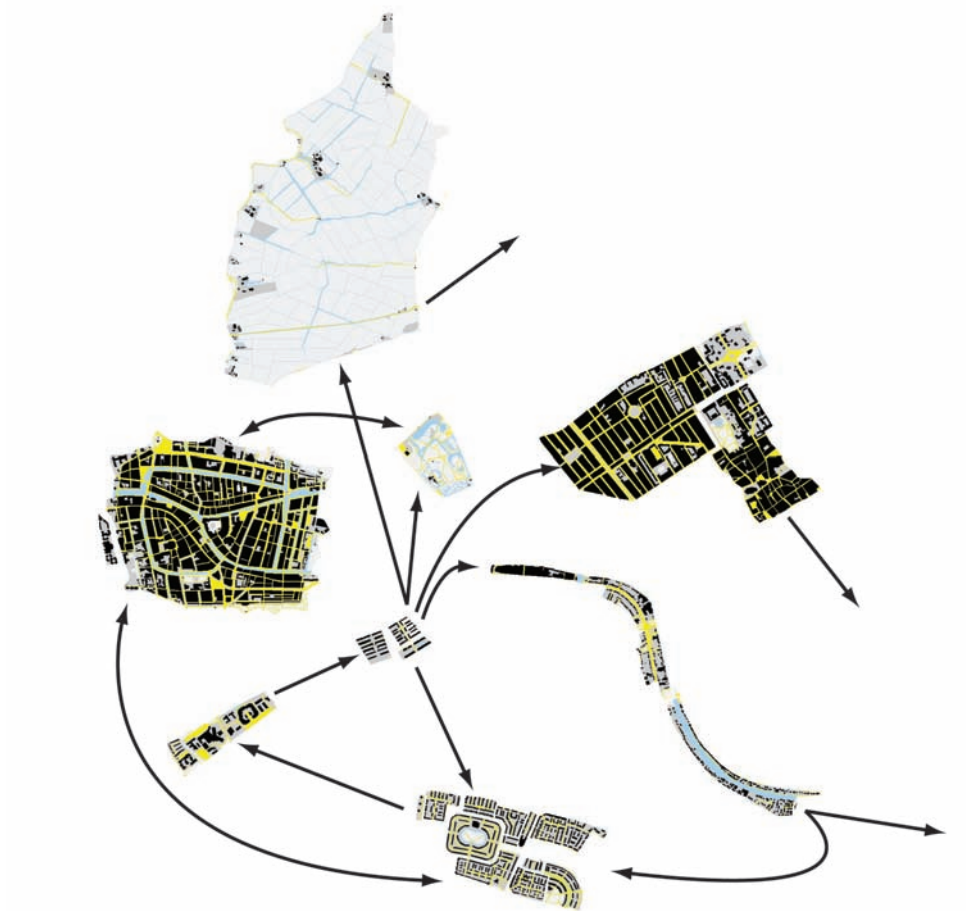


COLORING THE PATCHWORK METROPOLIS



COLORING THE PATCHWORK METROPOLIS

Carlo Pisano

Prof. Bernardo Secchi
Università IUAV di Venezia

Ir. Daan Zandbelt
TU Delft - Faculty of Architecture

COLOURING THE PATCHWORK METROPOLIS

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COLORING **THE PATCHWORK METROPOLIS**

INTRODUCTION

REFLECTIONS by BERNARDO SECCHI 1

About the compact city

The contemporary discussion about the city is characterized by the fear of the phenomena of the dispersion. Huge efforts are spent to maintain the city compact and manageable by setting always new boundaries between what was the ancient city and the contemporary territory. What in reality has been achieved, through this theoretical blindness, is just a continuous growth of the diffuse city. If we want to think to the future city, following the on going trend, we have to find a new way to understand and design the territory, a new methodology that has to surpass the boundaries of the compact city.

The Netherlands is not anymore a series of medium size cities located in an open landscape. The landscape perception has changed from something that lies outside to something that is within, not a series of space in between but a part of metropolis.

About the patchwork metropolis

The city planning, as many hard science, has always based the urban models on some metaphors. Human body, forest, hand, park, archipelago.

The patchwork has so to be understood firstly as a theoretical metaphor in order to catch the characteristic that can be then applied in a real territory.

The Appalachian woman that produce the patchworks start their work without a real preset plan, but just with a set of guidelines that have to be declined according to the raw material that they have. The work is guided by their own taste in juxtaposing patches of different sizes and colours. In the urban field we can compare this process with the attribute of compatibility. The arrangement of the patches is leaded by considerations about compatibility and incompatibility of

visual, functional and scalar characters of the patches.

The patchwork is opposed to the idea of fragmentation which is a negative figure, developed between the 19th and 20th century, that means that something got broken in the continuity of the city of the 18th and 19th century. The patchwork instead is composed by patches, a series of entities everyone with its own identity, arranged together in a superior unity.

The patchwork is a paratactic figure. The way in which the patches are adjusted together does not follow any comprehensive plan. The patchwork does not contemplate any syntax, just a vocabulary of patches managed following some rules of compatibility and incompatibility.

The place of collision between the patches is the real critical and interesting point of the patchwork metropolis. What is happening in between the pure crystals (Friedrich Schlegel)?

About the sustainable metropolis

Today we should think, in a responsible way, to produce a sustainable metropolis. We should consider the ecological value of the territory, the risk of flooding, the mix of uses and the creation of a collective and sustainable mobility. Agriculture and food production is another critical point. Today is in fact mainly applied the law of "comparative advantage", introduced by David Ricardo. Following this model we should facilitate the production where it cost less. In this way we are not considering a series of performance that the agriculture is delivering, that society values, but which is not rewarded on the market for agricultural products. We should understand deeply the territory and the differences that cohabit there. Different type of soil, heights, urban and natural patterns, types of cultivation, cost of land are characteristics that we should consider in order to assign different roles in the territory.

The patchwork as a framework and the sustainability as a leitmotiv to guide the evolution of the patches can become a powerful new methodology able to guide a complex territory as the Netherlands.

Bernardo Secchi, arranged by Carlo Pisano

PROBLEM FIELD AND THESIS STRUCTURE

"Managing the unmanageable". With this statement started the offer to take part at the Biennial of Rotterdam 2012 with a research and a project able to address two very challenging topics: channelling urban sprawl and preserving landscape values in the Randstad Region.

This introduction, as the entire booklet, is divided in three sections, everyone related with one of the hypothesis of the research.

H1- ADIEU COMPACT CITY

The Randstad model, based on a belt of compact cities around a Green Hearth is not able, any more, to control the urban evolution and protect the intrinsic qualities of the Dutch territory.

H2- FROM THE RANDSTAD TO THE PATCHWORK METROPOLIS

The Randstad is evolving towards an extensive carpet of patches, every one with its own program and specific spatial structure, as it was conceived in 1989 by Jan Neutelings.

H3- THE NECESSITY OF GUIDING THE PATCHWORK METROPOLIS

The patchwork metropolis needs completely new tools in order to be guided towards a desirable future.

H1- Adieu compact city

In our democratic and freedom-oriented society it is hardly thinkable the possibility to keep on fighting versus the dispersed city growth. "The tendencies to establish limits, boundaries, to built new differences between the city and its surroundings, to create again a shape for the city that ideally separate itself from what is considered an undifferentiated background, represent just the admission of a conception debt" (Secchi, 2007).

The phenomena of urban growth is affecting, with different degrees, all the urban environments. Even if it is called in different way, according to different spatial configurations, a new type of territory is appearing, "a territory in which the distinction between city and landscape has dissolved into an ecological and cultural continuum of built structure between city and landscape". (Sievert 2007)

Researchers like Sieverts, Secchi and many others stated that the sharp distinction between city and landscape has dissolved. This means that all the XXth century planning practices based on zoning and land use are not any more adequate. This open the necessity of a more holistic way to manage the territory.

The debate about sprawl, related to sustainable development, is based, on a sort of massive campaign in support of the traditional compact city. The compactness of a city has showed the capacity to guarantee some characteristic that nowadays appears as essential to create a urban environment. Mixture of uses, public spaces, short travel distances are propagated as the exclusive model for the current urban design. The compact city model has organized so strongly the thought about the city and urban society that the concentration appear as the only suitable character of the city.

While new policies based on green belts, density parameters, strict zoning acts were developed, the urban environment were already following another inexorable trend for the future.

In Holland, the ancient but seemingly still valid theme of the "Green Heart" in which the core of the Randstad area would remain empty, encircled by a ring of cities, has in recent memory never been subjected to critical scrutiny.

The Green Heart, never adjusted, never analysed, has become the more and more unconscious formula that guide the planning and development of the country (Koohlass, 1997). Due to its vanishing agricultural role this central green area has lost its economic base and with that the only active reason until now for safeguarding its empty expanse. An effective building ban act replaced today the agricultural role with ecological reasons.

H2-From the Randstad to the Patchwork Metropolis

The need to establish boundaries around the cities is based, even in Netherlands, not on a real lack of land, but on the manner in which the last developments have been planned. A strategic part of the research is based indeed on the Vinex neighbourhoods. They are presented as a paradigm of how a policy that were thought to preserve and strengthen the role of the compact city, by applying a sort of "land sparing policy", in the end realized a new type of urbanization. New neighbourhoods placed near the main cities, that are not related any more with them but with a network of facilities and urban amenities at a regional scale. The same critique can be raised for the new shaped business parks, shopping cities, green belt parks. They are all juxtaposed, one close to the other, not related with the surroundings but just with the national and international network of highway. They are part of what, from now on, I will call the Patchwork Metropolis.

"The Randstad can be better described as an extensive patchwork carpet. Each patch has a specific program and a specific physical structure. In this heterogeneous field the contradiction between city and landscape is abolished" (Neutelings, 1989). This was the way in which Neutelings presented its research project of the patchwork metropolis, a new paradigm for the dutch territory where the distinction between the paradisaal Arcadia and a megalomaniac metropolis has to be abolished. I will face this part of the research through a comparison between the statement of Jan Neutelings and the Richard Forman Land mosaics theory.

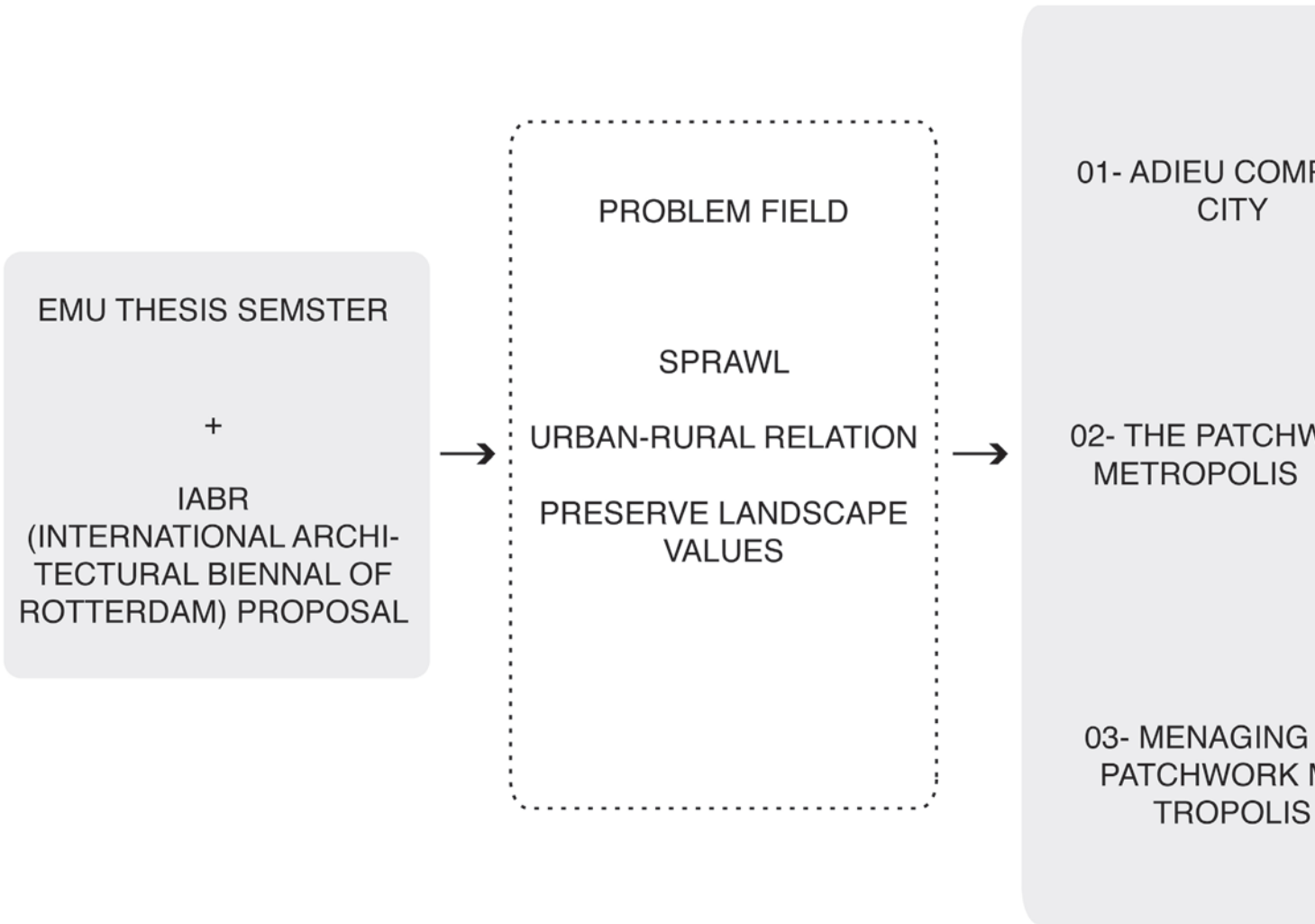
H3- The necessity of guiding the patchwork metropolis

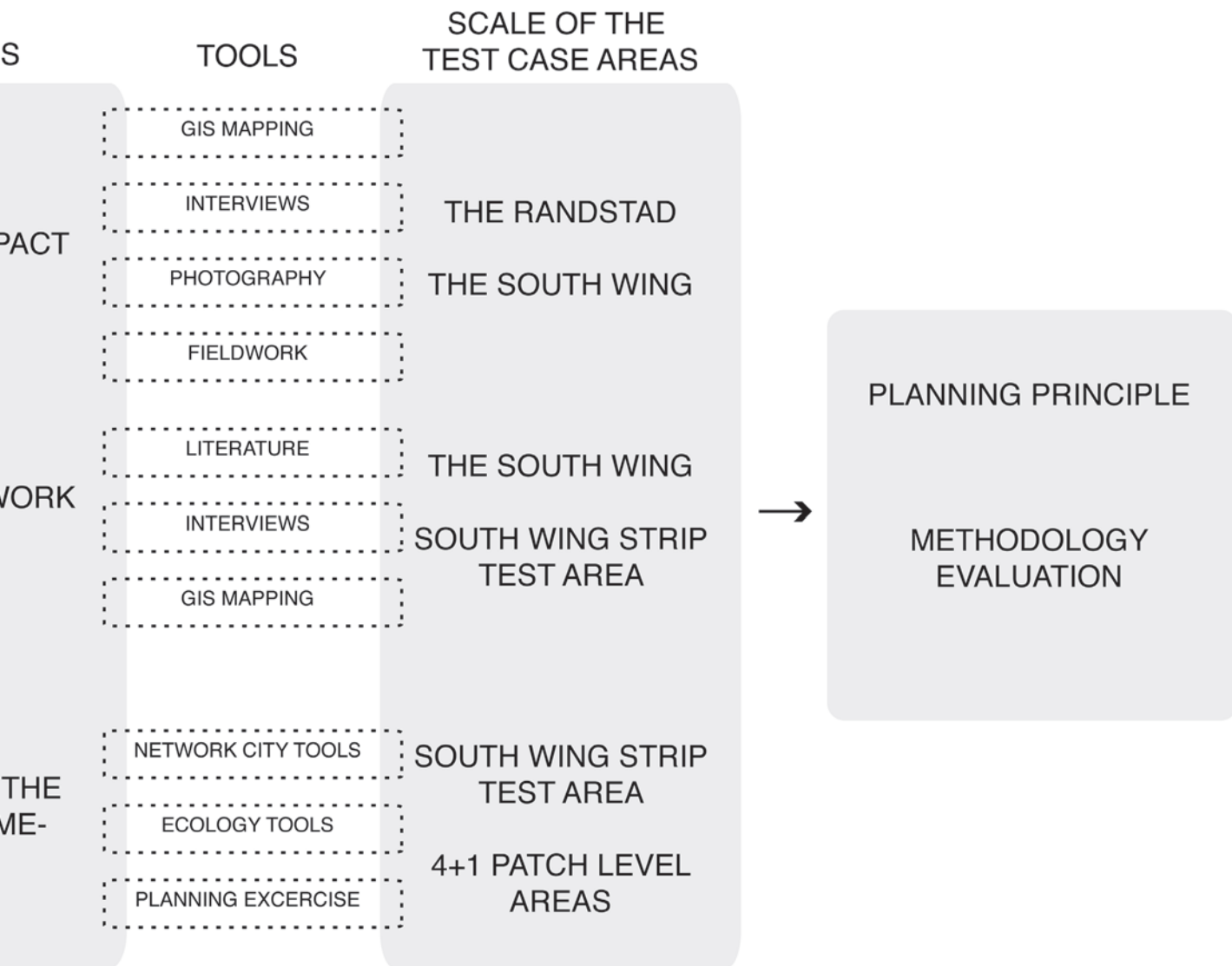
When we admit that the practice of setting sharp borders is inadequate to govern the contemporary territory we should then developed a completely new method, enough flexible to guide all the different parts of the territory, but enough precise in order to protect the most valuable quality that are still in the Netherlands.

In order to address this result I have stressed a clear distinction between what, in my opinion, can change and modify in a sort of metabolic metropolis (as stated by Neutelings) and what instead should be slowed down and preserved, in order to become a sort of mile stone in a fast changing territory.

In order to better define the evolution of the accelerating part of the territory, I will introduce 4 tools that are based on the idea that the patchwork metropolis can be compared with the network city (connection, disconnection) and with an ecological land mosaic (integration and differentiation).

In order to clarify better the meaning of the four tools I have produced four design examples, that will become a sort of legend for a new overall map of the Randstad.







THE PATCHWORK METROPOLIS

HYPOTHESIS 1

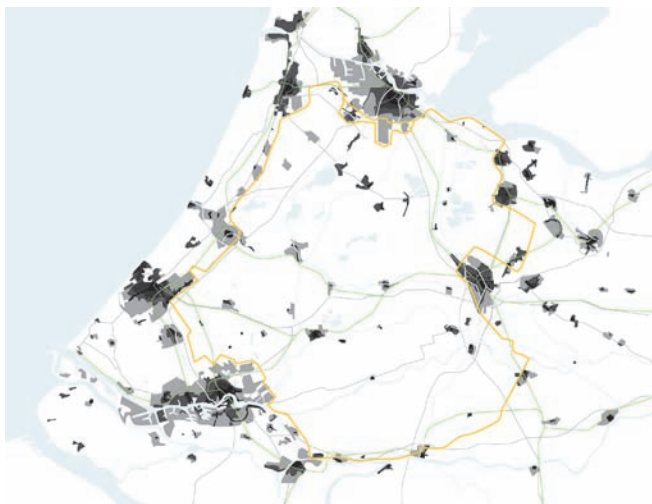
ADIEU COMPACT CITY?



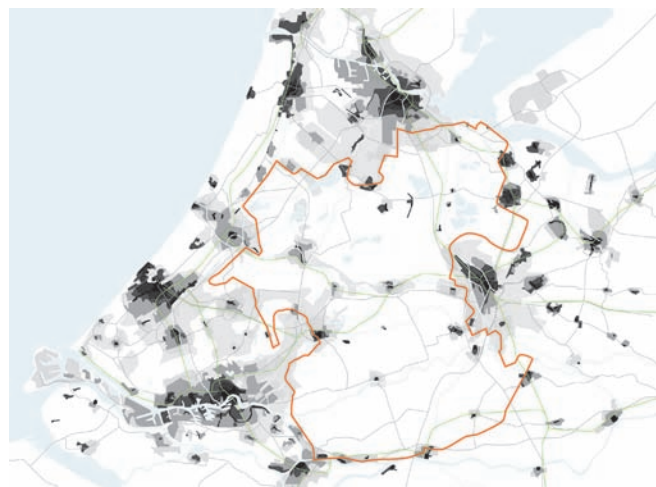
1850



1939



1970



2006

THE RANDSTAD: COMPACT CITIES IN A POLYCENTRIC AGGLOMERATION

The appearance of the Randstad concept

The Randstad consists of four cities with more than a half million inhabitants each - Amsterdam, Rotterdam, Utrecht, and The Hague - a large number of cities with populations over 100,000 and countless towns that are a cut above the category of sub-centers. This makes the Randstad a unique urban region within Europe. Although each city in the Randstad has its own functions, the level of interdependence is quite high. For this reason, about two decades ago Peter Hall referred to the Randstad as a polycentric world city.

The appearance and the evolution of the concept of Randstad is clearly highlighted by some key points in the history of the Netherlands. During the era of the Golden Century the most important cities in the Randstad had cornered worldwide monopolies on many products, sustaining a constant flow of merchandising, of spices, wool, wood, pitch, salt, slaves, porcelain etc.

From the end of the 18th century the Dutch control of world commerce broke down, the political power of the Republic of the Seven Provinces began to diminish and the international commerce moved away from Dutch ships and cities.

After a period of transition under French occupation, in 1813 Holland was governed by a king and a parliament. This new central government exercises increasing power over the once-mighty cities.

While in the 1800 the Dutch cities, with their walls and gates, were still very distinctly separated from the surrounding countryside as in the Middle Ages, in 1813 the systematic demolition of these fortification began, and the cities opened out towards their surroundings.

The Green Heart evolution, from the top-left: 1850 - 1939 - 1970 - 2006
Source: GIS Data mapping; Carlo Pisano.



2008

By 1820, after the introduction of the railroad, travelling became immediately very popular. In the 1839 the railway transported 78000 passengers, in 1843 about 470000 and in 1850 900000. [In this way the main Dutch cities, although their former political and military power was gone, were able to take a new type of centrality, becoming the gathering point of masses of people in motion. \(Auke van der Woud\)](#)

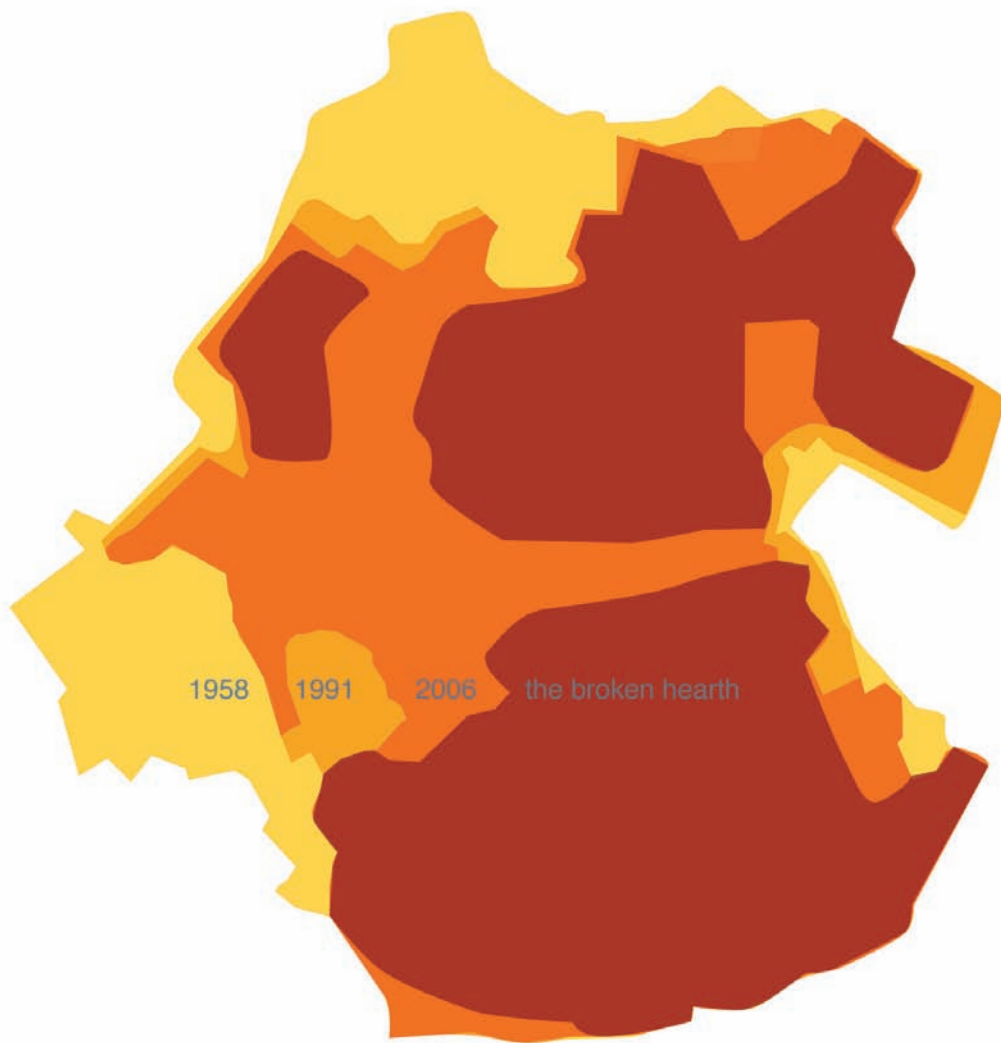
The necessity of the Green Heart

In the 1950 the Westen des Lands Committee described the Randstad as a ring of larger and smaller cities and settlements surrounding an open area. Soon afterward, the central area would be referred to as the Green Heart. Despite the occasional modification, this image of the Randstad has remained in existence throughout the intervening years. It is based, however, on the traditional distinction between city and countryside, a concept hardly applicable in this day and age. However the Dutch government's physical-planning policy is still based on the idea of the compact city. The ideal of an uninterrupted, closed space (urban, semi suburban, and suburban) which accompanies the concept of the compact city, is rooted in an intimate relationship with the Randstad concept itself.

In view of the massive and constantly accelerating expansion of the cities built up area, there was a massive campaign in support of the traditional city, that endure to this day.

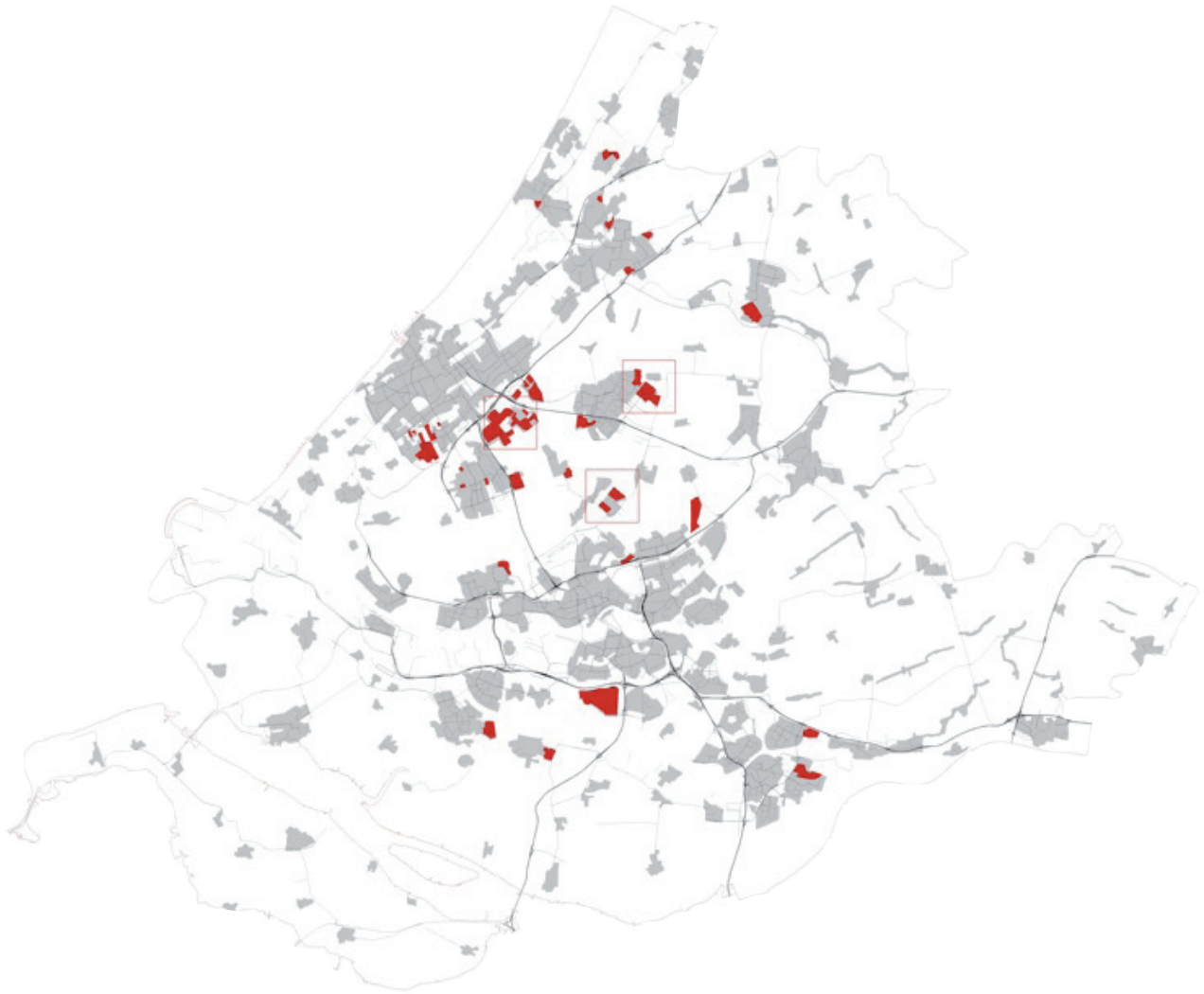
[The compact city throughout the European tradition has showed the capacity to guarantee some characteristic that nowadays looks like essential to create a urban environment.](#) The mixture of uses, the plot structure and the public spaces delineated by the walls of buildings is propagated as the exclusive model for current urban design. In energy, transport and ecological terms this city appears as the most favourable. Short travel distances, animated public spaces, contrast delineation between city and country are just few of the characteristics that pushed policy maker towards this model. [The compact city model has organized so strongly the thought about city and urban society that the concentration appears as the only suitable character of the city and as inexorable trend for the future. For these reasons this model hides for long time the tendencies and modifications that were however experienced by everybody. \(Secchi, 2007\)](#)

In Holland, the ancient but seemingly still valid theme of the "Green Heart" in which the core of the Randstad area would remain empty, encircled by a ring of cities, has in recent memory never been subjected to critical scrutiny.



