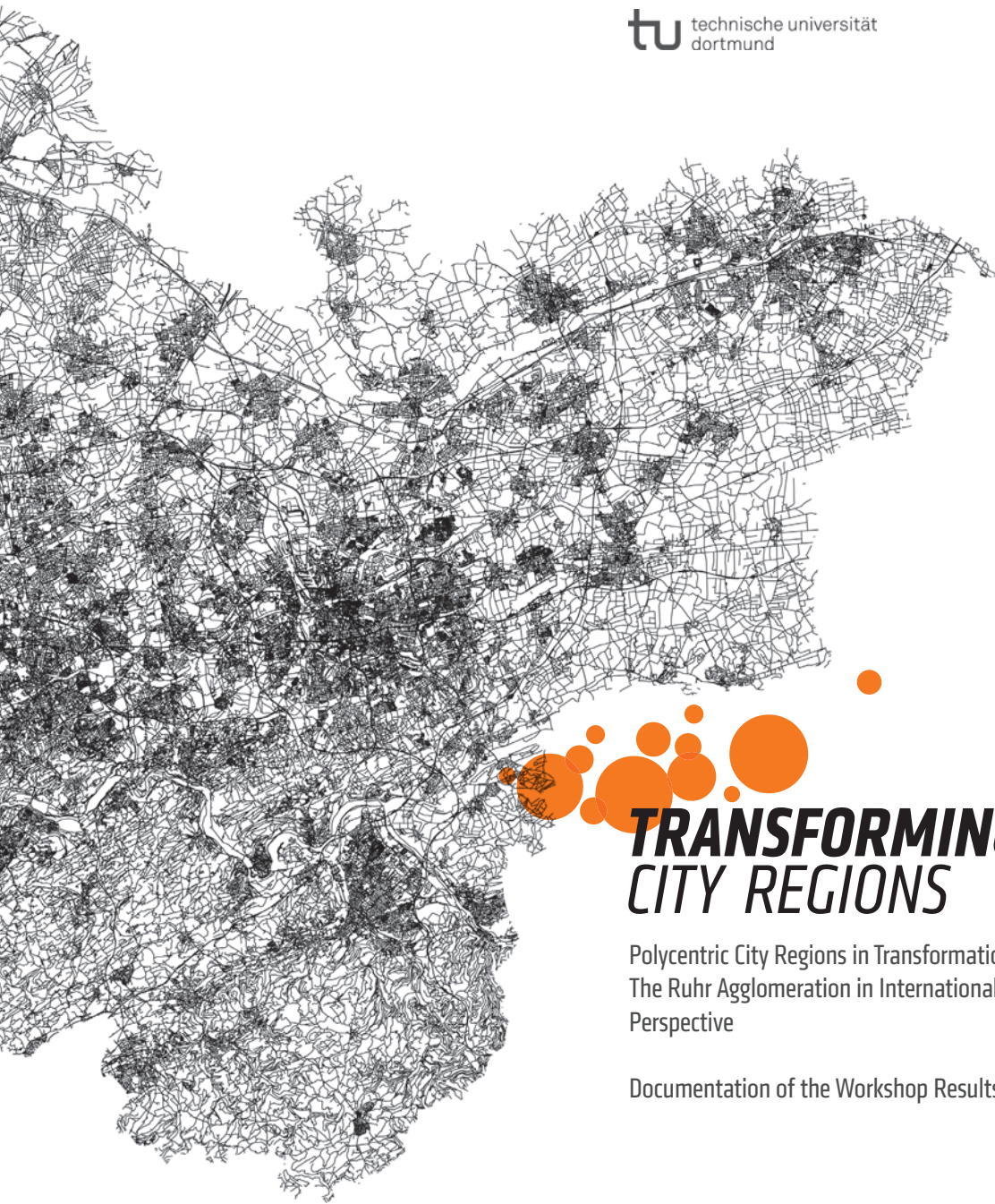


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tu technische universität  
dortmund

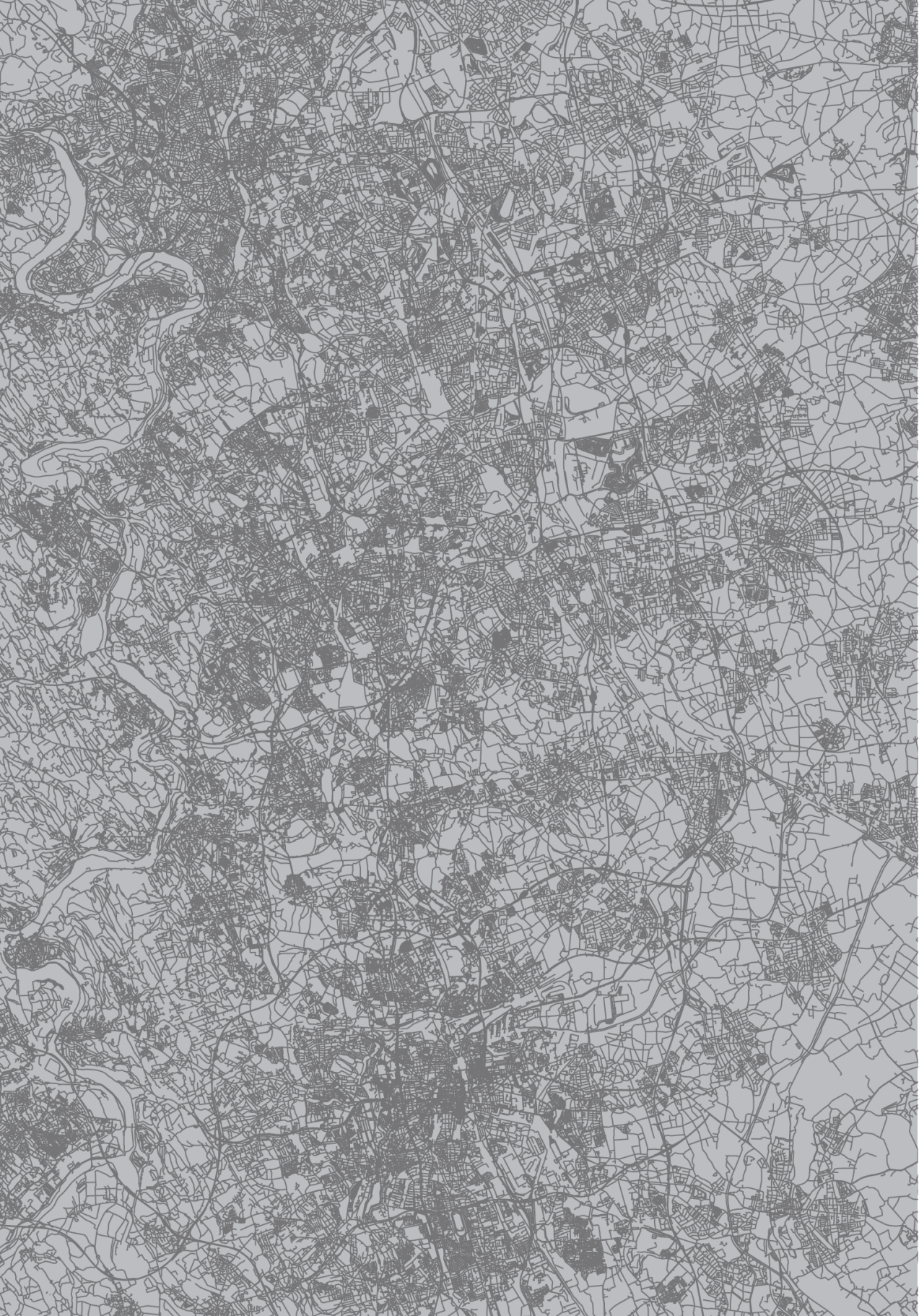


# ***TRANSFORMING CITY REGIONS***

Polycentric City Regions in Transformation –  
The Ruhr Agglomeration in International  
Perspective

Documentation of the Workshop Results

[www.transforming-city-regions.com](http://www.transforming-city-regions.com)



# PREFACE

Today, city networks are seen as a promising model for contemporary and future urbanization processes. What might seem empirically and theoretically convincing, however, poses a number of practical questions: how can such large-scale urban landscapes be designed, according to which principles and with which means should urban design take place at the regional level and by incorporating the landscape? The Ruhr region, with its 53 cities and its infrastructure network stemming from its industrial heritage, appears to be especially predestined for such questions – and not only because the new Regional Plan brings with it the need to test out new approaches to designing regional urban spaces.

For more than a decade, the research at the Department of Urban Design and Land Use Planning at TU Dortmund University has dealt with the ongoing structural change and continuing transformation processes in the Ruhr agglomeration. Even though many strategies and formats have been tested and applied – such as the first regional International Building Exhibition (IBA) Emscher Park – the pressure to revitalize is still present and the necessity for ongoing renewal is dominating the discussion.

An international comparison and the further exchange between science and practice can be helpful to search for new strategies. We are looking for ways to bring scientists and planners together to reach the following goals:



- // Raising and focusing the level of knowledge of regional transformation processes in post-industrial areas within an international comparative action.
- // Raising the awareness of possible conflicts and barriers that might occur in polycentric areas and questioning whether they are at all suited for sustainable development.
- // Expanding the network “Ruhr 2020+. Hochschulen und Region” to include partners from science and in practice in order to connect their expertise in relevant research projects and prepare them for future collaborations.
- // Enhancing the global perception of the Ruhr agglomeration.

The ongoing research on the topic of transforming city regions is one of our greatest issues for the coming years. The international conference “Transforming City Regions” in June 2015 at the Zollverein world heritage site in Essen is a kind of milestone along our way.

## **For the whole “Transforming City Regions” team**

Christa Reicher

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# 1. MOTIVATION

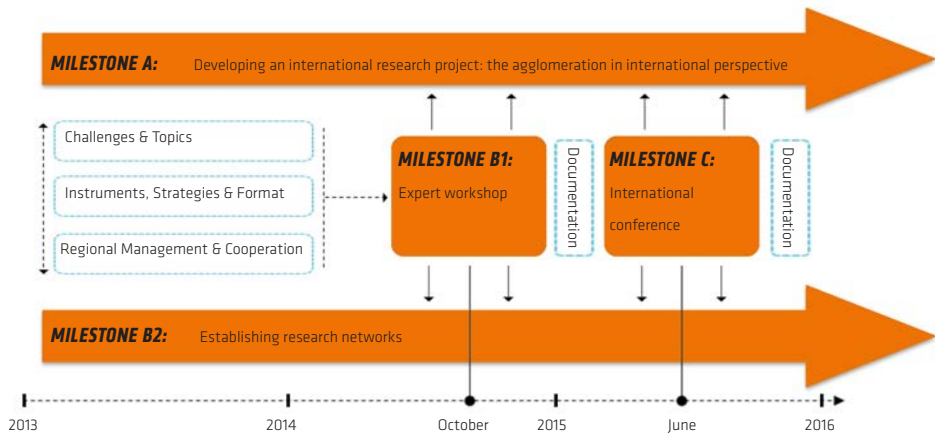
## 1.1 INTRODUCTION

Urban agglomeration in its classical form refers to a highly urbanized area that usually consists of the center of that territory – one or few larger cities and hinterland with towns and rural centers with strong mutual connections. However, many metropolitan regions around the world tend to follow different spatial patterns towards polycentricity, in which no clear distinct center can be identified. Therefore, polycentric urban development is gaining more attention in contemporary spatial development research and is considered one of the key elements of spatial development and policy in Europe as well as many other urbanized regions all over the world.

In urban and spatial development studies, polycentricity has been predominantly analyzed and understood from a morphological point of view, and polycentric urban systems have been approached as topographical entities made up of a number of adjacent centers that are located within the same urban system. Traditional concepts of metropolitan regions used to be dominated by a single large city. Today, polycentricity is a diverse concept distinguishing between several forms, as processes of suburbanisation and metropolitanisation resulted in a more dispersed settlement structure with growing secondary cities. Recently, research has increasingly focused on functional polycentricity (e.g., Hall & Pain 2006; Green 2007; de Goei et al. 2010; Burger & Meijers 2012; Vasanen 2012).

The spatial phenomenon of both physical and functional polycentric development has been strongly evident in the Ruhr region since the end of the 19th century. The metropolitan region has formed the spatiality of the area according to the locations of coal mining and steel production. Until today, the spatiality of the Ruhr Region reflects what were once emerging towns with industrial demands. Today, the Ruhr region's economy is widely independent from mining. Besides the specific challenges caused by this structural change, the region is dealing with spatial and functional management topics similar to any other polycentric metropolitan region.

This report tackles the polycentricity phenomenon in the Ruhr and in other five metropolitan regions that were investigated at a two-day expert workshop entitled “Polycentric City Regions in Transformation – The Ruhr Agglomeration in International Perspective”. In addition to the Ruhr region, five metropolitan areas were presented, understood and analyzed at this workshop, which is part of the Ruhr Urbanism Research Project carried out by the department of Urban Design and Land Use Planning at the Technical University of Dortmund. At this workshop, the polycentric urban development of the Ruhr region in Germany was addressed in comparison to five other polycentric regions in Europe, the United States and Japan. The Ruhr region was studied and understood in relation to the Detroit Metropolitan Area, the Berlin/



**// FIGURE 1.1**  
Urbanism research project structure and design

Brandenburg Metropolitan Region, Metropolitan Zurich Area, Nord Pas de Calais and the Kansai Metropolitan Area. Based on this, the exchange provides input for the discussion of the spatial planning system, strategies, instruments, formats and challenges in cross-regional comparison. It is one of the initial attempts to initiate a discussion on the Ruhr region's development in and international context, and thus to include it in a process of mutual global learning.

## **1.2 RUHR URBANISM RESEARCH PROJECT**

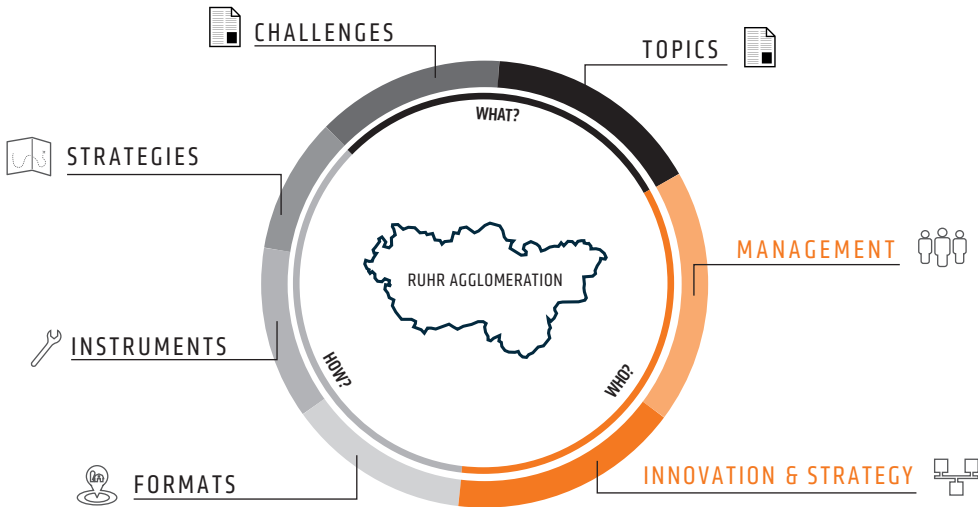
### **1.2.1 RESEARCH MILESTONE A: CHALLENGES, INSTRUMENTS AND PROCESSES**

The process is being conducted as a part of the Ruhr Urbanism Research Project, which started in 2013. It aims to investigate the polycentric-

ity of the Ruhr region in its different facets. Since its beginning, it has been motivated by the question of how to steer sustainable development in the Ruhr region and how to manage its development as a polycentric metropolitan region. To achieve these goals, the project approaches the Ruhr region from an international perspective in order to benefit from successful experiences in other regions. The following questions are being addressed:

#### **1. CHALLENGES AND TOPICS**

- // What are the challenges and topics that each study region is currently facing?
- // What are future challenges?
- // What makes these challenges so important?
- // How have they become the most important current challenges?



**2. INSTRUMENTS, STRATEGIES AND FORMATS**

- // Which instruments, strategies and regional formats exist in these regions and what are their characteristics?
- // How does the region work in terms of scales, density and context?

**3. PROCESSES OF REGIONAL PLANNING AND COOPERATION**

- // How is regional planning and cooperation organized; which institutions and actors are involved?
- // How is participation and communication organized?

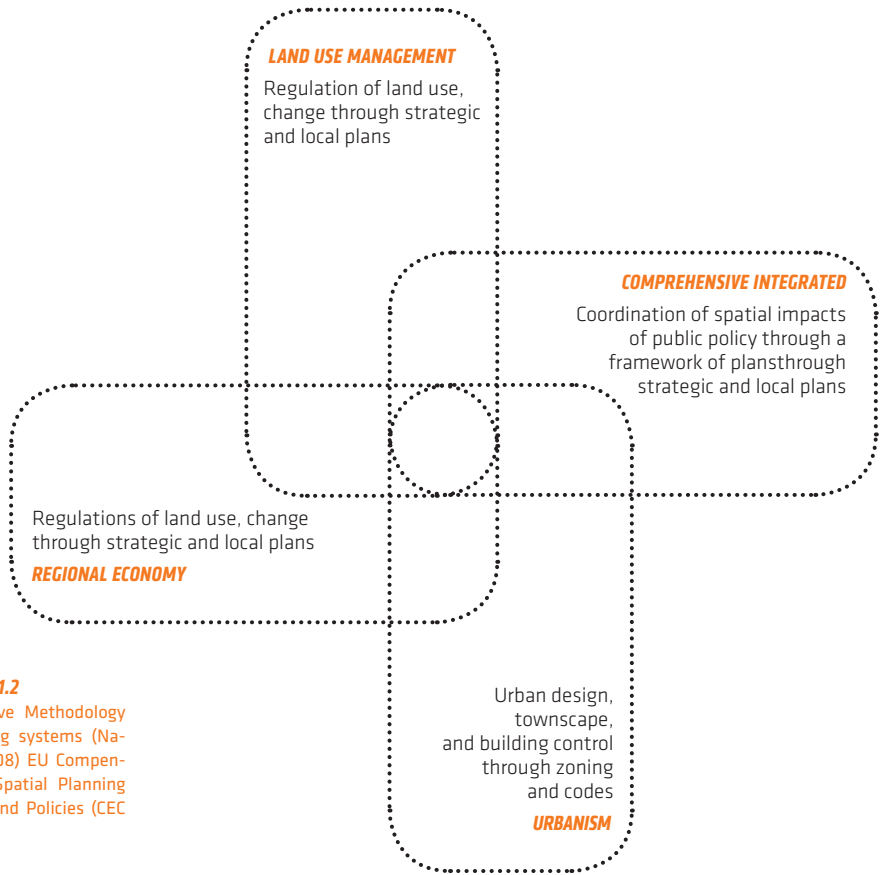
Additionally, the first block of the Urbanism Research Project aims to address the spatial development in the Ruhr region in terms of economic, spatial and social structural change

and development. This has been done through comparing:

- Regions and cities**
- Old identities and new definitions**
- Bottom-up and top-down**
- Regional guardrails and detailed mosaics**

**1.2.2 WHY A CROSS-REGIONAL COMPARISON?**

Cross-regional comparative studies have been preferred and applied by many spatial planning researchers, and especially in the European context (see Newman & Thornley, 1996; Booth et al., 2007; Nadin & Stead, 2008; Reimer et al., 2014). Despite the spatial and governmental differences between the planning systems of different regions, they are all strongly affected by complex relationships of networked cities, fragmented governance and globalized liberal economies (Koresawa & Konvitz 2001, Hea-



**// FIGURE 1.2**  
Comparative Methodology of planning systems (Nadin, V. 2008) EU Compendium of Spatial Planning Systems and Policies (CEC 1997)

ley 2005). Therefore, comparative studies are considered as an influential macrocosmic approach that include international perspectives in order to identify trends – particularly evidence of governance – diffuse ideas by studying the differences and commonalities in the conceived and practiced planning of various regions (Hantrais, 2008 in Duehr, et al., 2010, p. 179). However, most comparative studies of planning systems have focused on legal administrative planning conditions and framework, with less attention being given to many ongoing socio-economic dynamics at the micro level of practice (Reimer et al., 2014).

