

# In-between

Imagining the Future  
of the Silesian Metropolitan Area

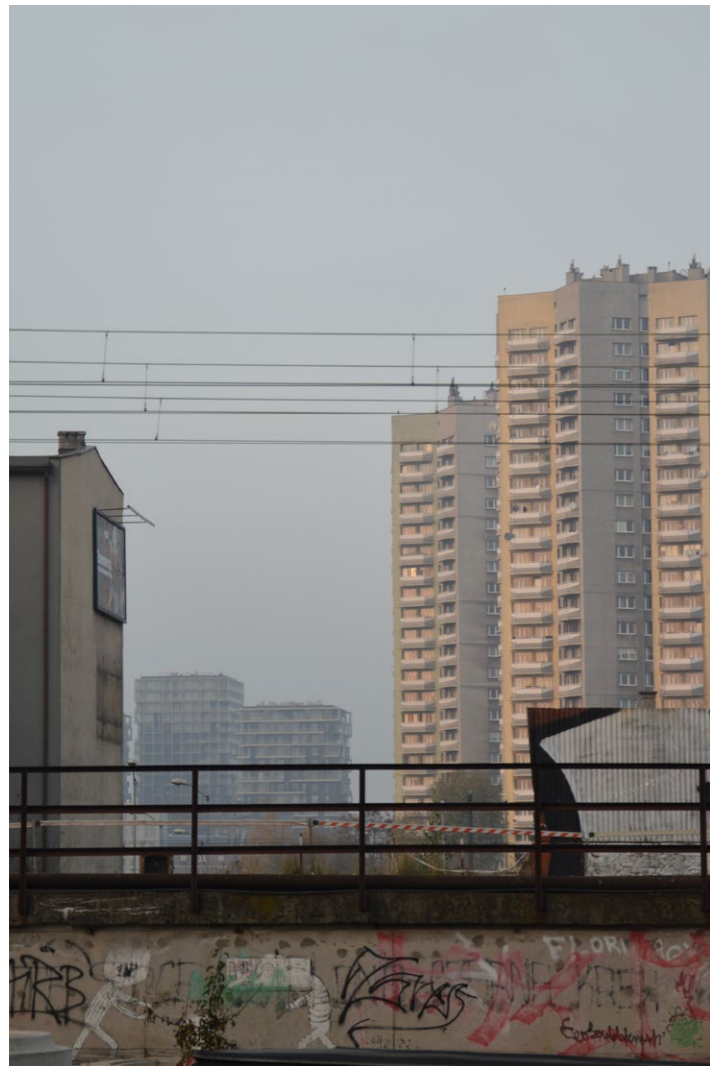


P5 presentation

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Studio  
Metropolitan Ecologies of Place



Soviet estate, Katowice



Coal heap, Katowice



Suburbs, Gliwice



City center, Bytom



Kaufhaus estate, Ruda Śląska

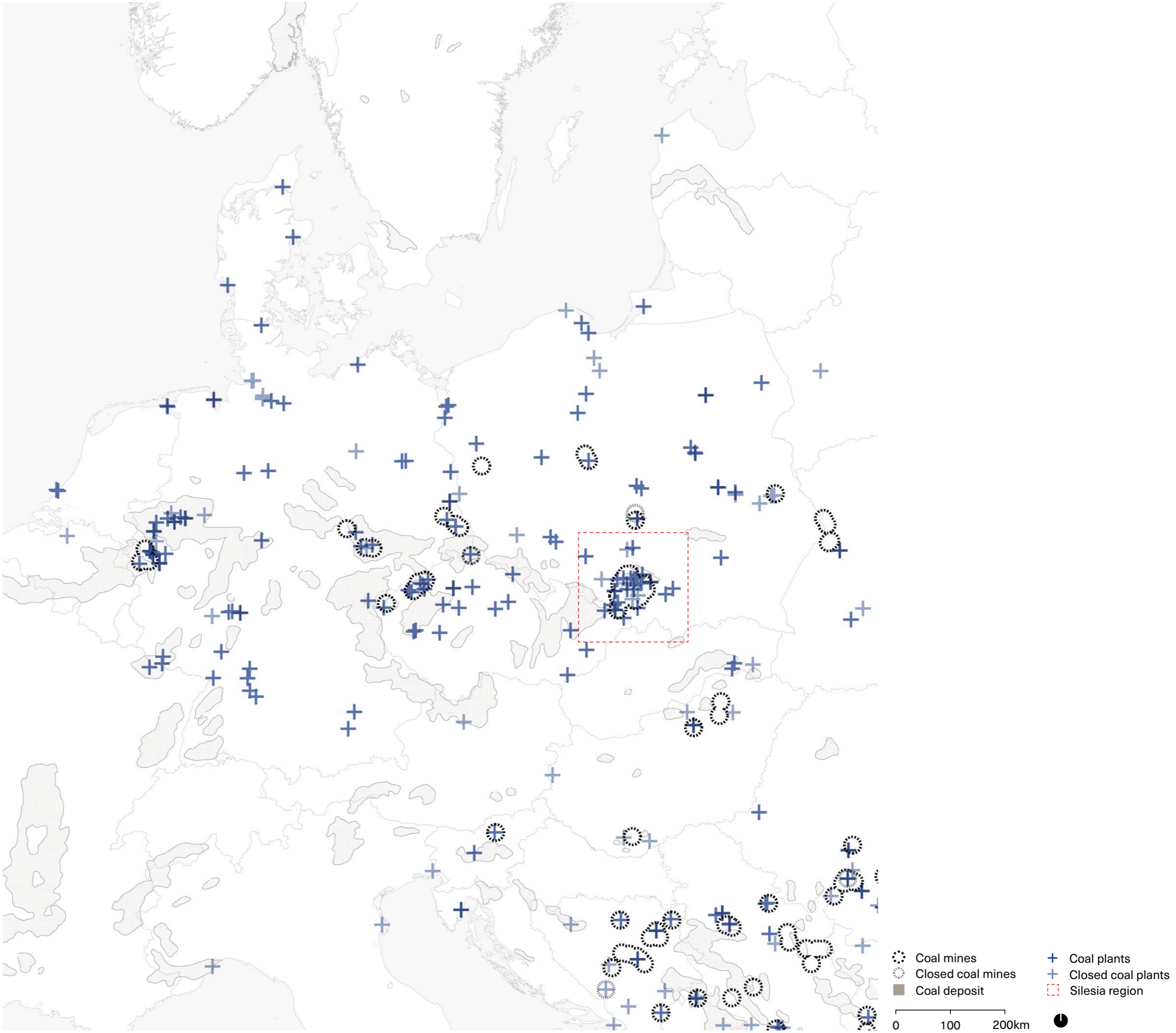


Mine "Boże Dary", Katowice



Teofil Ociepka, Miner in the Forest | 1956

# Coal regions in Europe





Teofil Ociepka, Miner in the Forest | 1956

Source: project Odratowac



Kłodnica river - water pollution



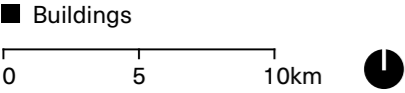
Bobek estate - view on the steel plant



Teofil Ociepka, Miner in the Forest | 1956

# Urbanisation

Urban structure

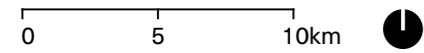


# Urbanisation

## Infrastructure



□ Main infrastructure: roads, train tracks, heavy industries

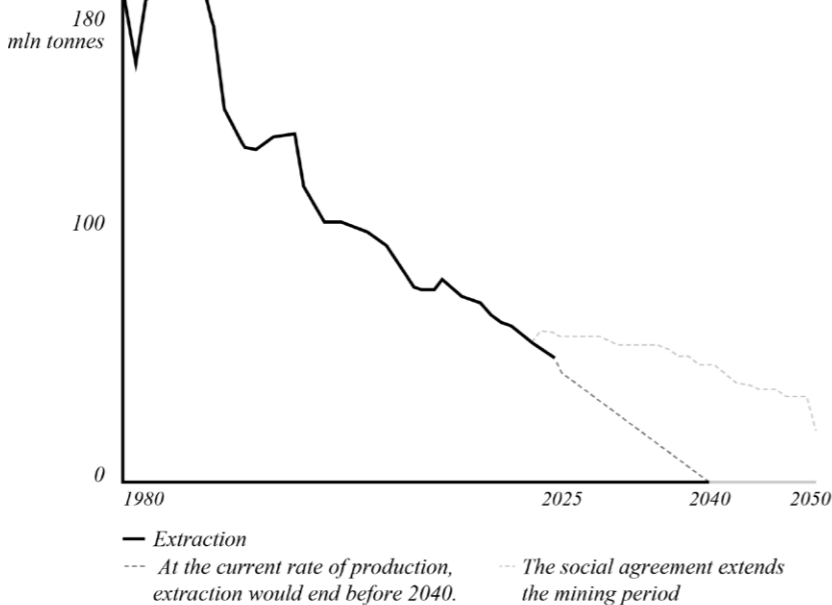


# Perception

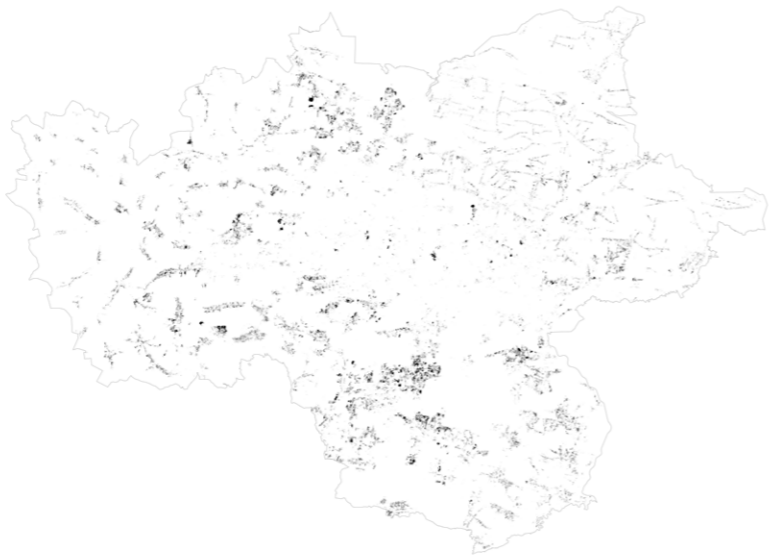
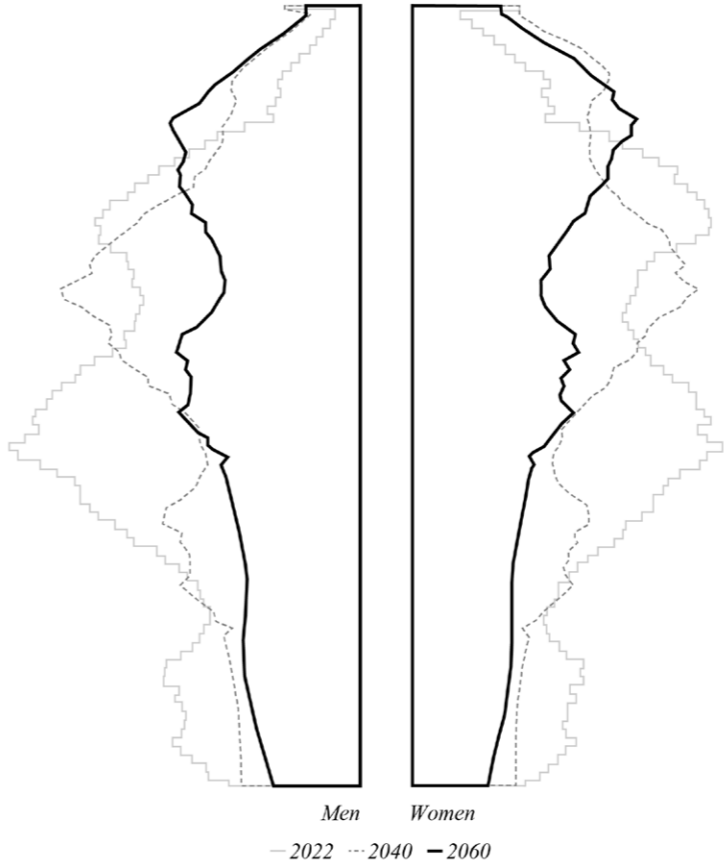


# Urgencies

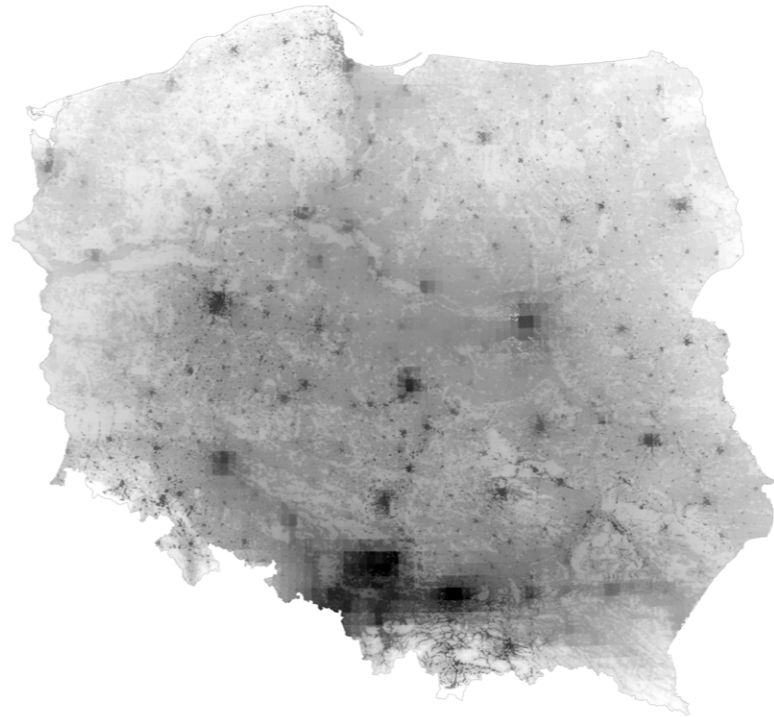
De-industrialisation  
Forecast for coal production in Siliesia region



Aging population  
Population structure predictions in core metropolitan areas

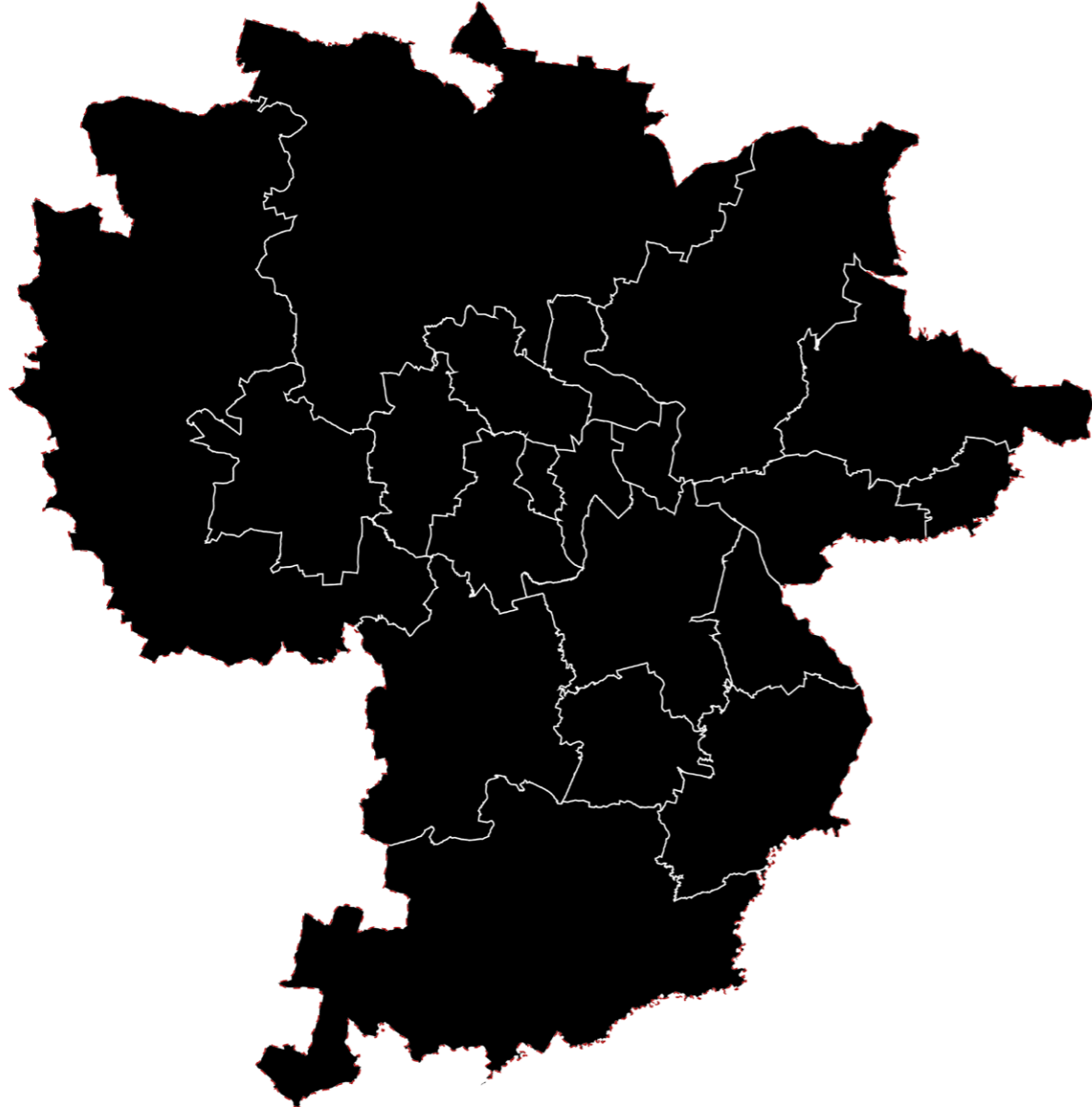


Suburbanisation  
Change in surface area overlapped with peripheral housing areas

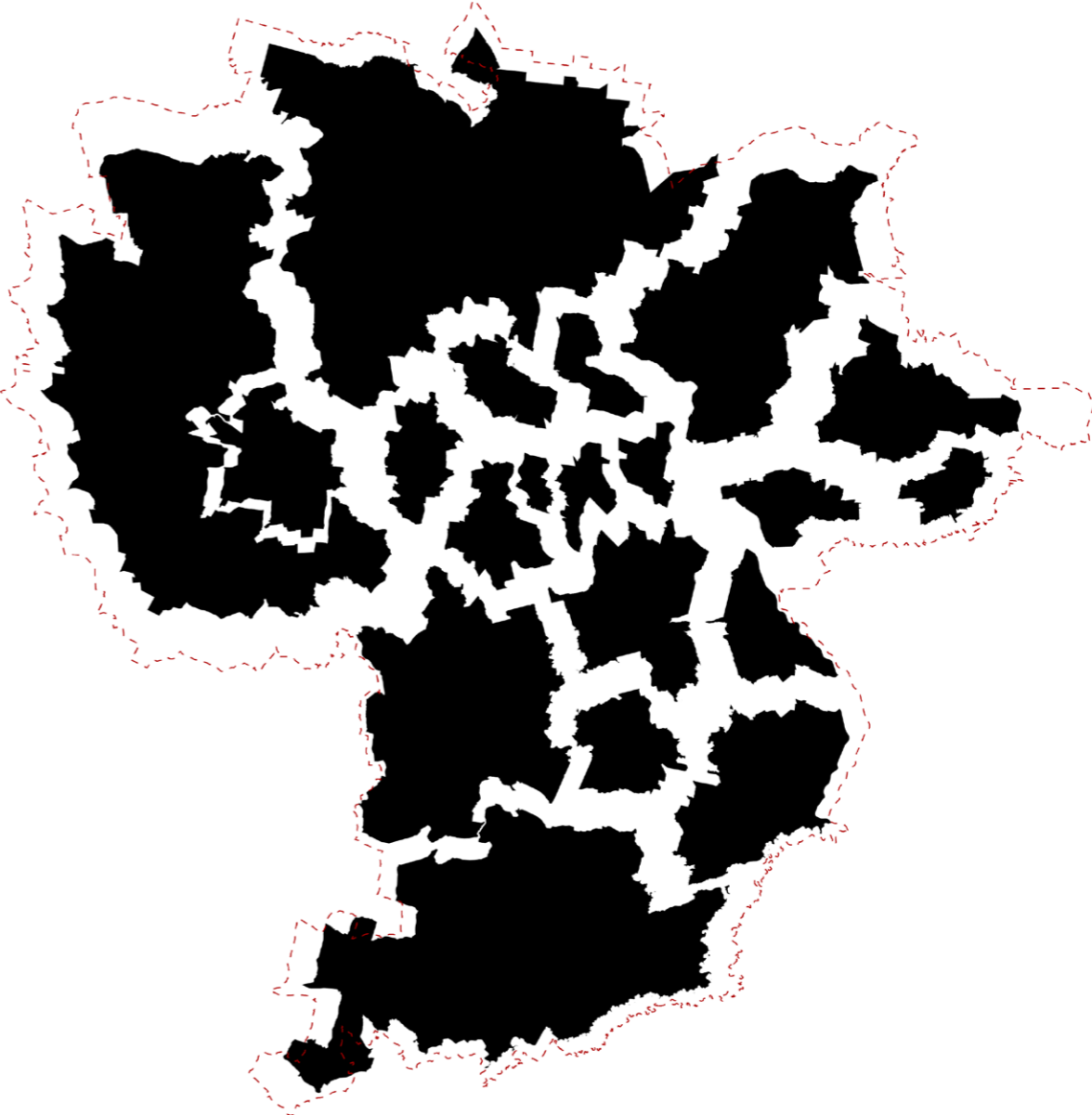


Environmental challenges  
Air pollution (pm25) in national scale

# Uncertainty



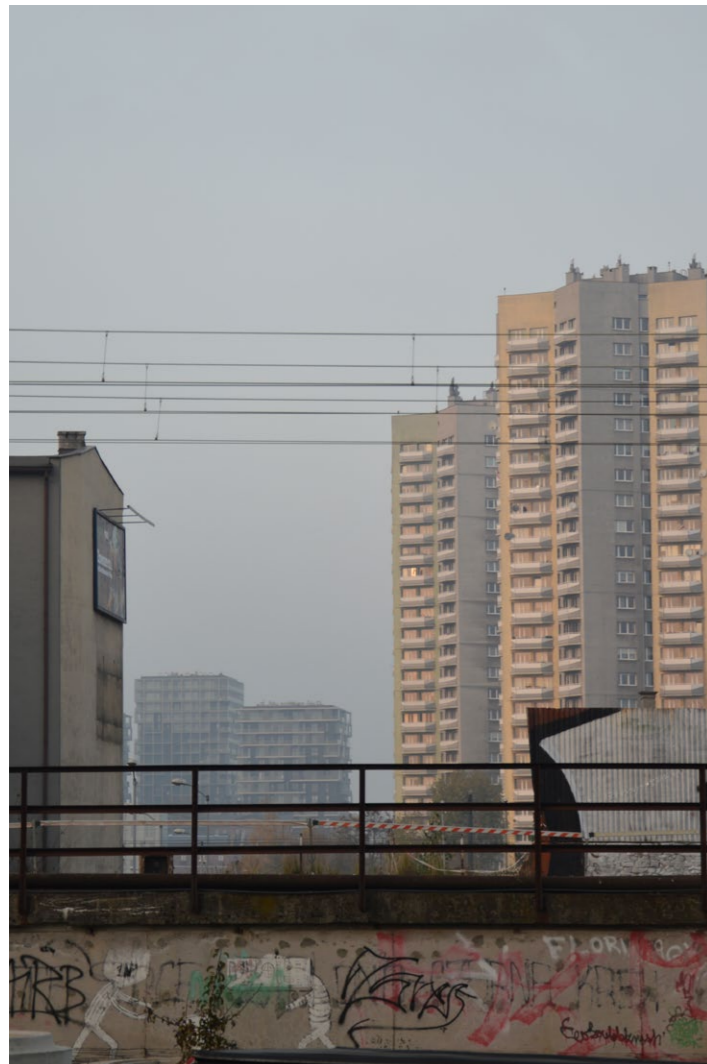
2022



2060

Average percent of population shrink: -24.7%

“Dross emerges out of two primary processes: current **rapid horizontal urbanization** and as **the leftovers** of previous economic and production regimes” (Berger, 2006).



Katowice soviet estate



Miners' heap



Gliwice suburbs



Bytom city



Kaufhaus estate



Katowice mine site "Boze dary"

“[...] some of the types of “waste” may be **productively reintegrated** for higher social, cultural, and environmental benefits” (Berger, 2006).

About regeneration

“Regenerative development [...] investigates how humans can **participate** in ecosystems through development, to **create optimum health for both human communities** (physically, psychologically, socially, culturally and economically) **and other living organisms and systems.**”

Jenkin and Pedersen Zari, 2009

Rethinking our built environments: Towards a sustainable future.

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### About imagination

“Spatial imaginaries are deeply held, **collective understandings of socio-spatial relations** that are performed by, give sense to, make possible and **change collective** socio-spatial practices.”

Davoudi et al., 2018

Policy and Practice Spatial imaginaries: tyrannies or transformations?