The Green Heart, never adjusted, never analysed, has become the more and more unconscious formula that guide the planning and development of the country (Koohlass, 1997). Due to its vanishing agricultural role this central green area has lost its economic base and with that the only active reason until now for safeguarding its empty expanse. An effective building ban act replaced today the agricultural role with ecological reasons.

The evolution of the broken Hearth; a
Carlo Pisano.



The VINEX distribution in the South Wing. Source: GIS data mapping
In the next page: Examples of VINEX in between city and countryside. Source Google map



THE VINEX PARADIGM

According to what stated by Prof. Wil Zonneveld it is possible to summarize the spatial planning policies in Netherlands in seven main categories: 1920-1934 Centralization or decentralization; 1934-1951 The completed future city; 1951-1958 From city to conurbation; 1958-1973 Extension and change (defined in the 1st and 2nd policy of spatial planning); The threat of sub-urbanization (3rd policy of spatial planning); 1976-1987 Concentration and conservation; 1987-1990 The rediscovery of the large scale (4th policy of spatial planning).



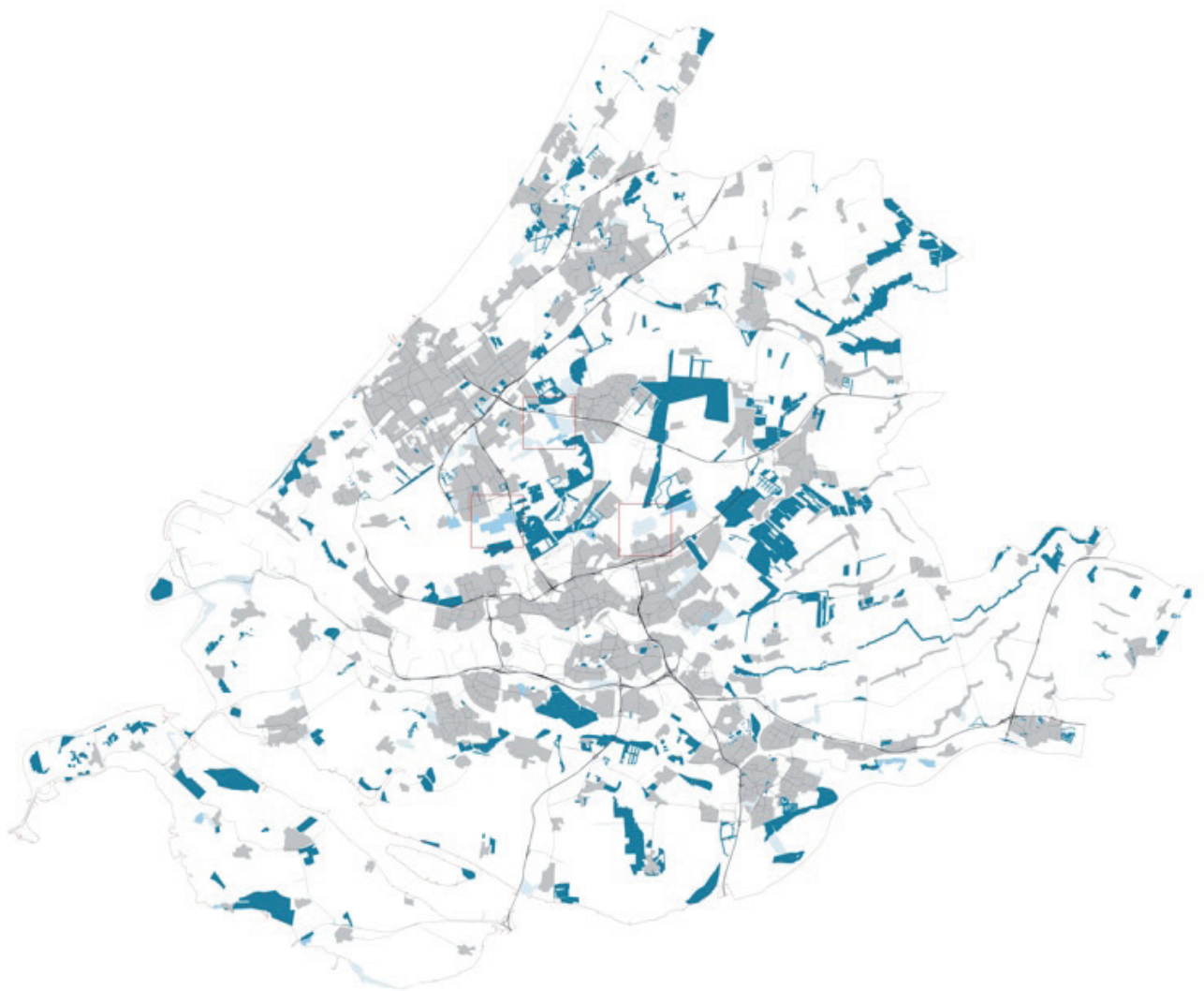
After the 1990, the supplement of the 4th policy of spatial planning came in stressing even strongly the concept of compact city. The future housing development called VINEX were planned close to the main dense centre and were intended to strengthen the position and the economy of the main cities.

The application of this sort of “land sparing policy” brought immediately to an increase in the land prize. Due to this and to the market requests, the new development were realized with the typical dense and low rise environment, that today seems as the main urban leitmotiv in Netherlands.

Because of the focus on the neighbourhood scale and the fact that there were no other stake holders to grasp the potential of these new developments on a bigger scale, the VINEX locations are built on empty spaces within the borders of one municipality.



What started as a policy to preserve and strengthen the role of the compact city in the end realized a new type of urbanization. The VINEX are in fact not related any more with the mother cities but with a network of facilities and urban amenities at a regional scale. Their inhabitants use the car, take the highway every-



In this page: The green Exodus. Realized parks from 1990 to 2006 (light blues) and proposed new green areas (dark blue). Source: GIS data mapping, Corine land cover and Nieuwe Kaart von Nederlands.

In the next page: Examples of new patches of green. Source: Google map

In the diagram, the land use changes in South Holland, in the period 1996-2000. Source: CBS



day to reach the working place, the shopping centre or just find a better quality school for their children.

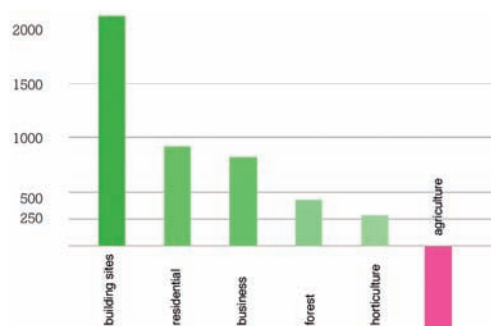
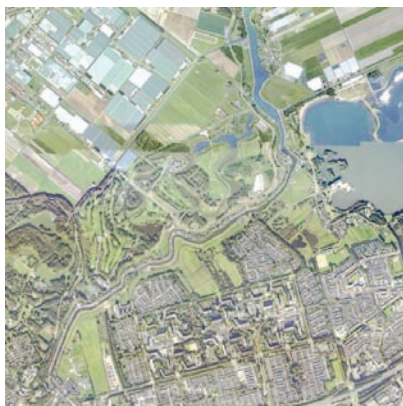
The same strategy, proposed for the VINEX, was applied in the distribution of the new shaped parks. that were planned in the left over spaces in between the cities and the countryside.

For the 2020 are foreseen 28500 ha of new green areas. This abundance of "nature", distributed randomly in the territory, poorly connected with the preexisting urban green areas, will improve the network and patched structure introduced by the VINEX.



The increase number of business parks, shopping cities, parks, residential areas, university campus is shaping the territory towards a sort of mosaics of functions and places. All these functions are laying together, side by side, without sharing any facilities or interests, without being connected between each others, but instead plugged with the nation or international traffic network.

The territory cannot be any more described as a gradual passage between compact, diffuse and no city. City is everywhere is just a matter of understand that nowadays it appears differently.





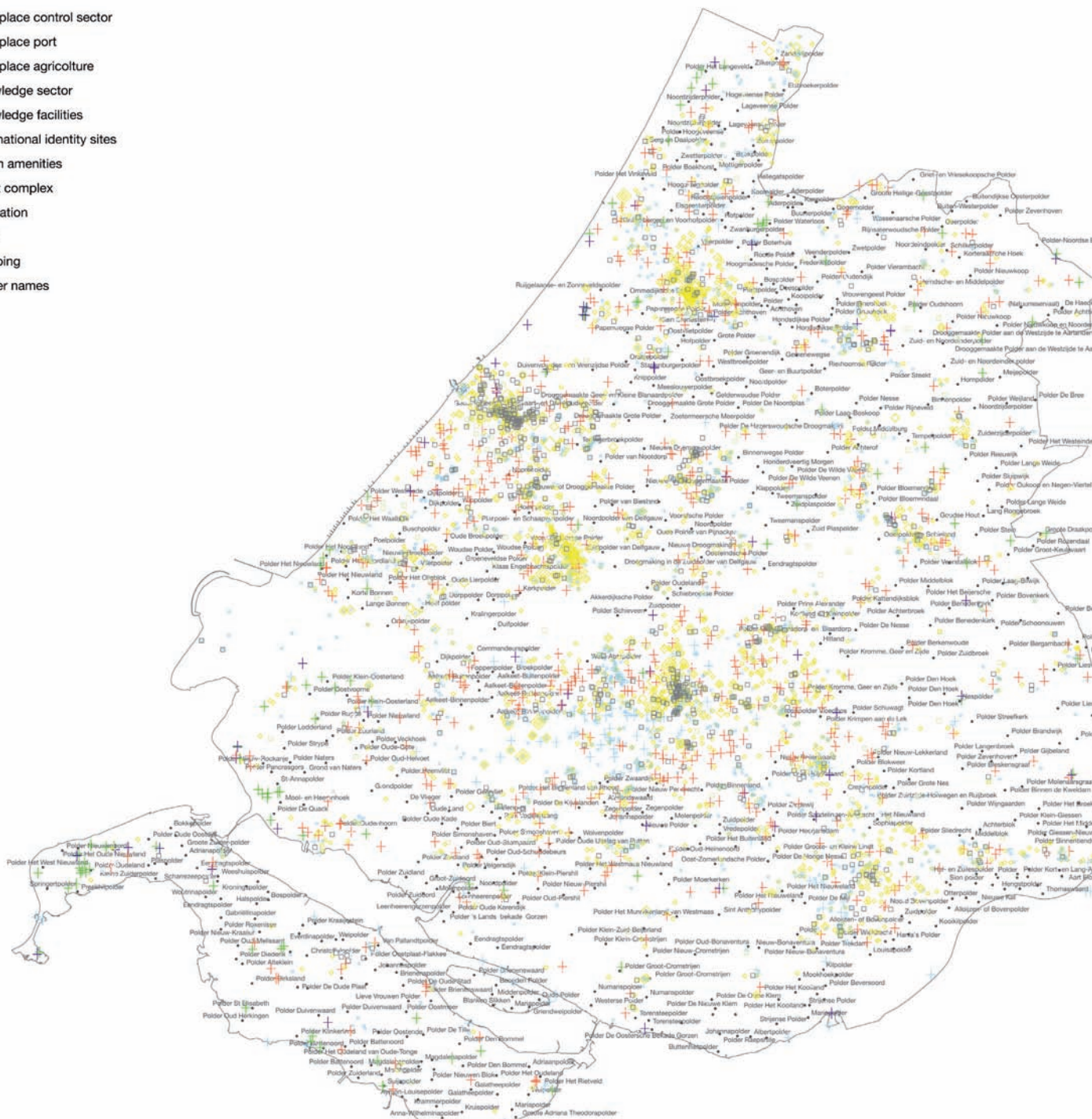
THE NEW TERRITORIAL CONFIGURATION

In our democratic and freedom-oriented society it is hardly thinkable the possibility to keep on fighting versus the dispersed city growth. The tendencies to establish limits, boundaries, to build new differences between the city and its surroundings, to create again a shape for the city that ideally separate itself from what is considered an undifferentiated background, represent just the admission of a conception debt (Secchi, 2007). Moreover we can relate the lack of a changing paradigm with the linkage between the project of the city and other interests like financial incomes, occupational and social control.

All attempts to translate the structural image of the historical European city directly into a general model for the future are, in my opinion, destined to fail. The world is going towards other directions and it is following other trends. *The city is becoming in the last decades less city, because it is not able any more to host all the urban functions and practices, that are, with different degrees, escaping out of its borders.* This concept is easily provable just taking some processes that are nowadays affecting the relation between city and countryside:

In production and trade, as well as in entertainment, the tendency towards rationalization and specialization leads to have bigger units. These units for example supermarkets or big box stores replace a multiplicity of smaller stores, cinemas, retail shops and are difficult to be integrated into the fine grain of the compact city. They need connections to fast infrastructure, bigger parking lots, for these reasons they find a more comfortable position in the space in between the urbanized areas and the rural territories.

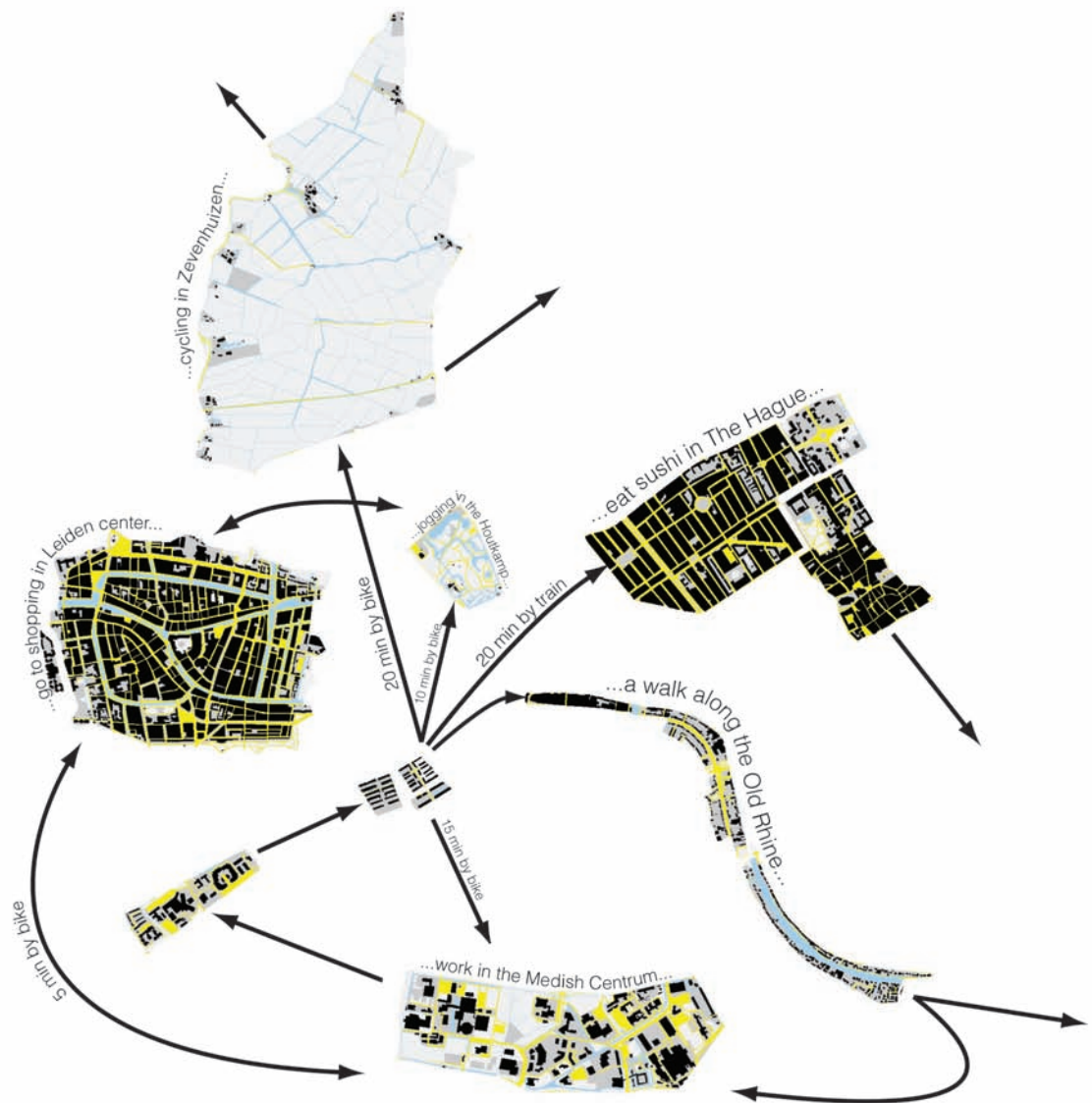
- workplace control sector
- workplace port
- workplace agriculture
- knowledge sector
- knowledge facilities
- international identity sites
- urban amenities
- sport complex
- recreation
- port
- camping
- polder names



Stuurt

 onthouden
 veert
 randerveert
 van Waander
 Alder

[illegible]



mega-stores, rubbish tips and golf courts, airfields, market, squares and mosques" (Neutelings, 1989).

Through a series of interviews I have tried to understand how the people perceive and use the territory. In the "Debord like" image I have summarized the life and the world of one of the interviewed. Huda described clearly the piece of the territory that she is usually using without almost mentioning their geographical position. Sometimes these areas are districts, sometimes streets along a River, sometimes just buildings. She described an active life where the activities and the venues are becoming more important than their position.

"The spheres of activities become specialized points of space which are connected with the home in a star formation by intimate traffic areas and thus "dead" travelling times. This star shaped configuration can also dissolve into a larger number of centres of living, which indicate a nomadic life style". (Sieverts, 2000).

Conclusions of the first section and the new research questions

In this section I have tried to explicit the transformation of the Dutch territory through history. I have highlighted a sort of continuity in the application of the compact city model, from the moment in which was felt the necessity to create the contradiction from a Randstad and a Green Heart until the last urban policies.

What is clear after the analyses of the contemporary configuration of the territory and the contemporary citizens behaviour is that the Netherlands, at least the South Wing, cannot any more be simplified with the opposition of a full area around an empty territory. The distribution of the job, of the facilities and urban amenities clearly depict a territory that is fully used, even if with different intensity. It is then clear that we need to solve some new issues that can be summarized by this research questions that will be addressed in the next section:

Which kind of city is appearing in Netherlands? How can we define it?

How can we manage the new territorial structure and its evolution?

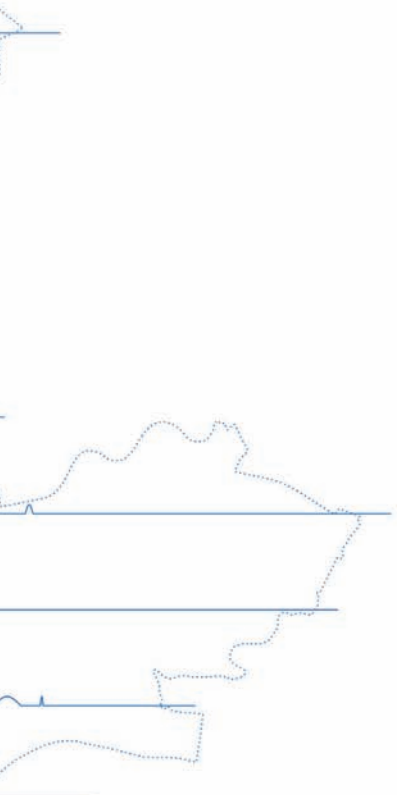


THE PATCHWORK METROPOLIS

HYPOTHESIS 2

FROM RANDSTAD TO PATCHWORK METROPOLIS

Discotheque car park, Bas Princen



THE NEW METROPOLIS

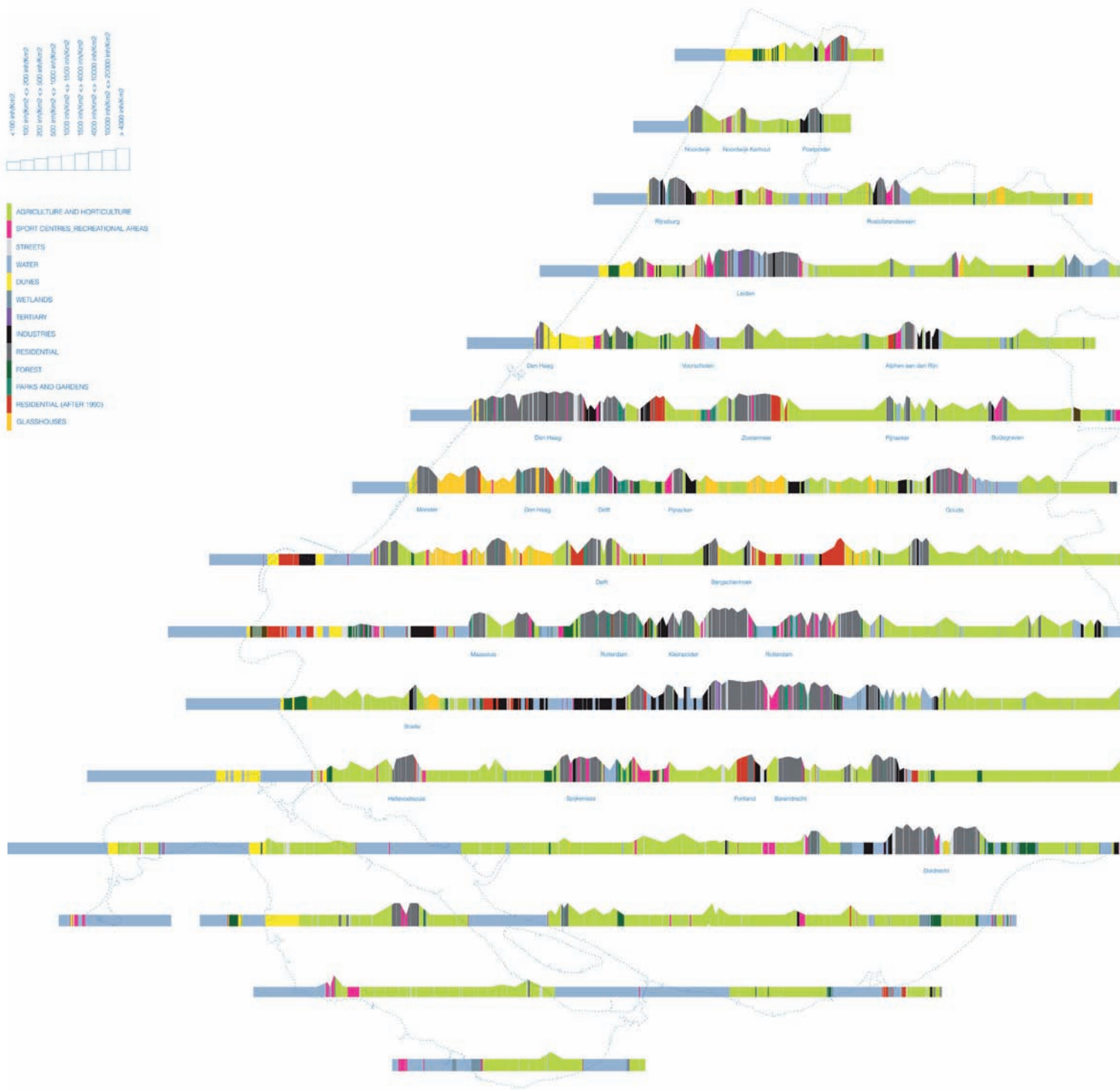
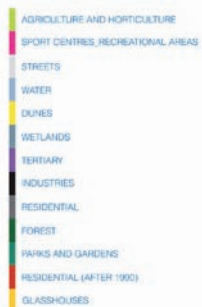
The entire landscape is changing in front of our eyes. Some areas have become specialized for the purpose of a mechanized agriculture, characterized by large fields, straight asphalt roads and canalized streams. Other areas have become natural parks, their water systems have been changed and transformed in seemingly arcadia. Functions have been segregated. What before were called rural and cultural landscapes today are suffering the processes of modernization and decoration.

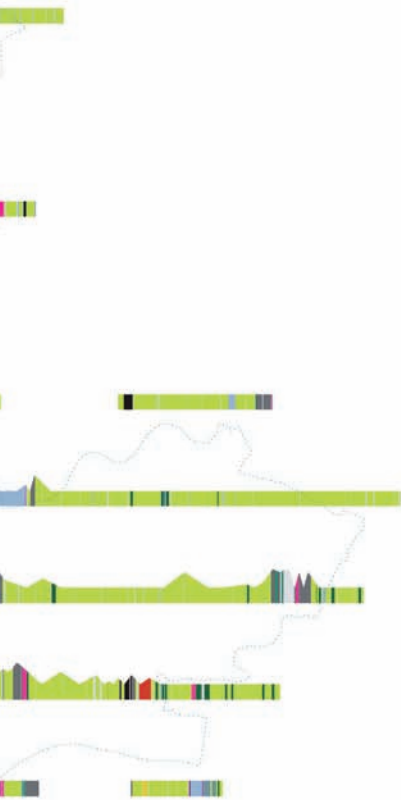
The living environment has been transformed into spatial and temporal islands. Only a minority of contemporary city dwellers live in family situations. They are confident and adventurous, extremely mobile, have technological skills and access to various media. They are constantly changing their surroundings, as commuters, recreationists, holiday-makers. Speed and time have replaced the traditional idea of space (Geuze, 1993).

In the spirit of this new dynamic evolution, the goal should be to develop a new kind of cultural landscape, in which food production, ecological balance, and recreation are brought in a new synthesis. Much the same could be said for building: the opposition between built-up areas and countryside must be overcome in a new synthesis. (Klaus Neumann and Thomas Sieverts, 1995).

I think that today is necessary a paradigm change. We cannot still straggle to draw the city as a series of isolated islands in a neutral territory (see fig. in the page in front). Too many exceptions, in fact, are appearing in the territory in between and too many important elements for the territory will be cut out. The

The sections of the Randstad as an Archipelago of islands in a neutral sea; Carlo Pisano 2011.





city is already integrated with the landscape and the contrast between town and country has already substantially dissolved in favour to a city-landscape continuum. Term like, sprawl, land consumption, green belts, indicate just the use of an inadequate perceptual model.

In this page, the Dutch territory is represented trough a series of section that relate inhabitant density to land use. This image represent, differently that the one before, the territory in its entirety, abolishing any sharp distinction between urban and rural. This new territorial representation highlights some phenomena that are usually hidden under the dichotomy urban and rural. It is possible to note, in fact, that the part of the territory in between Leiden and The Hague, even if it is almost free from any urbanization, has already a density that can be compared with some parts of the Rotterdam city centre. On the other side, inside the Rotterdam municipality there are some areas less dense than the Green Heart average.

The cities are not any more the only interesting, dense and mix uses areas of the Randstad. A complete territory has been shaped by the interactions between social and economical processes. Instead of complaining about the loss of centrality, we could recognize a modern network structure and the emergence of a new model through which we should understand and design the contemporary territory.



THE DUTCH CASE STUDY AND THE ORIGIN OF THE SECOND HYPOTHESIS

Till now the research dealt with the dissolution of the compact historical European city and with the emerging of a completely new form of urban environment. This new type of city have taken many different names according to the specificity that the long dead of the old city produces.

Some conditions clearly differentiate the Dutch case study from other European contexts. The Netherlands is, in fact, a quite small and very populated country if compared with other European examples. Its territorial evolution has always been based on the Randstad model in which the core of the territory would remain empty, encircled by a ring of cities. This conviction has, in recent memory, never been subjected to critical scrutiny.

