Visualisation and map-making in complexity:

European, transnational and Randstad experiences

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1. Introduction

The content of spatial planning is based on ideas and perceptions about desired spatial development and desired spatial structures. Such ideas and perceptions are embodied in spatial concepts (Healey 2004; Zonneveld, 1989) which are brought together – often through complex political processes – in documents labeled as for instance 'visions', 'outlines' or 'perspectives'.

In theory visualization is a key component of such documents because after all spatial planning is about territory and space. This 'materiality'- irrespective of absolute or relative perceptions of space (Davoudi & Strange, 2009) – make it possible to frame space with images (Faludi, 1996). Visualization could be done by a variety of techniques (Thierstein & Förster, 2008) like photography, 3D images etc. Even cartoons are used as figure 1 one shows. On higher levels of scale the most common visualization method is based on maps.

Maps can be extremely powerful (Wood, 1992, 2010), leading to consensus (Neuman, 2010) as well as serious conflict. On the basis of this power some conclude that it would be better to abstain from map making and map use in spatial planning (Eeten & Roe, 2000). Looking at the Randstad-Green Heart discourse in the Netherlands these authors conclude that maps lead to what they call an iconographic gaze. Especially the Green Heart has become a closed doctrine, through a large part via images and maps. "One way out of [controversy] is to adopt planning approaches that depend much less on maps and cartographic imaging" (Van Eeten & Roe, 2000).

This is opposed by others. Alexander well acquainted with Dutch planning and familiar with the Dutch planners' predilection for spatial imagery, strongly rejects the idea, but not because he wants to protect the Dutch style of spatial planning or the protagonists of the Randstad/Green Heart 'doctrine'. Alexander (2001: 98) asserts that "…some form of graphic representation …(maps or diagrams) is essential for communicating any ideas that have a spatial dimension, as planning concepts and doctrines must have; and … the fact that all metaphors are essentially fictions in their relation to reality in no way diminishes their usefulness in conceptualizing and communicating planning ideas."

There is a growing attention in the planning literature on the use of maps and spatial images (see for example Thierstein & Förster, 2008; Carton, 2007). What has not been done so far is a systematic exploration of the relation between the content of maps – what is the visual language and is it possible to make a distinction between different types of maps? – and how and why they are used in planning discourse. This paper seeks to do that taking example from Benelux, the European Union and the Dutch Randstad. The final case of maps and map making introduces the map as a collection of operational decisions. In Dutch planning this type of map is becoming a dominant type. Maps exploring, conceptualizing and framing spatial structure and spatial development are becoming very rare. This can be related to the ever growing complexity of the institutional environment. In such an environment planning discourse at a more strategic level is becoming ever more problematic. Seeking consensus is focused on operational

decisions and projects which in itself is such a challenging task that participant in policy processes abstain from abstract discussion about territory, space, place and structure. The case of the Dutch Randstad South Wing shows that operational decision-making is hindered by the absence of overarching strategic conceptual frameworks. So the sections discussing types of maps is followed by a large section on visioning, visualization and map-making in this area where a certain organizational setting has been created some time ago which should have led to novel insights on spatial structure useful to serve as a framework for operational decision-making. For various reasons these expectations did not materialize. We will discuss the main reasons why this was the case. In the final section we bring the insights of the various sections together and present some ideas on visualization and map-making in complexity.
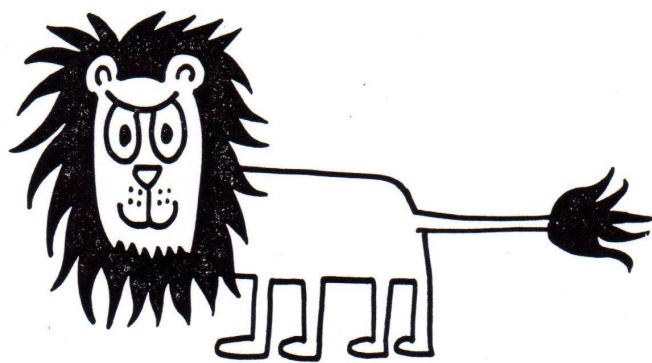
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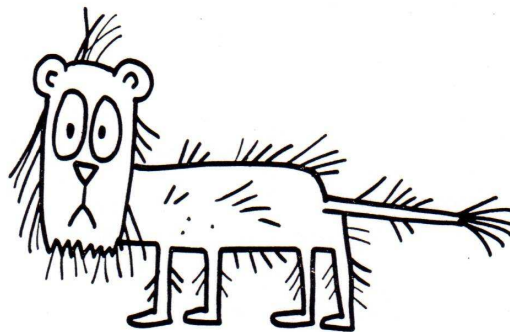
en na de Spreiding.

Figure 1: Cartoons used in a discourse about the spatial economic structure of the Netherlands around 1960: the Dutch lion – a lion is in the coat of arms of the Netherlands – before and after the installment of a national redistribution policy (Source: Luning Prak, 1960)

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2. Maps creating and seeking consensus in conflict

The cooperation between the Benelux countries is seen by many as a king of antechamber for European integration (for instance: Nugent, 2010). Benelux got involved in spatial planning from the late 1960's onwards (Zonneveld & Faludi, 1997a). The practical implications of this at higher levels of scale – i.e. Luxembourg and the Netherlands and the three Belgium regions – are difficult to detect: within Benelux cross border cooperation has always been much more important. Nevertheless the Benelux Economic Union through its organization has been and still is functioning as a kind of platform to discuss relationships between planning at national/regional scale (the reader should be reminded that Belgium does not have a national level when it comes to spatial planning; this situation in this respect does even go further than the classic European federal states of Germany and Austria. Meetings between Belgium regional ministers responsible for spatial planning run through Benelux).

In the 1970's the Benelux spatial planning ministers decided to compile a structural outline or 'esquisse global' as it is called in the second language of Benelux. The document was eventually finalized in 1986: in fact the first transnational spatial planning 'strategy' ever published in Europe. To make a long story short: the key map (in fact the only map) is basically a projection of Dutch national spatial planning policy on the entire Benelux territory. This seems a bit strange but as the Netherlands at this stage was the only country in Benelux with a clear cut national spatial planning policy civil servants and ministers in the other parts of Benelux were using the new Benelux structural outline to strengthen their position at home, so to speak. An agreement on Benelux spatial planning principles would be helpful in starting and establishing spatial planning at higher levels of scale.

What makes the 1986 Benelux outline in particular interesting is the following story or – to a certain level – anecdote. During the finalization a serious conflict broke out about the map.[2] As is clearly shown by figure 1 the emphasis of the Outline is clearly on urbanization, urban containment and preserving open space. The area between the so called Walloon urban axis and the Luxemburg metropolitan region initially looked like a green desert. Especially political representatives of the Walloon region thought this was unacceptable. Reacting upon this the makers of the map changed the key of the map by inserting new categories, namely centers ('noyaux') in rural areas. This filled the map to a certain extent. As the making of the 1986 Outline was dominated by people representing the Netherlands and Flanders this example shows what often happens when one looks at another area through a perspective formed by one's own experience, in this case the heavily urbanized middle part of the Benelux. From this perspective the Walloon Ardennes and northern part of the Grand Duchy of Luxembourg seems a welcomed 'green heart' in a heavily urbanized north-western Europe. The absence of urban structure, as it was originally imaged, was a problem for others though. This example

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[2] Information required through my participation in the making of the Second Benelux Structural Outline in the period 1994-1995. This story has never been put on paper, which often happens in the case of processes taking place behind the scenes.

also shows that transplanting spatial concepts form one context to another – in this case 'urban agglomerations' and 'separation zones' (i.e. green belts) carries certain dangers (see also: Healey & Upton, 2010).
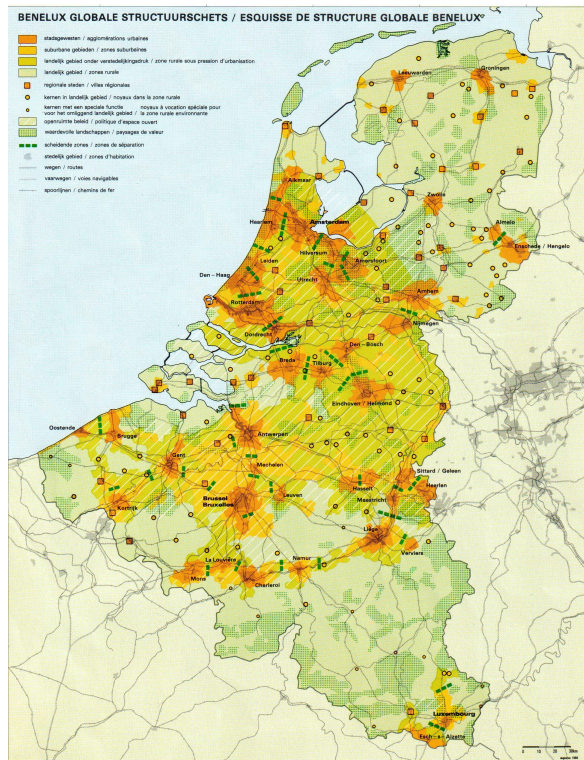