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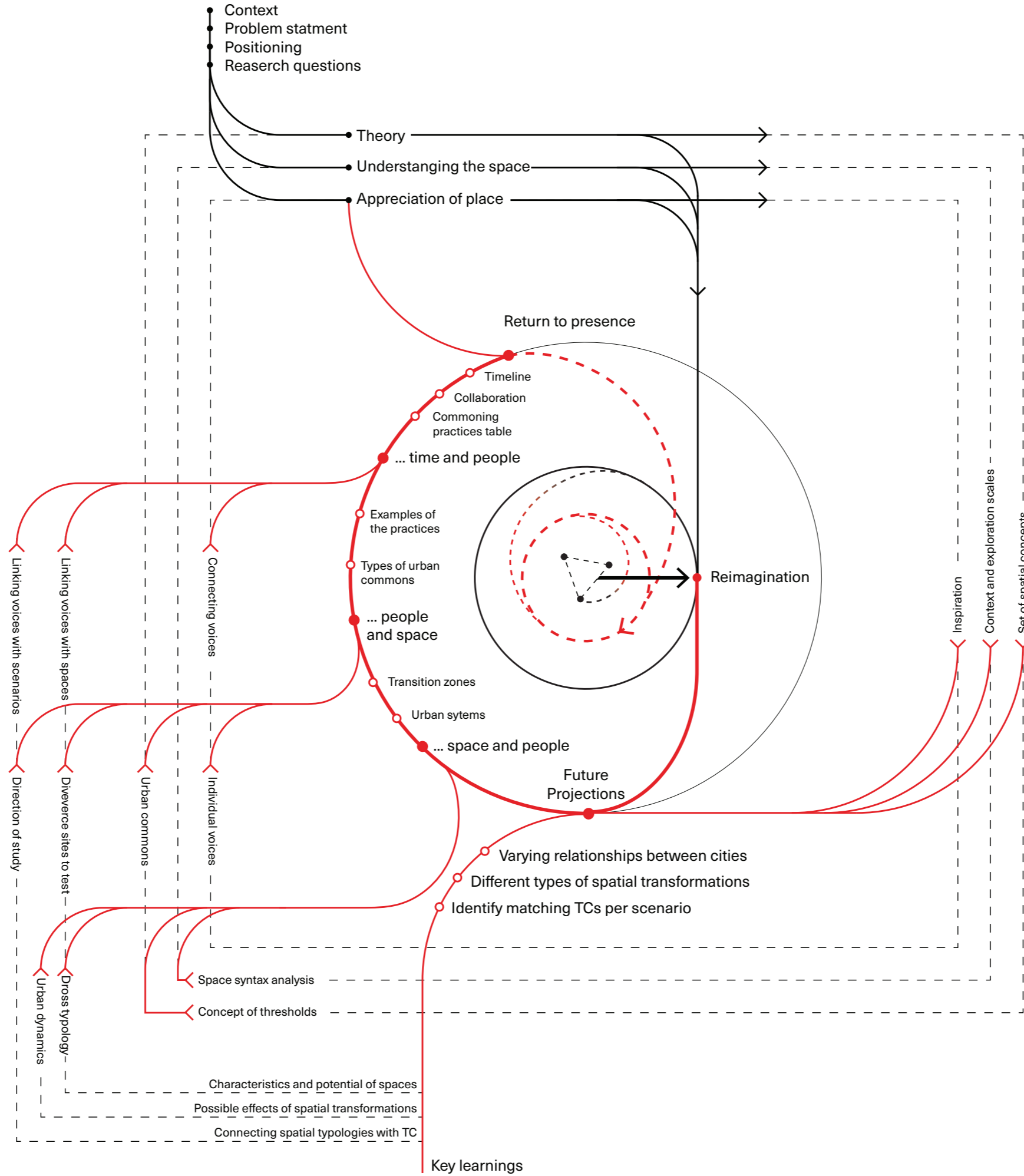
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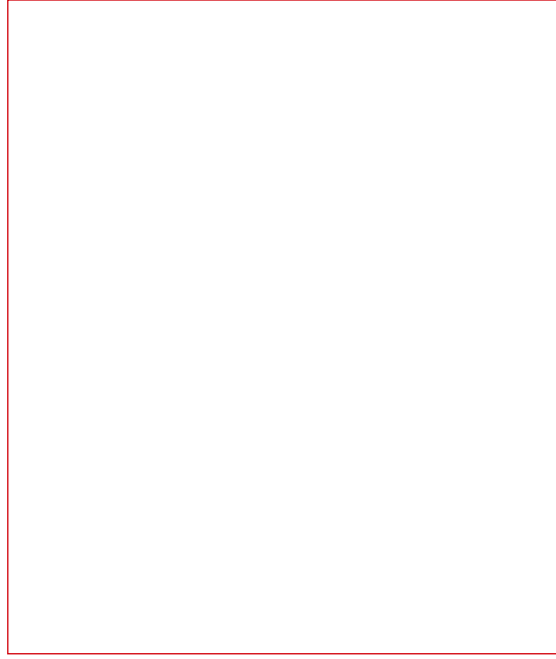
### Research question

How can the **imagination of spatial and territorial structures** of the Górnosłasko - Zagłębiowska metropolitan region **foster a regenerative future** and what spatial and territorial interventions could **support this process?**

# Process



# Scales



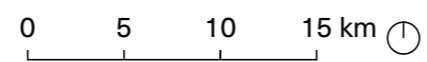
Metropolitan area



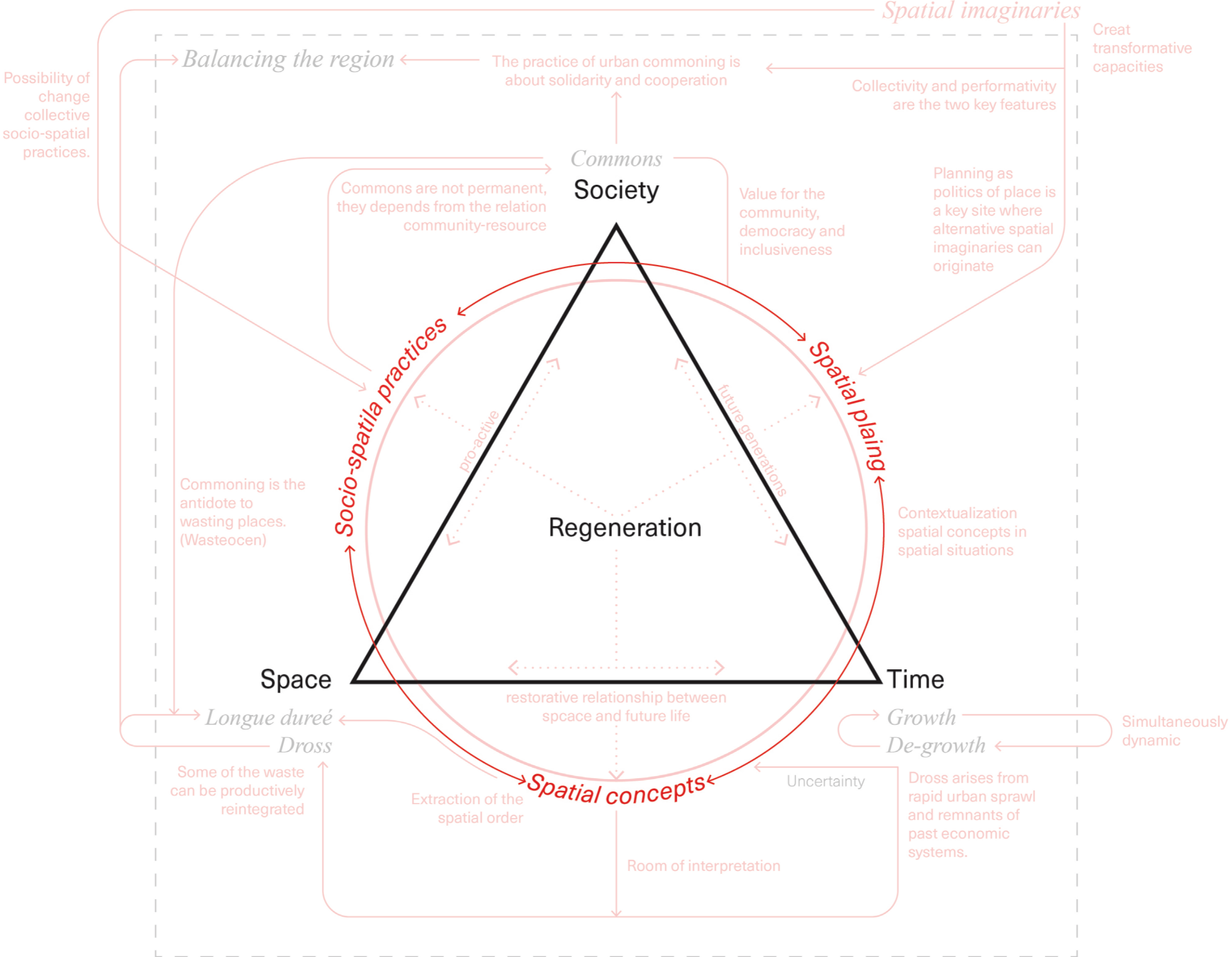
Transect



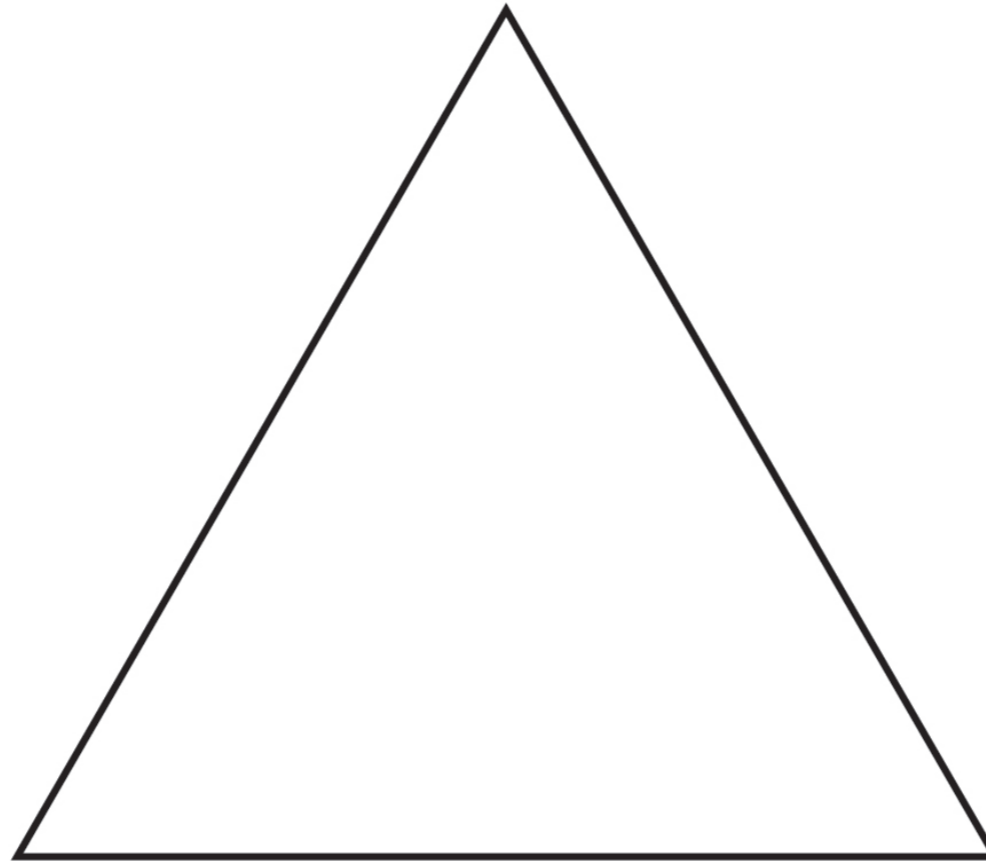
Zoom in



# Conceptual framework

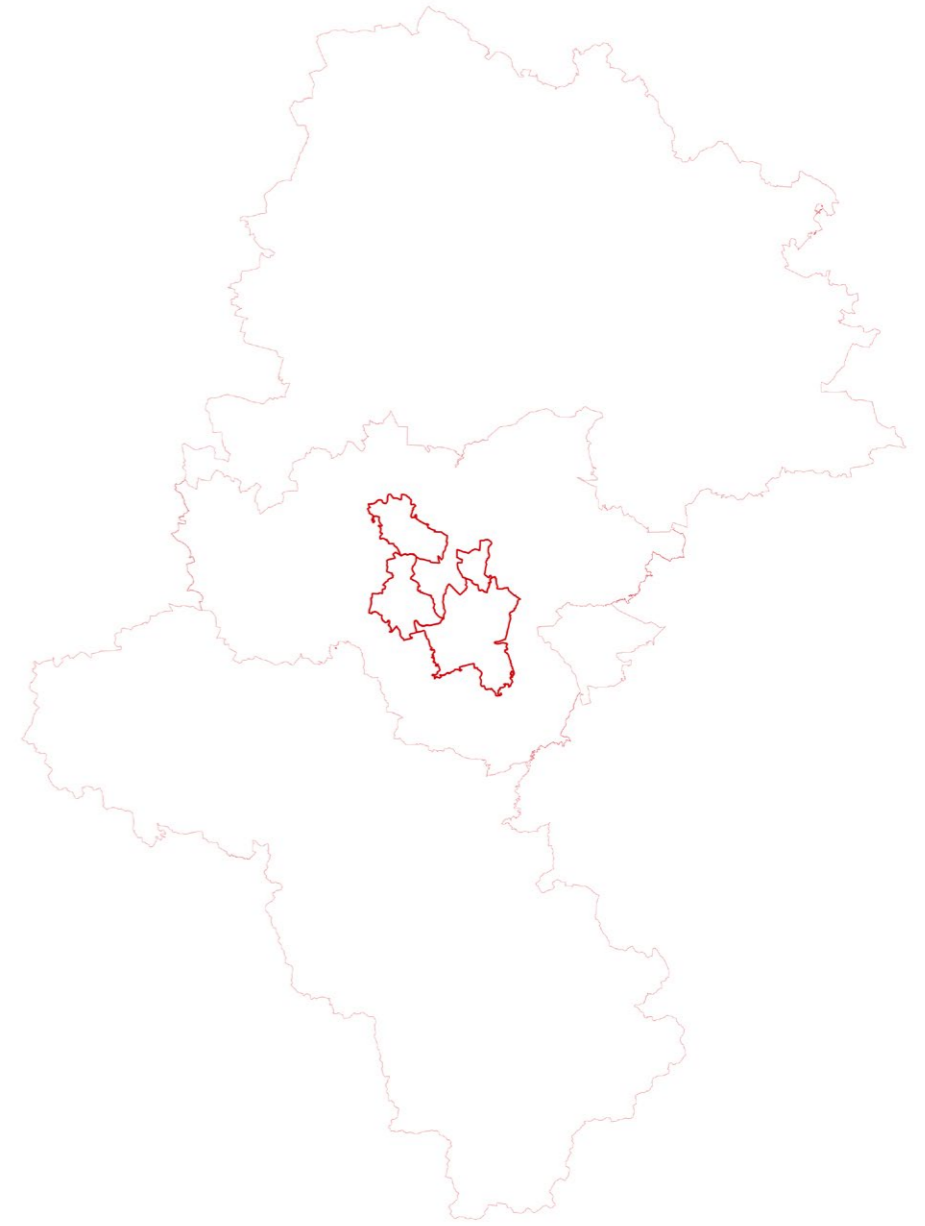
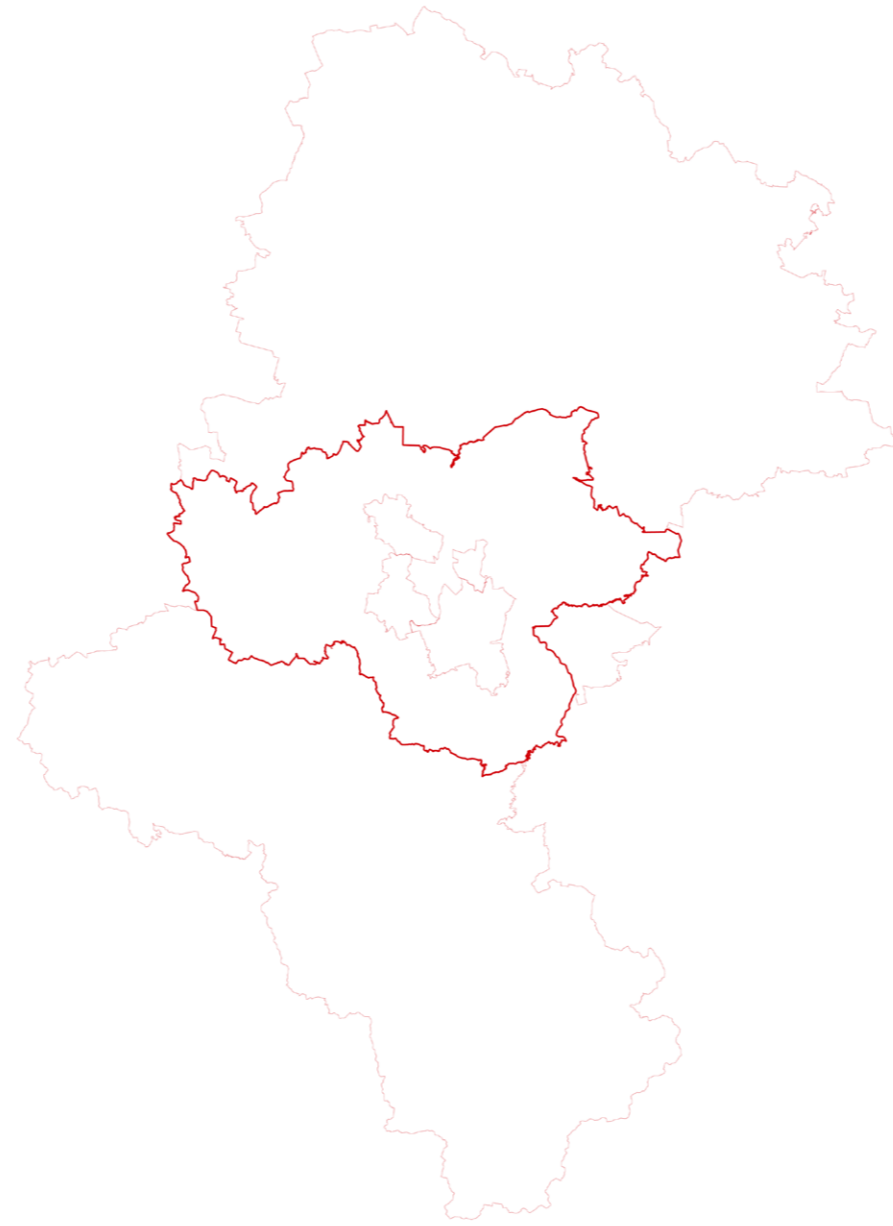
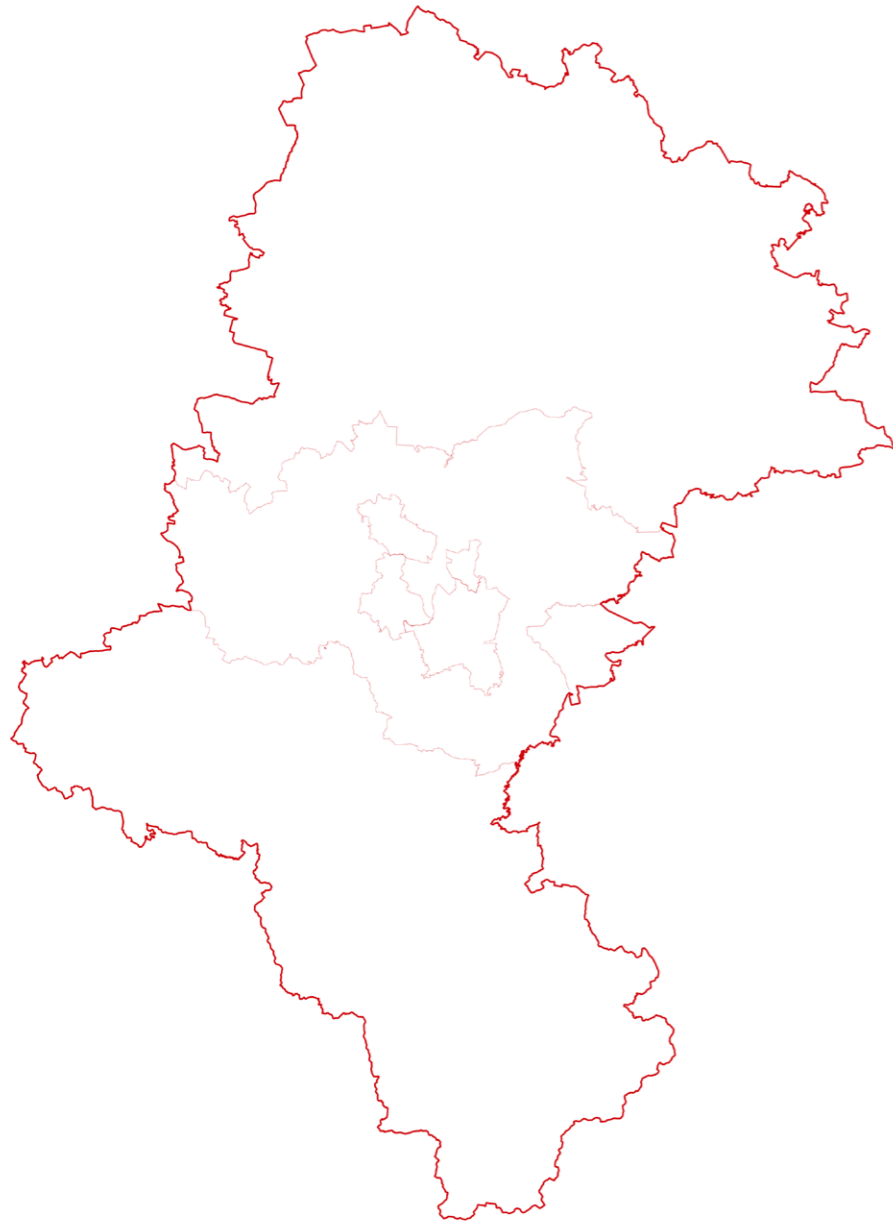


Society

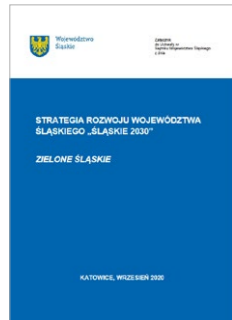




# Voices Policy



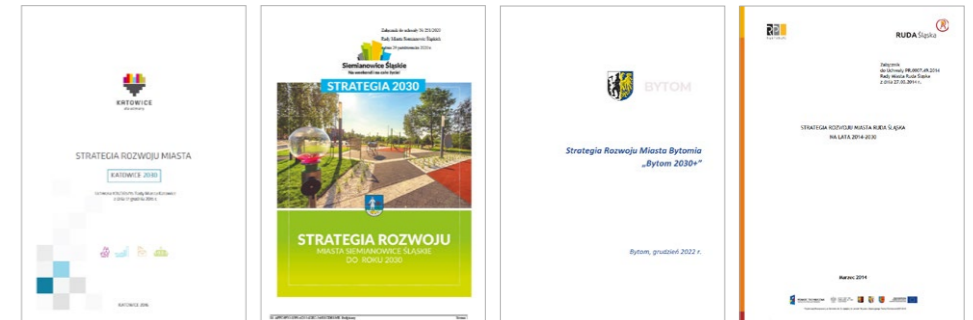
## Voivodship



## Metropolitan region



## Municipalities



## Infrastructure, resources and innovation

### mobility

#### soft mobility

Soft mobility, good public transport, safe bike lines and side walks

Development of sustainable urban mobility and promotion of public transport as the first choice for daily travel

Promotion of micromobility, including cycling and the sharing economy

Sustainable transport and mobility.

#### roads

Being proud of road infrastructure

Creating infrastructural and organizational conditions for the development of public and road transport

#### train

Development of rail transport

### infrastructure?

Efficient infrastructure

Developed technical infrastructure.

Technical infrastructure meeting the growing expectations of users.

### energy

How energy-transformation can start new era in the region?

Energy transformation and improvement of air quality

### innovation

How innovation can be define for future challenges?

#### circularity and sustainability

Integration of municipal waste and sewage sludge management systems, with a focus on a circular economy

Technologies supporting sustainable development.

#### collaboration

Cross-sector cooperation and support for innovation.

#### concentration

Concentrated innovation hubs and new economy enterprises,

## Greenery and environment

### quality

#### connection

Improve green connections, more green places

What are the connections with outside surroundings?

#### quality

High environmental quality

Well-maintained and diverse natural environment

Green, healthy spaces.

High attention to environmental and recreational values.

### preservation

#### protection

How to preserve and strengthen nature?

Preserved natural resources

#### awareness

Promoting awareness of climate change and sustainable development

### climate adaptation

#### nature based solution

Development and management of blue-green infrastructure

#### adaptation

Resilience to climate change and epidemics.

Climate change prevention and adaptation

## Job | education

### education

#### attractive

More diverse education opportunities and alternatives

Attractive and effective education and research system

How it could become a active studying destination?

#### strong

Enhancing the competitiveness of academic institutions and schools

A strong academic, research, and cultural hub,

Strong institutional capital.

### economy

#### strong and competitive

How can Silesia remain economically strong and create new jobs?

Higher level of economic development in Ruda Śląska.

Competitive economy  
Innovative economy

Creating conditions for economic growth and innovation

#### support local entrepreneurship

Strong local entrepreneurship

Friendly to entrepreneurial residents.

Conditions that stand out within the Metropolis for establishing and running local businesses.

#### diversification

How to diversified economy and use upcoming transition for new economy?

Economic specializations supporting transformation.

Economic specializations and high attractiveness of the city for investors.

#### sustainability

Sustainable and responsible economy.

#### accessibility and potential

High accessibility to an attractive labor market in the City and the Metropolis.

Increased development potential of the city's residents.

### collaboration

#### investors

Attractive for investors.

Strong cooperation between local entrepreneurs and investors

#### university and market

The best conditions for university graduates.

Modern education system in partnership with local and regional businesses.

More attractive job opportunities for university graduates

Collaboration between universities and the region?

## Engagement/ collaboration/ community

### involvement / collaboration

#### local

How to involve people?

How local community can be involved in the process?

Conditions for integration and social engagement.

Active participation of residents in the city's development.

#### external

Development of internal and external cooperation within GZM

Active cooperation with external stakeholders and strong regional branding

### activation

Active residents

Active local communities

### building local communities

This tools (transformation of the nikiszowiec) were used for very specific neighborhood, can it be reused for others? How?

Improving conditions for the development of open, active, and creative communities

High level of self-organization in local communities, as well as innovation and social solidarity.

### solidarity care

Building solidarity between whom, how and why?

How to create the care of the place? and how people can feel better?

## Identity / heritage

### identity and values

#### strengthening

How can identity be maintained?

How can future development strengthen the existing identity?

#### defining identity

Identity is in people or in place?

#### tradition vs. modernity

How to find new values that are attractive to old and young generation?

Where tradition intertwines with modernity and new trends are being set

Events highlighting uniqueness and history.

### local potential

#### using

How local potential can be used and make cities attractive?

#### protection

Looking at existing qualities and protecting them

### heritage

#### tourism

High degree of utilization of the city's cultural heritage

Respect for cultural heritage.

Tourism based on culture and heritage.

Where is truistic potential?

#### industrial heritage

Place for Mining culture and heritage

Protection of heritage, especially post-industrial.

Revitalization of post-mining and post-industrial areas.

Proud of its mining traditions

## Security/safety

### safety network and stability

#### safety network

How safety net can be created?

How different places can support each other in this process?

High social trust

#### demographic safety

Active response to demographic challenges

Stable demographic structure.

### safety physical

How to improve safety?

### support

#### different life stages

Equal opportunities for young people.

Support at every stage of life.

#### migration

Openness to immigration that supports the city's development.

### housing

#### diversity and quality

Different ways of living

High quality and consistency of housing conditions across districts

Attractive living conditions

#### affordability

More affordable housing

Access to housing.

### social services

High quality of social services, including healthcare

## Space

### balance and integration

#### balance

What can be reused | repurposed?

Rational use of space in the context of urban shrinkage and suburbanization

Balanced territorial development

#### integration

A city with a high level of spatial integration

### quality of space

#### attractive

Attractive city space and elimination of functional conflicts.

Clean environment and aesthetic space.

where spatial order is preserved – the urban space is organized, aesthetically pleasing, green, and the natural potential is utilized

(Ruda Śląska) as a modern, attractive, and friendly place to live and grow – a city with an integrated social space

#### diverse spaces

How to enhance the spatial diversity?

#### care

Comprehensive revitalization

Finding positive aspects of the place and situation

## Life and leisure

### quality of space

#### attractive leisure spaces

Accessible, well-designed public spaces

Find alternatives places for leisure for young people, affordable

#### diverse uses

An integrated city centre combining various functions and activities.

A rich and diverse range of public services,

#### quality

Improve quality of the living environment?

### re-definition

#### commers

Can be any other way of creating commercial places?

#### car based life

Is there any alternative for car-based life style in this region?

#### for young

What can be done to keep young people in the region?