This sort of subtle land sparing policy has created a series of consequences that have strongly influenced the territorial evolution of the Randstad.

All the functions were developed separately, trying to capitalize the used land. For instance the housing company, that were facing a market request of low rise housing, were almost obliged to develop the typical dense and low rise environments of the VINEX neighbourhoods. Moreover, due to economical reasons, all the functions that are usually directly related with the housing developments were not immediately realized. After some years the necessity to endow the new citizens with some basic facilities, forced the municipality to create, just next to the new neighbourhoods other dense patches of parks, schools and so on.

The same situation can be highlighted in respect to the business parks, the new woodlands, glass houses districts, leisure parks, golf courses. All these functions

are laying together, side by side, without sharing any facilities or interests, without being connected between each other, but instead plugged with the nation or international traffic network. This particular situation allow me to state my second hypothesis:

From the Randstad to the Patchwork metropolis. The Randstad is evolving towards an extensive carpet of patches, every one with his own program and specific spatial structure, as it was conceived in 1989 by Jan Neutelings.

The patchwork metropolis of Willem Jan Neutelings

Willem Jan Neutelings in 1989 carried a research about the territory between Delft and The Hague. This work became immediately very influential, especially for its power to give a totally new image of the Randstad.

"A view still held by many of the nature of a town is a red stain in a green landscape. The problem of urban expansion is thus reduced to the question of which piece of green on the map can be made red. This perpetuates the absurd notion of a romantic polarity between a paradisaical Arcadia and a megalomaniac metropolis, a red stain sprawling in an endless expanse of green.

In a complex area like the Randstad conurbation this model has long been inadequate for interpreting the reality of the situation. A twenty minutes drive take the Randstad dweller past sculptural oil refineries, colourful bulb-fields, intimate garden cities, medieval rings of canals, eight-lane motorways, hypermarkets, functional high-rise estates, lakes for recreation, old Dutch windmills, university campuses, tourist beaches, protected dune landscapes, glass roofs of greenhouses, reflecting business parks, motel for furniture mega-stores, rubbish tips and golf courts, airfields, market, squares and mosques.

This part of the Randstad can be better described as an extensive patchwork carpet. Each patch has a specific program and a specific physical structure. In this heterogeneous field the contradiction between city and landscape is abolished." (Williem Jan Neuteling, 1989)

He drew a territory in which an endless juxtaposition of shifting patches seems to define the structure's single element of consistency. The map that he produced seems to anticipate a broader issue. This issue goes to the hearth of the Randstad planning concept itself. He questions if nowadays the planning at such a regional scale and magnitude still make sense.

As Karl Beelen stated, the operation that is involved in the patchwork model is

essentially an operation of re-scaling. What is usually controlled at a national level should be scaled down to the parts that compose the territory. Neutelings with the patchwork metropolis project argued that the Randstad concept makes sense any more. Through the medium of the map, he calls for the design to take place on the level of the fragments, these being to him the only feasible, hence relevant, scale of regional planning interventions.

The Land Mosaics of Richard T. T. Forman

In the 1995 the landscape ecologist Richard T.T. Forman published a book that pointed out how we are already living in a finely fragmented and patched habitat. With his world the territory is a mosaic that "at any scale can be composed of patches, corridors and matrix" where a patch is defined as a "wide relatively homogeneous area that differs from its surroundings". The basic spatial elements that compose the landscape are: patches, corridors, nodes, boundaries and unusual features.

This definition can be compared with the well known "The image of the city" of Kevin Lynch. The American urbanist highlighted that city users understand their surroundings forming mental maps through five elements: districts, paths, nodes, edges and landmarks. By this comparison it is clear that all the territory, both urban and rural, can be understood and described with similar spatial elements.

Even if the two researches are different in term of context, approach and specific interests (Neutelings is in fact an architect and Forman a landscape ecologist), we can say that both were searching a change in the usual manner of understanding the city and the landscape. [In this way a patchwork paradigm founded on a theory of both landscape ecology and urban planning has emerged. This method provide a promising basis for understanding and planning the large urban territories and](#) is able to elucidate the history (rationality from which each place was created), structure (spatial pattern), functioning (flows and movements across it), and change (pattern over time) of a territory, for any living system.



INTERVIEW TO JAN WILLEM JAN NEUTELINGS (21.06.2011)

In which occasion did you develop the research on the patchwork metropolis?

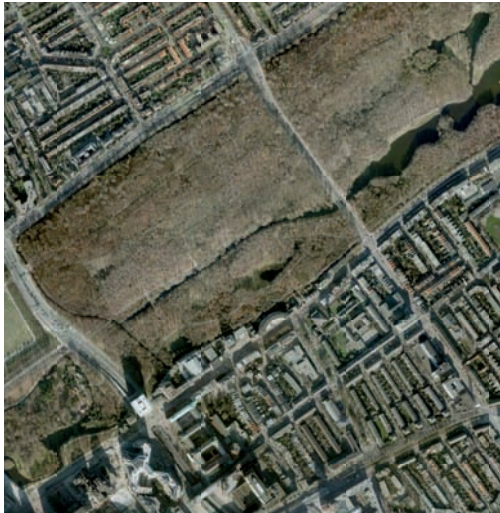
It was a commission ordered by the city of The Hague. They asked us to make a study about the possibility to expand the city towards the south. But this area was out of the boundaries of the municipality, so they asked us to look into the ground of another municipality. Then we went even further and we considered the whole area in between The Hague and Rotterdam in order to make a more comprehensive research.

After some months of work we came up with the idea of the patchwork metropolis where the area from the sea to the river Rhine was considered as a continuous carpet of spatial and functional elements.

This project was a sort of continuation of the "Ring culture" project in Antwerpen made in 1985. These two project were both based on the idea that in the 80's everybody was looking to the reconstruction of the inner city, but actually everything was happening outside the cities especially along the main roads.

The urban project has often been based on metaphors: why did you propose the metaphor of patchwork?

The whole project is based on the opposition against the paradigm that sees the city as a red spot in a green territory. We stated that this paradigm is not wright anymore and if you look closer to the city, like a biologist, you would clearly see that inside this red spot there are many green areas and inside the green a lot of



red spots.

If you consider then the territory between The Hague and Delft, you can see that what it is supposed to be green, following the interpretations of the old planners, is instead completely built. Furthermore if you now look at the centre of The Hague you can clearly recognize some spots of pure nature. So the medieval idea based on the opposition between red and green is not relevant any more; we have to define another way to qualify the spatial condition in which we are living. Therefore the research on the patchwork metropolis began.

Do you think that it is possible to guide the evolution of the patchwork metropolis?

We stated that it was impossible to guide the territory at the Randstad scale. The only way in which we can guide the territory is at the patch level. You can replace the old patches with new ones, you can fragment the existing ones, but in the neo-liberal and market oriented society you cannot still think that it is possible to guide the Randstad as a whole.

Few days ago the Dutch ministry of spatial planning, mobility, infrastructures developed a new vision which foresees that many responsibility will pass from the national to the local level.

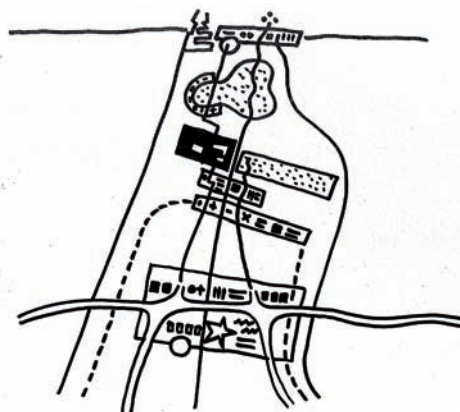
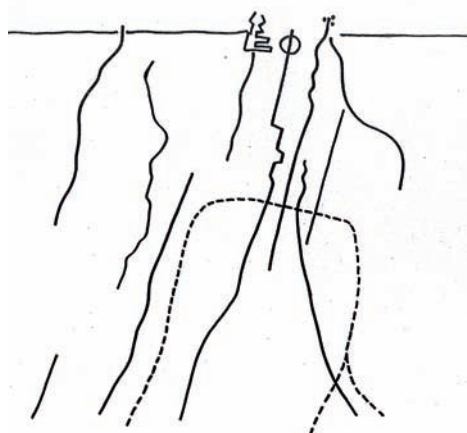
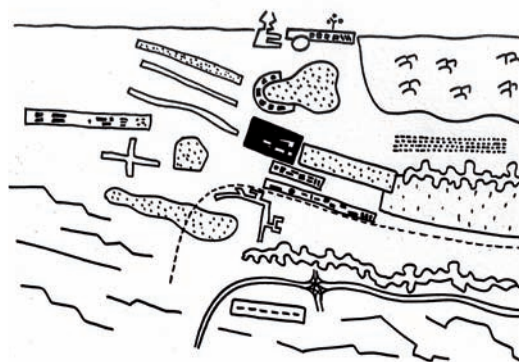
Do you think that your prediction about the impossibility to plan at a regional level is becoming true?

For sure this decision will enhance the patchwork metropolis since everybody will look at smaller and smaller patches. By comparing this situation with the real patchwork is possible to understand the difference between a kilt sewn by only one person, able to control the overall result, or the same kilt done by ten different people working on it at different times.

Actually what we said twenty years ago is that it is not feasible to work at the great scale. In the democratic market-driven society you cannot control the overall territory.

What will happen to the Green Hearth? It will also become part of the patchwork?

I think that the Green Heart is not existing any more. The all Green Heart concept is fake, it is a sort of idea in the head of the planners, but if you really look at the map you can see that it is full of little cities. Wherever in the Green Heart, within few kilometres, you will see a building.



It could have worked as a principle under a sort of national park regulation, setting a "no go" zone, as it happened in the dunes area, but they never did that.

Is the idea of the patchwork metropolis also related on how users interact with the territory?

People are continuously moving from one patch to another. Every patch has something different to offer and therefore attracts various sectors of population. In the weekend you can go to the marina, spend the day working in your farm and the night going to Hook Van Holland.

The problem now is that the city cannot be understood any more as a spatial element, because is not a spatial composition. Internet can be an appropriate metaphor of the patchwork metropolis, even if this was developed before. You can have many web-sites where you can go, you can link places and these places don't have spatial relation anymore.

It is possible to have a yacht club and then next to it something completely different without any direct relation; while at the same time it can be linked with an head quarter one kilometre far.

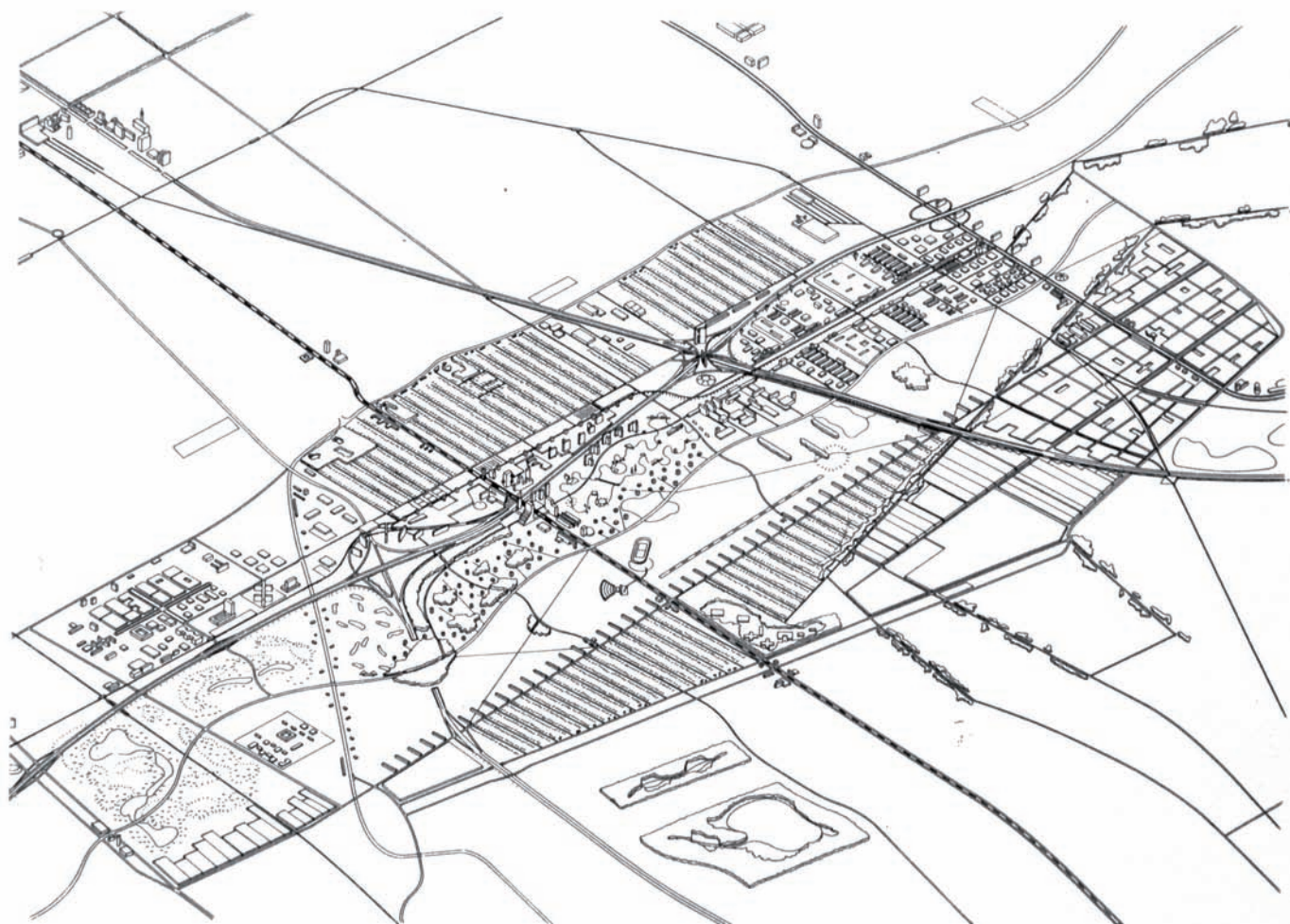
If you look for example at the trade companies patches it is evident that this kind of patches are always placed near a motorway exit. The distribution of the patches follows a logic that is not the spatial logic given by an urban planner but it is more driven by economic and social processes.

Just to give you an example, I live in Antwerpen and my office is in Rotterdam near the train station; so a big part my life is in between these two patches. In the last ten years I have never been in the south of Rotterdam, it is not a patch I am interested in, there is nothing there for me. The city is not a continuum any more, each of us live in a different city.

Do you think that the social relations are nowadays reduced and coincide with the dimension of the patch?

In the last twenty years, there is the tendency to transform patches into ghetto-like communities. Several became so strong that people even fenced them, in order to preserve their exclusiveness and live in a sort of fantasy world.

This process is slowly eroding the public domain, that is becoming more and more un-public, like the shopping centres or the airports. The public spaces have been transformed into controlled spaces.



How is it possible to foresee the future evolution of this patched territory?

Nowadays the areas of homogeneity are much smaller than during the 19th century. The fragments are becoming stronger and less related to the context. I think however that this trend will find a sort of balance, based on economical reasons and critical mass. For instance, a marina can be built just if there are 500 boats ready to be moored inside. A marina with 50 boats is not a profitable investment. There is always a certain scale for certain things, the fragmentation process will be allowed or forbidden by the economic logics.



THE SCALE PROBLEM AND THE DRAWING OF THE PATCHWORK

When, for the first time, I have faced the issue of drawing the area in between The Hague, Leiden and Alphen aan den Rijn as a patchwork, I have immediately realized that was not an easy matter. The problem of the scale and the boundaries of the patches appeared to me the most problematic issues.

In order to produce a reproducible methodology I have followed, as much faithful as I could, the work and the definitions that Forman stated in his book "Land mosaics". I will explain in the following paragraph the methodology and the rationality that I have used to be able to draw my patchwork.

The patches

I started with the Forman definition of patch as a "wide relatively homogeneous area that differs from its surroundings". We can say that a patch is then a piece of the territory that presents similar and homogeneous atmosphere, environment and composition. The patches selection was intimately related with the problem of the scale. The measurement of spatial pattern and heterogeneity is, in fact, always dependent upon the scale at which the measurement is made. It is of course impossible to define a perfect scale or grain at which the patchwork should appear more clear. The planet is spatially subdivided in many ways, including political, economic, climatic and geographic, depending upon human objectives.

I then stated a clear subdivision between urban and agricultural patches.

For the urban patches I considered the fabric scale, where a fabric is, by definition, a homogeneous repetition of blocks of the same typology. The fabrics are



moreover a sort of Zeitgeist for the Dutch and European urban environment. They are a clear reflection of the architectural, urban and sociological models of the period in which they were realized. They are composed by similar pattern, similar densities, and similar facilities distribution.

For the agricultural patches, instead, I took into consideration the polder subdivision, where a polder is, by definition, a low-lying tract of land enclosed by embankments, that forms an artificial hydrological entity. Usually the polders have similar soil type and land height. Also in this case we can notice a clear relation between the polder pattern and the reclamation period. The polders reclaimed around the 11th century and in the 15th century present two completely different landscape geometries because they were reclaimed using different methods and rationalities.

The two selected spatial scales are still comparable and are able to mesh both human and ecological patterns, processes and policies.

I have then concluded the patches selection by drawing the boundaries of some special areas like big peri-urban parks, airports, historical centres, ecological protected areas. This last category was quite clearly detectable due to the fact that these patches are already separated and enclosed entities that differ completely from their surroundings.

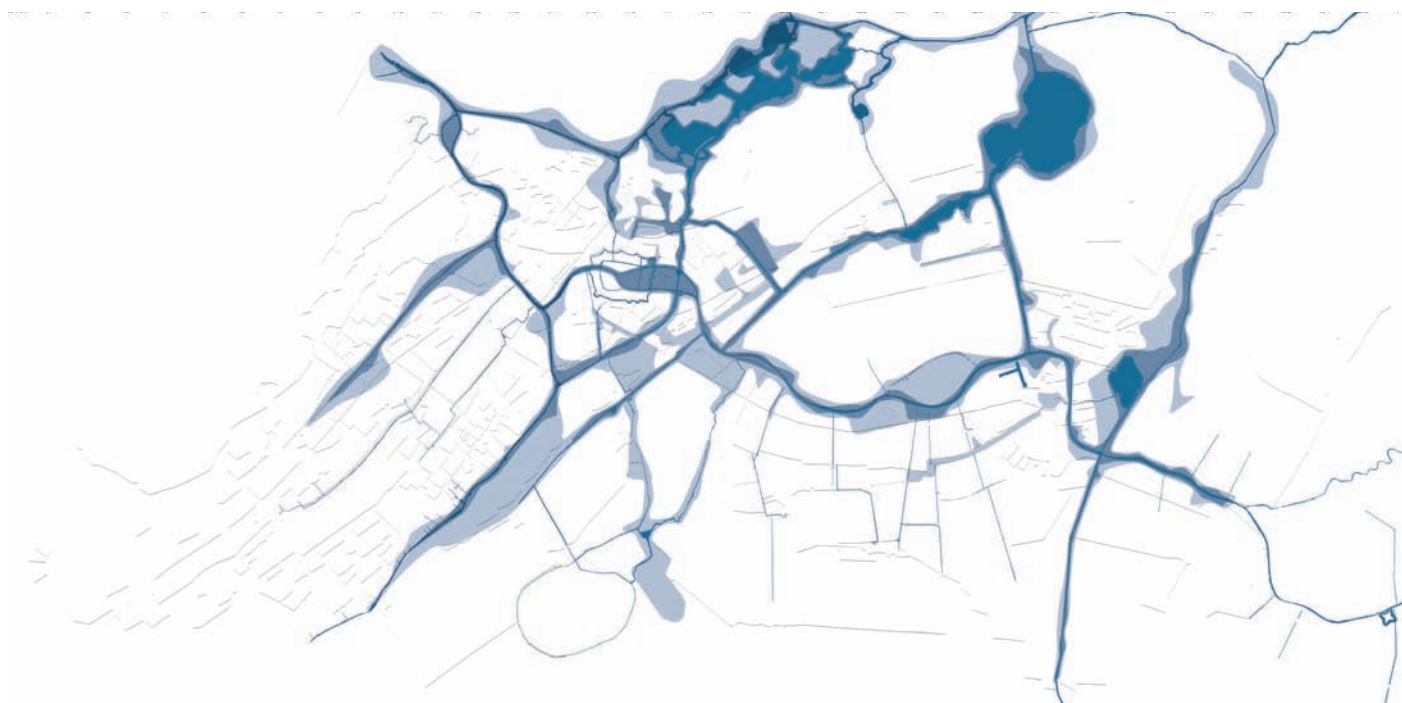
As a conclusion I should say that even if I didn't follow a completely scientific methodology the final result represent almost the entire territory as a clear mass of homogeneous patches.

The corridors

In order to produce the real patchwork we should introduce another element. The patches that I have defined are not singular elements spread in the territory. According to Forman the patches are just one of the elements that compose the mosaic system. In this section I am going to introduce what Forman called corridors and I will define as networks.

For Richard Forman a corridor is a narrow strip of land that differ from the surrounding matrix. Although corridors can be isolated strips, they are often connected to patches with similar characteristics.

For Sybrand Tjallingy in the contemporary complex planning situation we can recognize two different networks, the fast mobility network and the slow ecological network.

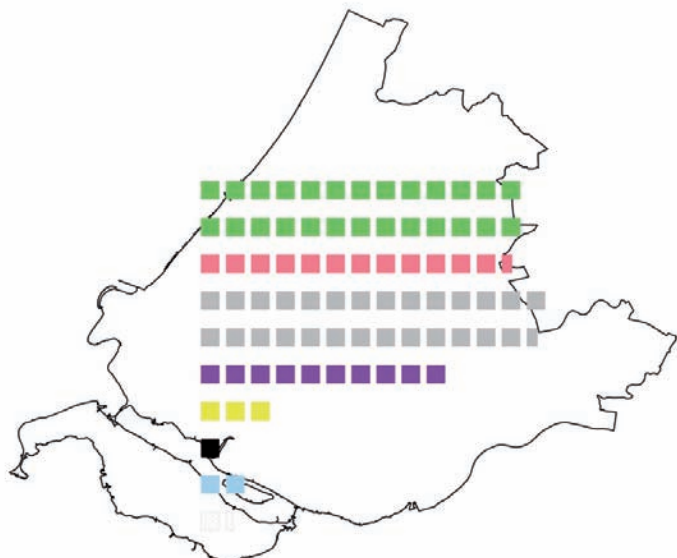
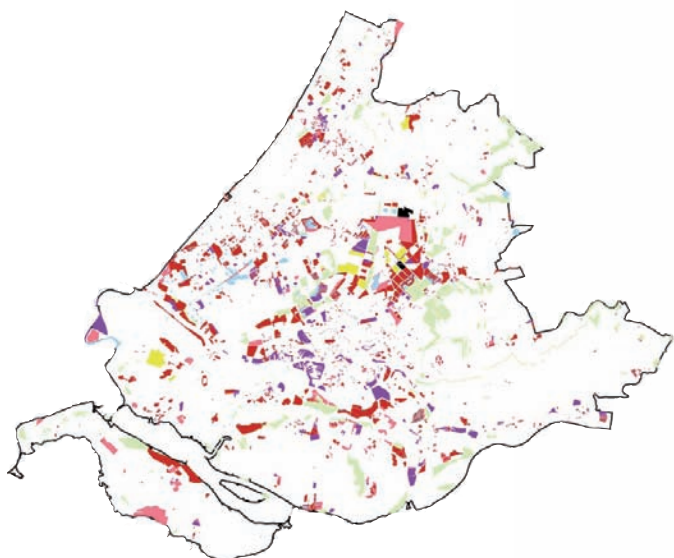
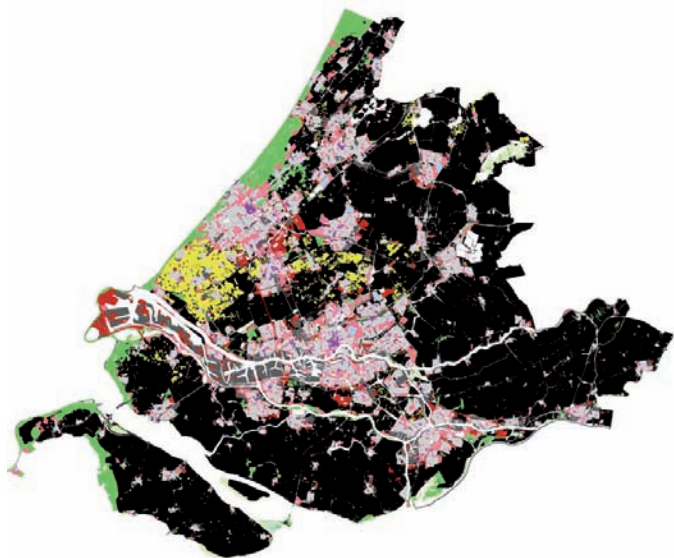


This spatial structure based on the Two Networks' Strategy appear to me an interesting guiding model that takes the networks of water and traffic as carrying structures for the development of the patchwork metropolis.

In this page: The fast and the slow network; Carlo Pisano
In the next two pages: The ultimate patchwork metropolis; Carlo Pisano







THE PATCHWORK LIMITS AND THE NEW RESEARCH QUESTIONS

As it was stated in the previous paragraphs the patchwork metropolis project was able to describe a re-conceptualized image of the Randstad; it clearly showed a Dutch territory in rapid change. Neutelings research was really revolutionary when it was presented in the 1989, but it was at the same time very criticized. The main limit is that he completely reject the possibility to have a planning overview at the level of the Randstad.

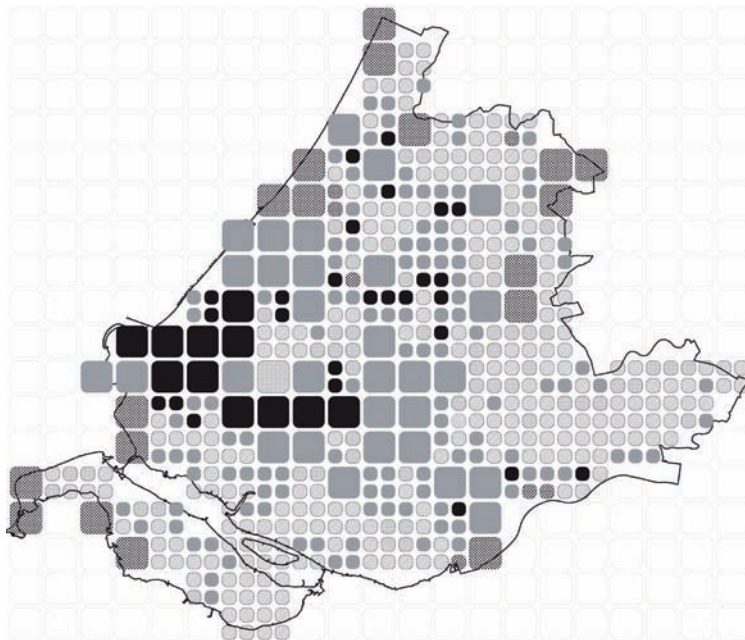
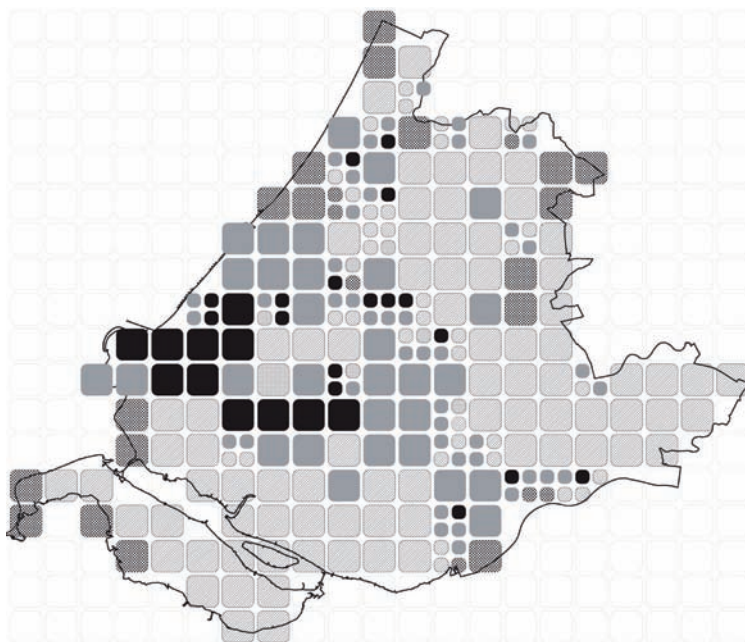
In my opinion this was a sort of give up in front of the complexity that he just expressed. The Netherlands is facing a critical moment, regard the planning and territorial control; just few days ago the new created ministry of spatial planning, mobility, infrastructure developed a new vision that is going to delegate many responsibility at a local level. This continuous re-scaling of the issues will for sure face in few years the problem of a completely lost overall image of the territory.