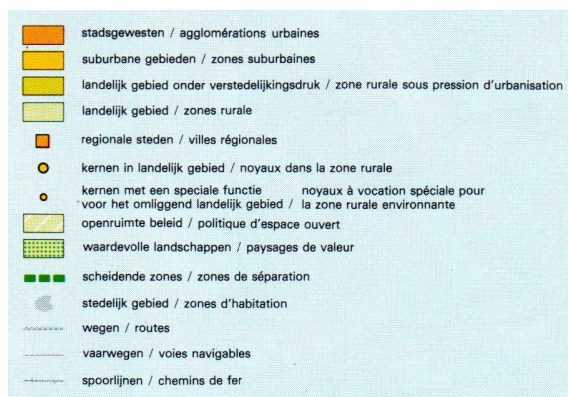*Figure 2: the map of the 1986 Benelux Structural outline, with its 'green desert' in the southeast.*

Figure 3: the key of the 1986 Benelux Structural Outline Map

3. Maps to stimulate thinking out of the box (but sometimes fail to do so)

We can continue the story of Benelux. In the early 1990's the discussion was taken by the ministers responsible for spatial planning to revise the 1986 Outline. The central aim became different though: not so much coordination of national/regional policies but the development of some kind of umbrella document or to discuss and flesh out concrete policy themes (about this new outline see the various contribution in Zonneveld & Faludi, 1997b).

The makers of the 'Second Benelux Outline' – all with a background either in spatial planning or urban design – explicitly made use of spatial concepts and maps. In spite of the Benelux cooperation in the field of spatial planning the countries and regions of Benelux develop and implement their spatial policy on the whole in isolation from each other (see De Vries, 2002). One of the tasks which the makers of the outline set for them was to stimulate policy makers to take a wider perspective; to stimulate them to think outside the box and thus outside the borders of 'their' area. One of the ideas they suggested was the idea of a North South Chain of Urban Networks (see figure 4).
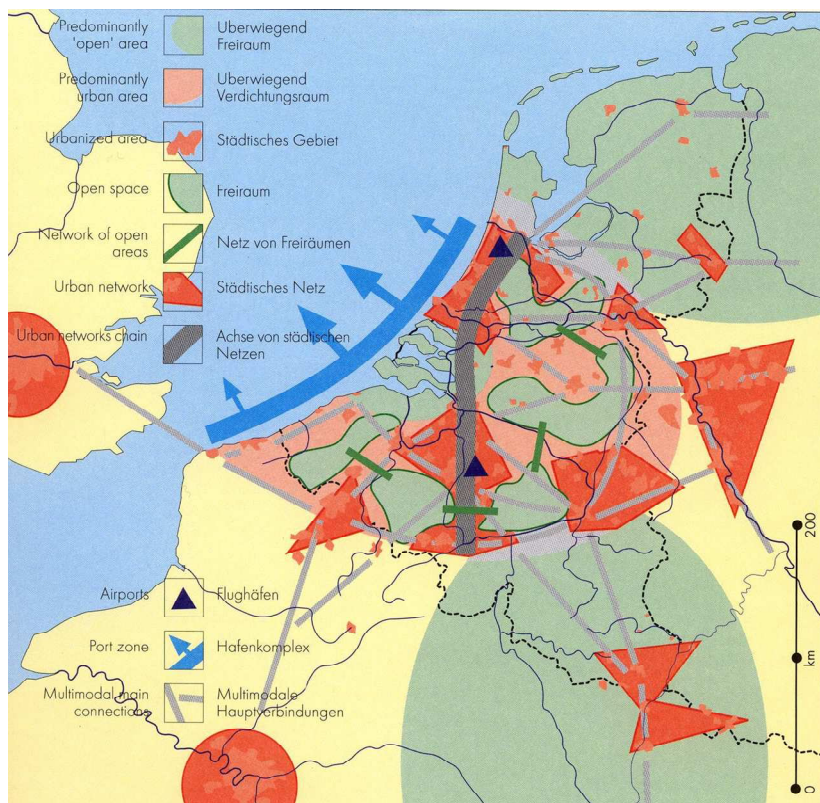

Figure 4: the North South Chain of Urban Networks as proposed in the 1995 draft of the Second Benelux Structural Outline.

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From a (north-western) European perspective it is quite extraordinary that large urban networks are so closely located in each other vicinity. This is an asset worth exploring, so the makers of the Outline claimed. What they underestimated were three issues. First that the two most powerful parts of Benelux, the Netherlands and Flanders, in their spatial planning approaches in these days thought west-east relations were far more important. In both countries the objective to improve connections in the hinterland of their main ports carried enormous political weight. Second it proved very difficult to comprehend what 'synergies between urban networks' could mean in practice. Third is that the visual language of the map presenting the concept of the North South Chain of Networks suggested an urban corridor between Amsterdam and the Walloon 'urban triangle'. Although this was not what the makers of figure 4 had in mind, it caused misunderstanding. Eventually a much simpler image was made much more in line with current planning though (see figure 5). Also the concept of a Walloon and Luxembourg green heart (see the green splodge bottom right in figure 4) proved – again – unacceptable and was consequently erased at least in text.
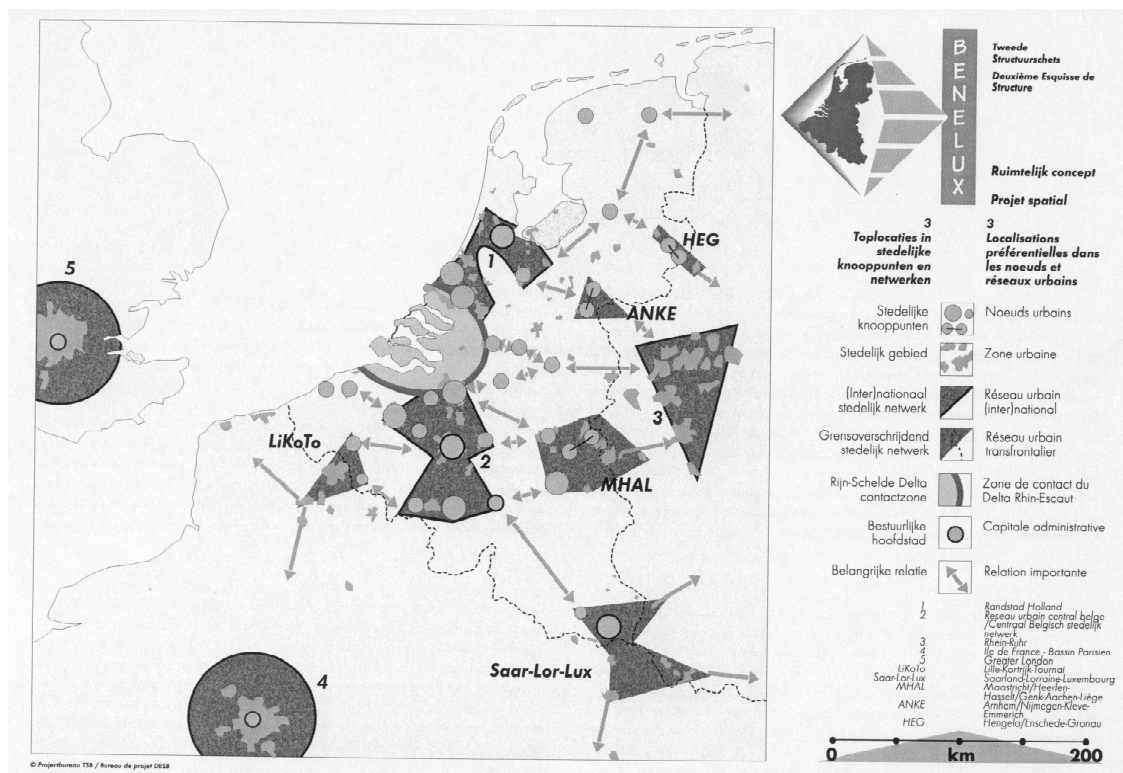

Figure 5: the urban-economic fabric of Benelux and its surrounding regions according to the 1996, final version of the Second Benelux Structural Outline.