## Other

### administration

#### modern

Modern public administration

Modern governance

Smart solutions supporting business and administration (in Siemianowice)

#### promotion

Promotion of GZM

### strengthening

#### functions

Strengthening metropolitan functions

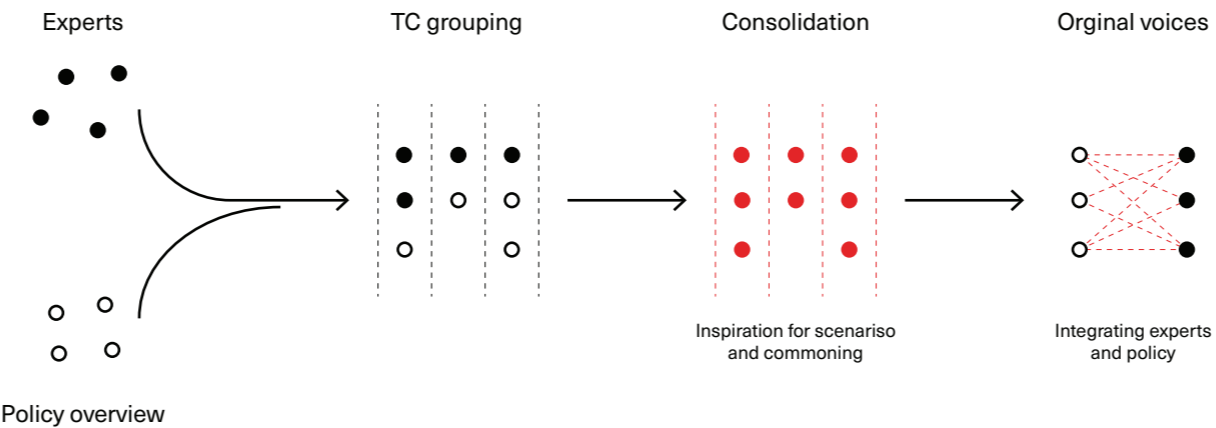
#### integration

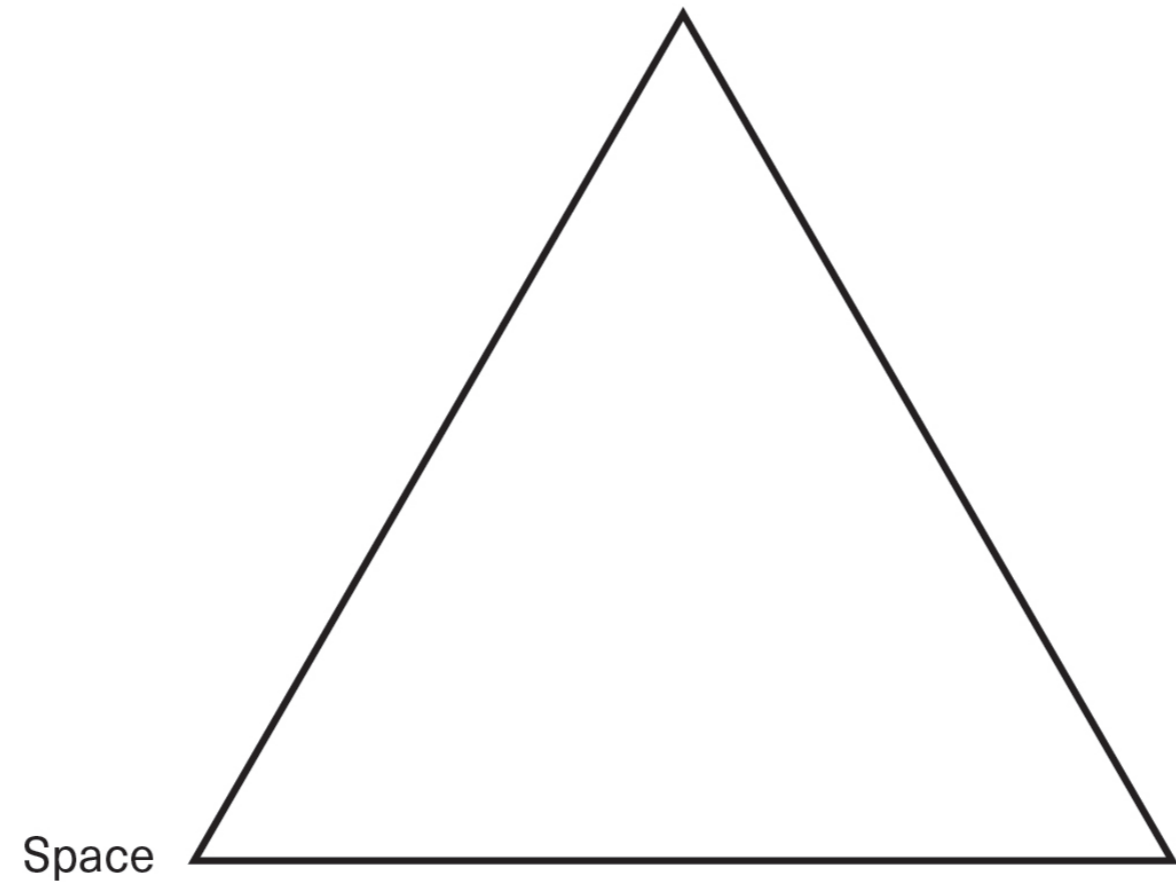
integrated both with the region and internally, while maintaining the distinct character of each district

### image

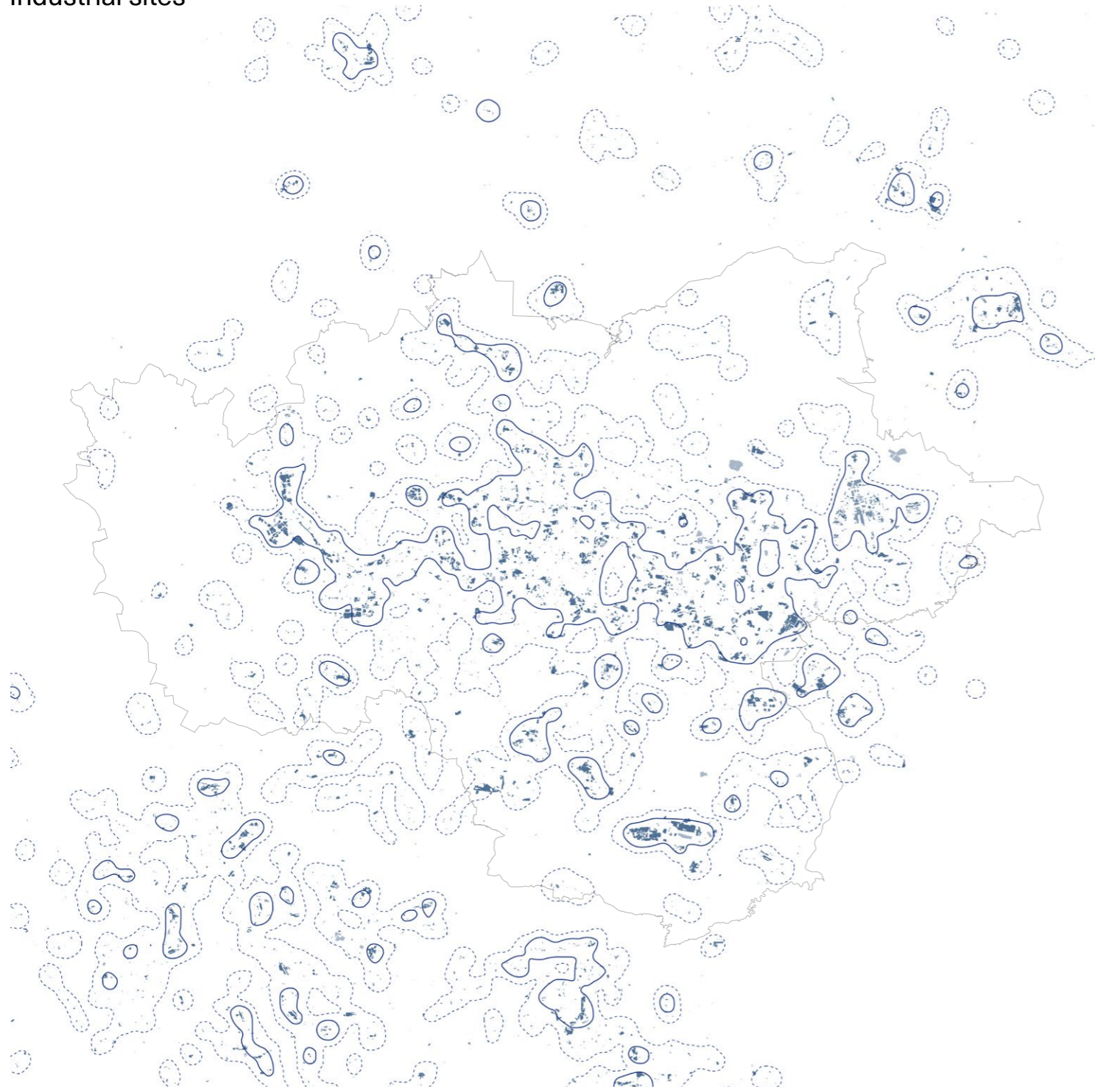
Positive image of the city.

# Territorial capital



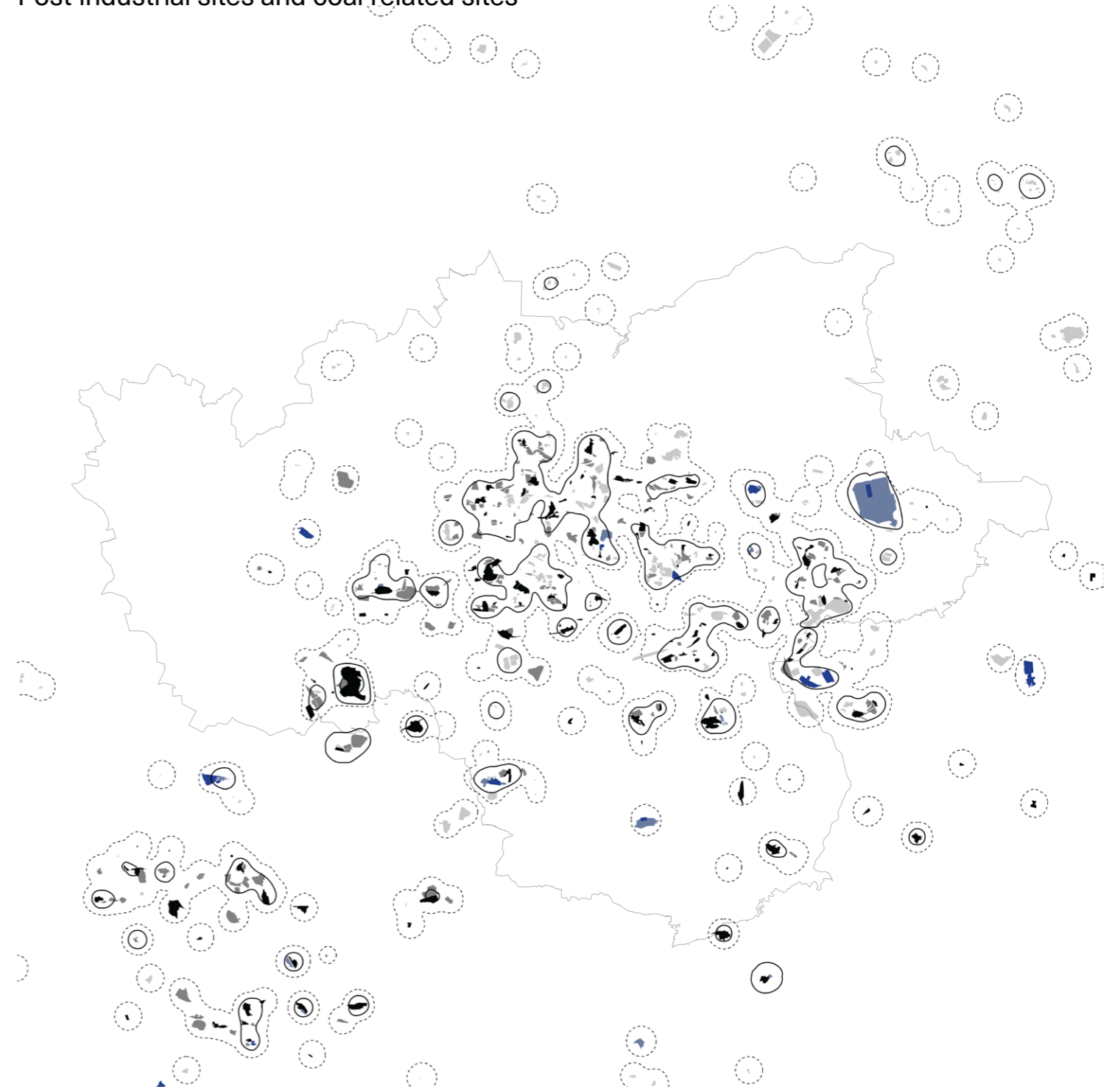


### Industrial sites



- Industrial - dense, compact, loose
- Clusters
- - Area of appearance

### Post-industrial sites and coal related sites



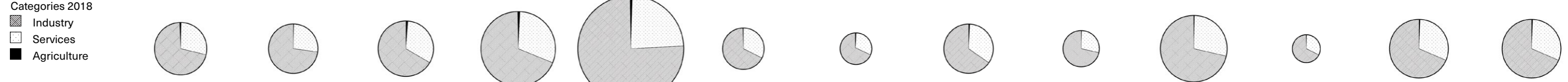
- Mines
- Post-mining sites
- Post-industrial sites
- Clusters
- - Area of appearance
- Coal power plants
- Steel plants

0 5 10km



Name of city

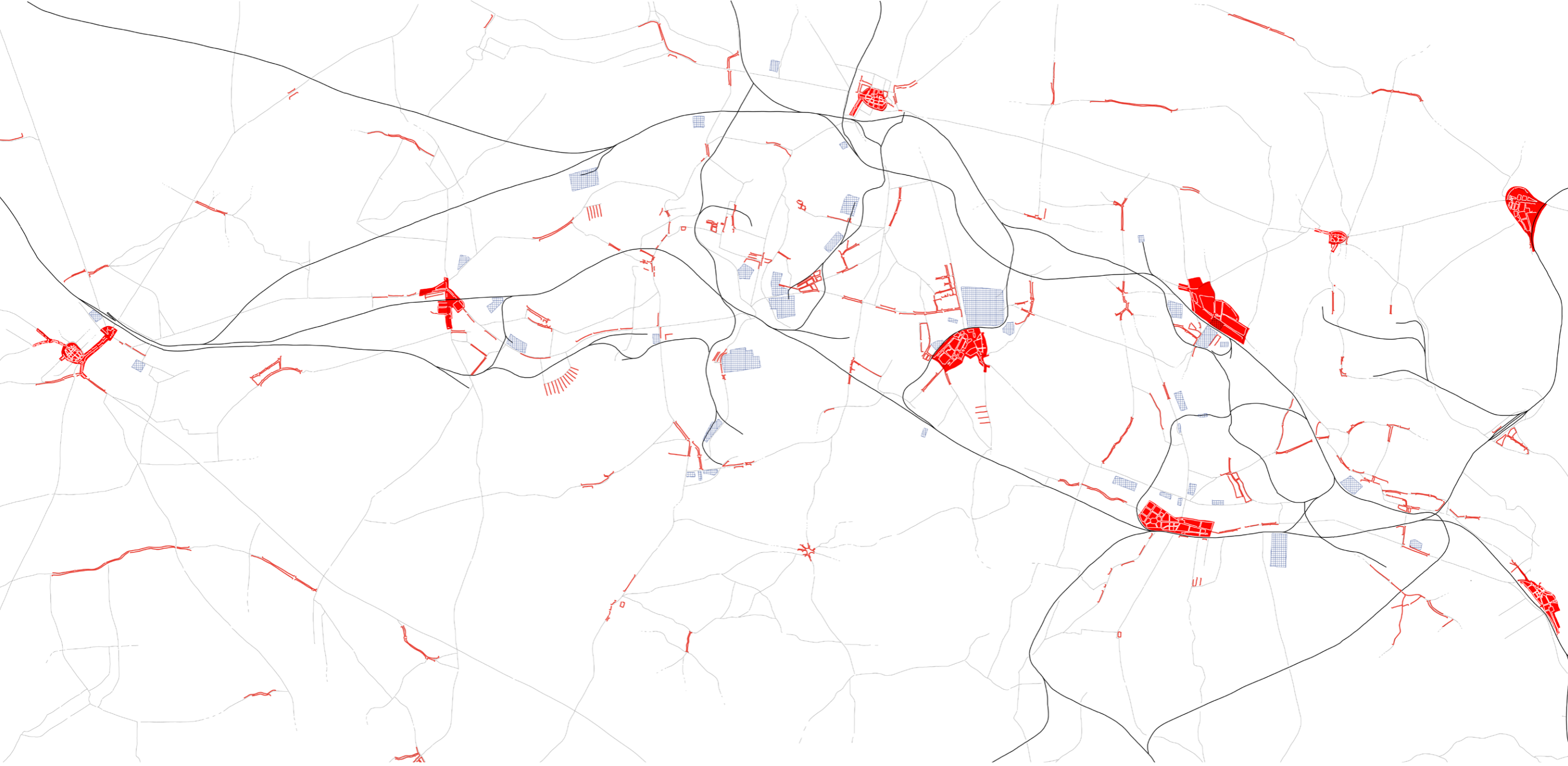
Unemployment rate 11.2023



Population predictions 2023-2060 [%]

# Urbanisation development

1883



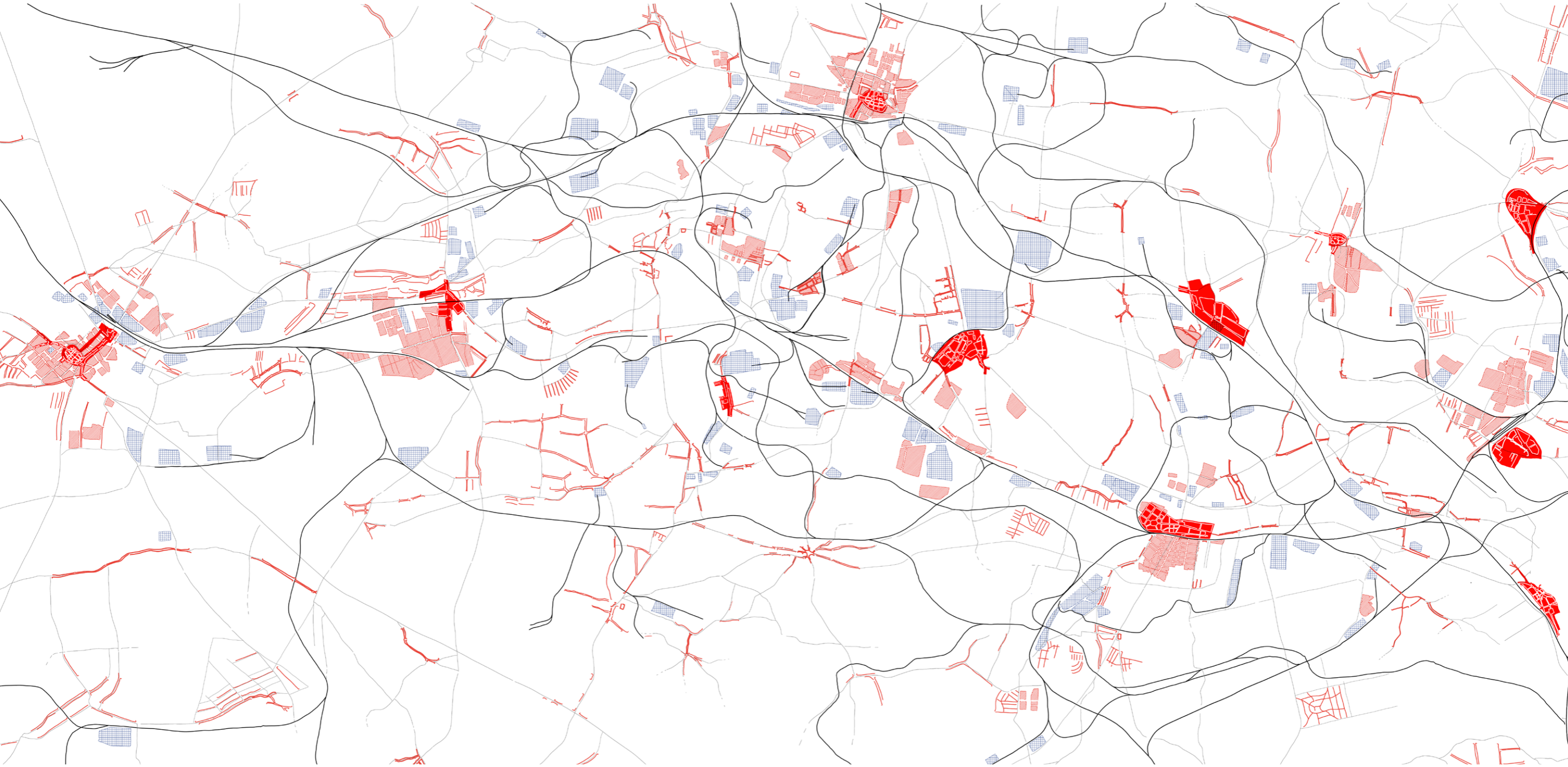
- City - core structure
- Village - initial structure
- ▨ Industries
- Train
- Roads
- Compact city expansion
- ⋯ Dispersed village expansion
- - - Unused tracks
- Highway

0 1 2km



# Urbanisation development

1954

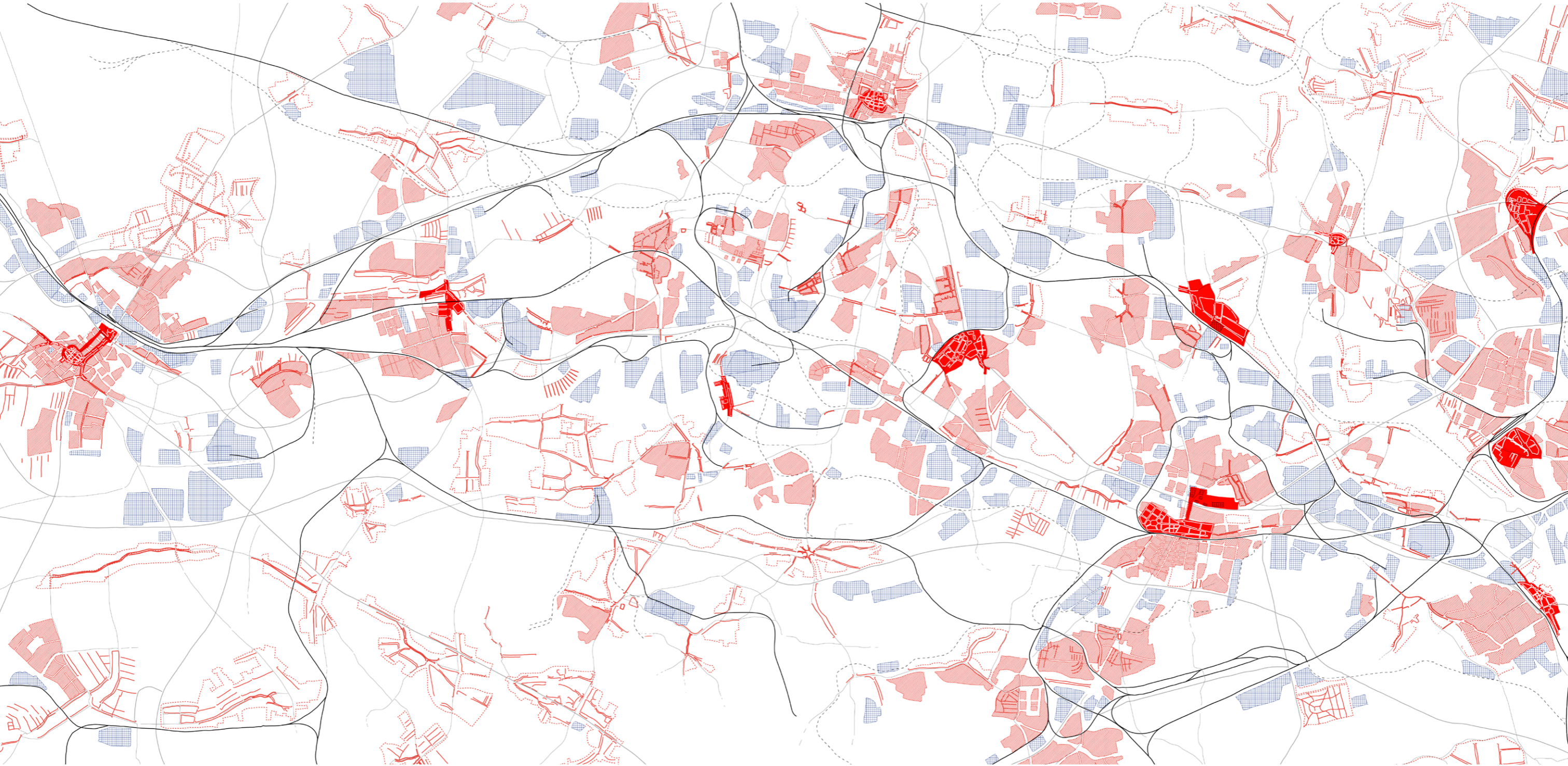


- City - core structure
- Village - initial structure
- ▨ Industries
- Train
- Roads
- Compact city expansion

0 1 2km

# Urbanisation development

2024

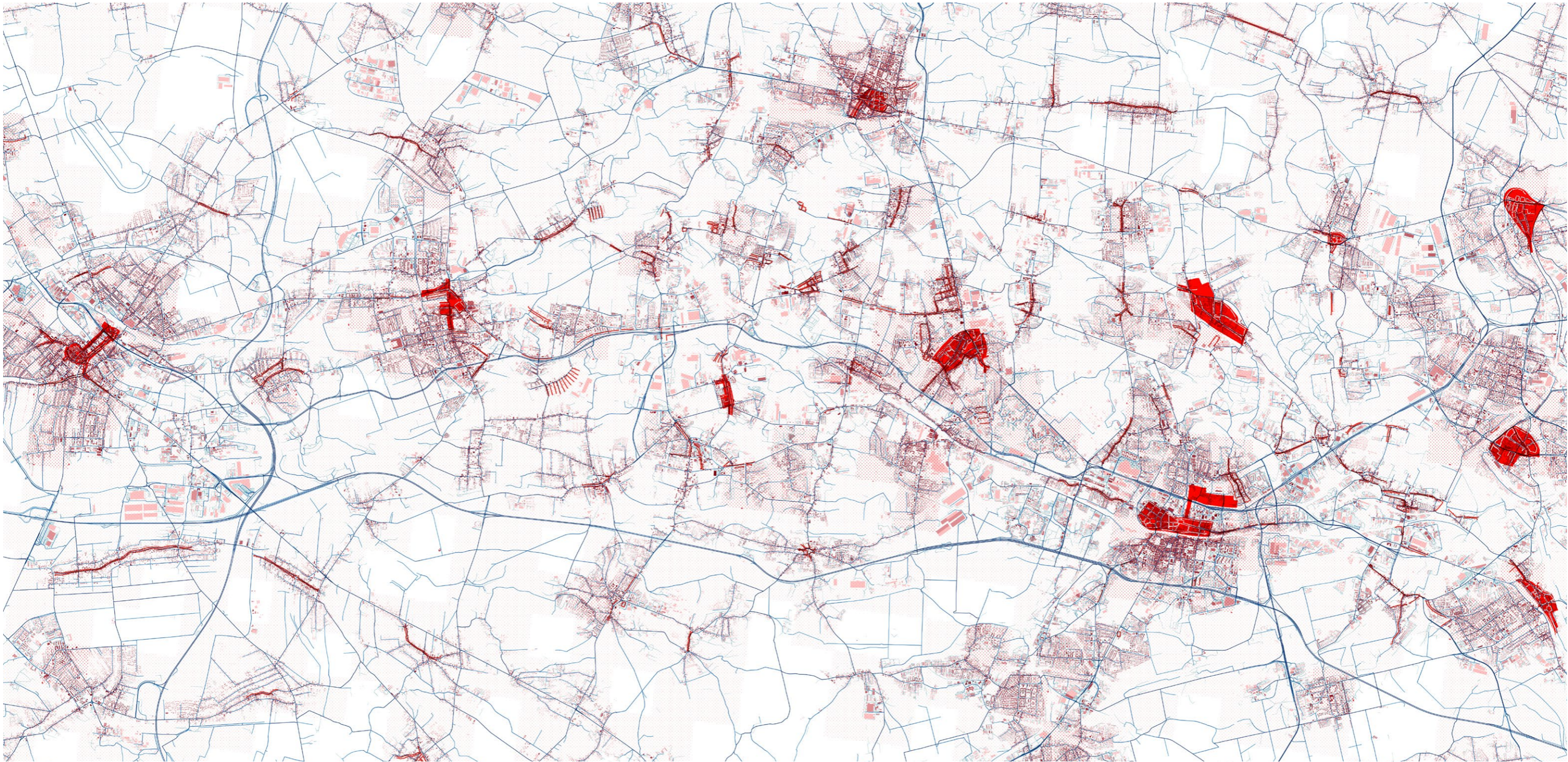


- City - core structure
- Compact city expansion
- Village - initial structure
- ⋯ Dispersed village expansion
- ▨ Industries
- ⋯ Unused tracks
- Train
- Highway
- Roads

0 1 2km



# Urban 'peaks'



Population and land-uses

- Urban
- Peri-urban
- Rural

Road network centralities

- Angular choice (10km)
- The highest two

Angular integration (500m)

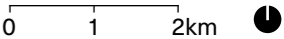
- Highest
- Lowest

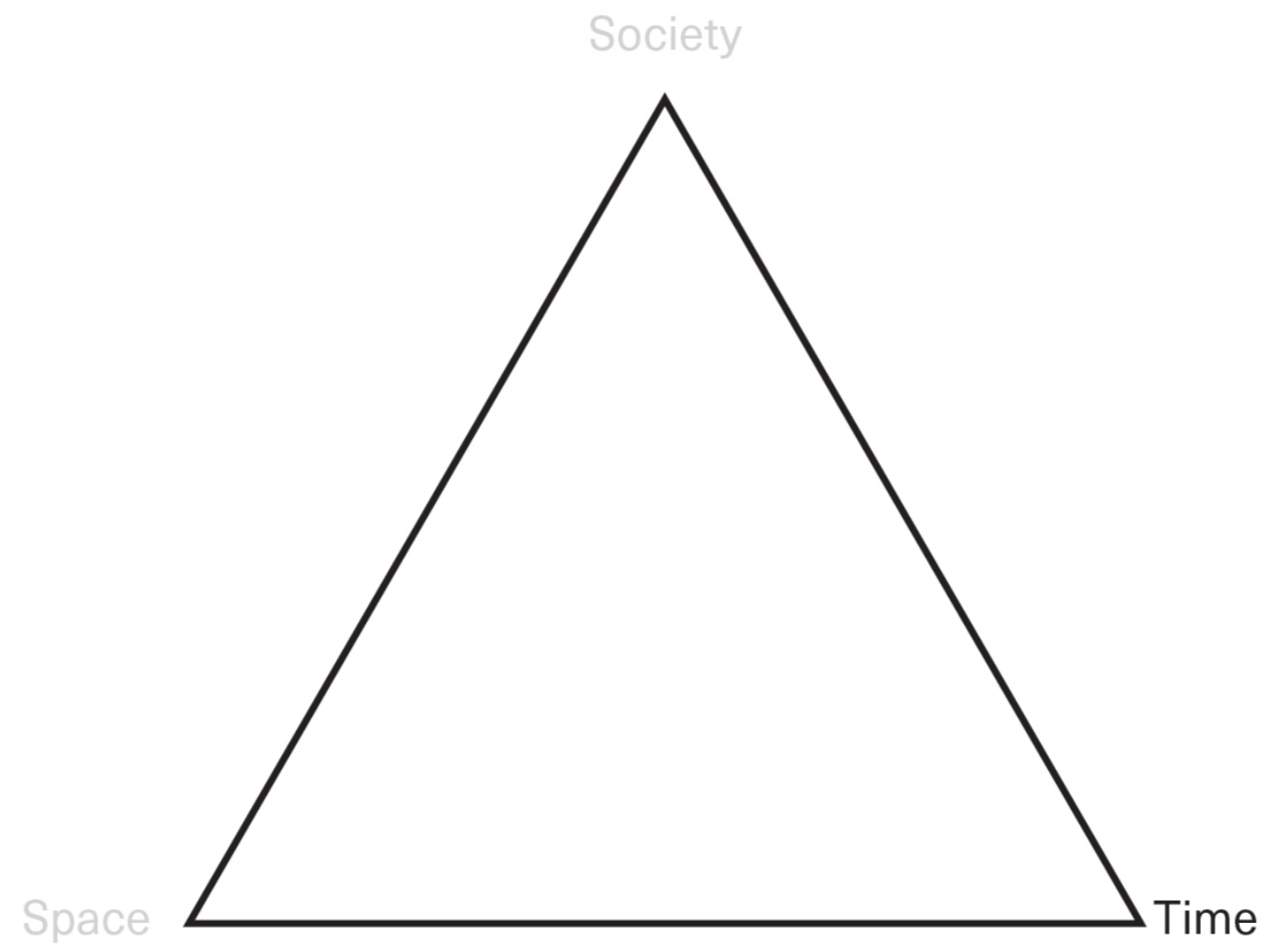
Compactness (500m)