Therefore, this summary study aims to classify planning typologies for six transforming regions in compression to the Ruhr region,

considering some intangible socio-economic planning aspects that affect the way in which the planning systems in the studied regions operate despite the similarities in institutional spatial planning in some of these complex urban polycentric agglomerations.

This comparative view aims to reach the following goals:

- // To profit from best-practice strategies and instruments that could be adopted from other international polycentric contexts and to reflect these on the Ruhr area.
- // To look for planning instruments and strategies that would enhance the international perception of the Ruhr agglomeration.

### **1.2.3 RESEARCH MILESTONE B1/B2: INTERNATIONAL EXPERT WORKSHOP**

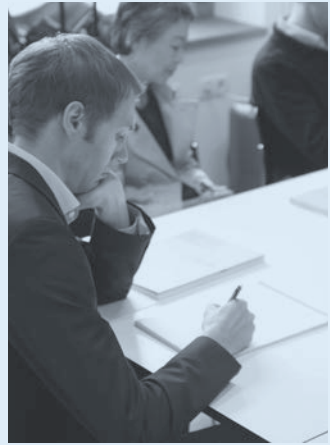
On October 16th–17th 2014, our first International Expert Workshop on “Polycentric City Regions in Transformation – The Ruhr Agglomeration in International Perspective” took place at TU Dortmund. National and international experts from six regions discussed the common challenges, planning instruments, strategies, and their experiences on how to deal with development in these complex spatial structures. The following case studies were involved:

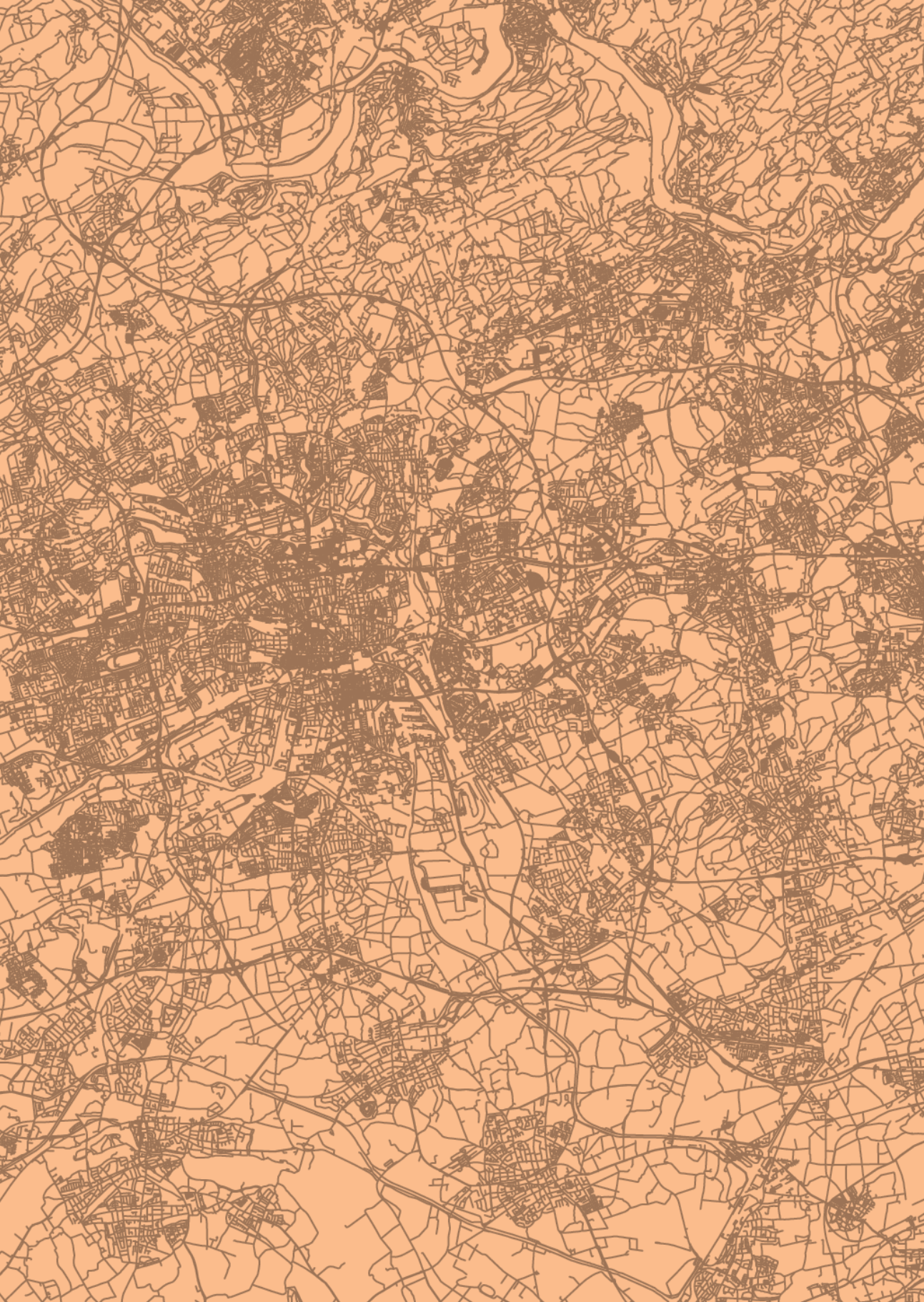
- // The Ruhr Agglomeration, Germany
- // The Detroit Metropolitan Area/ Detroit Metro, USA
- // Kansai Metropolitan Area, Japan
- // The Berlin/Brandenburg Metropolitan Region, Germany
- // Metropolitan Area Zurich, Switzerland
- // Nord-Pas-de-Calais, France

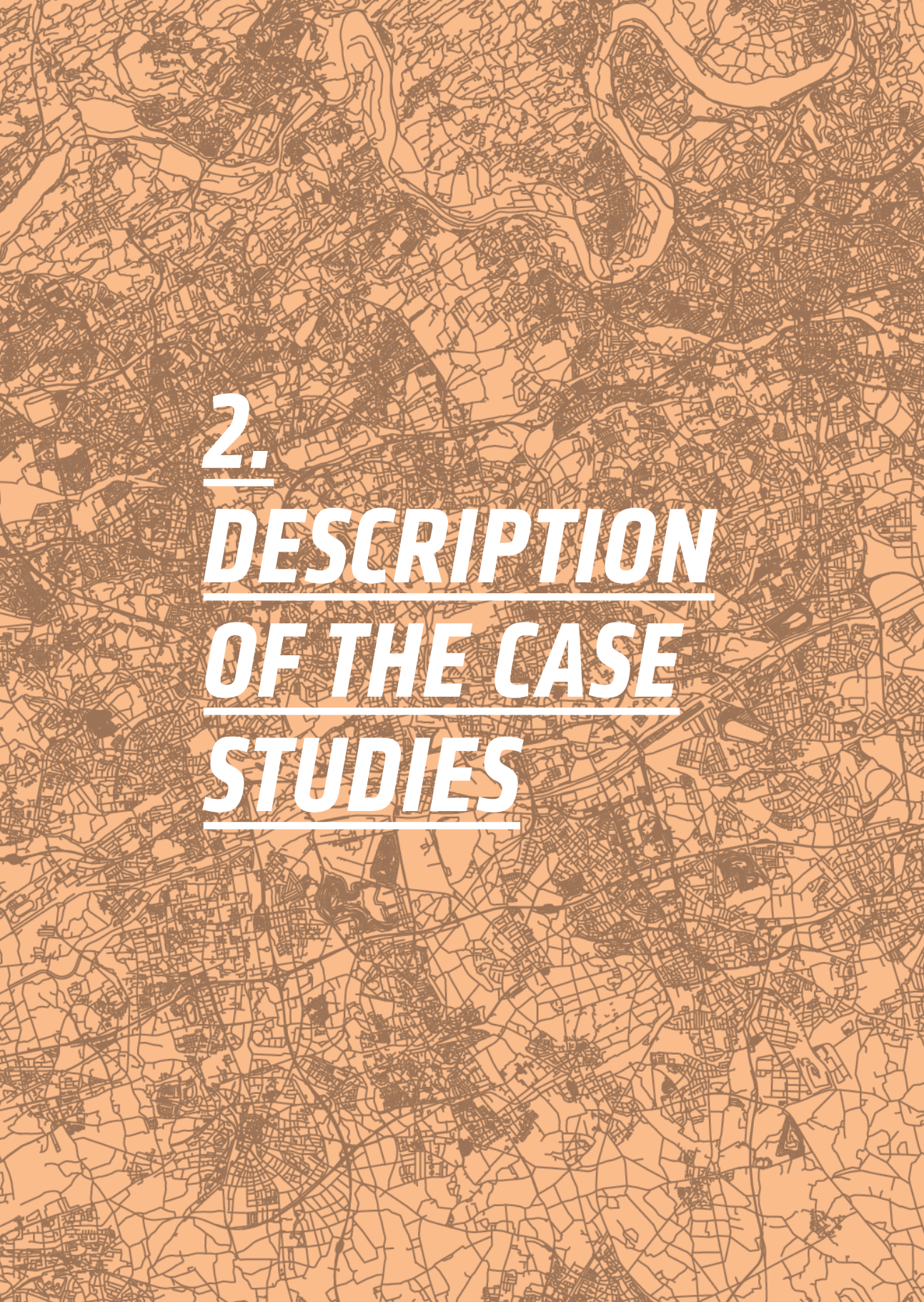
The workshop further aimed to create a so-called Urban Research Network to develop concepts for comparative polycentric region research, to elaborate research cooperation and to prepare the contents for the Ruhr Urbanism Research Project’s third milestone, the conference “Transforming City Regions” on June 11th–13th 2015 in Essen, Germany.

In the two-day workshop, six polycentric regions were introduced and presented, with a special emphasis on the planning system, challenges, instruments, formats and the processes of regional planning and cooperation in each

of these regions. Furthermore, The experts explained the spatial planning hierarchy of their regions and how regional planning, participation and communication are organized and which institutions and actors are involved. In the discussions, similarities and differences between the regions were addressed, and approaches and perspectives to future topics of the network were identified. The participants favor a practical approach to the further exchange on central topics, and emphasized the importance of institutional learning, innovative planning approaches, participation and the legitimization of planning.

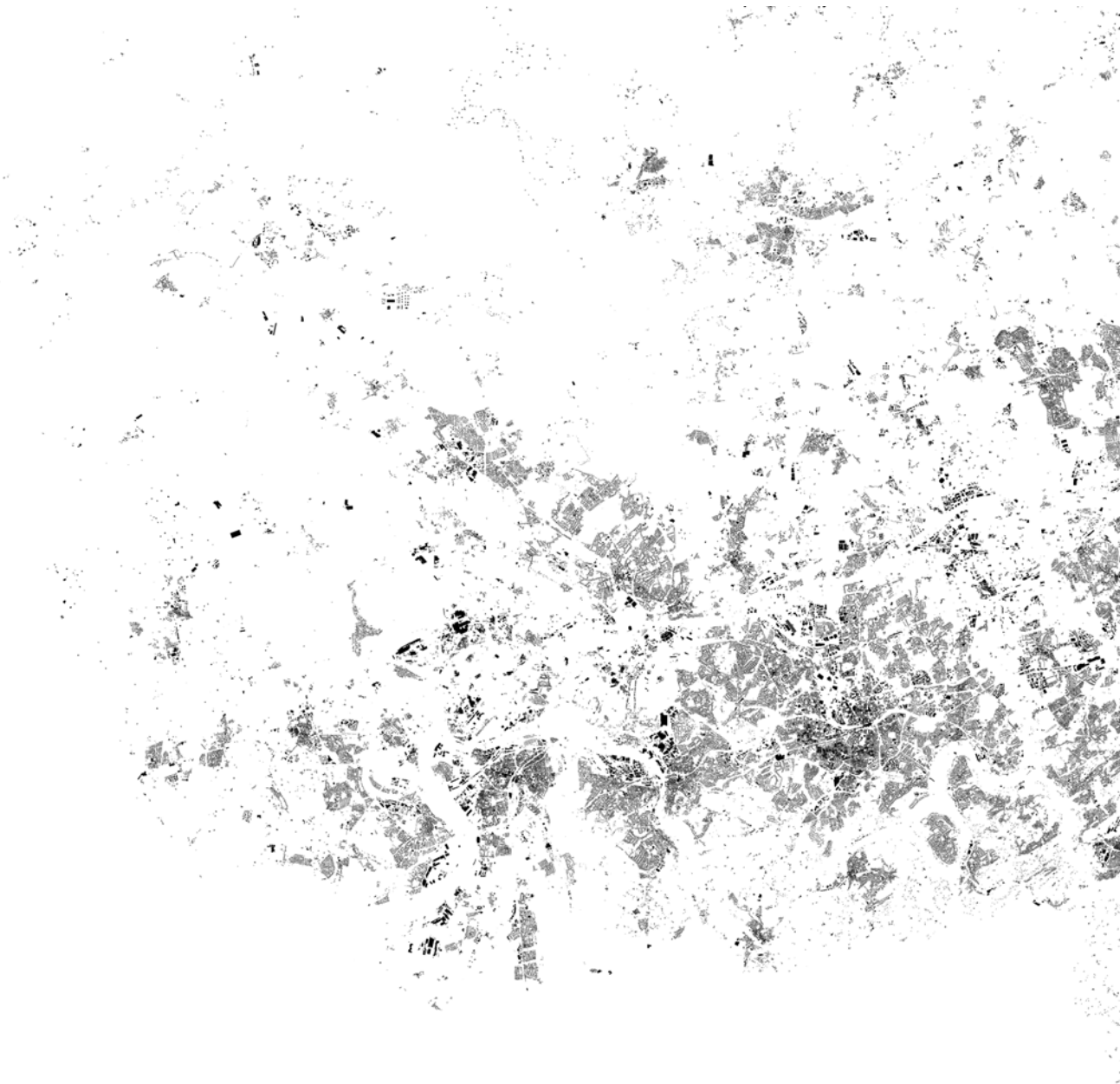


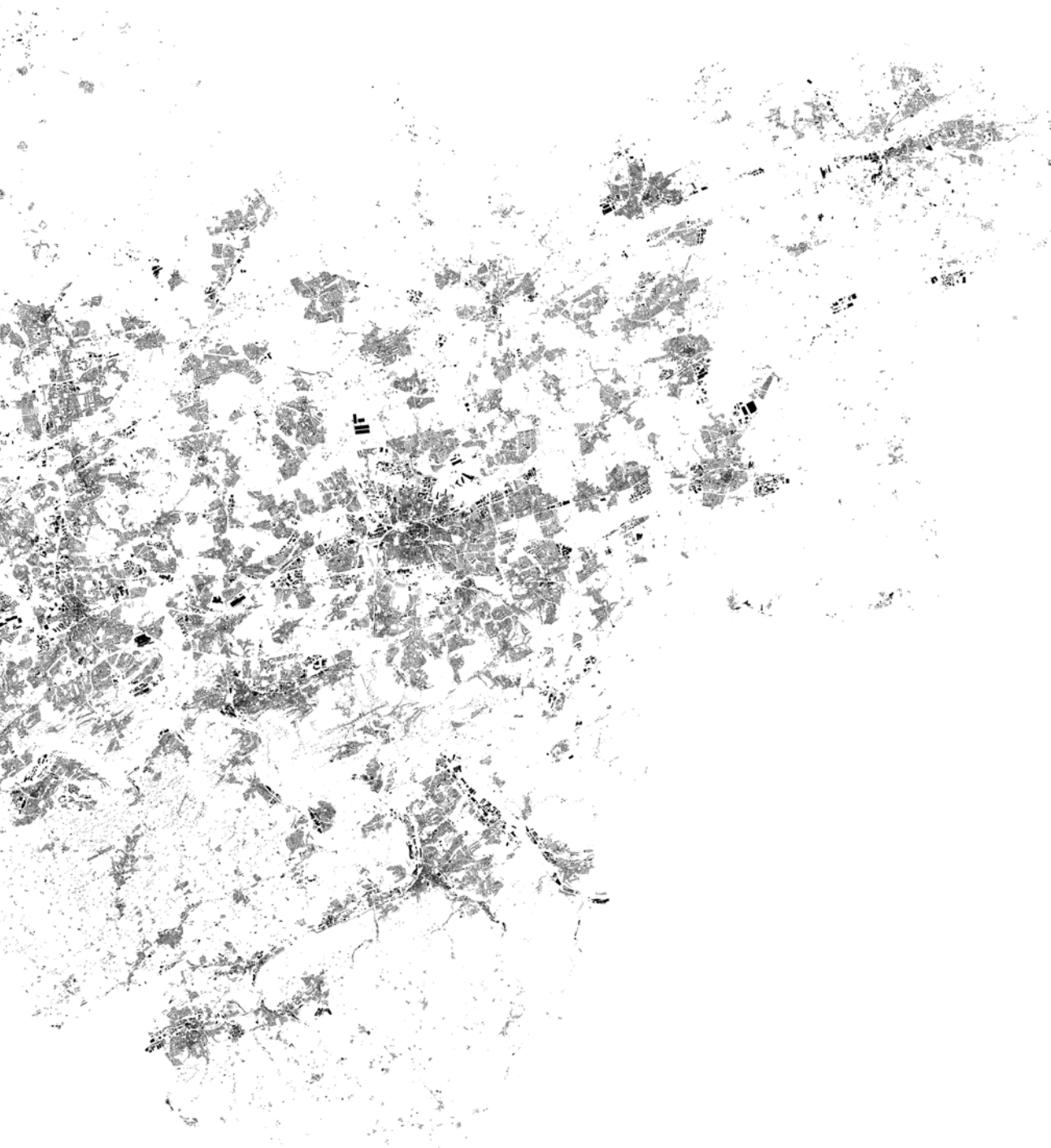




**2.**  
***DESCRIPTION***  
***OF THE CASE***  
***STUDIES***

# **THE RUHR AGGLOMERATION**





## 2.1

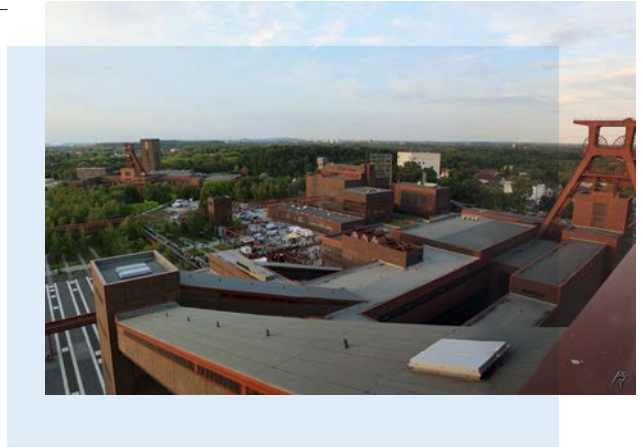
# THE RUHR AGGLOMERATION

*The Agglomeration Ruhr has a polycentric structure without a clear dominant centre. The settlements structure of the Ruhr region. Boroughs, quarters and neighborhoods shape the spatiality of the Ruhr region. The built-up area of the Ruhr region shows how it is difficult to recognize the region's urban centers in comparison to the monocentric city regions in which a dominant center can be distinguished. It is also noticeable how the centers of Duisburg, Bochum and Dortmund are not evidently more compact than the rest of their urban districts. Instead, the population is distributed with an equal density through different parts of the regions. Therefore, the Ruhr region's spatial development is influenced by these small-scale segregated settlements*

### 2.1.1 THE CONTEXT

#### BORDERS & REGIONS

The Ruhr Agglomeration shows a polycentric structure of 53 municipalities, with eleven major cities among them, and without a clear, dominant functional center. It is a highly polycentric region. As a result, many interior borders – both functional and administrative – exist between the different cities. Also typical of the Ruhr agglomeration is the great number of internal fringes which separate particular settlement areas, which at the same time have in many areas coalesced and thus do not always follow the administrative borders. Settlement areas outside of the urban city cores create a large portion of the urbanized space. They include a mixture of residential and industrial areas, areas for storage and logistics, paths of energy supply or one of the regional greenbelts that cross the Ruhr region. This building and settlement structure of the Ruhr agglomeration is the result of a historical process. Within about one hundred years starting in 1830, a previously agricultural region turned into a highly productive industrial landscape. A dense network of roads connects smaller and larger city centers, each with its own identity. Consisting of numerous cities of different sizes, the Ruhr agglomeration long had no formal administrative unit. Therefore, it had been difficult to regard the Ruhr region as one



region with consistent interests acting as an administrative unit. The interests of numerous large, medium and small cities are often quite diverse. The whole region consists of a mosaic of different arenas of stakeholders who fulfill individual tasks and thus represent individual interests. Some figures can illustrate that especially the jurisdictions are of great importance in the agglomeration: the area has two landscape associations, 20 institutions for economic development, 24 transit authorities and six chambers of commerce.

