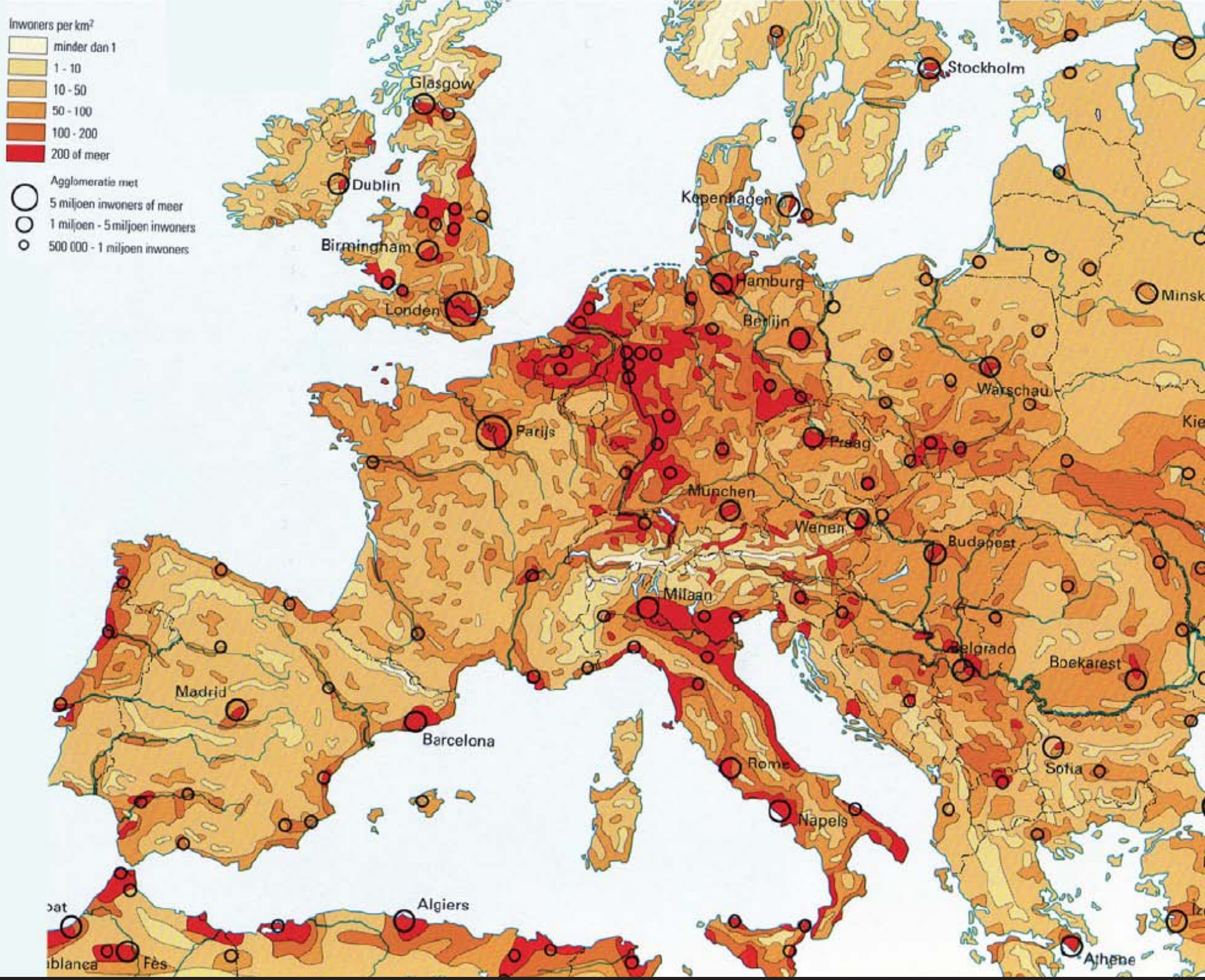
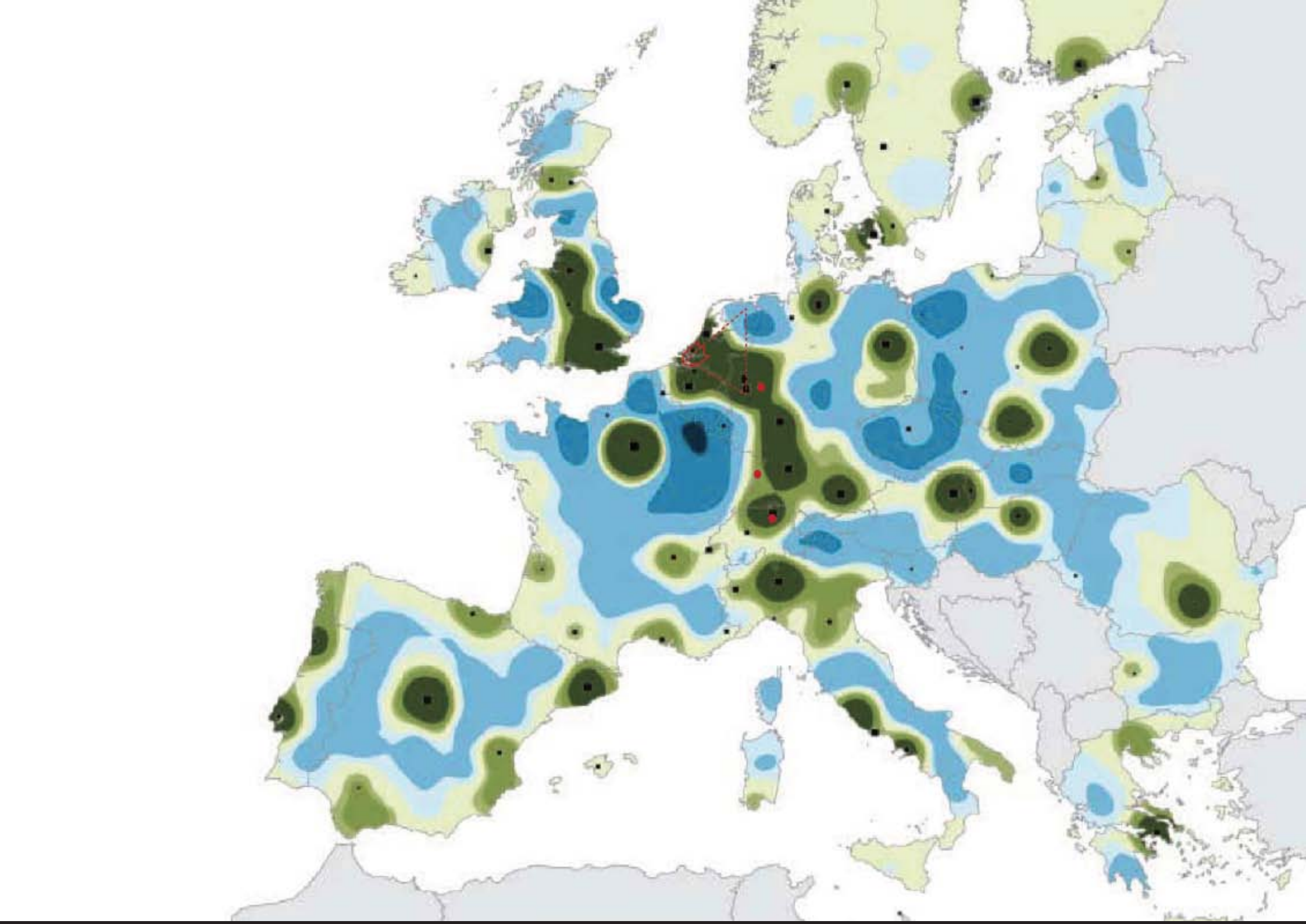

Inwoners per km²
minder dan 1
1 - 10
10 - 50
50 - 100
100 - 200
200 of meer
Agglomeratie met
5 miljoen inwoners of meer
1 miljoen - 5 miljoen inwoners
500 000 - 1 miljoen inwoners
Glasgow
Dublin
Birmingham
Londen
Stockholm
Kopenhagen
Hamburg
Berlijn
Minsk
Warschau
Parijs
Praag
München
Wenen
Budapest
Milaan
Belgrado
Boekarest
Madrid
Barcelona
Rome
Napels
Sofia
Algiers
Fès
Athene



Rotterdamse Academie van Bouwkunst

Rob Wouters , Jens Jorritsma, Ronald Flipsen, Roos Limburg, Bas van der Vinne, Sandra van Dijk, Jielis van Schijndel

Matthias Rottmann and Helmut Thoele

University Wuppertal

Axel Häusler und Klaus Overmeyer

De Zwarte Hond.

Provincie Zuid Holland

Rheingold

Treasury

Rheingold - Une stratégie pour le Rhin - APR - 21/01/2011

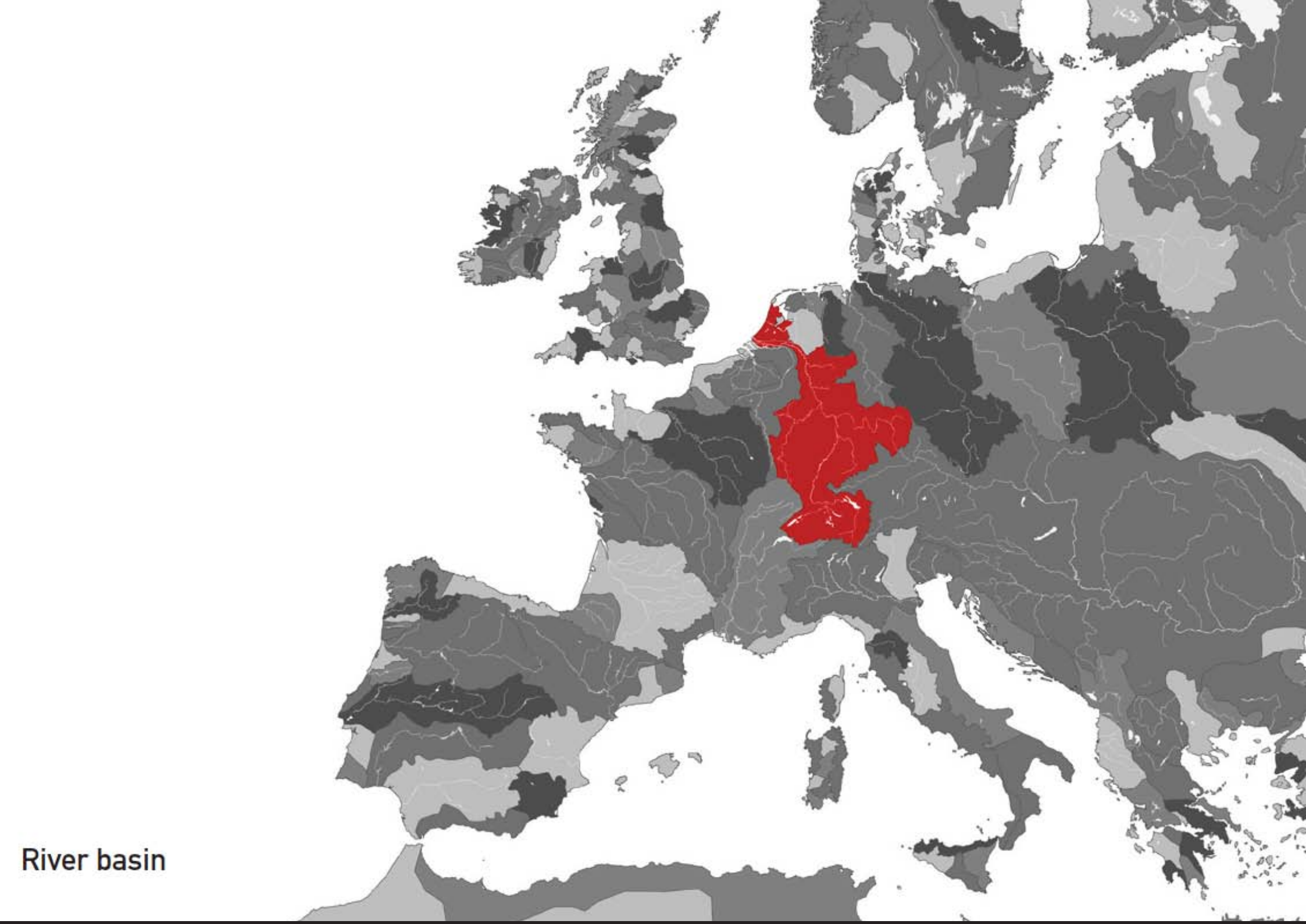
First thoughts

_possibilities to develop tools for open planning structures in the Rhine-area

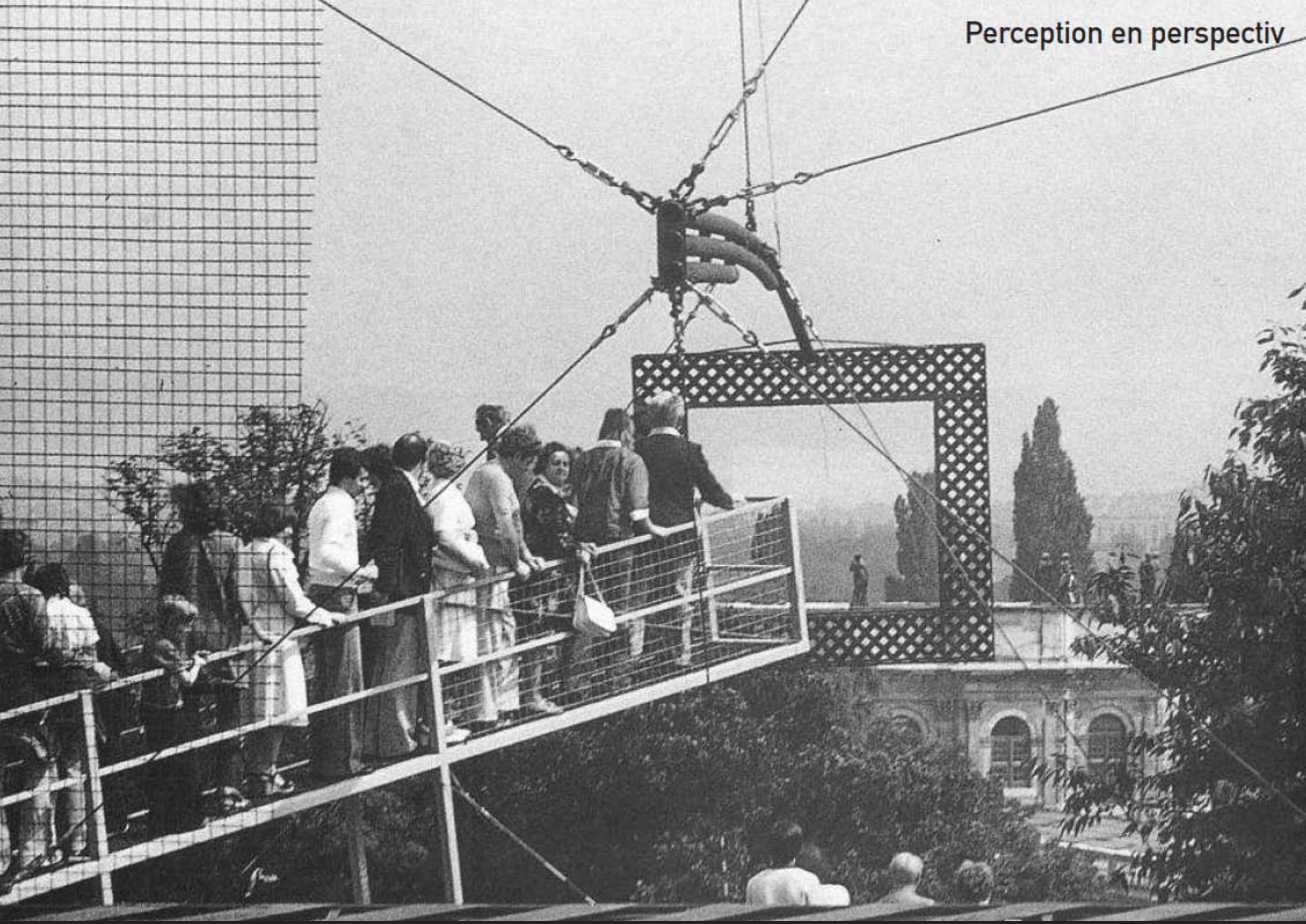
_Dutch-German cooperation within a research and desing laboratory as a starting point