- Lowest
- Highest

Historical urban structures

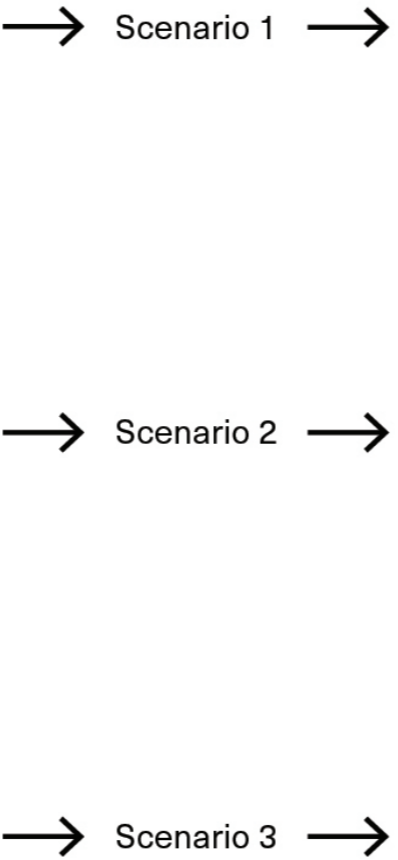
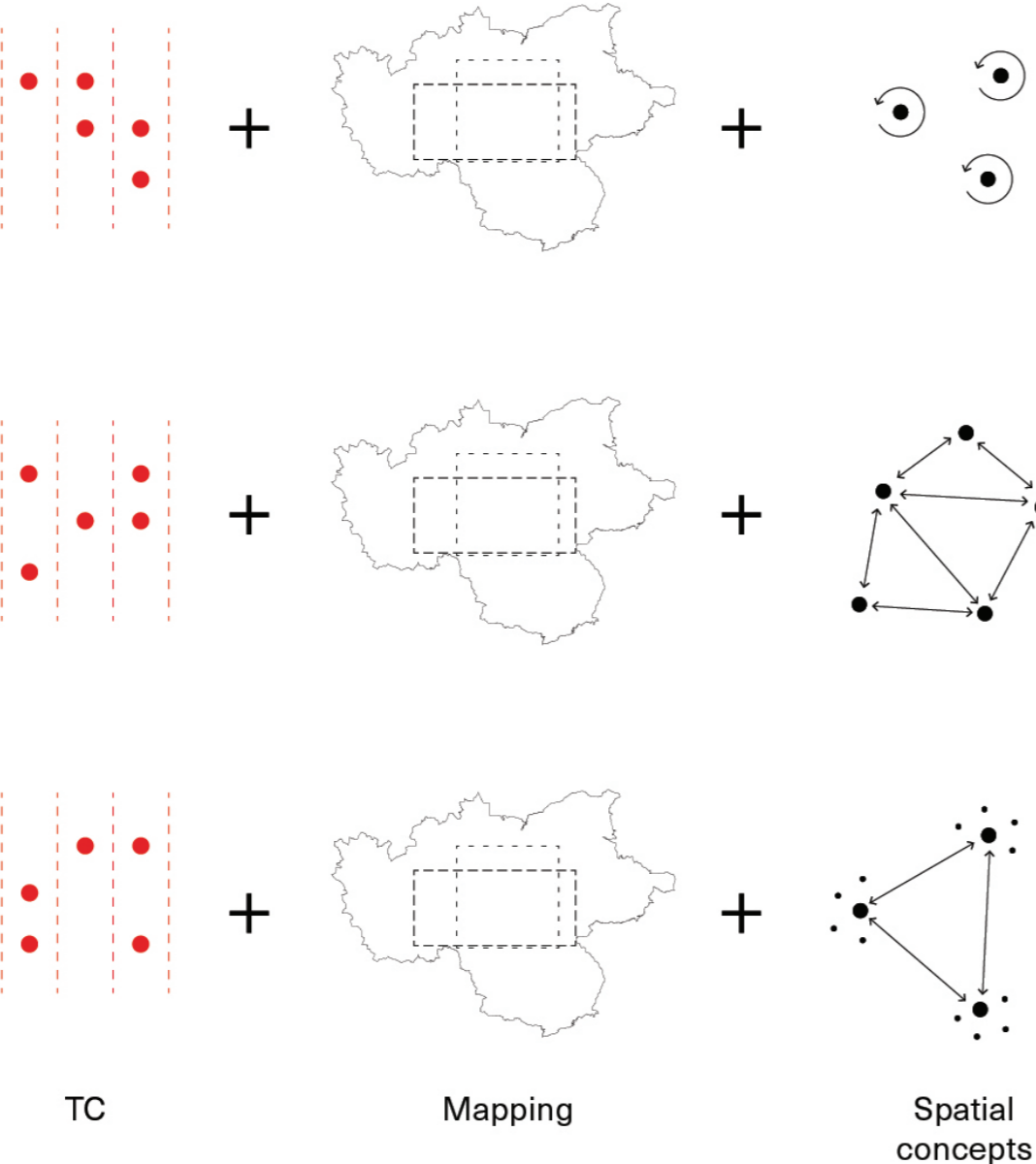
- Old town
- Old road villages



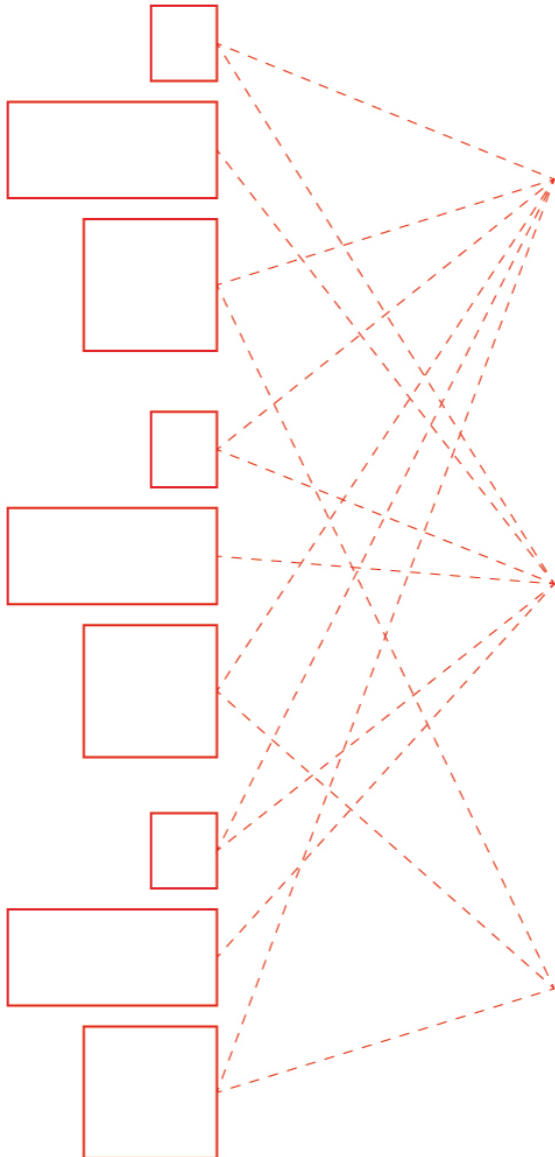


# Future projections

## Scenario building



## Exploration

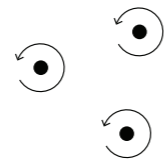


## Key learnings

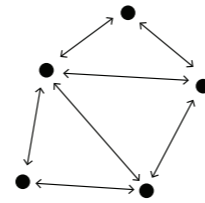
- Characteristics and potential of spaces
- Possible spatial transformations
- Connecting spatial typologies with TC

# Spatial concepts

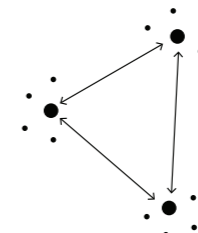
by Blotevogel in 1983



Clones



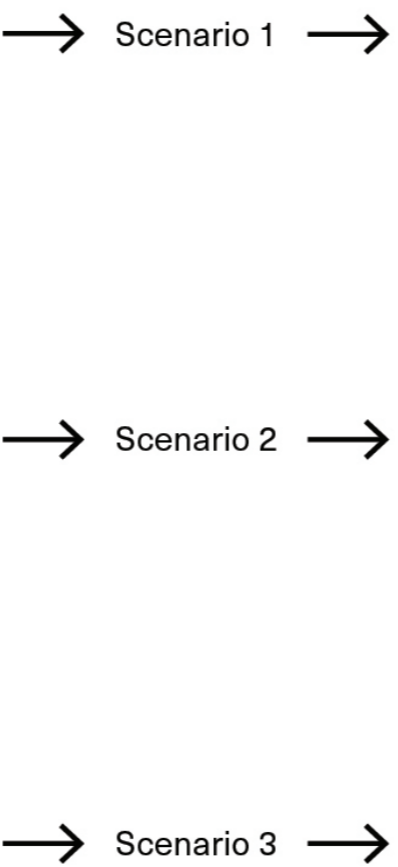
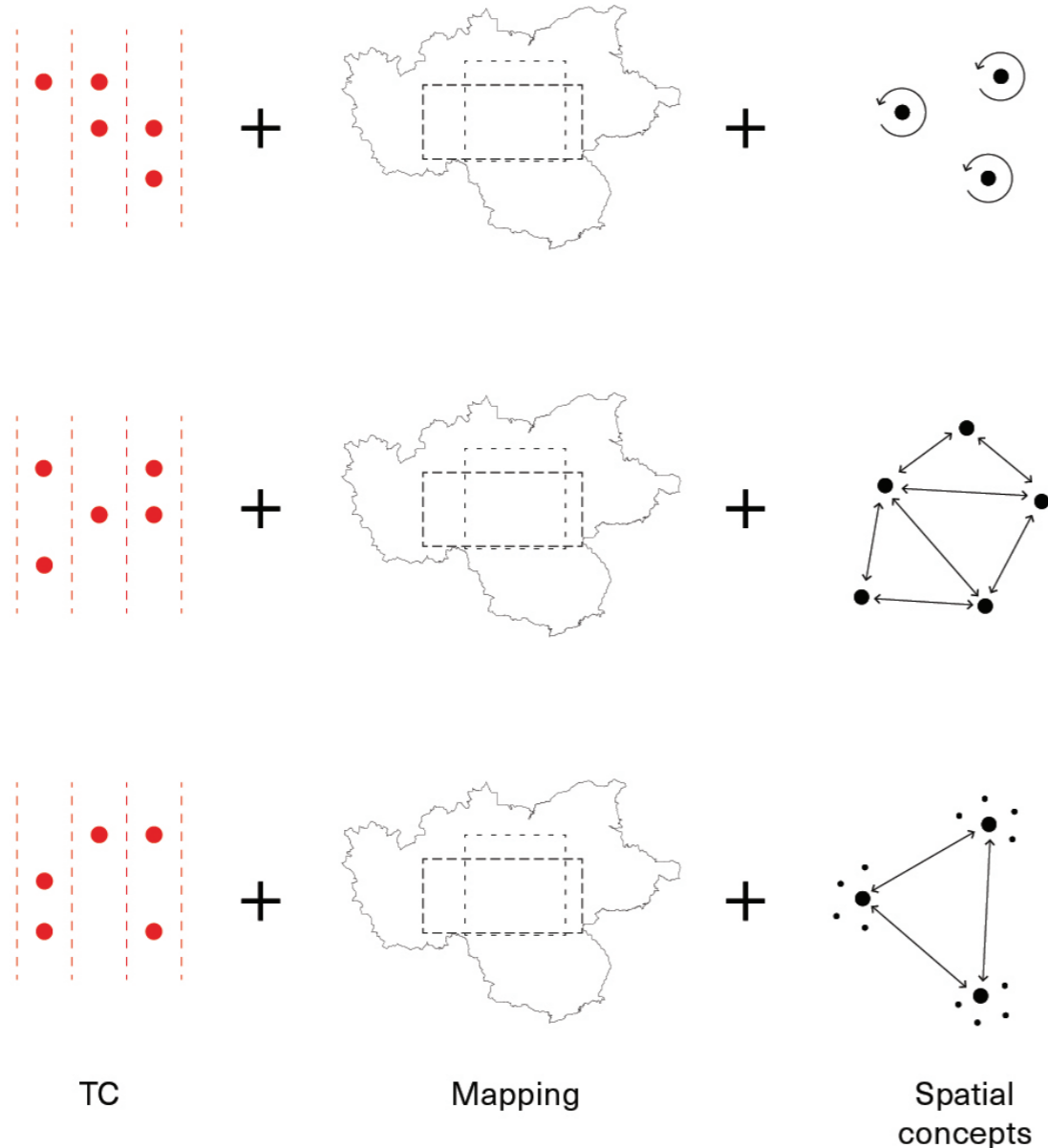
Diversification



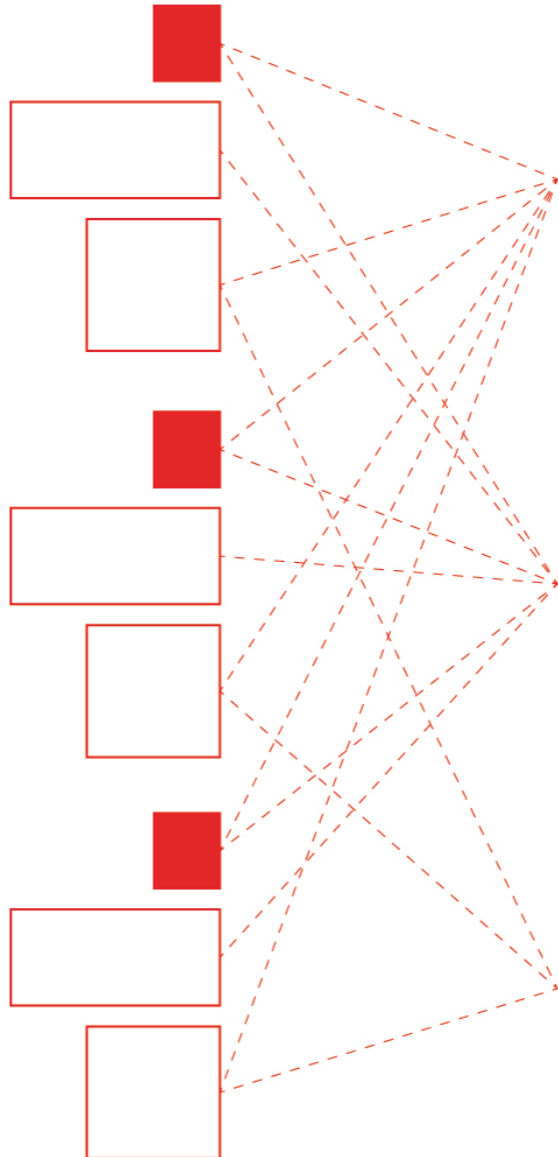
Hierarchy

# How might people live?

## Scenario building



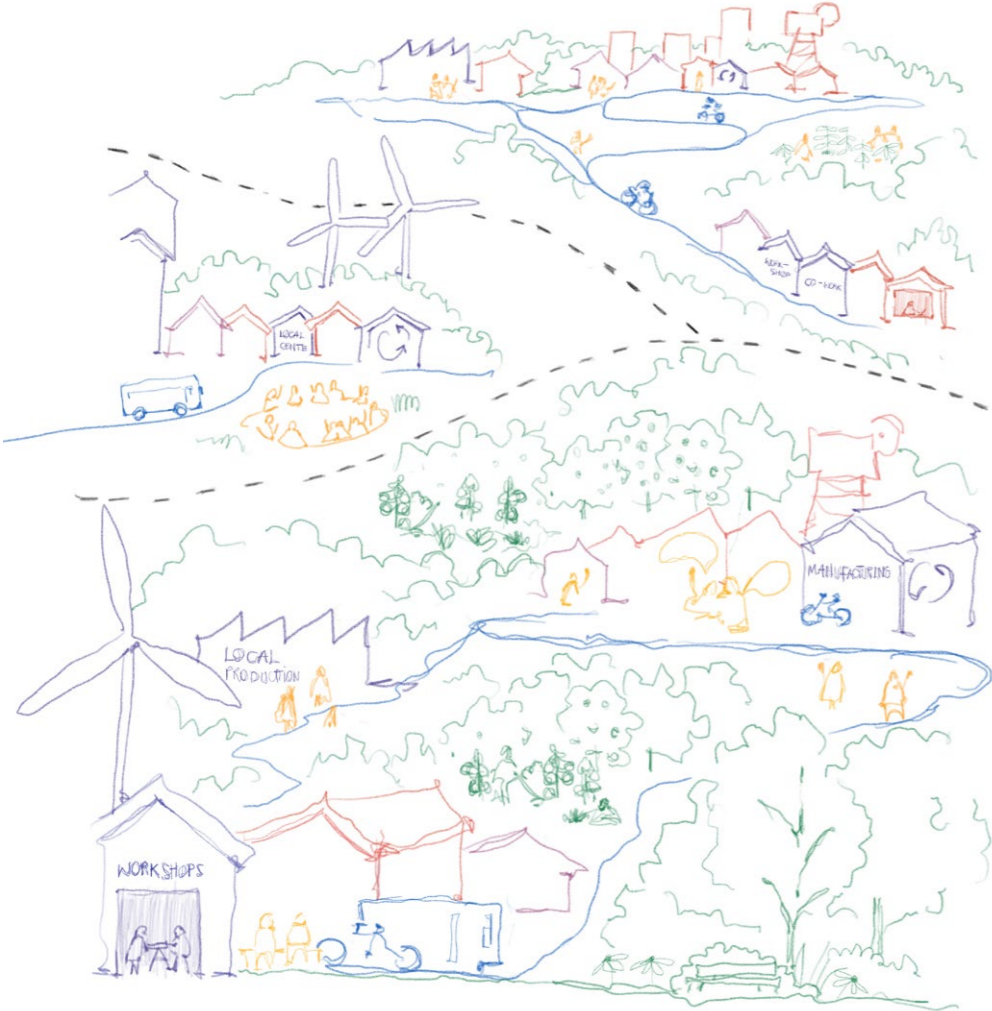
## Exploration



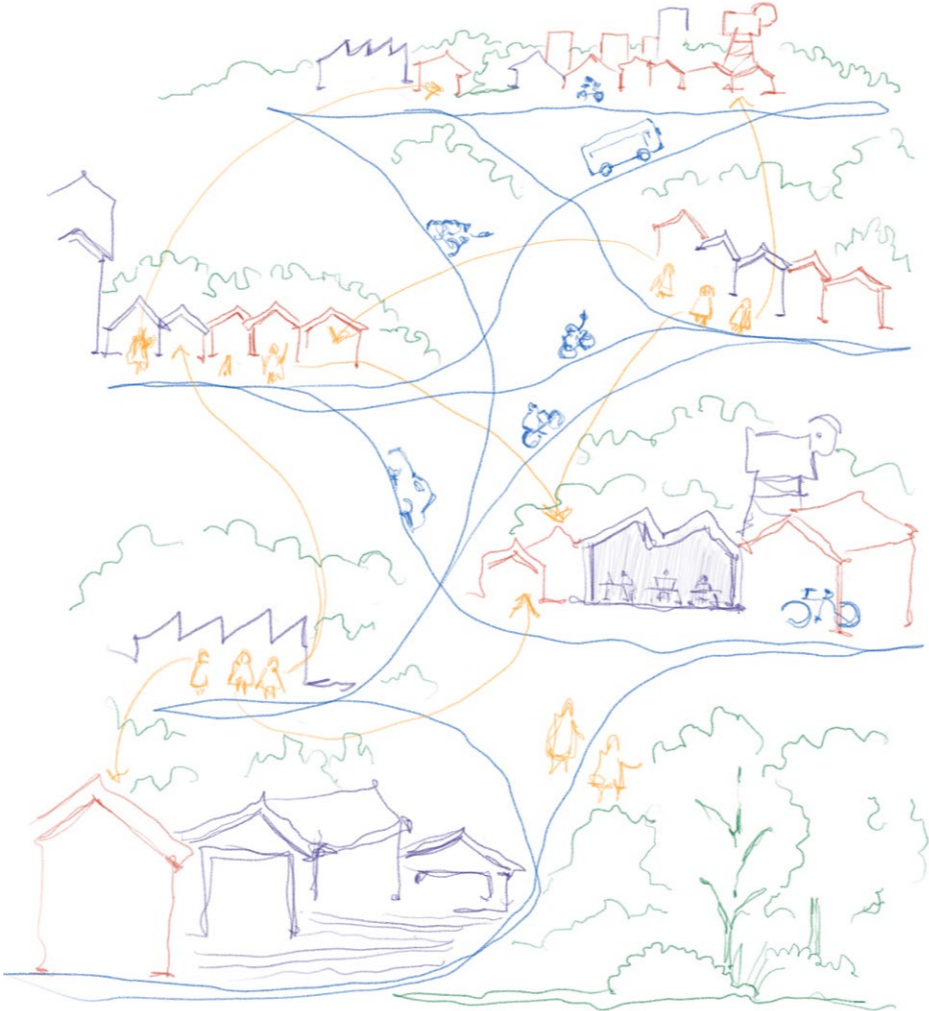
## Key learnings

Characteristics and potential of spaces  
Possible spatial transformations  
Connecting spatial typologies with TC

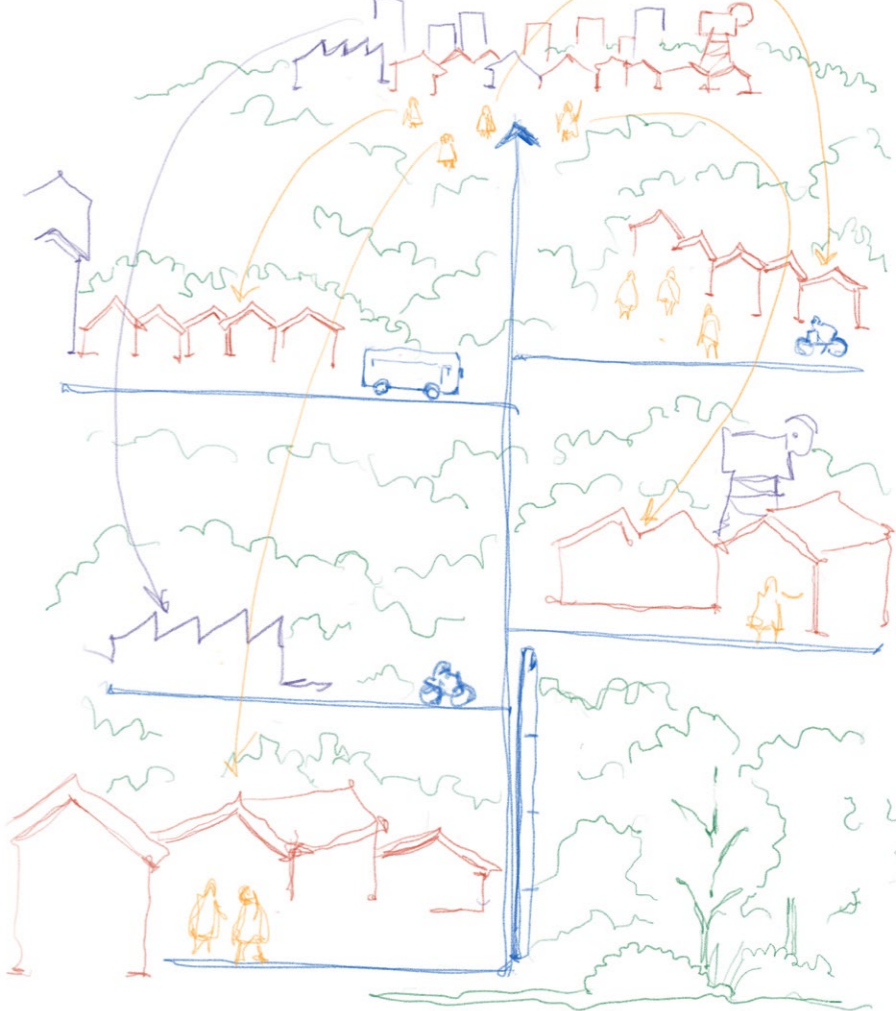
# How might people live?