4. Maps as diagrams (because genuine maps are too controversial)

The example of Benelux show how complex spatial planning is in a transnational setting with different planning cultures, different administrative systems and different perceptions of space, place and territory. Still cooperation in the field of spatial planning is now forty years old in Benelux. So antagonisms are a bit softened. In many other transnational areas in Europe the situation is much more complex. Zonneveld (2005a,b) has shown that in such setting the making of spatial visions and maps is extremely difficult and seldom lead to a (lasting) result (see also Jensen & Richardson, 2004). At the much larger scale of the European Union matters proved to be even more complex as is clearly shown by the example of the 1999 European Spatial Development Perspective.

The ESDP is a product of cooperation between the EU member states and the European Commission. Some member states have a tradition of national spatial planning so there is some experience with thinking at a larger level of scale but in other countries this is not the case (see Faludi & Waterhout, 2002). When the ESDP was made the making of conceptual maps, showing broad-brush images and perception of Europe's spatial structure proved very difficult and at the end impossible (see Waterhout, 2002 but especially Dühr, 2006). Some mistakes have been made as well; there is no way of calling it differently. An example is shown in Figure 6.
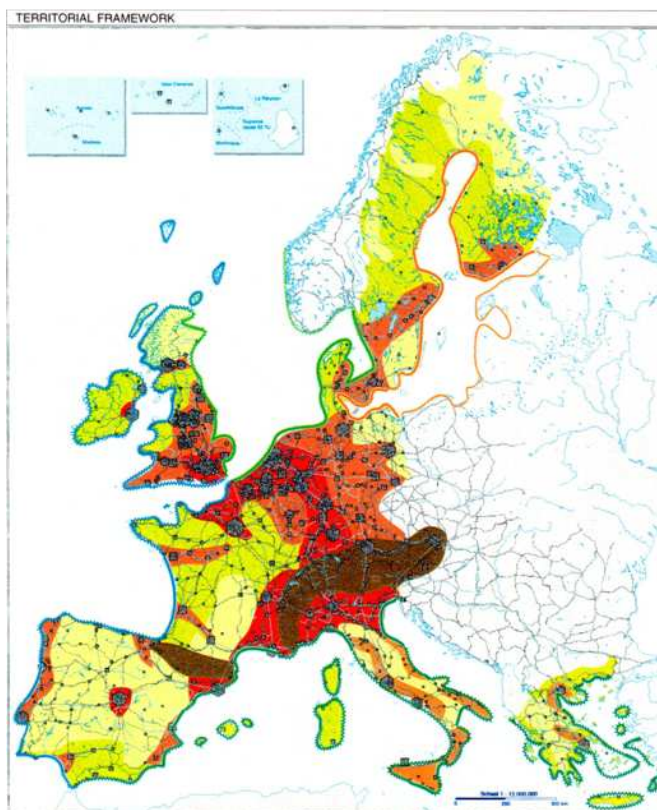

Figure 6: An unpublished map made during the preparation of the ESDP.

Figure 7: The key of the map shown in figure 6.

Looking at figure 7 it is not difficult to see why this map proved to be unacceptable for representatives of various countries. Adjectives like 'weaker' are clear examples of negative branding of regions, at least this is the way they have been understood. Another example in the same vein is shown by figure 8, a map made by Dutch Spatial Planning Agency. What draws the attention is the perception than certain territorial structures form physical barriers. Indeed coastlines can be seen in this way because these are the places where land is ending as is reflected in certain place names. Nevertheless water also connect. What proved to be far more politically sensitive is the claim made by this image that entire countries (the Alpine countries) form barriers. Because of all the negative connotations this also disappeared.
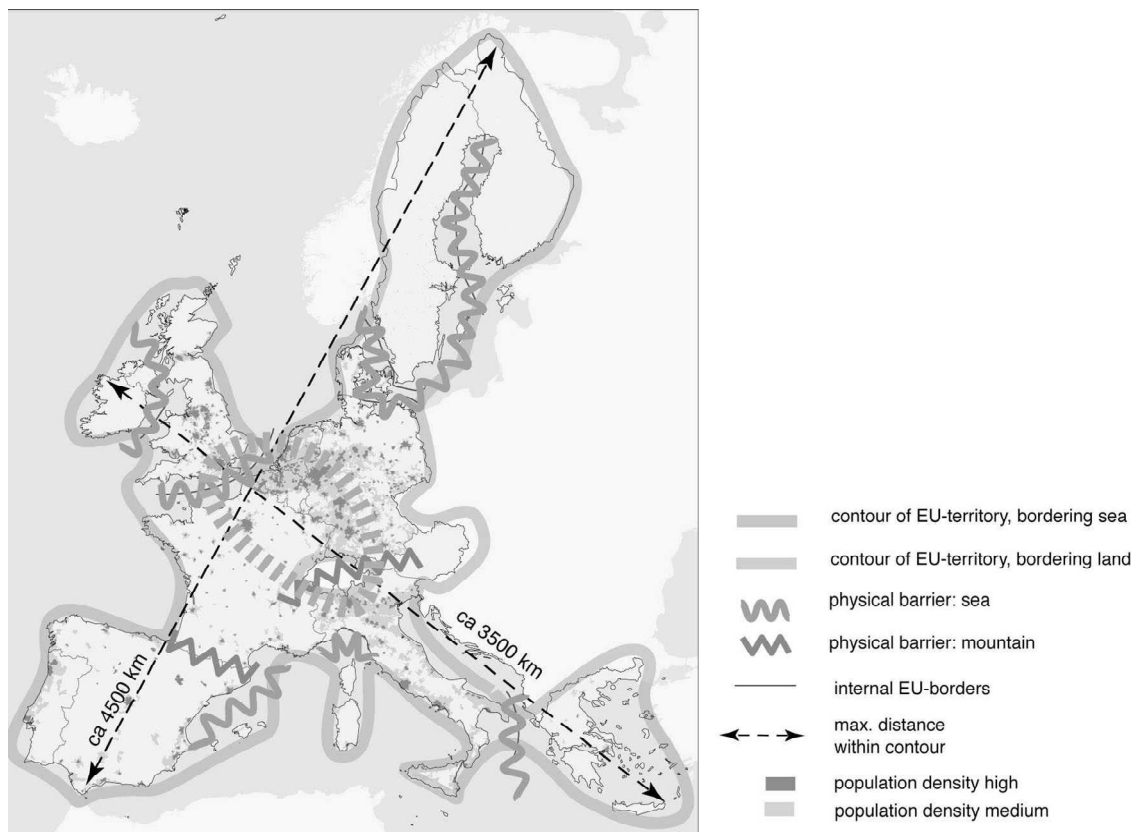

Figure 8: An unpublished map made during the preparation of the ESDP

Apart from some analytical maps the ESDP does not contain any maps showing images of desired spatial development or some kind of perspective how the European territory could or should develop. What the ESDP does contain are a large number of policy objectives which are illustrated by diagrams. The only visual language which resembles a map is a line symbolizing the shape of the European continent. Figure 9 collects all these diagrams/maps. The document which followed up the ESDP – the so called Territorial Agenda; see Faludi, 2009 – is made of just text and is as such a denial of Alexander's statement in the introduction that graphic representation is essential for communicating any ideas that have a spatial dimension. So at this stage the conclusion can be drawn that in those cases when there is no real consensus on where is planning about let alone some shared perception of how a territory is structured it is very likely that no maps will be included in any sort of policy document. A vision – or perspective or whatever name is used – will be limited to a collection of objectives. The scenario project of the ESPON programme shows that in a context not directly linked to a concrete policy arena there are (limited) opportunities for visualization and map-making.[3] We come back to the coupling between research and design-oriented research further in this paper.