If I completely agree that a series of big qualities can be originated by the downgrade of the planning instruments, in term of diversity of the territory and in terms of more selective economic policies, I still think that it is just impossible to give up the large scale overview.

This objection can be easily supported by considering that there are some issues that can be addressed just at the scale of the Region. Problems like fresh water storage or flooding control, mobility and preservation of ecological areas are just few of the point in favour of the necessity to maintain a certain degree of general control of the territory.

In the previous page: On the top, The South Wing today, on the bottom, "The new kart of Netherlands" The foreseen changes for the 2020.

In dark gray the infrastructures, in green the natural areas, in pink the parks and the facilities in red the industries, in yellow the glass houses, in grey the housing, in black the agriculture, in blue the water; Carlo Pisano 2011.



The metabolic and Tokyo like metropolis, that Neutelings described, was able to regenerate itself day after day, was completely son of the economical processes and for this reason unable to protect and enhance the fragile elements of the territory. I am sure that in order to produce a new convincing model, even if it is based on changes, speed and transformations, we should clearly stated how we are able to address the topic of protection and the topic of sustainability.

In order to say that the patchwork metropolis is a model that can guide the changing territories of the 21st century we have to be able to answer a series of simple but fundamental questions:

Is agriculture important today in a urban region or could it be eliminated and food imported from other countries?

Is biological diversity, especially rare species and rare habitats significant?

How can we rethink the mobility for the future territory?

How and where should be allocated the new development?

Which kind of public space is suitable for the new city dwellers?

The openness of the dutch territory should be considered a value?

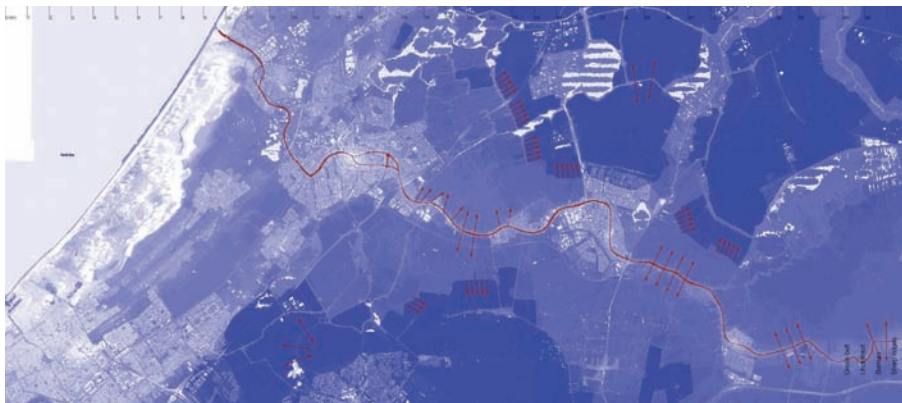
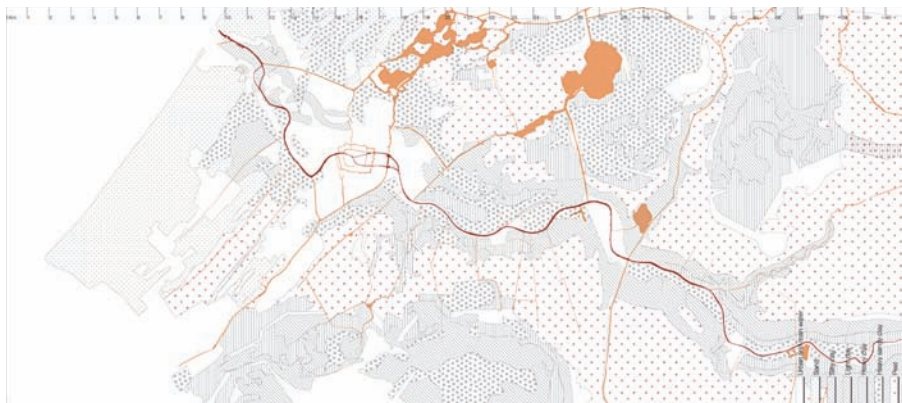
Just by addressing this questions I would be able to move forward the milestone work of Jan Neutelings.

In the previous page: On the top, The South Wing today, represented as a 10 Km2 matrix
On the bottom, Fragmentations of the patches after the realizations of the New Kaart proposals;
Carlo Pisano 2011.

THE PATCHWORK METROPOLIS

HYPOTHESIS 3

THE NECESSITY TO GUIDE THE PATCHWORK METROPOLIS



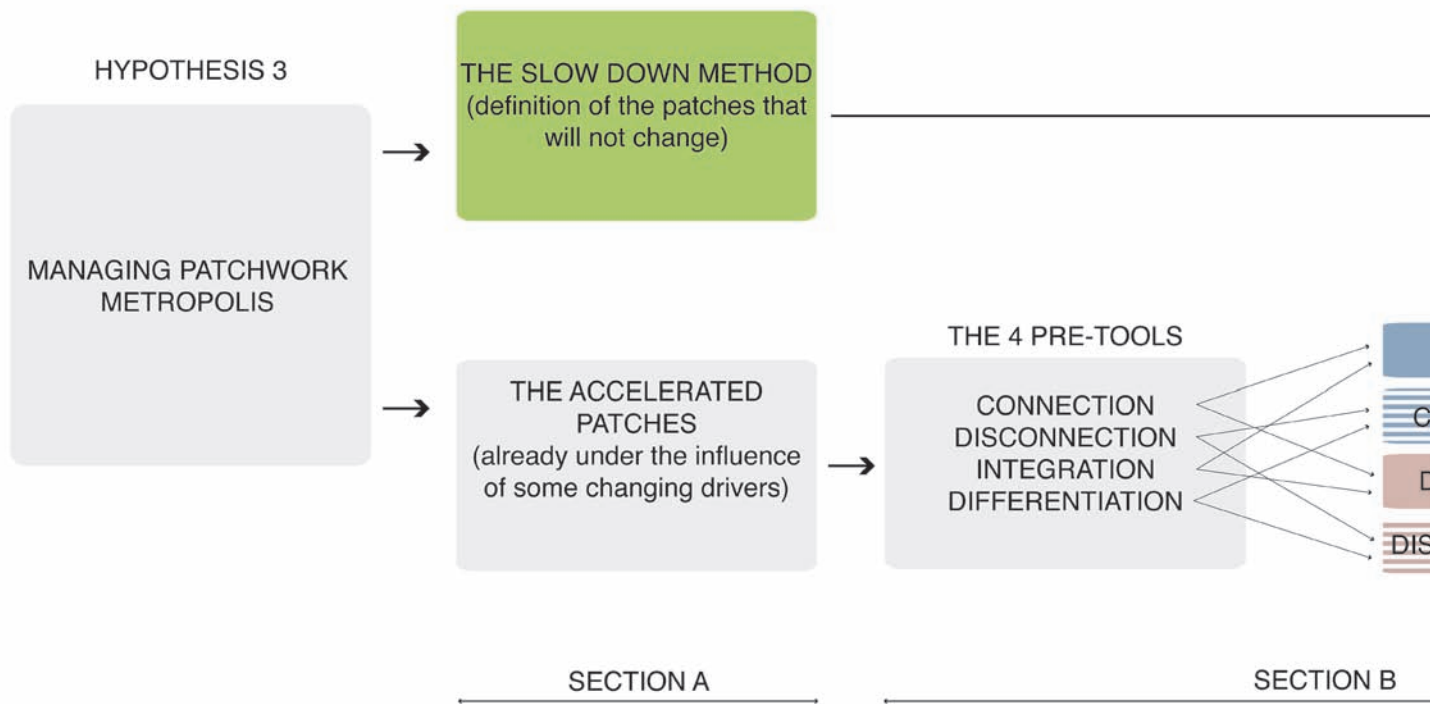
In this page: The soil type map; the ecological and water system; the elevation map.
In the next page: The structure of the third chapter.

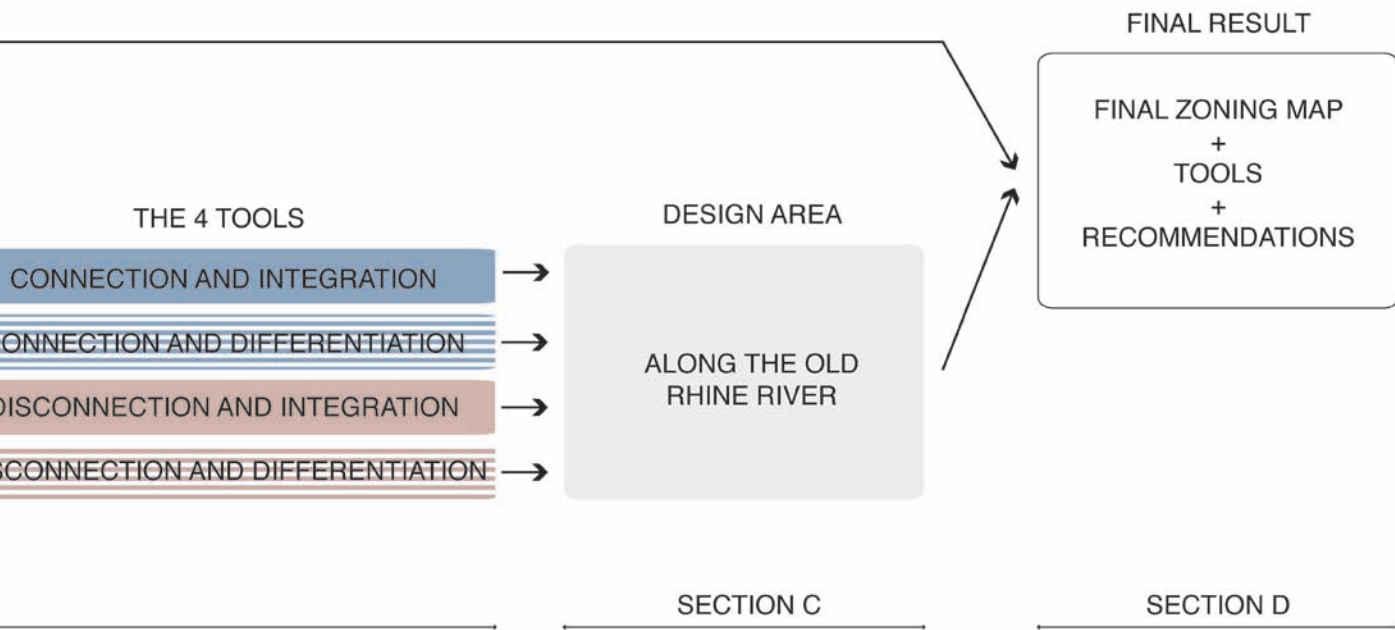
INTRO THE NECESSITY TO GUIDE

This section will be completely dedicated to the main critique that I have raised to Neutelings in the previous section so that it is still important to maintain an overall image of the patchwork able to protect and enhance its special characteristics.

In order to develop a convincing model we need first of all to highlight all the lines, existing in the territory, that in the past were just filled by sand and transformed into something new. The type of soil, the height, the territorial pattern are all important traces that has to be respected when we think to the future of the territory. The period in which it was possible to rise a hill of sand and built on it, it is just finished. This is the end of this trend because we realized that there is not any lack of land, it is just a matter to know how to use it. A huge territory is ready to allow us to live, work and have fun, but it is necessary to respect its special character.

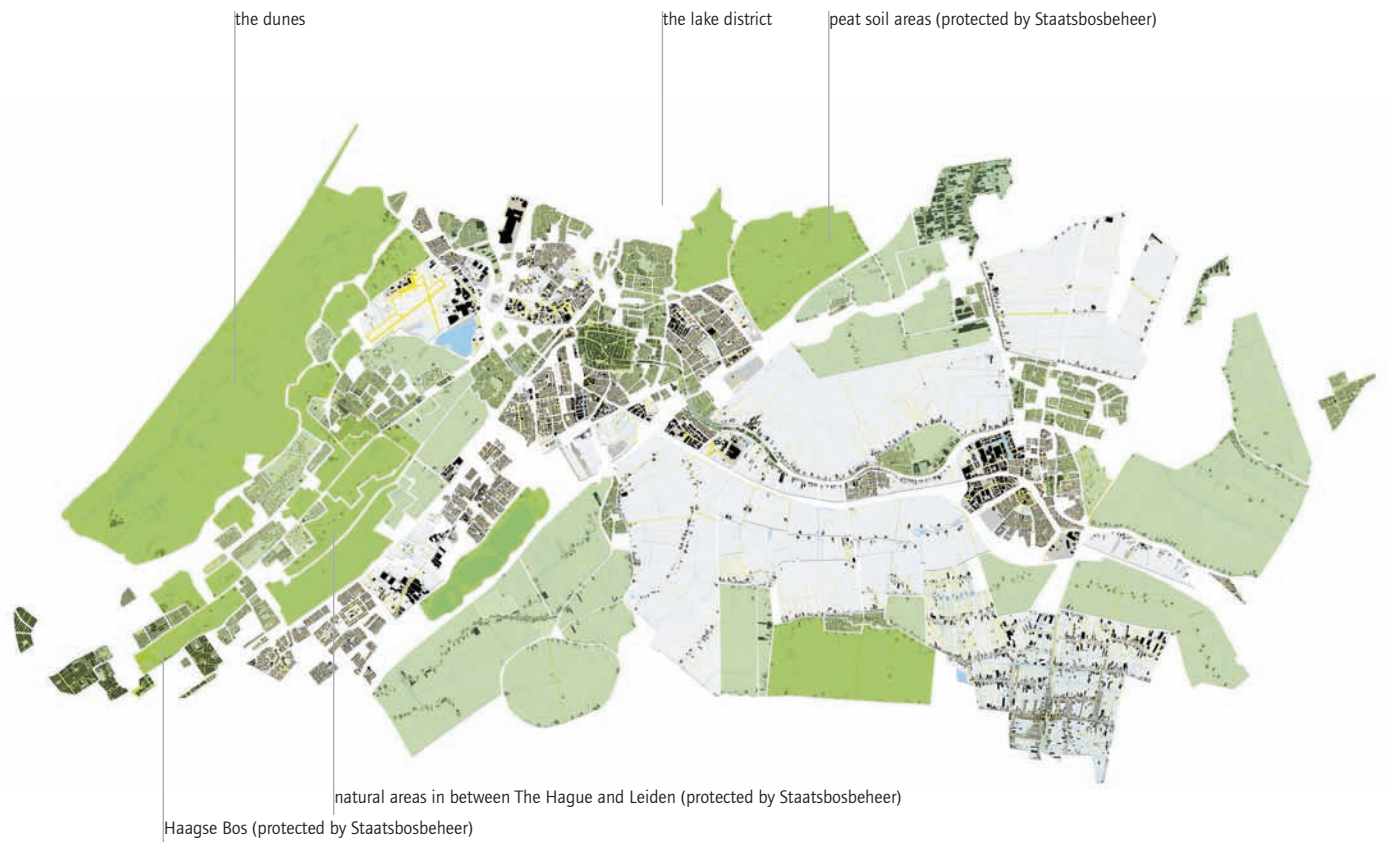
By looking at the soil maps, for instance, it is clear that exist a huge diversity that was created in the past by the flows of the main rivers and by successive territorial colonization. Also the height map reveals that are still existing, even in the most urbanized area of the world, vast open areas. The emptiness of the landscape is a clear value for a society that is changing rapidly. In the future, in fact, all the Europe will be served by a dense network of streets, highways, railways, and in that moment, the quality of the landscape will represent the main difference between the territories.





Before start to explain the strategic plan I think it is important to highlight briefly that it is composed by four sections:

- A First selection of the areas that will accelerate (already under the influx of some transformation drivers) from the areas that will be slowed down
- B The acceleration and transformation processes will be guide through the use of four tools
- C The tools will be explained with four design exercises
- D The accelerated and slowed down patches will become part of the general map of the coloured patchwork metropolis



THE PRESERVATION AND THE “SLOW DOWN METHOD”

When we look more carefully at the Randstad territory we can clearly see that not all its parts should be considered in the same way. The most important characteristic of the Randstad is in fact that the urban sprawl is discontinuous. The merging of expanding cities has intentionally been avoided by creating green buffer zones. So densely build areas are alternated with green patches such as leisure parks, lakes or natural preserves.

Whether we accept it or we refuse it we should take seriously into consideration the existence of these areas that, trough time and trough a series of policies, have been frozen and protected.

These areas are already a clear exception in the theory of Neutelings of a global regeneration of the patches; in the territory are already existing some “artificial reservoirs” that are not responding to the overall logic that guide the territory. Even if I am in principle against this type of use of the land (that remind me the European agricultural policies that act freezing the social and economical processes that naturally guide the territory) I should take note that it succeed in avoiding the creation of a monotonous urban fabric, like Los Angeles or the Ruhrgebiet, but creating a series of very interesting spatial contrasts.

We can even go further in these kind of reasoning. [By stating that there is no reason why the whole territory will change and modifies continuously, it is important admit that, in the immediate future, something will be protected.](#) Important water reservoirs, precious peat soil ares, historical city centres will be part of this selection of territories that should in a certain way be “slow down”.

In bright green: The patches already under a protection regime; in dark gray: The new protected patches;
Carlo Pisano



Staatsbosbeheer and Natuurmonumenten, are two associations, respectively governmental and private, that just together own already around the 10% of the unbuilt Dutch land. These groups buy the unproductive land and transform it into a sort of artificial reservoirs where the natural dynamics can slowly get back the upper hand. This practice, typically Dutch, can be a good starting point to define some areas that have to slow down, that can remain stable and respond just to the local and ecological dynamics.

Other areas, like the city centres, are under a process of intensification, modernization and decoration. Highways, train and tram lines are deviated in order to pass as close as possible to the old centres. This requires enormous infrastructural works that often necessitate the change of the entire water and fine grain mobility systems that maybe survived unchanged through several centuries.

Also morphologically the tissue is changing. In order to host new spectacular functions like cinemas, theatres, dance centres, the old blocks are distorted and styled, the old tiny streets are transformed into shopping strip and the old squares are filled with strange objects that today don't attract anymore anybody. I think that this process of "Disney-fication", will soon reach a point in which they will be hardly distinguished from leisure and touristic parks, places in which the population will be just composed by waiters and daily tourists.

We should also be aware that the "Venice-fication" of the old city centre cannot be considered the solution because it will soon produce similar results.

In order to avoid this cultural and social loss I think we should go for a solution that lay in the middle of the two just-mentioned processes.

In the example of Leiden city centre (see the picture in front) I highlight all the infrastructural and functional works that are rapidly changing the balance that the city found through the centuries. We can operate a slow downgrade of the accessibility of the area and allow changes just at a lower grain. This process will immediately produce a revalorization of the fine grain network that connects the old centre with the new neighbourhoods. By downgrading the accessibility the citizens will come back to be the owners of the area and they will be able to act a series of low scale changes in order to produce a more livable and safe environment.

In this page: example of the preservation strategy of the Leiden city center:

On the top the existing accessibility and the ongoing transformation projects.

On the bottom possible strategy of downgrade the accessibility and use of the fine grain of streets.

The same analyses can be done for the old peat agricultural areas. In the considered strip of land along the Old Rhine river we can still recognize the historical and cultural peat pattern that in many other areas of Holland has already been completely lost. These areas are today facing the process of intensification of the



agriculture that can be already seen in the areas around the Boskoop. I don't think that this transformation process is completely harmful. This low scale, differentiated agriculture produced, in fact, from age to age, a very particular cultural pattern that in many case have protected the peat land from a villain excavation. On the other side I am convinced that some of the peat areas should be maintained and preserved as they are in order to allow the filtering and sponge function that is very useful for the water management of the country.

In this way I have highlighted a whole range of areas, variously spread in the territory, that should be slow down, preserved from imminent changes. These territories can become in our mind, of nomadic citizens, a sort of milestones, that can help us to orientate in a continuously changing patchwork metropolis.

In the previous page: Examples of "Slowed down patches" (in clockwise order): The dunes (Elvira Smit), Leiden center (Marco Langbroek), Lakes region (R. Moher), The peat land (Francine Vincente).



THE ACCELERATED PATCHES

We cannot, of course, state that in order to preserve the today's qualities, we should slow down the whole Dutch territory. The territorial dynamics and changes are an essential part of a vital and productive country. This thesis's section will address the possibility to preserve the main territorial qualities even under dynamic processes. The territory is changing and I am convinced that a proper and wise design, that follows some general and simple guidelines, can be able to apply transformation without alter the landscape qualities.

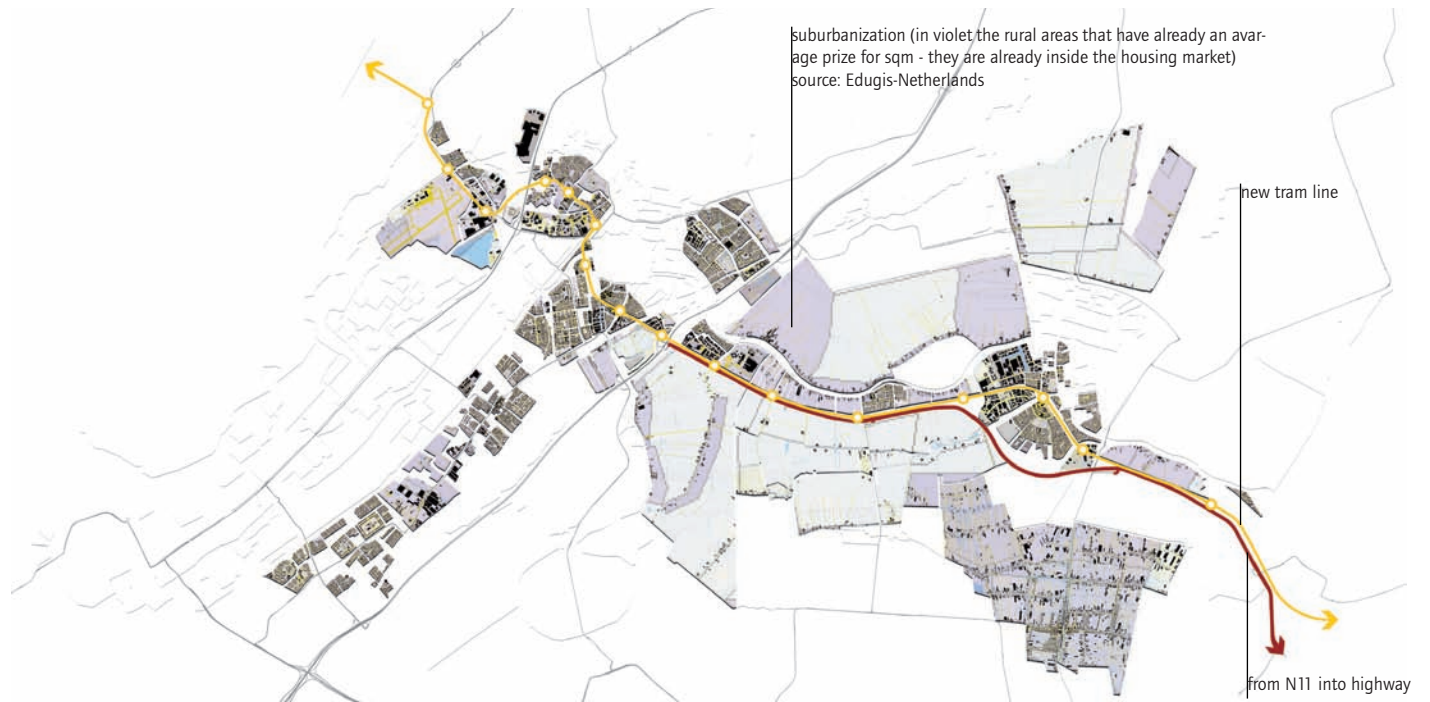
First it is important to highlight why and how the patches will change in the next few years; in the studied area along the old Rhine river I have recognized three main drivers of changes:

- The RijnGouweLijn. It is an already 10 years old project to connect the city of Gouda, Alphen aan den Rijn and Leiden, Katwijk and Noordwijk with a tram line. The project is almost completed and will be probably launched in 2012. This will heavily change the urban strip between Leiden and Alphen aan den Rijn that will become soon part of a more national and even international route.

- The transformation of the N11 into a highway. The speedway that today connects Leiden and Alphen aan den Rijn with the A4 and Gouda, will be soon transformed into a highway. This will enhance some exits and erase others. Such process of polarization will stress some areas under a more heavy and fast traffic, disconnecting, on the other side, other parts of the region.

- The suburbanization. Leiden and Alphen aan den Rijn are rapidly expanding

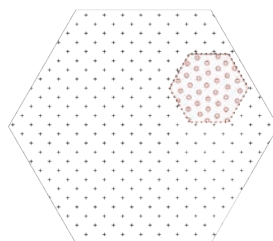
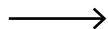
In the previous page: Examples of "Slowed down patches" (in clockwise order): The dunes (Elvira Smit), Leiden center (Marco Langbroek), Lakes region (R. Moher), The peat land (Francine Vincente).



their urbanized areas. This process will soon create a further expansion of the municipalities limits that will affect the near agricultural areas. (The "Old Rhine vision 2020" foresees, for instance, 1500 new houses for the municipality of Leiden, that will be developed as new neighbourhoods in between Leiden and Rijnsburg).

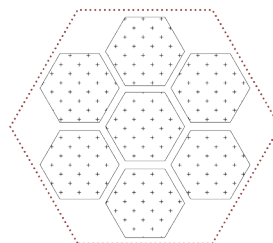
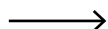


In the previous page: The drivers on changes
In this page: The new tram line; Carlo Pisano



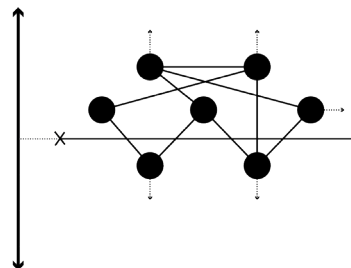
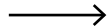
DIFFERENTIATE

Differentiating a patch means the increase of the level of internal heterogeneity. This process will increase the degree of diversity inside the patch system. If implemented this pre-tool can produce the subdivision of a patch into more specialized little ones.



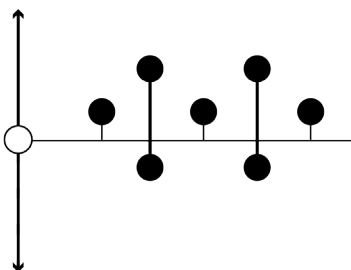
INTEGRATE

Integrating a patch means increase its level of internal homogeneity. This process can also produce the sewing of different patches with similar characters into bigger ones.



DISCONNECTION

Through the disconnection from the fast mobility and the connection with the slow water and biological networks it will be possible to produce a more local scale of connections.



CONNECTION

Through the connection of an area with a bigger scale mobility network it will be possible to speed up the relation between that patch and a more national and international context

THE INTRODUCTION OF THE TOOLS

When we abolish the contradiction between urban and rural we lose one of the most important tool that the policy makers use in controlling the territory, thus of defining limits and boundaries. It is necessary to find a new class of policies and spatial operation that manage the complexity of the territory.

In order to propose a repeatable methodology, I will introduce in the following paragraphs 4 tools that are basically the composition of two couple of “pre-tools”. The first couple of pre-tools considers the patchwork metropolis as a network city in which the most important character of a patch is related with its connection or disconnection condition from the fast or slow network.

The second couple, instead, consider the patchwork as an ecological land-mosaics in which the main characteristics are the size and the internal homogeneity of a patch.

Considering the patchwork metropolis as a network city:

CONNECTION. Through the connection of an area with a bigger scale mobility network it will be possible to speed up the relation between that patch and a more national and international context.

DISCONNECTION. Through the disconnection from the fast mobility and/or the connection with the slow water and biological networks it will be possible to produce a more local scale of connections. The patch, affected by this pre-tool will be better connected with the neighbourhood patches trough a small scale mobility.



CONNECT AND INTEGRATE

The connection of a patch with a bigger scale mobility corridor can provide the potentiality for a functional specialization. The connection can in fact provide the increase of the connectivity to a broader scale of amenities and facilities, producing an environment that can be more specific and unique.



CONNECT AND DIFFERENTIATE

The connection of some patches with a bigger scale mobility corridor can provide the potential to the increase of homogeneity in the system in order to compete with a broader scale of competition.



DISCONNECT AND INTEGRATE

The disconnection of a patch can preserve its integrity through time. The deceleration can be further implemented connecting the patch with the slow rhythm of the ecology and tides.



DISCONNECT AND DIFFERENTIATE

The disconnection of a patch from the main mobility can create the opportunity to introduce a series of specific functions that can take advantage of the slow environment. These special function can maintain the patch relate with a broader exchanging system.

Considering the patchwork metropolis as an ecological land mosaics

INTEGRATION. Integrating a patch means to increase its level of internal homogeneity. This process can also produce the sewing of different patches with similar characters into bigger ones. Water quality protection and the connections between lower streams will benefit of this process.

DIFFERENTIATION. Differentiating a patch means the increase of the level of internal heterogeneity. This process will increase the degree of diversity inside the patch system. If implemented this pre-tool can produce the subdivision of a patch into more specialized little ones.