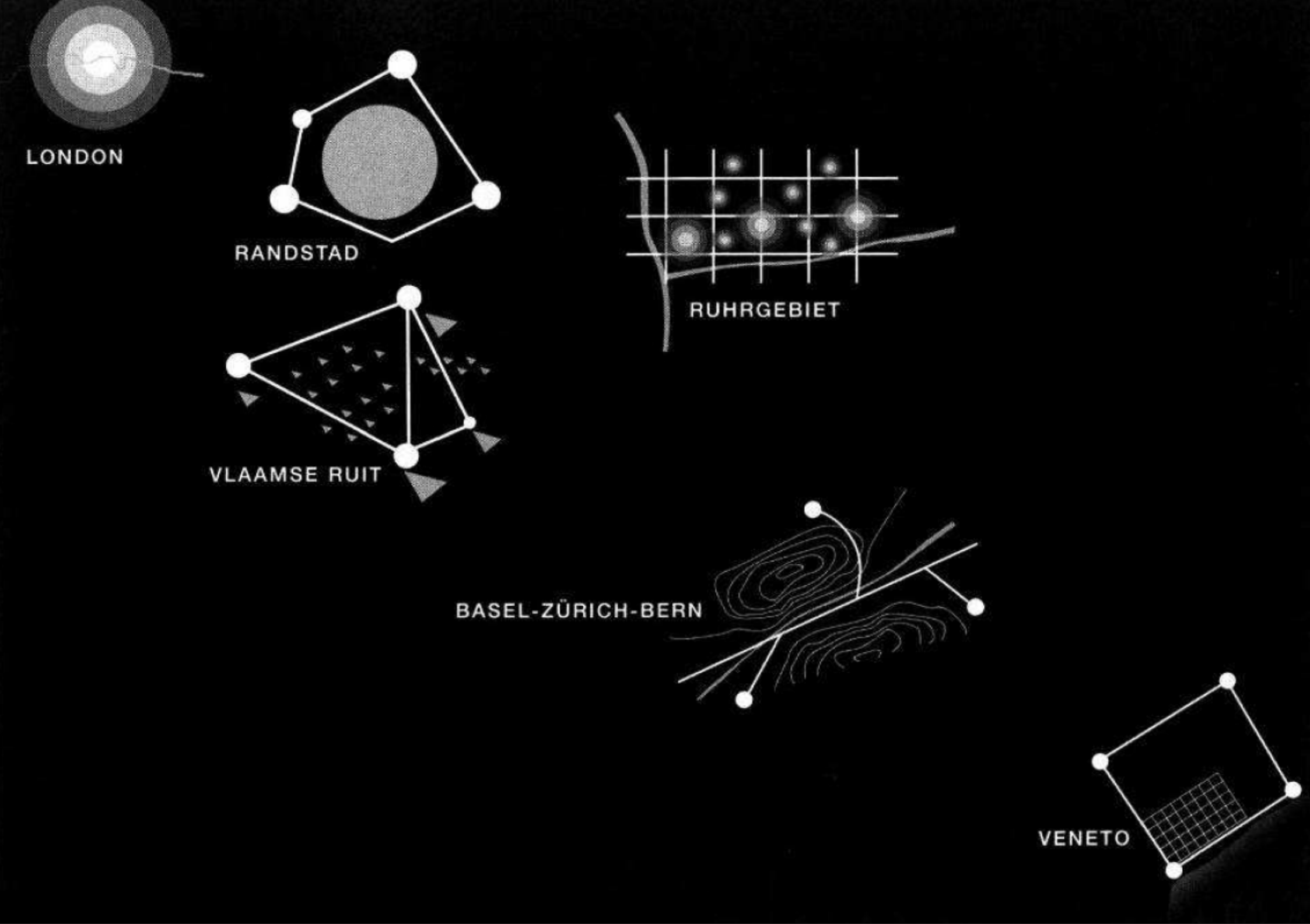
_Rhineconference2010 showed urgency to further strengthen strategic cooperation

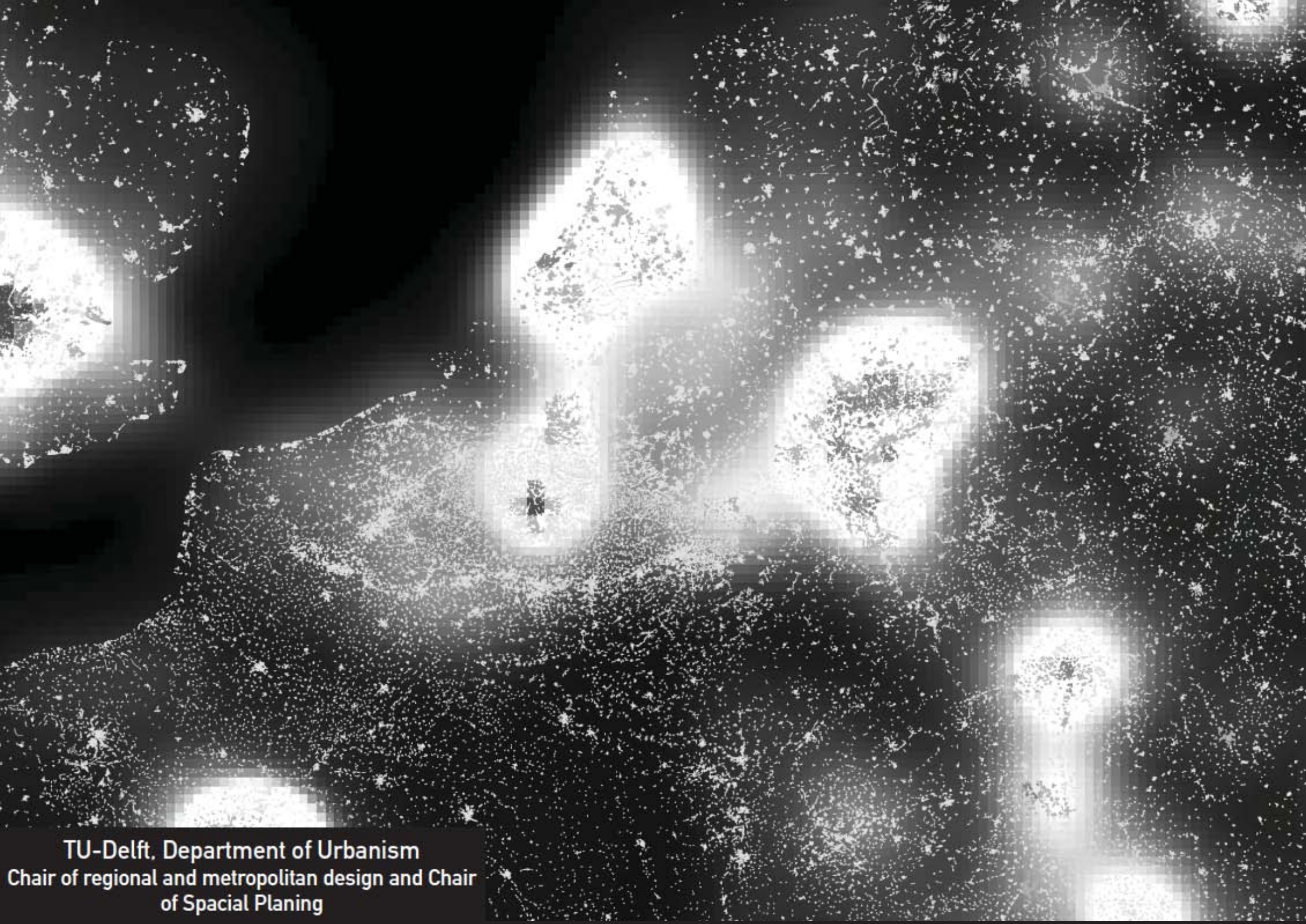
_basic need is to find and define common interest on different levels and scales

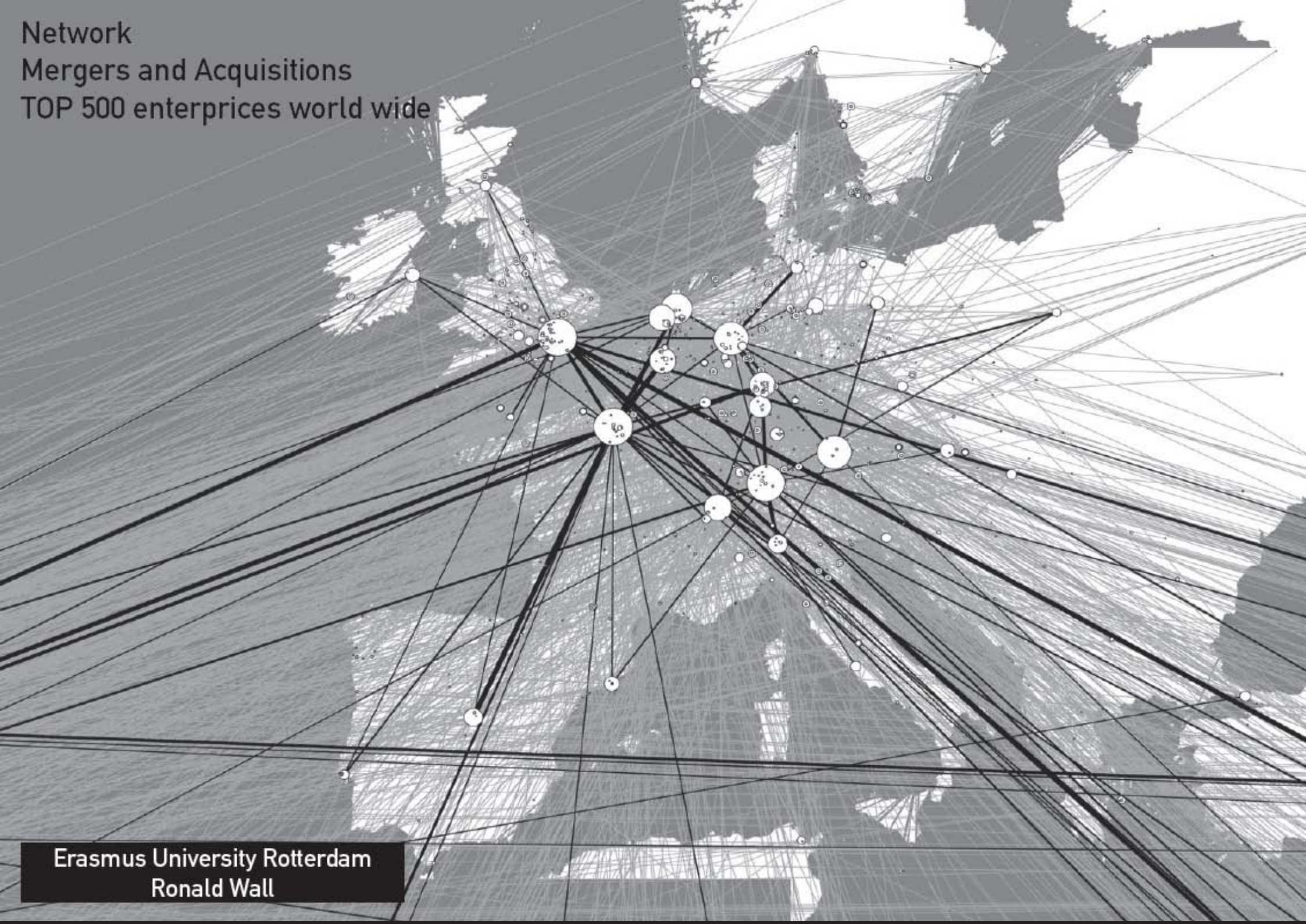



ASIEN UND OZEANIEN
AMERICA
HIMALAYA
EUROPA
AFRICA
Schnee Linie
Schnee Linie
Chimborazo




LONDON
RANDSTAD
RUHRGEBIET
VLAAMSE RUIT
BASEL-ZÜRICH-BERN
VENETO





urgencies and needs

_water

_logistics

_mobility

_economy

_landscape

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Binnenschifffahrt

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HINTERGRÜNDE, ARTIKEL, FAKTEN

finden Sie auf den Themenseiten zu...

Rheinland-Pfalz

ALLE THEMENSEITEN

KARTE

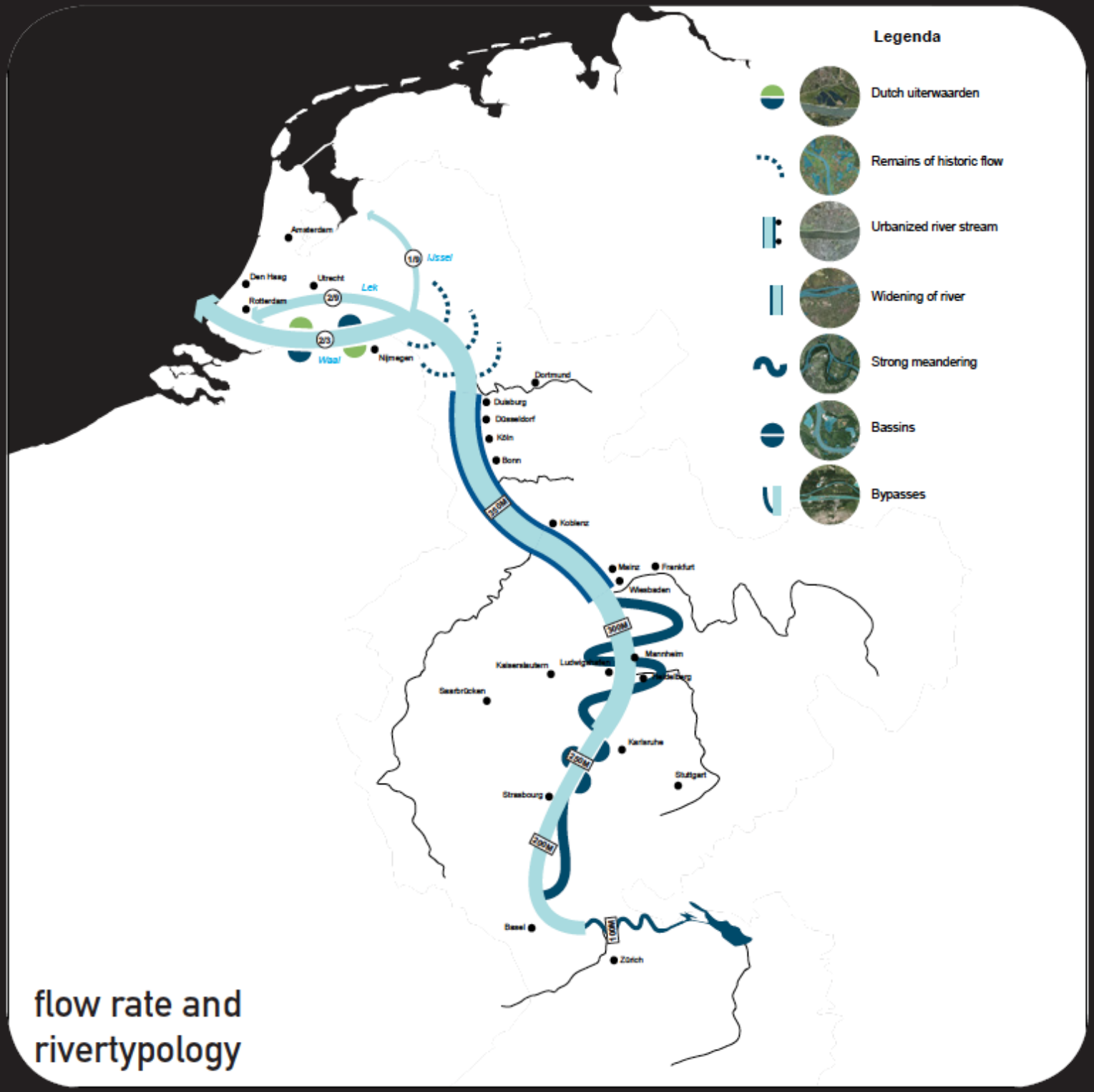
Loreley

Tankschiff mit Säure kentert auf dem Rhein

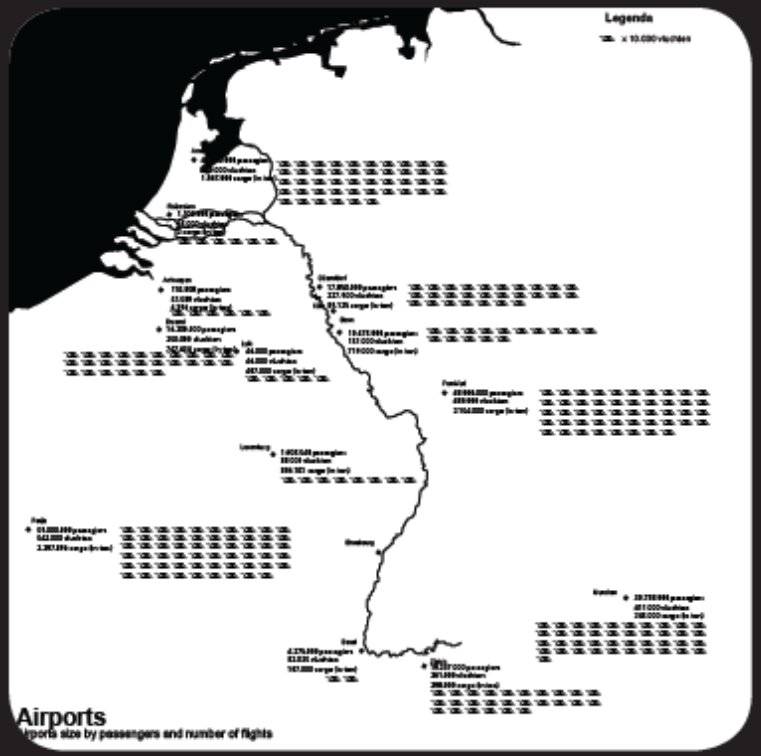
dpa

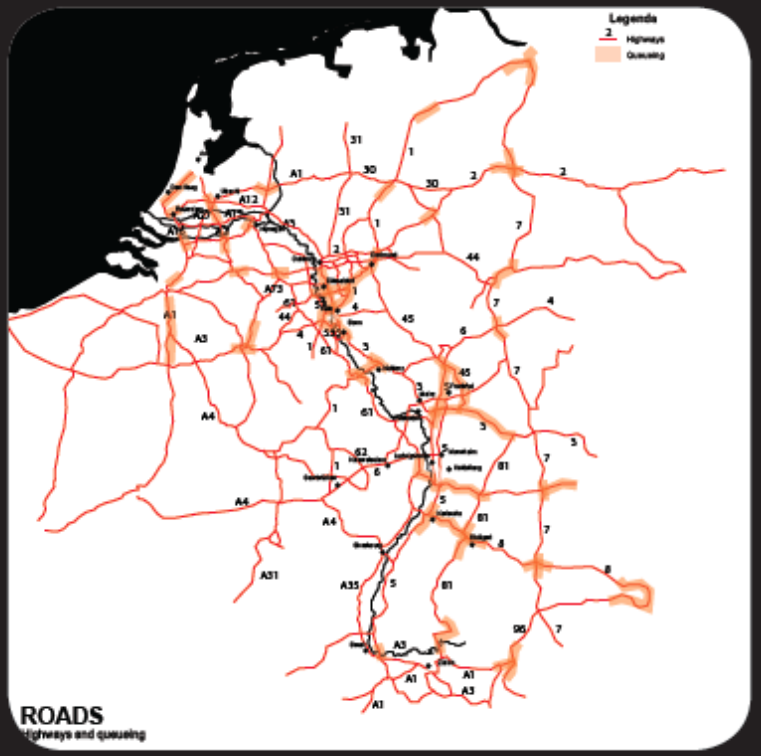
Ein mit Schwefelsäure beladenes Tankschiff ist auf dem Rhein verunglückt: Der 100 Meter lange Frachter liegt seit dem frühen Morgen nahe des Loreleyfelsens auf der Seite. Bislang konnte die Polizei zwei der vier Besatzungsmitglieder retten.