Figure 9: Key policy aims of the European Development Perspective illustrated by these hybrid diagrams/maps (source: CEC, 1999)

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[3] ESPON: European Observation Network, Territorial Development and Cohesion. For the scenario project see: www.espon.eu/main/Menu_Projects/Menu_ESPON2006Projects/Menu_CoordinatingCrossThematic Projects/scenarios.html (accessed April 2011)

5. Maps to provide evidence in discourse

This is a very important function of maps. Especially in the formative stage of spatial planning – when discussions take place about the added value or even necessity about a particular type of spatial planning – maps are used to show or even prove that certain policy strategies are needed. We have already discussed the European level. We have emphasized the controversial role of maps in policy discourse especially the more conceptual maps which present coarsely-woven perceptions of spatial structure and spatial qualities. For more than a decade in a side stream of policy discourse there is ESPON: European Observation Network, Territorial Development and Cohesion. Dozens of research reports have been produced so far with a very strong emphasis on map making. Several Atlases have been produced so far. On top of that the website always with a 'map of the month'. There is no clear cut policy maps behind every map produced via ESPON. Nevertheless the subjects of the research project are not randomly chosen but are related through what the representatives of the countries participating in ESPON together with the European Commission (DG Regio) perceive as important policy issues. So indirectly ESPON maps play a role in policy discourse.

But there are examples of maps that although they present the results of spatial analyses are clearly and explicitly meant as an invitation to act politically. One such example is provided by the Dutch history of spatial planning. To describe the urban structure of the west of the country the concept of the Randstad is used for more than half a century. The term Randstad – which originates from the 1930's – turned into a genuine planning concept through a 1958 government advisory report (see Faludi & Van der Valk, 1994). This report gave a clear answer to such questions as is there a need for policies at the level of the west of the country, what should be the objectives of these policies and which key actors should be active at this level? But the discussion about these question is much older and even goes back about ninety years, the formative years of spatial planning in the Netherlands. Figure # presents a map of one of the founding fathers of Dutch urban design, planning as a discipline and spatial planning as a policy field: Van Lohuizen (1890-1956). The map dates from 1924 and was presented at a international conference on urban design in the same year. Van Lohuizen – who worked very closely for quite a number of years with one of the key figures in CIAM, Cor van Eesteren – was seeking to get a message across to the political world, together with a far large group of planning 'pioneers'.

Using the results of census records over the period 1869-1920 – which in itself was quite an achievement because the sophisticated statistics of the present combined with GIS did not exist – he tried to measure in which municipalities population growth took place. The area of population growth he called ' sphere of influence'. He drew the conclusion that in the west of the country population growth took place in a large, horse shoe shaped area. His political message was that this area is in need of planned urbanization. Such a task could not be left to municipalities: higher levels of government ought to step in.

In its presentation technique figure 10 is rather simple (figure 10 itself is a photograph because the original map is lost). It is obviously an analytical map but is also part a policy

agenda. The map in itself is interesting because it was not only used in framing a problem situation. The map in itself is a frame, like all other maps. The section cut out of (the west) of the Netherlands was deliberately chosen and within this frame it delineates not only an urban structure, but also an action area. The map also tries to image something which is not visible with the eye i.e. population development over half a century.
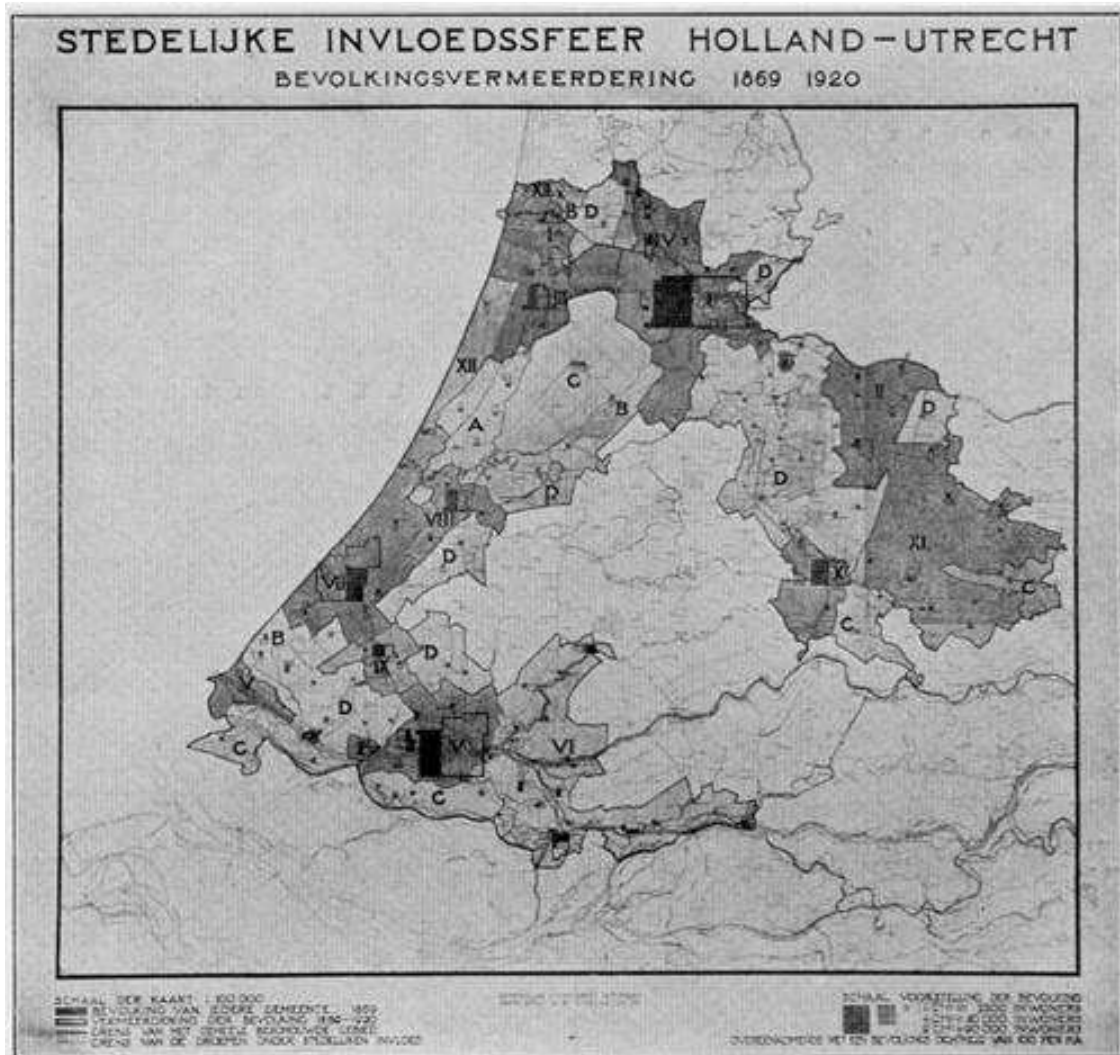
Figure 10: 'Framing' urbanization as a policy issue for government (Source: Van der Valk, 1990)

The transformative power of Van Lohuizen's map was rather limited. No regional plan for this part of the country was made. No planning competences in the public domain on a higher level of scale – above that of the municipalities – were created. Giving such competence to the provinces – the middle layer of government in the Netherlands – was considered by parliament as too centralistic. Nevertheless the map is seen by many as part of the historical canon of Dutch spatial planning.

6. Maps to show an unwanted future: the discursive map

Maps in spatial planning are not only used to present a desired future although most people will probably associate planning maps with this. Maps can also be used – or misused - to show the opposite: an unwanted future or even dystopia.

During the late 1940's and early 1950's the policy environment changed in the Netherlands. Provincial authorities acquired a certain authority to develop and implement spatial plans, mostly of the land-use type i.e. functioning as zoning plans. At the national level a spatial planning agency was established. Although this took place under German occupation the agency was allowed to continue to work after the war.

During the 1950's a national debate took place about the internal spatial-economic structure of the country. Many feared that that urban congestion in the west of the country would increase enormously while the more peripheral regions would remain deprived, a debate not uncommon to other (western) European countries. In 1951 government established a high level committee to advise on future policies regarding the territorial development of the western part of the country (we will meet their 1958 advisory report in the next section). This committee explicitly made use of images and maps. In fact part of the discourse took place through visualization. A perfect example is a map of an advisor of the government installed commission: Jac P. Thijsse.