Scenario 1 : Clones



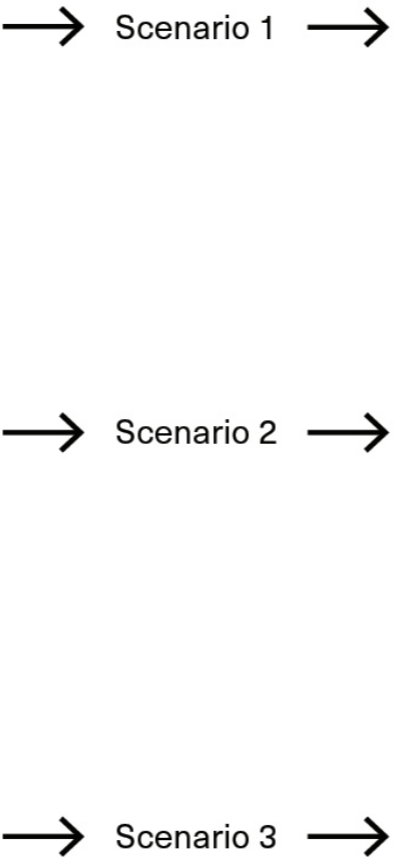
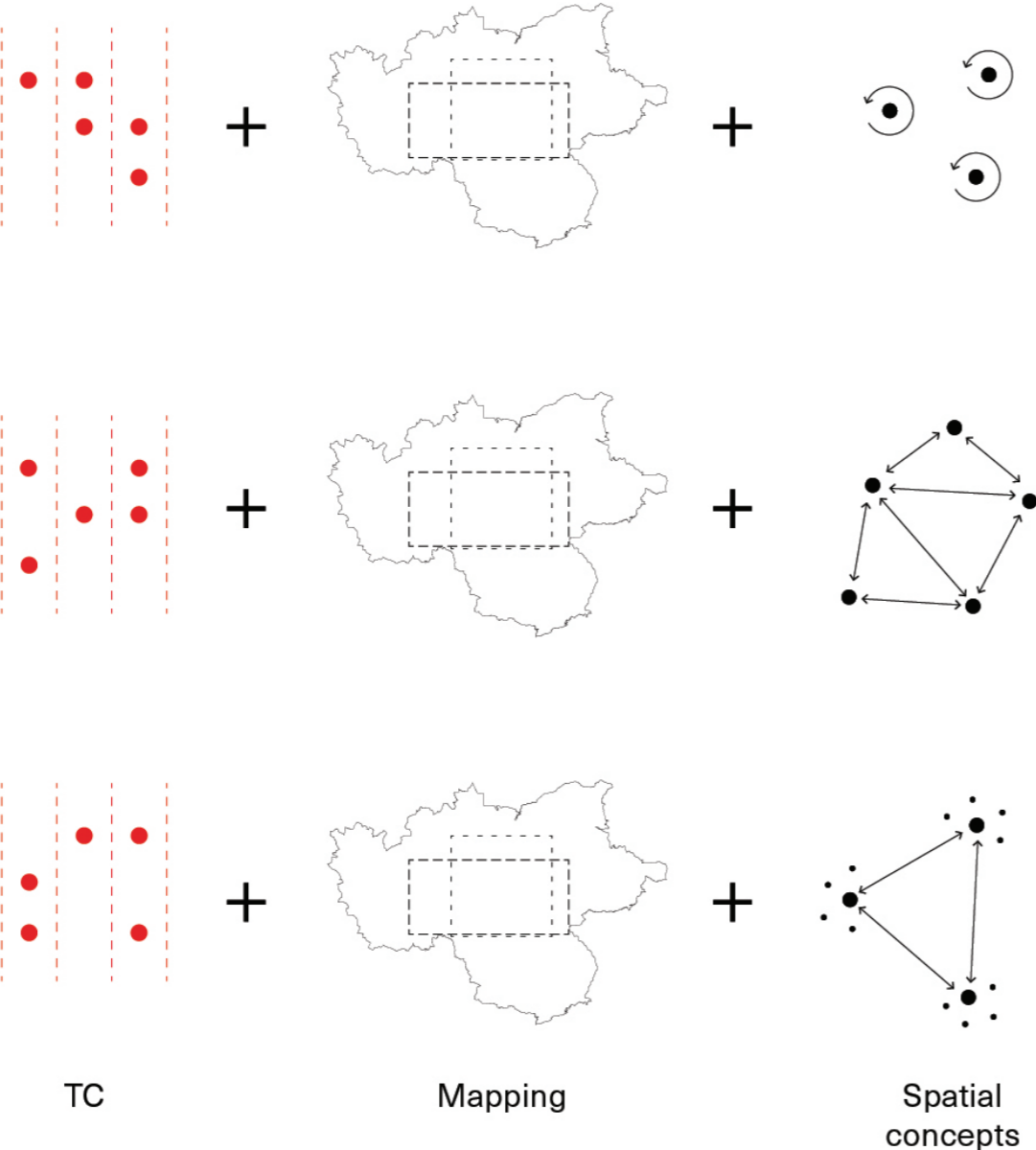
Scenario 2 : Diversification



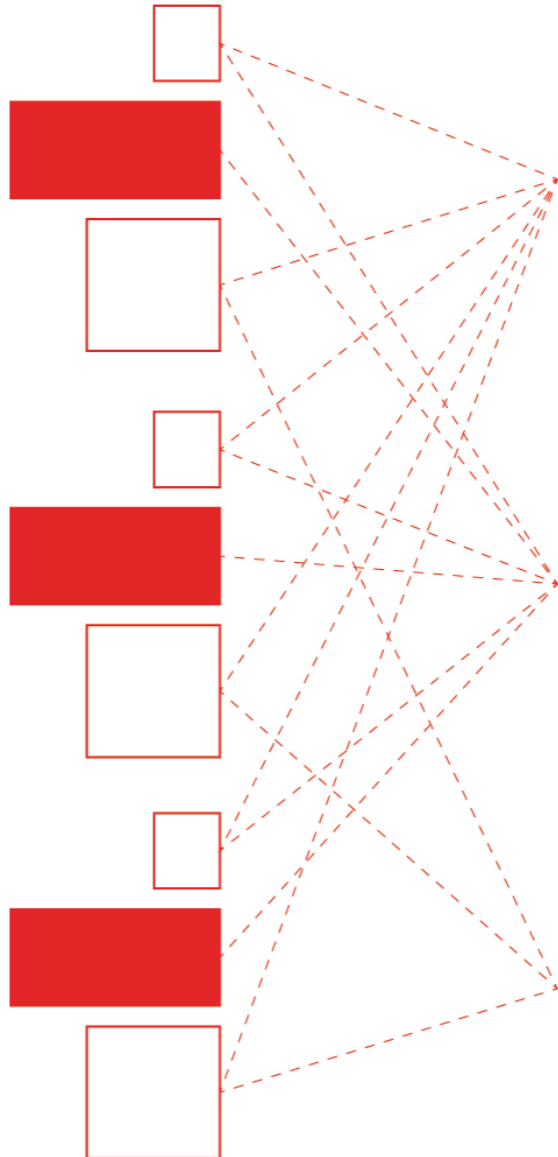
Scenario 3 : Hierarchy

# Conceptual mapping

Scenario building



Exploration



Key learnings

Characteristics and potential of spaces  
Possible spatial transformations  
Connecting spatial typologies with TC

# Conceptual mapping

## Scenario 1 : Clones



Roles of the mapping: Limits: Administrative boundaries and protected greenery



Types of expansion: Primary internal expansion to create the intended urbanisation structure



Territorial structure: Administrative structures and networks connecting neighborhoods

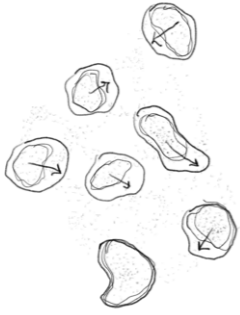
- Compact
- - - Ring
- · · Linear
- · · Islands
- · · Dispersed



0 2.5 5 km

# Conceptual mapping

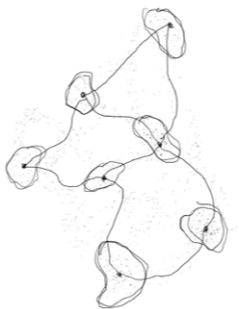
## Scenario 2 : Diversification



Roles of the mapping: Limits: Similar size and main hard infrastructure

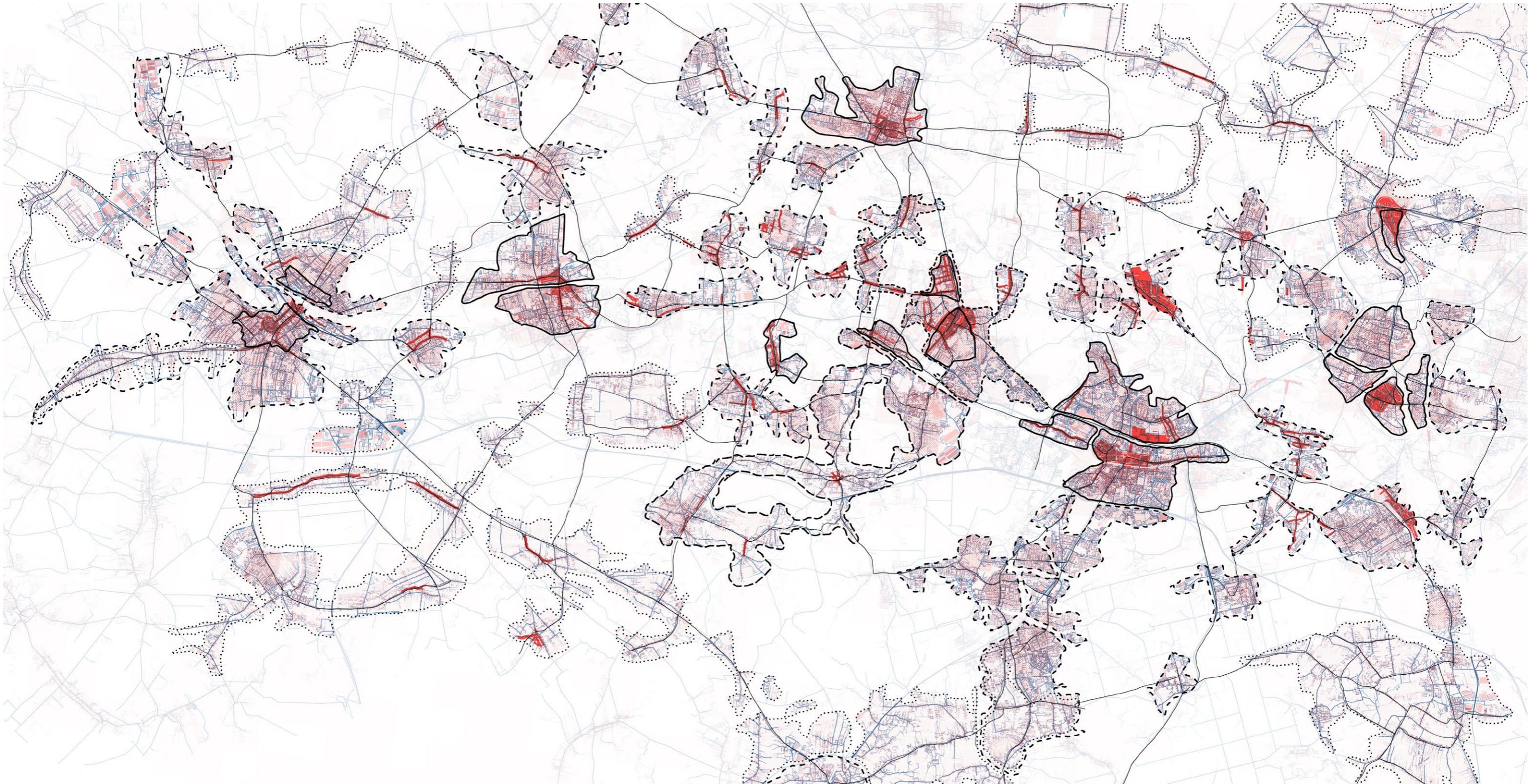


Types of expansion: Internal expansion and outer expansion



Territorial structure: Secondary network and local centers

- Compact
- - - Ring
- · · Linear
- · · Islands
- · · Dispersed



0 2.5 5 km

# Conceptual mapping

## Scenario 3 : Hierarchy

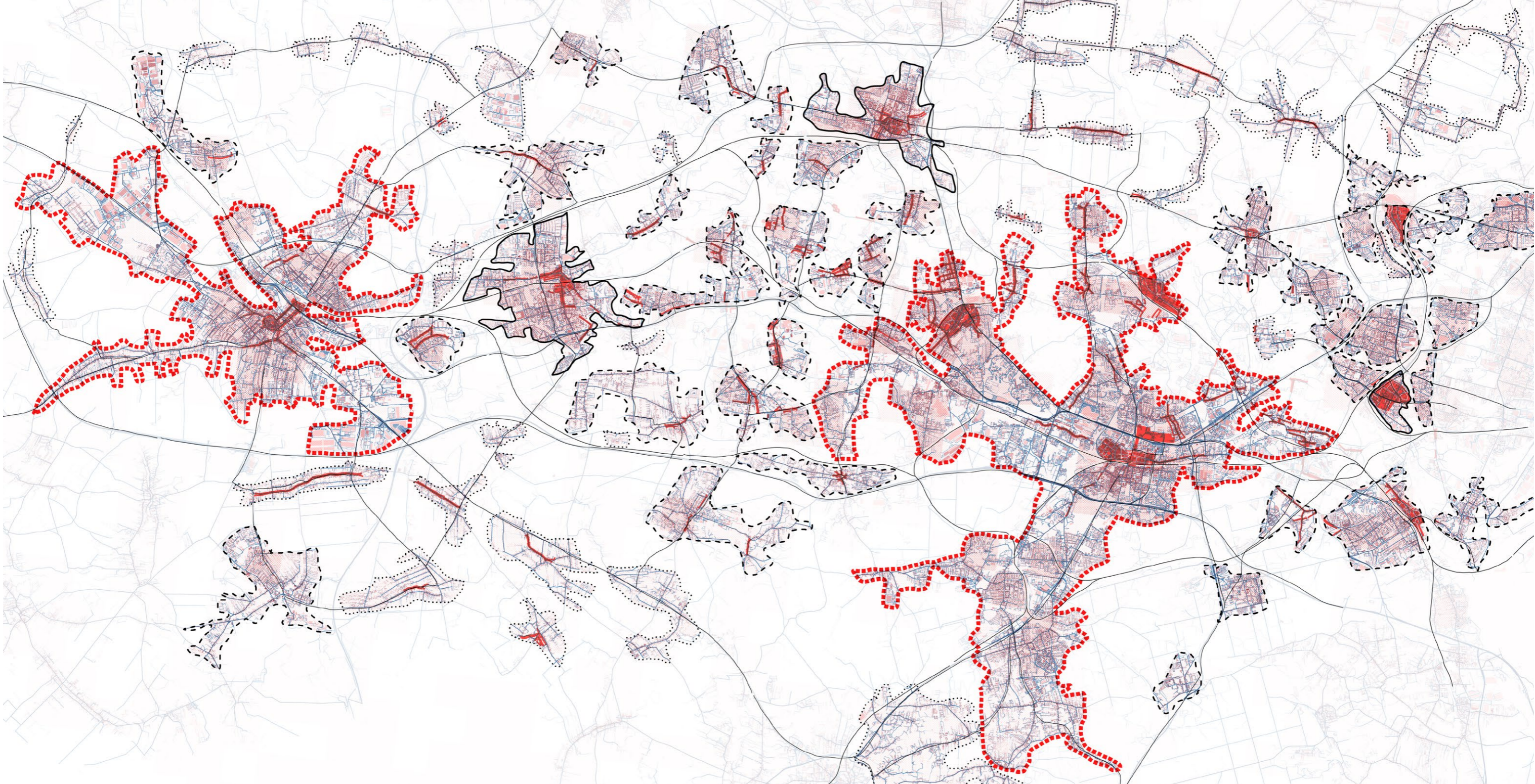


Roles of the mapping: Limits: For main cities no-limits, supportive cities size are district scale

Types of expansion: Primary linear expansion of main cities with secondary infills of the structures.

Territorial structure: Growth lines and urban continuity.

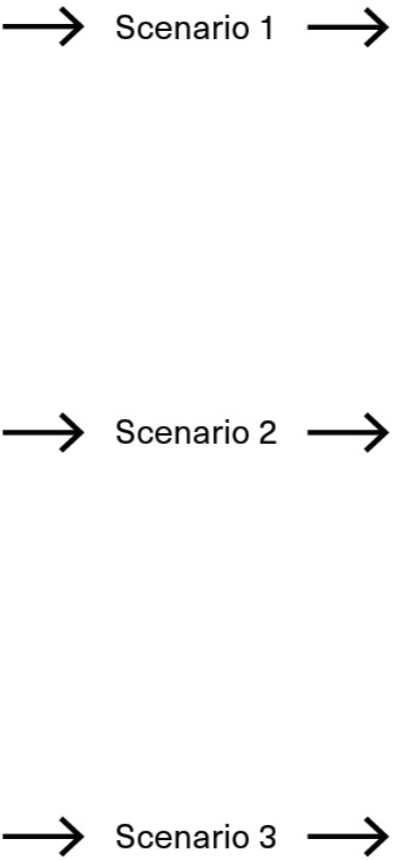
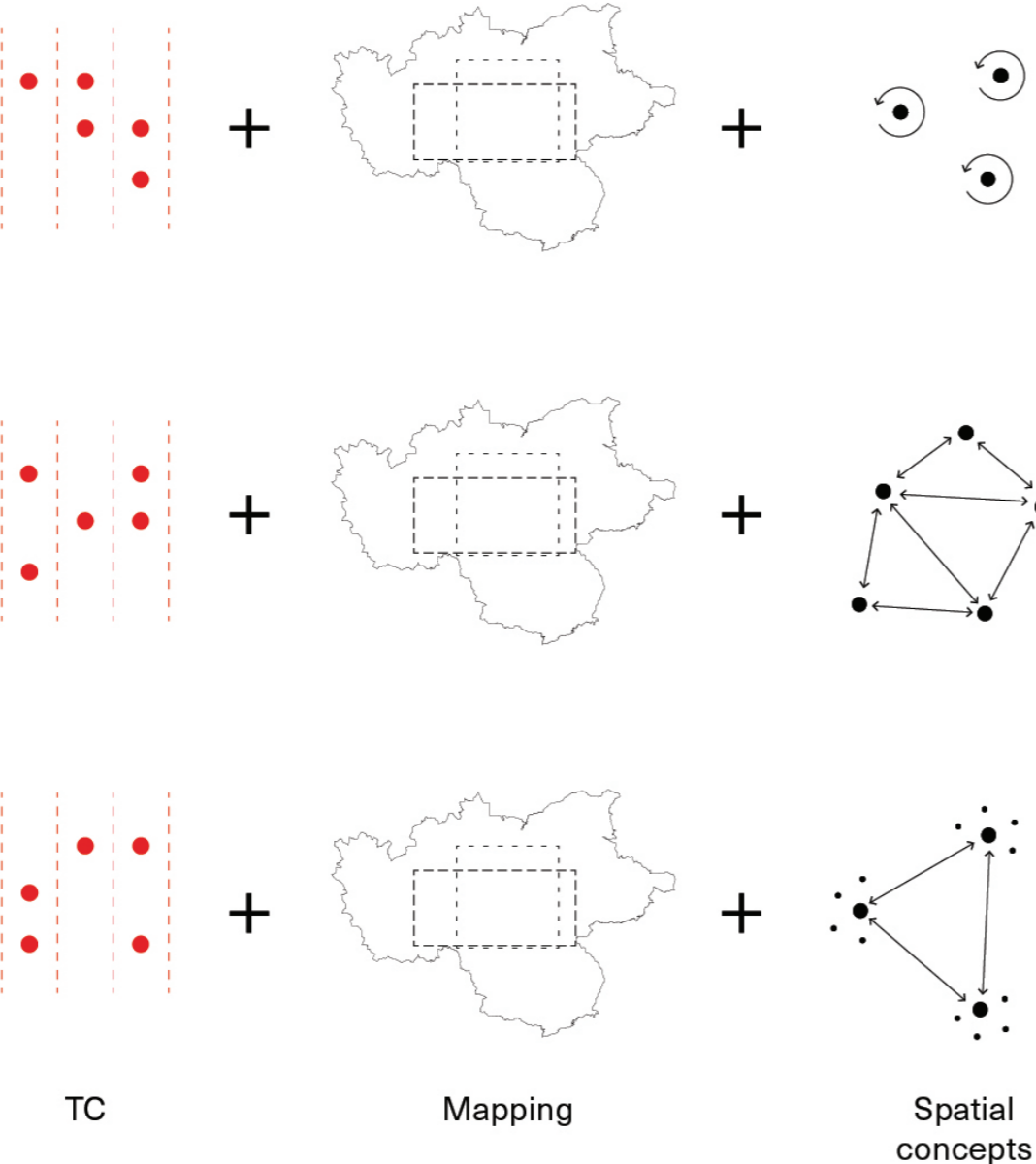
- Core urban structures
- "Leading" city
- Compact
- - - Ring
- · · Linear
- · · Islands
- · · Dispersed



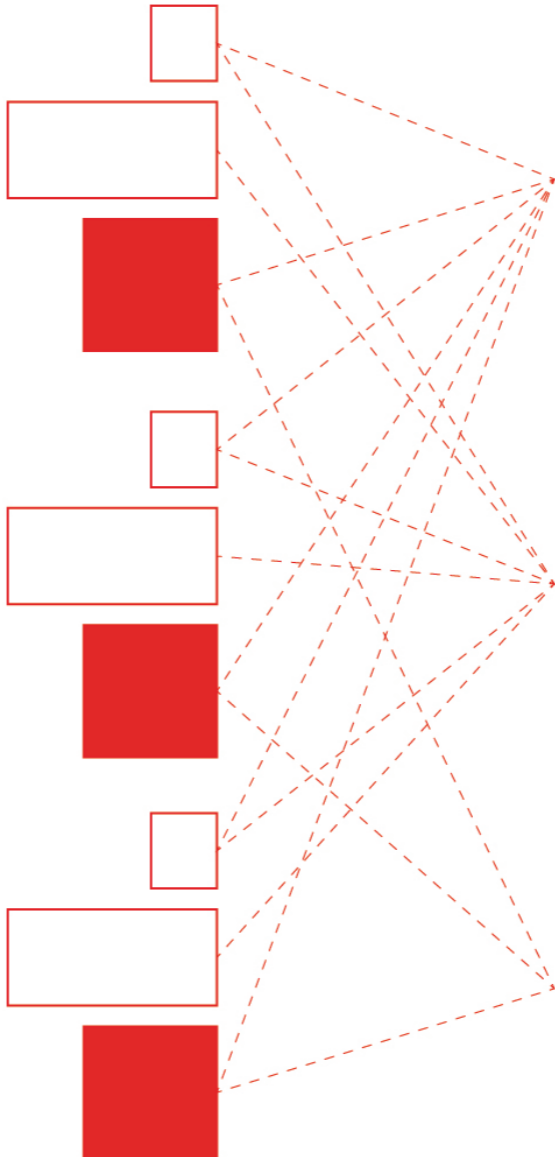
0 2.5 5 km

# Scenario focus

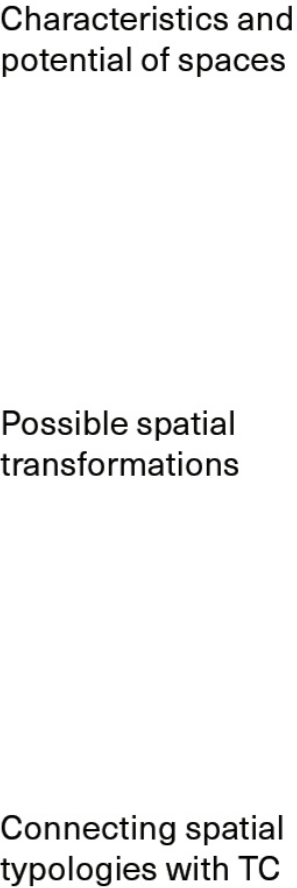
## Scenario building



## Exploration



## Key learnings



# Scenario focus: Clones

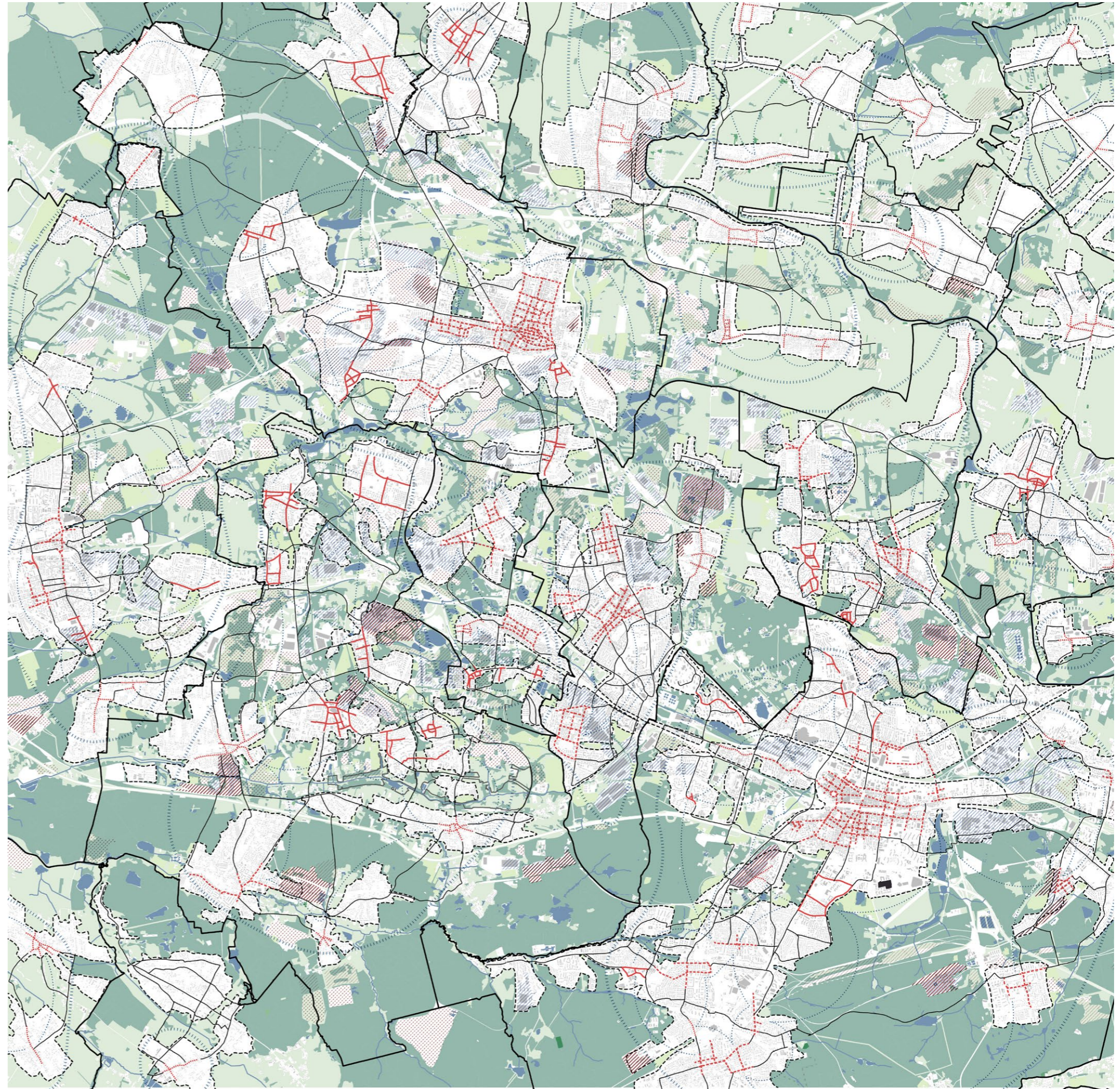
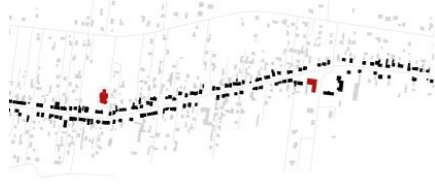
Dense centre