### **ROADS AND NETWORKS**

The polycentric structure of the Ruhr region is also reflected in the road network. In contrast to classic metropolises, it does not consist of circular and radial roads, but rather a grid structure which connects the centers of the numerous cities of different sizes. The railway system is also not focused on one single center, but is widespread all over the Ruhr region. The infrastructure was built in the 19th century to exploit the industrial and mining sites which were distributed across the region. The Ruhr region is covered by an infrastructure that services traffic, industry and trade, producing breaks in the landscape and the settlement area. While the railway, trams and bicycles dominated the area's traffic until the 1950s, the expansion of car ownership brought along the development of one of the densest highway systems in Eu-

rope following the Second World War. Widespread railway lines, motorways and large industrial areas have an insuperable and highly disjunctive effect on the region. As a result of the declining coal and steel industry, many railway lines and abandoned industrial areas have taken over a new function. Some of the infrastructural breaks have thereby lost their sharpness, been converted into open spaces, green spaces or bikeways. Nevertheless, abandoned, converted or sparsely used railway lines remain a shaping element in the urban landscape. Today, after decades dominated by a car-oriented infrastructure, the reshaping of the modal split in favor of public traffic and multimodal systems is becoming an important topic

### **MOBILITY**

The mobility in the agglomeration Ruhr has developed according to the rapid growth of cities in the middle of the 19th century. The Road networks, waterways and train systems developed according to the polycentric core system. As a consequence there is only few radial streets leading towards the city cores, but much more a network of different street with varied priorities that connect the different points in the agglomeration. By this polycentric structure the residential density varies a lot and only allows a sufficient public transport in the cities with densified cores. Especially the mobility options in between cities face the challenge of differ-

ent jurisdictions, since there are 24 different traffic enterprises.

In the reconstruction phase after the second world war, many cities of the Ruhr Agglomeration followed the guiding image of the „car-friendly city“ which can be experienced in many of the inner cities, decreasing the quality of public spaces until today.

### **Open spaces and green spaces**

Because of their exceptional means of urbanization during the 19th century, which were based around particular coalmines, most of the cities in the Ruhr region never showed a compact urban structure with clear settlement boundaries. Over the centuries, the landscape of the Ruhr region was influenced by the interaction of natural conditions and human influences. A unique quality of the Ruhr region is the interaction between the settlement areas and the green spaces: almost everywhere, green spaces extend into the urban landscape so that it is possible to reach a nearby open space in a short period of time. Even in the middle of the region, one can find meadows and forests, fields and gardens that are used by the residents and noticeably shape the urban landscape. Adding up its great amount of public parks, the Ruhr region displays a high proportion of open space. For around a decade, the 70-km-long Emscher River, which served as

an open sewer for more than a century, is being denaturalized by the Emscher Association. This transformation process of infrastructure and landscape is one of the largest construction projects in Germany and the largest of its kind in Europe.

### **2.1.2 CURRENT AND FUTURE CHALLENGES AND PLANNING TOPICS**

Within the last 40 years, the Ruhr agglomeration has undergone a significant structural change. The de-industrialization of the whole region has forced the area to transform in many ways: economically, socially and environmentally. A significant loss of jobs within a short period of time left many of the former workers of coalmines and steel factories behind and led to high unemployment. This is still one of the most striking consequences that the region suffers from. This decline in jobs was followed by a population decline from over 6 million in 1960 to around 5 million in 2010, which is still slightly continuing. The structural change has produced many abandoned industrial areas and sites. The reuse and recycling of these brownfields is one of the main challenges for future spatial development. Additionally, the region is making great efforts to establish new economies and attract young professionals.

The Regional Association Ruhr (RVR) is currently responsible for creating a regional plan for the Ruhr region. When the RVR was founded in 1920, it was one of the first regional associations in Germany. In 1975, the regional planning was disfranchised from RVR and set back completely to three regional governments: Arnsberg, Düsseldorf and Münster. In 2009, the Regional Association Ruhr (RVR), as a municipal association under public law with the right of regional self-government, has taken again took over planning authority for the Ruhr region. In the process of a regional dialogue, RVR is now developing its own binding regional plan, which is to be issued prior to 2020. The regional plan aims to promote regional development within intermediate-term plans (10-15 years) by regulating the land use in the cities and small communities of the Ruhr region. The plan is the result of a top-down/bottom-up process combined in an open, multi-leveled regional dialogue. Finally, the elected Ruhr Parliament will pass the final regional plan before 2020. It will include all fields of regional planning and aims to replace the plans of the current regional government for the Ruhr agglomeration.

#### **CHALLENGES**

- // Globally still perceived as an industrial, grey and polluted region
- // Transformation from industrial region to information society
- // Intraregional competition between the individual cities and local authorities: local city identity vs. regional identity
- // Stagnating population, social segregation and tension between the different social groups
- // Outflux of young educated people to other parts of the country to seek for better job opportunities

#### **PLANNING TOPICS**

- // Ongoing management of structural change from a heavy industry-based region into a research-development-production and service-based metropolitan region
- // Fostering integrated energy efficiency and innovation in all fields of settlement, production and mobility
- // Managing efficient polycentricity through a common regional plan
- // Strengthening of socio-spatial cohesion by inclusive education

# INSTRUMENTS, STRATEGIES AND FORMATS

PLANNING LEVEL

	INSTRUMENTS	STRATEGIES	FORMATS
<b>EUROPEAN UNION</b>	<ul style="list-style-type: none"> <li>&gt; European Spatial Development Concept (EUREK)</li> <li>&gt; INTERREG (European Territorial Cohesion)</li> <li>&gt; ESPON (European Observation Network for Territorial Development and Cohesion)</li> <li>&gt; Territorial Agenda</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Territorial Cohesion of the Regions in Europe: Principles of competition and cooperation within the integrated spatial development of Europe.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; European Capital of Culture</li> <li>&gt; European Route of Industrial Heritage</li> <li>&gt; European Green Capital</li> </ul>
<b>FEDERAL REPUBLIC GERMANY</b>	<ul style="list-style-type: none"> <li>&gt; Guiding Images of spatial planning</li> <li>&gt; Spatial planning principles</li> <li>&gt; Guiding images for the spatial development of the federal state</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Sustainable spatial development as general principle</li> <li>&gt; Principle of countervailing influence</li> <li>&gt; Balanced social, infrastructural, economical, ecological and cultural conditions</li> <li>&gt; Guarantee of public services</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Regional Garden Show „Bundesgartenschau“</li> </ul>
<b>FEDERAL STATE NORTH RHINE-WESTPHALIA</b>	<ul style="list-style-type: none"> <li>&gt; State development plan NRW (from 1995, new version in progress)</li> </ul>		<ul style="list-style-type: none"> <li>&gt; Regional Garden Show „Landesgartenschau“</li> </ul>
<b>REGION AGGLOMERATION RUHR</b>	<ul style="list-style-type: none"> <li>&gt; Regional Plan Ruhr (in progress)</li> <li>&gt; Regional plan of the district governments Düsseldorf, Amsberg and Münster</li> <li>&gt; City Region Ruhr 2030</li> <li>&gt; Masterplan Ruhr 2010</li> <li>&gt; Regional Land Use plan</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Concept Ruhr (Ruhr 2030) of 2007</li> </ul> <p>Connection of informal and formal instruments, Integration of stakeholders from the region: Development of the Regional Plan Ruhr</p>	<ul style="list-style-type: none"> <li>&gt; International Building Exhibition Emscher</li> <li>&gt; „Regionalen“</li> <li>&gt; Climate Expo.NRW 2022</li> <li>&gt; Redevelopment Emscher Landscape</li> <li>&gt; Masterplan Cultural Metropolis Ruhr</li> <li>&gt; International Garden Exhibition 2022</li> </ul>
<b>CITY</b>	<ul style="list-style-type: none"> <li>&gt; Land Use Plan</li> <li>&gt; Bebauungsplan (legally binding land use plan)</li> <li>&gt; Urban Development Concept</li> <li>&gt; Urban Framework Concepts</li> <li>&gt; Urban Design Concepts</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Urban Development Strategy</li> <li>&gt; Spatial Guiding Images</li> </ul>	

A T S	LEGAL FRAMEWORK	COMPETENCES & RESPONSIBILITIES	STAKEHOLDERS
Heritage	<ul style="list-style-type: none"> <li>&gt; Treaty of Maastricht (1992)</li> <li>&gt; Treaty of Lissabon (2009)</li> <li>&gt; Spatial planning law: plans and measures relevant to the EU and European States have to be considered</li> </ul>	<ul style="list-style-type: none"> <li>&gt; No competence of the European Union for comprehensive planning in Europe</li> <li>&gt; Treaty of Maastricht (1992): Environmental protection principles lead to <i>measures, affecting spatial planning</i></li> <li>&gt; Treaty of Lissabon (2009) is strengthening the territorial Cohesion</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Council of the European Union</li> </ul>
	<ul style="list-style-type: none"> <li>&gt; Spatial Planning Law</li> <li>&gt; Sectoral Laws</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Development of spatial planning principles</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Federal Ministry of Transport and Digital Infrastructure</li> <li>&gt; Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety</li> </ul>
	<ul style="list-style-type: none"> <li>&gt; Federal state planning law</li> <li>&gt; State building law</li> <li>&gt; Sectoral state laws</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Planning and building law legislation</li> </ul>	<ul style="list-style-type: none"> <li>&gt; State chancellery of the countries</li> <li>&gt; State Ministry for economy, energy, building, housing and transport of NRW</li> </ul>
hibition Emscher Park  andscape Park opolis Ruhr ition 2027		<ul style="list-style-type: none"> <li>&gt; Regional planning agency: Preparation and modification of the regional plan</li> <li>&gt; Organisation / Representation of interests towards the cities</li> <li>&gt; Responsibility for large Infrastructure projects, regional economy and tourism promotion, compilation of data</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Regional Association Ruhr (RVR)</li> <li>&gt; Transportation Association Rhein Ruhr (VRR)</li> </ul>
	<ul style="list-style-type: none"> <li>&gt; Federal Building Code</li> <li>&gt; Federal Land Utilization Ordinance</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Planning Authority</li> <li>&gt; Planning execution</li> <li>&gt; Land Use Planning</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Community council</li> <li>&gt; Citizens</li> <li>&gt; Bodies of public affairs</li> </ul>

# **THE DETROIT METROPOLITAN AREA-METRO DETROIT**





0 5 10 20 Kilometer

## 2.3

# THE DETROIT METROPOLITAN AREA - METRO DETROIT

*The greater Detroit metropolitan region is located in the southeast Michigan and has one of the largest spatial footprints of all cities with a comparable population. In contrast to the classic perpendicular grid pattern, the road system that defined Detroit was the alternative hub-and-spoke radial network. The region is characterized by significant patterns of spatial, economic and social division. While the Detroit area faces serious economic challenges caused by the economy based on the automotive industry's decline, resulting in public budget difficulties, massive enduring housing vacancies due to inhabitant outflow during the 1960s and 1970s and related societal issues, the wider metro area includes some of the wealthiest suburbs in the United States. Currently, selec-*

*tive revitalization in the central area of Detroit city has produced bubble urbanism, reinforcing the already highly uneven urban landscape. Innovative planning strategies and long-term planning processes are at the head of the aims of the regional planning for the Detroit metropolitan area. Strong competition between cities of the region as well as relatively weak regional governmental structures are among the current challenges of the endeavor to evenly reestablish regional stability.*

### **2.2.1 THE CONTEXT**

#### **BORDERS & REGIONS**

The greater Detroit metropolitan region includes nine counties, mostly comprised of residential suburbs. Two administratively separate cities – Hamtramck and Highland Park – exist within the boundaries of Detroit. The City of Detroit covers approximately 139 square miles. For cities of comparable population size, the City of Detroit has the largest spatial footprint in the United States.

Detroit is an integral node of the so-called Rust Belt in the United States – deindustrializing cities that form an arc stretching from northern Pennsylvania, through New York, Ohio, Illinois, and Indiana. While the processes of abandonment and decline in cities like Erie (Pennsylvania), Toledo (Ohio), and Cleveland (Ohio) can be traced to the massive deindustrialization starting in the 1970s, each city has displayed historically specific characteristics that make it difficult to generalize beyond a certain point.

The greater Detroit metropolitan region is characterized by extreme spatial unevenness. From a peak population of 2.3 million residents in 1950 (when it was the fifth most populous city in the United States), the City of Detroit has shrunk to less than 700,000 residents in 2014. At the same time, because the outlying residential suburbs have absorbed newcomers, the greater Detroit metropolitan region has remained relatively stable in terms of population. The greater Detroit metropolitan region is characterized by enduring patterns of racial segregation in housing, jobs, and opportuni-

ties. The so-called “white flight” starting in the late 1960s is linked with longstanding racial suspicion and even hostility.

The suburban communities outside of Detroit have a median household income of \$54,141 (whereas Detroit is closer to \$25,193), and hence they remain fiscally solvent. The patterns of abandonment and neglect in the City of Detroit itself are spatially uneven. Detroit resembles more a mosaic or checkerboard than a homogeneous landscape of blight. Selective revitalization has produced a kind of “bubble urbanism”; that is, a highly uneven urban landscape where stable neighborhoods are interspersed within vast zones of abandonment and disrepair. Some residential neighborhoods exist in name only, while the Woodward corridor from midtown to downtown has experienced redevelopment, where a handful of real estate developers and corporate investors (particularly Quicken Loans, one of the largest mortgage companies in the US, and Rock Ventures under the real estate mogul Dan Gilbert) have purchased abandoned buildings, refurbished residential accommodation, encouraged entrepreneurial start-ups, and introduced the kinds of social amenities associated with the trend toward tourist-entertainment cities. This property speculation represents an embryonic kind of truncated gentrification by stealth. For example, Gilbert has purchased 43 buildings (mostly high rises) in Detroit’s downtown and relocated countless companies back into Detroit’s downtown. While Gilbert’s job creation in Detroit has been staggering, he has also created what we have named here a “city within the city” for his employees, which

includes a private downtown security system, private buses and bike systems that only employees are able to use. This has created major tension among long-term Detroiters, who feel that, while they have been in Detroit for a long time, the “new” Detroit is not made for them or with them in mind.

### **ROADS & NETWORKS**

The greater Detroit metropolitan region has one of the largest spatial footprints of all cities of comparable size. The polycentric and distended patterns of city-building are reflected in the transportation networks. In contrast to the classic perpendicular grid pattern of downtown roads, the road system that defined Detroit was the alternative hub-and-spoke radial network. After the great fire of 1805, Woodward restructured movement in and out of the downtown core (located next to the Detroit River) in a radial pattern based loosely on L'Enfant's grid for the District of Columbia. Over time, the urban fabric was overlaid by a system of freeways that not only circled the central city, but crudely cut through existing neighborhoods, creating discontinuous pockets of light industry, warehousing, and residential zones separated from each other. One major transportation corridor constitutes the only international bridge across the Detroit River, connecting the outlying freeway system with Windsor (Canada) to the south.

The circulation infrastructure that developed in the early 20th century was designed to facilitate the growth of the automobile industry and the need to import massive amounts of raw materials and export finished products.

The placement of railway lines, highway corridors, circular freeway systems, arterial roads have effectively divided the urban fabric into a patchwork pattern of discrete residential neighborhoods, factory districts close to the city center, and warehousing and transport linkages located along the main water courses. Automotive factories were originally located close to the downtown core, but over time they were moved to outlying districts. The combination of this pattern of spatial restructuring and the subsequent process of deindustrialization (beginning in the 1970s) that hollowed out the dense clustering of manufacturing sites resulted making the original transportation networks redundant, under-utilized, and largely irrelevant. Abandoned infrastructure has suffered decline, sometimes returning to nature, thereby producing green spaces not by deliberate design, but through inattention.

Various efforts to improve transportation and circulation linkages around the region have not produced the anticipated results. Thought to aid movement in the dense downtown core, the People Mover has proven to be a failure of connectivity. The M-1 rail line and bus rapid transit have proven to be not particularly effective as substitutes for automobile dependency.

### **OPEN SPACES AND GREEN SPACES**

Open space in Detroit connotes not only open landscape and recreational space, but also vacant lots and blighted empty properties. Open space is therefore one of Detroit's biggest challenges and also, as some in the city argue, its biggest asset. Often, the city's 139 square miles are used as a reference point for

challenges with open space and blight. However, many other American cities are comparable in size but have either incorporated the surrounding suburban territories within their limits (such as Houston, TX) or have much larger high-density areas to account for the overall city (such as Atlanta). Only 6% of Detroit's territory has over 30 people per acre. 55% of the city consists of 5-15 people per acre (Detroit Future City Strategic Framework).

The biggest challenge in consideration of open space in Detroit relates to blighted structures and open lots that remain vacant, but which people continue to use for illegal dumping. A 2014 report by the Detroit Blight Removal Task Force suggests that 84,641 parcels out of 263,569 structures and 114,033 lots in the city are blighted and require intervention.

