. And a third outcome, to be expected, is that every authority uses its own set of definitions. So the end result is more or less complete chaos.

16. Deltanet (3): concept

To clarify the main aim of Deltanet, the concept is to reduce travel time within the metropolis to simplify interaction. As all trips can be divided into two short parts for departure and arrival and a long part for the main trip, we translated this reduction of travel time in a 20% reduction in the short parts, that is

trips on an agglomeration level, and a 20% reduction in the long parts, that is on the metropolitan level. Together that would offer a 40% reduction in all.

17. Deltanet (4): travel time and speed

If we then translate these aims in average speed on the metropolitan network, we see that the Deltametropolis may be too large to expect to be able to travel from one side to the other within 45 minutes. This problem can be tackled in different ways. One is to ease average speed by extending travel time to 60 minutes. Another is to reduce the size of the metropolis by dividing it into two wings or by concentrating on the western part of it, the linear city along the coast, between Rotterdam and Amsterdam. A third one is to introduce a clear-cut hierarchy in the transportation system, by reduction of the amount of railway stations and highway accesses that belong to the Deltanet proper. As Deltametropolis is a widely dispersed and very low-density kind of metropolis, compared to traditional nineteenth century metropolises we know them, it is necessary to integrate the highway system in Deltanet, as most trips by road will take less time than trips by rail. An important way, number four, of attaining the aims of Deltanet is to think as seriously about public road transport as we do about public rail transport.

18. Deltanet (5): provisional proposal

We can now make a scheme of a provisional deltanet by concentrating on the three relevant levels of networks -agglomeration, metropolitan and international- for road and for rail. These are presented by the six circles in the scheme. We then select those nodes in the network where a railway station and a highway access are less than a kilometre apart. The scheme shows to which networks these nodes are connected, giving an impression of their relative rank in the system.

19. Deltanet (6): deltaconnectors

During the workshop in October I already mentioned, this concept of Deltanet then was elaborated. One of the results has been to make a distinction between nodes in the network and centres in the urban pattern. At the start the idea was that both should be on the same level, that is an international centre needed an international node and vice versa. But we concluded these are not necessarily connected. The Hague is evidently an international centre, but situated far too peripheral in the network to serve as an international node. For Utrecht, it is the other way round: an international node, the 'landport' of Deltametropolis, but not an international centre. Another result of the workshop has been to be selective in highway access and by doing so to simplify the system and make it more hierarchical. Deltanet can now be shown as an integrated system of highways (blue lines) and railways (red lines), interconnected by a hierarchy of connectors.

20. Deltanet (7): deltacentres

In the same way the pattern of urban centres in the Deltametropolis has been clarified. The workshop has led to another selection of urban centres than that of central government in its fifth report on spatial planning, published two years ago. Spatial planning of central government is traditionally focused on providing space for urban expansion. But with 5 mln inhabitants at present and a growth of population of half a million at most in the next thirty years, in a way this is a minor problem. For the Deltametropolis as a multi-centered 'global city' it is much more important what the various urban centres have to offer by way of facilities of international relevance. For that reason Almere and Gouda as two important areas for urban expansion were deleted as important urban centres and replaced by Leiden and Delft, two university towns that have a role to play in an Information Society.

21. Deltanet (8): deltametropolis

An important picture that is the result of the Deltanet workshop is this image of Schiphol Airport as the intercontinental node that connects Deltametropolis as a continental centre in Europe to metropolises elsewhere, embedding Deltametropolis in the worldwide network of global cities. Because the word metropolis is unconsciously associated by most people to the nineteenth century examples of world cities, the fact that Holland historically has a multi-centred urban pattern is reason to doubt the potential of the cities of Holland ever to transform into a 'real' metropolis. This picture shows how one could conceive this transformation to happen, as Schiphol offers direct access to a rich variety of urban centres that together give shape to a new type of metropolis that belongs to the twenty first century.

22. Dutch dilemmas

In this second part of the lecture I will try to clarify a series of dilemmas national land use planning is confronted with. I will do so by an assessment of the position of the Netherlands in the European Union and an analysis of the possible strategies the Netherlands might follow. This then will serve as a background for some well known and unsolved dilemmas with regard to regional government, urban concentration versus dispersal and, for Holland, having one delta or two metropolitan wings.