The ultimate 4 tools

The 4 tools are the composition of the pre-tools. Without setting any distinction between urban and rural, industrial or commercial we can say that the four tools are able to manage the peace and the scale of changes of the patches that compose the system.

CONNECT AND DIFFERENTIATE: The connection of a patch with a bigger scale mobility corridor can provide the potentiality for a functional specialization. The connection can provide, in fact, the increase of the connectivity to a broader scale of amenities and facilities, producing a more specific and unique environment.

CONNECT AND INTEGRATE: The connection of some patches with a bigger scale mobility corridor can provide the potential to the increase of homogeneity in the system in order to compete with a broader market.

DISCONNECT AND INTEGRATE: The disconnection of a patch can preserve its integrity through time. The deceleration can be further implemented connecting the patch with the slow rhythm of the ecology and tides. In the urban fringes for instance the process of fragmentation can be stop by applying policy of reduction of car traffic.

DISCONNECT AND DIFFERENTIATE: The disconnection of a patch from the main mobility can create the opportunity to introduce a series of specific functions that can take advantage of the slow environment. These special function can maintain the patch relate with a broader exchanging system.

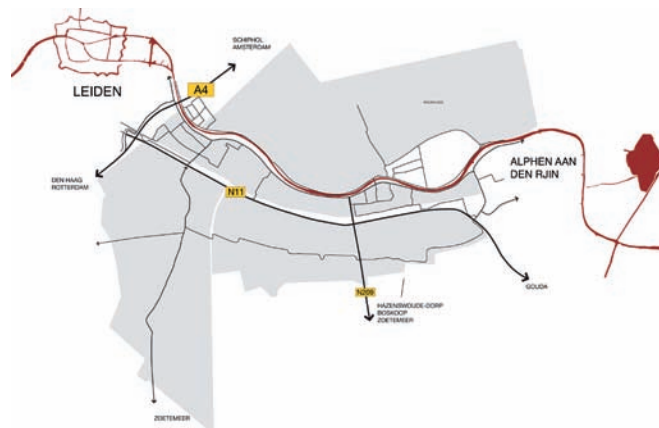
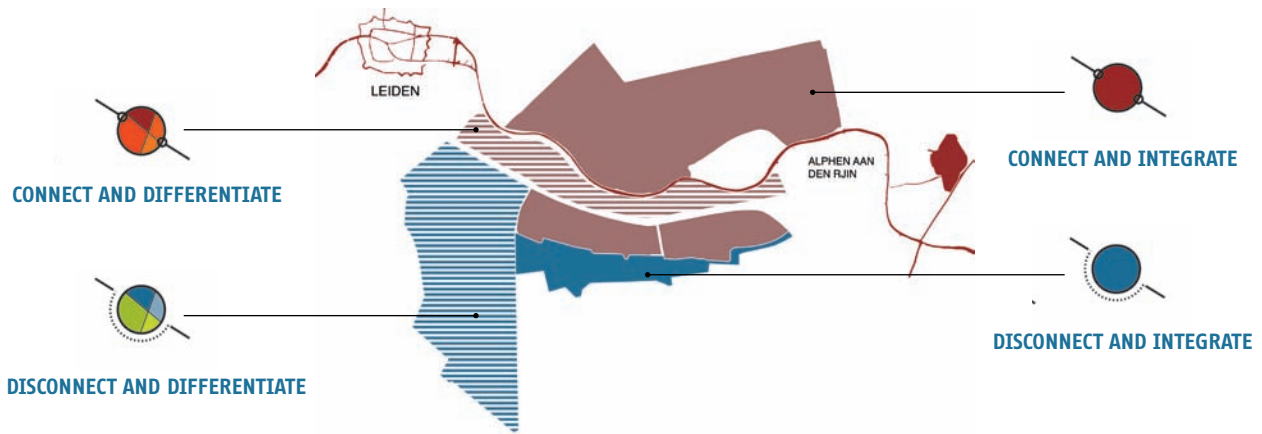


THE DESIGN AREA

In order to prove the worth and the capacity of the set of tools to address and solve specific territorial problems, I will proceed to develop four design exercises. The selected area is composed by a series of patches in between Leiden and Alphen aan den Rijn sew together by the Old Rijn river. According to type of soil, type of agriculture, landscape and urbanization pattern the area is composed by four main type of patches.

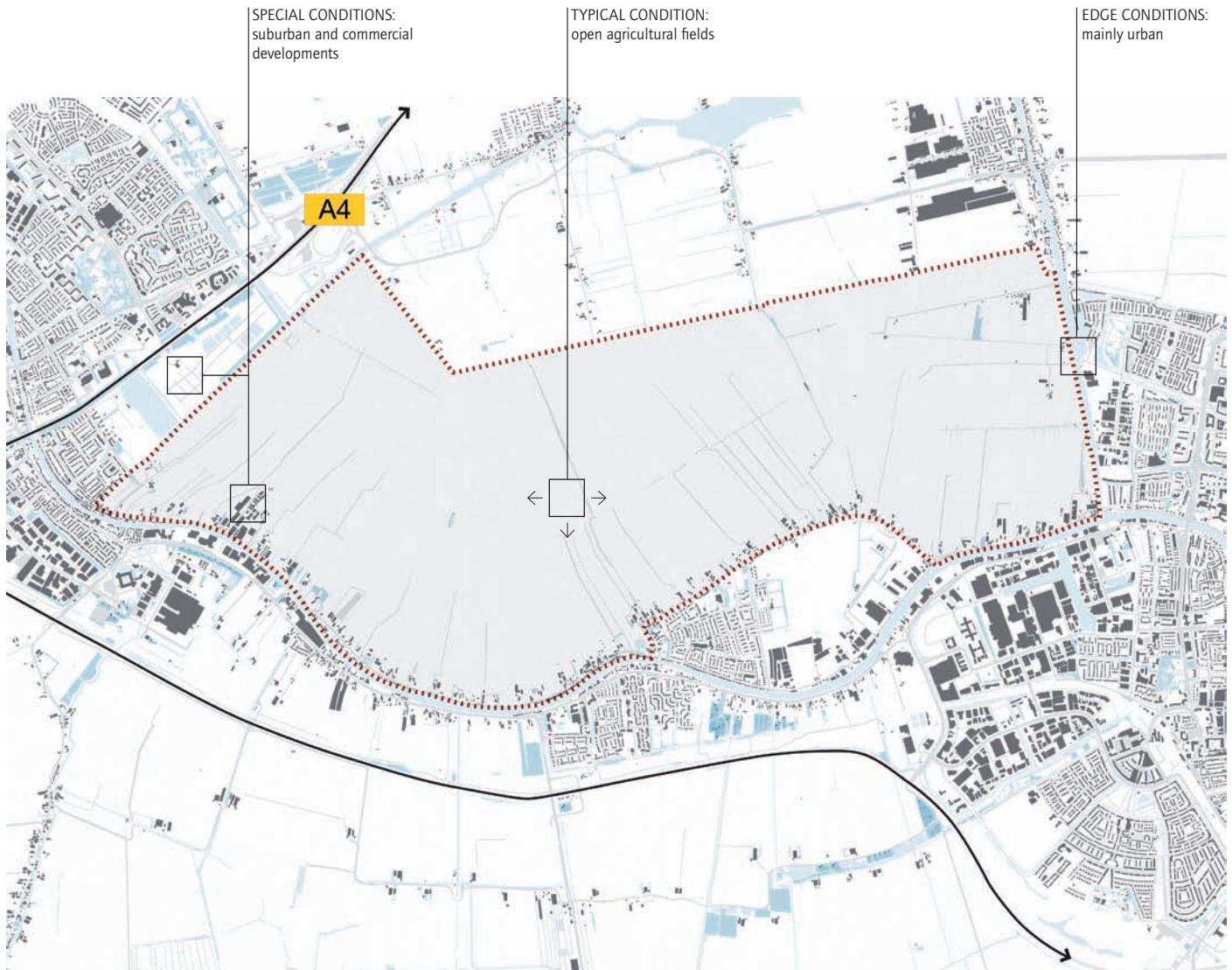
The area to the north of the river (1) is an extensive and quite industrialized pasture and agricultural land, characterized by a light clay soil. The area along the river (2) is instead the typical old ribbon development that today is changing into a retail and commercial strip. The areas in the south of the Old Rijn (3) are characterized by the typical peat soil pattern, with wide ditches and very little urbanization. The last patch (4), in the south east of Leiden is a beautiful peat polder characterized by a fine ribbon development in the middle.

Each area has its own characteristics and specificity, each one is under a certain stressing process that is creating different peculiar reaction. The patchwork metropolis seems to me a good methodology to address specific issues, but in order to don't loose the overall image and the repeatability of the approach I will apply in each of the four areas one of the tools introduced in the previous paragraph.

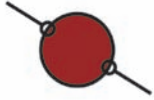




In the previous page: The application of the 4 tools; The ecological structure; The mobility structure.
 In this page: Representation of the design areas; Carlo Pisano



PATCH 1 - APPLICATION OF THE TOOL "CONNECTION AND INTEGRATION"



TOOL #01 CONNECTION AND INTEGRATION

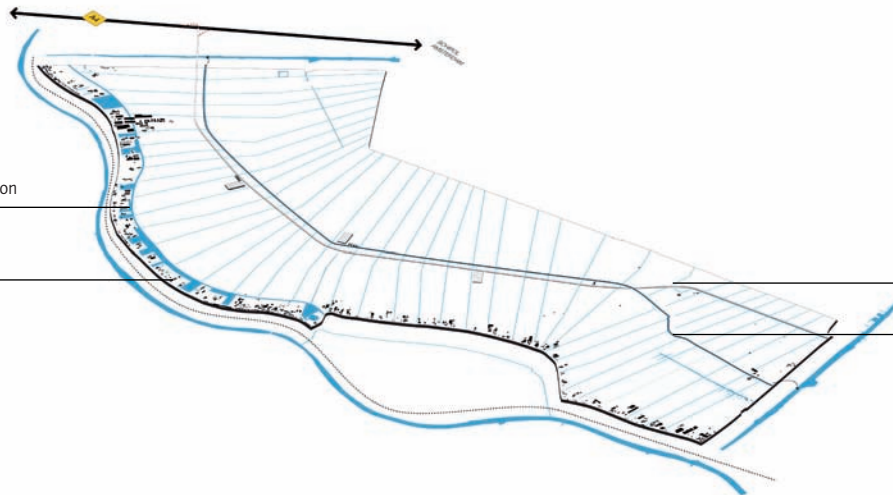
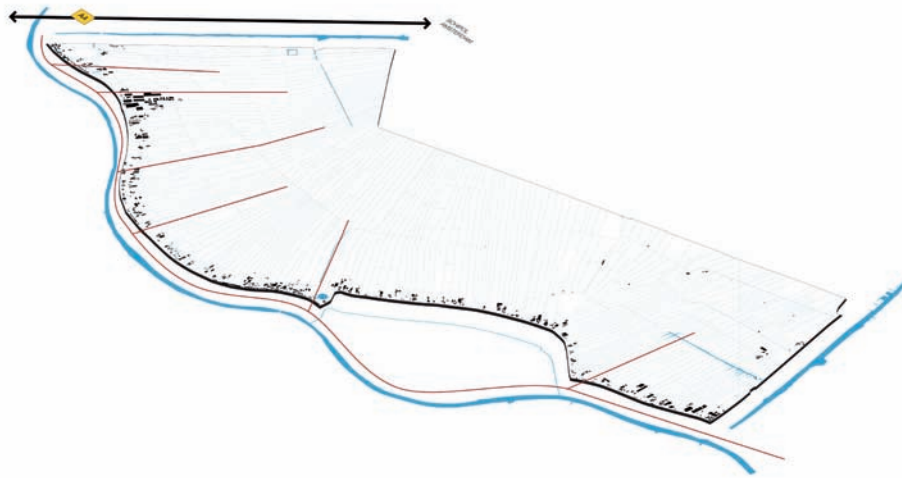
This patch is the typical 11th century polder, reclaimed by singular farmers from the Old Rhine river towards the north. They set their estate along the river that later on became the peculiar dike development that characterizes many territories of the Green Heart. The main quality of this area is its openness and wideness. This can be recognized as a clear special feature because today very few open areas of the western Randstad present similar extension.

The pasture and the agriculture is facing big problems due to the European Union policies. The farmers, under these protection policies, are restricted in their commercial freedom to such an extent that they are practically told what they can grow and how much of their land they have to leave fallow. In Netherlands this is a fundamental aspect. In fact agriculture has always been a major determining factor in the appearance of the Dutch countryside and its natural diversity. In the course of food production the farmers deliver a whole range of performance that society values but which is not rewarded on the market for agricultural products. Phenomena like sub-urbanization, leisure parks, business districts developments are taking advantage of this agricultural weakness.

For this area, in particular, we can say that there are four possible future scenarios: DO NOTHING, probably the polder will be piece by piece beaten by the sub-urbanization and retail enterprises that are already appearing in the western part. BUY AND FREEZE THE LAND, I think that this process of slow down, that I have suggested for other areas, cannot work in this agricultural field for two main reasons. The area is too vast and doesn't present clear precious characteristics that can justify such expensive operation. Moreover that agriculture has to be maintained productive in order to avoid, in the future, the complete food dependence from other countries.

SPECIALIZE AGRICULTURE, In order to survive, the agriculture may be specialized into quality production. This is a phenomenon that is happening for example in the Boskoop area (to the south east of the selected area). This solution is not applicable in the considered polder for two reasons. The type of soil is not suitable for elite production and the "Boskoop-ization" of this area will produce a dense inhabited and built environment that will erode the remarkable openness.

ACCELERATE AGRICULTURE, The contemporary agriculture is today facing an industrialization process. Up scaling the fields size, fast and better connections to the international routes, a more rational water system are the characteristics of



water storage and openness preservation

new developments

connection with the A4

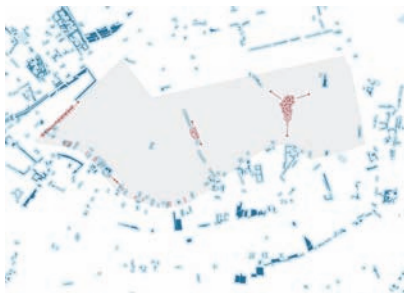
intermediate water system



Connection of the patch with the A4 highway



New intermediate water system



Ecological stepping stones



New buildings and openness preservation

an agriculture that is able to survive in the globalized world.

I have chosen the last scenario, the only able to protect the openness and to strengthen the production. This will make the agriculture and pasture enterprises able to face the sub-urbanization interests.

In order to reach this desirable result I will apply the "CONNECTION AND INTEGRATION" tool through a series of basic actions.

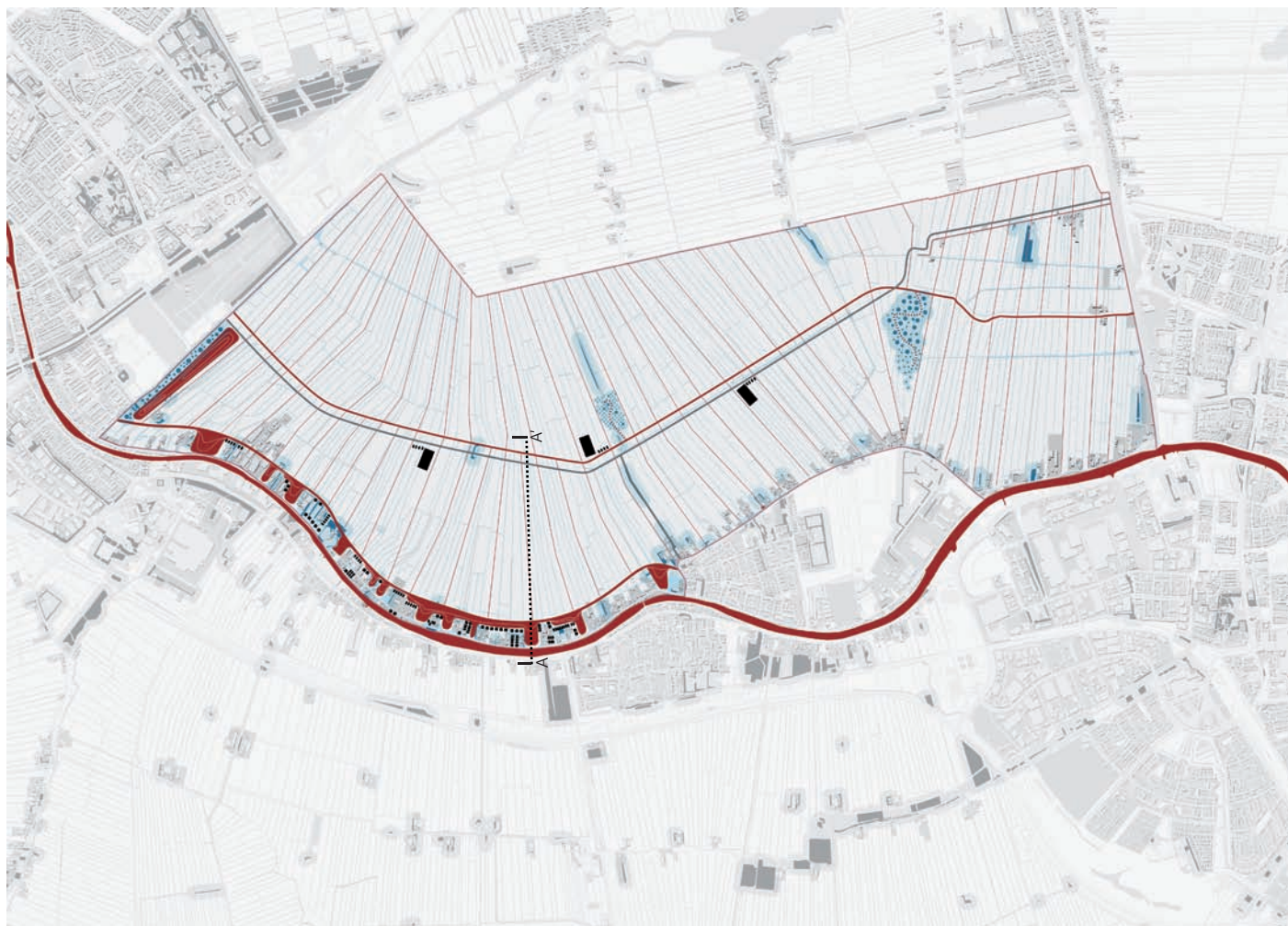
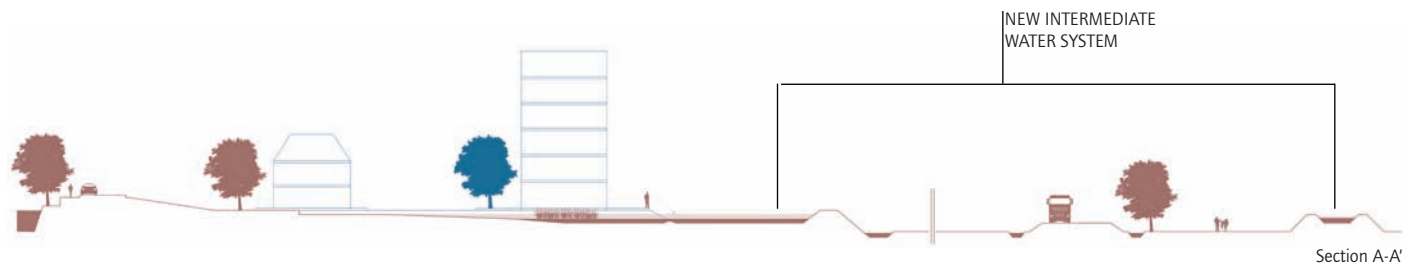
Connection of the patch with the A4 highway. By increase the connectivity of the polder with a more international context, the farmers will be able to deliver their products faster and more efficiently.

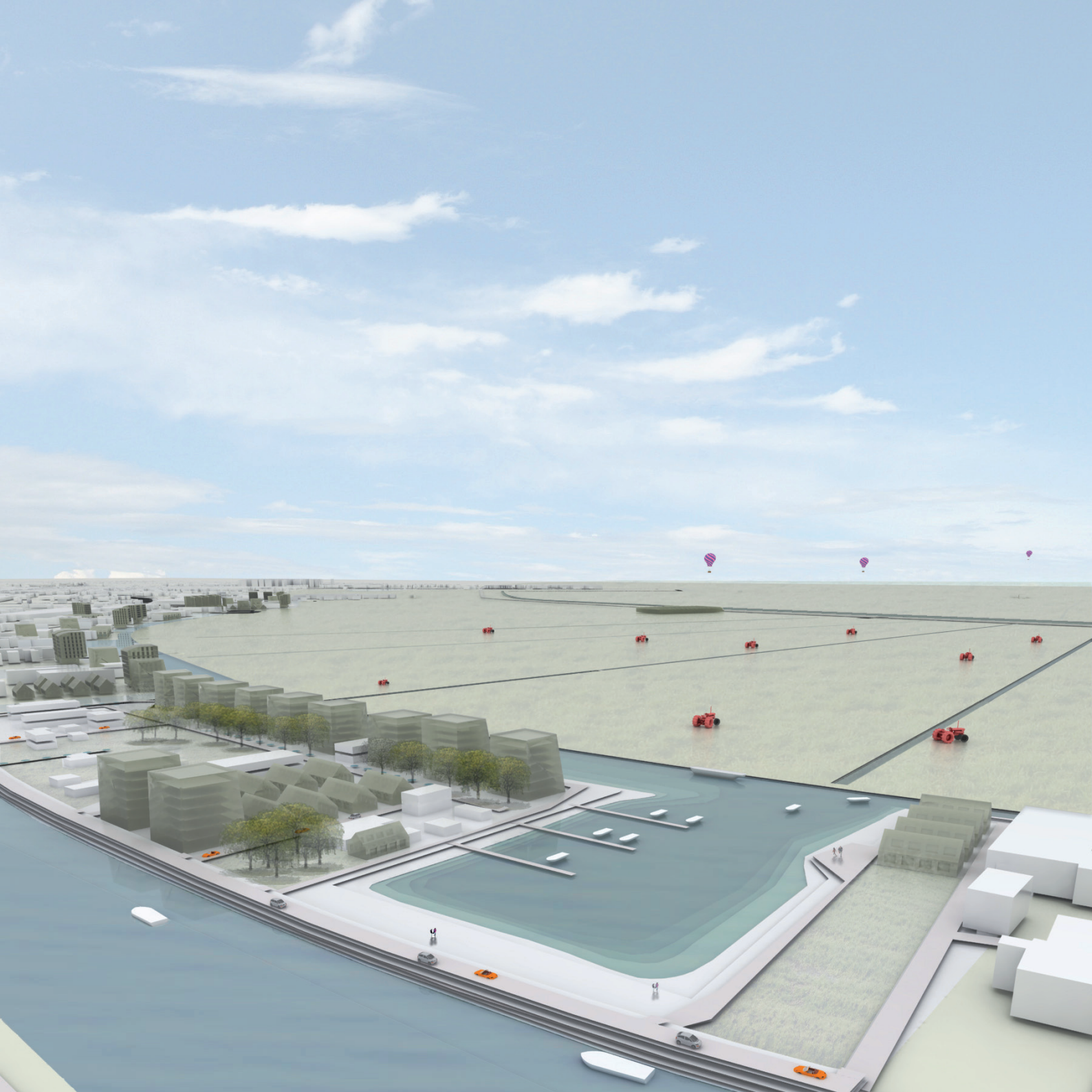
A second result will be the lightening of the street along the Old Rhine river, that today is quite busy due to an heavy track and tractors traffic.

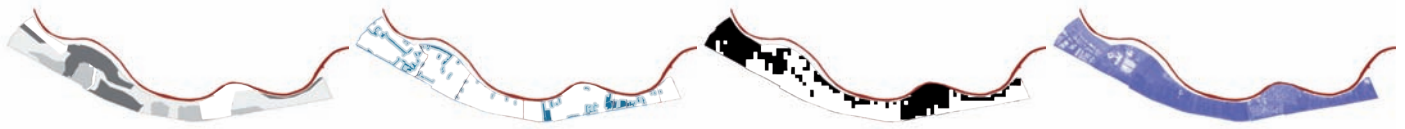
New intermediate water system. By proposing a new and more efficient water system it will be possible to made the water supply more efficient and less expensive. Today, in fact, the water is discharged directly from the ditches to the boezem system. The introduction of an intermediate level can make the operation less expensive for two main reasons: first because the height that has to be covered by the pumps is less and second because by adding to the system a series of water purification and storages it will be possible to create a sort of recycling network. In addition, if strategically placed, the water purification systems and storages can improve the ecological network that is crossing the polder, creating a sort of stepping stones for birds and other animals.

Scaling up of the agricultural fields. In order to compete with an international market the farmer should change the production scale. This will mean that several plots will be joint into bigger ones.

Improvement and differentiation of the housing and tertiary offer: Respecting the existing openness from the Old Rhine to the inner polder it will also be possible to densify the southern border of the patch with new mix-uses buildings. The water storages can play the double role of protecting the open views from the Rhine to the north and create the potentiality for a new interesting environment





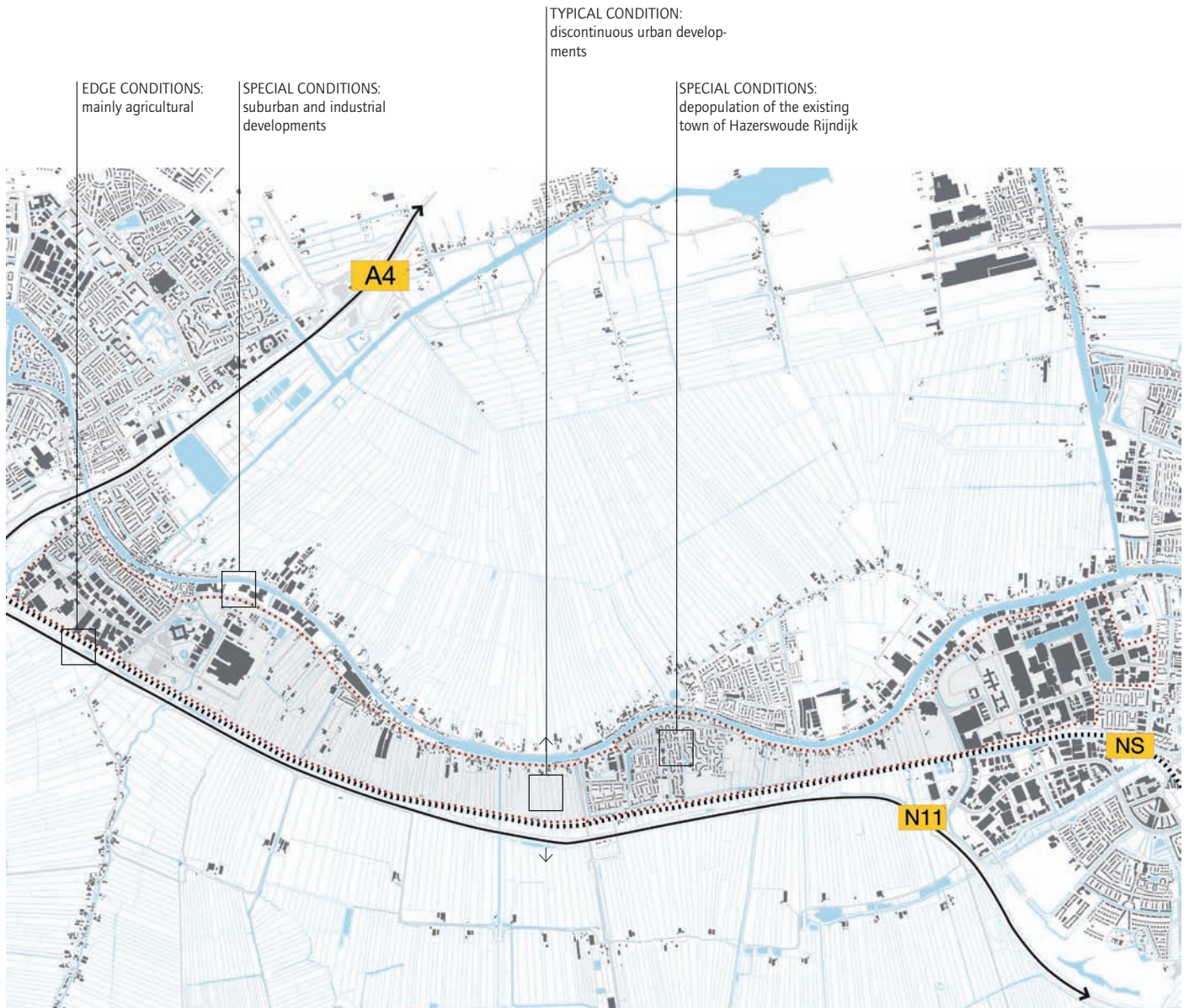


SOIL TYPE: MIX OF CLAY AND ARTIFICIAL

VEGETATION DISTRIBUTION

BUILT UP AREA

SOIL HEIGHT AND OPENESS





PATCH 2 - APPLICATION OF THE TOOL "CONNECTION AND DIFFERENTIATION"

This patch can be described as an historical ribbon development along the Old Rijn river. It is composed by historical villas, old churches, warehouses and the town of Hazerswoude Rijndijk. More recently this strip has been subjected to the intensification of the industrial and retail development.