With such a tremendous amount of vacant parcels, Detroit Future City argues that much of this vacant land can be transformed into a network across the city offering the following benefits: 1) the capability of transitioning grey infrastructure into blue infrastructure to manage storm water runoff; 2) remediate air and soil through natural vegetation; 3) the generation of food, jobs, and energy; 4) connecting neighborhoods across these open space networks; and 5) offering recreation opportunities for residents (Implementing Open Space Memo 2014).

Many Detroit residents remain skeptical of the majority of large-scale open space planning. This may be due to fears of displacement that draw upon memories of urban renewal initiatives that displaced many underprivileged and minority residents in the mid-1960's. Because

vacancy in the city remains a patchwork across all neighborhoods without clear areas of concentration, decisions about what will become open space and how remain highly contested.

### **RIVERS AND WATERWAYS**

Detroit is located in a vast riverine and lake catchment area. The Great Lakes Basin contains 90 percent of the fresh surface water in the United States and more than 20 percent of the world's supply. The Great Lakes supply freshwater to more than 40 million people. Located within the basin, the Detroit River is 28 miles long and runs south from Lake St. Claire to Lake Erie. It serves as a boundary between the United States and Canada, and has played a significant role in the history of Detroit. The Detroit riverine system also includes the St. Claire and Clinton Rivers flowing into Lake St. Claire, and the Rouge River that feeds into the Detroit River. All are interconnected with the Great Lakes above (Lake Huron, Lake Michigan, and Lake Superior) and below (Lake Erie, Lake Ontario, and the St. Lawrence Seaway).

The growth of modern industry in Detroit shaped the use of the interconnected systems of rivers and lakes. The movement of goods both in and out of Detroit contributed to the transformation of these waterways from bountiful resources (clean water and aquatic life) into polluted transportation corridors linking industries and manufacturing sites to the world beyond.

The Detroit River and its shoreline incurred tremendous pollution damage as a result of the dumping of industrial water into waterways during the first half of the 20th century. As a

result of the dumping of industrial pollutants into its waters, Lake Erie, for example, become so toxic that it pronounced “dead” in the 1960s because it was incapable of supporting aquatic life. Stormwater runoff, wastewater overflow and the dumping of industrial waste have combined to severely compromise the water quality from the banks of the Detroit River near Zug Island (to the west) to the beaches of Belle Isle (on the east of downtown)

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### **2.2.2 CURRENT AND FUTURE CHALLENGES AND PLANNING TOPICS**

Many of Detroit's current and most pressing urban planning challenges fall far outside of what is traditionally considered within the domain of urban planning. In terms of infrastructure, Detroit is experiencing challenges due to a lack of efficient non-motorized transit, pervasive abandonment and blight, and also profound special segregation by race. Tied into all of these issues are a multitude of socio-economic disparities that cannot be easily untangled from the aforementioned challenges.

Contrary to what intuition in the context of post-industrial urban restructuring might suggest, Detroit's most widespread form of blight is not industrial, it is residential. As such, residential blight remediation of mostly single-family housing is perhaps the most immediately visible, and internationally best-known challenge that the city needs to tackle. The most recent estimates indicate that a staggering 22% of the city's structures are considered blighted, which comes to close to 85,000 properties, roughly half of which need to be torn down at an estimated cost of roughly \$2 billion. At current capacity, the city manages to address less than 5,000 blighted structures, which implies that it would take Detroit more than 15 years to address all blighted structures and vacant lots, assuming very optimistically that no additional structures fall into disrepair during that period.

The issue of urban blight and property abandonment also ties directly into the cities vast socio-economic disparities that are perhaps best characterized by the metro area's high levels of racial segregation. For example, in 2010, Detroit was named the fourth most segregated city in the US and the most segregated metropolitan region. While every planning challenge affects all Detroiters, we know that Black Detroiters opportunities are affected disproportionately and negatively compared to all other ethnicities.

#### **CHALLENGES**

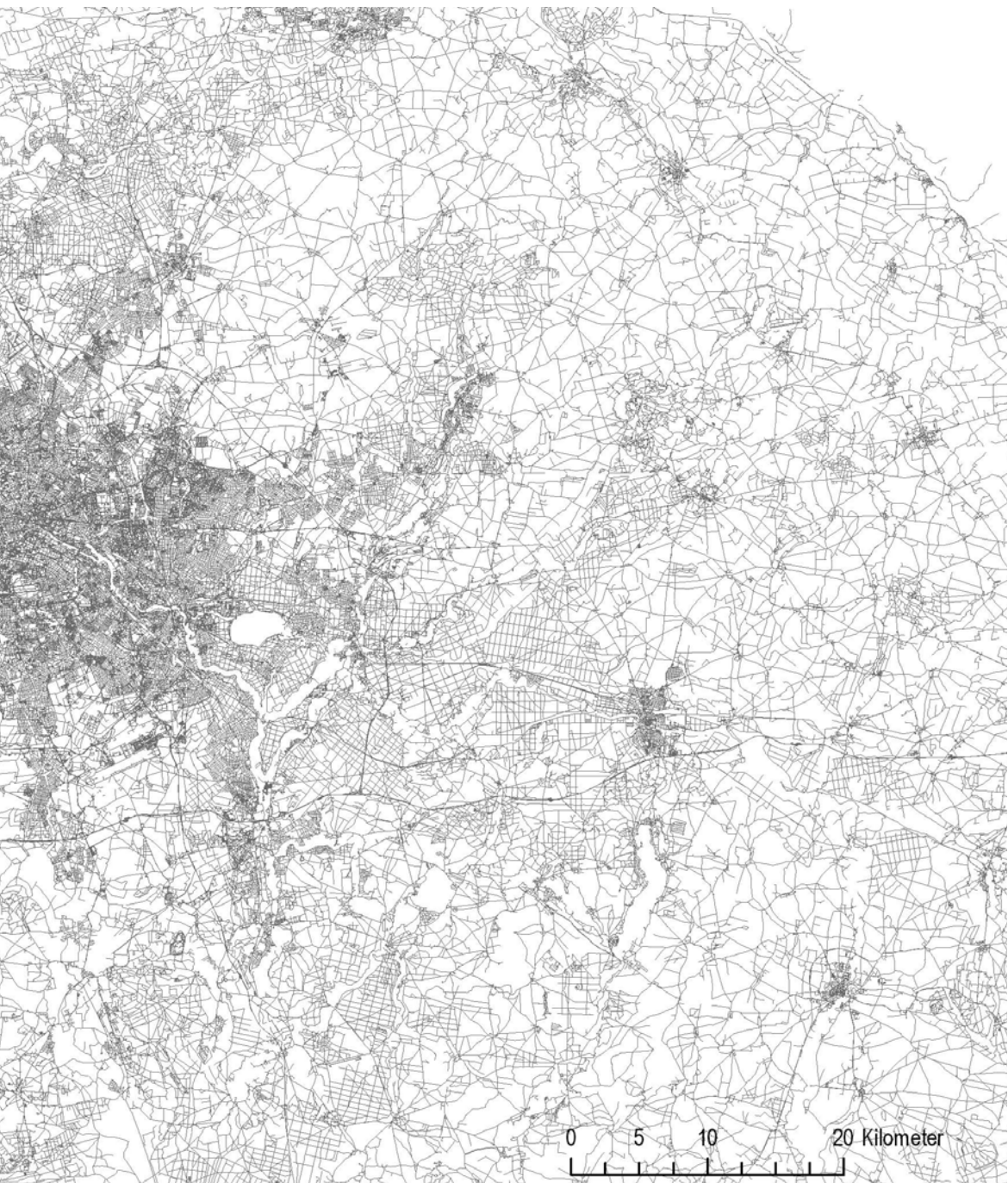
- // Financial bankruptcy, policy vacuum, democratic paralysis
- // Pervasive abandonment/blight and ongoing depopulation
- // Political dysfunction and a lack of policy coordination (within the city and across the region)
- // Profound segregation and legacies of racism
- // Lack of regional cooperation and very strong administrative borders within the region
- // Fractured education system with little mechanism for quality control
- // Lack of non-motorized transit and access to job opportunities
- // Stretched-thin social services, broken-down infrastructure

#### **PLANNING TOPICS**

- // Long-term planning vision (short-term, incremental thinking over long-term holistic strategic planning)
- // Continued tactical decision-making in lieu of strategic decision-making
- // Need to embrace different, innovative land use approach
- // Potential for "cities within the city" (consolidated land ownership and pockets of gentrification within such extreme poverty)
- // Building regional cooperation under conditions of jurisdictional hostility
- // Job creation

# **THE BERLIN/BRANDENBURG METROPOLITAN REGION**





## 2.3

# THE BERLIN/BRANDENBURG METROPOLITAN REGION

*The Berlin Brandenburg metropolitan region is one of eleven metropolitan regions in Germany and the second largest agglomeration after the Rhein-Ruhr metropolitan region. It consists of the capital city Berlin and the surrounding area of Brandenburg. Unlike many metropolitan regions, which are polycentric and based on morphological measures, Berlin/Brandenburg region is to a large extent centric. Nevertheless, even under the dominance of Berlin, it follows functional polycentricity and interdependence between cities of the region. Like the most cores of metropolitan regions in Germany, Berlin witnesses population growth and therefore facing the challenges of meeting the demands of new housing projects and social-and-physical infrastructure. Berlin city as an autonomous federal*

*state consists of central city government and city wards. Despite its population growth, the region is facing challenges of maintaining social cohesion and global economic position. In the current years, real investment boom and population growth has resulted into Gentrification, increasing rents and real state costs and Social segregation and peripheralization of poor people. A general task becomes the governance issue: how to participate citizens in strategic plans needed to steer the fast inner urban redevelopment induced by the real estate boom as well as the task to re-establish its federal capital function.*

### **2.3.1 THE CONTEXT**

#### **Borders & Regions**

Berlin is the capital city of Germany, and at the same time one of the 16 federal states of Germany. It has a population of 3.5 million and an area of 892 km<sup>2</sup>. The Governing Mayor is simultaneously Lord Mayor of the city (Oberbürgermeister der Stadt) and Prime Minister of the Federal State (Ministerpräsident des Bundeslandes). The planning collaboration between Berlin and the neighboring state of Brandenburg is based on different state treaties, such as Landesplanungsvertrag. With the “Leitbild Capital Region Berlin-Brandenburg” and other planning instruments and regional concepts, Berlin-Brandenburg is one of the eleven metropolitan regions in Germany.

The collaboration includes a large number of common authorities, courts, departments and institutions. It also encompasses the economy; collaborations in science and technology, in the film and media industry, the health sector, and good networking are perceived as elements of a region.

The City of Berlin is subdivided into twelve boroughs (Bezirke). Each borough contains a number of localities (Ortsteil), which often have historic roots in older municipalities. In addition, there are several neighborhood centers (Kieze) which have their own character and are very important for the identity of the citizens. Berlin therefore has several faces. With the 1920 Greater Berlin Act, dozens of cities, including Schöneberg or Charlottenburg, suburban cities, villages and estates around Berlin were

incorporated into an expanded city. The act increased the area of Berlin from 66 to 883 km<sup>2</sup> (25 to 341 mi<sup>2</sup>). The population almost doubled and Berlin had a population of around four million. As consequence of the Second World War, large parts of Berlin were destroyed. From 1961 to 1990, the city was divided into East Berlin and West Berlin.

#### **ROAD AND NETWORKS**

Berlin’s transportation infrastructure is highly complex, providing a diverse range of urban mobility. After reunification, Berlin had to improve and adapt its traffic and mobility infrastructure. The division of Berlin influenced the urban transportation system. The western part of Berlin had a radial road network with tangential transport connections, the eastern part had a radial road network with a central focus. Since reunification in 1990, the systems have merged into a highly efficient system. With 324 cars per 1,000 inhabitants, Berlin has a remarkably low rate of motorization compared to other large cities. More journeys are made in the city center with public transportation, on foot or by bicycle than by car. This is also a consequence of the continuous promotion of pedestrian and bicycle traffic as well as public transportation in Berlin over a number of years.

#### **OPEN SPACES GREEN SPACES**

Berlin is a green city: nearly 44% of its area is comprised, among others, of public green spaces, playgrounds, sports areas, unused land, farmland and bodies of water. The open spaces have been extended and connected since reunification, and many more are cur-

rently in the planning stage. About 2.2 million inhabitants live within walking distance of public green spaces. Land use in Berlin is divided into 41.4% buildings and open space, 0.9% factory areas, 11.9% recreation space, 14.9% traffic infrastructure, 4.2% agriculture, 18.3% forest, 6.7% water and 1.7% other uses. More than 18% of the city consists of forest, 11.9% of recreational areas.

### RIVERS AND WATERWAYS

The two rivers Havel and Spree are connected to several water channels that cross the city. Besides the rivers and channels, Berlin has more than twenty lakes and bathing beaches. The biggest lake is “Großer Müggelsee”, with an area of 743.3 ha. Berlin is the only city in Germany that is able to satisfy the demand for drinking water through its own groundwater.

### **2.3.2 CURRENT DEVELOPMENT AND NEW CHALLENGES**

After a long phase of being concerned with reunification tasks, Berlin is now facing enormous growth. In accordance with its general planning objectives, such as integrated, compact and dense development of the existing urban fabric in order to avoid traffic and greenhouse gas emissions and stay green (Stadt Berlin, 2015), much effort focuses on new housing and needed infrastructure growth. Due to the structural challenges based on the economic fracture after 1989, social cohesion is still an ongoing and important task. With support from federal and EU funds, Berlin invests in urban renewal and social cohesion in 65 urban areas, encompass-

ing an area of around 9,149 ha and a population of approximately 1,025,000. The spatial focus is the inner city as well areas at the western and eastern urban fringe.

The urban development plan “Housing” from 2014 offers site potentials for more than 200,000 new housing units until 2025. Activating these site potentials together with the boroughs’ planning administrations is the most important task owing to rising demand.

Related to the aim of managing the growth and improving public and stakeholder participation, the BerlinStrategy | Urban Development Concept Berlin 2030 was developed. The BerlinStrategy provides an inter-agency model for the long-term, sustainable development of the capital. It serves as a guiding principle and a motivating force for those who wish to involve themselves in shaping the capital and life in its neighborhoods.

The responsibility for coordinating and managing this process lies with Berlin’s Urban Development Department, whose job is to ensure that Berlin remains an attractive place to live and do business.

Using a range of eight strategies and goals, it sets out the areas and directions in which this growing city should develop. The strategies for Berlin provide approaches to the major challenges in terms of sustainable development that will the city will face between now and 2030. They promote quality of life for the people of Berlin and strengthen the city’s position as a competitive and attractive urban destination in the eyes of the rest of the world. The strategies are based on Berlin’s qualities and

are designed to maintain, reinforce and develop these going forward to 2030. The strategies are:

- // Strengthening the economy with smart knowledge
- // Unleashing strengths through creativity
- // Safeguarding employment through education and skills
- // Reinforcing neighborhood diversity
- // Merging the growth of city and green space
- // Laying the groundwork for a climate-friendly metropolis
- // Improving accessibility and city-friendly mobility
- // Shaping the future together

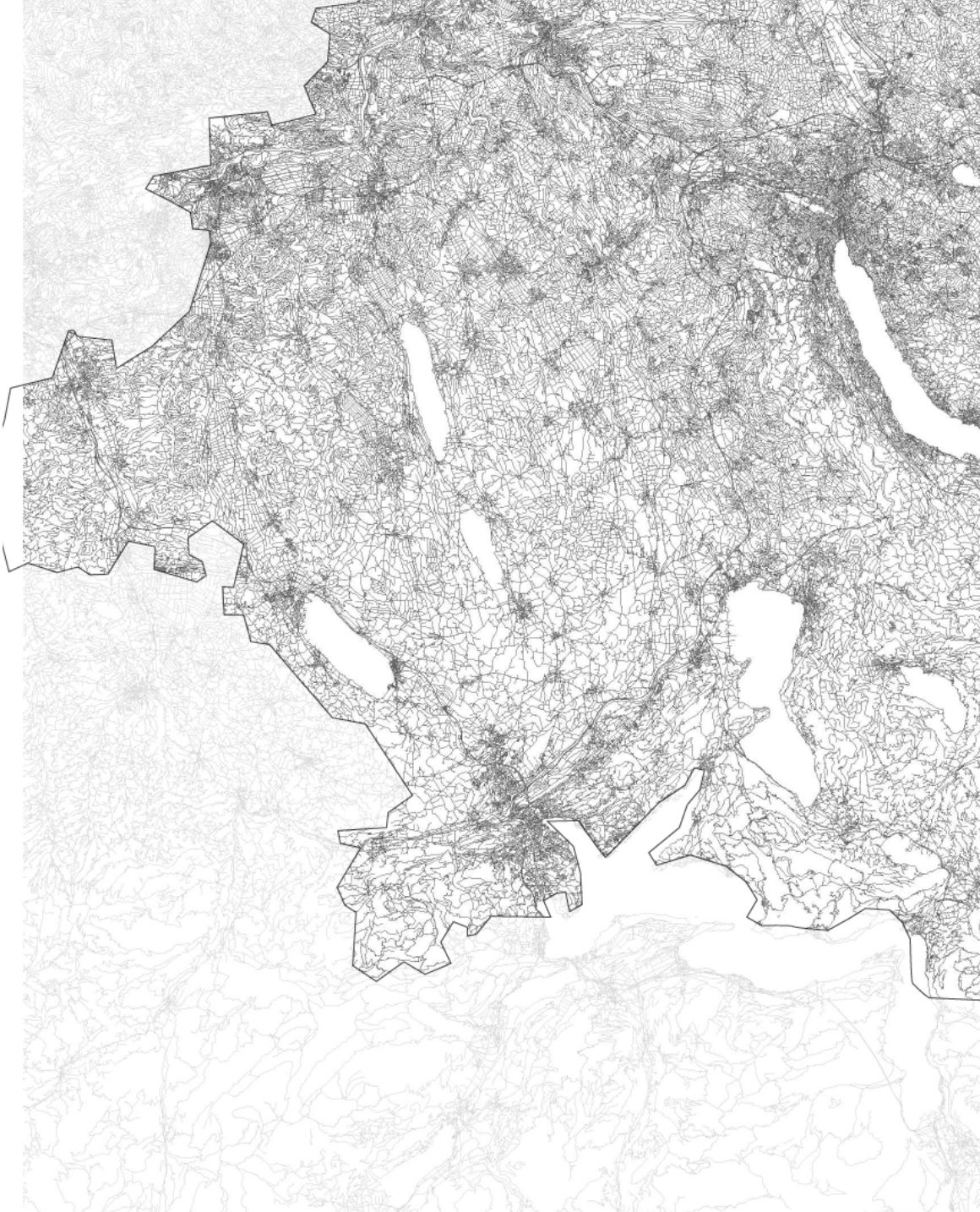
The BerlinStrategy highlights the ten transformation areas that will form the focus of its future development. These transformation areas are embedded in Berlin's multi-centred structure. The potential development sites they offer lend themselves to the future development of Berlin, to restructuring the city and increasing its international influence. They can be used to find potential in shortcomings and provide exemplary solutions to urgent problems in immediate social provision, in the socio-economic framework or in the city's built or spatial struc-

ture. The transformation areas offer development potential relevant to the whole city in terms of both social issues and open spaces. In addition, they are, or will be in the near future, sites of clear processes of change triggered by public or private investment, which generate a specific need for action and require support. 'Shaping the City Together' is both the hallmark of the community dialog which underpinned the development process behind the Urban Development Concept Berlin 2030 and the keynote of the city's goals and expectations for the future.