Diffused centre



Village-type centre

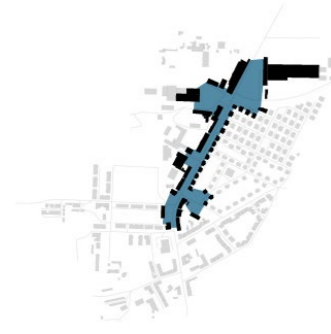


0 1 2 km



# Scenario focus: Diversification

Industries and city



Dross between cities



Between industries and city



Dross between industries



Dross between industries and cities



0 1 2 km

# Scenario focus: Hierarchy

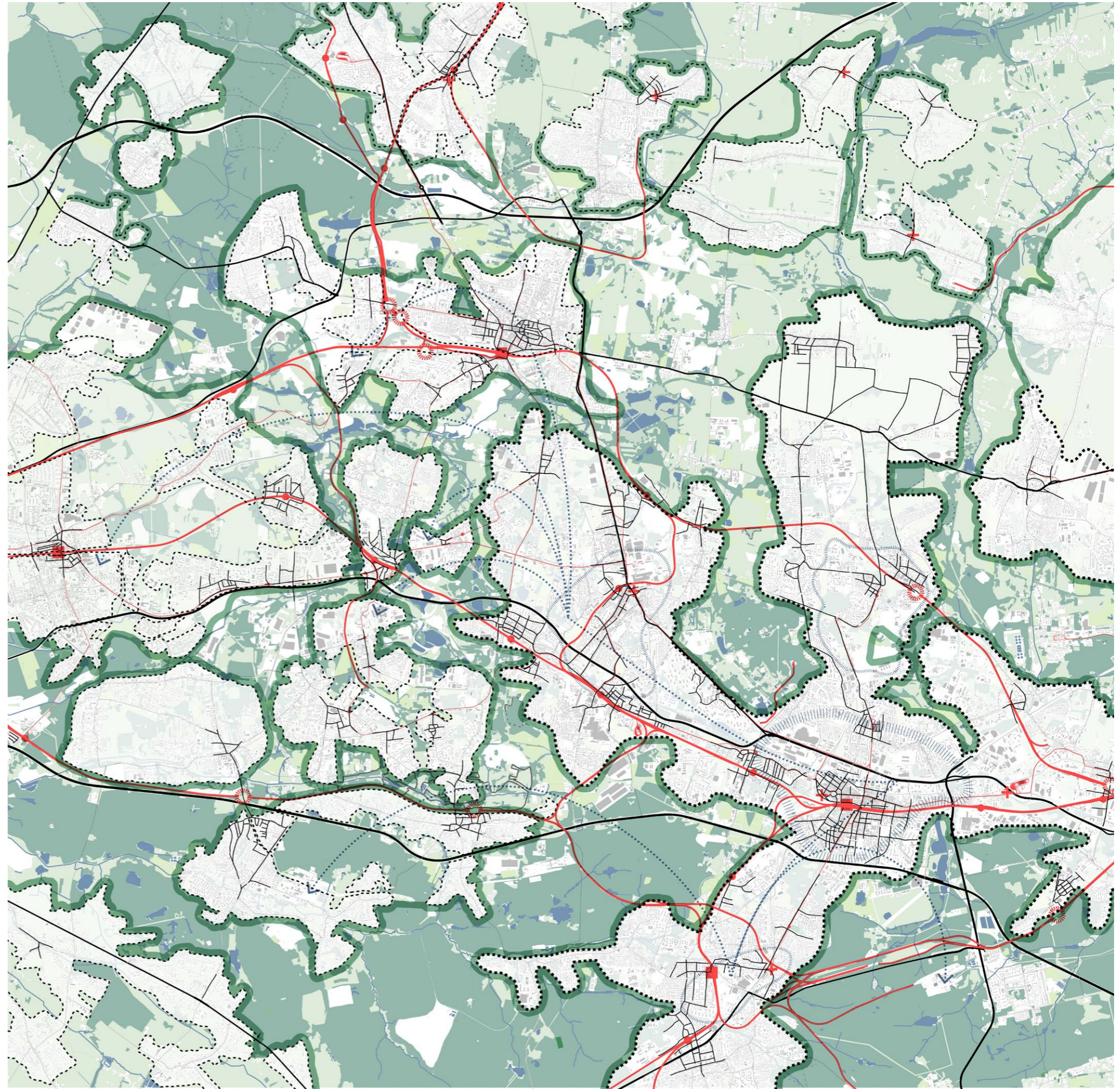
Forest corridor



Altered landscape corridor



From park to agriculture corridor



0 1 2 km

# Four layers

Greenery



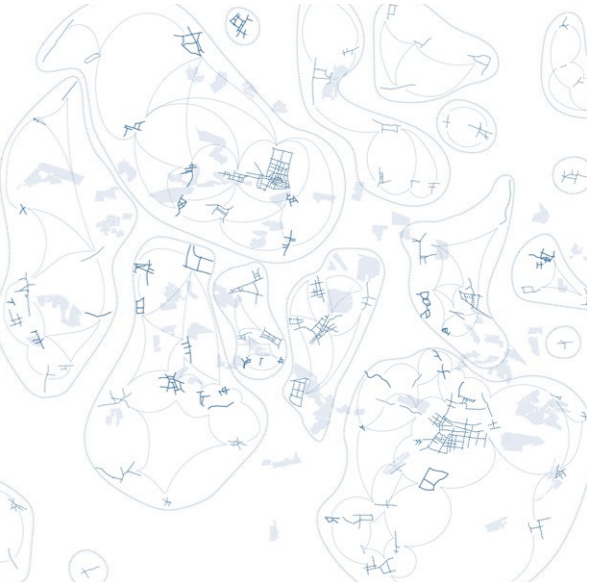
Infrastructure



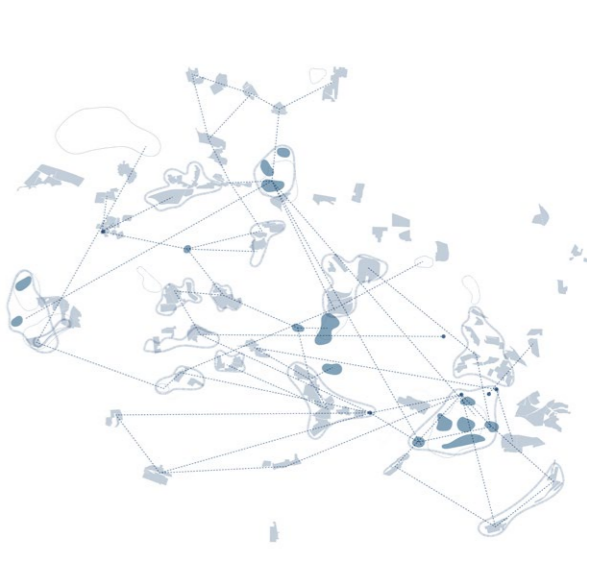
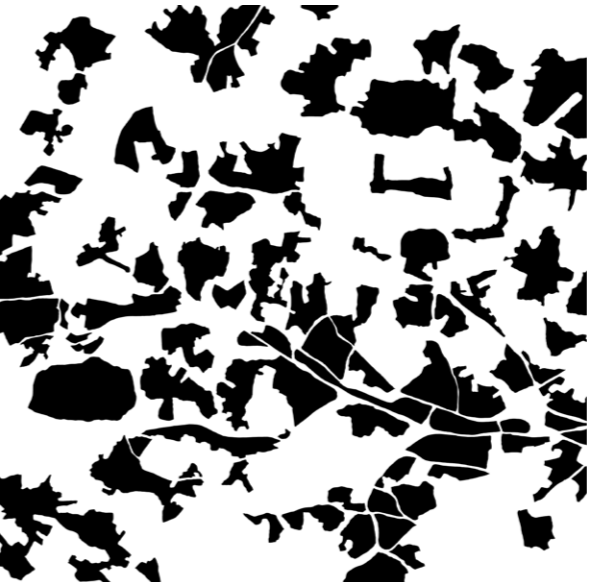
Urbanity



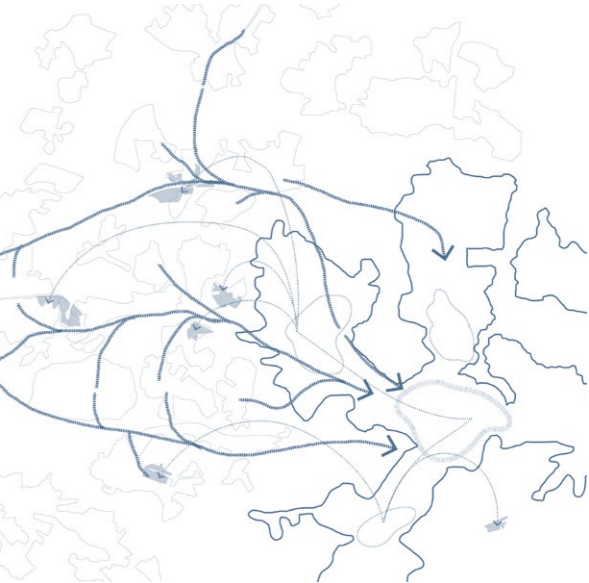
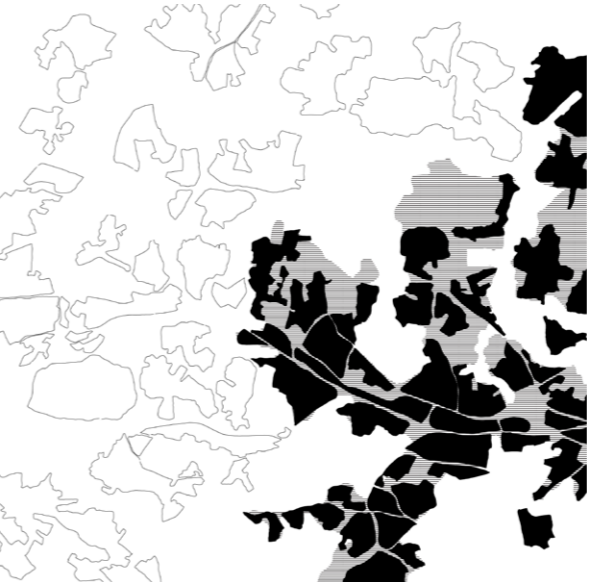
Society and Economy



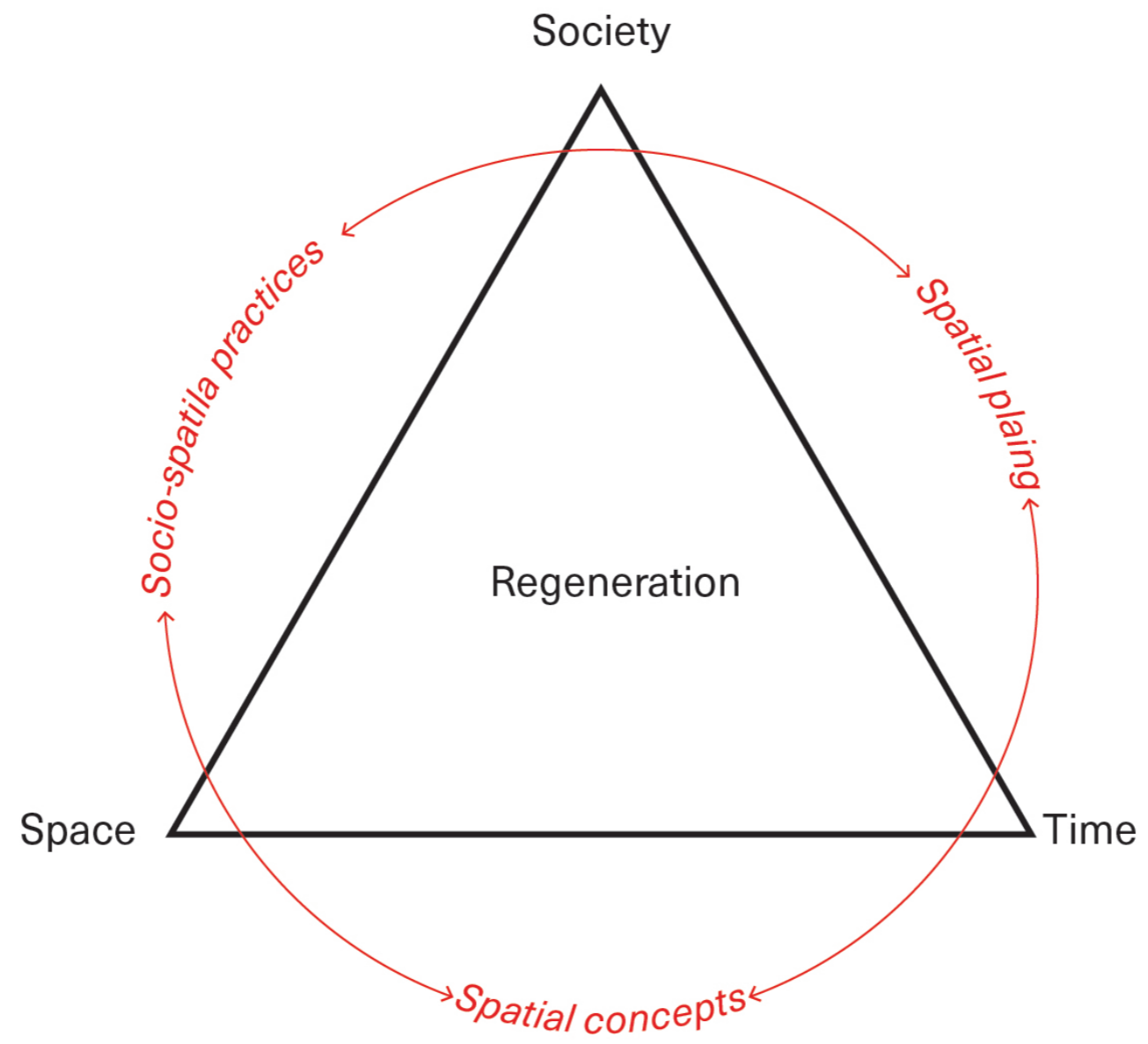
Scenario 1 : Clones

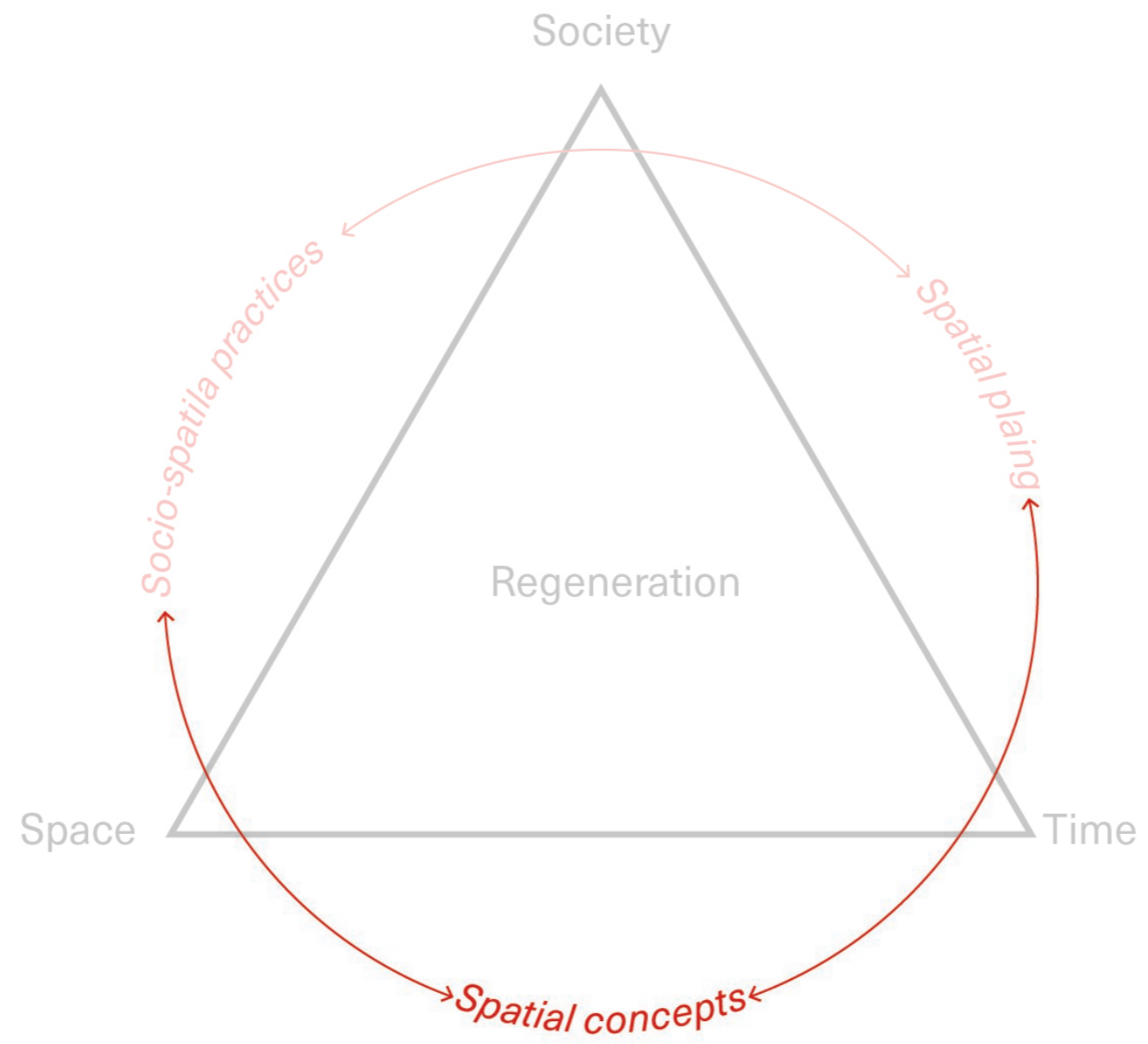


Scenario 2 : Diversification



Scenario 3 : Hierarchy



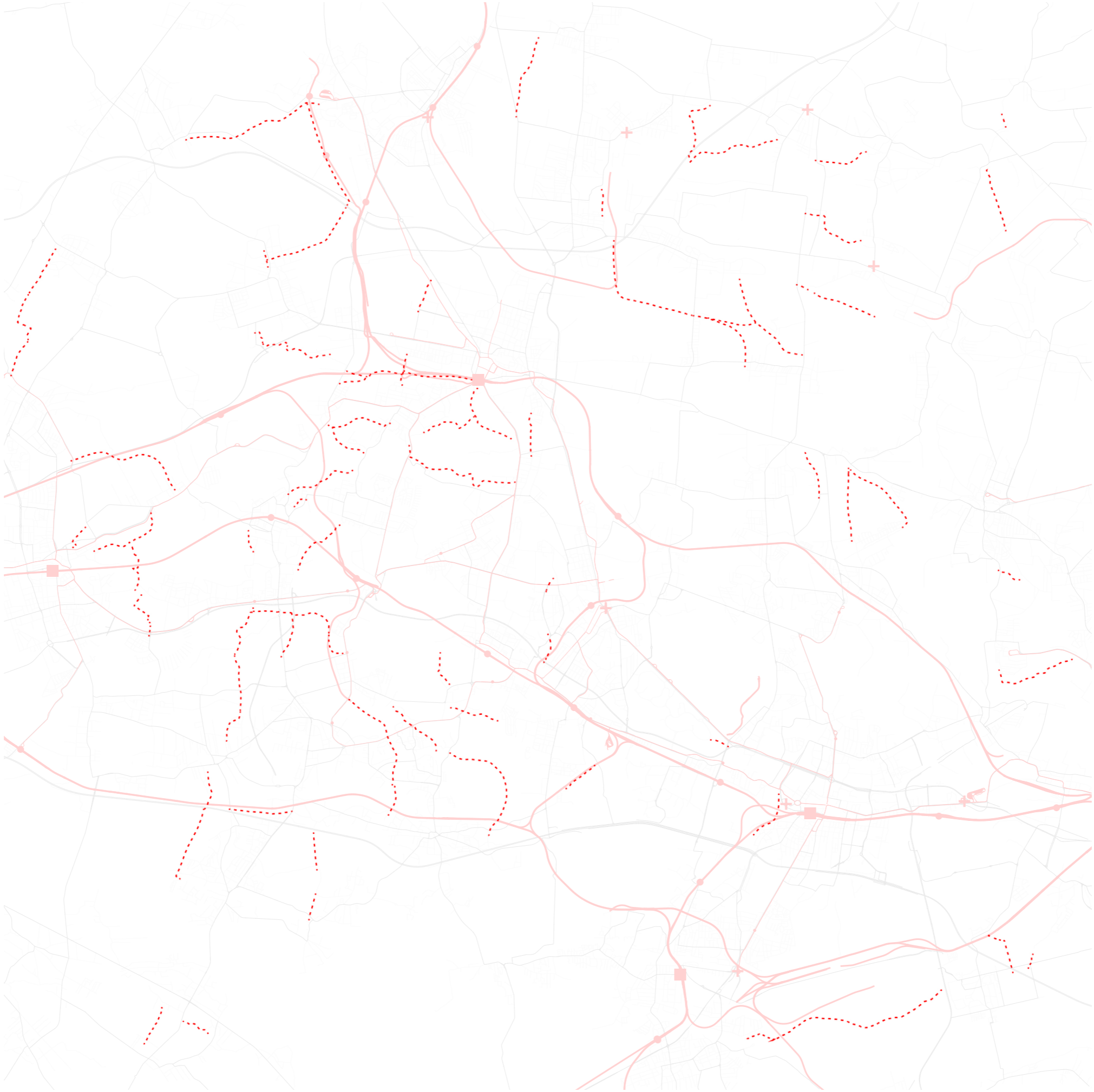






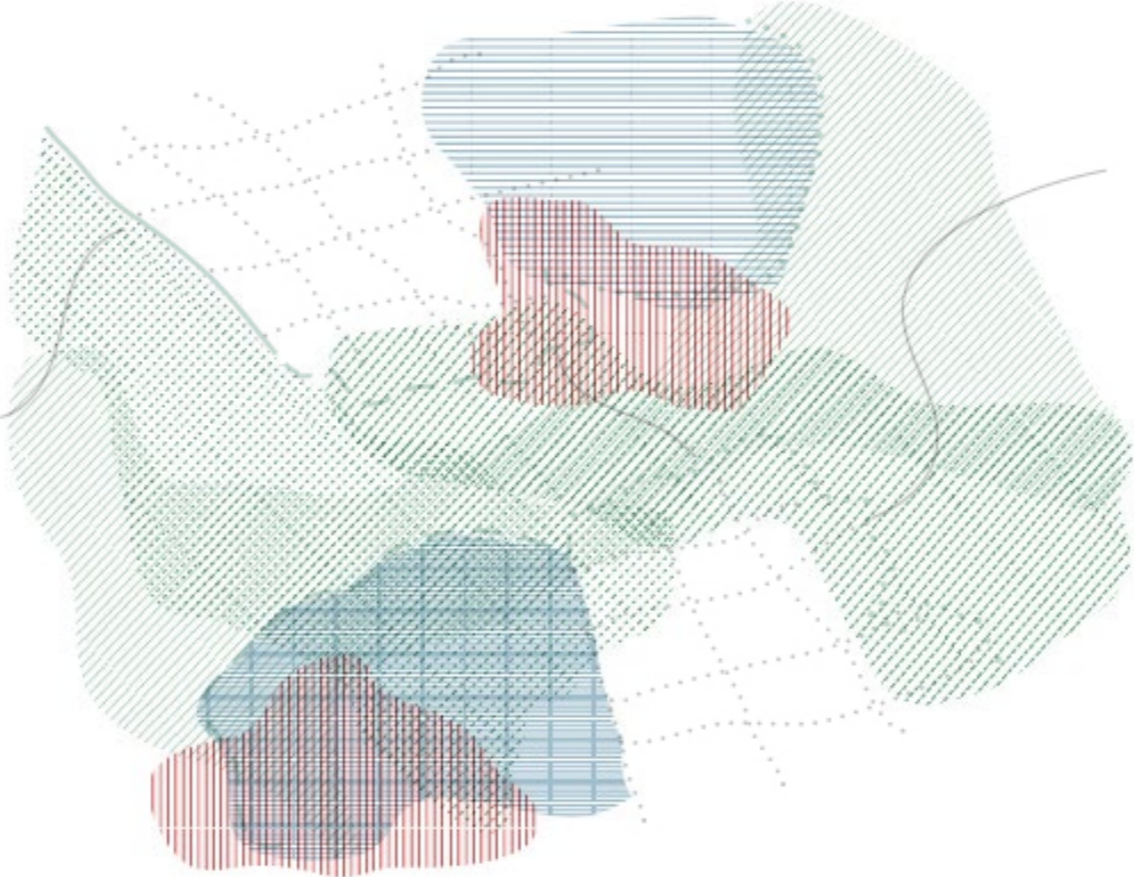
# Urban system

## New connections



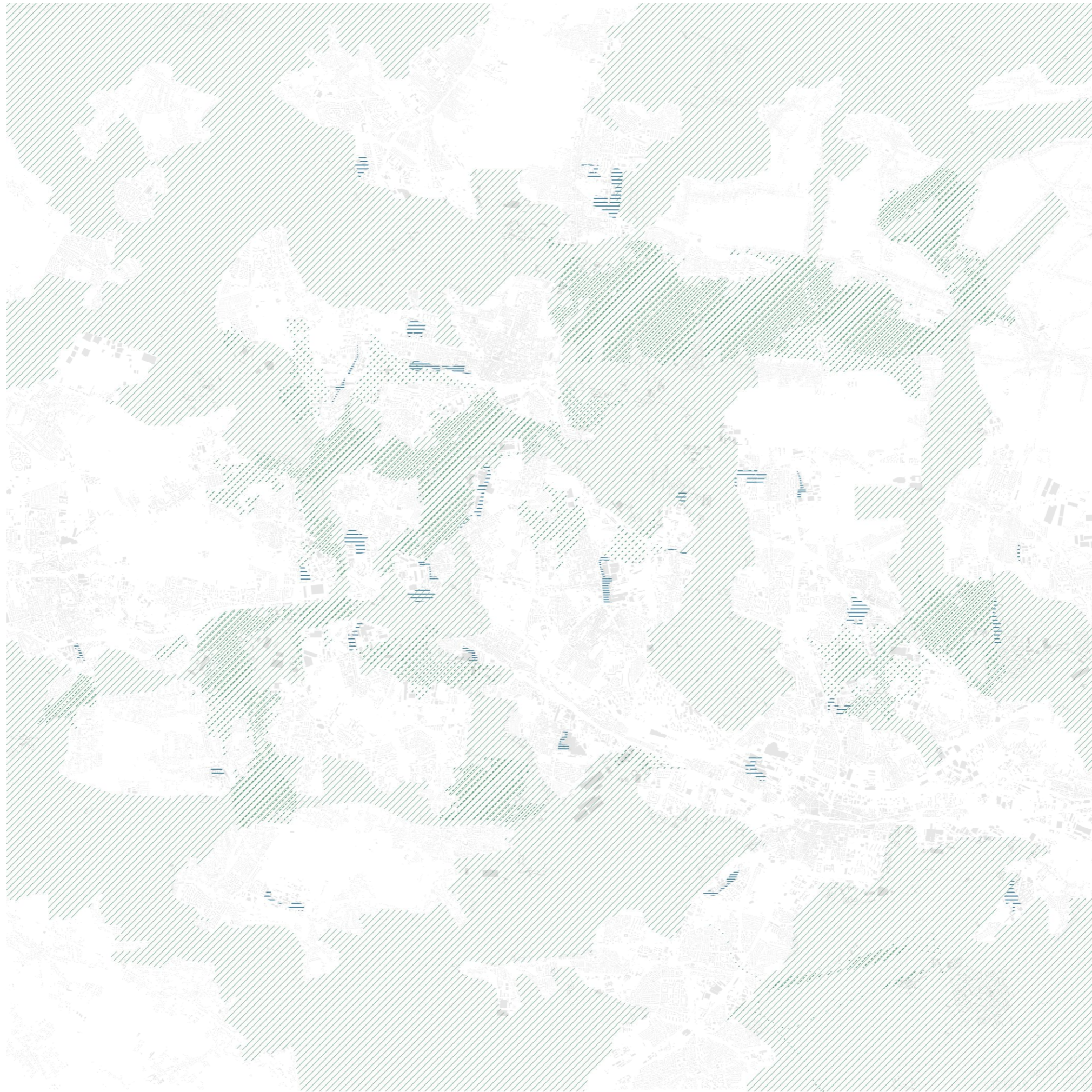
--- New soft-mobility connections  
— Railway infrastructure

# Transition zones



# Transition zones

## Between spaces



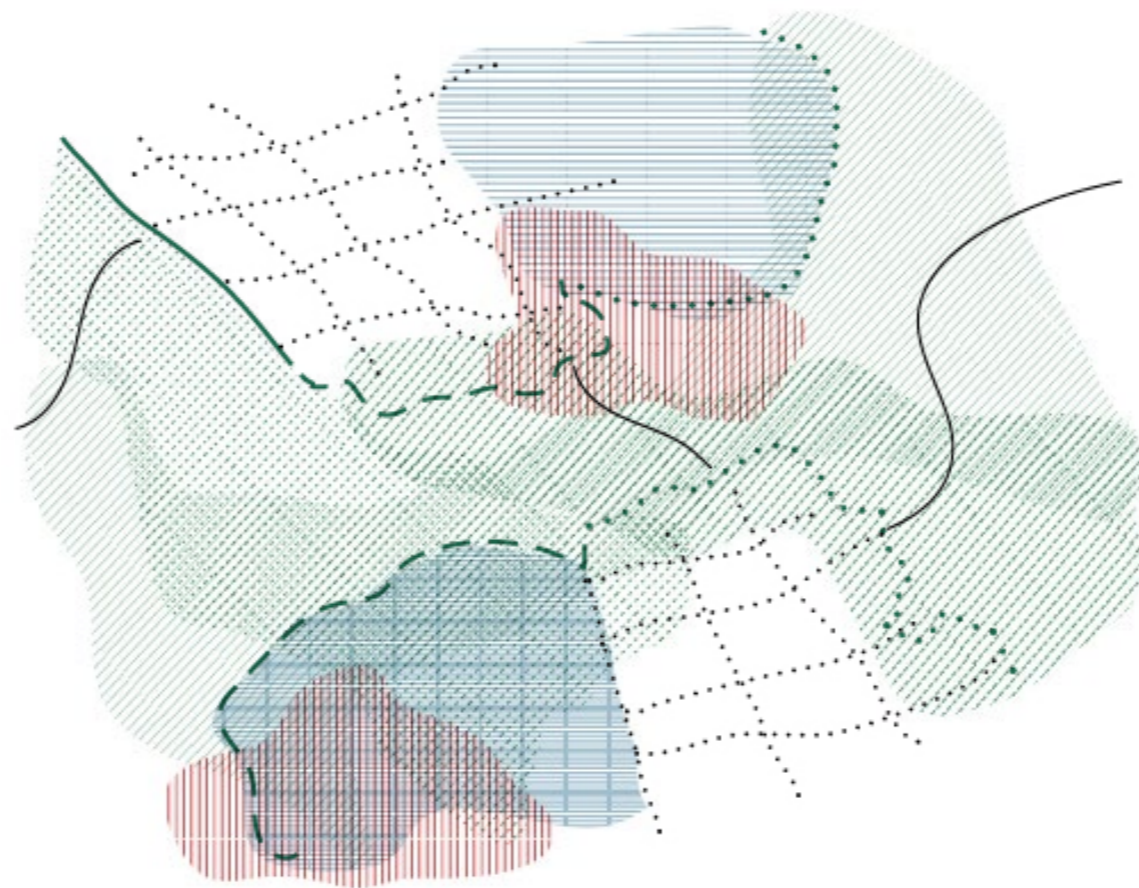
- Industries and city
- Between industries and city
- Dross between cities and industries
- Dross between cities
- Green corridor