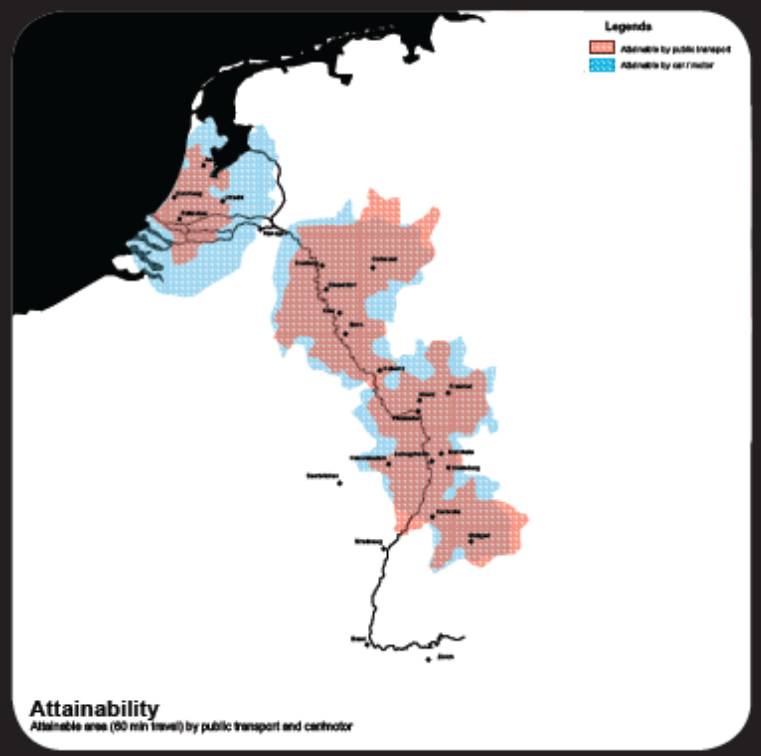
Mainz - Auf dem Rhein hat es einen schweren Schiffsunfall gegeben: Bei St. Goarshausen nahe der Loreley ist ein Tankschiff gekentert. Der Frachter hat rund 2400 Tonnen



infrastructure accessability

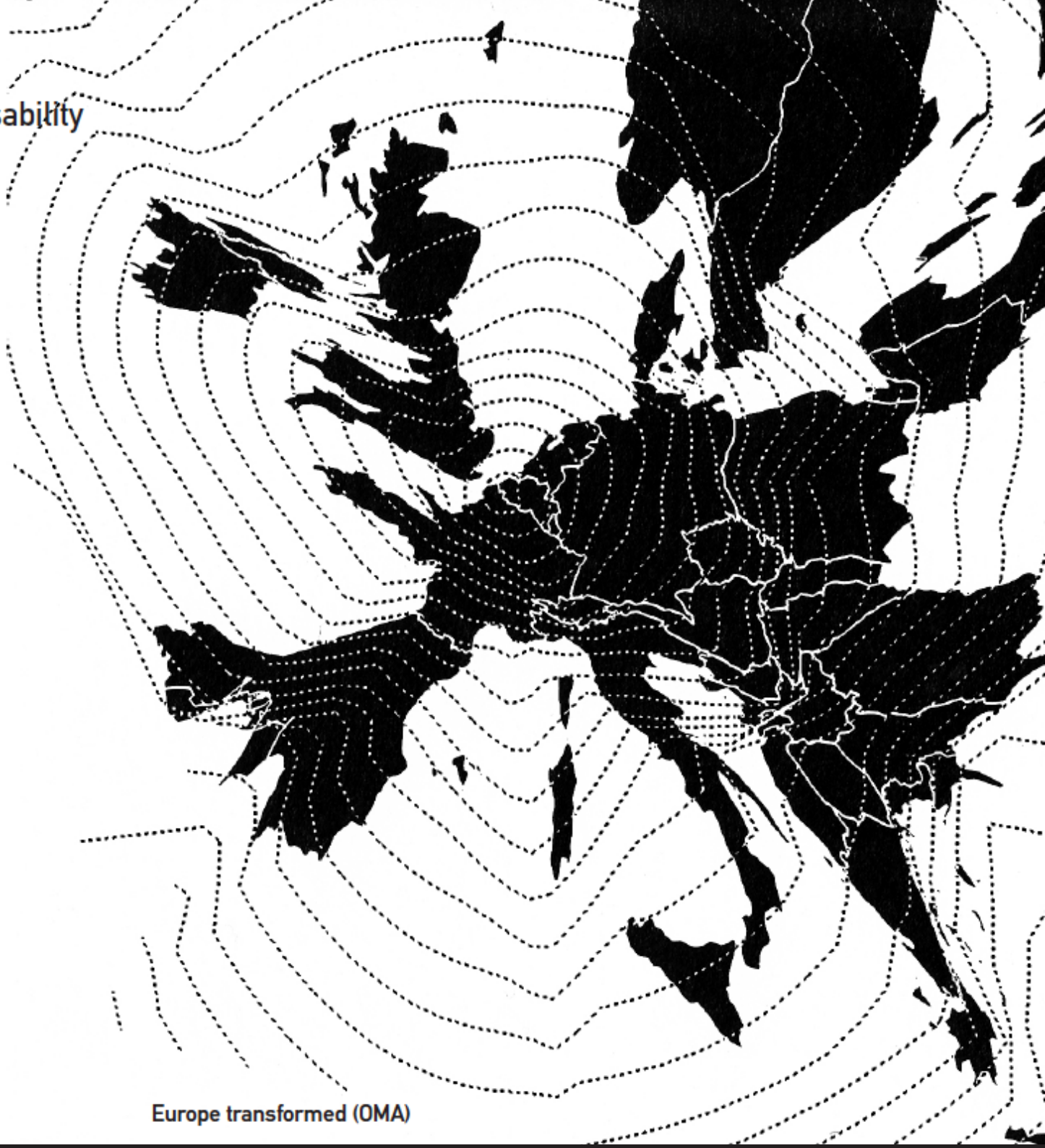






what are we busy with ?

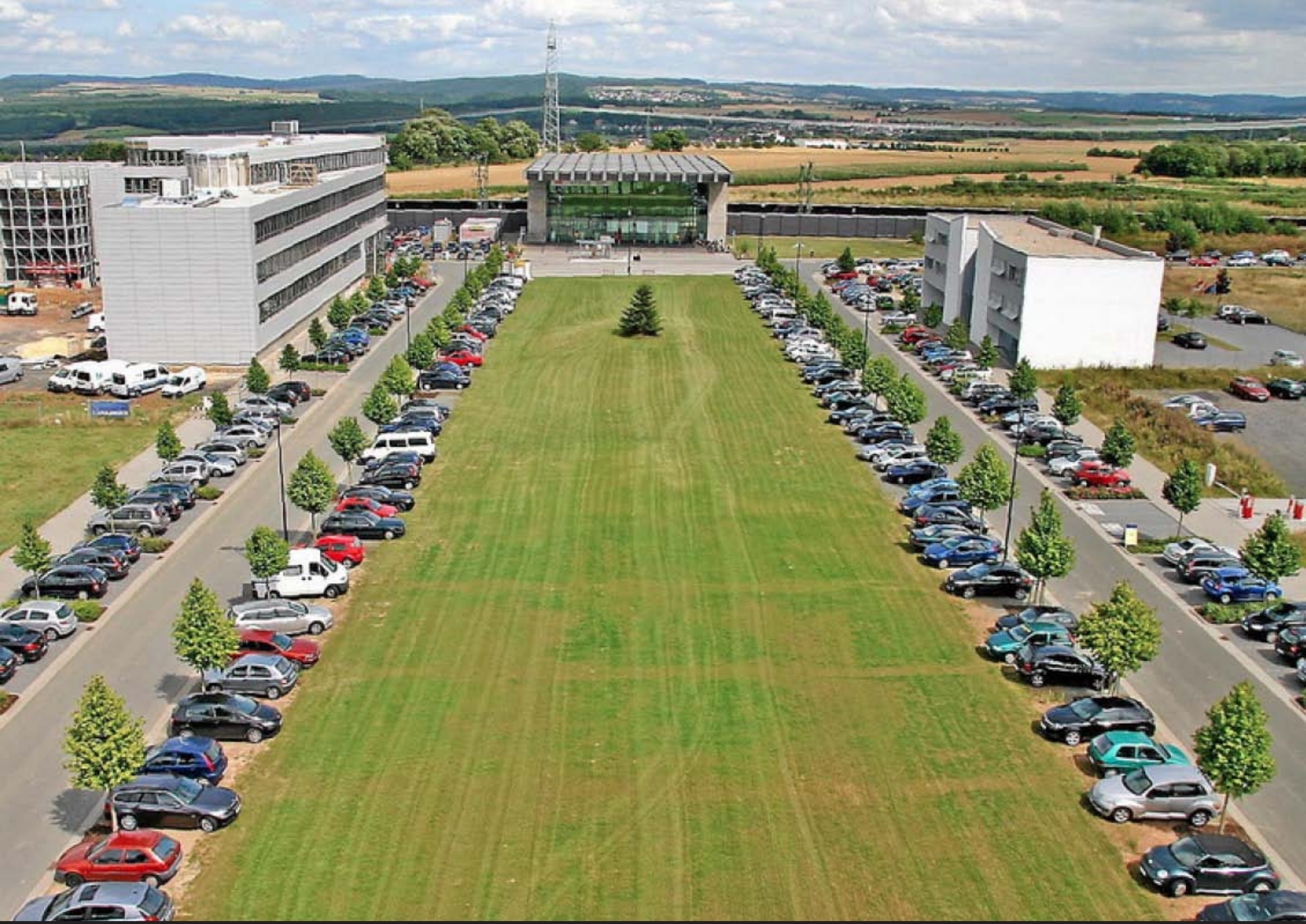
TEN - the logics of networks and accessability over time created new centralities



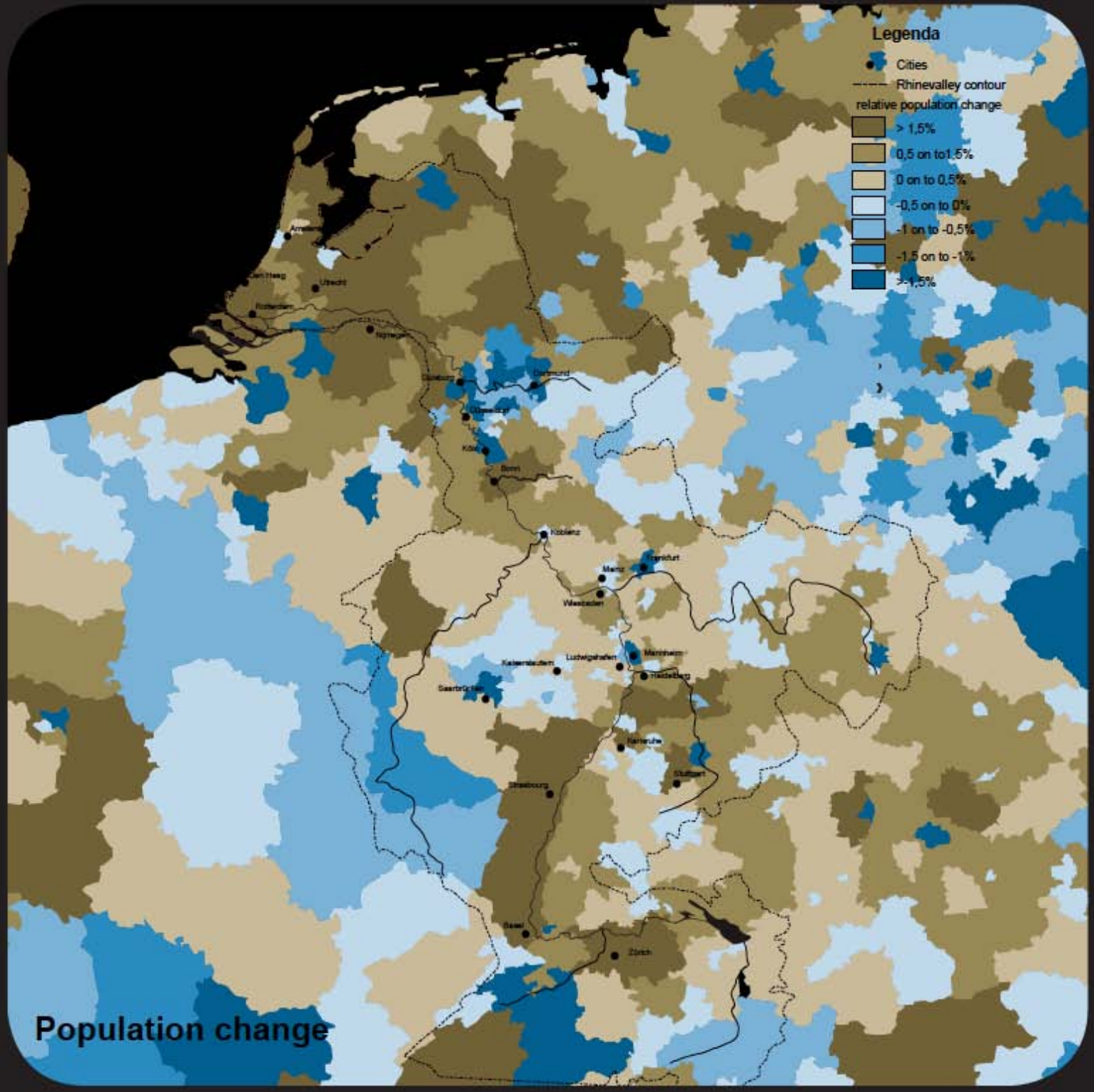
Europe transformed (OMA)

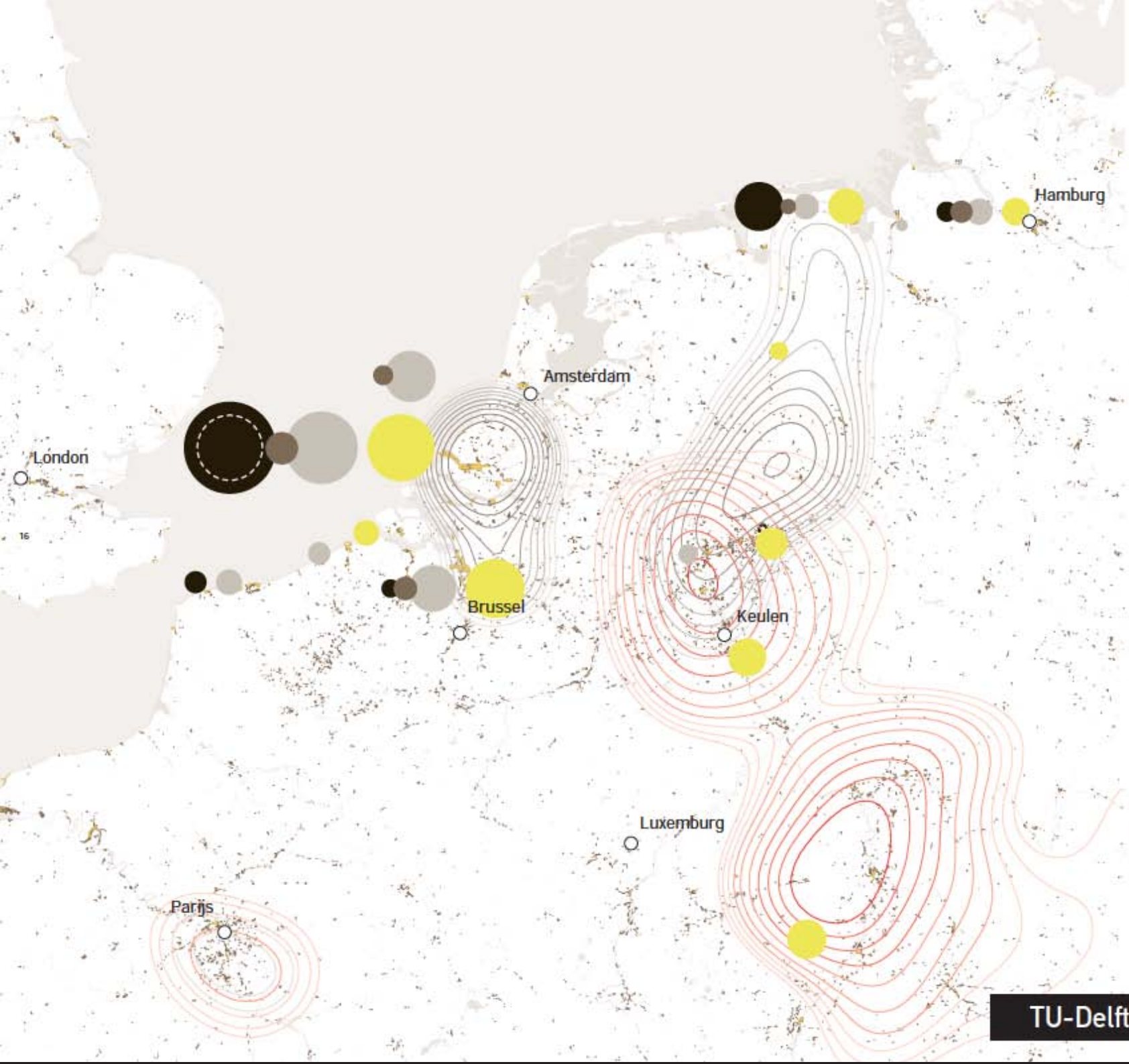
OMA

4. Euralille, un nouvel espace tertiaire pour la ville, A : gare Lille-Europe ; B : tour de bureaux (Crédit Lyonnais) ; C : centre commercial d'Euralille ; D : gare Lille-Flandres ; E : centre ancien.