#### **CHALLENGES**

- // Gentrification and increasing rents and real state costs
- // Population growth and demands for new housings
- // Social segregation and spatial peripherization of the poor

# **METROPOLITAN AREA ZURICH**





## 2.3

# METROPOLITAN AREA ZURICH

*Zurich metropolitan Area is the largest of three metropolitan areas in Switzerland and one of Europe's strongest economic centers. It includes the canton of Zurich and a six neighboring regions. The metropolitan region of Zurich follows a morphological and functional polycentric pattern and interconnections including nodes and corridors of development between the regions' many municipalities. Managing spatial development of the booming region within the limited space is one of the main planning challenges in Zurich metropolitan region. It calls for alternative governance policies that incorporate the local, regional and metropolitan dimensions*

### 2.2.1 THE CONTEXT

#### **STRUCTURE AND BORDERS**

Zurich is the capital of the Canton of the same name and is the largest city in Switzerland, center of a metropolitan area including over 200 municipalities, Zurich has a population of approx. 400'000; almost one quarter of the city's population is made up of non-Swiss nationals. Every year, approximately the city center, historically grown neighborhoods and former industrial zones are transformed into new city districts. Each of the villages, which later became a suburb of Zurich, had its old established commercial and social center, which in most cases became the present business district of that part of the city. The area of the medieval municipality of Zurich, which is located in the center of the city of today, became the location of the central functions of high order, and thus the central business district at the international level.

Zurich provides an example of a comparatively well-organized European city, unharmed by the war, and, until now, hardly changed by the impact of the "private car era". Much development has been done in the valleys of the rivers Limmat and Glatt: urbanized landscape of separate settlement areas divided by green belts. With the preservation and upgrading of such areas as «Parklands» advantages of these

spaces should be guaranteed and developed. Thus it is also the integration between the strategically important central areas as well as the general linkages between the residential, employment, and recreation areas, which are to be preserved and improved. This also aims to guarantee a sustainable development of the living space by similarly promoting settlements and transport infrastructure. At the same time central areas of cantonal importance, which are linked by the metropolitan railway system, should ensure inner urban area development and an equal quality of life throughout the canton. Correspondingly the need must be taken into account of the constant pressure on natural and recreational spaces by coordinating and supporting good quality multi-level uses.

### **ROAD AND NETWORKS**

The close proximity of Zurich Airport and the construction of the suburban train lines (S-Bahn) favored the expansion of the agglomeration, establishing the city of Zurich as the center of a thriving metropolitan area. The spatial development of the Canton of Zurich in the 1950s and 1960s was greatly influenced by the impact of traffic. At the beginning of the 20th Century it had been the railway, which had contributed much to the definition of the urban hierarchy, but after the Second World War it was the enhanced mobility afforded by private vehicles. The opening of the metropolitan railway system in the Spring of 1990 and the continual service improvements in public transport had the great effect in the «Greater Zurich Area» of bringing activities closer together and to increase the use intensity of public transport.

### **GREEN AND OPEN SPACES**

Zurich promotes a careful use of natural resources and has enshrined principles of sustainability objectives in its constitution. Particular value is attached to providing enough spaces of a green and natural environment. The city's 80 small parks and other green spaces together with urban forests make up 43% of the municipal area. This approach has been greatly enforced by the changing awareness of how much more important integral natural and landscaped areas are to the quality of life. This development of awareness has, in particular, seen a successive reduction in settlement areas. Most green space development has been placed on the areas between the individual settlement areas, where the character of spacious parkland landscapes exists.

### **RIVERS AND WATERWAYS**

Lying at one end of Lake Zurich, the city is embedded between two forested hills and spreads across the two rivers Limmat and Sihl. The textile factories, which had sprung up during the Industrial Revolution of the 19th century, were located along the rivers in the area of the old home industry. Hydropower from the rivers Töss (Oberland and Winterthur) and Aabach (Uster and Wetzikon) has been crucial for early industrialization of the agglomeration in the 19th century. A significant shipping did not exist in the greater Zurich area.

### **2.4.2 CURRENT SITUATION AND PLANNING CHALLENGES**

The Federal Office for Spatial Development organizes the spatial coordination on the national level. The central instruments of spatial coordination in Switzerland are the 26 cantonal structure plans. There is no overall national plan. However, the cantonal structure plans have to be approved by the Federal Council (national government) in order to be binding on the authorities of all planning levels.

In each canton there is a Cantonal Planning Office which is responsible for the elaboration the instrument of the cantonal structure plan. The Cantonal Planning Office supervises the land use planning on the communal level. It gives directives to the communities and approves the communal land use plans.

Large cantons often delegate supramunicipal spatial planning tasks to public-law planning associations at a regional level (regional planning associations). In the canton of Zurich, for example, these draw up regional structure plans, which further specify the provisions of the cantonal structure plan at the regional level.

Every community (municipality) has its Local Building Authority, which is responsible for the elaboration of land use planning by zoning plans and building regulations. The zoning plans refer to the whole territory of the community, not only to the built up areas. These plans have to be approved by the Cantonal Planning Office and are binding on the land-owners.

### **PLANNING IN FUNCTIONAL SPACES**

In the last decade the awareness evolved, that the spatial patterns of population and economy are becoming increasingly less coherent to the borders of the political entities. Therefore informal cooperation between municipalities, cantons and the confederation within „functional spaces“ (i.e. strongly interlinked and interdependent clusters of municipalities or cantons) became indispensable in order to steer spatial development effectively.

In order to facilitate such „planning in functional spaces“, so-called agglomeration programs were developed. They serve as an implementation-oriented tool designed to improve collaboration and coordination within conurbations. In order to benefit from federal co-financing the elaboration of an integral and sustainable development concept on land use and transport planning is required. Meanwhile 3rd generation agglomeration programs for 2016 are in preparation. Originally thought as a temporary measure until 2020 only, political discussion for a permanent funding are currently on the way.

### **CHALLENGES**

- // Gentrification and increasing rents and real state costs
- // Population growth and demands for new housings
- // Social segregation and spatial peripherization of the poor
- // Societal acceptance of higher densities and inward urban development
- // To use and improve existing instruments instead of creating new instruments

### **PLANNING TOPICS**

- // Long-term attractiveness for business and population
- // Settlement area remains limited
- // High level of building activity and a high degree of change in the existing building stock
- // Low acceptance of higher densities
- // Protection of cultural and urban landscapes as a strategy against urban sprawl

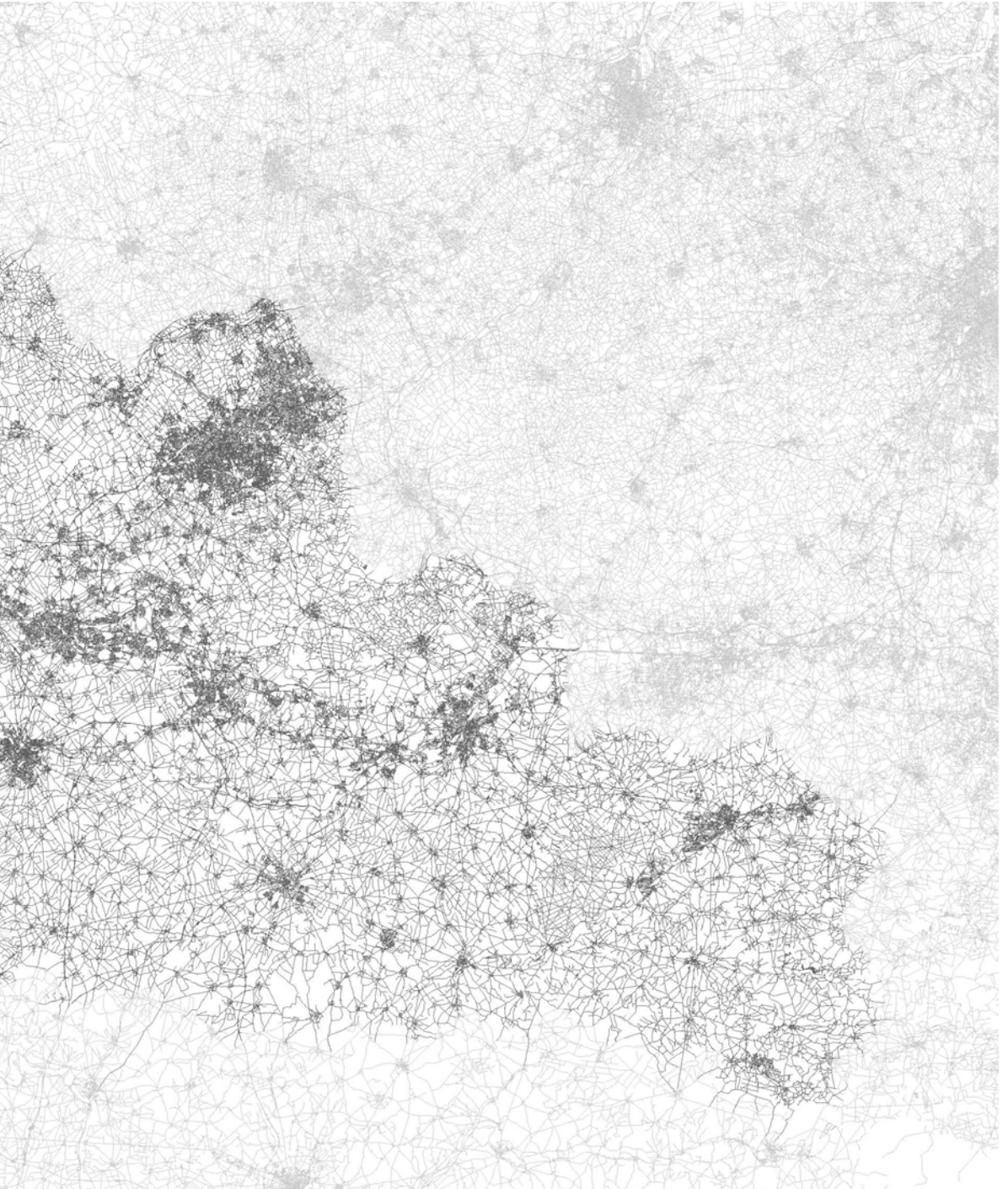
## **THE SWISS PLANNING SYSTEM**

<b>WHO MAKES ARRANGEMENTS OR CHANGES</b>		
<b>LEVEL</b>	<b>SIZE</b>	<b>DESCRIPTION</b>
National	8.0 million inhab. (100%)	Federal Council (national government)
		Federal Office for Spatial Development
		Other federal offices with tasks influencing spatial development
Cantonal	0.2-18%	Cantonal governments (26)
Regional	0.1-5%	Cantonal authorities
Communal	up to 5%	Communal authorities (2396)

<b>WHAT TYPE OF ARRANGEMENT</b>		
<b>NAME</b>	<b>SCALE</b>	<b>DESCRIPTION</b>
Approval of cantonal structure plans	Words	
Spatial planning report	Words	Definition of goals and measures
Concepts & sectoral plans	Words and maps	Tasks of federal authorities (to be coordinated by the cantonal structure plans)
Structure plans	Words and maps 1:100,000 – 1:25,000	Results of spatial coordination, binding for the authorities of all planning levels (this is the central instrument of spatial coordination)
Regional plans	Words and maps	Regional level used in larger cantons for detailing cantonal structure plans and/or for specific planning tasks
Land use plans	1:10,000 – 1:5,000	Designating the permitted use of land, binding on land owners
Special plans	1:1,000 – 1:2,000	Designating special arrangements for selected subjects/ selected areas
Building regulations	Words	Designating the permitted kind & size of buildings

# **NORD-PAS-DE-CALAIS**





## 2.5

# NORD-PAS-DE-CALAIS

*A cross-border metropolitan region located at the crossroads of key infrastructures for the transit of goods, and thus linking the major metropolitan areas in northwest Europe (Paris, London, Randstad Holland, the Rhine-Ruhr basin in Germany). Nord-Pas-de-Calais is the fourth most populous region of France's nine metropolitan regions. Just like the Ruhr region, Nord-Pas-de-Calais contributed substantially to the mining, steel and textile industrial development until the middle of the 20th century, with many of its coalfields now classified as UNESCO World Heritage Sites. Nord-Pas-de-Calais currently still suffers the consequences of the decline of its industrial history, with net outmigration, a high unemployment rate and enduring social difficulties. The last two decades have witnessed major planning attempts at industrial restructuring and the attraction of newer industries based on substantial public investment incentives.*

### **2.5.1 THE CONTEXT**

#### **STRUCTURE AND BORDERS**

The region Nord-Pas-de-Calais is one of the 27 regions of France (13 from the 1st of January 2016). It covers 4,793.11 square miles, with 4,107,148 inhabitants, making it the fourth-largest French region in terms of population. It is composed of two administrative departments: Nord and Pas-de-Calais. Nord has 64 percent of the population, and Pas-de-Calais 36 percent. Some 27 percent of the population is under 20 years of age, although people in this demographic are beginning to migrate away from the region in search of better livelihoods. Life expectancy is 77.7 years, which is the lowest in France.

It is bordered on the north by the English Channel and the North Sea, on the northeast by Belgium, and on the south by Picardy. Just like the Ruhr region, Nord-Pas-de-Calais contributed substantially to the industrial revolution and experienced strong industrial development until the middle of the 20th century. This development was mainly based on mining, steel, metallurgy and the textile industry, and was accompanied by dynamic demographic and urban growth. However, Nord-Pas-de-Calais still suffers the consequences of its past industrial history, with net outmigration, a high unemployment rate and enduring social difficulties. Currently, The region consists of about 15 urban areas, each having more than 10 000 jobs, and which are gathered into four metropolitan poles ("poles métropolitains"): one around Lille (the most important, that is actually a "Euro-

pean metropolitan area”), one around Dunkerque, and two poles are currently forming: one around Valenciennes, Cambrai and Maubeuge, and one gathering the core of the former mining zone (Béthune, Lens, Douai). Parts of the Dunkerque area have been eligible for Enterprise Zone status benefits since the closure of the Normed shipyards in the 1980s. The region therefore presents all the characteristics of an old industrial region (Holliday et al., 1991). The last two decades have witnessed major industrial restructuring with the final closure of the coalmines, the gradual running down of other core industries such as textiles and the attraction of newer industries based on substantial investment incentives. The Lille area has shown considerable signs of growth based on its effective crossroads location between the major European conurbations of London, Paris, Brussels, the Randstad and the Rhine-Ruhr areas, boosted by its junction position on the still-developing North European High Speed Rail Network

### **ROADS AND NETWORK**

In Nord-Pas-de-Calais, industrial activities and proximity to densely populated areas in southern England, Belgium, the Netherlands and Germany have fostered strong infrastructure development since the 19th century. Nord-Pas-de-Calais is one of Europe’s main regions for the transport of goods, given its strategic position between northwest European regions, the major ports of the north of Europe, and the Paris region. However, in the mid-1970s, when the first consequences of the economic crisis had already become tangible, public infrastruc-

ture in Nord-Pas-de-Calais lagged behind that of other French regions.

At the national level, Nord-Pas-de-Calais has one of the densest road and railway networks in France, where regional trains are mostly used due to its cross-border location. The rail network links the region to the rest of France, to Paris and to neighboring countries such as Belgium. Additionally, there is a high-speed railway network that leads into the center of the region and the coast, between Lille, Arras, Dunkerque and Calais, for regional and international services. However, at the local level, urban and interurban mobility is not as well planned and developed as at the national level. This has a historical diminution, in which the strategy during industrialization was not to promote mobility, but to maintain labor forces in specific geographical areas in which the means to support them (housing, education, health services, leisure, etc.) were available. Therefore, the bus system and the road infrastructure are often underdeveloped, causing congestion in the urban areas and problems in mobility.

Nord-Pas-de-Calais has a 140-km-long coast and a 680 km of waterways, including 576 km that are used for commercial purposes. This makes the region the first in France in terms of waterway density. The region has three main harbors: Dunkirk, Boulogne and Calais and a fourth harbor, the channel tunnel, which is underground. The Port of Calais specializes in Channel transport for passengers and goods and ranks first in France in terms of passenger

numbers. However, the performance of both Dunkirk and Calais has tended to stagnate or even decrease in recent years, whereas maritime traffic has increased in ports in Belgium and the Netherlands. In terms of infrastructure, the Port of Boulogne is strongly focused on fishery activities (it is the leading French fishing port). Boulogne has been the European leader for years in the transformation of sea products. This led to the establishment of the Aquimer competitiveness pole in 2005.

For structuring a regional development, the Seine-Nord Europe Canal (2017 – 2025) is a European project that will enable a direct water connection with Paris as well as with five of the largest European ports: Rotterdam (Netherlands), Antwerp and Zeebrugge (Belgium), Dunkirk and Le Havre in France.

### GREEN SPACES AND OPEN SPACES

The Nord-Pas-de-Calais region has a moderate climate and rich soils. A close-knit network of towns and cities within a fertile agricultural landscape covers 73% of the territory, compared with an average 57% in France. However, forest represents only 7% of the region, and natural and protected areas only 1.5% of the territory. The dramatic reduction in forested areas has made doubling wooded areas and recreating a real network of woods and other natural areas a priority objective of the regional development of Nord-Pas-de-Calais

## 2.5.2 PLANNING CHALLENGES

### REGIONAL PLANNING

In France, decentralization reforms were started in 1983. New competences were progressively conferred to local authorities (economy, planning, housing, culture) and regional pole centers were promoted. Therefore, the spatial planning system in France in general and in Nord-Pas-de-Calais in particular follows a bottom-up approach, with the municipal level as the principal actor of urban development and planning, forming the basis of legally binding plans (Baron-Yelles, 2008, Booth et al., 2007). However, the large number of small and very small towns increasingly complicates planning decisions. Located above the binding plans are, in many regions: (1) the sub-regional schemas, the 18 territorial coordination plans („schémas de cohérence territoriale -SCOT“) that are functioning effectively in some regions; and (2) the regional strategic plan („schéma régional d'aménagement et de développement durable du territoire - SRADTs“) that has covered the whole regional area of the North-Pas-de-Calais since 2006.

In Nord-Pas-de-Calais, which has experienced more than 20 years and various series of regional planning, the SRADTs are influential in negotiating structural change especially regarding infrastructure and transportation systems. Elsewhere, few planning frameworks exist between the SCOTs and the national sectorial schemas (Marshall, 2013).

The urban area of Lille (Lille Métropole Communauté urbaine): one of the rare local admin-

### **CHALLENGES**

- // Structural change
- // The influence of industry is still very visible on the profoundly modified urban and rural organization
- // Most of the coalfields are now classified as a UNESCO World Heritage Site
- // Massive unemployment (decline of the prosperous industries in the 1960s and 1970s)
- // Poverty and social segregation, concentrated in some towns or neighborhoods
- // A well-developed road and railway network
- // A metropolitan area located at the crossroads of key infrastructure for the transit of goods, and thus linking the major metropolitan areas in northwest Europe (Paris, London, Randstad Holland, the Rhine-Ruhr area in Germany)

- // A region that profits (and suffers) from an important traffic of goods
- // "Individual mobility", which is a real challenge for the northern region of France

### **PLANNING TOPICS**

- // The formation and coordination of the four metropolitan poles
- // The fusion with Picardy
- // The coordination between the planning levels

istrations in France created by state authority (in 1966); since 2014, it has been identified by the French federal government as a "European metropolitan area", and allowed to acquire new missions and decisions from the local level.