The strip today appear as a discontinuous and diversified built environment where dense industrial, retail and housing areas are alternate with view corridors towards the south.

In 1935 the old train station of Hazerswoude Rijndijk was demolished and since that time the areas is accessible just by the N11 and a weak bus system that connect Leiden and Alphen aan den Rijn.

From 2003 is under debate the possible transformation of the train line from Gouda to Leiden into a tram line. Finally this work should be completed for the 2012. This improvement of the accessibility will bring this patch inside a national and international mobility network.

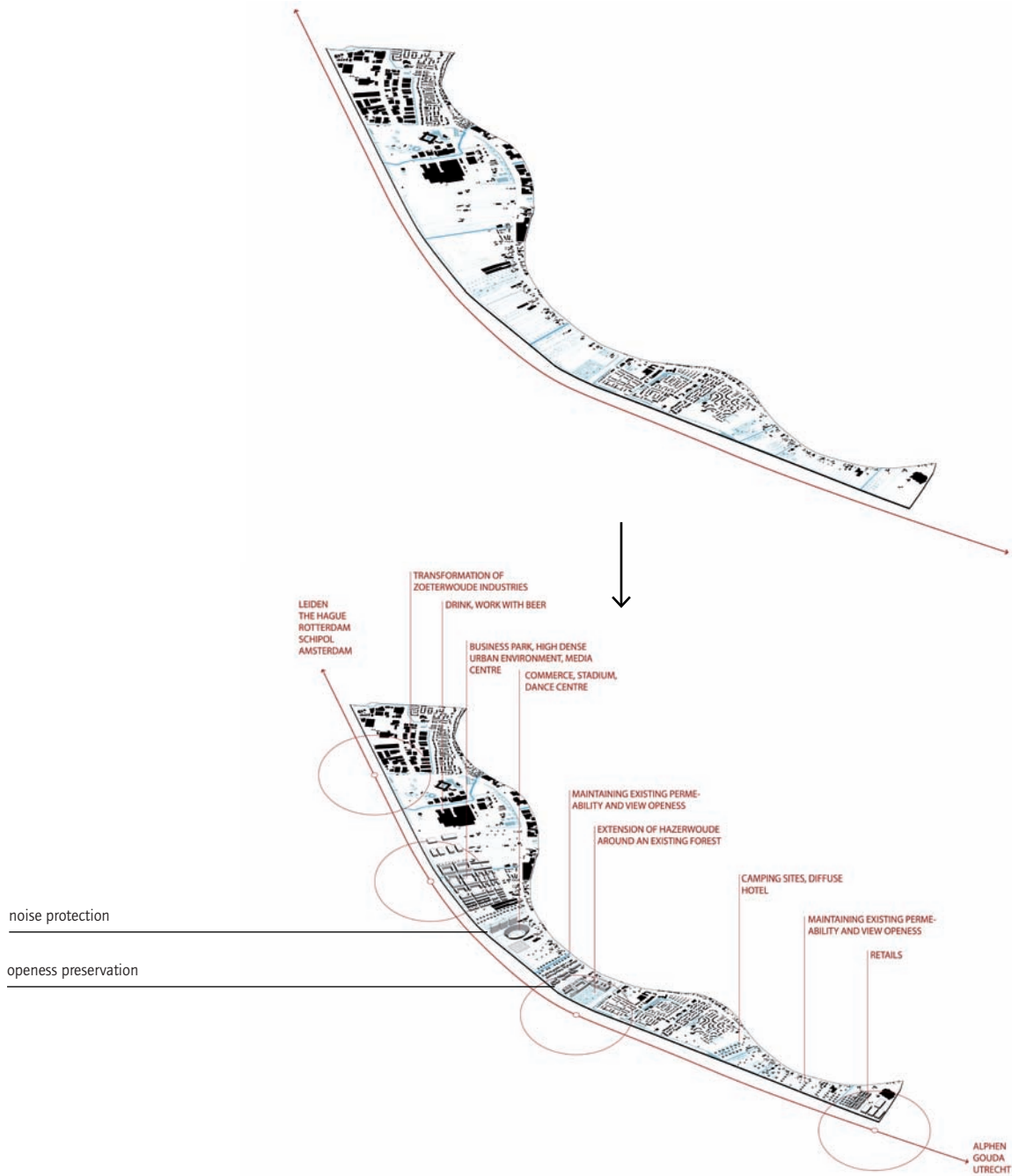
In order to control this acceleration process I will apply the "CONNECTION AND DIFFERENTIATION" tool through a series of basic actions:

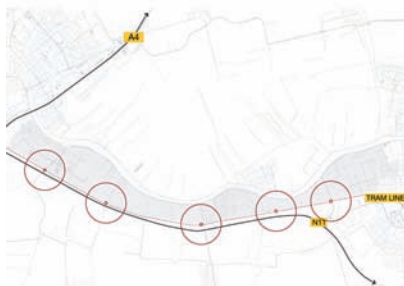
New planned tram stops: The new planned tram stops will be place close to the existing main activities and urban developments. This process not only will fuel the town of Hazerswoude Rijndijk and the industrial activities with a new potential accessibility, but also can create the presuppose for the change of the entire strip.

Noise protection: A new thick strip of wood land will be place in the southern border of the patch. This strip of trees will connect the existing ecological areas and will represent the essential presupposition for the strip development.

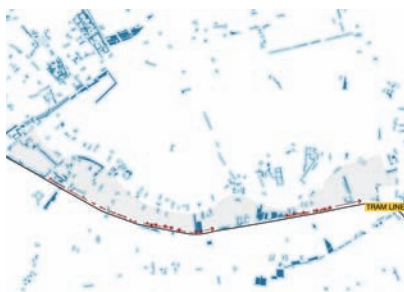
Openness preservation: An essential qualities of the todays ribbon development is its discontinuity. The open view corridors, especially along the Rijn tributary, are creating a sort of rhythm in between the built environments. This qualities should preserve by enlarging the most import water lines that are connecting the Rijn with the southern territories.

Diversification of the functions: The improvement of the regional and national accessibility and the special condition of the strip can create the potential for





New planned tram stops



Noise protection



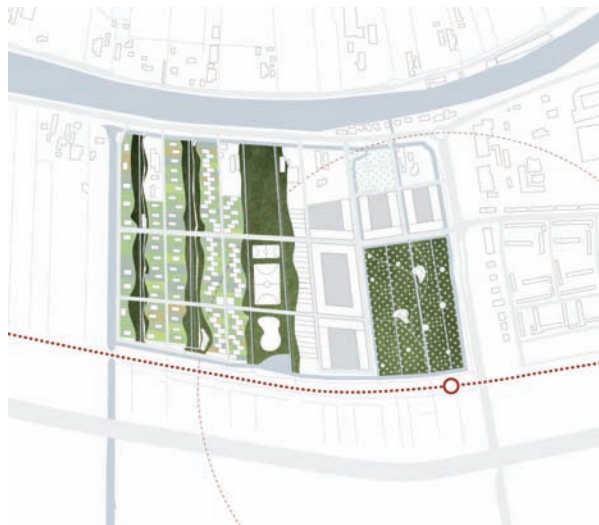
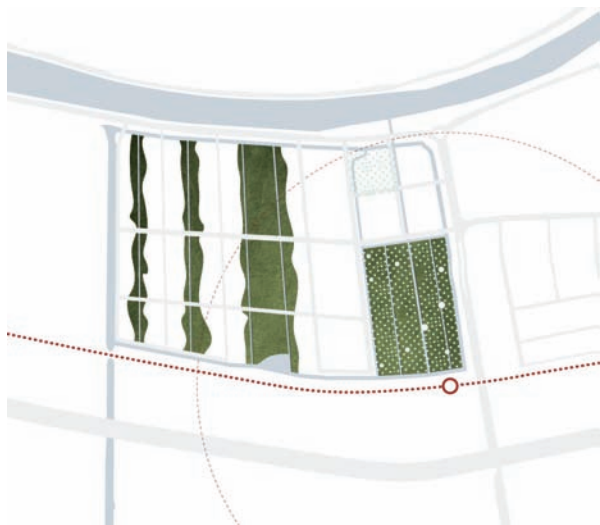
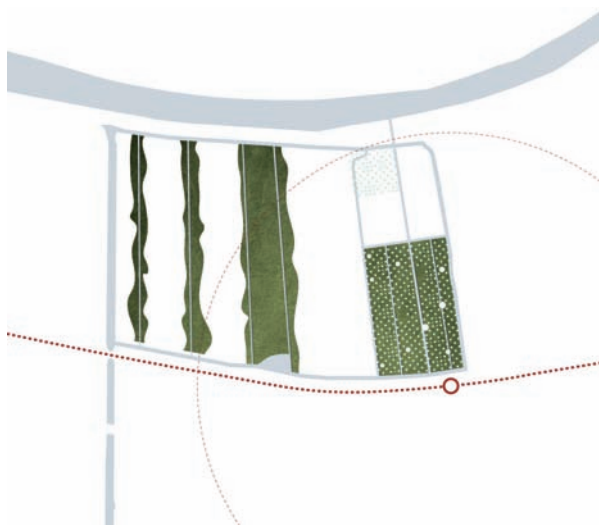
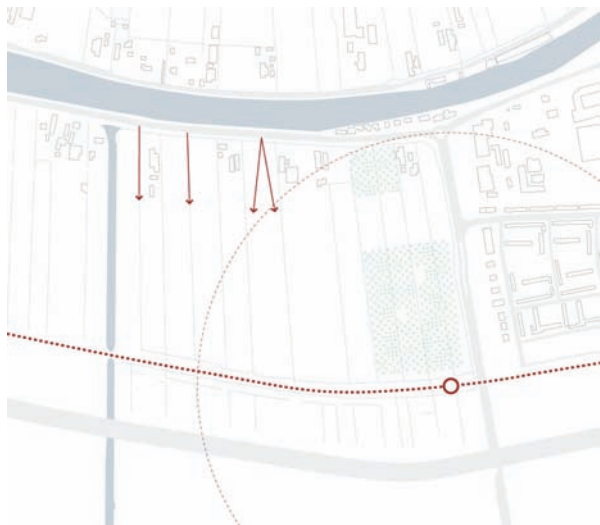
Openness preservation

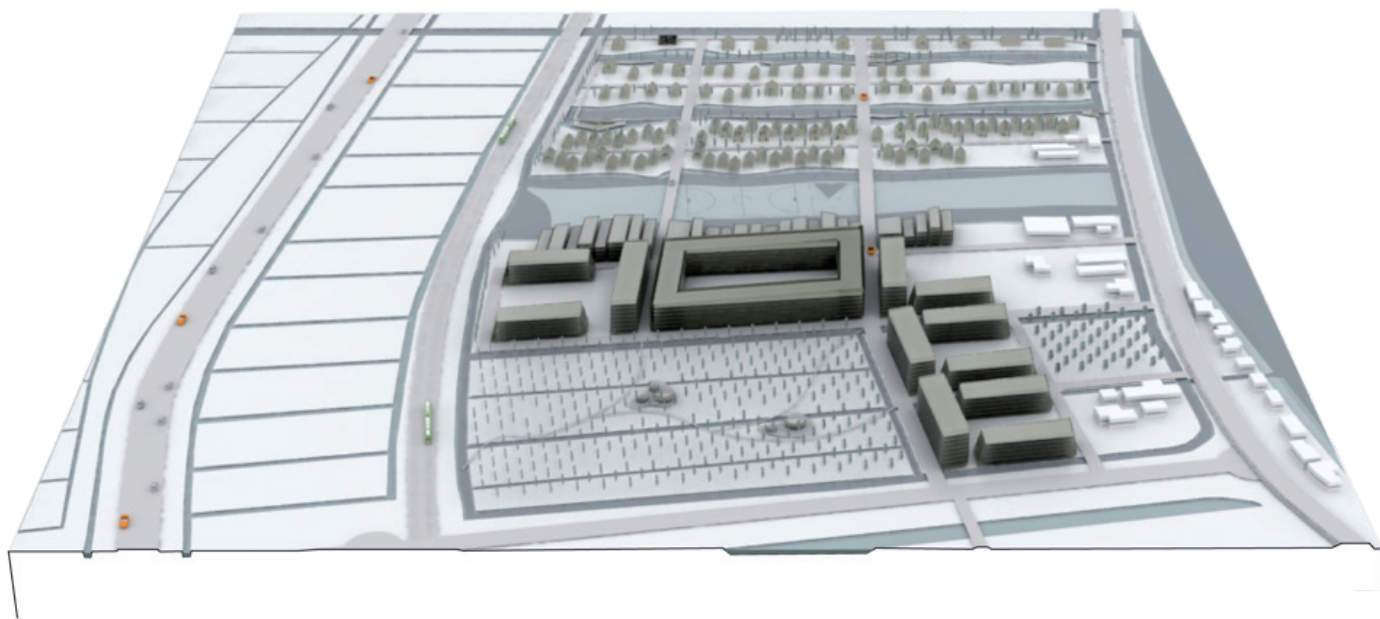


Diversification of the functions

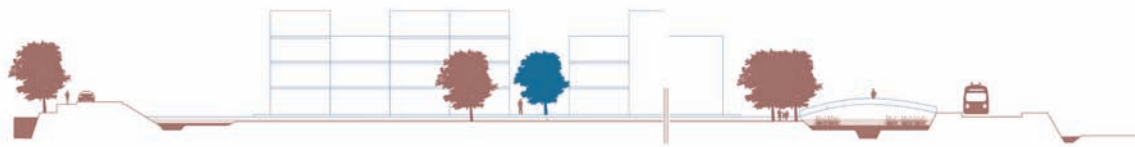
new, national scale, functions. Stadiums, theatres, mosques, minarets can, in fact, take advantage from the accessibility of the area and from the openness of the surrounding landscape.



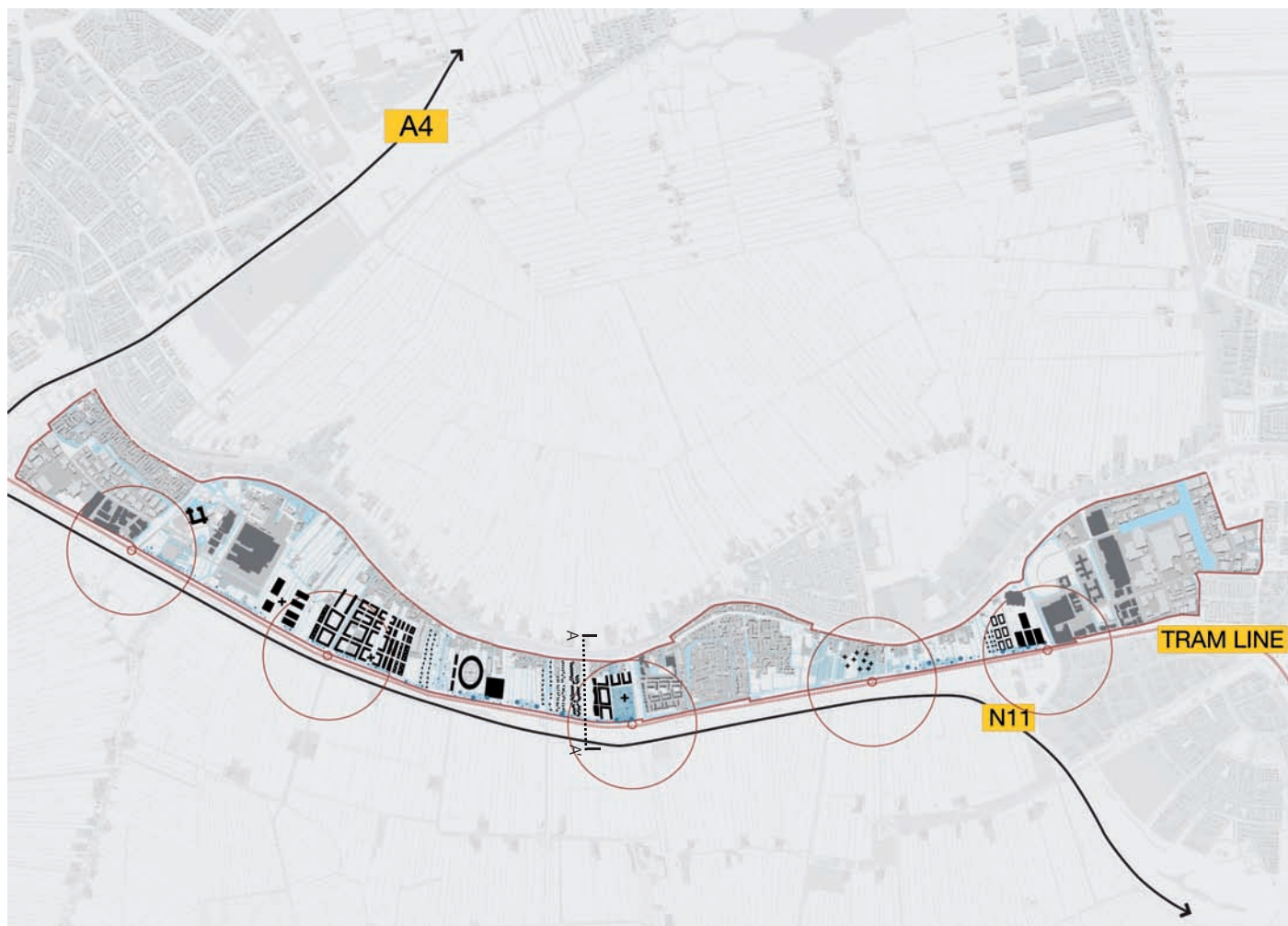


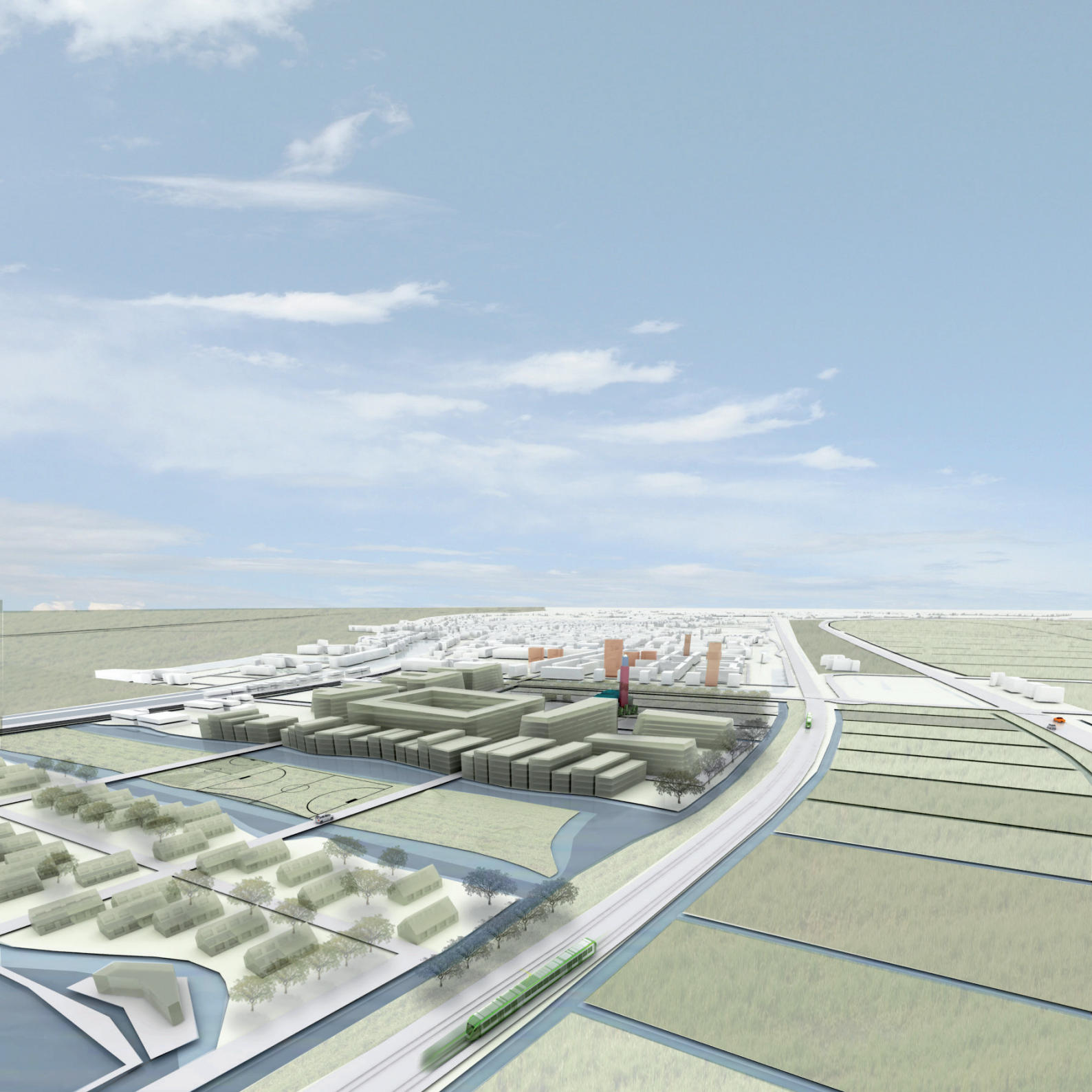


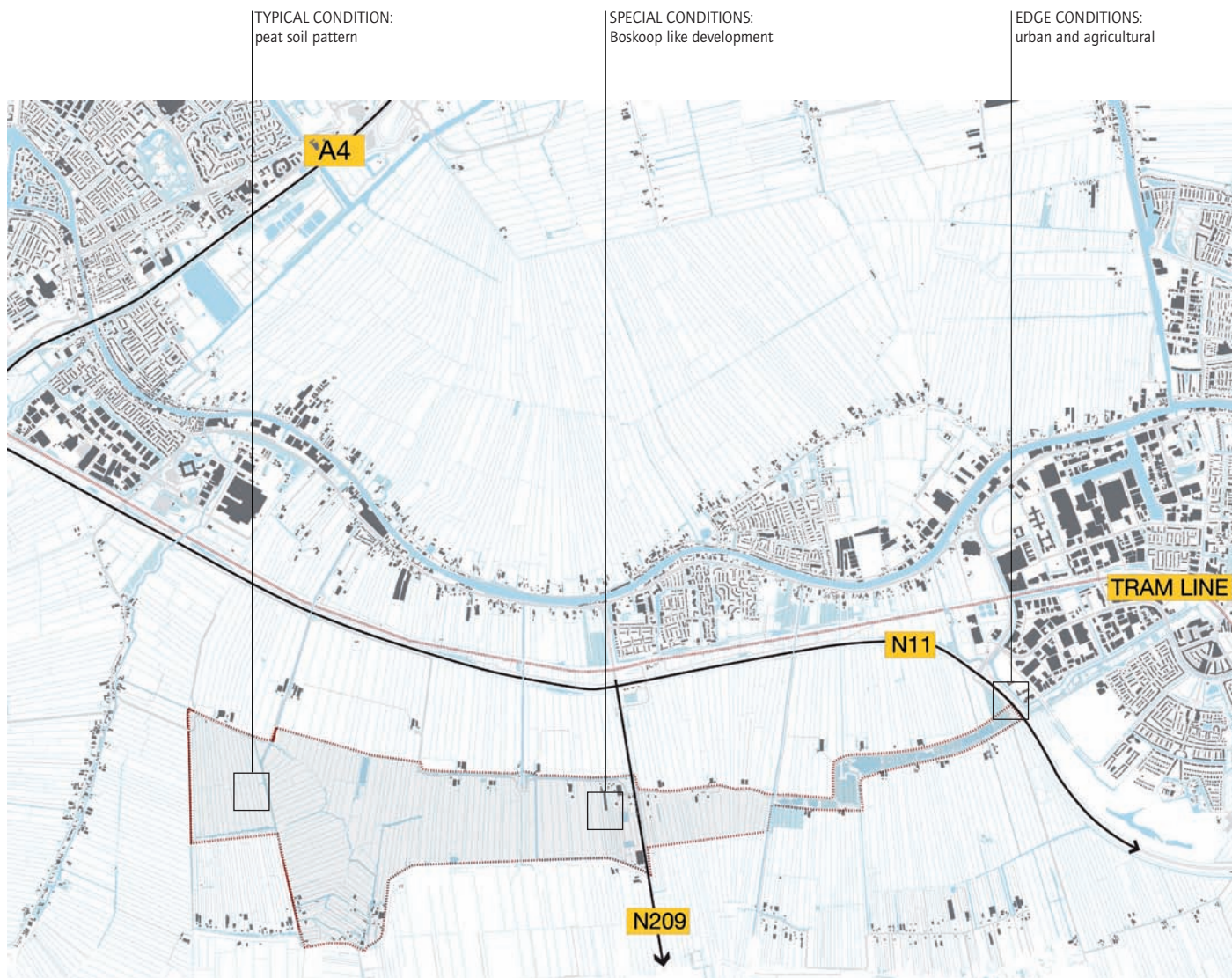
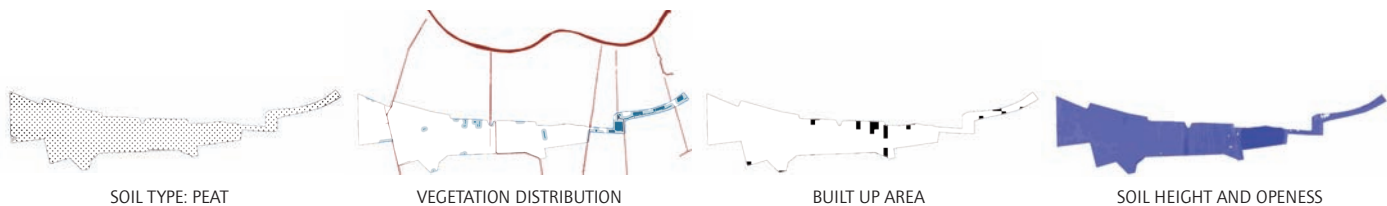
In the previous page: Testing area The open views; Preservation of the openness; Streets and water structure; Final plan;
In this page: 3D model of the testing area;
Carlo Pisano



Section A-A'









TOOL #03 DISCONNECTION AND INTEGRATION

This is a mainly unproductive agricultural patch, characterized by the typical peat soil pattern, with wide ditches and very little urbanization.

The peat soil is a unique characteristic of this part of the territory. In other parts of the Netherlands, in fact, this soil has been extracted and used as a fuel. The preservation and even the increase of the peat areas is very important for the water balance of the Netherlands. The peat works as a sponge that absorb the water during the flooding event and relieves it very slowly.

This area in particular is very close to the Boskoop, a very characteristic agricultural and horticultural land with small field size and a very dense built environment. We can already see that some part of this patch have been transformed in this way.

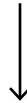
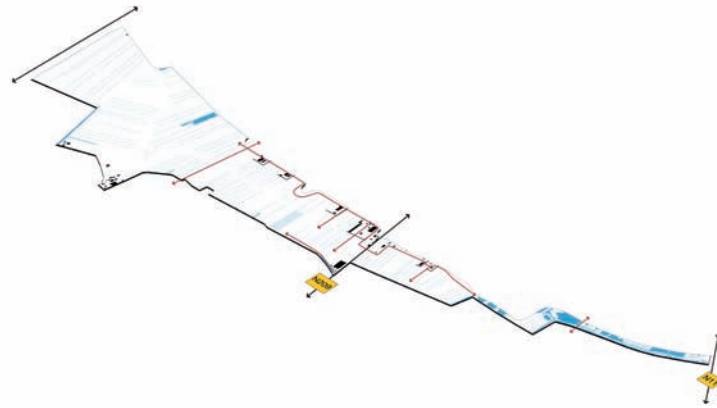
Lastly this patch is cut in two pieces by the N209 that will even see the improvement of its car traffic when the N11 will be transformed into an highway.

In order to preserve the peat soil, even implementing its production, and in order to create an ecological corridor that, running parallel to the Old Rijn, will connect Leiden and Alphen, I will apply the "DISCONNECTION AND INTEGRATION" tool through a series of basic actions.

Disconnection from the N209: In order to slow down the transformation of this peat patch into a small scale agriculture (Boskoop like) I will disconnect the direct access to the N209. The streets that today runs along the northern border of the patch will be downgraded and better connected with the Old Rijn through walking and bicycle paths along its tributaries.