Before we have a look at this map it is interesting to look at the urban structure of the west of the country during the years the government advisory committee was active (it produced its report in 1958). Some years ago the Dutch urban design Group MUST made a reconstructions of the change of the morphology of the country in a series of 4 maps starting in 1850 and ending in 2010. Figure 11 shows part of the map what the country looked like in 1950. What we see is a number of relatively small cities in a setting which is on the whole rural.

Now the reader is invited to have a look at figure 12, a clear example of what could be called visual rhetoric (Zonneveld, 2007: 663). Jacob Thijsse envisaged a nightmare scenario of a sea of houses. If things were allowed to run their course, the Randstad would become a huge ocean of houses. There would no longer be any separation worth mentioning between urban areas. Thijsse even drew this sea of houses (see Figure 1). It was an image that played an important role in the success of the concept of the Green Heart (Faludi & Van der Valk 1994).

It is debatable whether the Green Heart would have survived as a spatial planning concept if it had been founded only on the principles of good spatial organization. People still had vivid memories of food shortages during the war, so the agricultural function of rural areas was regarded as crucially important. In those days the grasslands in the west of the country were considered vital for food production. Hence, the alternative name for the Green Heart was 'Central Agricultural Area' (agrarisch middengebied) (WWL 1958b: 16). The agricultural sector, supported by its then highly influential professional

organizations, endorsed the concept of the Green Heart, along with the Ministry of Agriculture, right up to the 1990s. So next to the analytical map of discussed in the previous section there is a type of map we could – neutrally – label as a discursive map.
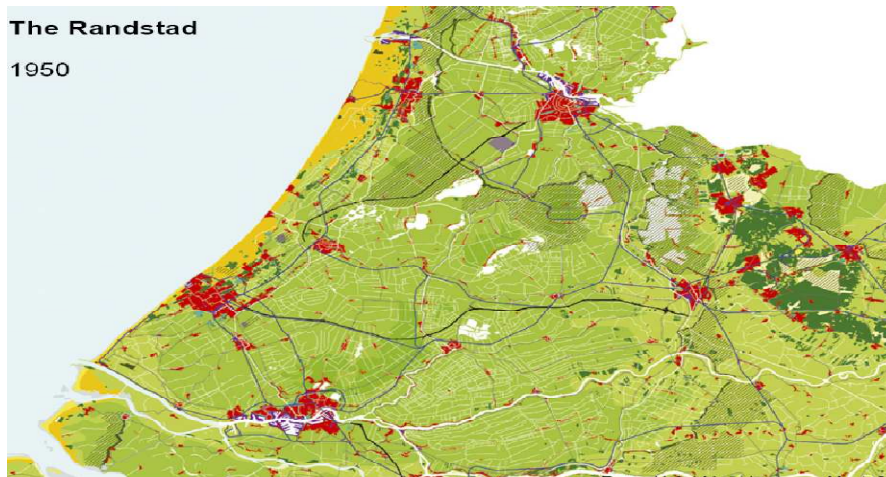

Figure 11: the urban morphology of the west of the Netherlands (Source: part of an unpublished map made by MUST).
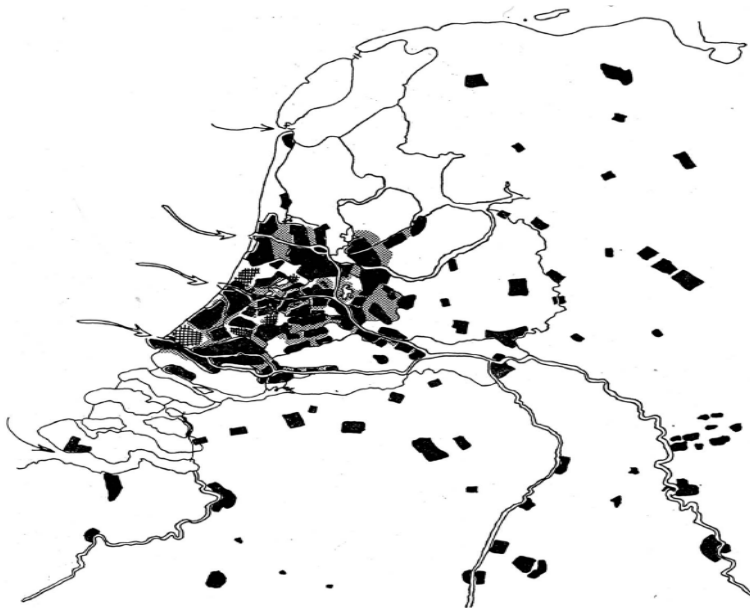

Figure 12: by showing dystopia maps can be used to underline the urgency of an issue (Source: De Ranitz, 1964).

7. Maps to present a complex strategy in condensed form: the conceptual map

Early 1958 the government advisory commission introduced in the previous section finalized report: "The Development of the Western Netherlands". (Werkcommissie Westen des Lands 1958a/b). The focus of this report was largely on urban form. The report came out in support of maintaining the deconcentrated urban structure of the west of the country. It proposed to preserve the green character of the open spaces between the major cities (the so-called buffer zones) and to keep them at least 4 km wide. And on a larger scale it also argued that the relatively open area located in the middle of the ring of cities constituting 'the Randstad' (Randstad in fact means quite simply 'Rim City') should be preserved. This is the famous concept of the Green Heart, a term which was chosen largely on the merits of its rhetorical resonance. In order to achieve this the natural growth of the Randstad should be take place away from the Green Heart, a principle known as radiation.

This entire set of planning concept was visualized in very simple forms, as both maps demonstrate in figure 13. On the left we see the main building blocks of the Randstad; on the right – in fact the cover of the report – the principle of radiation is shown. The second circle on this map roughly shows the area where locations for new towns had to be sought. The map is basically a diagram but unlike the diagrams of the ESDP there is a quite clear topographic underlay.

Figure 13: the desired structure of the Randstad (left hand) and the main direction of urbanization (right hand) visualized through conceptual mapping techniques (Source: Werkcommissie Westen des Lands, 1958a,b).

8. Maps as master plans

In 1966 a government report on spatial planning, the second (the first of 1960 basically endorsed the report of the 1958 advisory committee), was published. The context for (national) spatial planning had changed considerably over the course of a decade. A very steep population growth combined with growing wealth, a growing car ownership and ample supplies of relatively cheap housing in smaller centers, including the Green Heart, threatened the model of distinct urban agglomerations and large green belts. Also these processes were no longer limited to the Randstad but took place in a much larger area: the entire country south of the line Alkmaar-Arnhem. As a counter strategy, the 1966 Second Policy Document put the principle of clustered deconcentration on the agenda. The idea was that the existing hierarchy of centers would be kept intact, albeit in a slightly more flattened form. These ideas were translated into a detailed image of the future spatial layout of the Netherlands, made up of various urban areas brought together in four categories, or urban milieux, with the so-called D-milieu being the highest order. This image is presented in figure 14. The makers of the Second Report even dared to show what the Belgian agglomeration of Antwerp, Gent and Liège could look like.

Figure 14: the structural outline of the 1966 second government report on spatial planning: a genuine master plan

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Every square and rectangle of figure 14 was carefully considered. So basically this 'structural outline' of the Second Report (its official name translated into the most appropriate terms in English) was in fact a master plan. Even a 3D model of this map was made which put on show in the building of the National Planning Agency (it is now lost). What figures shows is not only a planning principle, a set of notion about the preparation, form and working of a plan (Faludi& Van der Valk, 1994: 18 ff.) but also very clear that architecture and town planning are parent disciplines (we borrow this term from Davoudi & Pendlebury, 2010) of Dutch spatial planning.

9. Maps illustrating operational decision-making

We know come to the final manner how a map could function, namely illustrating the location of operational decisions which could be concretely located in space. In the context of this paper we can only touch upon the causes of the growing use of maps of this category. Generally speaking what is a hand here is a growing fragmentation at the level of government and governance. Nowadays a multiplicity of actors participate in decision-making processes in the domain of spatial planning. But this multiplicity is not just a characteristic at the side of the civil society. Decision-making along neat administrative divisions is a matter of the past. So in government circles we see a veritable explosion of consultation and coordination structures partly induced by the growing complexity and scale dynamics of spatial structures. This has led to a disintegration of spatial planning and strategy development.