# Transition zones

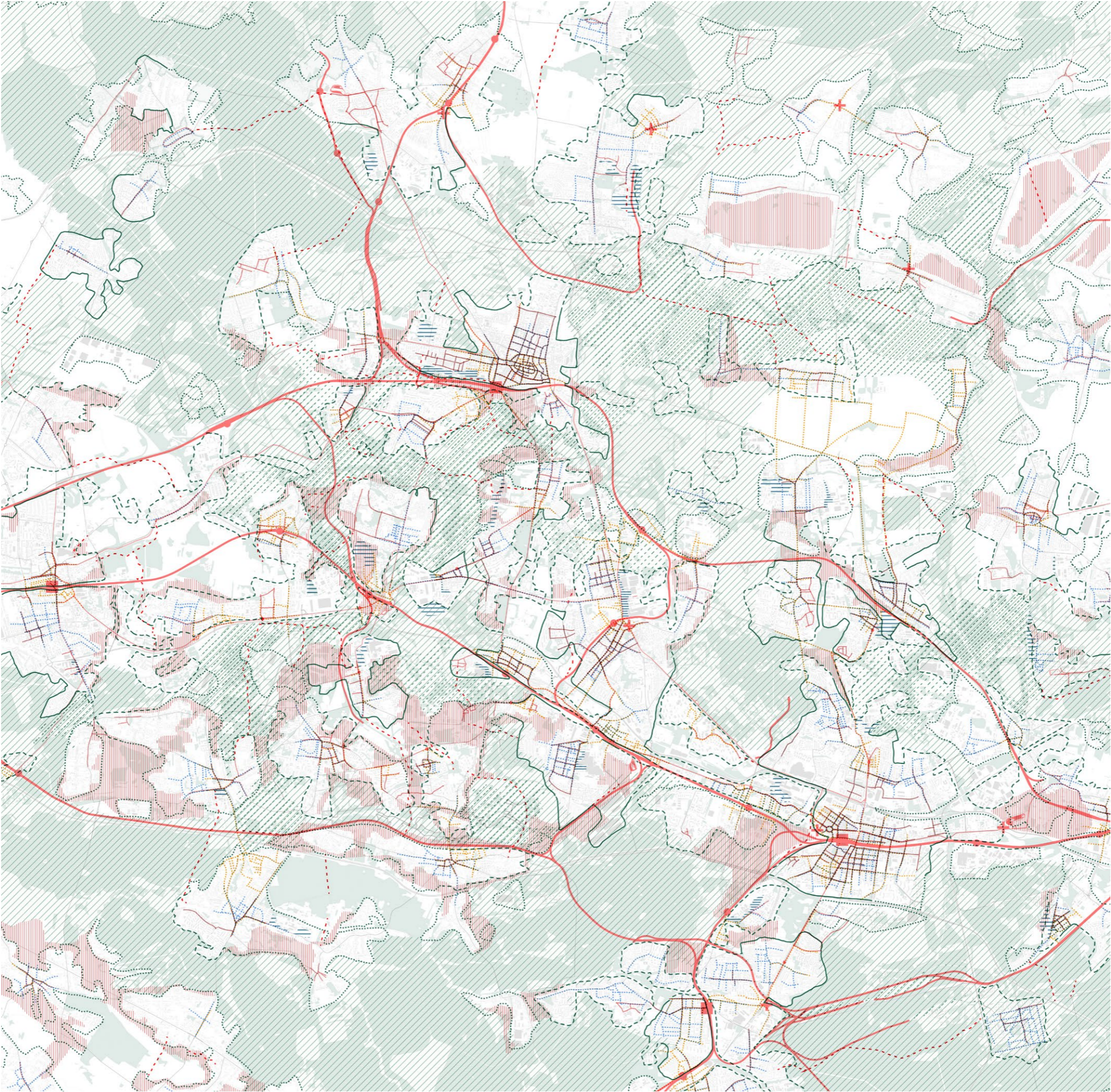
## Dynamic urban areas



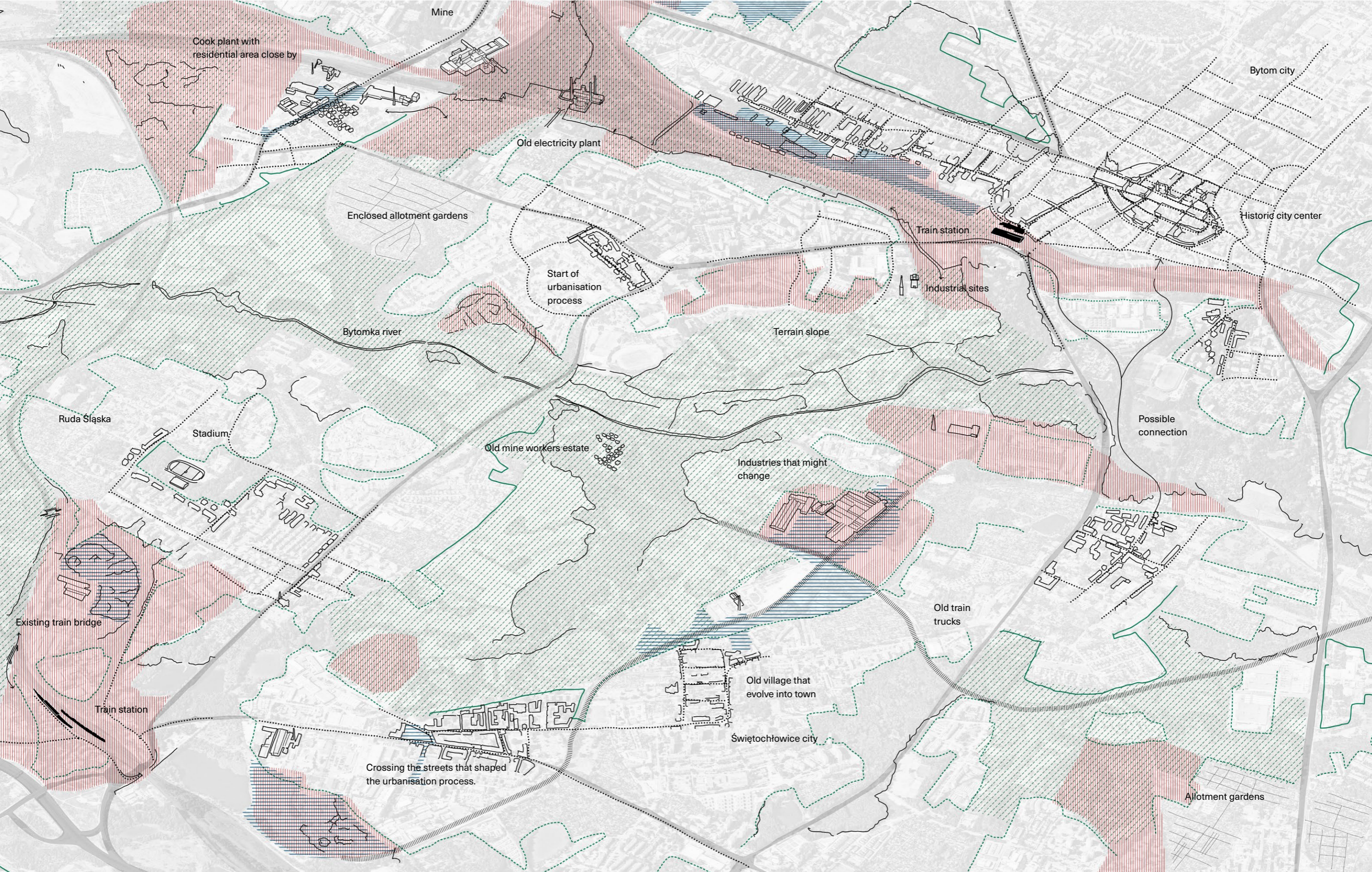
Dynamic urban area

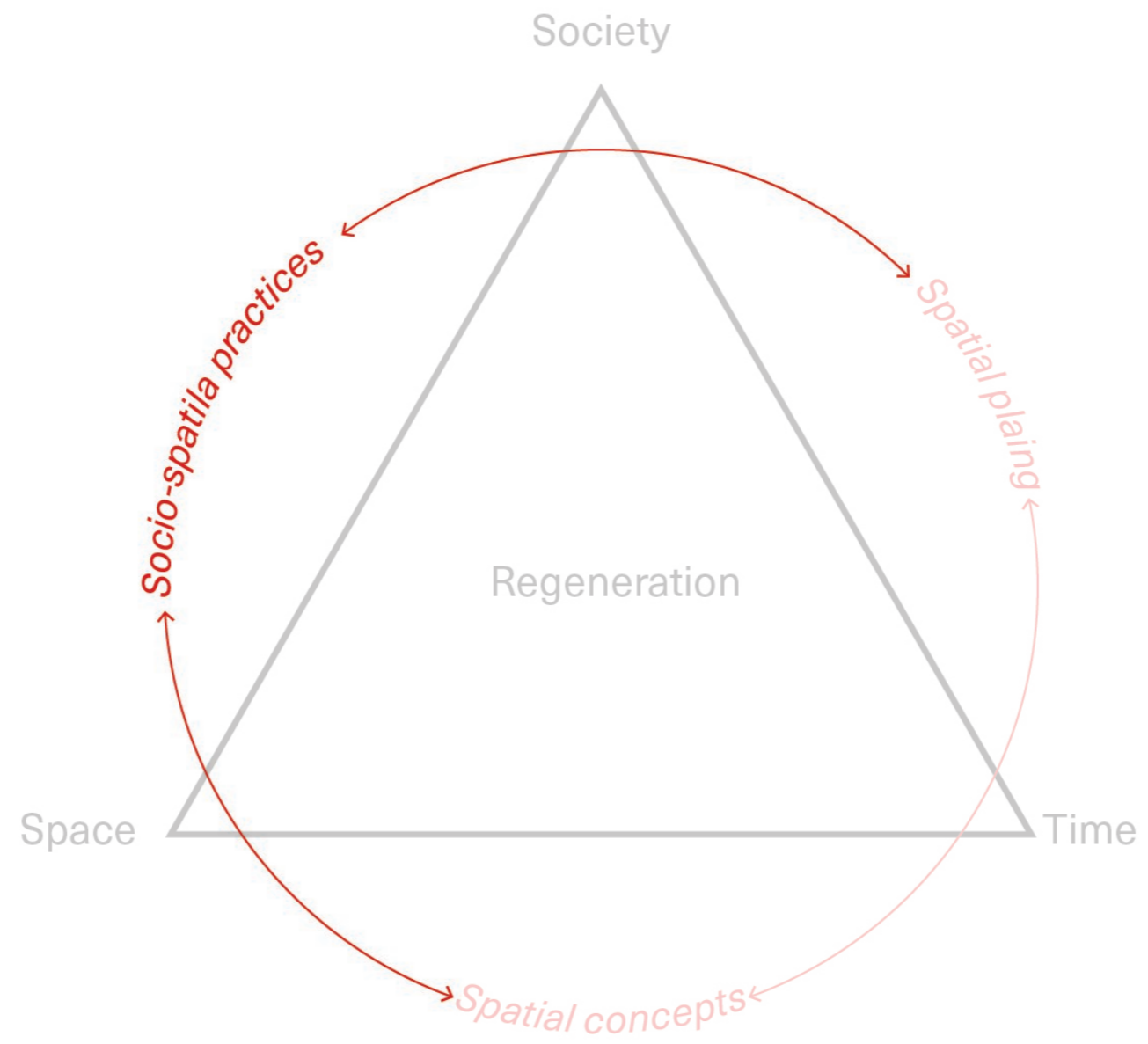


# Field of possibilities



# Field of possibilities within regional contexts





# Types of urban commons

## Types of spaces

Dense centrer

Diffused centrer

Village-type centrer

City and industry

Cities - industry

Dross - city

Dross - industry

Dross - city - industry

Green corridors

Urban network

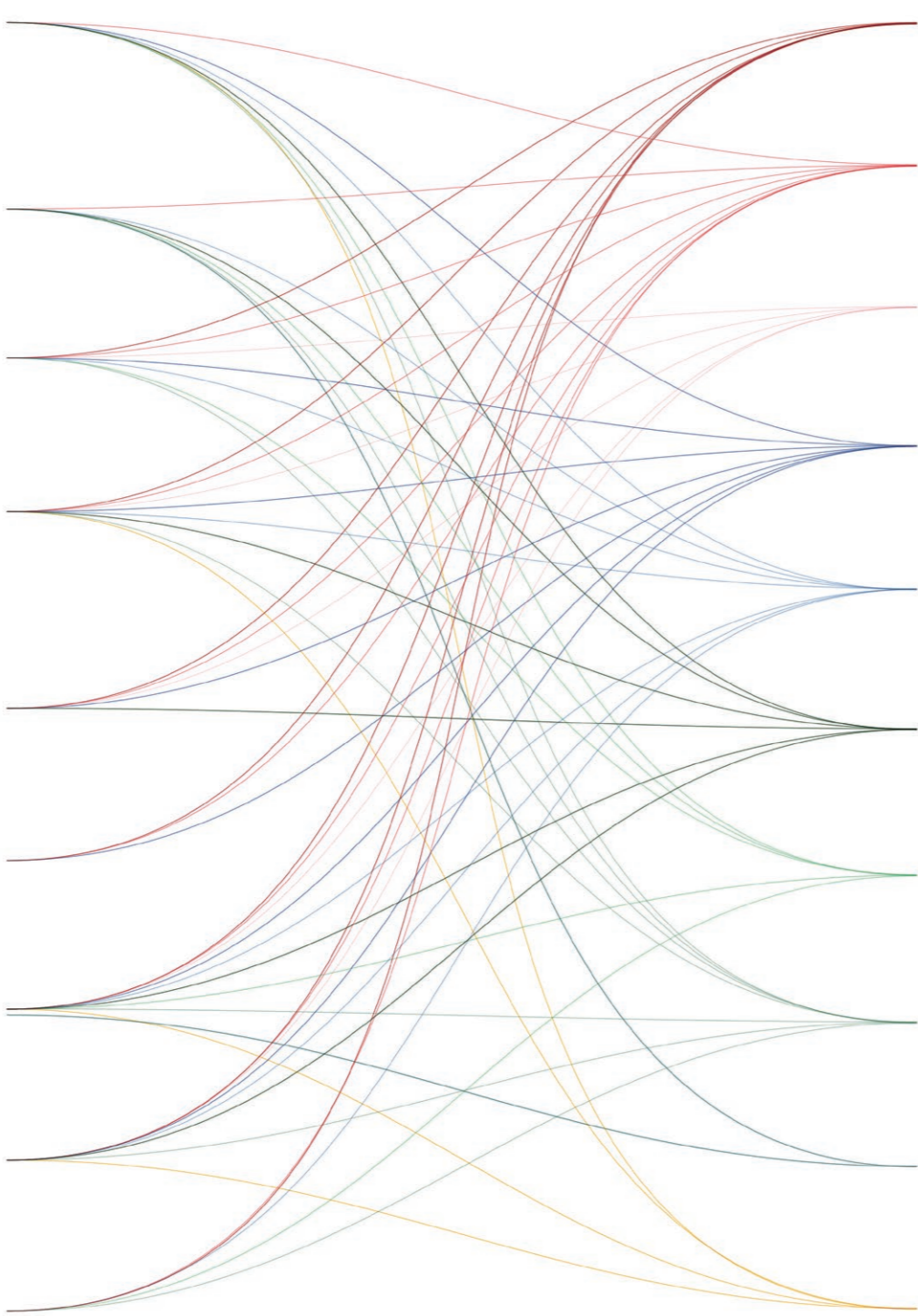
# Types of urban commons

## Territorial capital

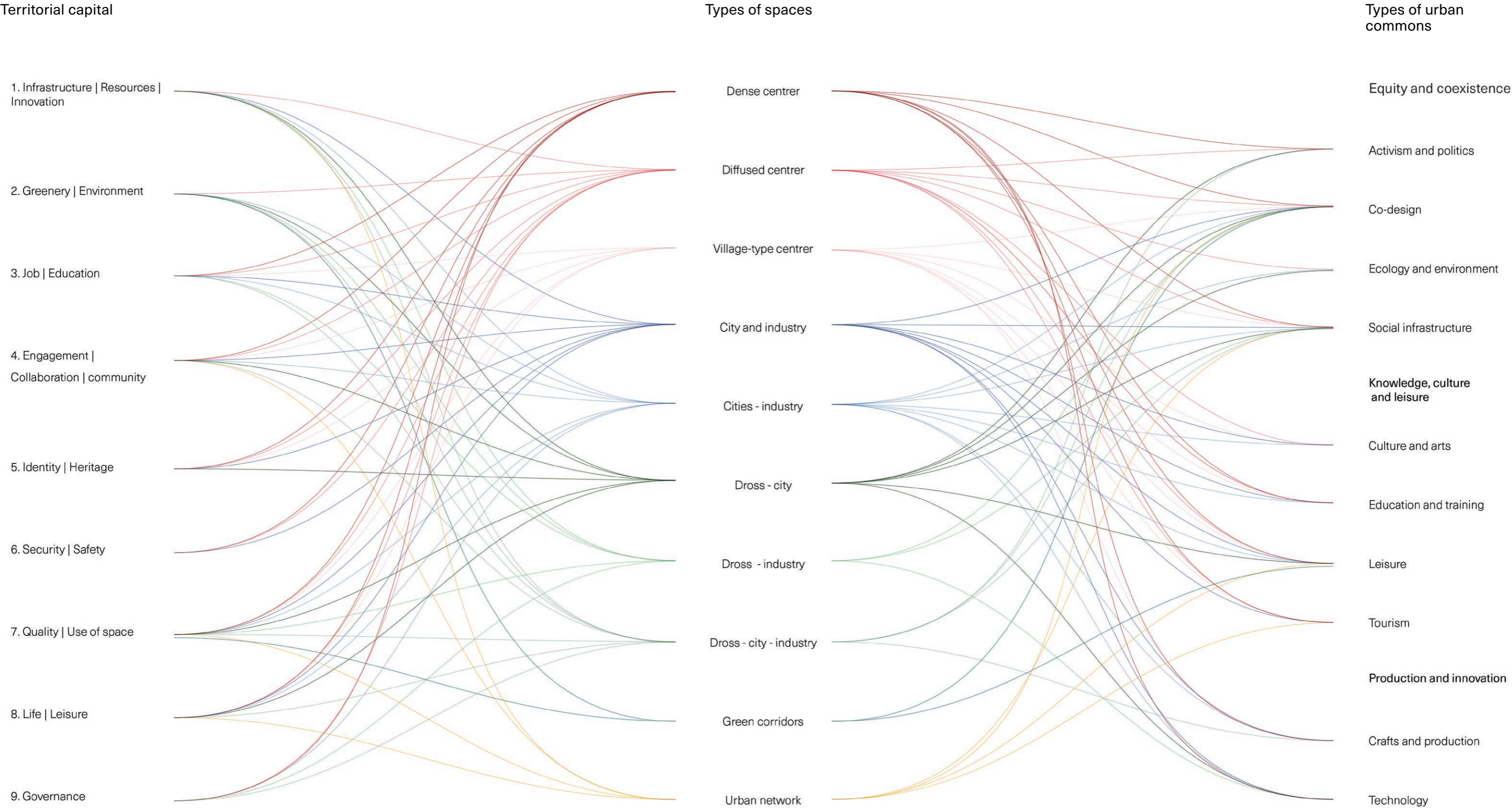
- 1. Infrastructure | Resources | Innovation
- 2. Greenery | Environment
- 3. Job | Education
- 4. Engagement | Collaboration | community
- 5. Identity | Heritage
- 6. Security | Safety
- 7. Quality | Use of space
- 8. Life | Leisure
- 9. Governance

## Types of spaces

- Dense centrer
- Diffused centrer
- Village-type centrer
- City and industry
- Cities - industry
- Dross - city
- Dross - industry
- Dross - city - industry
- Green corridors
- Urban network



# Types of urban commons



# Commoning practices

## Industries and cities

### Studied place

An existing coke factory is located on the opposite side of the street from a residential area characterized by the region's distinctive architecture.

### Spatial quality

- Place of unique history and atmosphere
- Diversity of spaces and structural elements
- Visibility

### Possible urban common

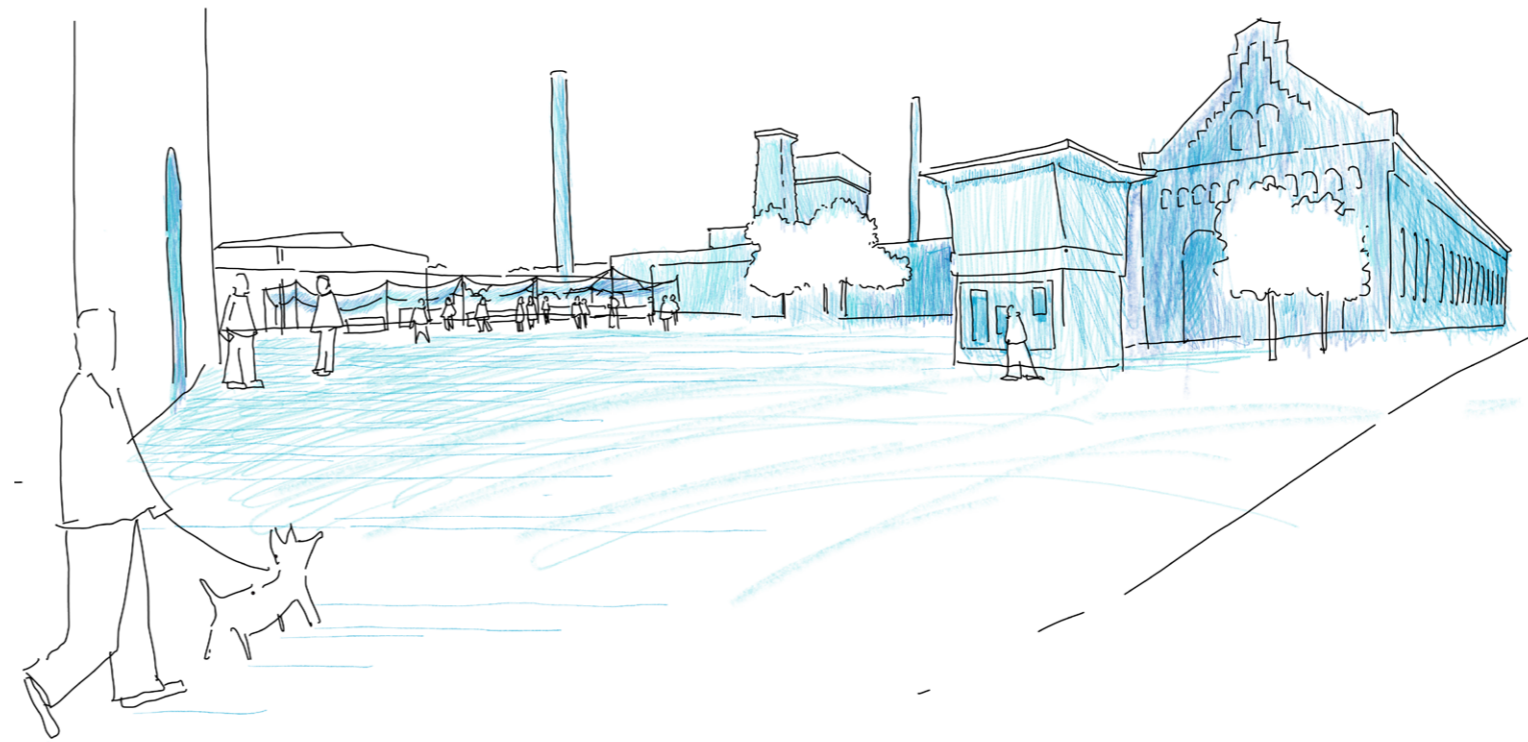
Community center with museum cared by community.  
Parking that can be used as weekly market.

How can identity be maintained?

How local potential can be used and make cities attractive?

Events highlighting uniqueness and history.

Conditions for integration and social engagement.



# Commoning practices

## Between industries and city

### Studied place

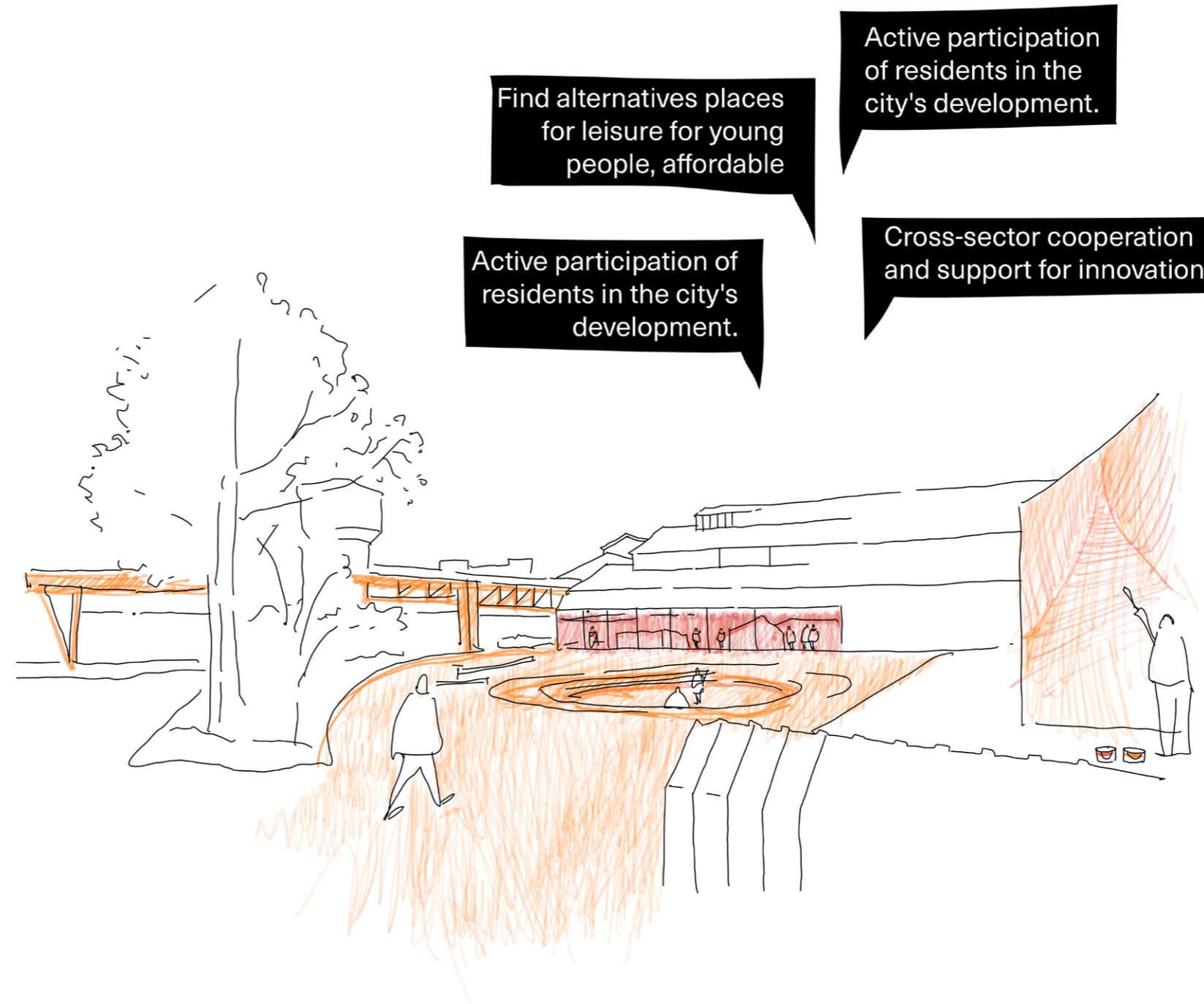
A steel-related industry is located in the middle of the neighborhood. The vast industrial site is almost entirely built up with warehouses, creating an irregular layout.

### Spatial quality

- Closeness to the neighborhood and city
- Variety of indoor-outdoor spaces
- Visibility

### Possible urban common

Cultural hubs, workshop and workspace with open access. Sharing skills intersect with local street art and community creativity.