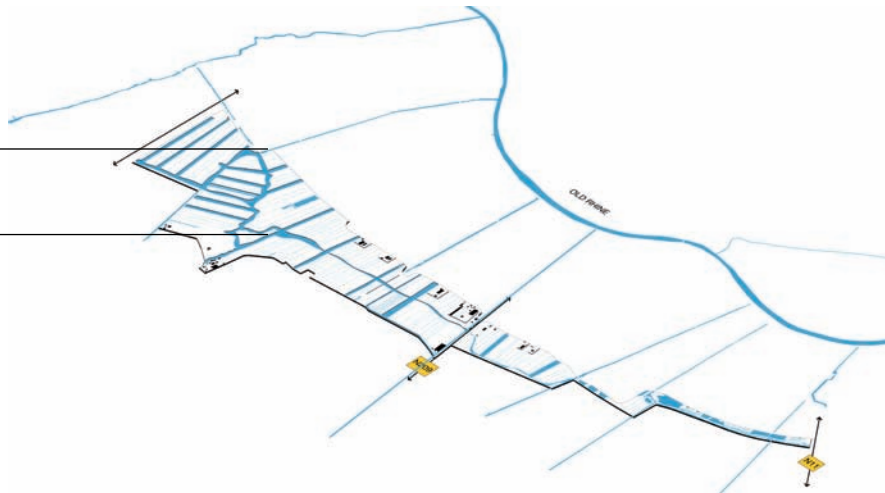
Improvement of water links: This area will be directly related to the water dynamics of the Old Rijn tributaries. Some ditches will be broaden and their borders will be made less steep in order to enhance the water fluctuation. This daily process, strongly linked with the tide and the slow peace of the rivers, will slowly produce new peat land and will create a bio-diverse environment that will attract different species of animals.

New small scale connections: A series of walking and bicycle paths (partially reusing the existing agricultural streets) will connect this area with the surrounding patches. The north-south connections will occur along the Old Rijn tributaries, that will become the backbone between the more frenetic urban patch in the



Improvement of water links

Enlargement of the ditches





Disconnection from N209



Improvement of water links



New small scale connections



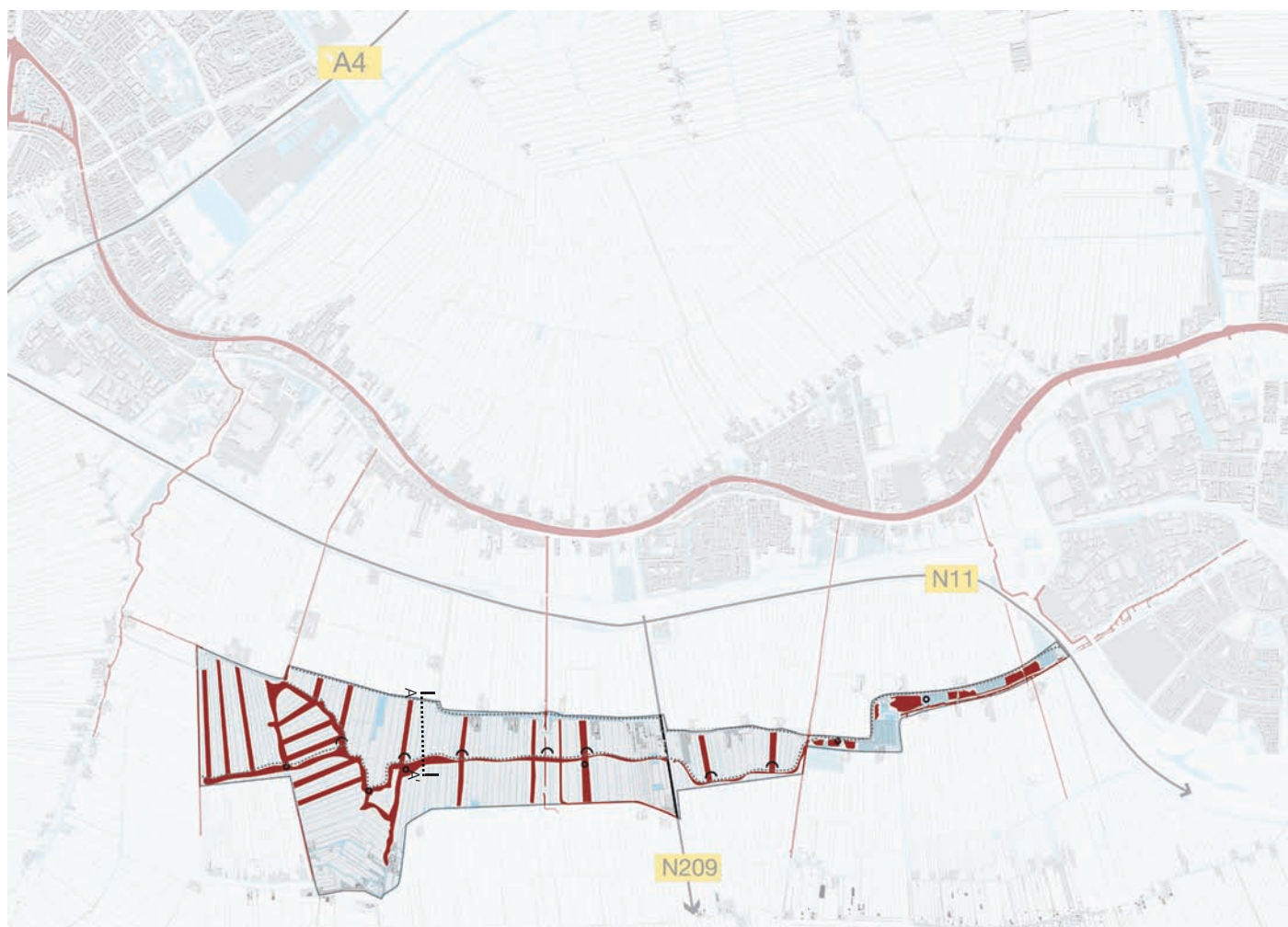
Equipments

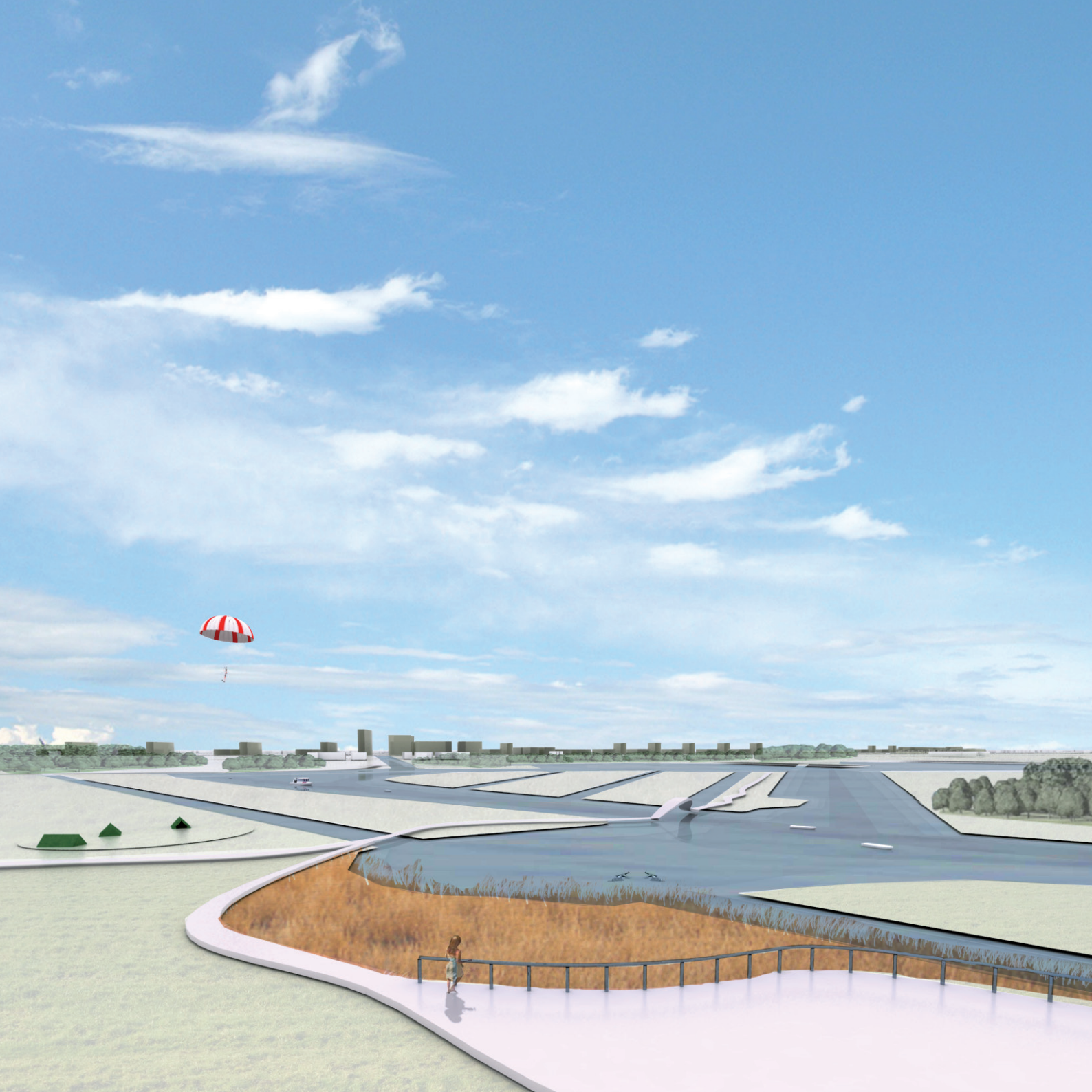
north and the more relax ecological patch in the south.

Equipments: The patch will be equipped by a series of panoramic bridges and bird watching sites. Very important will be the connection east-west that will cross the N209.



Section A-A'







SOIL TYPE: PEAT



VEGETATION DISTRIBUTION



BUILT UP AREA

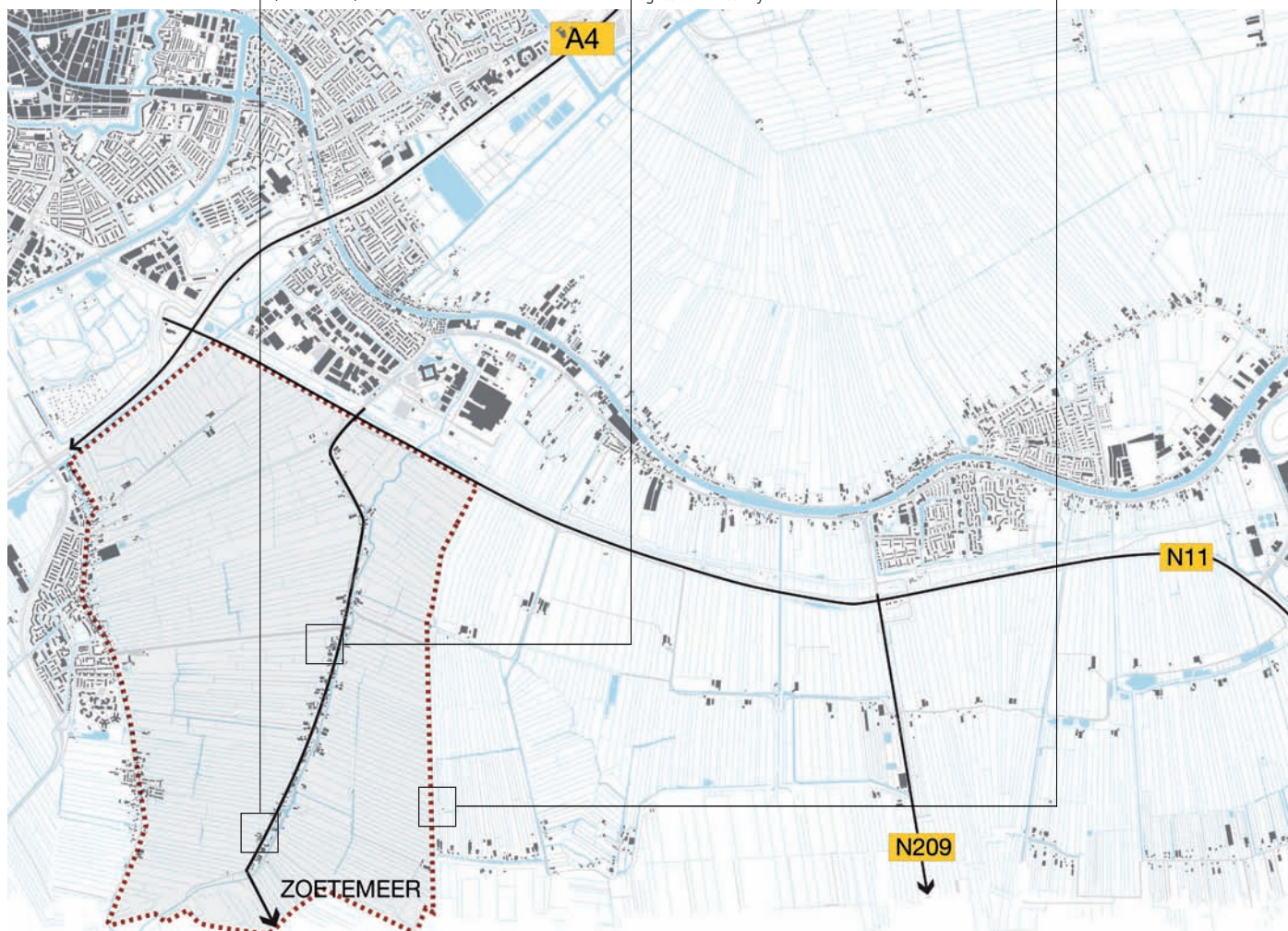


SOIL HEIGHT AND OPENESS

TYPICAL CONDITION:
ribbon development into an
open landscape

SPECIAL CONDITIONS:
Intensification of the
agricultural activity

EDGE CONDITIONS:
urban and agricultural





PATCH 4 - APPLICATION OF THE TOOL DISCONNECTION AND DIFFERENTIATION

This area is characterized by the typical peat soil pattern and by a ribbon development in the middle. It presents a very beautiful and unique environment with large rural estates that are facing an open landscape. The ribbon development is crossed by a very busy street that represents the fastest connection between the northern A4 and the city of Zoutemeer.

The possibility to transform the N11 into an highway will implicate the selection of some preferential exits that will be maintained and even strengthened. Others will instead be cut out producing a series of changes in the territory.

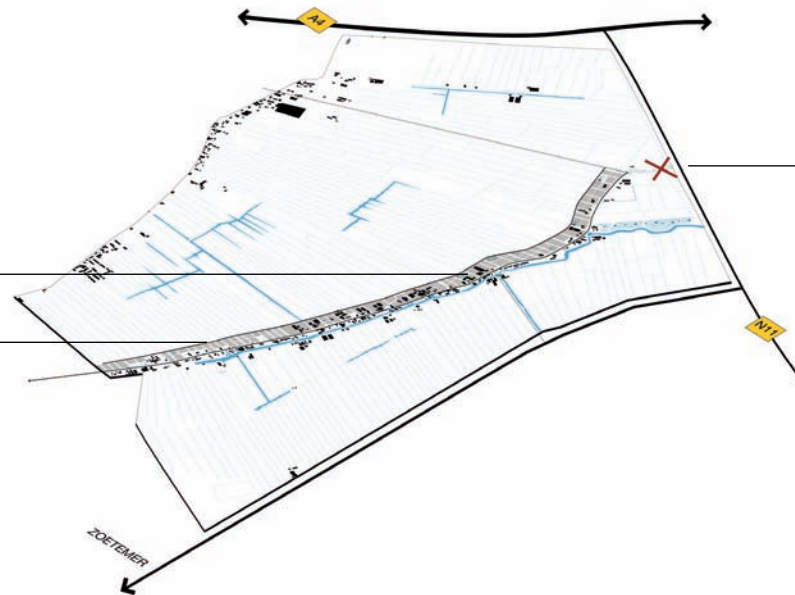
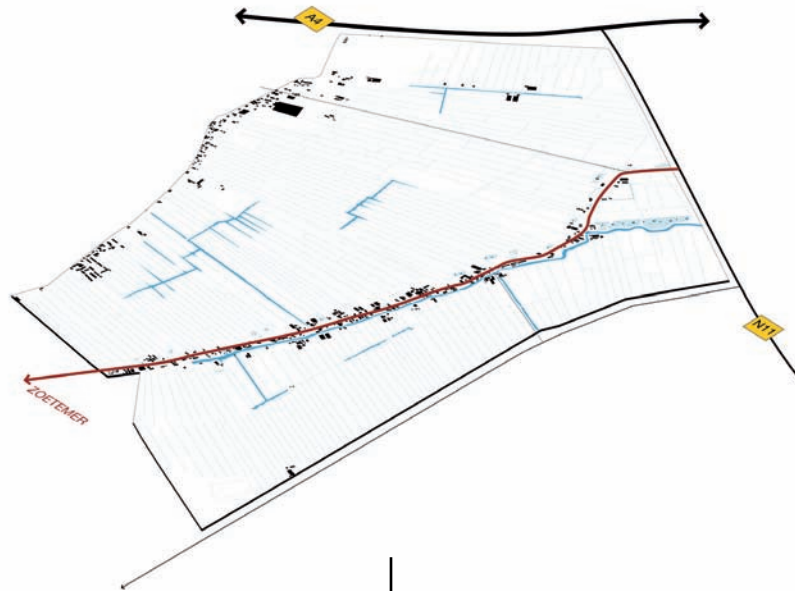
In order to guide the transformation of this patch I will apply the "DISCONNECTION AND DIFFERENTIATION STRATEGY" tool through the application of some basic actions.

Disconnection from the N11: In order to enhance the quality of this patch I will disconnect it from the fast mobility network that here is represented by the N11. This will of course imply the necessity to strengthen the existing transversal connections with the village of Zoeterwoude Dorp in the west, and with the urban strip in the north. Some bicycle path will follow the existing dirt roads reinforcing the connections between the patch and its beautiful surrounding landscape.

Openness preservation: The main quality of this patch is represented by the unique landscape openness that can be appreciated passing through the transversal roads. This characteristic should be preserved by a series of policies that will avoid any view obstacle.

Doubling the ribbon: Once we stated that the main characteristic of this patch is the ribbon development in an open landscape we can say that this concept can be even enhanced by introducing a parallel street along the main existing one. This action should be done gradually and should develop according to the market request. However, even if the second ribbon will be completely built the open landscape will be however preserved.

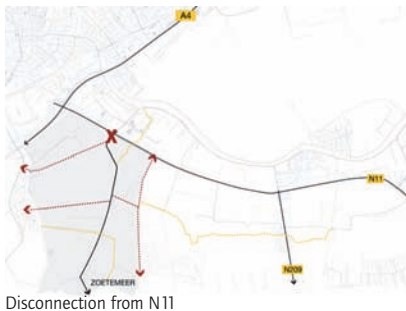
Diversification in scale and functions: The introduction of the new street will produce a differentiation in the plot scale, that today are quite large and homogeneous. This process will produce a diversification in scale and quality of the housing



Diversification in scale and functions

Doubling the ribbon

Disconnection from the N11



Disconnection from N11



Openness preservation

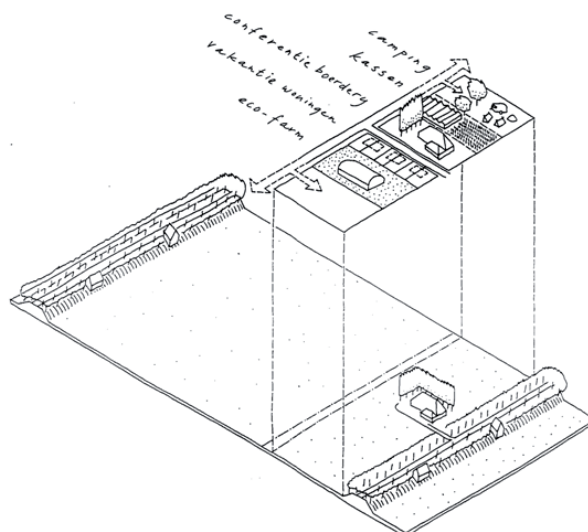


Doubling the ribbon

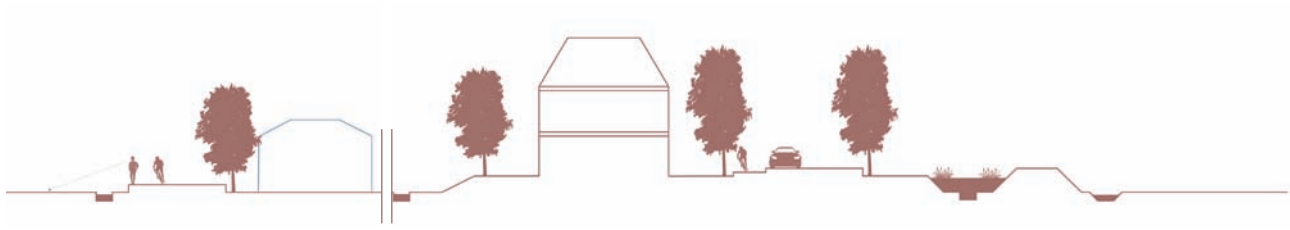


Diversification in scale and functions

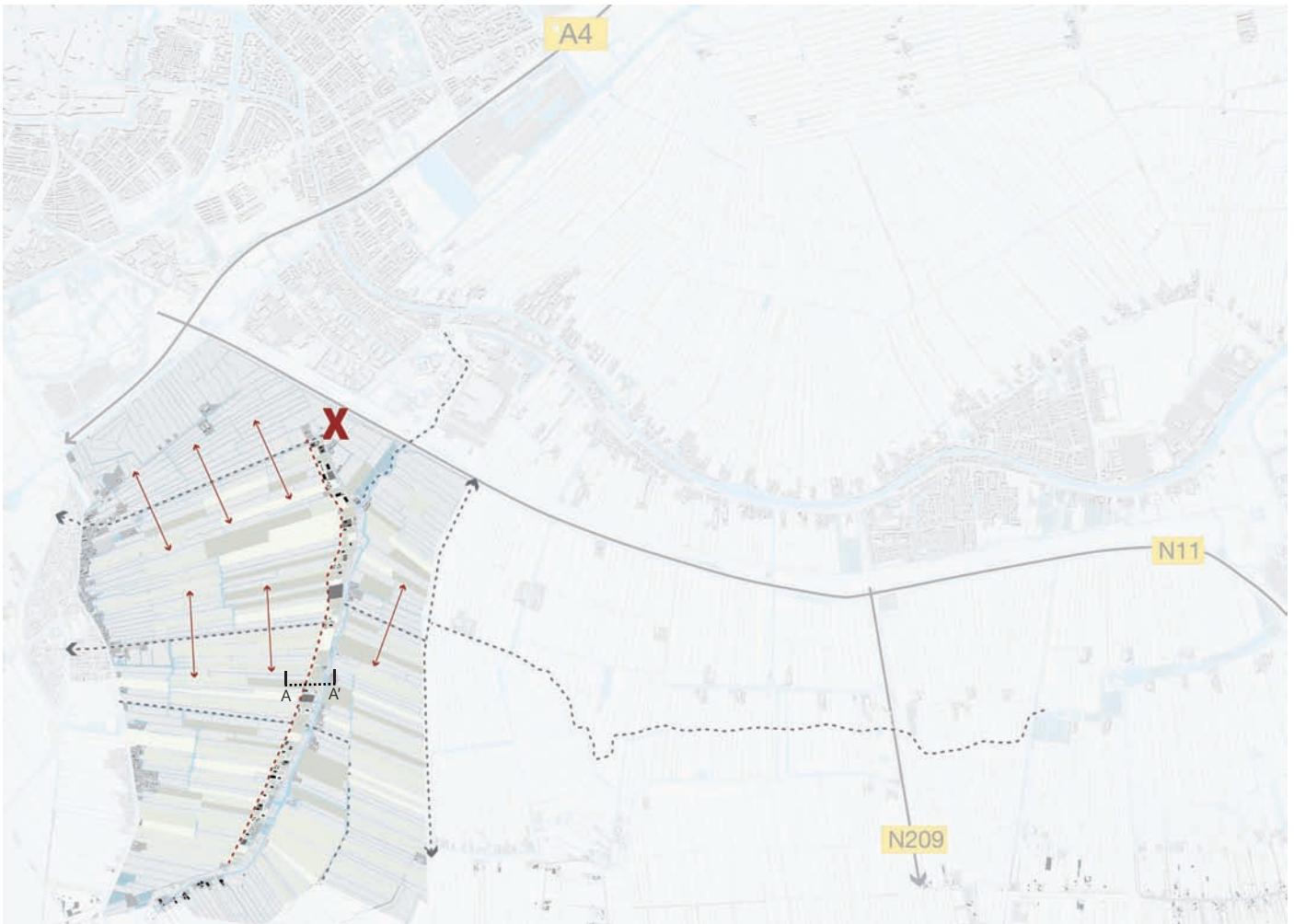
market. Moreover this can also produce a diversification in terms of functions, facilities and amenities that this territory will offer to its inhabitants and to the travellers. Camping sites, sport facilities and all sort of temporary events will take advantage of the slow and relax environments and of the openness towards one of the best landscape of the west Holland.



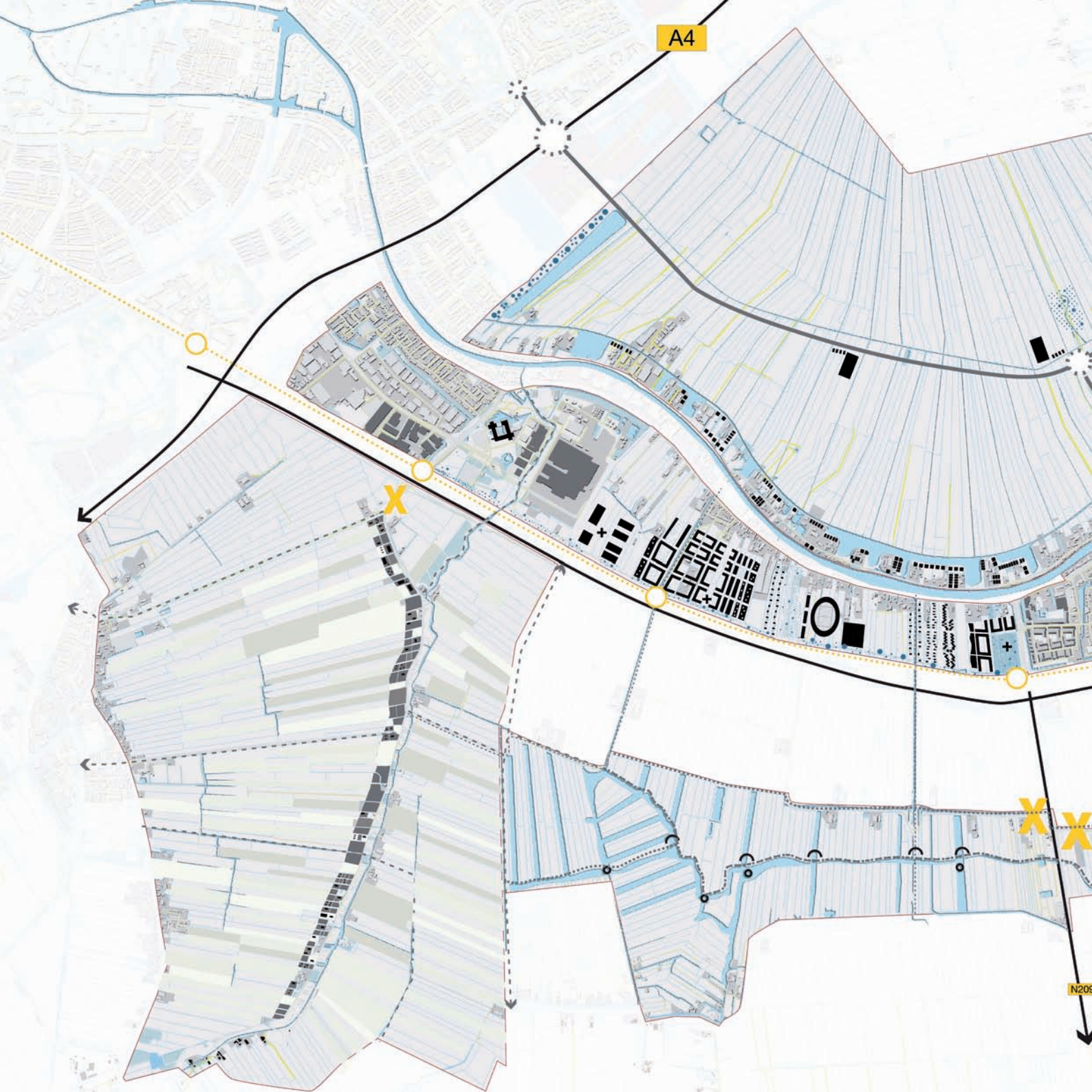
Fritz Palmboom, doubling the ribbon strategy



Section A-A'





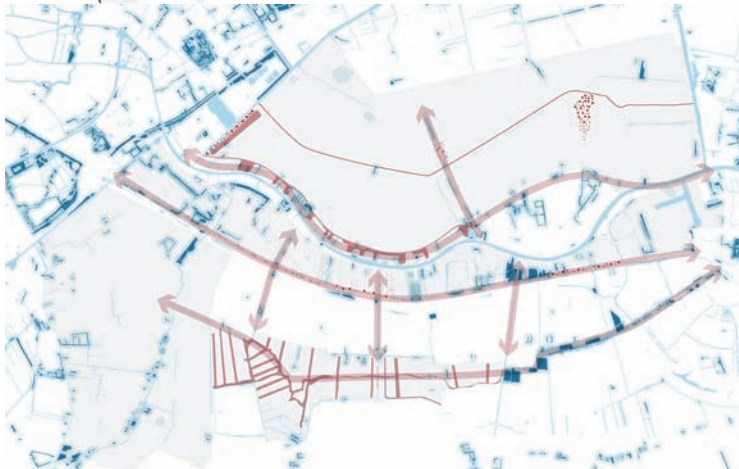




The final masterplan of the testing area:



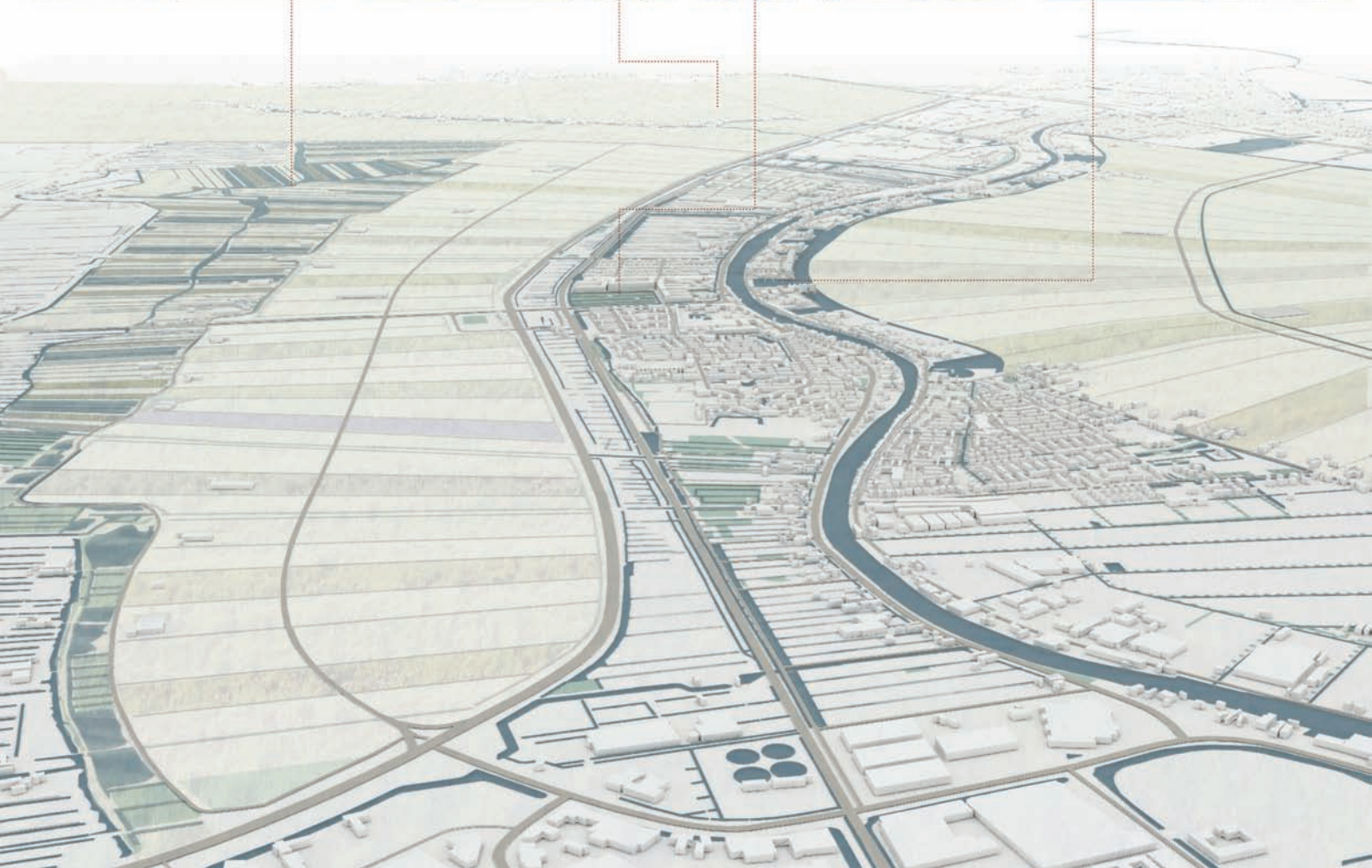
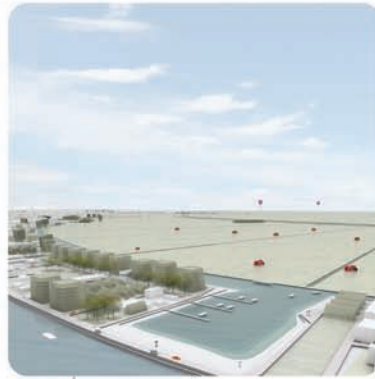
Mobility changes



Enhancement of ecological corridors

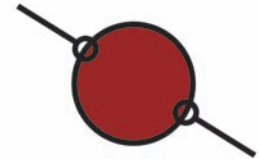


Preservation of the openness





TODAY



CONNECT AND INTEGRATE



POSSIBLE SOLUTION



DISCONNECT AND DIFFERENTIATE

ANOTHER APPLICATION OF THE METHOD

Through this thesis I have already recalled several times the VINEX neighbourhood. In this paragraph I will explain which is my point of view about the idea that guided their evolution and what could be a possible general solution for these areas.

Using the tools terminology we can state that the Vinex patches were created applying the "ACCELERATION AND INTEGRATION" tool. They are in fact mono functional residential areas directly connected with the fast network of the highways.

In my opinion a possible solution for this areas could be instead the application of the "DISCONNECTION AND DIFFERENTIATION" tool. In this way we can force the different neighbouring patches to interact with each others by a lower scale of connections.

The introduction of special functions like cinemas, cultural centres, theatres, retail shops can produce a beneficial effect and improve the relations between the Vinex patches and the rest of the city.

In this page:

On the top the existing accessibility of the VINEX patches.

On the bottom possible strategy of downgrade the accessibility and creating a more connected urban environment.



COLORING THE PATCHWORK METROPOLIS: A TERRITORY THAT DON'T PROCEED AT THE SAME SPEED.

After the tools definition and their explanation through 4+1 projects it is time to come back to a broader scale in order to prove that the strategy is enough flexible to guide the territory also at a bigger level. In the final map I have coloured the patchwork using the tools and the decisions that were explained and tested at the patch level. Some areas have been slowed down in order to be preserved and become a sort of milestones, that can help us to orientate in a continuously changing patchwork metropolis. Important water reservoirs, precious peat soil ares, historical city centres are part of this selection. The rest of the territory, on the other side, will be interested by a whole range of changes that are better defined by using the 4 tools.

New administrative system (utopia)

From a bureaucratic point of view the patchwork divides the territory into homogeneous units that are associate by same problems and potentials. We can state that each patch can be considered as a sort of political unit in which the stakeholders will be linked by sharing the same fate. Regions, provinces, municipalities are today just a fake representation of a past unity. The continuously changing territory need a more flexible and representative system, able to solve specific problems and enhance precise characteristics.

Each patch can be organized in a sort of citizens and stakeholders associations that can refer directly with the main national government. Similar patches can be connected or learn from each others the good practices and the mistakes. In



this way it would be possible to overcome many slowness and interferences that today are created by the hierarchical political system. What Neutelings stated regarding the impossibility to control the territory at the Randstad scale, in my opinion is not correct. It is more the opposite, in fact, the patchwork has the potential to develop a completely new type of administrative system in which the national level can recover its power, becoming a sort of global mediator of the individual and precise interests raised at the patches level.

Contact and contrast between patches

What is then interesting to notice in the “coloured patchwork map” is that it shows a patched territory that run and change at different speed. A patch of protected and precious peat soil can stand side by side with a patch of accelerated agriculture. This kind of strange combinations are exactly what was already happening in the Randstad 22 years ago when Neutelings described his strange car tour from The Hague to Rotterdam. The only element that differ in this map I have tried to describe and controlle. With the use of the “slow down method” and with the use of the 4 tools to control the “accelerated” areas we can take a position in this mess of patches.

Before to state the conclusions I would like to point out, with a series of montage, how the contact of contrast between contiguous patches with different speeds can create very interesting environment. It could be possible that an historical protected city centre will stand side by side with a patch of industrialized and fast agricultural. In the same way a new shaped urban development can face a series of protected fields. These new interesting experiences can produce a completely new way to live and perceive a territory. A territory where not everything run, something can also have a rest.



CONCLUSIONS

As was stated by Jan Neutelings, in a complex area like the Randstad conurbation the model of compact city based on the romantic polarity between a paradisaal Arcadia and a megalomaniac metropolis has long been inadequate for interpreting the reality of the situation.

The town and spatial planning have become defensive, the planners are attempting to defend the old structures with unsuitable means. Anthony Giddens clearly shows that we have reached a period in which society and city have to live without the support of the historical conditions.

The dissolution of the old European town seems to be irreversible, although nobody can predict its specific future formation in social and spatial terms.

In view of the structural problems and uncertainties, how can town planning find a way from its present resigned position?

This was the challenging question that guided my research. The concept of the patchwork metropolis seems to me a very refreshing answer to the political and bureaucratic limits of the present era. A model that overcomes the compact city limits, defining a new territorial structure. A model that considers, as a principle, pointless the planning activity.

Should we just give up in front of the impossibility to manage the Randstad?

I am convinced that there are some issues that can be addressed just at the scale of the Region. Problems like fresh water storage or flooding control, mobility and preservation of ecological areas are just few of the points in favor of the necessity to maintain a certain degree of control of the territory.

The last section of the thesis was than the research of the wright balance between a flexible and precise approach, able to give some guidelines to the territorial evolution without interfering exceedingly with the economic and social dynamics.

PROS/CONS

1 The last section of the thesis is completely centered on the definition of a solid methodology able to overcome the main limits of the Neutelings patchwork, so the impossibility to manage the evolution of it through time. This issue could be implemented by an whole range of different tools and methodology but to a certain extent. The socio-economic dynamics, as a matter of fact, escaping from the compact city boundaries, have created the patchwork metropolis. We cannot, following the pretension to guide it, interfere excessively with the contemporary urban processes. The national and regional government should instead establish a series of basic and simple objectives, based on performance, such as water storage needs, density, openness, accessibility... and then leave the patches free to evolve.

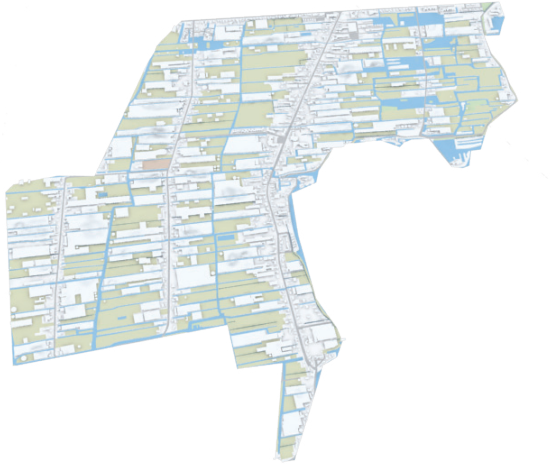
2 Using the the four design exercise I have tried to demonstrate that it is possible to protect the qualities of the territory even in a changing regime. This indicates that the major responsibility will be assigned to the design at the patch dimension. I am convinced that a system of national and international competition based on clear, performance based, objectives, can represent a solution.

3 The patchwork proved to be a very interesting design methodology. The division of the territory in spatial and functional entities allows a more detailed analyses of it. However this way of doing could create a series of patch based designs, where each project is a blind closed box. A more detailed investigation about the role of the corridors can represent a sound solution, able to transform them in the place of meeting and exchanges described by Forman.

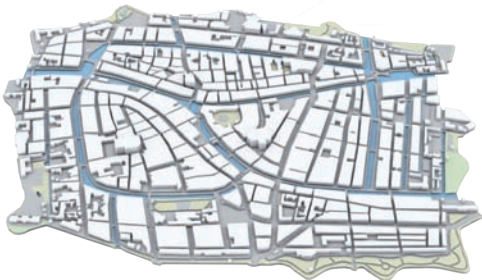
4 The action of give to the territory different speeds can create very interesting result but also catastrophic outcomes. The latter can be prevented through the definition of a table of compatibility and incompatibility between patches and then working with the concepts of ecotone and ecocline to solve the contrasts at the borders level.



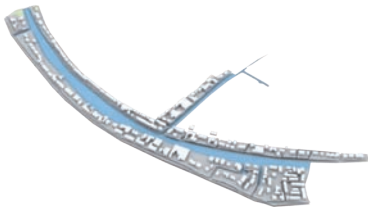
APPENDIX 1 - THE DUTCH PATCHES CATALOGUE



GLASS HOUSES DISTRICT

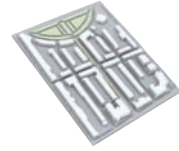


HISTORIC CITY CENTER



HISTORIC FILAMENT

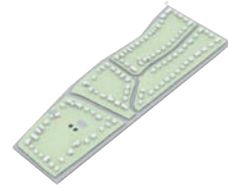
BUILT UP 1850-1910



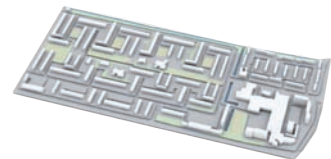
BUILT UP 1910-1940



BUILT UP 1910-1940 LOW RISE

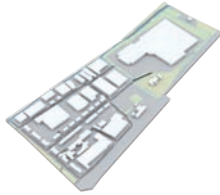


BUILT UP 1940-1970





BUILT UP 1940-1970 LOW RISE



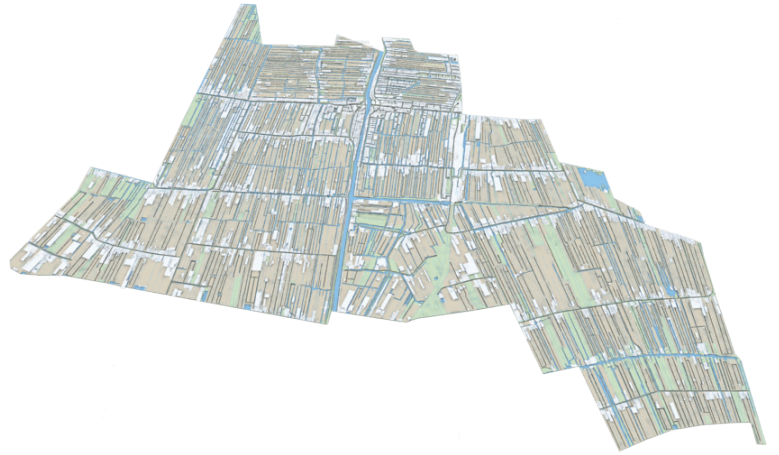
BUILT UP 1940-1970 INDUSTRIAL



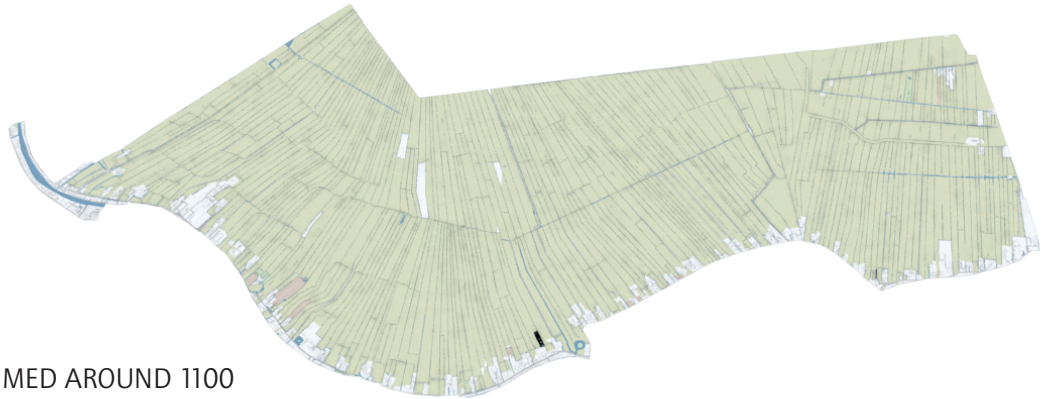
BUILT UP 1970-1990



PERI-URBAN PARK



BOSKOOP

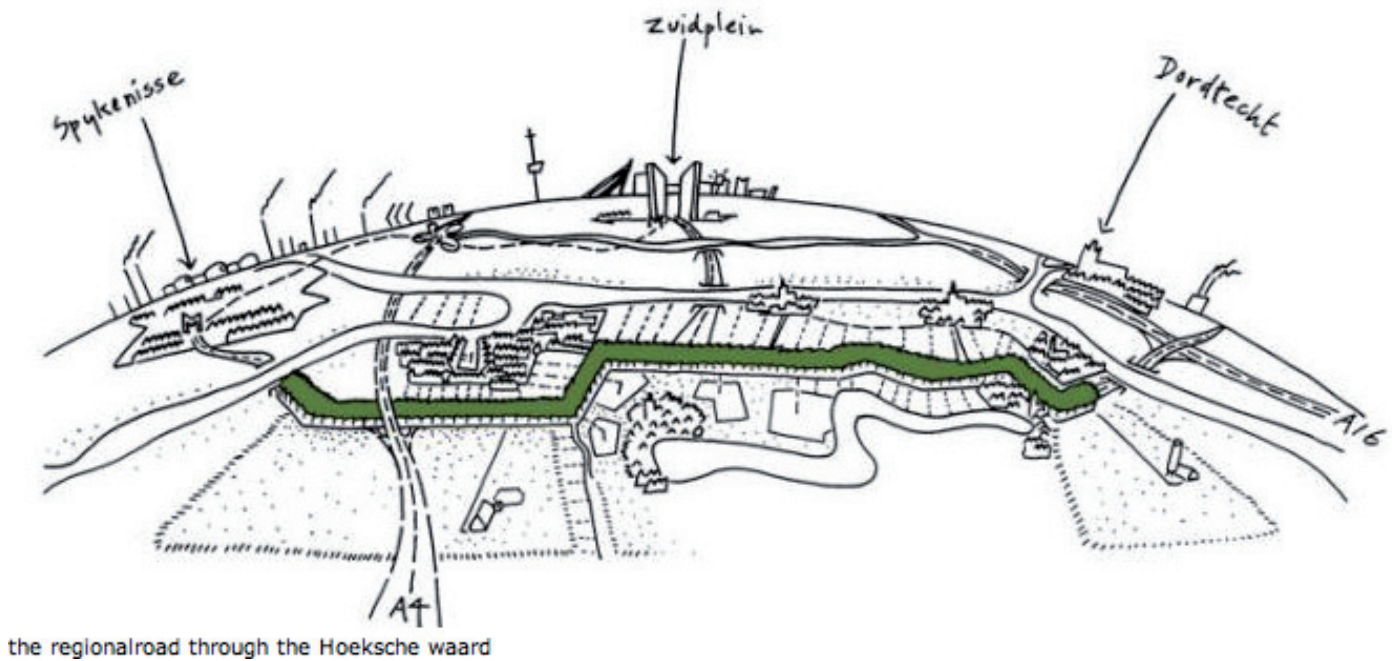


AGRICULTURAL POLDER RECLAIMED AROUND 1100



AGRICULTURAL POLDER RECLAIMED AROUND 1500

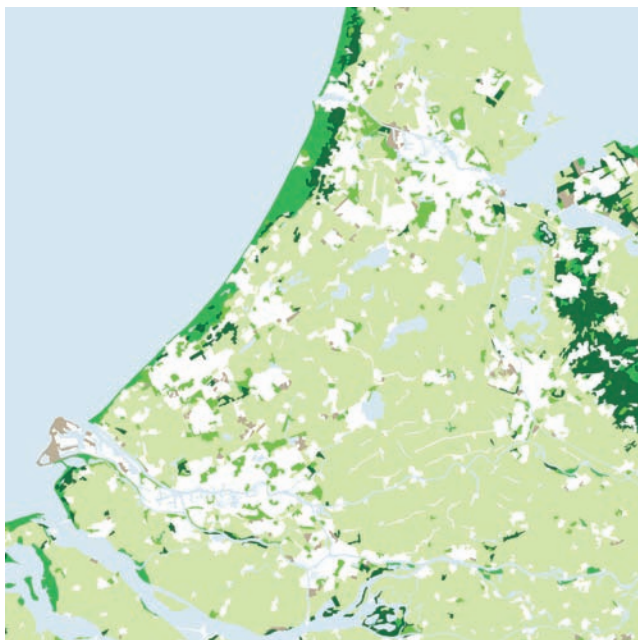




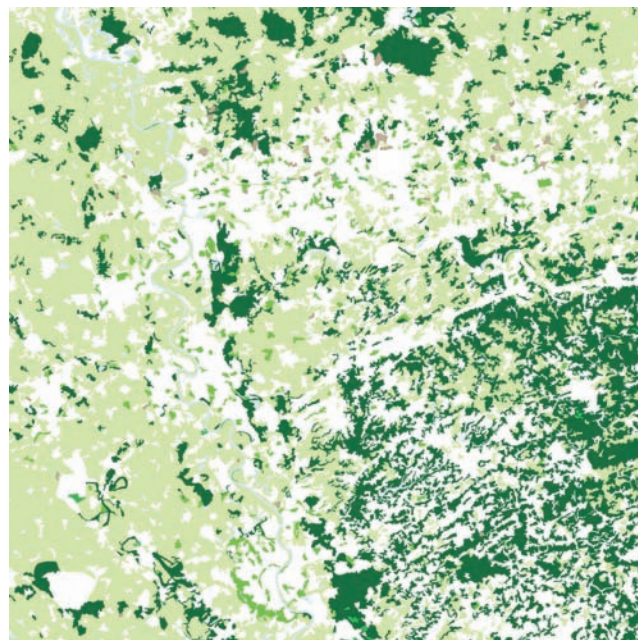
Fritz Palmboom, AIR Hoeksche Waard project; 1999

This plan was one of the eight entries for the manifestation AIR Hoeksche Waard and was commissioned by the Rotterdam Art Foundation. The design fixes no final image and consists of a territorial division (zoning) and an accompanying set of rules (strategy). The plan operates like a time machine that modulates changes in the area in time (pace) and space (scale). Speeding up is achieved by looking for a connection with the infrastructural network at a regional and international scale.

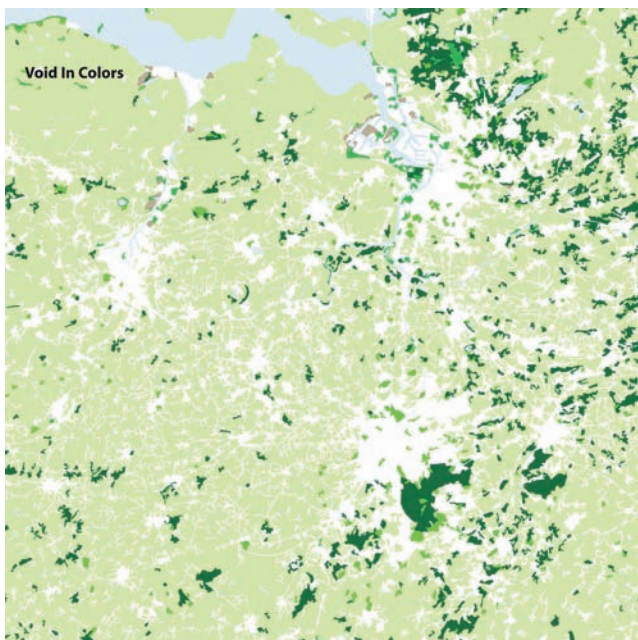
Slowing down is achieved by looking for a connection with the slow cycles of the delta, and/or disconnecting areas from the regional and international infrastructure. The differentiation of the scale means that the landscape will develop towards a more varied combination of different elements. Integration means that the various parts of the existing landscape will be put together and will blend into a greater whole.



Randstad



Ruhr

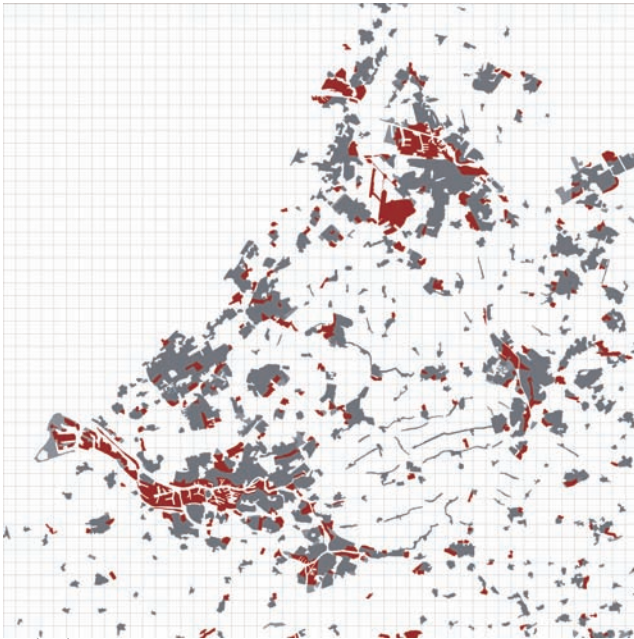


Flemish diamond

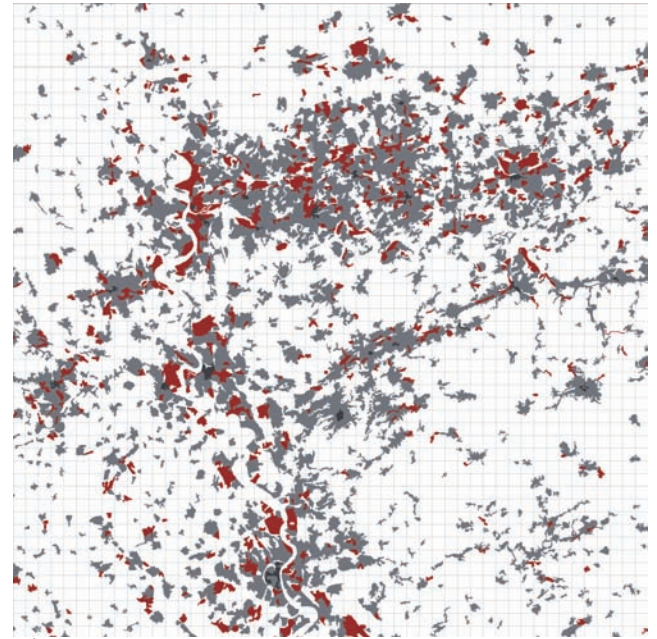


Veneto

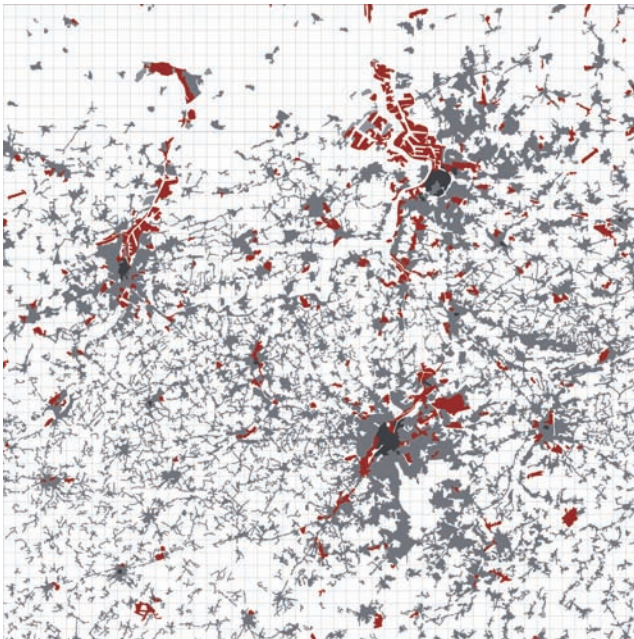
APPENDIX 3 - 50X50 COMPARISON



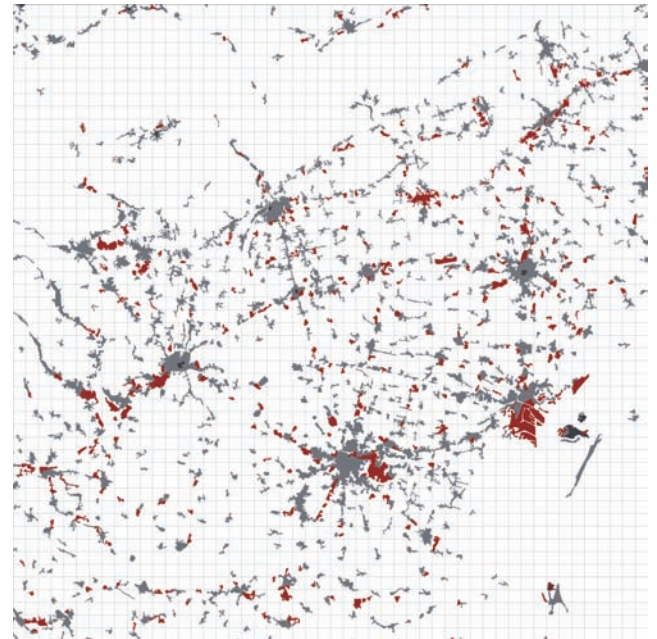
Randstad



Ruhr



Flemish diamond



Veneto

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