Some years ago *Policy Science* published an article in which Maarten Hajer discusses the implications of what he calls 'policy without polity'. Here is what he says: "There are no generally accepted rules and norms for policymaking and politics or for reaching agreement on policy measures" (Hajer, 2003). The upshot, he says, is an 'institutional void'. This analysis can likewise be applied to spatial planning in the Netherlands.

Let us take a closer look at politics and policy from the perspective of spatial planning, without the accompanying polity. In 1994 Andreas Faludi and Arnold van der Valk published the internationally famous study Rule and Order: Dutch Planning Doctrine in the Twentieth Century. A planning doctrine encompasses a durable set of views on the desired spatial order of a specific area, the development of this area and concrete decisions..

A planning doctrine does not come about of its own accord. Faludi and Van der Valk say that one important prerequisite for the development and maintenance of a planning doctrine is the presence of a planning community, an influential motley crew of professionals, public officials, politicians, academics and all sorts of organizations; in other words, a constellation of players from the world of politics, governance and civil society. We know from what the literature refers to as 'framing' that certain institutional 'frames' do not form, interpret or maintain themselves; they need sponsors.

Does a coherent planning community still exist in the Netherlands, like the one that existed about one and a half decade ago, according to Faludi and Van der Valk, and which, even then, was reportedly at risk of falling apart? I know of no recent sociological research on this question. But I very much doubt it. There are clear indications that the Dutch planning community has collapsed and crumbled.

Safe, climate-resilient, green-blue delta as an urbanization framework
- strengthen diversity and identity

- reinforce coast

- space for the river (or waterway)

- from southwestern delta to IJsselmeer

- space for green-blue residential environments with a stronger identity for landscapes

- metropolitan parks (search areas)

Give backing to strengths: strengthen the leading functions
- strengthen the leading functions in the cities (■ head offices of international organizations and NGOs, ■ science, ■ international conferences, trade fairs, exhibitions, etc., ■ urban tourism, ■ head offices of multinationals and international banks, ■ ports, airports and international accessibility)

- develop port network

- strengthen Schiphol's hub function

- strengthen the greenports' centre function

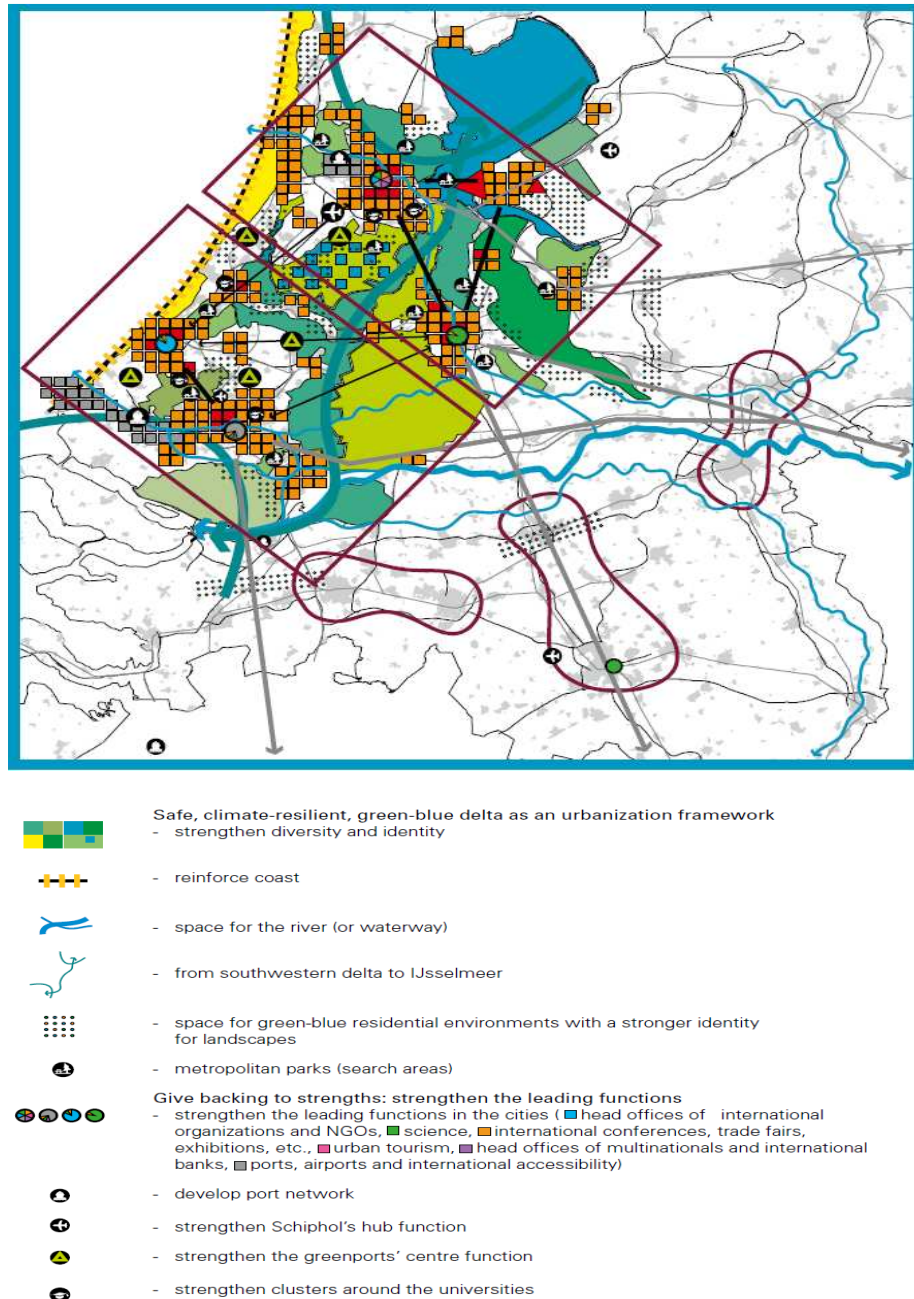- strengthen clusters around the universities

Figure 15 a and b: the most important map of the Randstad 2040 structural vision plus a selection of the key of the map.

In addition, spatial planning definitely occupies a lower place on the current political agenda than in the 1980s and 1990s, thereby occasioning a decline in the status of parliamentary spokesmen in the House of Representatives. And what could be the dead knell for national planning is the fact that the ministry for Housing, Spatial Planning and the Environment has been taken apart by the present government last year. Leaving this aside the effect of the growing complexity at the level of governance can be read from planning document. Several of the types of maps we have discussed above can no longer be found. Strategic thinking and strategic, long term spatial concepts are evaporating. In planning documents, especially statutory plans, we no longer find maps to conceptualize space and territory. Instead we find maps illustrating the results of operational decision-making: picturing the location of operational decisions which could be concretely located in space, as we have said in the opening sentence of this section.

That there is a need for conceptual research and design will be shown in the next section on the case of the South Wing of the Randstad. At this stage we can give a clear example of the type of maps which has become dominant recently. Figure 15 is a map taken from a statutory national document on the Randstad, the Randstad 2040 Structural Vision. Every item mentioned in the key is either object, a project or an investment programme. The most conceptual element on the map are the two rectangular shapes which symbolize the conclusion that the Randstad – in spite of its unifying label – should not be seen as a functionally integrated regions but as two.

10. Research and visualization in the network city: The Design Studio South Wing

Innovative regional design does not thrive very well in an administrative complex environment dominated by political negotiations between various governments and governmental agencies. Administrative containers - in the Dutch context: the boundaries of municipalities, city regions and provinces - cloud the view on cross border connections and relations. According to the Dutch landscape architect De Jonge settings like this call for a laboratory, a free haven where regional research and design is only loosely coupled with daily decision-making and the administrative structures where this is taking place (De Jonge 2009a; see also De Jonge 2009b). In 2005 the province of South Holland took the initiative to create such a laboratory. This was the Design Studio South Wing[4] (Atelier Zuidvleugel), from the onset meant as a temporary organization. In this section we seek to evaluate the results of this Studio starting with the initiative itself. Next the results of the Studio will be discussed. This will be followed by an analysis of the application and performance of the results of the Studio.

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[4] The South Wing is the urban area stretching form the city of Leiden in the north to Dordrecht in the south. It has a very complex governance structures with a few dozen municipalities, several statutory cooperation bodies of which the most important one is focused on The Hague and another one on Rotterdam. There is also a non statutory cooperation body on the level of the entire South Wing but its effectiveness is rather limited. The atelier discussed in this section was supposed to work on behalf of this Administrative Platform.