OMA





Rol van havens zal veranderen.

Stellingname
De haven van Rotterdam importeerd jaarlijks zo'n 100 miljoen ton ruwe olie. Dit is 17% van de vraag in Europa. De helft van deze import wordt geraffineerd in Rotterdam zelf (30% in Antwerpen, 5 % Vlissingen, 15% in Gelsenkirchen en Godorf/Wesseling). Behalve in het ruwe olie netwerk is Rotterdam ook een belangrijke hub in het netwerk voor olie-producten: 75% van de import en geproduceerde derivaten wordt weer geexporteerd.

Interactiemilieu
Visie haven Rotterdam:
Refinery hub: European center voor oil producten en export
Gas hub: LNG import in aanvulling op gas per pijplijn
Power hub: Kolen/biomassa getstookte centrales + CO2 afvangst
CO2 hub: Afvangst in Noordwest Europa, opslag in oude velden op zee
Biofuels hub: import en productie van bio-ethanol en biodiesel
Energy efficiency: co-siting, utilities sharing, pipeline infrastructure

BASF: vraag naar chemische producten zal met 6% krimpen in West-Europa

Legenda

Achtergrondinformatie
- import aardolie (in mln ton/jaar)
- waarvan doorvoer aardolie
- opslag aardolie en derivaten (in mln m3)
- uitvoer derivaten (in mln ton/jaar)
- industriegebieden

Aandachtsgebied
Vervaardiging van cokesovenproducten en aardolieverwerking
Concentratie van arbeidsplaatsen
- laag
- |
- hoog

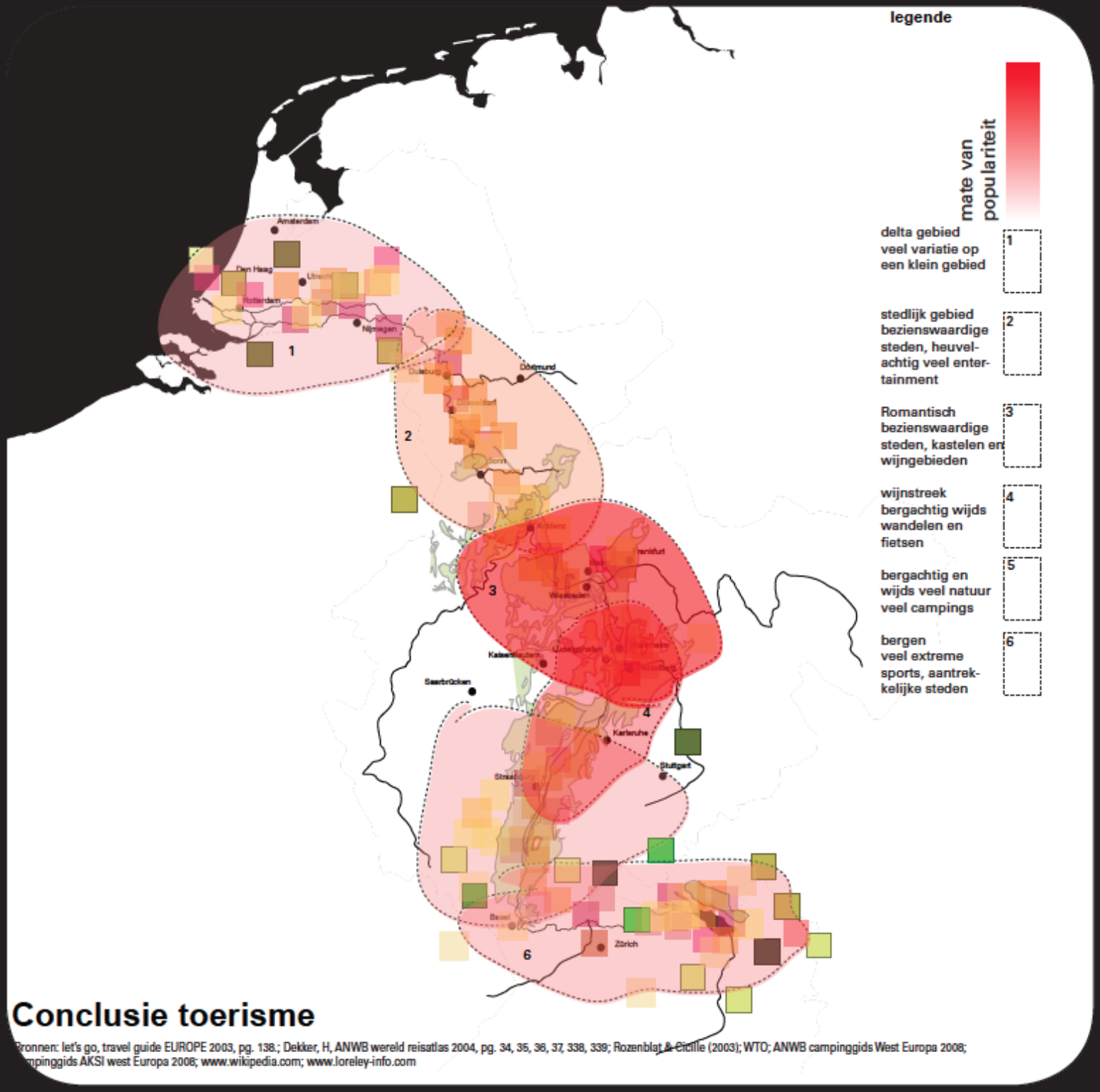
Vervaardiging van chemische producten
Concentratie van arbeidsplaatsen
- laag
- |
- hoog

Interactie
- havengebieden
- raffinaderij (relatieve capaciteit in mln ton/jaar)

bron: Eurostat, 2007, Manufacture of chemicals and chemical products, Manufacture of coke, refined petroleum products and nuclear fuel at NUTS level 3, Number of persons employed. De hoeveelheid arbeidsplaatsen, die gerealiseerd mag hun oorsprong hebben

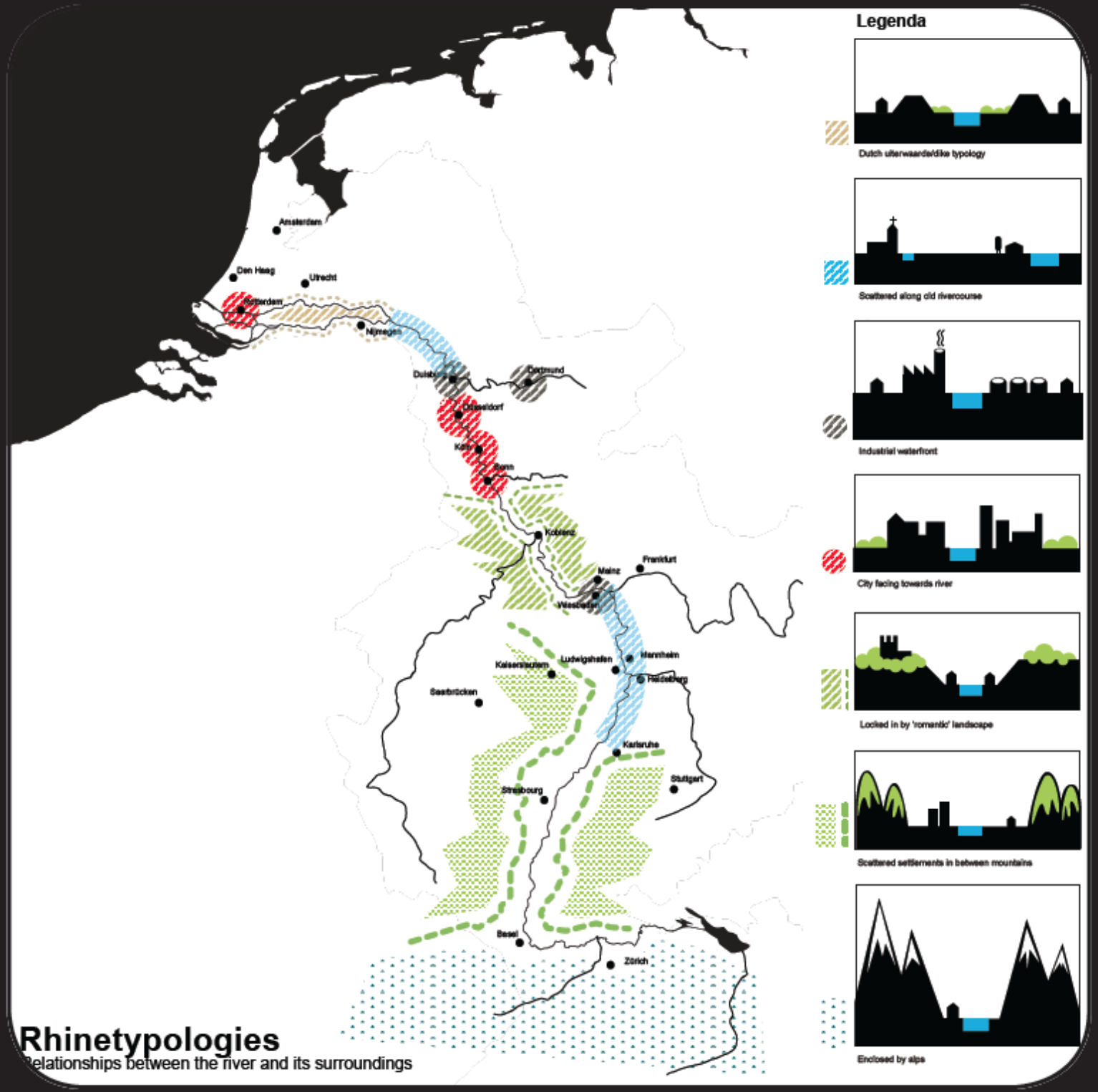
TU-Delft, Department of Urbanism


Rheinfall - Fischetz
217 Phot. C. Koch, Schaffhausen

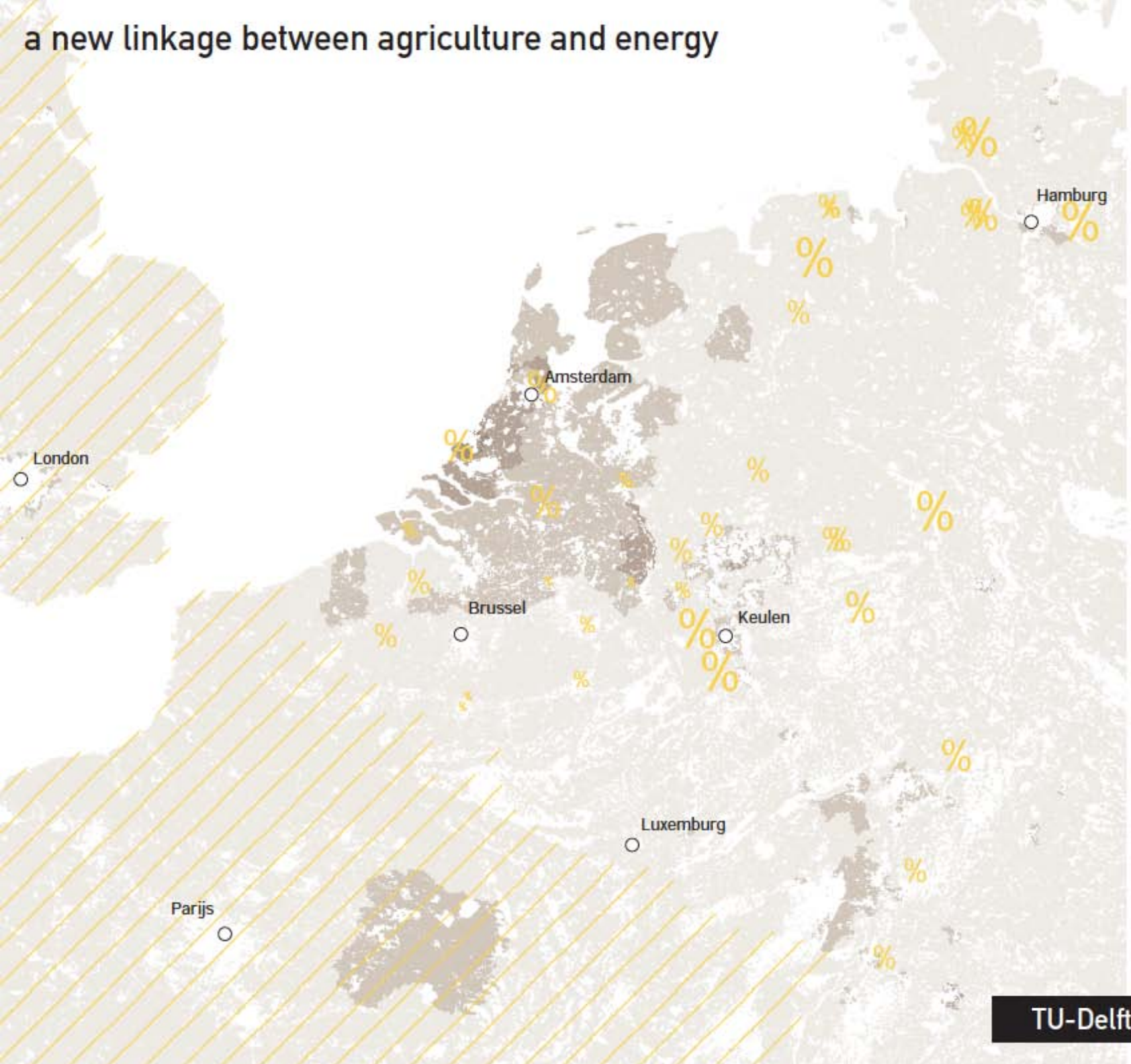


Conclusie toerisme

Bronnen: let's go, travel guide EUROPE 2003, pg. 138.; Dekker, H, ANWB wereld reisatlas 2004, pg. 34, 35, 36, 37, 338, 339; Rozenblat & Cicille (2003); WTO; ANWB campinggids West Europa 2008; campinggids AKSI west Europa 2008; www.wikipedia.com; www.loreley-info.com



a new linkage between agriculture and energy



De teelt van biobrandstofgewassen op grote schaal is in Nederland onrendabel.

Stelling
Momenteel wordt slechts 0,2% van de Nederlandse landbouwgrond gebruikt voor de teelt van biobrandstofgewassen. De Nederlandse regering zet erop in om dit met 13 voud te laten toenemen. Terwijl, zo constateert het Landbouw-economisch Instituut, de belangrijkste bron voor biobrandstof, koolzaad, in Nederland ten opzichte van andere gewassen economisch niet rendabel verbouwd kan worden, zelfs indien er een accijnsvrijstelling wordt gegeven voor biobrandstoffen. Deze conclusie geldt niet alleen onder de huidige marktomstandigheden, maar ook onder het nieuwe EU-landbouwbeleid. In andere Europese landen, zoals bijvoorbeeld Frankrijk, zijn voor agrariërs niet altijd hoger renderende gewassen aanwezig, waardoor het telen van biobrandstofgewassen daar wel rendabel kan plaatsvinden.

Interactiemilieu
De locatie van centrales geschikt voor biobrandstof, heeft invloed op de transportkosten van koolzaad.