Specific economic strategies are being developed in the French region Nord-Pas-de-Calais. In 1998, the regional council adopted the document "Une grande région économique en Europe", the strategy for the economic development of the region, which was undergoing difficult restructuring process. This strategy was focused on increasing the number of enterprises. The objective has been realized to a large extent - from 2001 to 2004, the creation of new enterprises increased by 34%. In 2005, the current strategic plan "Schema Regional

de Developpement Economique", which is also the strategy for the economic field, was also adopted. Apart from the above, there are a few other subject strategies in Nord-Pas-de-Calais, such as the "Plan Regional Sante-Environnement", a strategy that encompasses four principal priorities:

- // To develop the action capacity of region, different institutions and local actors in the field of environmental health
- // To improve and use the knowledge of health risks related to the environment
- // To eliminate or diminish sources of health danger
- // To eliminate health dangers stemming from the environment

## CURRENT PLANNING TOPICS

Although the metropolis of Lille has succeeded in transforming its economy into a service-based system, and other urban areas have greatly expanded their services (e.g., Roubaix, Valenciennes, some parts of the former mining district), the rest of the Nord-Pas-de-Calais region is still trying to transform its industries. The biggest challenge is to make the more successful areas the motor for the entire regional development, which implies developing research and innovation, and also improving the average education level, which is very low in the region. In rural parts of the region, the services to old people have a great potential, but the formation of the workers in this area is important to improve the quality of the services and the working conditions. The prices and the quality of the housing projects must be improved in all the urban regions in order to avoid constraining the mobility of middle- and low-income workers and the chosen mobility of managers and executives who work in emerging agglomerations but still live in the Lille area.

Spatial segregation in the Nord-Pas-de-Calais agglomeration is an important topic, as the lo-

cal governments ("communes") is still the principal actor in urban development and planning in France, although the large number of small and very small towns increasingly complicates planning decisions. Whereas countries such as Germany or Denmark have modified municipal boundaries, France kept its municipal limits intact while adding administrative "superstructures": "communauté urbaine, „communauté d'agglomération, communauté de communes). These city-corporations make some, but not all, local decisions together. The regional strategic plan („schéma régional d'aménagement et de développement durable du territoire - SRADDT"), covering the whole Nord-Pas-de-Calais region, guides regional policies and includes several special strategies (economic development, regional transportation scheme or a plan about climate and environmental aspects) but is not binding. 18 territorial coordination plans („schémas de cohérence territoriale - SCoT") cover not less than two local regrouped governments and address all questions of local planning that need to be coordinated between its member cities: the coordination of transportation and mobility; economic and urban development and especially the responsibility

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to specify the objectives to limit urban sprawl (GRENELLE and ALUR) introduced through new national legislation; the coordination of measures to protect drinking water and corridors to redevelop biodiversity. However, these are too small to deal with housing, mobility or climate in an efficient way.

The fusion of Nord-Pas-de-Calais with the Picardy, which will be effective as of the 1st of January 2016, will be also a great challenge. Picardy is a rural area with a very productive agriculture, but, like the Nord-Pas-de-Calais region, the service economy is still weak, the education level is also low and poverty is high. Picardy is also searching for its identity, with a weak capital, and its southern territory working more with Paris than with Amiens. There is also a great challenge in finding a common identity and vision for the territory, and the significant economic challenge of expanding services.

# **KANSAI METROPOLITAN AREA**





## 2.5

# KANSAI METROPOLITAN

## AREA

*The Kansai region is the second largest metropolitan region in Japan after the Tokyo metropolitan area. Kansai has long been the political, economical and cultural center of western Japan and the East Asian region until the capital was moved to Tokyo in 1868 and this gradually became the concentrated global center. Similarly to the Ruhr region in Germany, Kansai contributed to the prosperity of the modern Japanese industrial state. Beginning with textile production, its central area at Osaka Bay became an industrial hub for the country in the 19th century, focusing on steel and chemical production during the first half and the electric machinery industry during the second half of the 20th century. Despite its continual*

*loss in profile vis-a-vis Tokyo, the Kansai region remains one of the 20 largest regional economies worldwide. Today's challenges are the stabilization of the regional economy through high-tech innovation as well as demographic change. The high competition between the regions' cities and the reaction to the slowing growth leads into individual centralization strategies, leaving peripheral parts of the regional metropolitan area with a slower pace of development. One task is thus the establishment of regional governmental structures of a regional management for the coordination of strategic development tasks.*

### **2.5.1 THE CONTEXT**

#### **STRUCTURE AND BORDERS**

The Kansai region is located in the southern-central region of Japan's main island Honshu and consists of the six prefectures of Osaka, Hyogo, Kyoto, Nara, Wakayama and Shiga. The six prefectures form one polycentric agglomeration region with 21 million inhabitants, the second largest metropolitan region in Japan after the Tokyo metropolitan area. It accounts for 16% of the Japanese population. Unlike the Tokyo metropolitan area, Kansai is a decentralized region and the population and businesses are dispersed over the three major cities of Osaka, Kobe and Kyoto.

Though Kansai is considered to be consisted of the six prefectures mentioned, it is often also defined as the mutually networked area within the combination of the watershed and commuting district, which each consist of parts of the six prefectures and are creating the inner metropolitan area with around 17 million inhabitants.

Kansai had been the political, economical and cultural center of western Japan for more than 1000 years until the political center was moved to Tokyo in 1603, followed by the emperor's residence in 1868. Then, Tokyo gradually became the concentrated global center, especially after WWII. Still, the most economically prosperous period for Osaka, with heavy industry and global trade, was the early 20th century before WWII, when both economic production and the population were much greater than in Tokyo, and when Osaka was called the "smoky

capital: Manchester in the East". Kansai was leading high culture as well as the economy at that time. The industrial prosperity of Kansai started with the textile production at the end of the 19th century, and, with the electric machinery industry based in Osaka, after WWII. In addition, heavy industries such as steel and shipbuilding also developed during the same period. The industrial development has consequently resulted in population growth as a result of the inflow of people from other parts of western Japan. The 1960s were the peak of the rapid economic growth following WWII as part of the part of rebuilding from the destruction. After that, the Kansai economy stagnated due to two oil crises, which decreased the demand for heavy industry.

#### **ROADS AND NETWORKS**

The Kansai area as the largest center in western Japan combines the road, rail and shipping connections of an important traffic hub. Major national roads and highways cross the area, also connecting the fourth largest Japanese island of Shikoku by means of the Akashi Kaikyo Bridge, the world's longest suspended bridge. Even though the main infrastructure was built after WWII, Kansai's road system is still under construction – especially the ring roads around the largest cities. Kyoto and Osaka are connected by bullet train routes with the west and east Shinkansen network with the first route ever built, the Tokaido route, which was opened in 1964. Today, the developed network connects Kansai to all other Japanese regions. The ports of Kobe and Osaka remain the nation's most important connection to continental Asia, es-

pecially in goods shipping. Kansai International Airport is the third busiest international airport in Japan after Tokyo's Haneda and Narita airports. Regarding road construction, as with other regions in Japan, Kansai is now facing the increasing cost of maintenance and repair to the aging infrastructure. Construction is still taking place, though only punctually.

### **RIVERS AND WATERWAYS**

The central Kansai area is situated in the Yodogawa river valley, surrounded by mountains. The valley itself is around 80 km long and 40 km wide, and is rich in fertile soil and water. At the Yodogawa delta, the city of Osaka and its port emerged in medieval times, giving Osaka the nickname of the 'water city', crisscrossed by merchant canals. The river itself has been the subject of fundamental regulatory works since the 17th century. The Osaka Bay coastal area is a 100-km-long metropolitan industrial belt including two major ports and several industrial production sites mostly located on man-made islands. Much of the old major industrial area on the coast is located on reclaimed land that is connected to the natural coastline, although some newer man-made islands exist and are not intended for industry, but for more complex land use.

### **GREEN SPACES AND OPEN SPACES**

The Kansai region is rich in green and nature thanks to the mountainous area directly neighboring the densely inhabited central valley. Within the central metropolitan areas, green space is scarce. The Japanese idea of greenery is embodied in the small gardens and flower

planters on streets as well as shrines. The rice fields between urbanized areas are also considered urban green and open spaces. Traditionally, the historical sites of temples, shrines and palaces as well as riverbanks are the main green areas provided within the city. In modern planning, small parks and street trees are the main ways of promoting urban greenery. Since the 1970s, local movements for the improvement of the quality of the living environment have been advocating for local green space projects, such as pocket parks. Planned neighborhoods, such as the new towns of the modern era, are well equipped with green and open spaces. Traditional urban neighborhoods and suburban commercial developments – including areas of detached housing – often extremely dense and thus lacking both green and open spaces.

## **2.6.2 PLANNING TOPICS AND CHALLENGES**

### **REGIONAL PLANNING**

In Japan, regional government functions are held by the prefectures. However, the strongly hierarchical and rigid institutional systems do not allow for flexible strategic planning. Innovative planning impulses for the regions are traditionally delivered by federal development programs. These often reflect national strategic interests rather than regional ones. The relative weakness of regional planning bodies also mirrors the weak position of the regions as such. Within this situation, the Kansai region is becoming a slowly emerging metropolitan region in Japan. With only rudimentary regional planning bodies to date, and facing a row of difficulties, the Kansai regional body should become an example over the longer term of a new inter-prefectural regional administration body, which may gain more autonomy than allowed by the current national centralistic system. Decentralization is proceeding in the field of planning decision-making. The legal systems and development programs are delivered from the national government, and most of these have been established with the purpose of growing and activating the economy. Because the local governments of Kansai are unique and differ from each other, efforts are being made to redesign and utilize the universal national system and programs as needed. This attitude for planning is the basis for gaining autonomy with independence, but also the basis for weak possibilities to collaborate and a severe inter- and intraregional competition. However, as governments in Kansai are in a sense independent

from each other and the area is polycentric, the potential for collaboration is much more significant than the Tokyo region–Shutoken.

Regional planning in the greater Kansai area (Kinki) arose starting 1965, when the Basic Development Plans for the Kinki region began to be issued. These were made in accordance with the periodically issued five National Development Plans between 1962 and 1998, using the areas of natural preservation, natural park, forestry, agriculture and urban areas, and based on National Land Use Law. The urban area is a planning area designated by city planning law, and is usually divided into two areas as a legal decision; an urbanization promotion area and an urbanization control area. Though focal points have been changing over the decades according to the actual situation of the economy, demography and land use trends, two strategic issues have remained standard. First, it was the topic of regional disparities, particularly the widening gap between the Osaka/Kyoto/Kobe city cores and other areas. The influx of inhabitants into the largest cities of the Kansai area, especially to the sea belt industrial area of Sakai, Osaka, Amagasaki and Kobe, which among others produce steel, chemicals and glass, was powerful before and after WWII, only gradually abating after the 1960s. Even though the electric machinery industry, which developed into an important Japanese industrial sector after WWII, has mostly been located in the areas between Osaka and Kobe and thus further from the coast, until the 1960s, no significant urban expansion plans were implemented. This led to a long-lasting extremely high population

density at the belt area and within the existing city cores. At the beginning of the 1960s, large urban expansion projects were developed around the major cities. They gave birth to several developments during the subsequent decades, such as the Northeast Urban Development Belt around Osaka, including the oldest Japanese new town – the Expo 1970 grounds and the East Osaka sub-center – as well as the Senboku New Town in Sakai. In Kobe, new city development was pursued on the other side of the Rokko Mountains in the north. Several other public investments located between Osaka and Kyoto led to the regionalization of housing and contributed to the decrease in the nighttime population in the city centers of major cities. With the de-densification of the traditional centers, a physical metropolitan regionalization process started, connected to the public investment in technical and traffic infrastructure in order to narrow the spatial intraregional development gap and relieve the urban cores of high development pressure.

The second strategic issue for regional development was meant to balance off the trend of the weakening position of Kinki relative to Tokyo within the increasingly unipolar concentration of the national economy and central functions on national and international arenas of activity. Beginning in 1978, proposals to improve the vital force and adjustment to internationalization and informatization were created for Kansai. The influential Subaru plan, issued 1987 as an alternative plan against concentration in the Tokyo metropolitan area, envisioned the creation of an international economic cul-

tural zone within the whole area, proposing a multipolar distributed polycentric structure. To realize this, three strategic project families were designated: i) an international exchange urban zone, with the Kansai International Airport as a core; ii) a pioneering economy zone for cooperation with Asia and the Pacific areas; and iii) the creative cultural zone of Kansai Cultural and Academic Research City (Keihanna gakkentoshi). The decentrally located core projects of Kansai – the International Airport and Kansai Cultural and Academic Research City – were opened in 1994. The heritage of the Subaru plan also underlies several urban renaissance projects, such as the re-designation of the core area of the Osaka Port from a purely logistics and industrial area into a service-oriented waterfront. The current urban renaissance program 'Water City Osaka' is a descendant of this water-oriented planning.

However, the public-driven metropolitan settlement expansion projects have been spatially organized, as the Japanese planning system encourages (sub)urbanization by not regularizing several kinds of development, and outside the urbanized areas most of the suburbanization remained privately driven and uncoordinated. The lack of planning power on the regional level and the highly competitive environment between particular municipalities led to both an urbanization and suburbanization race during the period of rapid growth between the 1950s and 1980s. The restoration and rapid growth were not controlled by a formal plan and promoted by the developments projects resulting in the urban expansion accompanied

by suburbanization, especially up to 1968, when the present City Planning Law was enacted. Regarding the suburbanization process, there were three main spatially relevant phases: the 'bourgeois' suburbia as a first suburban ring mostly absorbed by later urbanization, the mass middle-class suburbanization, including both public and private residential and other mostly homogenous developments within the central metropolitan area, and ex-urban scattered development in the broader metropolitan areas located mostly in distant mountainous locations around the main settlements. The latter two are a matter of stagnation, reorganization and mosaic-like shrinking pursued by demographic change (which in Japan is a result of an aging population and low birth rates) and core-centered reurbanization processes.

These include a reinforcement of the urban cores as metropolitan hubs through the reconcentration of central functions by the 'Urban Renaissance' program. The program aims to recentralize the urban function in established urban centers. However, it is often rather applied to promote development projects by the private sector with excessive deregulations and without a regional or citywide strategy. Furthermore, programs incorporate the post-suburban development of new centralities throughout the metropolitan area. The previous model establishing new nodes of specialized 'gateways' and focusing on research and development as well as infrastructure, which were to enlarge the regional metropolitan system, have been partly given up due to the reconcentration at urban cores. At the same time, particular highly

connective traditional nodes within the metropolitan areas outside of the core cities are also gaining new functions due to their favorable metropolitan location. In this sense, a massive diversification of the regional settlement space is occurring. The main locational measure is not the physical distance to the core cities, but the connectivity to and between them. Furthermore, particular functional clusters create their own new specialized centralities, such as the robotics and biotechnology sectors, which only seldom copy the strategically designated central areas. The diversification and functional clusters are generated by the efforts of each municipality to survive under severe local economic conditions. Their coordination in terms of efficient networking and collaboration should be discussed and planned at regional level, although no legal or institutional framework for this exists to date.

The comprehensive regional planning for the Kinki region, targeted on developing the area as a single polycentric global city, does not conform to the highly competitive and thus spatially selective policy of particular cities in the region. On the regional level, this policy opened a gap along the centralizing and globalizing the Osaka area and the spatially widely defined and peripherizing Kansai region. This gap became visible on the level of institutional governance, mainly in the growing effort to establish an Osaka metropolitan prefecture by merging the city of Osaka and the Osaka prefecture during the first decade of the 21st century. Osaka City and the Osaka Prefectural Administrations proposed a plan for a larger-than-municipal

government structure, which would more likely include the whole area of Osaka prefecture and therefore create a centralized metropolitan area. Until now, this has only been applied to Tokyo. The idea of Osaka as a metropolitan government entity reaches back to the beginnings of the Japanese modern state in the 19th century, guiding the city's longtime endeavor to replace the national monopolar centrality of Tokyo and its Kanto metropolitan area by a bipolar system that includes Osaka and its Kansai metropolitan area. After WWII, a gradual system of city independence from the national prefectural government in terms of the number of inhabitants was established and conflicts decreased for some time. However, since the Osaka metropolitan area grew together on both city and prefecture territory during the 1960s and 1970s, the challenges of overlapping administration once again emerged. Since then, the city of Osaka has proposed a merger into a metropolitan prefecture.

This endeavor has been repeatedly opposed by other large cities in the Kansai area. The reason why this issue has again become highly relevant during the last decade was nothing less than the stronger effort to decentralize during the 1990s and the work of the Koizumi national government since 2001, which started a significant devolution of planning duties to the regional and municipal levels. According to changes in the City Planning Law in 2000, the decision-making powers of the designated cities were strengthened, especially in the fields of urban redevelopment and infrastructure or zoning. A majority of urban decision-making

powers shifted from the prefecture to the municipalities – the city of Osaka. On the other hand, the Union of Kansai Governments became legally designated as the administrative body in 2010 (today, the largest regional administrative unit in Japan) in the National Local Government Law. This granted the regional organization the function of a special regional administrative unit, allowing it to issue official planning documents. Its Kansai development strategy aims to issue a regional development plan. By now, this is only limited to agreements of cooperation in the field of disaster protection and tourism. Regarding decentralization movements since 2000, the prefecture may come into a position to compete with new regional planning bodies. Prefectures may still maintain the position of coordinating regional matters and conflicts in cities' interests, or they will be made redundant and associations of cities and towns will function as the body that manages and coordinates the regional level. Cities of the Kansai Area are now in the process of seeding for the future local institutional framework.