Within the South-Holland administration a new director 'Territory and Mobility' took office in 2002. A leading figure in the world of Dutch urban design and planning this person expressed the opinion that although it has becoming common sense to talk about the South Wing as an urban network its urban structure was hardly known. Although becoming increasingly popular across the country in the case of the South Wing of the Randstad the network concept was not ready yet to serve as a for ground spatial policy: without a proper understanding of regional issues and the functional relations within South Wing as well as its identity no proper spatial strategy could be formulated. How to arrive at a better understanding of the South Wing? Integrative thinking across various different spatial scales is troublesome in a context where cities (mostly The Hague and Rotterdam) compete on many issues and where the (provincial) administration is organized along sectoral lines. The new director could convince the Provincial Executive that the organization which should be created for a better understanding of the South Wing had to acquire a position outside the regular South-Holland administration. This organization quickly acquired the indication *atelier*, quite a familiar phenomenon in the professional world of urban and landscape design although the exact organizational form is not prescribed.

Outside the province, amongst South Wing stakeholders the idea to create an Atelier was on the whole supported, both within the Administrative Platform South Wing (Platform)[5] as well as the spatial planning ministry. The latter was hoping that the insights developed by the South Wing Atelier could be used to develop the urban network concept – a corner stone in the official national planning document at this stage – so it could be successfully applied across the country. Between the policy agenda of the Platform and the objectives of the South Holland initiative were many resemblances. The Platform was unable to carry out the initiative itself though although it was meant for the urban areas this platform would like to cover: in spite of its broad membership the platform has a very limited budget of its own and is very limited in manpower.

Eventually the Atelier as an independent think tank was positioned at the edge of the provincial administration with the Platform as its main client. The following partners participated: South-Holland, the Platform, the municipalities of Rotterdam and The Hague, the Ministry of Housing, Spatial Planning and Environment known by its Dutch acronym as VROM and two knowledge platforms which get their financial resources from central government funds fuelled by profits out of the sale of the Dutch natural gas resources (Habiforum largely focusing on urban issues and Transumo on transport issues).The lion share of the budget – 90% of € 2 million – is provided by the province which also house the Atelier in the plinth of its own government building. All other partners contribute quite small budgets mostly in the range of ca € 20.000 per annum. Various partners find it rather difficult in the end to create an organization with quite a wide brief while it is not very clear from the outset whether the results could be fed in the daily practice of decision-making and policy preparation. Research into design ateliers elsewhere in the Netherlands has shown that their ownership is crucial for their functioning and the application of their results (Nieuwe Gracht, 2008). We will see that the lack of ownership of the South With Atelier will have serious repercussions when it

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[5] See previous note.

comes to the actual application of the results . Matters were aggravated by the fact that none of the partners participating in the Atelier is able or willing to delegate experts to the Atelier although this was originally foreseen by the South-Holland initiators and has been standard practice in relation to most other ateliers elsewhere.

In spite of the fact that South-Holland supplied the bulk of the budget the province stayed at distance. As foreseen the atelier got an external manager – an urban designer – and a programme advisory council in which all partners participated. The Atelier was entitled to develop its own work programme and could decide for itself whether it will participate in ongoing political processes. The Atelier is not requested to develop some kind of operational vision for the South Wing although it is supposed to deliver a research contribution to the Stedenbaan ('Cities Trajectory') project, the main project of the Platform which aims to a more intensive use of the urban areas around the stations of the South Wing main railway networks as well as the networks themselves. Above all the Atelier is supposed to investigate the structure and identity of the South Wing and from there to investigate the possibility to increase the coherence between all the plans and projects which form as kind of cloud hanging above the area. To summarize, the Atelier is supposed to play three roles simultaneously: laboratory, search area ('vindplaats') and stage ('podium').

The stage is the place where debates take place and perceptions and opinions are developed. Via discussions, lectures, presentations and workshops the Ateliers tries to stimulate a permanent debate between policy makers and other South Wing stakeholders. The search area is meant to bring together all the knowledge acquired by the Atelier and to make this knowledge accessible and understandable. An ongoing series of booklets and reports is published in quite a crude layout form to emphasize the temporary nature of results. A well stocked website is developed also which is by the time of writing still in the air (www.stedenbaan.nl; accessed April 2011). The laboratory is the core function of the Atelier: to investigate and unfold territorial problems through the identification of concrete policy issues preferably on request of one of the South Wing partners.

In daily practice these three core tasks are closely intertwined. Broadly speaking it worked like this. On the platform various stakeholders articulate their interests which influence and guide the spatial analyses (search area). Visualisation of research results (laboratory) leads to all sorts of reactions which lead to new research. The interaction with stakeholders shapes the products of the Ateliers. Nonetheless and in spite of the ongoing dialogue the Atelier wanted to maintain and independent position. It was even supposed to do so because this was part of its brief.

Highly characteristic of the working methods of the Atelier is the analytic nature of the research endeavors. The most appropriate label for this is probably research by design. In no way the Atelier strived for a widely embraced, normative Leitbild for the South Wing, an image which brings together all interests to reconcile them. The Atelier worked according to a design philosophy which says that every design is temporary, open to be followed up by new insights and designs, new maps to express the research results. The Ateliers seeks to combine perceptions which complement each other. The search is not for the one for a lifetime image of South Wing's identity. Instead a range of partial

visions on South Wing sub-spaces is developed. This working method has one important side effect because it depends so heavily on communication: as soon as the Atelier comes to the end of its foreseen lifespan of two years discussion with stakeholders comes to an abrupt end. The survey of the complexity of interests in South Wing on which the Atelier was continuously working stops resulting almost instantly in a blurred view on this highly complex urban region. The lack of ownership amongst the South Wing stakeholders is a main reason for this. This brings us to the various perceptions people had about the Atelier. Which perceptions of the Atelier do the stakeholders have afterwards?[6]

Looking back we can conclude that the position of the Atelier at the fringes of the provincial administration of South-Holland has resulted in a situation in which about everybody sees the Atelier as something which belongs to somebody else. The overall feeling within the province is that the Atelier was about the South Wing and for this reasons meant to work for the political Platform. This is rather surprising because the province was after all one of the key stakeholders in this Platform. What should be mentioned here is that the initiator of the Atelier – the director 'Territory and Mobility' – left the province to take up a new job somewhere else. His deputy – also a major protagonist of the Atelier - moved over to the ministry of spatial planning and is currently very active to improve the relationship between the domains of design and f politics: exactly the world in between in which the Atelier was functioning. Through this departure of two crucial South-Holland civil servants quite literally the Atelier lost its owners.

When we move over to the Platform and its (very) small supporting staff we found that right from the start there was a feeling that the Atelier should not interfere in the daily affairs of the Platform. As long as the Atelier abstained from doing this it was welcome to do whatever it liked. So altogether the attitude of the two main partners of the Atelier – South-Holland and Platform – is rather lukewarm. What did not help was that within the provincial administration the creation of the Atelier was perceived as a no-confidence motion. After all what the Atelier was supposed to do could not be done by the provincial administration itself according to its initiators. In short: the Atelier was not affectionately embraced. At the same time as we have seen none of the partners was able or willing to contribute to the Atelier's workforce so a close personal connection between the Atelier and its potential clients did not exist.

There are a few exceptions on this rather negative account. In relation to various sub-projects carried out by the Atelier a number of representatives of secondary parties and interests stepped to the foreground (the mayor of Dordrecht; an alderman of the municipality of Midden-Delfland) and showed a keen interest in positioning 'their' area within the wider spatial context of the South-Wing. And although self-interest played a clear role here, the persons in questions managed to play a kind of ambassador role on behalf of the Atelier.

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[6] This part of the paper is based on a number of interviews with eyewitnesses. The findings and conclusions are the sole responsibility of the author.

The political context in which the Atelier was situated is spatially, politically as well as organizationally rather complex. One expects that the actual effects the Atelier had on framing and decision-making will exhibit a rather fragmented picture. In general it is highly uncertain whether and how the results of design ateliers will find their way (Nieuwe Gracht 2008). The same counts for the South Wing Atelier although the situation is not as bleak as one may expect knowing the reception of the Atelier (see immediately above). Not unimportant is the fact that quite a large range of activities of the Atelier took place within a substantial project: Stedenbaan. These activities form the most prime example of application the work done by the Atelier. Various research outcomes served as a base for the signing of an agreement between the BPZ and the Dutch railway company (NS) about the transformation of the surroundings of railway stations (densification of land-use) linked with a higher frequency of future train service. The project 'In Between Space' (Tussenruimte) which was about the – more or less – open area between Rotterdam and The Hague contributed to the project Garden of Delfland (Hof van Delfland), for which considerable funds are made available by the national government. Stedenbaan as well as the Delfland case are examples where the Atelier contributed to overcome the gap between spatial visioning and visualization and design on the one hand and project decision-making and management at the other.