Legenda

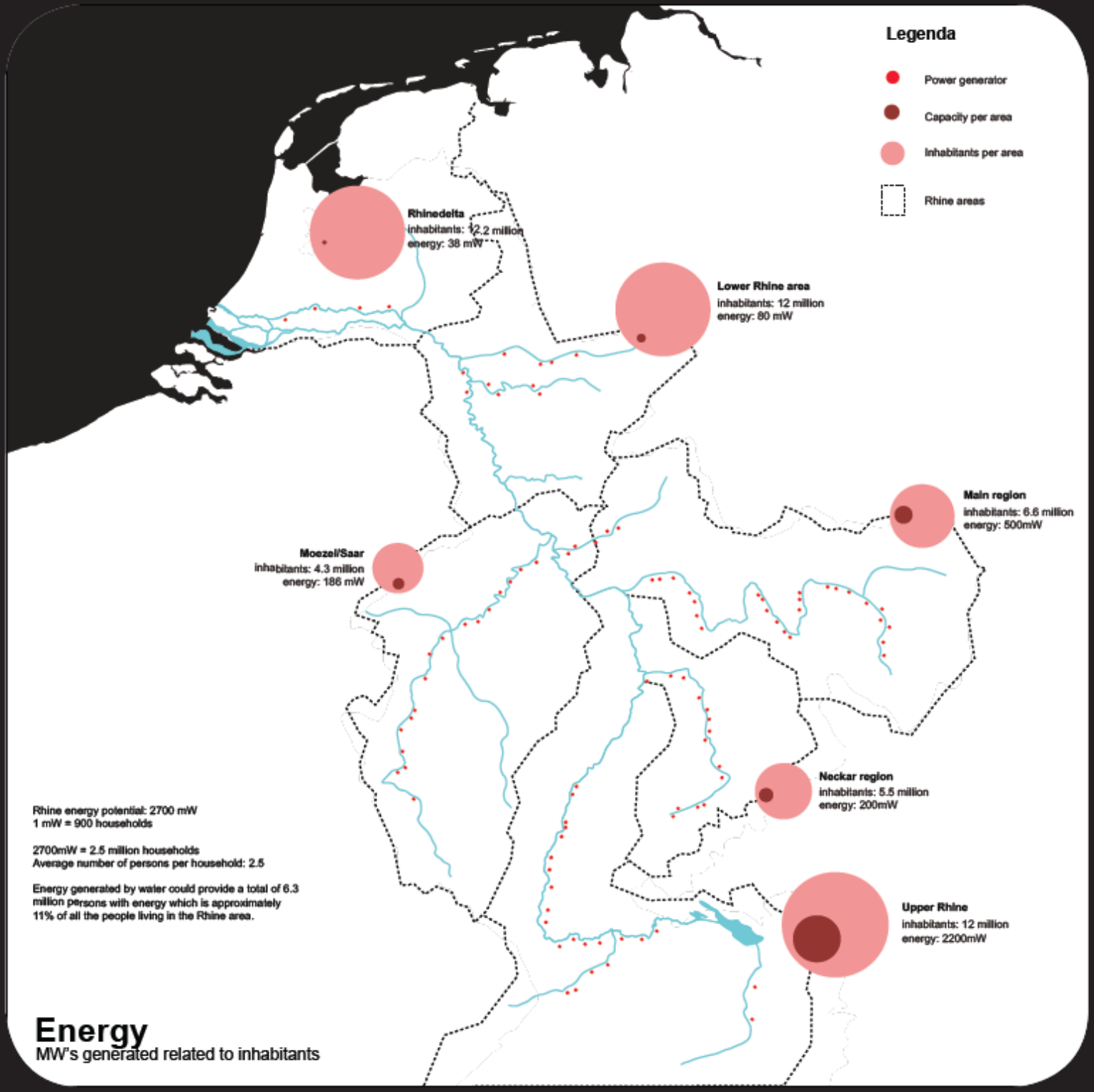
Achtergrondinformatie
Toegevoegde waarde van de landbouwsector per hectare
(in miljoen euro per hectare in 2007)
laag
|
hoog

Aandachtsgebied
n.v.t.

Interactie
centrales geschikt voor biobrandstof
(grootte geeft relatieve capaciteit weer)
geen gegevens

bron: Eurostat, 2007, Gross value added at basic prices at NUTS level 3, Millions of euro added by agriculture, hunting, forestry and fishing (NACE A+B);
bron landgebruik: IEA, 2007, Corine Land Cover 2000
De hoeveelheid hectaren landbouwgebied per NUTS 3 zone zijn bepaald op basis van de Corine Land Cover.

TU-Delft, Department of Urbanism

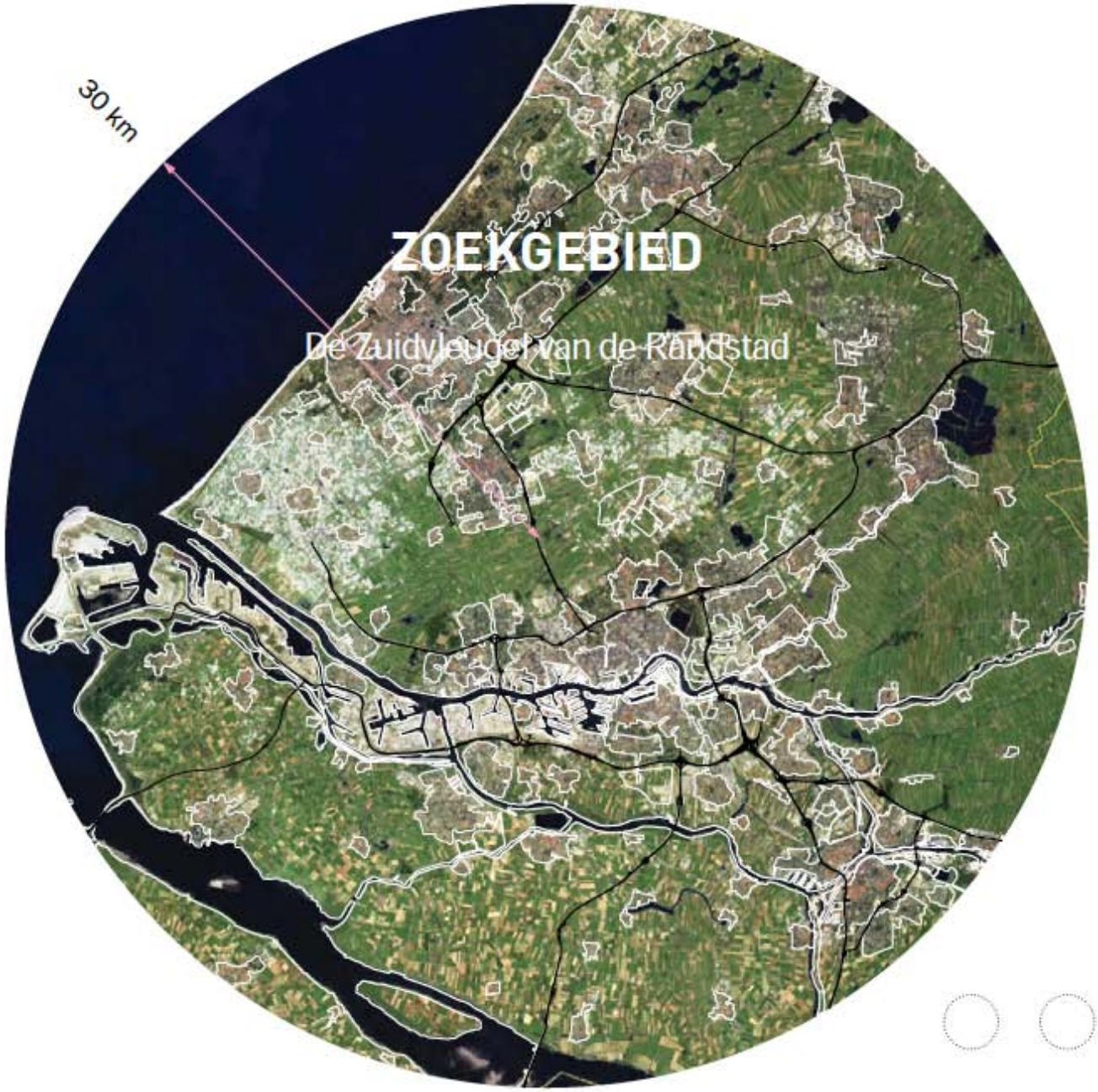


drawing the rijn

_combining layers

_exploring driving forces and dynamics

_using our profession



Atelier Zuidvleugel / South Holland

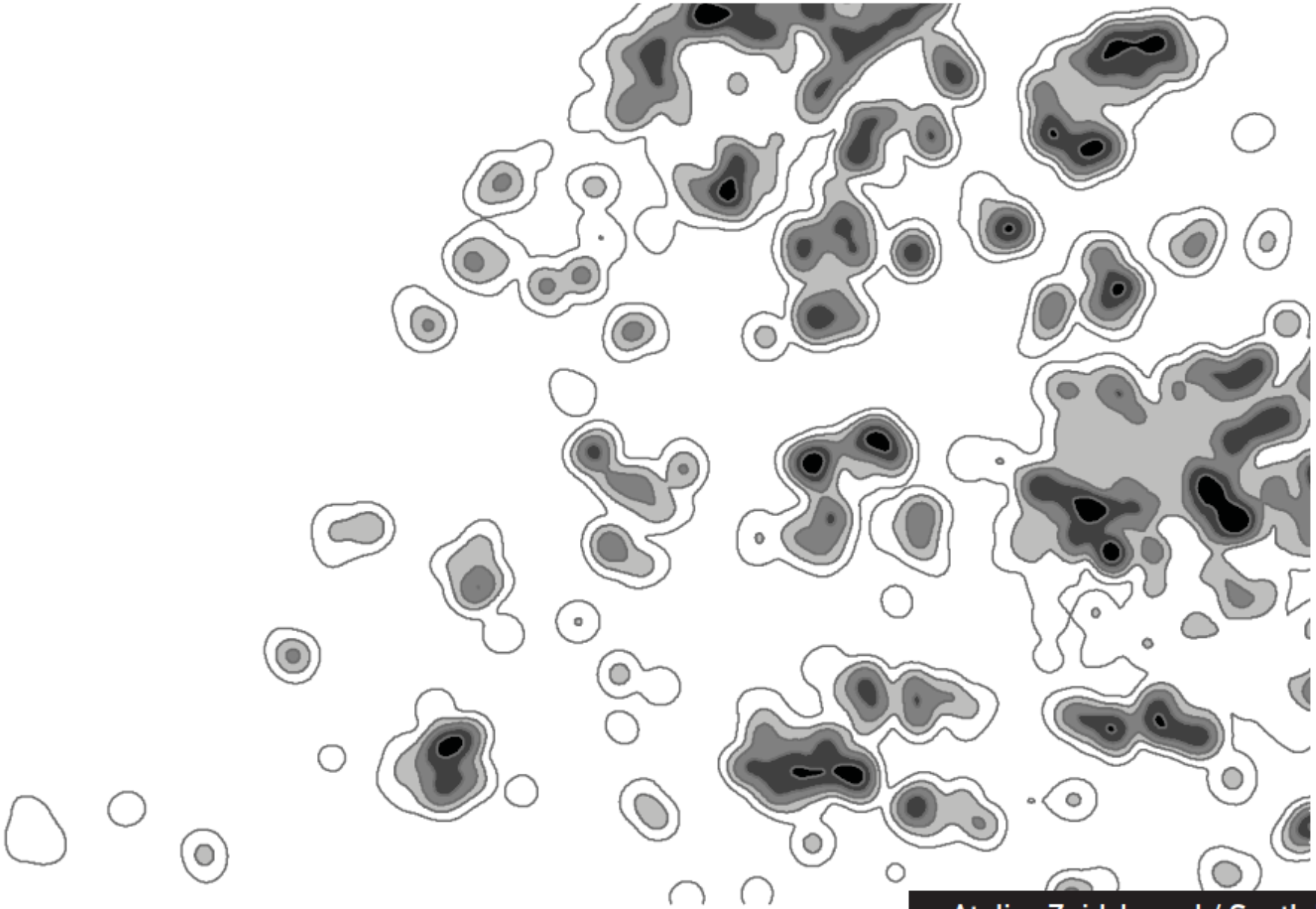
netwerken

Deze kaarten geven de aanwezigheid van (potentiële) netwerken weer. Bijvoorbeeld het fietspadennetwerk, het netwerk voor langzaam verkeer.

Atelier Zuidvleugel / South Holland

dichtheid van activiteiten

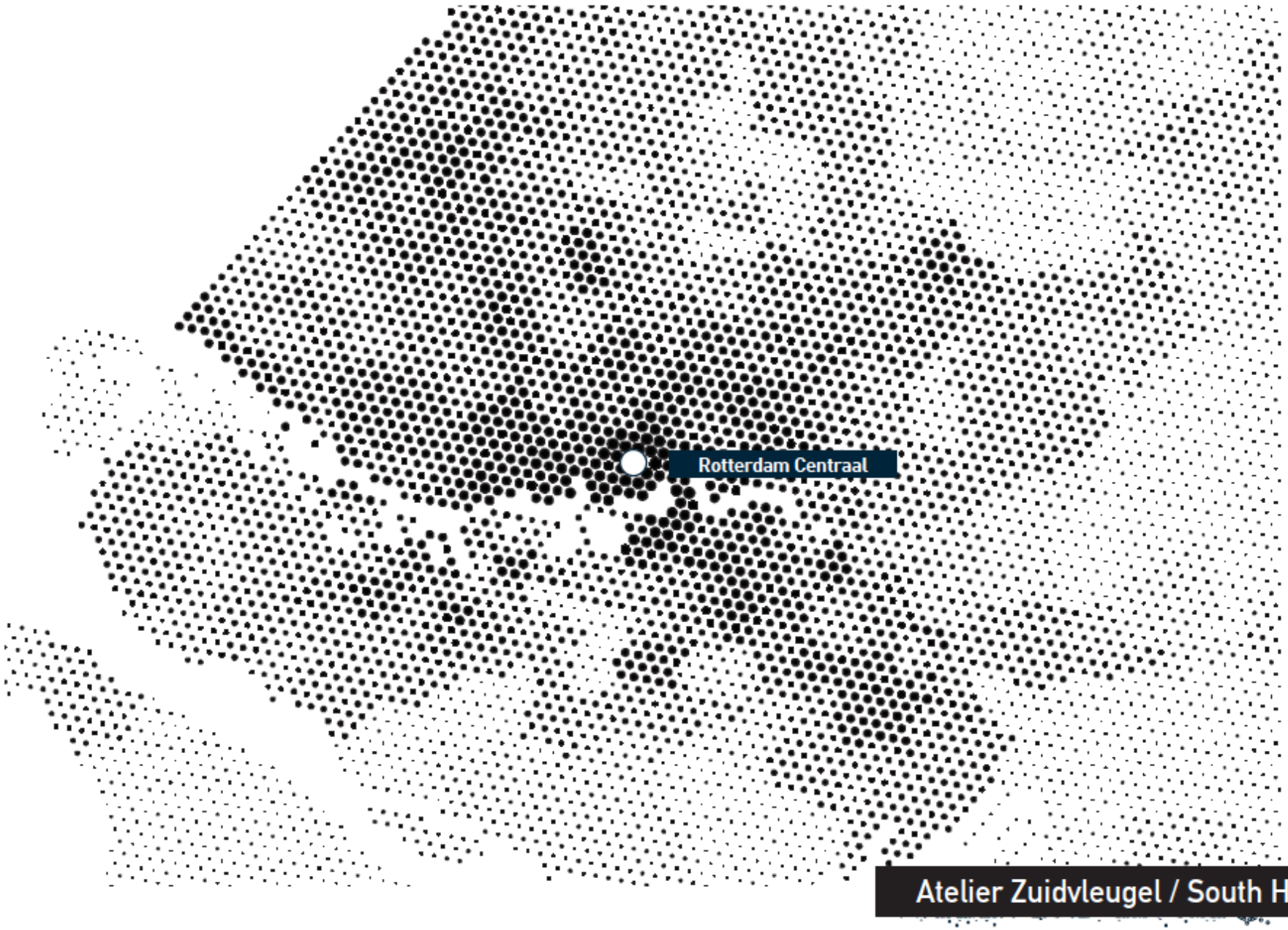
Voor deze kaarten is de dichtheid van bepaalde activiteiten per hectaren onderzocht. De clusters geven aan hoe geconcentreerd de activiteiten in bepaalde gebieden zijn. Bijvoorbeeld economische activiteiten uit de creatieve sector