23. assessment (1): position of Deltametropolis

Recently a group of businesspeople, calling themselves 'friends of the Deltametropolis', have issued a brochure that benchmarks Holland against metropolitan regions elsewhere. Ranking number 3 as a seaport, number 10 as an airport and number 8 in headquarters of the top-500 private companies, our standing in science and knowledge is poor. Nearby none Nobel-prizes, no university in the top-10 of the world and only one in the top-10 of Europe.

24. assessment (2): atlas of global pattern

Arjen van Susteren, a student in regional design analysed the global pattern and made an atlas of global cities. By ranking global distribution centres according to the combined importance of their seaports, airports and teleports, he found that the Deltametropolis ranks number 5 in the world, behind London, New York, Los Angeles and Singapore.

25. assessment (3): position of the Netherlands

The world economy can be conceived as a pyramid with a base of production and consumption, an intermediate level of distribution and a top of global business centres. Combining several benchmark studies from different sources one may get an impression of the relative position of the Netherlands. The basis of the Dutch economy seems to be sound: in income per capita and value for money the Netherlands ranks number 10 in the world, with other small countries like Luxemburg and Denmark.

On the intermediate level of continental distribution it ranks number 5 in the world.

On the top level of global business centres the position is rather weak, with only Amsterdam of some importance, ranking between number 20 and 50.

26. aims

What to do? To clarify the dilemmas this assessment of the present position of the Netherlands I have to go back to the start of the period of a new orientation on the role of national government in the European Union in the middle of the eighties, now twenty years ago. For that purpose I will refer to the analysis that was used in an exposition of 1987 called New Netherlands, 2050. In that exposition four scenarios for the future of the Netherlands were presented, Careful (zorgvuldig in Dutch, Z in the scheme), Dynamic (D), Critical (K), and Relaxed (Ontspannen, O). Careful stands for a Christian - Democratic policy, Dynamic for a Freedom - Democratic policy, Critical for a Social - Democratic policy and Relaxed for a policy guided by technical breakthroughs. A careful policy thinks traditional values to be vital: the past is the frame of reference. A dynamic policy thinks one should use today's opportunities: the present is the frame of reference. A critical policy thinks we can and should improve the quality of life: the future is the frame of reference. And the relaxed policy thinks human beings may invent anything: the creative mind is the frame of reference. The best way to prepare ourselves for things to come is to play with possibilities.

So, right at the start of this analysis of possible strategies we find that right in the heart of the political system one will always find people and parties in favour of the past, of the present, of the future and of new discoveries and inventions. This may be seen as the primary source of policy dilemmas. Democracy is the type of government that accepts the everlasting existence of these different political inclinations. Democracy is the method that aims to overcome the dilemmas they entail by clarifying the differences and then decide by public vote.

27. methods

These four views of society differ also in their preferences in methods of governance. Dynamic policy is inclined to flexibility and sensible adaptation to outside circumstances, whereas relaxed policy is inclined to trust inner intuition and ideas, that is to initiate change from inside out. Careful policy does believe in the necessity of top-down government whereas critical policy does see bottom-up government as a

valuable method of social emancipation. So, with regard to method too we are confronted with enduring dilemmas.

28. references

In the mainstream of Dutch politics, three continuous currents can be observed, that in a way are directly related to the three principles of the French Revolution: Freedom as the guiding principle of the Dynamic scenario; equality as the guiding principle of the Critical scenario and brotherhood as the guiding principle of the Careful scenario. The relaxed scenario in this scheme of things is the meeting point of radicals from left, right and middle that has optimism as a guiding principle.

The dynamic people look at Great Britain and the Anglo-Saxon world in general as a frame of reference, the critical people may refer to Sweden or any other Scandinavian country; Careful people may take southern countries as an example such as France, Italy, Spain; Relaxed people might see Germany as an example of a technologically advanced society.

I admit this typology of fairly continuous political currents is very schematic and in many ways rude and superficial. Nevertheless it may help to understand and accept that political differences are here to stay and it is downright silly to think that land-use policy or any other kind of public policy may be neutral, a-political, above politics or on a purely rational basis for the common good.