## CURRENT AND FUTURE CHALLENGES AND PLANNING TOPICS

Kansai is characterized as the association of the unique cities and towns that differ in their geographic conditions, history, culture and industries. The highly competitive environment together with a lack of coordinated strategies and concepts for current and future development further augment the spatially diversifying development and undermine the basic

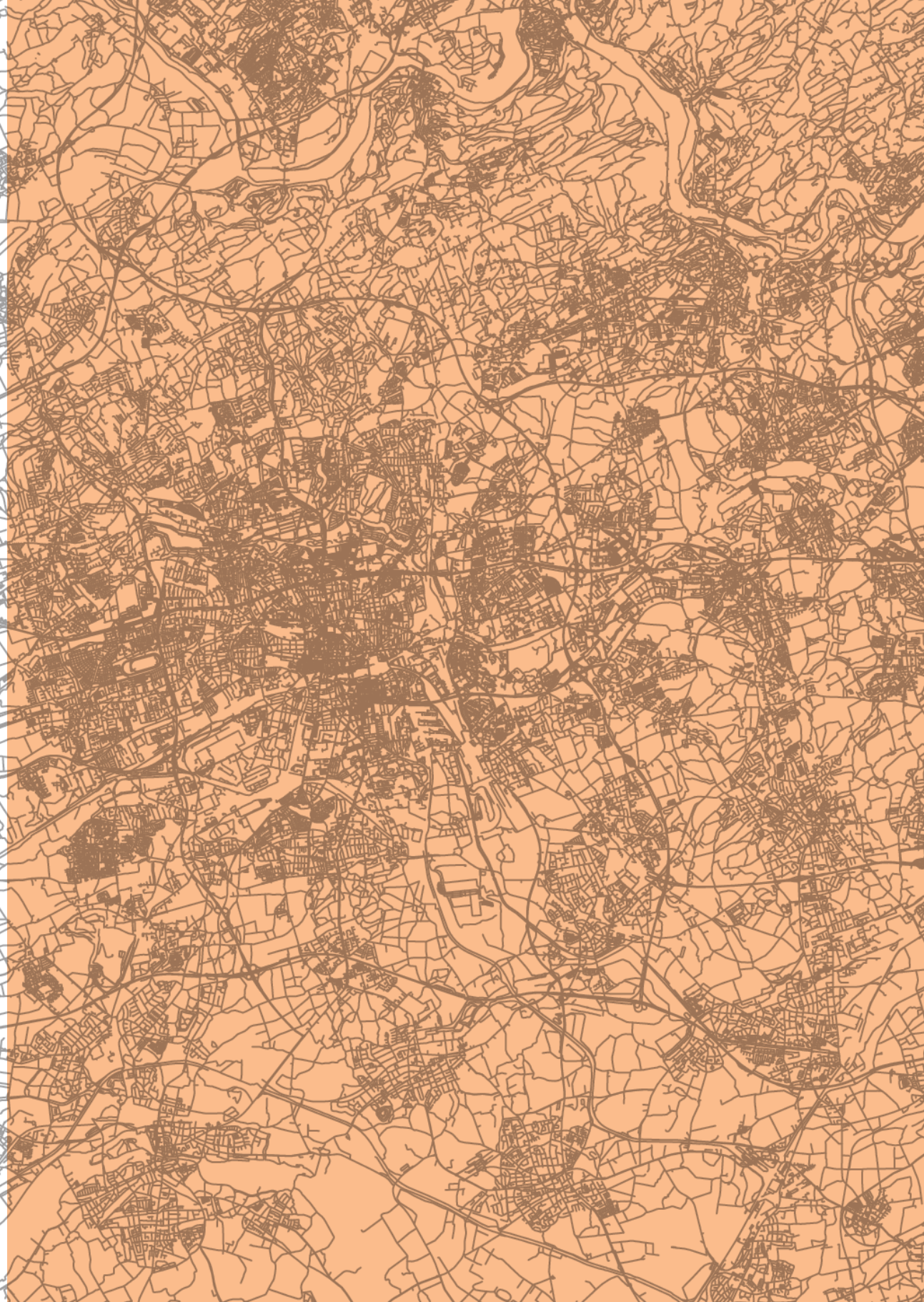
### **CHALLENGES**

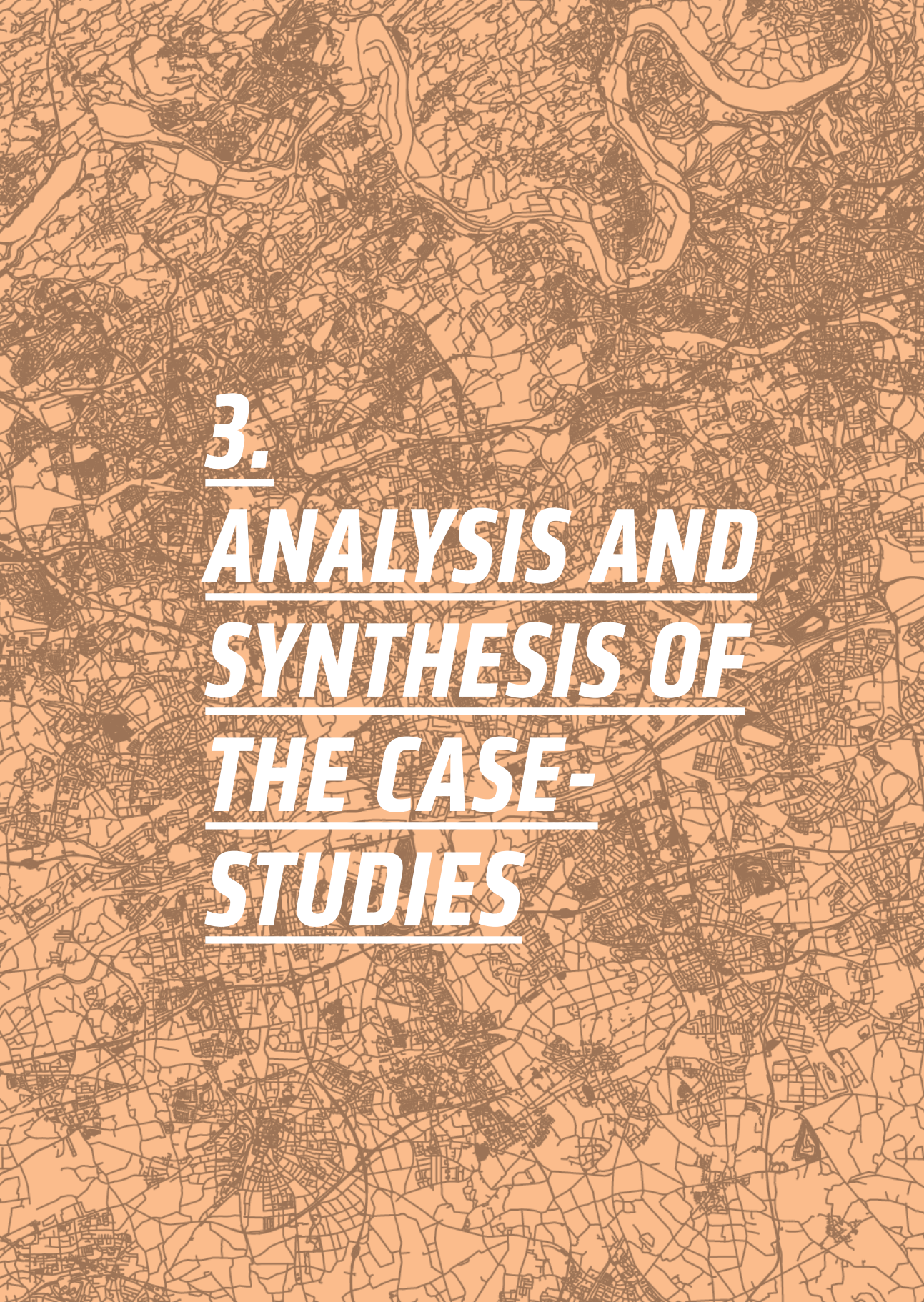
- // Lack of regional planning system in general in Japan
- // Lack of efficient coordination scheme between the well-interconnected cities
- // Collaboration under very competitive settings
- // Planning for depopulation and shrinking is required in the near future
- // Problems with suburbia
- // Preparedness for large natural disasters
- // Lack of strategies and concepts for current and future development management

### **PLANNING TOPICS**

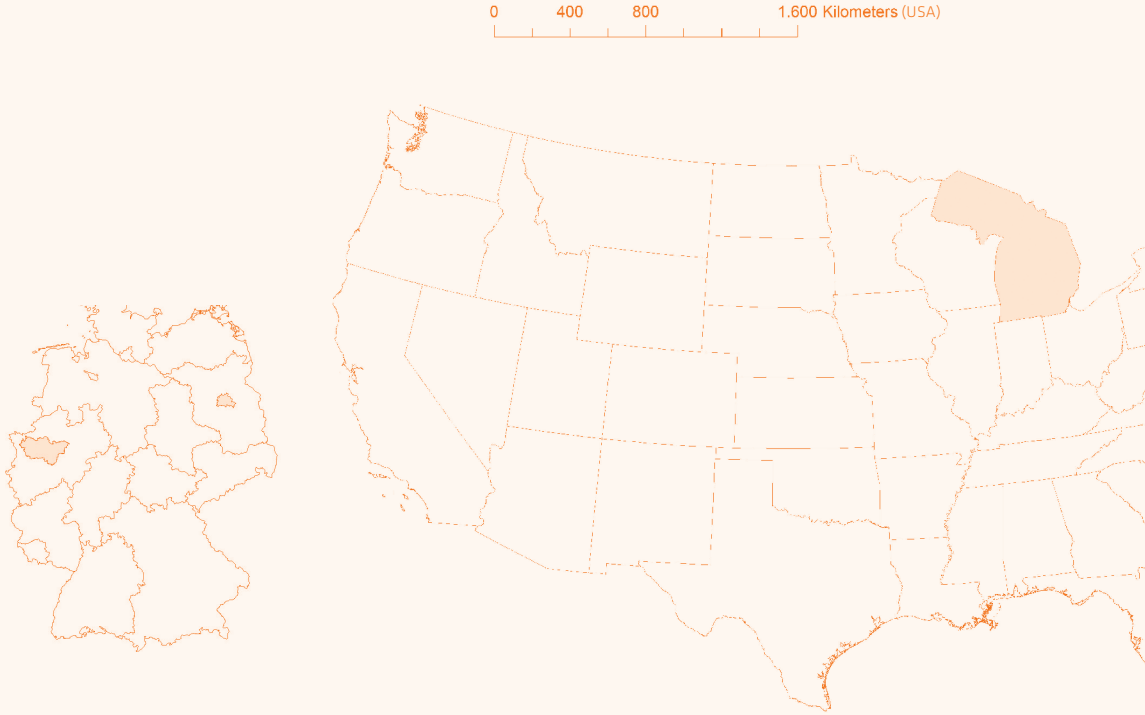
- // Establishing effective regional structures and balancing their interests with existing prefectural bodies
- // Dealing with intraregional competition
- // Answering to peripherization and generating sustainable economic growth

planning target of leveling regional disparities. On the one hand, the region's cities are beginning to individualize their development in order to pursue their unique selling propositions. The intraregional competition further hinders the strategic development of the region within intraregional and global competition – especially the mono-centralized Tokyo metropolitan area. As in most other Japanese regions, a further challenge remains natural disaster protection. For example, the densely inhabited coastal areas of the region are still partly insufficiently protected from potential tsunamis. Further discussion is needed to seek an appropriate institutional body or other system to strategically coordinate or manage for Kansai, and which is composed by rather independent-oriented municipalities that face the common issue of regional restructuring.





**3.**  
**ANALYSIS AND**  
**SYNTHESIS OF**  
**THE CASE-**  
**STUDIES**



**// THE RUHR  
AGGLOMERATION**

**AREA:** 4,435 km<sup>2</sup>  
**POPULATION:** 5,135,136  
**DENSITY:** 1,140/km<sup>2</sup>

**MAIN CITIES:** Dortmund, Essen, Duisburg, Bochum, Oberhausen, Muelheim an der Ruhr

**// THE BERLIN/BRANDEN-  
BURG METROPOLITAN  
REGION**

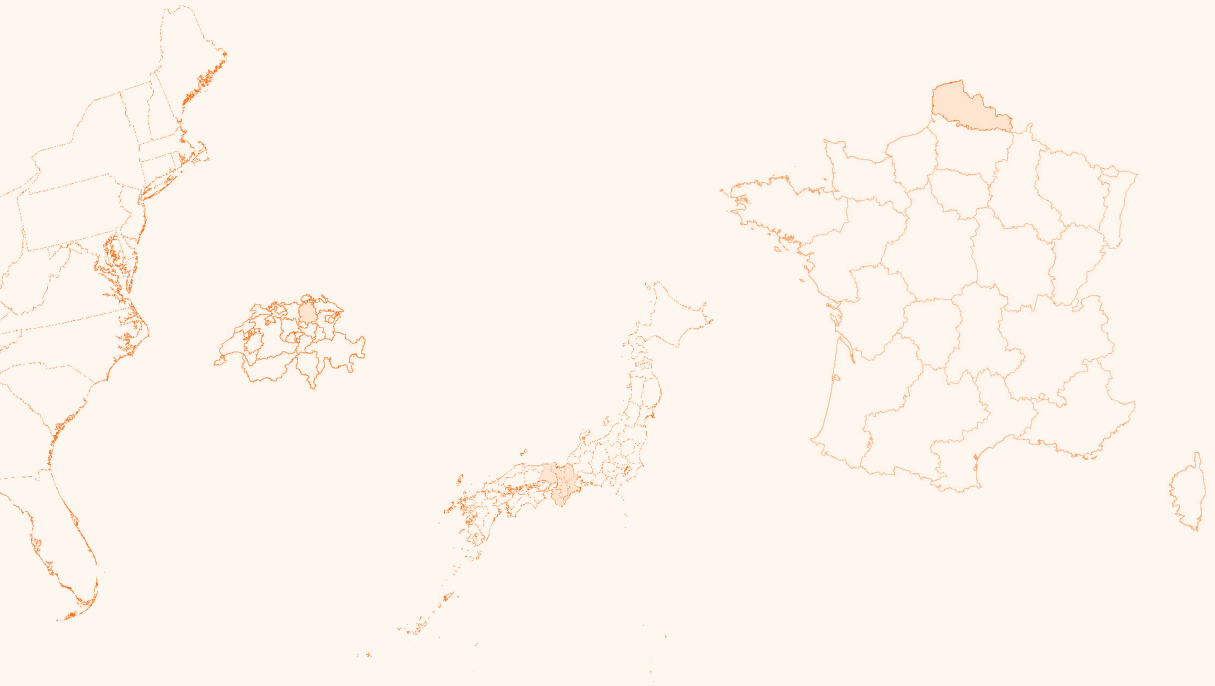
**AREA:** 30,370 km<sup>2</sup>  
**POPULATION:** 5,871,022  
**DENSITY:** 169/km<sup>2</sup>

**MAIN CITIES:** Berlin, Potsdam, Cottbus, Strausberg, Königs Wusterhausen, Ludwigsfelde, Nauen, Oranienburg, Zossen, Telto

**// THE DETROIT  
METROPOLITAN AREA**

**AREA:** 10,071 km<sup>2</sup>  
**POPULATION:** 3,734,090  
**DENSITY:** 1,078.2/km<sup>2</sup>

**MAIN CITIES:** Detroit, Windsor (Ontario, Canada), Warren, Sterling Heights, Ann Arbor, Dearborn



**// METROPOLITAN  
AREA ZURICH**

**AREA:** 2013 km<sup>2</sup>  
**POPULATION:** 1,900,000  
**DENSITY:** 800/km<sup>2</sup>

**MAIN CITIES:** Zurich,  
Luzern, Winterthur, Baden,  
Schaffhausen, Frauenfeld,  
Rapperswil-Jona, Zug

**// KANSAI  
METROPOLITAN AREA**

**AREA:** 27,335.11 km<sup>2</sup>  
**POPULATION:** 23,450,000  
**DENSITY:** 830/km<sup>2</sup>

**MAIN CITIES:** Osaka,  
Kobe, Kyoto, Nara, Wakay-  
ama

**// NORD-PAS-DE-CALAIS**

**AREA:** 12,414.09 km<sup>2</sup>  
**POPULATION:** 4,107,148  
**DENSITY:** 330/km<sup>2</sup>

**MAIN CITIES:** Lille,  
Dunkerque, Arras,  
Boulogne, Valenciennes,  
Calais

# 3.1

## COMMONALITIES AND DIFFERENCES

### 3.1.1 TOPIC 1: POLYCENTRIC STRUCTURE / MONOCENTRIC STRUCTURE

Centrality is one of the main characteristics of metropolitan regions. While monocentric metropolitan areas often show a concentric hierarchy of settlement and functional density and their centers, polycentric city regions are often based on a diversified distribution of these within their space, creating a physically and functionally highly differentiated centrality pattern. The idea of the 'compact city' has

for long been connected with the central city model that dominates a settlement area. The development of post-suburban settlement landscapes turns this discourse, arguing that polycentric systems may offer a more even distribution of functions and thus provide better connectivity. Both, however, remain dependent on effective traffic systems.

COMPARISON MATRIX TOPIC 1 Polycentric / Monocentric Structure

	Ruhr Region	Detroit Region	Berlin Region	Zürich Region	NPDC-Region	Kansai Region
Ruhr Region		●	●	●	●	●
Detroit Region	●		●	●	●	●
Berlin Region	●	●		●	●	●
Zürich Region	●	●	●		●	●
Nord-Pas-de-Calais Region	●	●	●	●		●
Kansai Region	●	●	●	●	●	






### 3.1.2 TOPIC 2: POPULATION GROWTH / POPULATION DECLINE

The development of population in settlement areas is a result of complex interdependencies of mainly economic, societal and environmental trends. Even though there might be ruptures and sudden changes in time, a long-term statistics-based view remains the basic approach. Due to its complexity, the interpolation of population development data into the future has never been a reliable method to predict popu-

lation growth or population decline. In any of the analyzed metropolitan regions, the real population development met the development predictions. In metropolitan regions connected to the global world by their economy or migration policies, population development tends to be more stable over the long term than in more isolated regions.

COMPARISON MATRIX TOPIC 2 Population Growth / Population Decline

	Ruhr Region	Detroit Region	Berlin Region	Zürich Region	NPDC-Region	Kansai Region
Ruhr Region		●	●	●	●	●
Detroit Region	●		●	●	●	●
Berlin Region	●	●		●	●	●
Zürich Region	●	●	●		●	●
Nord-Pas-de-Calais Region	●	●	●	●		●
Kansai Region	●	●	●	●	●	

 strong similarities     
  medium similarities     
  low / no similarities

**3.1.3 TOPIC 3: FOCUS ON INFORMAL INSTRUMENTS / FOCUS ON FORMAL INSTRUMENTS**

The implementation of instruments and procedures in the planning of metropolitan regions depends on each governmental system, governance structure as well as the culture of planning practice. These prove to be quite diverse among the analyzed metropolitan regions and depend on the administrative system of the different states, but also the traditionally prescribed roles of particular stakeholders within

their regional and local arenas. While the systems of government are constructed along 'classic' hierarchies, the reality of planning action in most of the polycentric metropolitan regions tends to be built along panarchic connections, in which authority is based on informal but mandatory relations within a broad scope of actors with similar powers.

COMPARISON TOPIC 3 Focus on Informal / formal instruments

	Ruhr Region	Detroit Region	Berlin Region	Zürich Region	NPDC-Region	Kansai Region
Ruhr Region		●	●●	●●	●●	●
Detroit Region	●		●	●	●	●●
Berlin Region	●●	●		●●	●●	●
Zürich Region	●●	●	●●		●●	●
Nord-Pas-de-Calais Region	●●	●	●●	●●		●
Kansai Region	●	●●	●	●	●	



**3.1.4 TOPIC 5: POST-INDUSTRIAL SOCIETY/  
SERVICE & INFORMATION  
SOCIETY**

Most of the analyzed polycentric metropolitan regions came into being as global industrial hubs, and are thus nowadays struggling with structural change into modern service-and-information-based economies. Apart from the changes in economy, the attraction and development of human capital is becoming a crucial topic for the development of such regions. Together with employment and housing, quali-

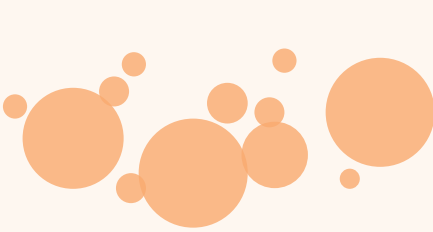
ty-of-life indicators and convenience, safety and environmental issues play a key role within this development. The connectivity of the knowledge-based economy, including the issue of social inclusion in education, also remains crucial. This is what post-industrial metropolitan regions have in common with all other urban regions in the global society.