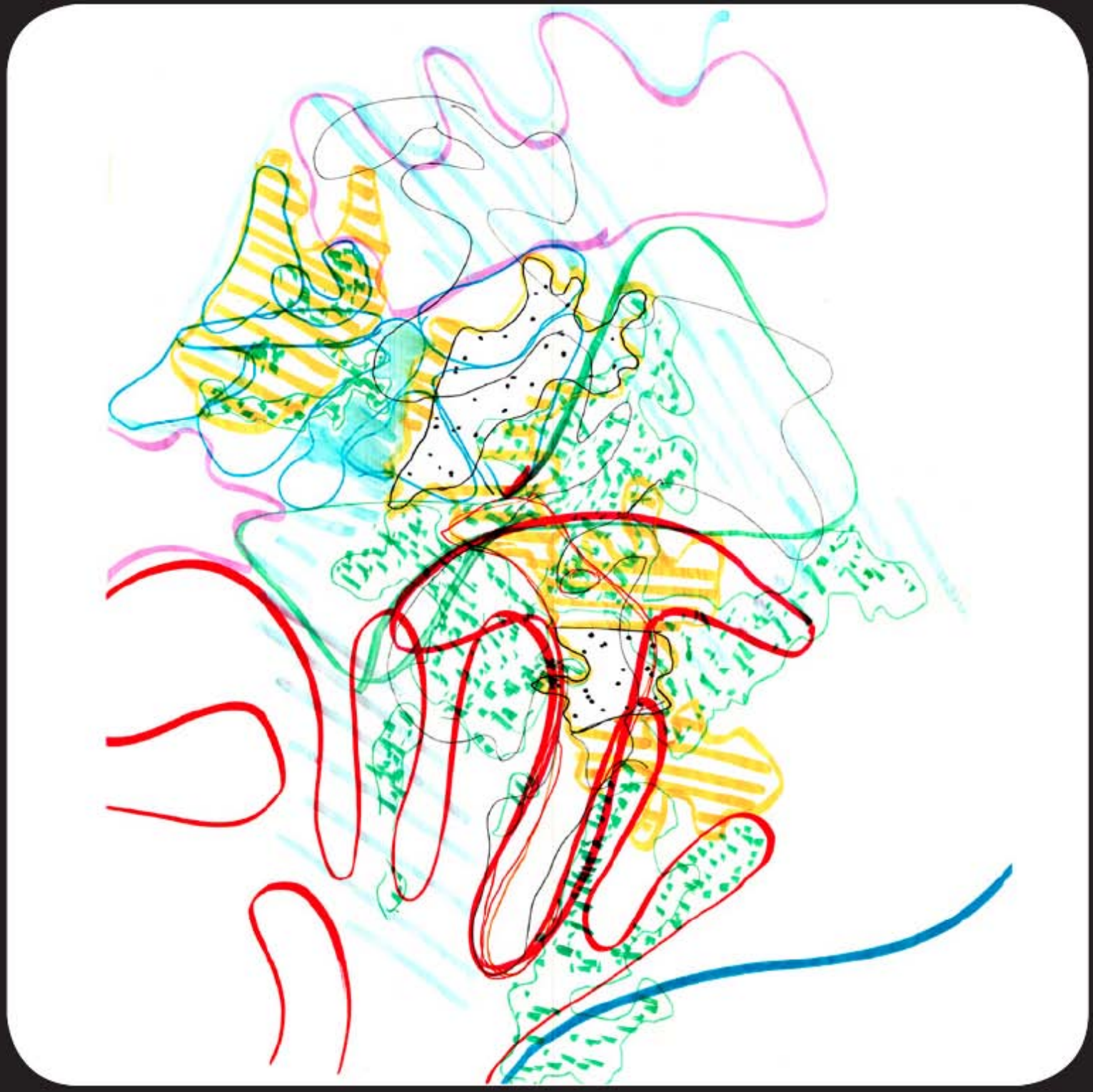
Atelier Zuidvleugel / South Holland

toegankelijkheid

Deze kaarten beschrijven de toegankelijkheid van een bepaalde plek in reistijd. Bijvoorbeeld de toegankelijkheid van Rotterdam Centraal met de auto



draw the line



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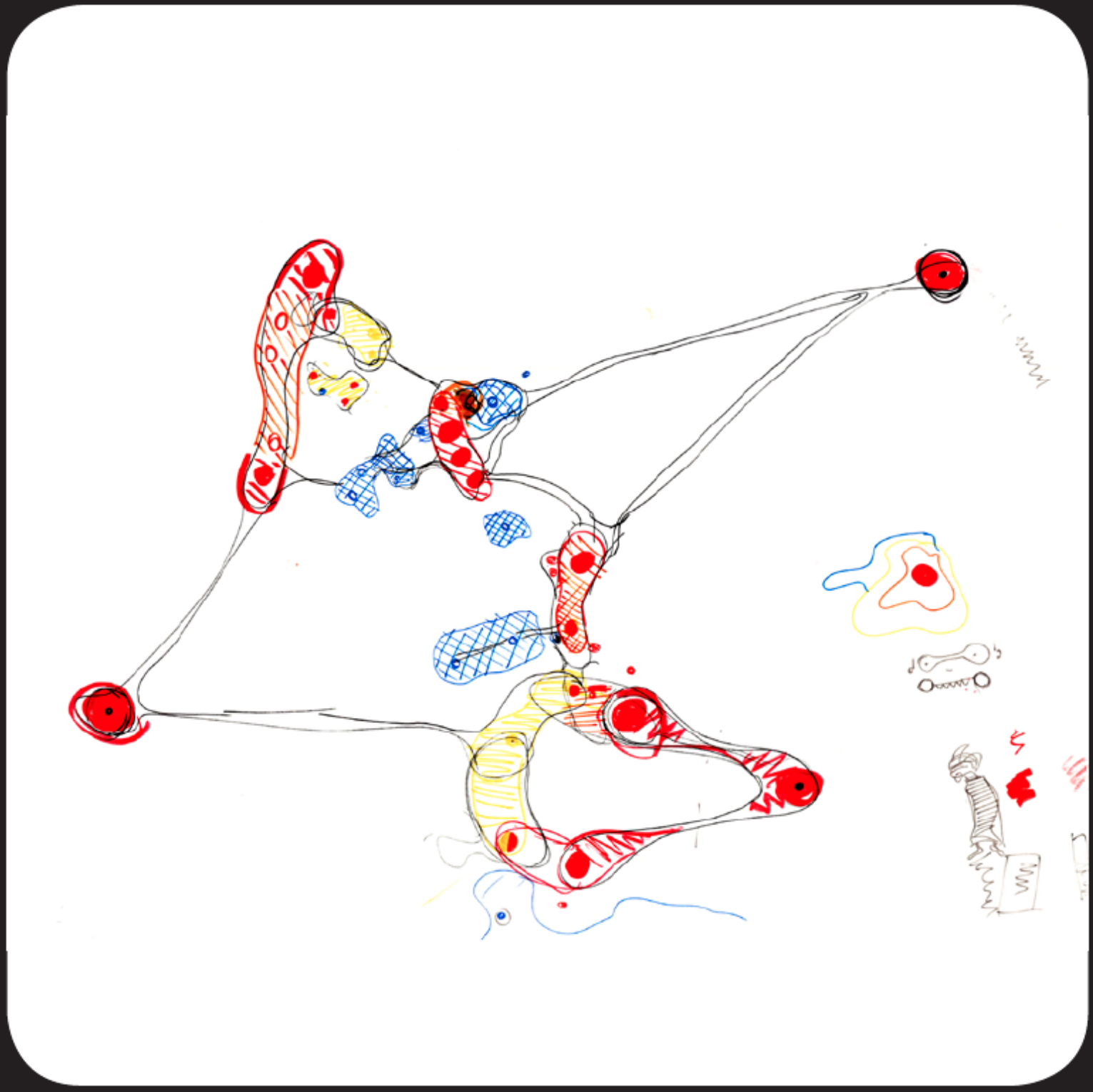

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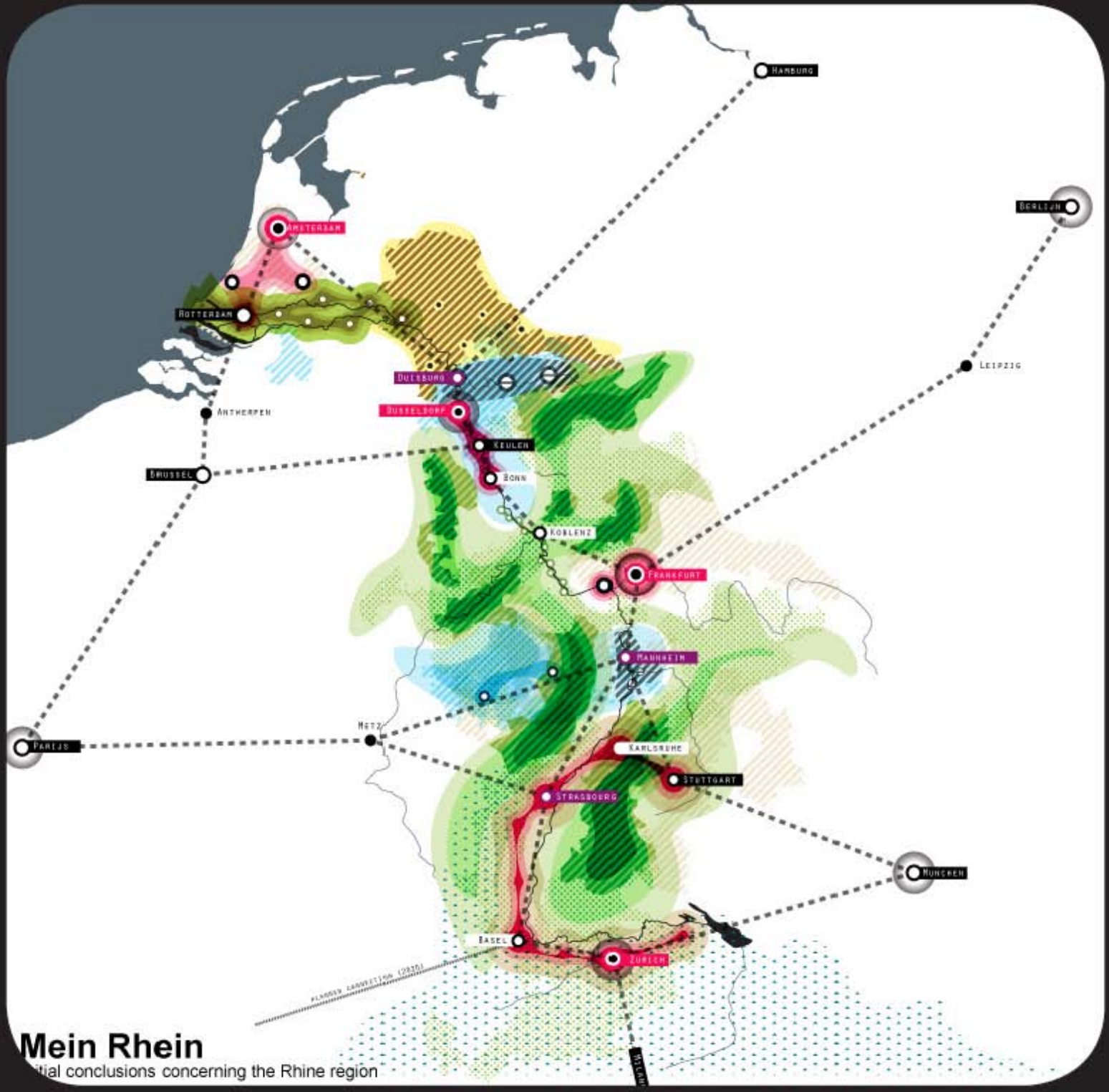