29. Perspectives

In the exhibition of the Netherlands in 2050 these four political scenarios were then presented by way of images of future land-use. All designs enhance the difference between highlands and lowlands; all increase the amount of surface water in Holland; the Careful and Dynamic futures show ongoing urban dispersal, while the Critical and Relaxed scenarios show urban concentration. The Dynamic and Relaxed scenarios do invest heavily in infrastructure networks aiming at economic growth; the Critical scenario invests heavily in nature reserves, explicitly in the Green Heart. The Careful scenario investments are geared to local development: there is no specific reason for change other than eventual growth of population and income. In the Relaxed scenario the Netherlands will mainly use solar energy, for which huge areas are reserved. The use of solar energy is no longer restricted to food production, but made available for all kinds of use.

30. dilemmas (1): vademecum spatial policy

Having shown the dilemmas and the difference in policies they may imply, I think they can be boiled down to a few main dilemmas. The first one is that in the Netherlands, the constituency of socialist parties live in cities, the constituency of the Christian - democrats in towns and villages and the freedom - democrats are concentrated in the west. Political rationality then will lead to a policy of national concentration and regional dispersal in a Freedom / Christian coalition; to an opposite policy of national dispersal and regional concentration in a Labour / Christian coalition; to a policy of national and regional concentration when Freedom and Labour unite. But as none of these coalitions will stay in power for more than eight years, none of these policies is sustainable. Reality then is national and regional dispersal. If you understand policy this political rationality the of any coalition becomes very predictable.

31. dilemmas (2): Dutch regions * something wrong in the picture

The second dilemma is how to define Dutch regions. Formally, the Central Bureau of Statistics (CBS) sees the western part of the country as a combination of six provinces, together having a population of 7.3 mln. Inhabitants. Should we consider Utrecht to be part of the eastern region of the Netherlands, the size of populations in the different regions becomes more balanced. This will be even more so if one should see the so-called northern and southern urban constellations in the west as fairly separate urban systems. As the national government has announced that it will decentralise land-use policy, this dilemma has to be solved.

32. dilemma (3): concentration versus dispersal

An evergreen in land-use planning is the dilemma between urban concentration versus dispersal. In a recent design studio of the Ministry of Housing, Planning and Environment these two approaches were shown by the teams designing the south wing, that chose concentration, and the team for the north wing, that chose dispersal.

33. dilemma (4) wings versus backbone

Up till a few years ago there was general agreement on a land use concept for Holland, containing two urban wings. The Deltametropolis initiative introduced a new concept that concentrates in an urban backbone along the coast. It can be conceived as a more or less linear city or urban belt between the New Waterway and the North Sea Canal.

34. strategy (1): accept and adapt

The Dutch dilemma today, I suggest, is a choice between three strategies.

The first, most realistic one, is to accept economical and political decline and adapt policies accordingly. This influences the structure of the economy and may be followed by a decline of population, by urban dispersal as agriculture retreats, by more EU-funded infrastructure as especially the harbour of Rotterdam is a European facility, and certainly no great overhaul of the water system.

35. strategy (2): maintain and improve

The second, more difficult one, is to maintain our present position in the world and work hard to strengthen it under circumstances of evermore intensive competition. This means we maintain the economical and political position and keep up Dutch social values of equality. We have to invest heavily in a knowledge policy, in environment and transport and in the quality of life. This is the position Deltametropolis aims at.

36. strategy (3): challenge and innovate

It may be, however, that maintaining traditional strong characteristics of the Netherlands like agriculture, transport and trade will not be enough to be able to compete on a global level. A third strategy then emerges, in which the Netherlands challenges its competitors by creating what one could call a 'smart society'. To create the smart society the Netherlands have to reinvent democracy and reappraise the ways we inform each other. Innovation will be focused on quality of life: education, health and government services.

37. summing up

Let me conclude by summarizing the main aims of land use policy in the Netherlands, starting with the second period, after the period of post-war reconstruction.

- During the sixties the main aims of land use policy were housing an expanding population, a strong agriculture, intensive and industrialized and first class facilities for international transport.
- In the third period, mainly during the seventies, housing stayed traditionally on the agenda but the emergence of the environment as a political issue threw doubts on ongoing economical growth.
- In the present, fourth period, the Netherlands have to orient themselves to a new situation, that is becoming integrated in the European Union and being confronted with global competition, symbolized in the rise of China.

Under these circumstances, it is understandable as well as deplorable that four cabinets on a row have not been able yet to produce an adequate national land use policy.