From there on the application and use of the activities of the Atelier become more diffuse. The Atelier contributed – at least temporarily – to a closer connection between the municipalities of Rotterdam and The Hague which in itself is rather remarkable knowing the political context of the South Wing. After the Atelier was officially dismantled it was asked to elaborate the idea of a Twin City. This took shape as the 'Design Studio Twin City The Hague-Rotterdam' organised by the both municipalities and South-Holland. Lasting effects – a true Dutch version of the twin city Minneapolis-Sint Paul which were after each other's life in earlier stages – are barely visible for the outside world.[7]

All people which have been interviewed that it has been a missed opportunity to use the results of the Atelier to develop a shared vision on the South Wing. Although the Atelier – especially its leader – has been communicating intensively with a large number of parties and there has been some kind of client relationship no single party stood up as owner of the Atelier and its results. Perceptions of the Atelier might have changed in the course of time. For example: representatives of the province now emphasize that the work of the Atelier has been used when the 2009 statutory Structural Vision South-Holland was made, but this is two years after the closing of the Atelier. This is in accordance though with application research: application can take place in later stages and in circumstances not foreseen initially (see for instance Mastop & Faludi 1997).

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[7] Very recently a decision has been taken by the two regional transport boards of The Hague and Rotterdam to merge.
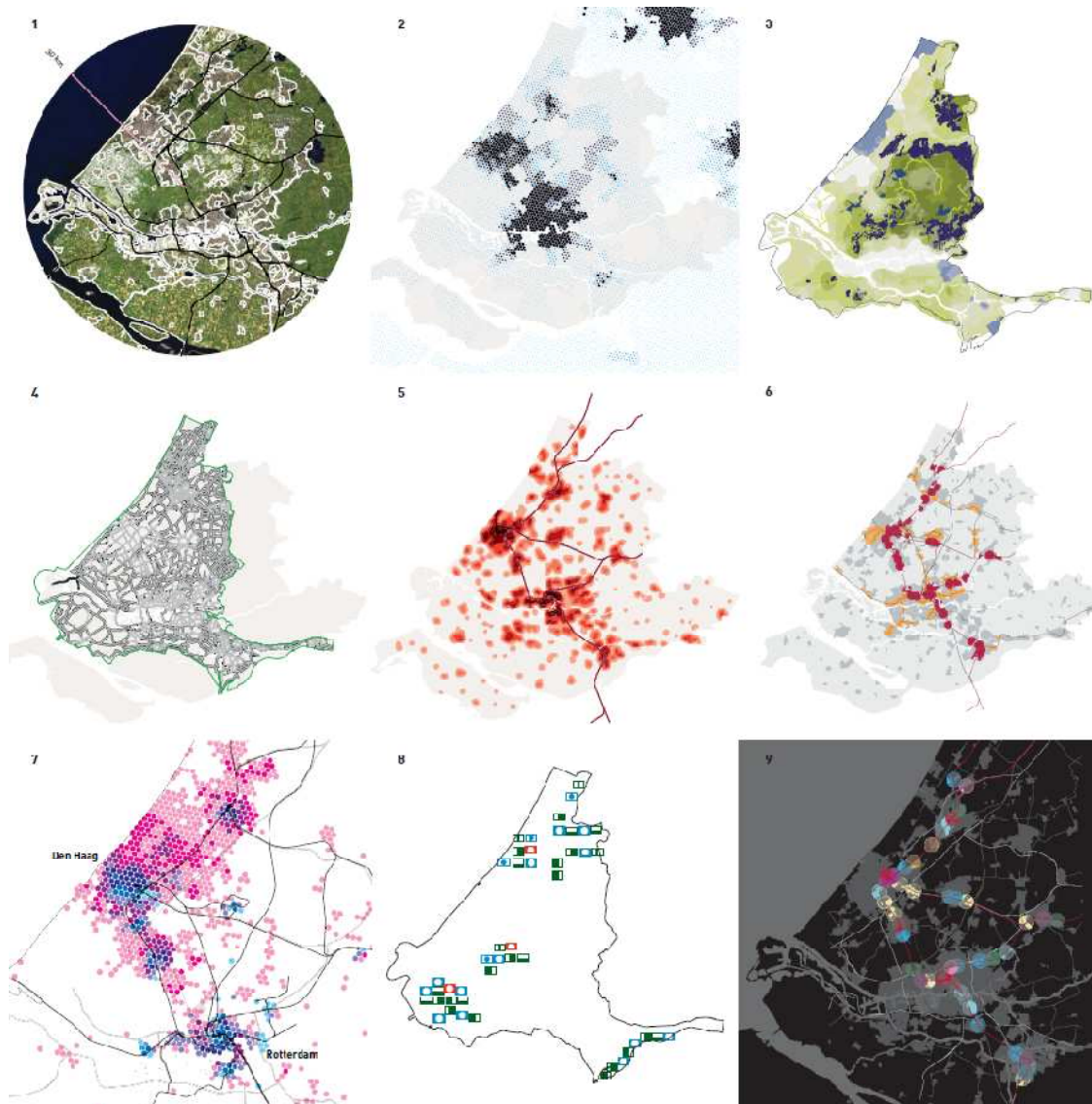
Figure 9: Examples of Atelier maps: 1. Study area of the Atelier; 2: Accessibility of Randstad inhabitants by public transport; 3) Areas suitable for water storage; 4) Cycle networks outside city perimeters; 5) Population density in the South Wing; 7) Development opportunities for service industry; 8) Opportunities for agriculture to include the development of cultural heritage; 9) Different urban environments within the catchment areas of stations along Stedenbaan (Source: Atelier Zuidvleugel)

Especially in relation to urbanisation issues, rural-urban relationships and the identification of provincial interest in these matters (Dutch planning law makes it mandatory that every government on all levels of scale identifies its interests and grounds its policies on that) representatives of South-Holland underline that the work of the Atelier has been used. The fact that the Atelier has been created to fill in a gap – although some within the province were rather in favour of filling in this gap in another way – has

lead to the conclusion that design and research should play a stronger role in policy making. In this sense the Atelier has proven the added value of design and research by design. The fact that some Atelier members have become part of the provincial administration underlines this. This in itself is quite important and remarkable because many spatial planning agencies on all levels of government, from the now defunct National Spatial Planning Agency (known by its Dutch acronym RPD) to similar organizations at the municipal level – have turned into policy units during the 1990's. This meant a heavy emphasis on policy implementation and the realization of projects and hardly any room for research, design, visualization, reflection and debate. A lot of expertise was lost in this way, but even more important: institutional memory.

11. Conclusion

What does this teach about visualization in planning? In staccato:

1) Maps are intrinsic part of planning.

2) Maps come in different shapes: diagrams; analytical; conceptual; precise; symbolic. The relation to a concrete area makes turns visualization in a map.

3) The making of maps in contexts where there is no consensus on where planning is about is extremely difficult and often ridden with conflict.

4) Maps and visualization can be influential in introducing new approaches but it is very difficult to transform consolidated perception of space and territory. Planner often underestimate the associations people have with metaphors and images.

5) To introduce new perceptions of space and territory the emphasis is often on more conceptual maps, diagrams and – sometimes – maps showing some truth (Van Lohuizen) or expected truth (Thijsse).

6) In recent history of planning in the Netherland and the Randstad the functions of maps and visualization in general has changed: nowadays maps mostly picture projects, not concepts.

7) Maps in policy documents form a tip of an iceberg, at least in the Netherlands: there is a very lively debate in the professional world.

8) As path dependency and planning doctrines – established routines – play an important role, only a fraction of innovations will be integrated in policy eventually (see also 4 and 5).

9) The case of the design study South Wing gives some clues for policy innovation. Conceptualisation and innovative map making needs a trajectory of its own but the absence of some sort of coupling with the official administrative domain will form a blockade.

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