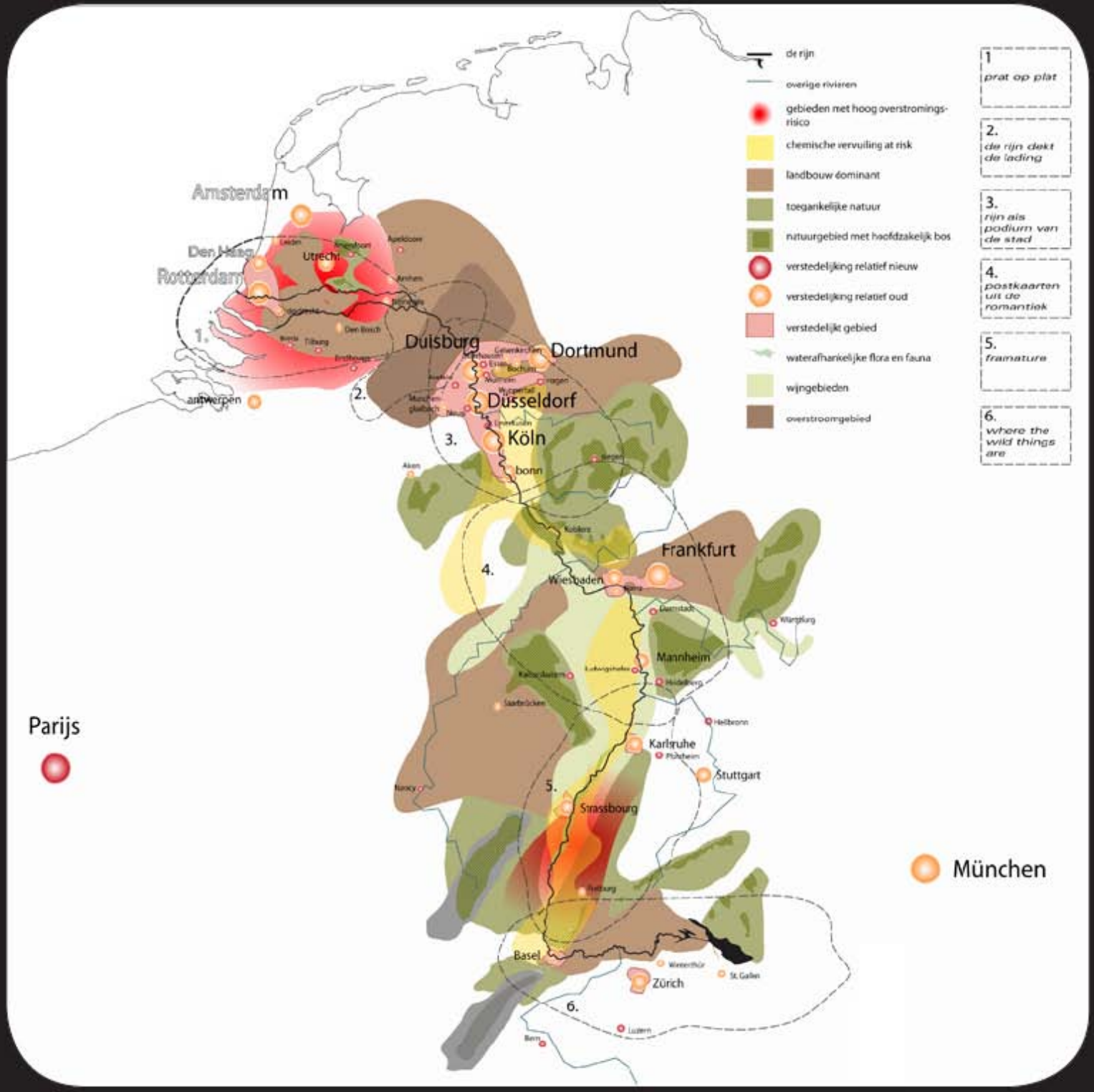

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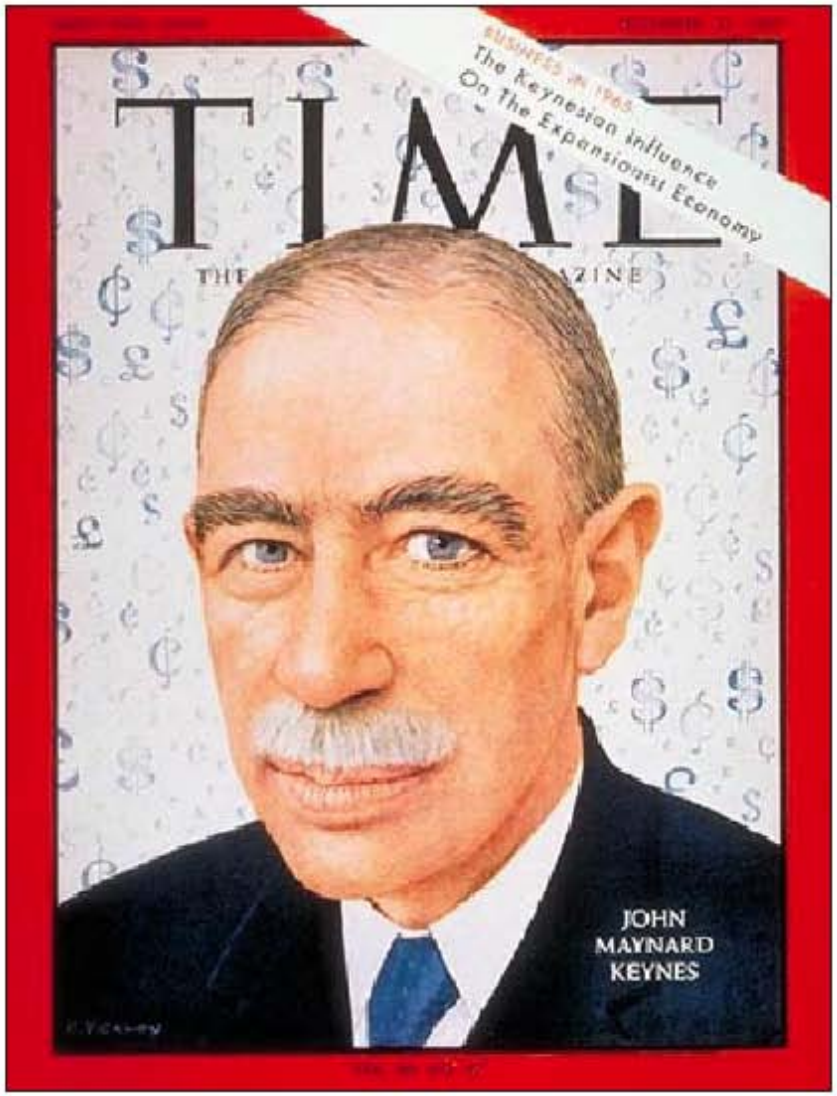
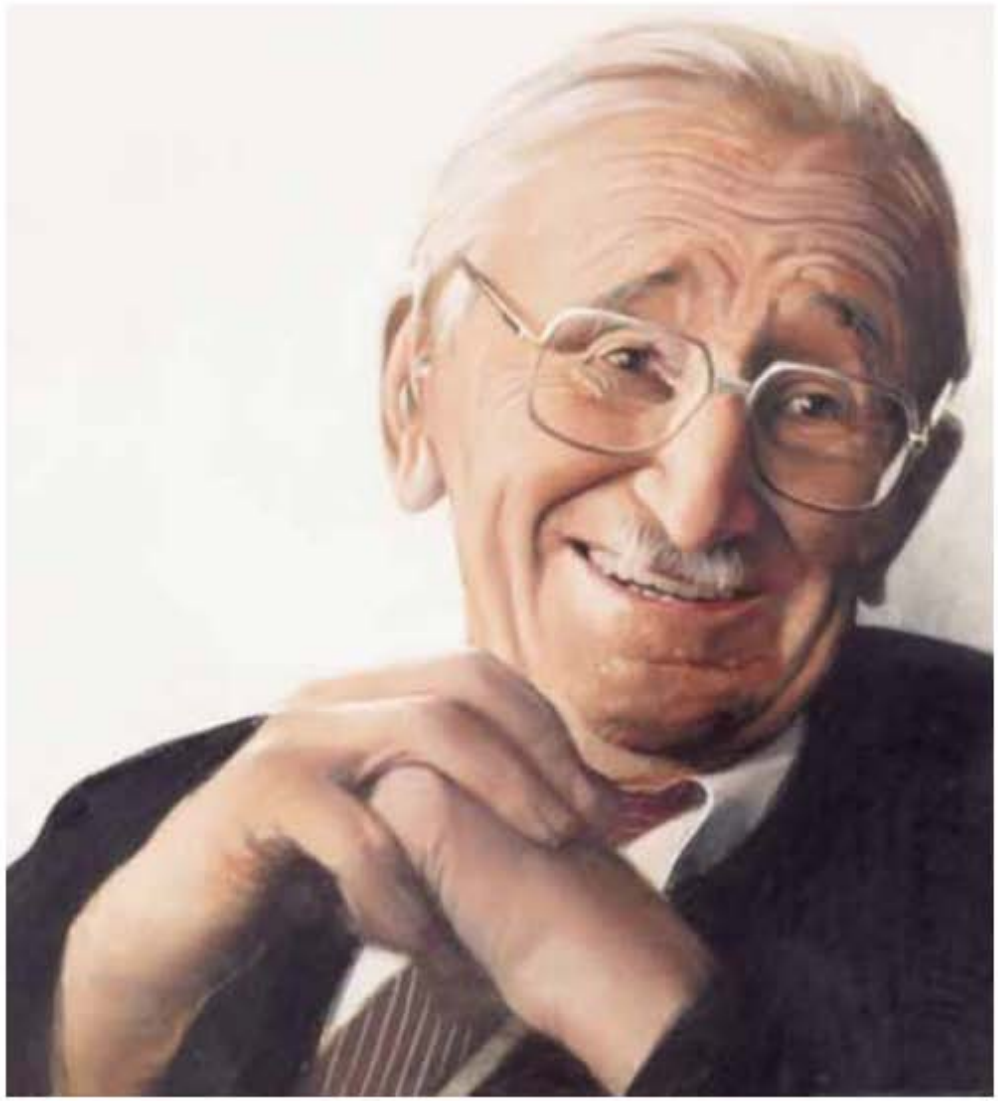
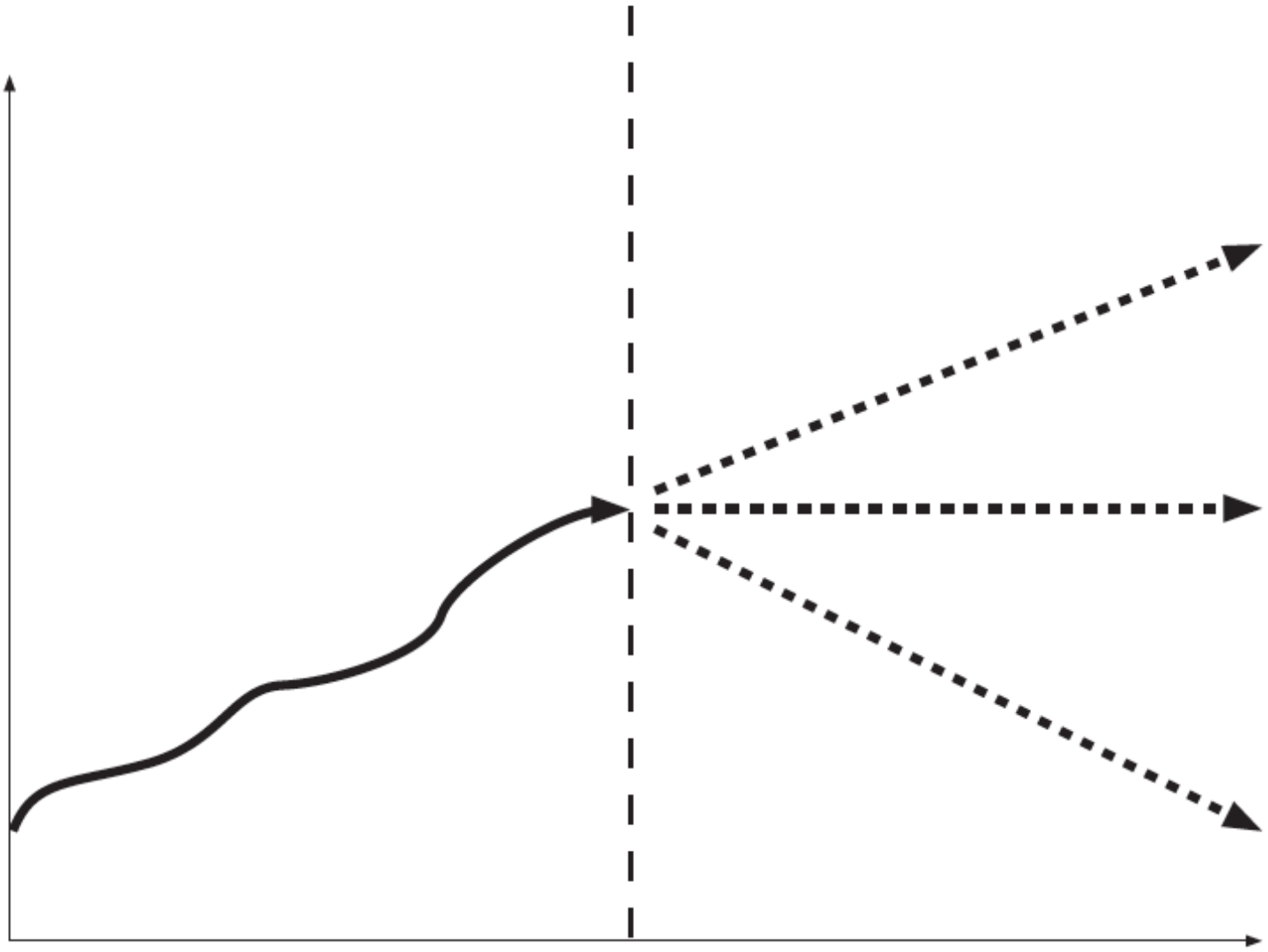
discourse on future is not a matter of ideology



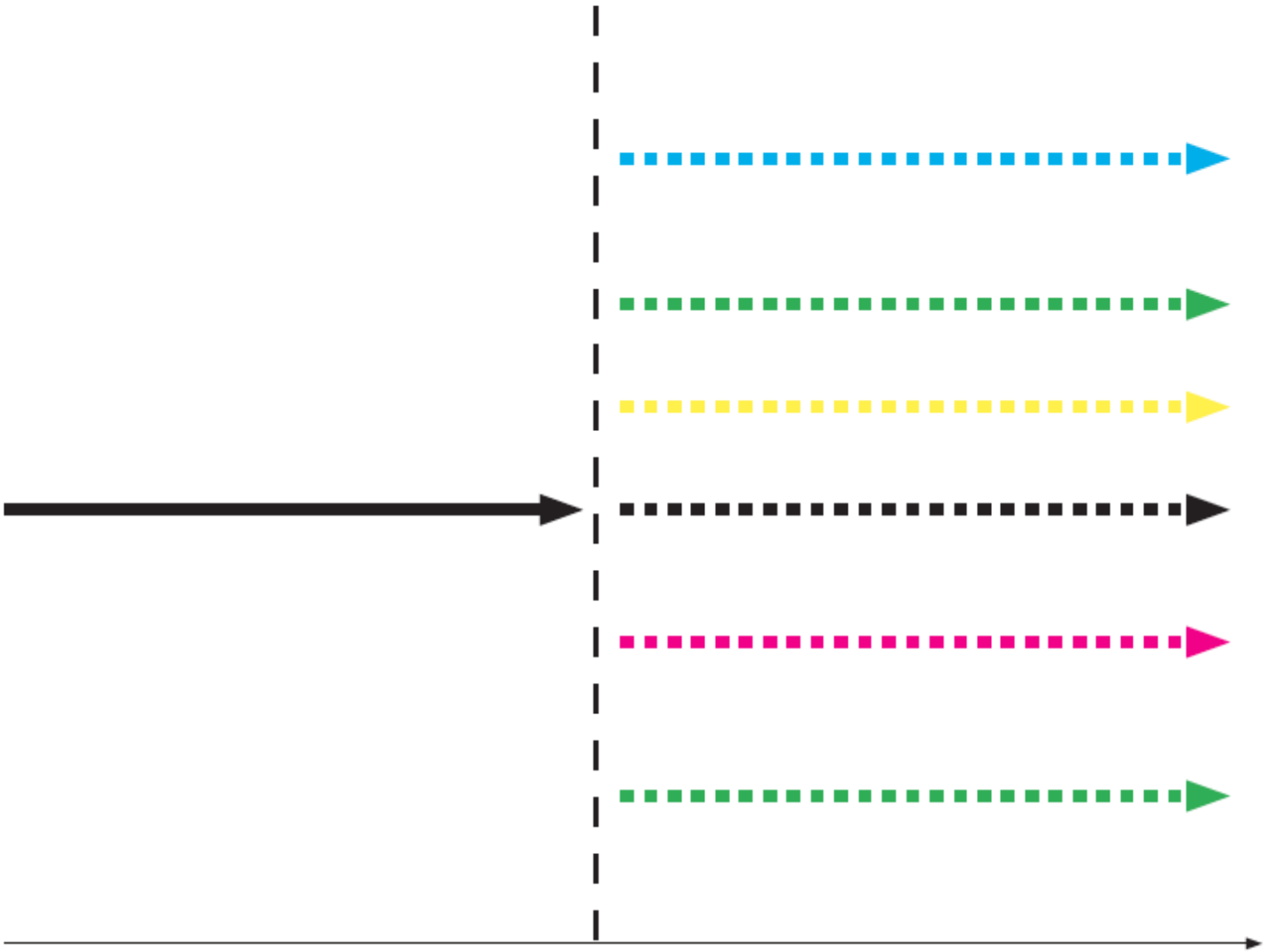


beyond plan b

Scenarios on quantity



Scenarios on quality



3 scales

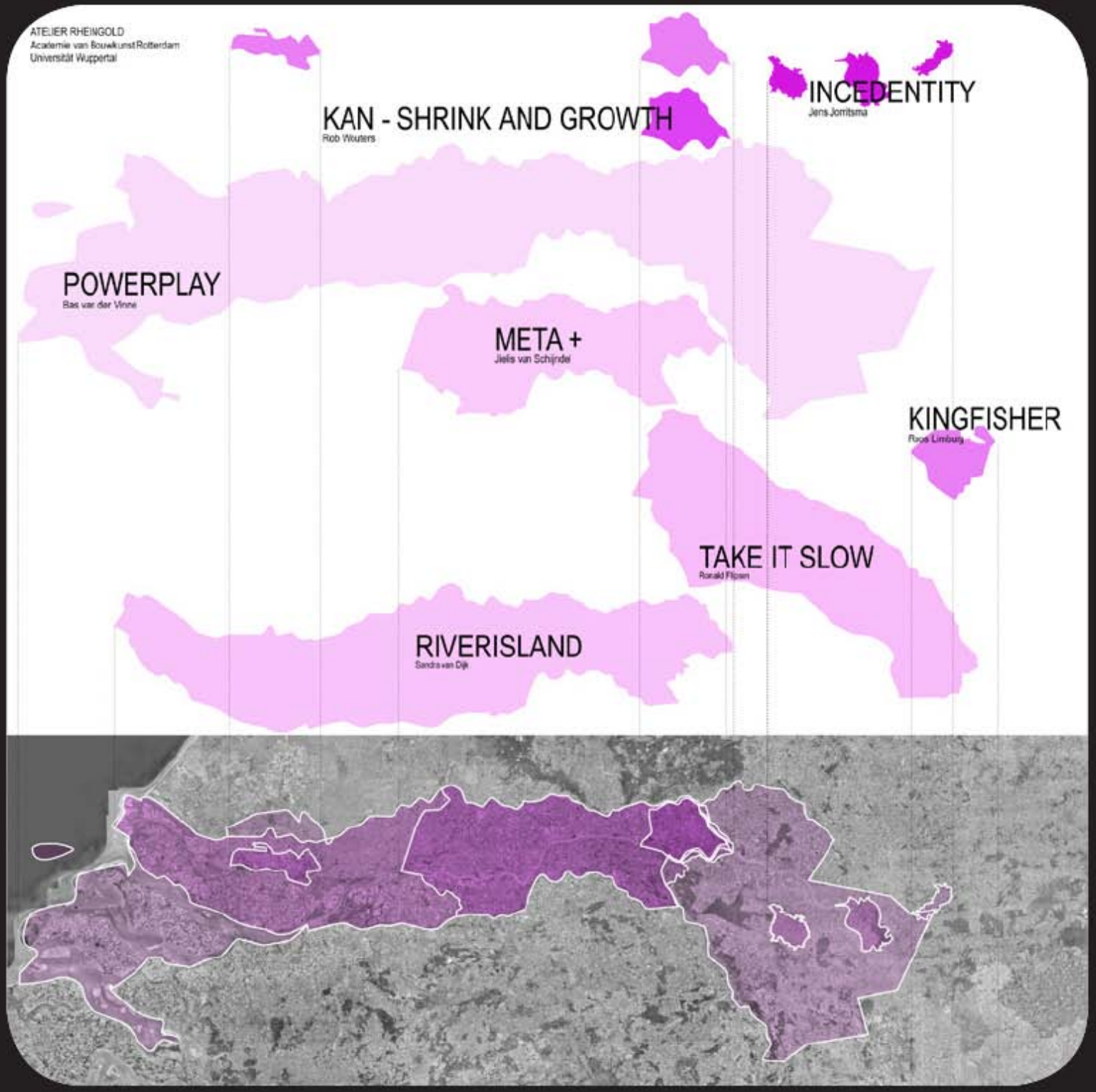
_River

_Regional strategies

_local projects

Die Furkationszone des südlichen Oberrheins: „Blick vom Isensteiner Klotz rheinaufwärts gegen Basel".
Ölgemälde von Peter Birman (1758-1844). Der Rhein hatte 1600 Inseln zwischen Basel und Straßburg.

Peter Birmann (um 1820), Kunstmuseum Basel. Quelle: http://de.wikipedia.org/wiki/Peter_Birmann



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NIEDERRHEIN INCIDENTITY

JENS JORRITSMA

Niederrhein Region

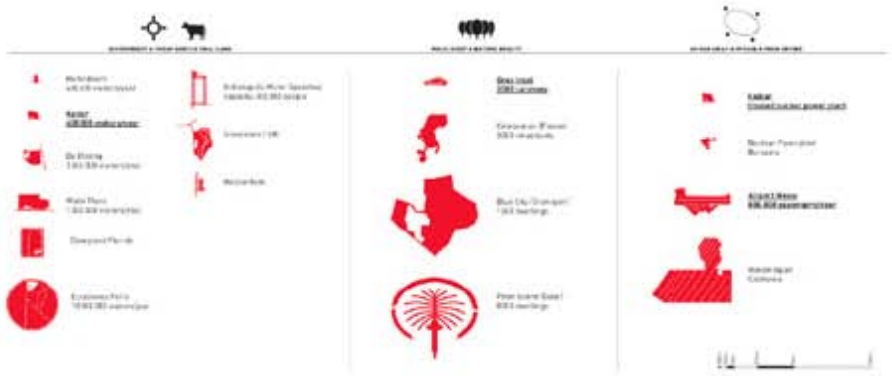
The Niederrhein region (in between Ruhrgebiet and Arnhem-Nijmegen) seems to be lacking a clear identity. What charcterizes this region is the fact that it is used mosty for agricultural use and it has a high 'incident potential'.

Incident typology

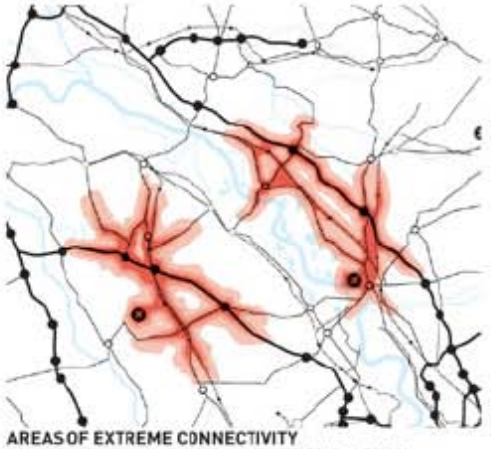
By analysing different incidents around the world, a set of 4 incident-elements were desribed: areas of extreme connectivity, areas of remoteness, areas of agricultural (cheap) land use and areas of natural beauty.