COMPARISON MATRIX TOPIC 4 Post-industrial / Service & Information Society

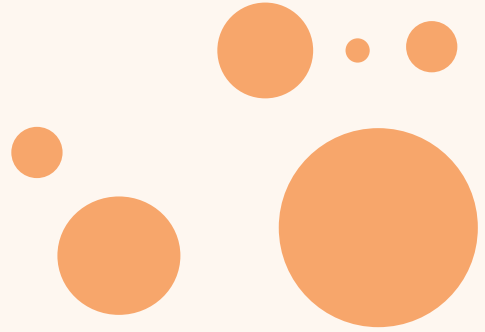
	Ruhr Region	Detroit Region	Berlin Region	Zürich Region	NPDC-Region	Kansai Region
Ruhr Region		●	●	●	●	●
Detroit Region	●		●	●	●	●
Berlin Region	●	●		●	●	●
Zürich Region	●	●	●		●	●
Nord-Pas-de-Calais Region	●	●	●	●		●
Kansai Region	●	●	●	●	●	

● strong similarities      ● medium similarities      ● low / no similarities

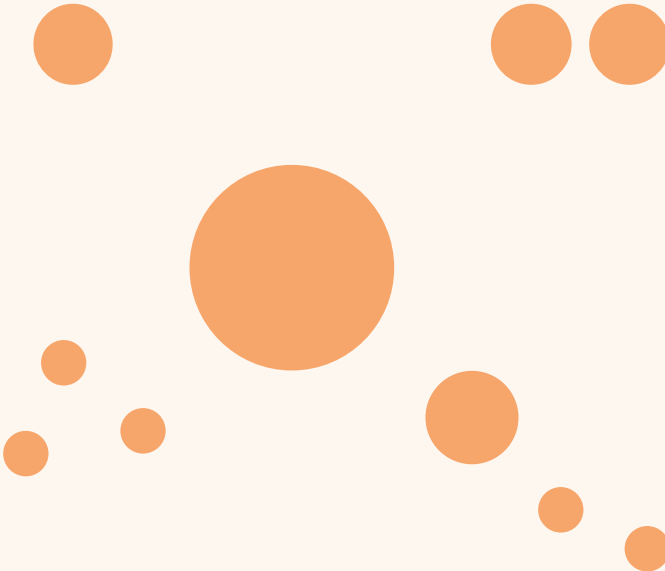
**THE RUHR AGGLOMERATION**



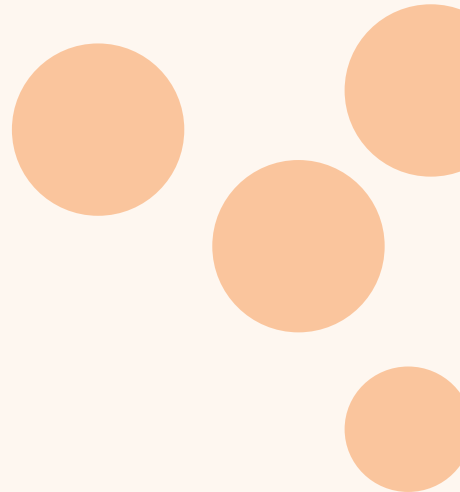
**THE DETROIT METROPOLITAN AREA-METRO DETROIT**



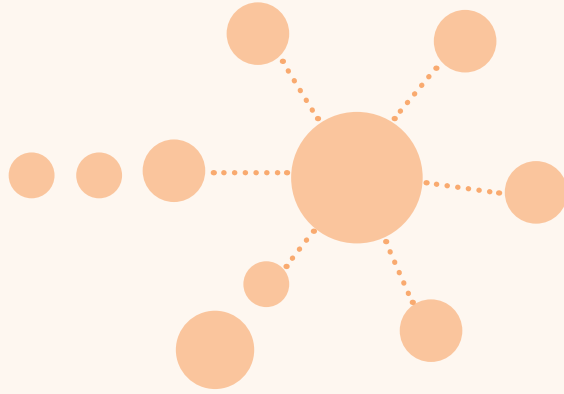
**METROPOLITAN AREA ZURICH**



**KANSAI METROPOLITAN AREA**



**THE BERLIN/BRANDENBURG METROPOLITAN REGION**



**NORD-PAS-DE-CALAIS**



## 4

**CONCLUSIONS**

The desired approach is to pursue concepts for comparative polycentric regional research, to elaborate on research cooperation and to further broaden the member base and knowledge within the international Urban Research Network. As a major step, the conference on Transforming Polycentric City Regions will take place from June 11th to 13th 2015 in Essen, Germany. The six case studies shortly presented above focus on the challenges and planning topics, instruments, strategies, formats and processes of regional planning and cooperation in each specific region. Further questions concern how regional planning, participation and communication should be organized, which sectoral planning topics should be primarily highlighted and which institutions and actors are to be involved. Special attention is to be given to comparative approaches. Methodologically, the comparison of different areas under divergent governments and planning cultures makes the discussions on similarities and differences between the regions a challenge. The Urban Research Network members favor a practical approach to the further exchange on central topics, emphasizing the importance of institutional learning, innovative planning approaches, participation, and the legitimation of planning – issues which stakeholders involved in all regions have in common.

With the new start of its regional plan and a dialog-oriented and integrated development strategy, the Ruhr region is predestined to further develop the discourse on polycentric postindustrial urban regions. With the International Building Exhibition IBA Emscher Park

(1989-1999), the European Capital of Culture RUHR.2010 and many other current initiatives, the region has proven that it can collectively activate innovative urban and regional planning formats. However, the understanding and reappraisal of the historical as well as spatial development of the Ruhr region itself offers only initial strategic clues for reflecting on its transformation process. In comparison to most other German metropolitan areas, the Ruhr agglomeration is a special case: it is a polycentrically organized urban region without a single dominant core, with a diversity of local and regional institutions. At the same time, it is characterized by multifaceted structural breaks and juxtapositions in almost all key areas – especially in its spatial, economic and social development. For decades, the regional transformation and renewal has been carried out by the most diverse – albeit mostly local – actors. Although comprehensive changes have taken place, the transformation process continues. This process is underscored by a variety of planning activities. As part of a globalizing society, all regions involved – similar to the Ruhr region – aim to open up their regional planning discourse to international attention.

Therefore, within an international context, which addresses the processes and strategies of the revitalization of polycentric urban regions, the following goals have been defined:

// The consolidation and expansion of the current body of knowledge about regional transformation processes using an international comparison of strategies and concepts that deal with urbanized postindustrial spaces;

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// The exploration of the chances and challenges that polycentric regions face in sustainable development;

// An exchange on practical planning approaches to and formats for sustainable and prosperous postindustrial polycentric city regions.

To work on these goals, the Urban Research Network has agreed on eight commonly relevant themes that should be further discussed together with the international audience: Structural Change & Transformation: Trajectories, Practices, Leitmotifs; Two-Scale Urbanism – Between Strategic-Regional and Project-Oriented Local Urban Design Approaches for City Regions; Planning Culture – Effective Governance Regimes in Polycentric Metropolitan Regions; Industrial Heritage and Identity; Productive Landscapes; Economic and Social Perspectives; Energy, Mobility & Sustainable Development; and the Urban Redevelopment Beyond Big Plans.

These have become the main topics of the 2015 Transforming City Regions Conference.

We kindly invite you to shape their contents with us!

[www.transforming-city-regions.com](http://www.transforming-city-regions.com)

# 5 PARTICIPATING EXPERTS

## RUHR REGION

### Christa Reicher

(TU Dortmund University)



Prof. Christa Reicher is Head of the Department of Urban Design and Land Use Planning at TU Dortmund University. Additionally, she is founder of the architecture office rha reicher haase architects. Prior to this, she was a Professor for Urban Design at the University of Applied Science, Bochum, and worked as a Research Associate at RWTH Aachen.

### Karsten Zimmermann

(TU Dortmund University)



Prof. Karsten Zimmermann the Head of the Department of European Planning Cultures at TU Dortmund. He is the President of the European Urban Research Association (EURA) and is educated as a political scientist. He was part of the research center „Intrinsic Logic of Cites“ at the TU Darmstadt.

### Michael Schwarze-Rodrian

(Regional Association Ruhr)



Michael Schwarze-Rodrian is the Head of the Department European and Regional Networks Ruhr and the EU Representative of the Regional Association Ruhr (RVR) in Germany. He is a landscape planner who moderates local and regional networks for a sustainable Metropolis Ruhr. He has great experience in integrated strategies, regional and local moderation, and is an internationally sought-after speaker for sustainable urban and regional development.

### Hendrik Jansen

(TU Dortmund University)



Hendrik Jansen studied spatial and urban planning at TU Dortmund University and San Diego State University (USA). He worked for the Cologne-based office ASTOC and for the Institute for City Planning and Urban Design (University Duisburg-Essen). He is founder and partner of the office BJP | Bläser Jansen Partners. Since 2014, he is researcher at the Department of Urban Design und Land Use Planning (TU Dortmund), with a focus on the Ruhr Urbanism project.

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### **Katja Schlisio**

(TU Dortmund University)



Katja Schlisio studied architecture and urban planning at TU Dortmund University. She worked from 2007 to 2011 at the Department of History and Theory of Architecture (TU Dortmund) and in various planning offices. Since 2013, she has worked at the Department of Urban Design und Land Use Planning (TU Dortmund), with a focus on the Ruhr Urbanism project.

### **Andrea Wagner**

(TU Dortmund University)



Since October 2012, Andrea Wagner has coordinated the research projects of the Department of Urban Design and Land Use Planning. Before this, she worked at the German Institute of Urban Affairs (Difu), where she gained project experience in the fields of municipal climate protection and development. Andrea Wagner studied urban planning at the Technical University of Berlin and Hunter College New York.

### **Jan Polivka**

(TU Dortmund University)



Dr. des. Jan Polivka studied town and regional planning as well as Japanese studies in Berlin and Prague, Tokyo and New York City, and received his PhD from the TU Dortmund University (2015). He is the co-founder of Forum Stadtforschung Network. Since 2009, he has been an Associate Professor at the Department of Urban Design and Land Use Planning (TU Dortmund) and fellow at rha architekten & planner.

### **Mais Aljafari**

(TU Dortmund University)



Dr. Mais Aljafari studied architecture and landscape architecture at the University of Jordan and received her PhD from the TU Dortmund University (2014). She worked in several architectural and planning firms in Amman, Jordan. In addition to her practical experience, from 2008 to 2010 she worked as a researcher and lecturer at the German Jordanian University. Since 2014, she is working at the Department of Urban Design and land Use Planning (TU Dortmund).

## **DETROIT REGION**

### **Martin J. Murray**

(University of Michigan)



Prof. Martin J. Murray is a tenured full professor of the Taubman College of Architecture and Urban Planning. He is also affiliated as an Adjunct Professor with the Department of African-American and African Studies (DAAS) in the College of Literature, Science, and the Arts. Professor Murray began his academic career as sociologist with a strong foundation in urban geography.

### **Meagan Elliott**

(University of Michigan)



Meagan Elliott is a Ph.D. Candidate in Sociology at the University of Michigan, where she also received her Masters in Urban and Regional Planning. Her academic work focuses on the politics of redevelopment and gentrification in shrinking cities, and she has worked in several applied settings throughout her academic career, including the Planning Departments of Detroit and Hamtramck.

### **David Bieri**

(Virginia Polytechnic State University)



Dr. David Bieri is Assistant Professor of Urban and Regional Planning at Virginia Polytechnic State University. His main research and teaching interests are at the intersection of public finance, regional science and economic geography. David's research examines spatial features of credit flows and local economic development, focusing on the dynamics of urbanization and the evolutionary development of the monetary-financial system as a joint historical process.

### **Dan Kinkead**

(Detroit Future City)



Dan Kinkead is an architect and urban designer, and the Director of Projects for the Detroit Future City Implementation Office. Before Detroit Future City, Dan was design principal at the Detroit architectural firm Hamilton Anderson Associates, and an urban designer at Skidmore Owings & Merrill in New York. Dan graduated from Harvard University with a Master of Architecture in Urban Design, and from the University of Kentucky with a Bachelor of Architecture.

## **ZURICH REGION**

### **Wilhelm Natrup**

(Office for Spatial Development, Zurich)



Wilhelm Natrup studied Urban and Regional Planning at TU Berlin. From 1984 to 1987, he worked in planning offices in Berlin and Basel, and afterwards at ETH Zurich at the Chair of Urban Planning of the Architecture department. From 1990 to 2009, he was an associate and member of the management at the office Ernst Basler + Partner AG in Zurich. Since 2009, he has been cantonal planner of the Department for the Spatial Development of the Canton Zurich.

### **Matthias Loepfe**

(Regional Planning Zurich & Surroundings)



Dr. Matthias Loepfe works as a project manager at Regionalplanung Zurich und Umgebung (RZU). He studied Human Geography at the Universities of Zurich and Fribourg, and Spatial Planning at the ETH Zurich (Switzerland). In his dissertation, he focused on the dynamics of collective decision-making in urban design practice in peri-urban and suburban Swiss municipalities.

### **Fabienne Hoelzel**

(ETH Zurich)



Fabienne Hoelzel is the founder of FABULOUS URBAN, a design and planning practice for emerging and developing regions, after having worked several years as the Urban Design and Planning Program at the Social Housing and Urban Development Authority of São Paulo, Brazil. Fabienne also has a teaching position at the Institute of Urban Design at the ETH Zurich. Additionally, she is currently involved in the Makoko Regeneration Plan.

## **KANSAI REGION**

### **Hisako Koura**

(Kobe Design University)



Dr. Hisako Koura is professor at the Kobe Design University. She is an urban planner who worked in a private planning institute mainly engaging in the project plans and guidelines of redevelopments in the Osaka urban center from 1984 to 1992. She started her research and education career in Osaka University in 1992. Her major research interests are landscape and spatial planning.

## **NORD-PAS-DE-CALAIS REGION**

### **Brigitte Groenewald**

(Syndicat Mixte Lille Métropole - le SCOT Lille Métropole)



Brigitte Groenewald studied spatial and landscape planning at the University of Hanover (Germany). Since 1993, she has focused on regional and urban planning. She started her career at the City of Hanover (Germany). Then, she worked in Luxemburg for the engineering consultancy TR Engineering, and continued for the regional government (Bezirksregierung) in Cologne (Germany). In 2002, she started working in France for the urban department of the City of Mulhouse. In 2006, she joined the urban development agency of Lille's greater area (Agence de développement et d'urbanisme de Lille Métropole). She is currently in charge of Lille's metropolitan master plan.

### **Ludivine Dufour**

(Conseil régional Nord-Pas-de-Calais)

Ludivine Dufour studied political science at the Lyon (France) University and town and country planning at the University of Tours (France). In 2004, she worked for the Région Nord-Pas-de-Calais. Since 2007, she has worked on the regional development plan (Schéma Régional d'Aménagement et de Développement Durable du Territoire, SRADDT), especially on the foresight aspects, leading foresight studies and working group on environmental, social and economics topics.

## **BERLIN REGION**

### **Philipp Misselwitz**

(TU Berlin University)



Prof. Dr. Philipp Misselwitz is an architect and urban planner. He studied at Cambridge University and the Architectural Association London and received his PhD from Stuttgart University for research on urbanized Palestinian refugee camps. He initiated an EU-funded research project which led to the development and testing of community-driven planning methodologies (CIP) conducted in Palestinian refugee camps across the Middle East. He worked for (GIZ) and as a consultant for UNRWA before becoming the Chair of International Urbanism at University of Stuttgart (2010-2013). In 2013, he was appointed Chair of the Habitat Unit at the Institute of Architecture of the Technical University of Berlin. He is a network partner at Urban Catalyst studio, a planning design consultancy group based in Berlin.

### **Elke Plate**

(Senate Administration Berlin)

Elke Plate studied spatial planning at the University of Dortmund. Founder of the planning firm "Planersocietaet" Dortmund/Dresden from 1992 - 2001. 1995 - 1997 formal administration traineeship at the Senate of Urban Development and Environment in Berlin, 1997 graduated as "Staedtebauassessorin". In 2001, she joined the staff of strategic planning in the Senate Department. Since 2008, she has been Head of the Unit for Centres, Economy and Urban Development Concepts.

## **REFERENCES**

- Booth, P. (Ed.). (2007). *Spatial planning systems of Britain and France: a comparative analysis*. Milton Park, Abingdon, OX ; New York: Routledge.
- Burger, M. & E. Meijers. (2012). Form follows function? Linking morphological and functional polycentricity, *Urban Studies*(49), 1127-1149.
- Dühr, S., Colomb, C., & Nadin, V. (2010). *European spatial planning and territorial cooperation*. London ; New York: Routledge.
- Gabathuler, C. u. P. Sascha 2001:Siedlungsentwicklung im Kanton Zürich – Ein Rückblick auf 50 Jahre Raumplanung. In: *Das kleine Forum in der Stadelhofer Passage* 22. Zürich.
- Green, N. (2007). Functional polycentricity: a formal definition in terms of social network analysis, *Urban Studies*(44), 2077-2103.
- Hall, P., & Pain, K. (2006). *The polycentric metropolis: learning from mega-city regions in Europe*. London ; Sterling, VA: Earthscan.
- Healey, P. (1997). *Collaborative planning: shaping places in fragmented societies*. Vancouver: UBC Press.
- Knieling, J., & Othengrafen, F. (Eds.). (2009). *Planning cultures in Europe: decoding cultural phenomena in urban and regional planning*. Farnham, England ; Burlington, VT: Ashgate Pub. Company.
- Nadin and V., Sted, D. (2008). European spatial planning systems, social models and learning, *disP*(44), 35-47.
- Newman, P., & Thornley, A. (1996). *Urban planning in Europe: international competition, national systems, and planning projects*. London ; New York: Routledge.
- Reimer, M., Getimis, P., & Blotevogel, H. H. (Eds.). (2014). *Spatial planning systems and practices in Europe: a comparative perspective on continuity and changes*. New York, NY: Routledge.
- Senatsverwaltung für Stadtentwicklung und Umwelt (2013): *Stadtentwicklungskonzept Berlin 2030. Statusbericht*. Berlin.
- Vasanen, A. (n.d.). Functional polycentricity: examining metropolitan spatial structure through the connectivity of urban sub-centres, *Urban Studies*(49), 3627-3644.

### Websites

<http://www.metropoleruhr.de/en/home/the-ruhr-regional-association/regional-planning.html> (accessed May 30, 2015)

<http://www.berlin.de/berlin-im-ueberblick/zahlen-fakten/index.de.html> (accessed May 30, 2015)

<http://www.berlin.de/rbmskzl/regierender-buergermeister/buergermeister-von-berlin/buergermeister-galerie/artikel.4556.php> (accessed May 30, 2015)

<http://www.lib.kobe-u.ac.jp/repository/81006871.pdf> (accessed May 30, 2015)

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dortmund

## **EDITORIAL STAFF**

TU Dortmund University | Faculty of Spatial Planning  
Mais Aljafari, David Bieri, Ludivine Dufour, Hendrik Jansen,  
Hisako Koura, Elke Plate, Jan Polivka, Christa Reicher, Liesa  
Schroeder, Wilhelm Natrup

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