Niederrhein incidentity

A map of potentials -an overlay of all of the 4 elements- resulted in three different areas that could provide the Niederrhein the identity it lacks. The first project 'Access rest' was described as a preserved agricultural park, well connected to the urban areas and a place to bring the Niederrhein farmer closer to the people. The second project focusses on bringing the Rhine closer, with a high dose of natural beauty. The 'Energynaturpark' is a remote area that could be transformed into a high-tech energypark, giving the people access to both nature and giving place to sustainable energy.



INCIDENTS AROUND THE WORLD

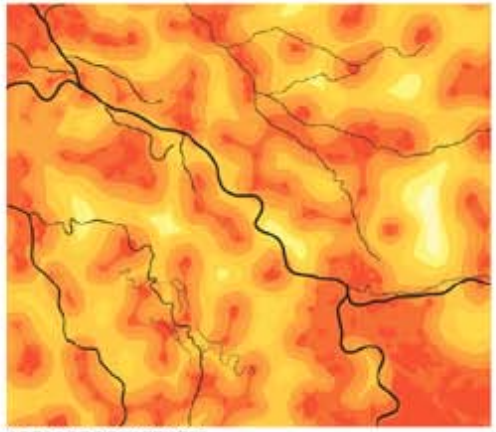


AREAS OF EXTREME CONNECTIVITY

HIGHWAY EXITS, REGIONAL INTERSECTIONS, TRAINSTATIONS & AIRPORTS

AREAS OF NATURAL BEAUTY

NATIONAL PARKS, NATURE PARKS & RIVERSTREAMS

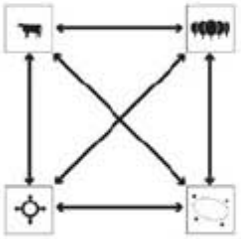


AREAS OF REMOTENESS

AS FAR AWAY AS POSSIBLE FROM BUILT ENVIRONMENT

AGRICULTURAL LANDUSE

LARGEST UNINTERRUPTED AGRICULTURAL ZONES



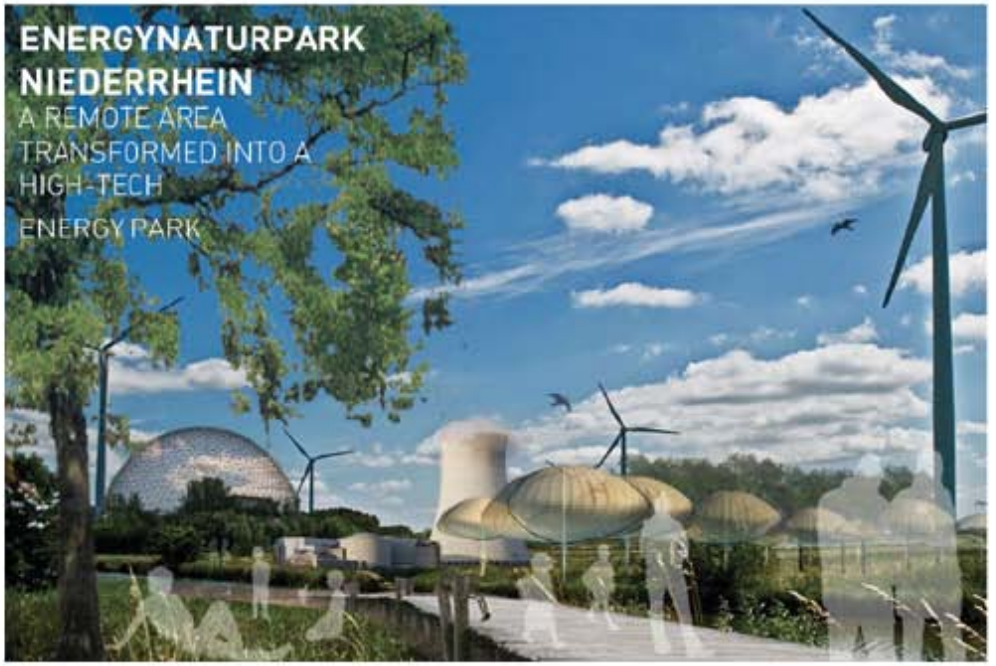
COMBINING INCIDENT ELEMENTS

MAP OF POTENTIALS SHOWING AN OVERLAY OF THE FOUR ELEMENTS.

03. ENERGYNATURPARK NIEDERRHEIN

THIS AREA JUST SOUTH OF BOCHOLT COULD PROVIDE THE NIEDERRHEIN AN OPPORTUNITY TO PRESENT ITSELF AS A REGION THAT ENCOURAGES RESEARCH ON AND USAGE OF SUSTAINABLE ENERGY.

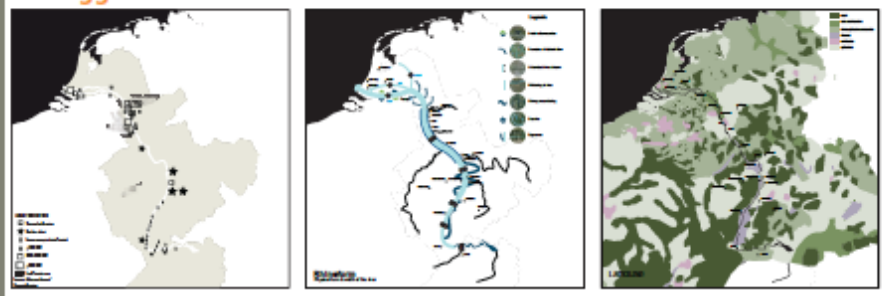
Amidst the Naturpark Hohe Mark lies a scattered structure of natural beauty combined with mainly agricultural land. Far away from built environment and providing lots of space for a sustainable experiment. Similar to the highly succesful Emscher Park, but instead of adding park, build a high tech experimental landscape within the existing park. Even a failed experiment could prove to be succesful. Imagine huge abandoned windmills, algae testing facilities and biodomes aging in between a forest environment.



POWER PLAY FIELD

atelier Rheingold

the bigger scale



The Rhine is in many ways an important backbone for Europe. The river is important in a logistic way, but also in energyproduction.

The Rhine vallley is a concatenation of different landscapes and ways of producing energy.

These production forms often are linked to environmental conditions.
In this perspective the Rhine valley is one big battery of different types of energy. It would be interesting to investigate if the Rhine-battery is able to answer our future energy problems in a sustainable and clean way.

context

energy related to environmental conditions

landscape transformation

thesis ; a regional approach is the solution to a sustainable way of energyproduction

Traditionally, we think about energy in a global way. Big power stations are build to provide a whole nation of energy. This project shows the potential of a regional approach.
By analizing local qualities and local elements, we can determine the energyvalue of a region.
The site has a rich diversity of elements that can be used in the production of eergy.
The area is 600.000 hectares with 3.2 million inhabitants.

The project shows a spatial model for using local potence in the energyproduction. It also shows spatial interventions in order to improve the energyvalue of the area.

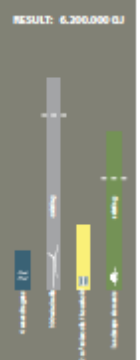
spatial and environmental conditions

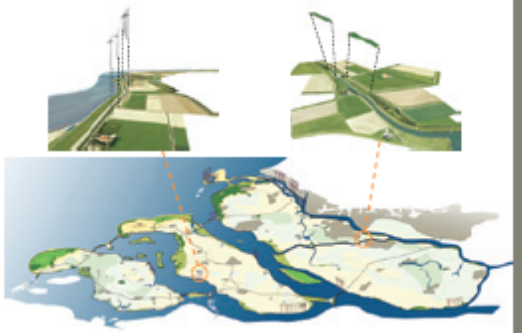
site : 600.000 ha
inhabitants : 3.200.000
necessary energy : 18.000.000 GJ

power station	CO2 emission	spatial impact
coal power plant		
gas power plant		
nuclear power plant		
solar cells		
hydroelectric power station		
energyisland		
wavedragon		
windmill		
biovintage		
landscape elements		1,9 x

spatial and environmental impact of using one type of energy production for 18.000.000 GJ

small interventions; wind, water, vegetation

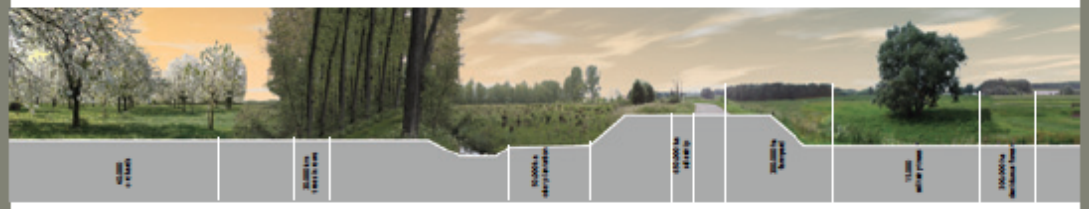


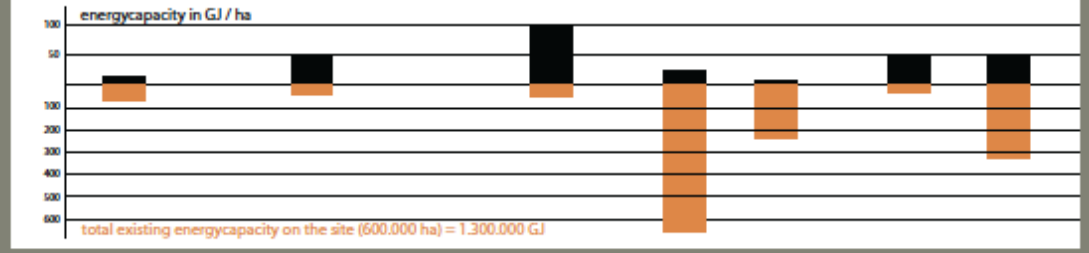


Simply by maintaining the landscape we can produce energy. The rest-materials of green landscape elements can be used in bio-power stations. Each landscapeelement has a certain energyvalue. For example; the bearing wood of an oiser plantation has an energyvalue of 105 GJ/ha.

By analizing the region, we can conclude that there are lots of opportunities to strengthen the energetic value of the site. One windmill is a weak landscape element and gives a beautifull landscape a restless appearance. A row of windmills can give strong perspectives an extra accent.

With small interventions, the energyvalue of landscape can grow with a factor of 1.5. The interventions are done by emphazising cultural-historical lines and landscape structures. The result of adding green elements on well chosen location can strengthen the identity of the area. On littered locations green elements can improve the quality of the environment. Increasing the quality of the landscape will also uplift the social bea-ring surface for these typical landscapes. Regions can profit from these interventions. Adding quality also gives the region a higher recreational value.





energyisland; production and storage

osier plantation

energy vintage area

The plan contains 3 large interventions. The first one is an energyisland in the Northsea. This island contains 350 windmills and also has the abbility to store energy by pumping water out of a big lake (off peak situation) and hydraulic produce energy by letting water in (high demand).

The second intervention is a large osier plantation between Rotterdam and the Biesbosch. The lower wet ground is perfect for osier. By maintaining the characteristic landscape structure, it can be a beautifull transition area between the Biesbosch and the Alblasserwaard.

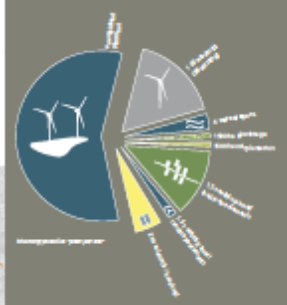
The third intervention is nearby Kleve. An existing windmill-park is transferred into an energy landscape with biovintage and productionwood. By surrounding the hilly area with productionwood, the energyroom has straigt borders and can be changed into a closed experimental garden.

CONCLUSION

Total Needed: 16.6 million GJ equals 1 coal power plant; 18 million GJ

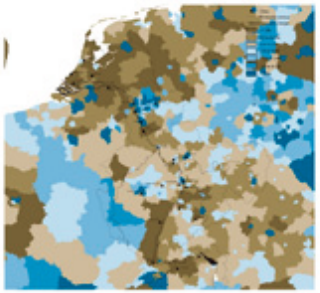
Total CO2 reduction: 2.5 million kg

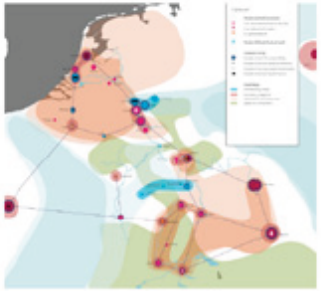
CO2 emission of 1 coal power plant: 2.2 million kg

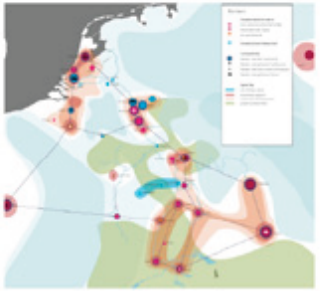


further optimalisation and future innovations can lead to a succesfull sustainable energy strategy by using a regional approach !

In-between land strategy







THE BIGGER PICTURE

The Rhine valley is a very dynamic region, The urban networks surrounding the river vary from very dense and polycentric in the North-west, to very open including large monocentric cities in the South-east.

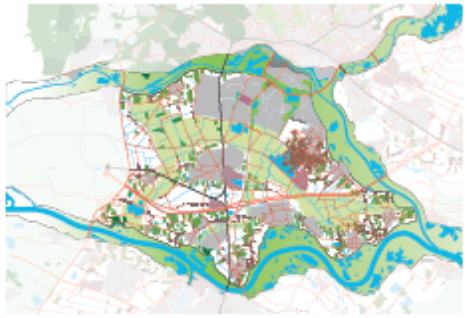
Looking at the population change over the last decades, there is a urbanization shift recognizable on a national level and on the regional level, where industrialized cities of the past that have lost their function. In these regional areas, shrinkage is commonly found between the two metropolitan areas.

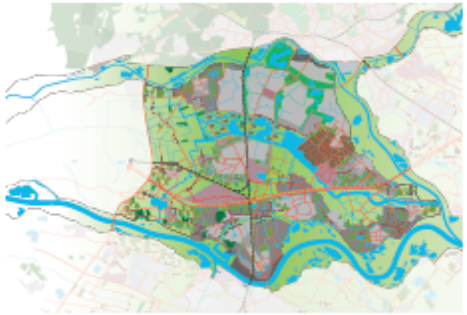
Shown in the map at the right side of the panel, the conclusions of the former maps are added into a clear picture. An interesting question is as follows: What will the future of the Rhine valley look like and what factors will be of influence in the changing position of cities in the West-European network?

We are currently experiencing a decrease of population growth and it is assumed that this development will continue. Under these circumstances, cities will look for a differentiated position and will brand their unique qualities even more, in order to maintain their position. Consequently, the fierce competition between cities will lead to even bigger differences among each other. Especially decentralized cities will suffer from this competition. Looking at the Netherlands, the position of the KAN region (Arnhem/Nijmegen) could be at stake.

KAN REGIONAL BRANDING AND QUALITIES

The two cities of the KAN, fully exploit it's agricultural resources, and use the natural hillscape for their city branding. Lately the cities started to join forces and urbanize the in-between land with regular housing. Furthermore they try to strengthen their regional economy they aim at devopment of a creative economy. This is where it goes wrong, because the in-between lands qualities are not being used and the ' creative economy' is not competitive at all; multinationals are leaving.





IN-BETWEEN LAND IMPORTANCE

In order to strengthen it's position the in-between land should be redefined to it's qualities. By creating a living environment unique in the Netherlands the cities competitiveness will grow. No matter what the upcoming population development will be, the region should use it to enforce it's ecological diversity. When the region keeps on growing, large scale landscape transformations should be reserved and implemented. If the population starts to drop it should be used to strengthen the competitiveness of the allready existing and homogenous urban area's.

TOOLS TO ACCOMPLISH TRANSFORMATION

The used tools can be best described as stated here to the left:

- Using relatively small measures to improve the current island cities and it's connectivity to the main-city of Arnhem
- Bringing an extra river through the island creates waterfront potential at the Lek and the Waal, and gives another totally different image of the city at the new river since this is fully regulated and not functional for shipping.
- Bundeling of logistics between the current infralines and glasshouses to the regional agriculture market to maintain local identity and create large scale landscape contrasts.
- A more clear organization of occupation: A ring of villages connected by fields of orchards and an open new riverlandscape.
- Using and strengthening of local qualities to create a stronger local image per village. For example creation of new country estate nearby oosterhout.

Lessons learned from ‚studio rheingold' 1(3)

_one can deal with the scale of the entire rhine

_look at possible future perspectives and define tasks and goals

_combine data from different sectores to visualize and show cohesion

_use different angles to describe and develop possible scenario's

Lessons learned from ‚studio rheingold' 2 (3)

_define comparable zones which are task-related - and not driven by policy-borders

_there are many rhines

_create a free-zone to work in and use the power of simplification - unsharpenes - and exhile-ration to generate new insights

Lessons learned from ‚studio rheingold' 3 (3)

_define strategic projects

_don't put everything in one map (as there are many rhines..)

_preparation and structure are necessary to create freedom and focus on content

_act open and invate people - experts - stakeholders - inhabitants - everyone interested is welcome

starting point

_usage of non-sectoral images of the rhine about the driving forces and dynamics of the river

_yes, it is the economy - yes it is about innovation and added value

_link it with the european idea of identity and territorial cohesion

_The whole is bigger than the sum of its parts if projects can define common goals.

_common interest on different scales is within the synergie of strategies and projects

Exploring

a possible working structure with a coalition of partners as an open planning system

_it is not about the ‚beter plan' or setting up a masterplan

_task to build up common and cross-border pool of knowlegde and databases

_start small think big ?