# Commoning practices

## Between industries

### Studied place

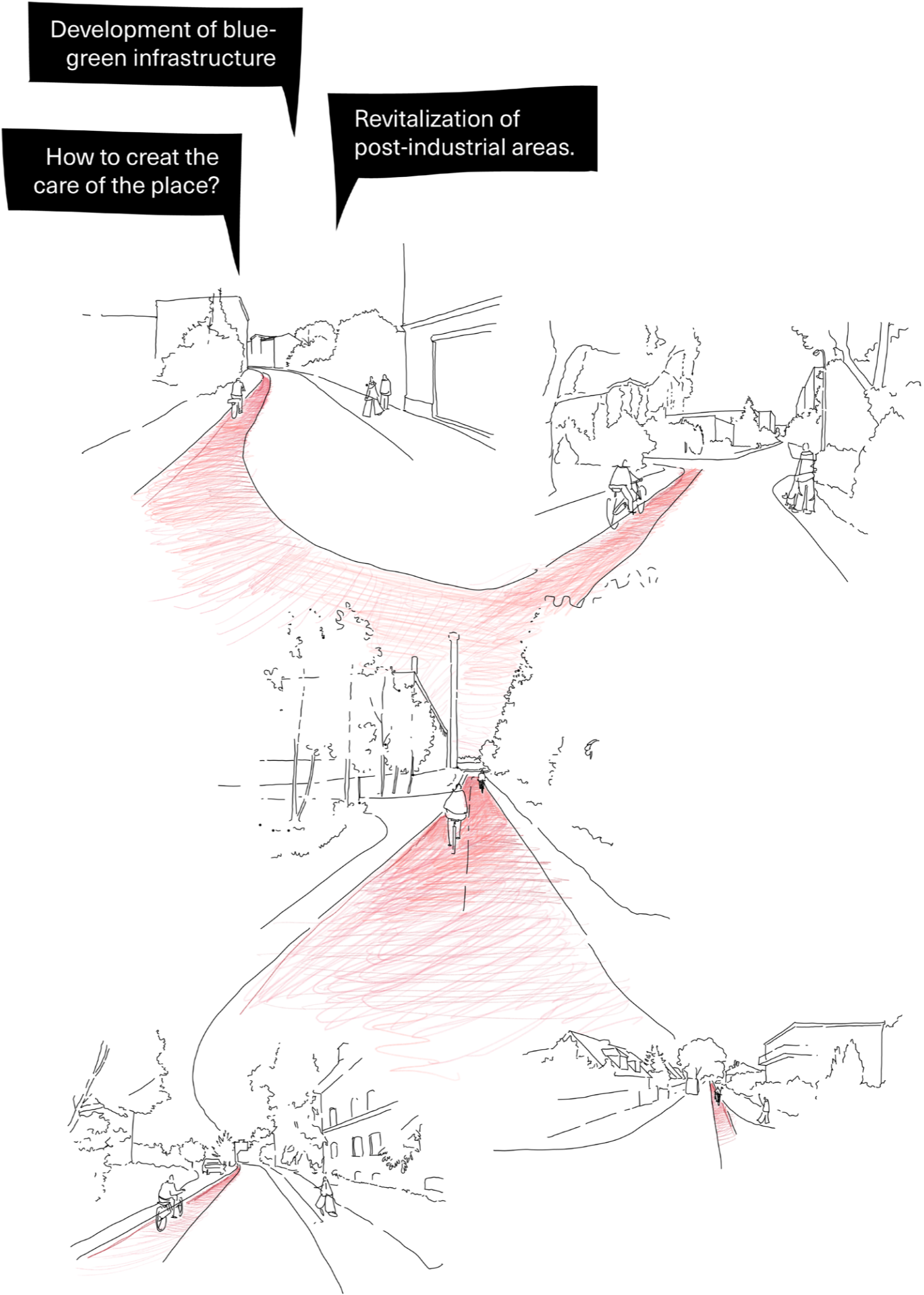
This green site is situated between fenced industrial areas and is located in close proximity to several cities.

### Spatial quality

- Continuity of green structure
- Variety of landscape
- Proximity to cities and industries

### Possible urban common

Creating a bike line through industrial sites to connect different neighborhoods.



# Commoning practices

## Between cities

### Studied place

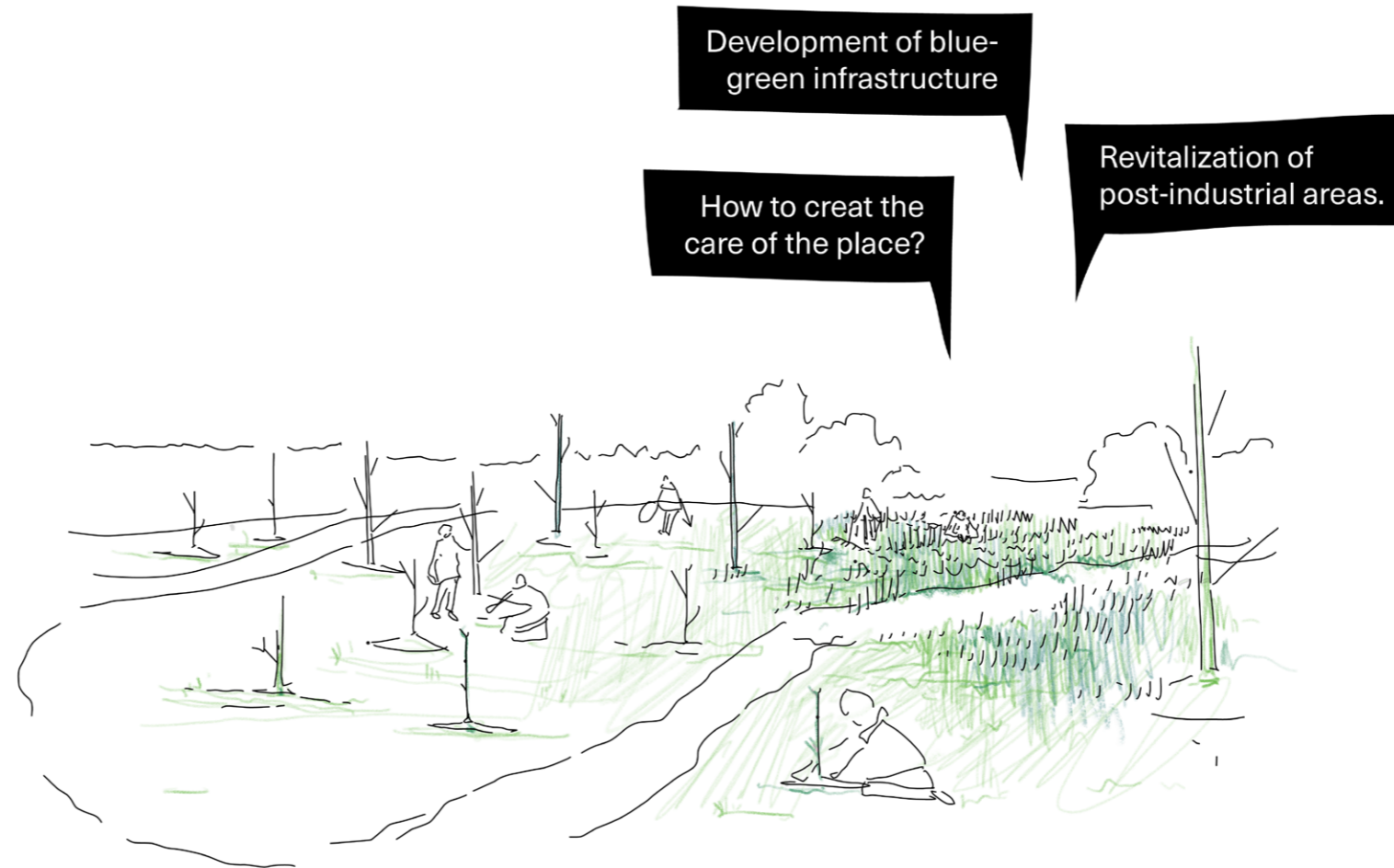
An altered transitional landscape bridging the edge of residential development and expansive green areas.

### Spatial quality

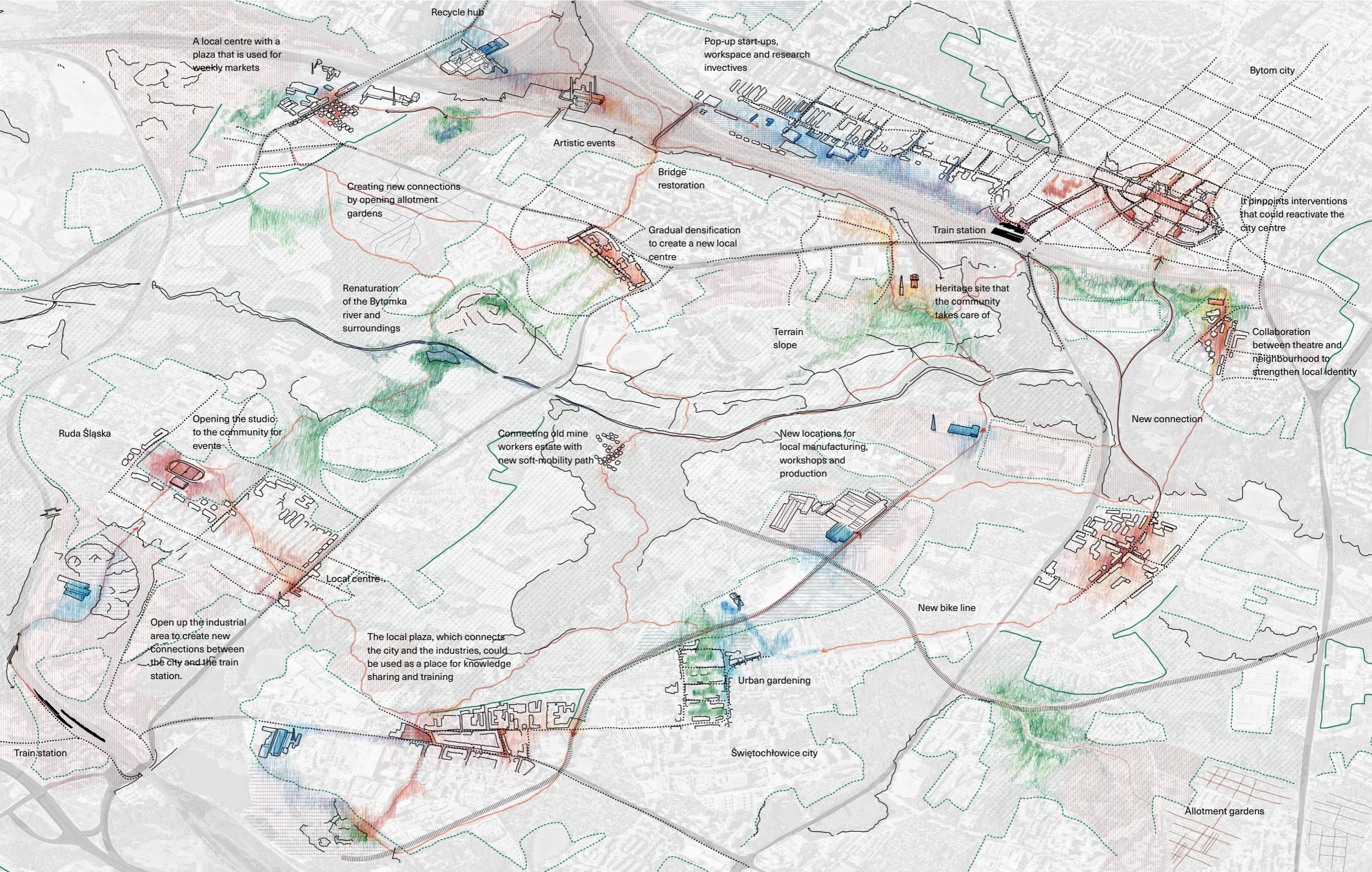
- Connectivity between city and nature
- Open and vacant space
- Informality

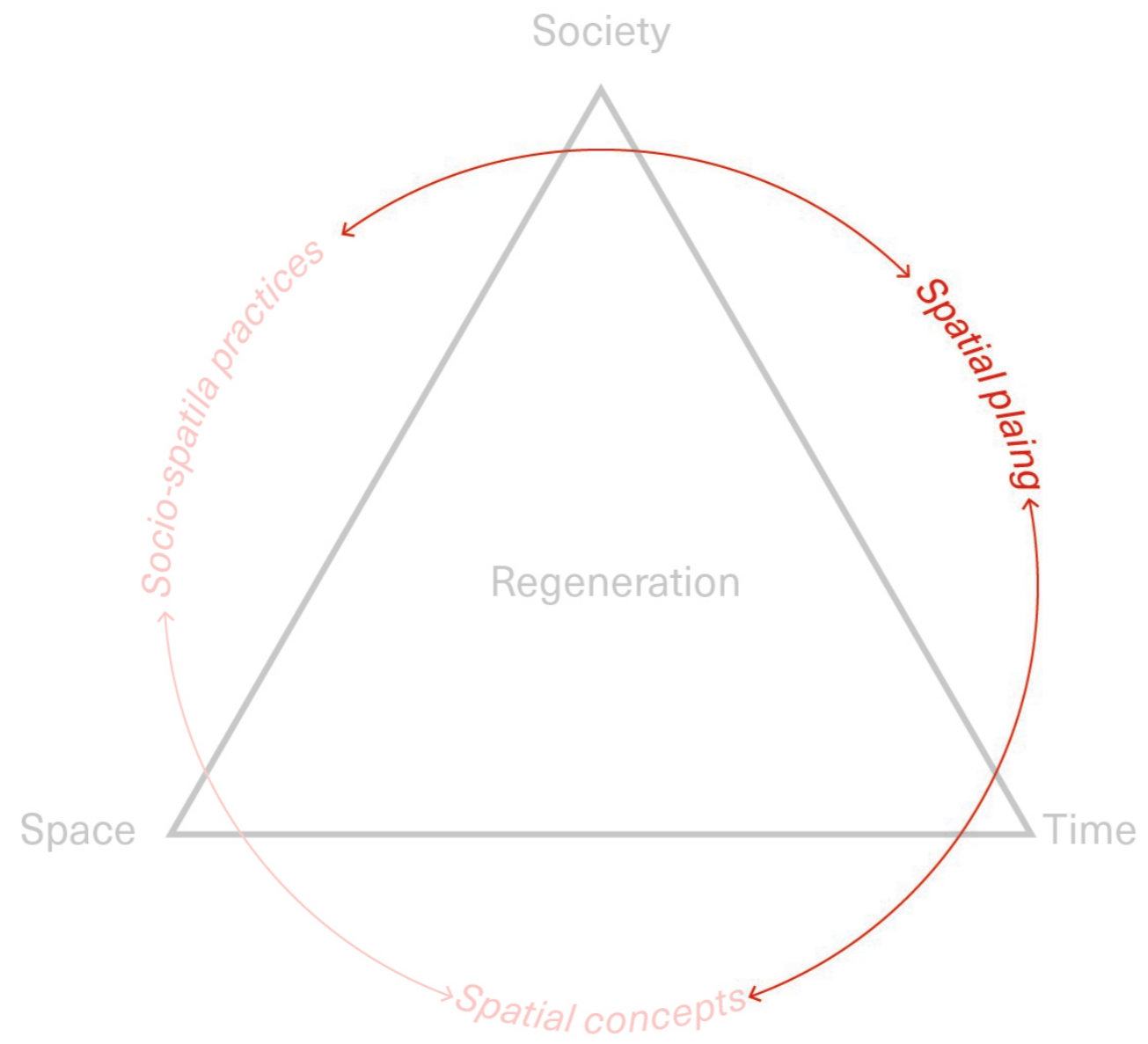
### Possible urban common

Community garden, that helps in soil regeneration and reforestation of the post-industrial site.



# Network of urban commons

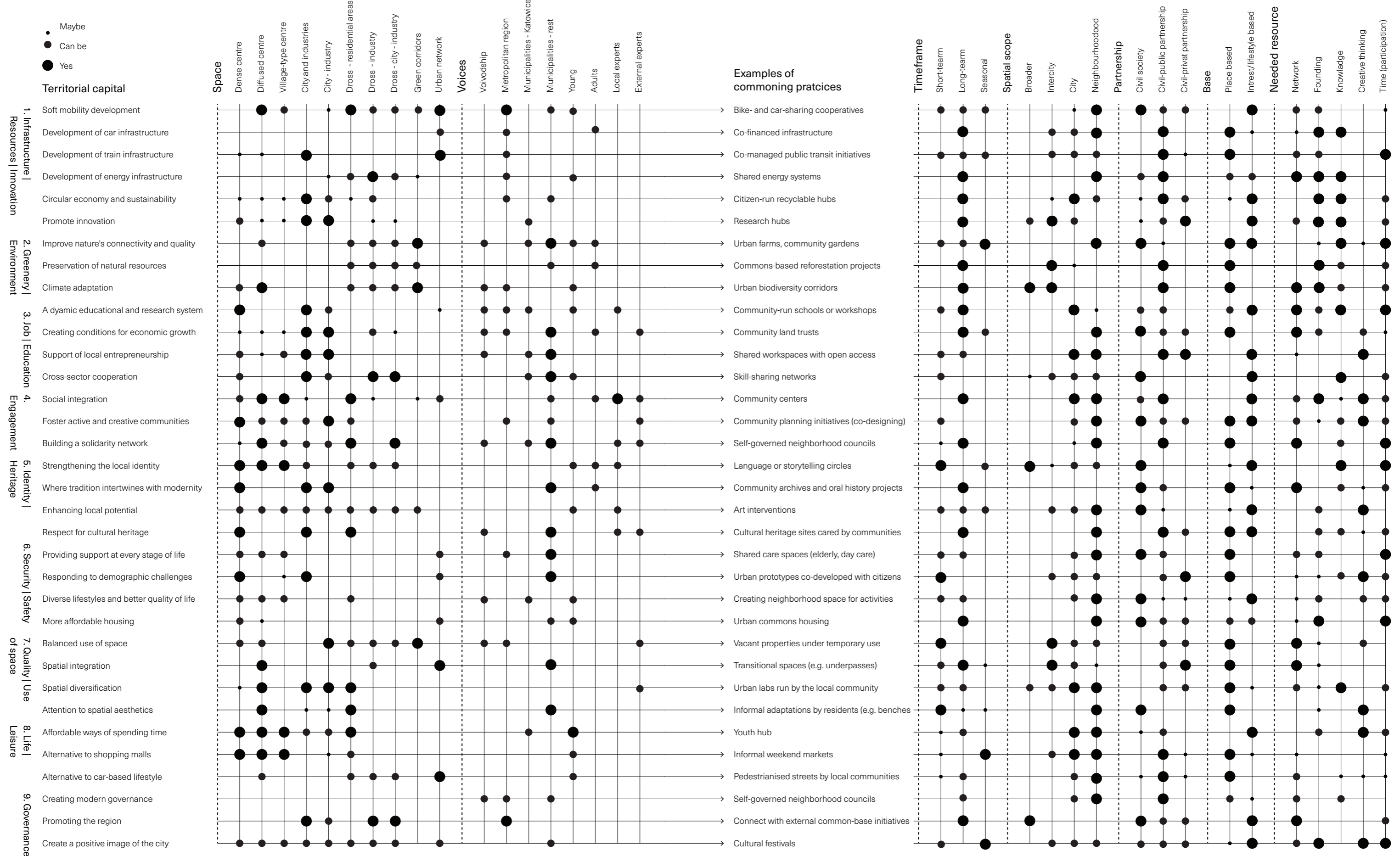




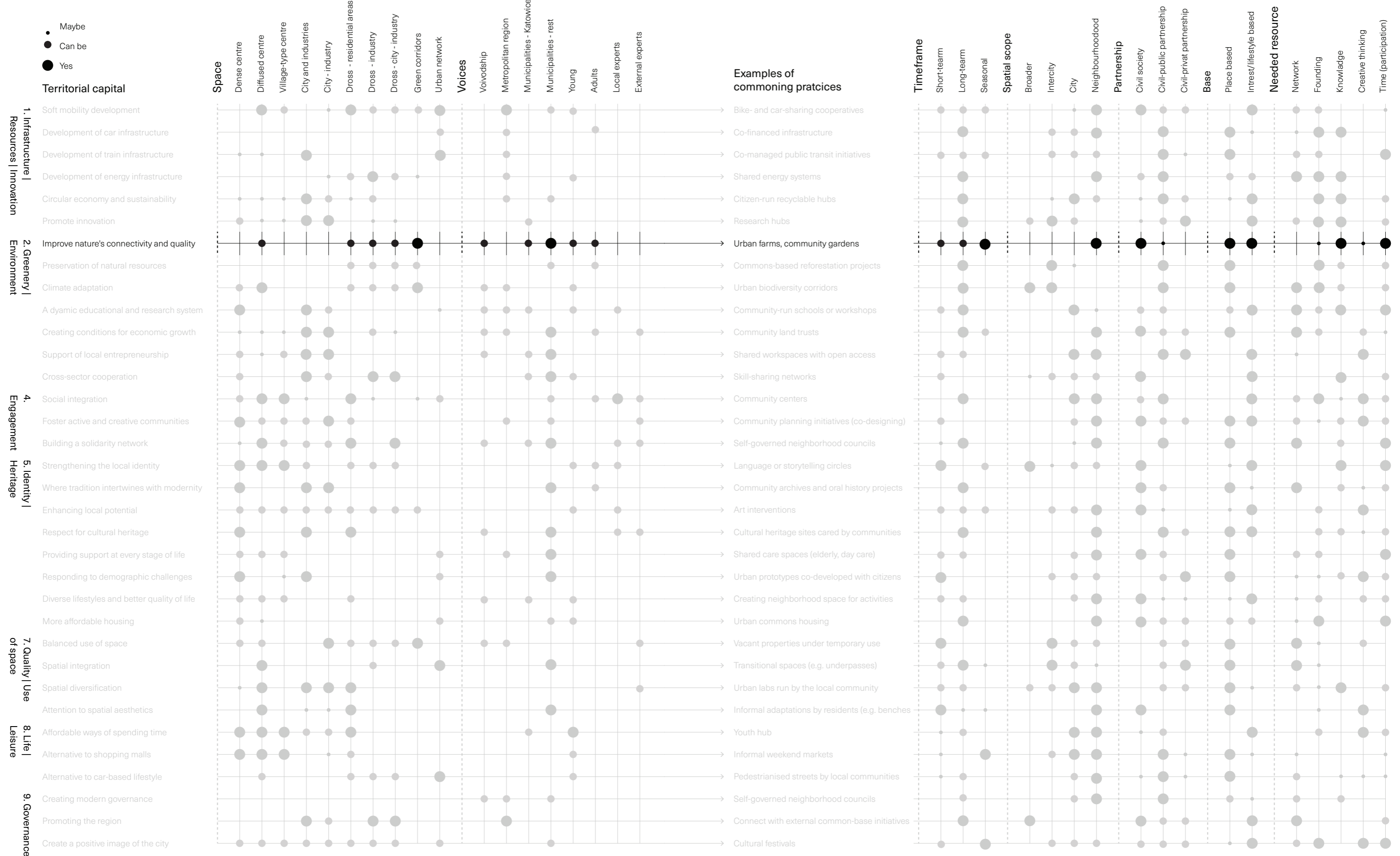
Time x People	Imagination	→	Temporal intervention	→	Long-enduring initiative
Commoning practices table	Imagination	→	Temporal intervention		
Collaboration	Imagination	→	Temporal intervention	→	Long-enduring initiative
Time frame			Temporal intervention	→	Long-enduring initiative

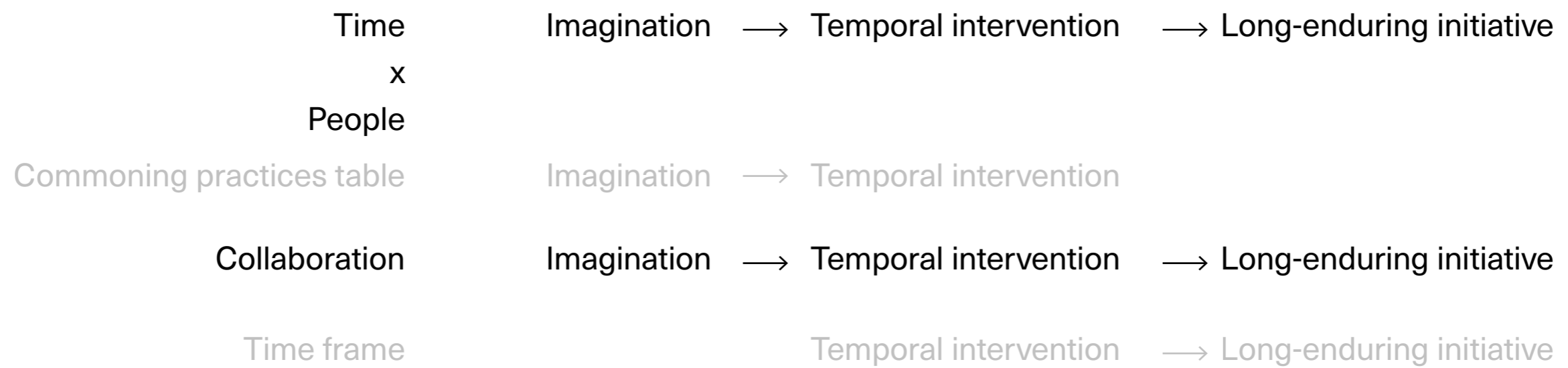
Time x People	Imagination	→	Temporal intervention	→	Long-enduring initiative
Commoning practices table	Imagination	→	Temporal intervention		
Collaboration	Imagination	→	Temporal intervention	→	Long-enduring initiative
Time frame			Temporal intervention	→	Long-enduring initiative

# Commoning practices table



# Commoning practices table



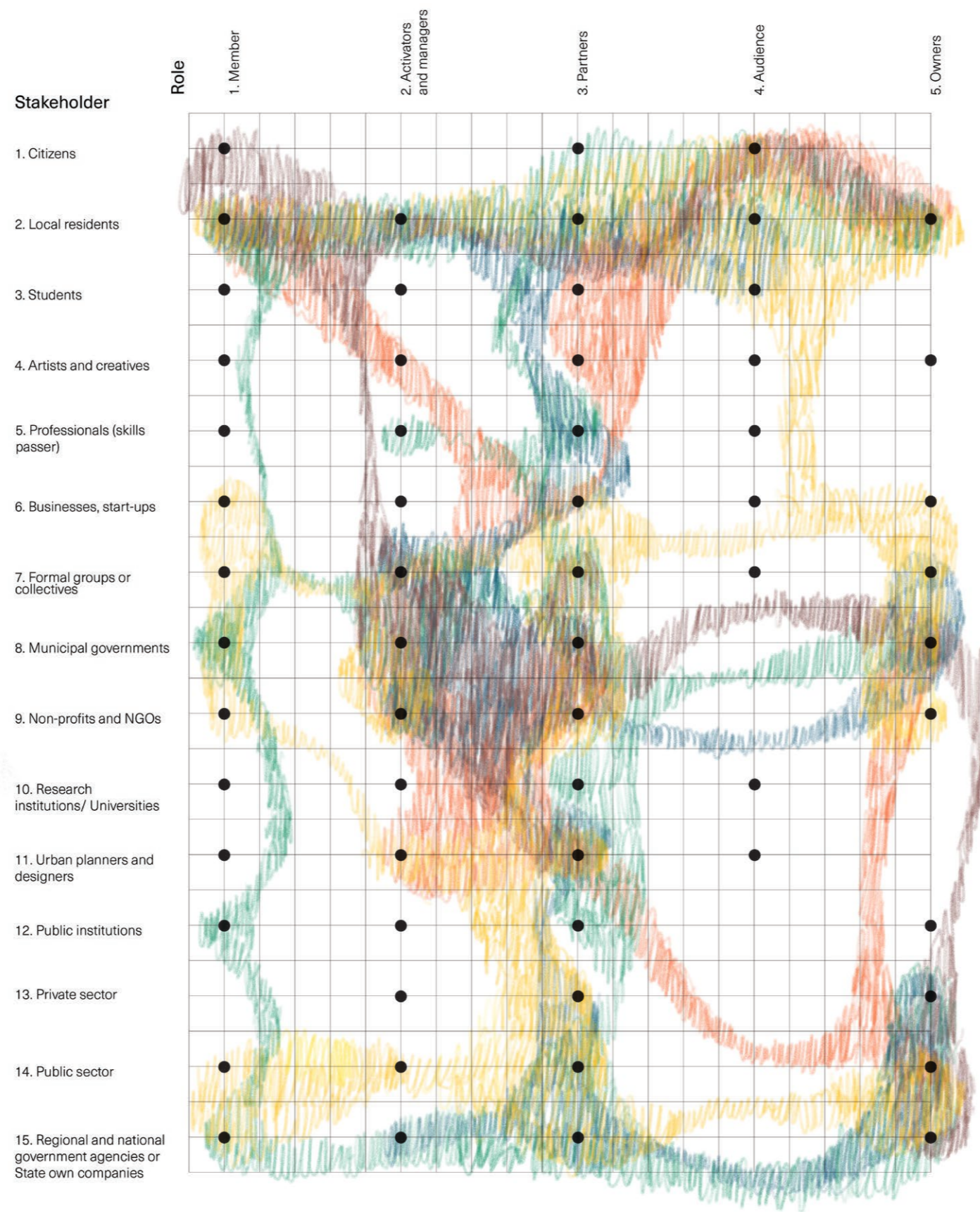






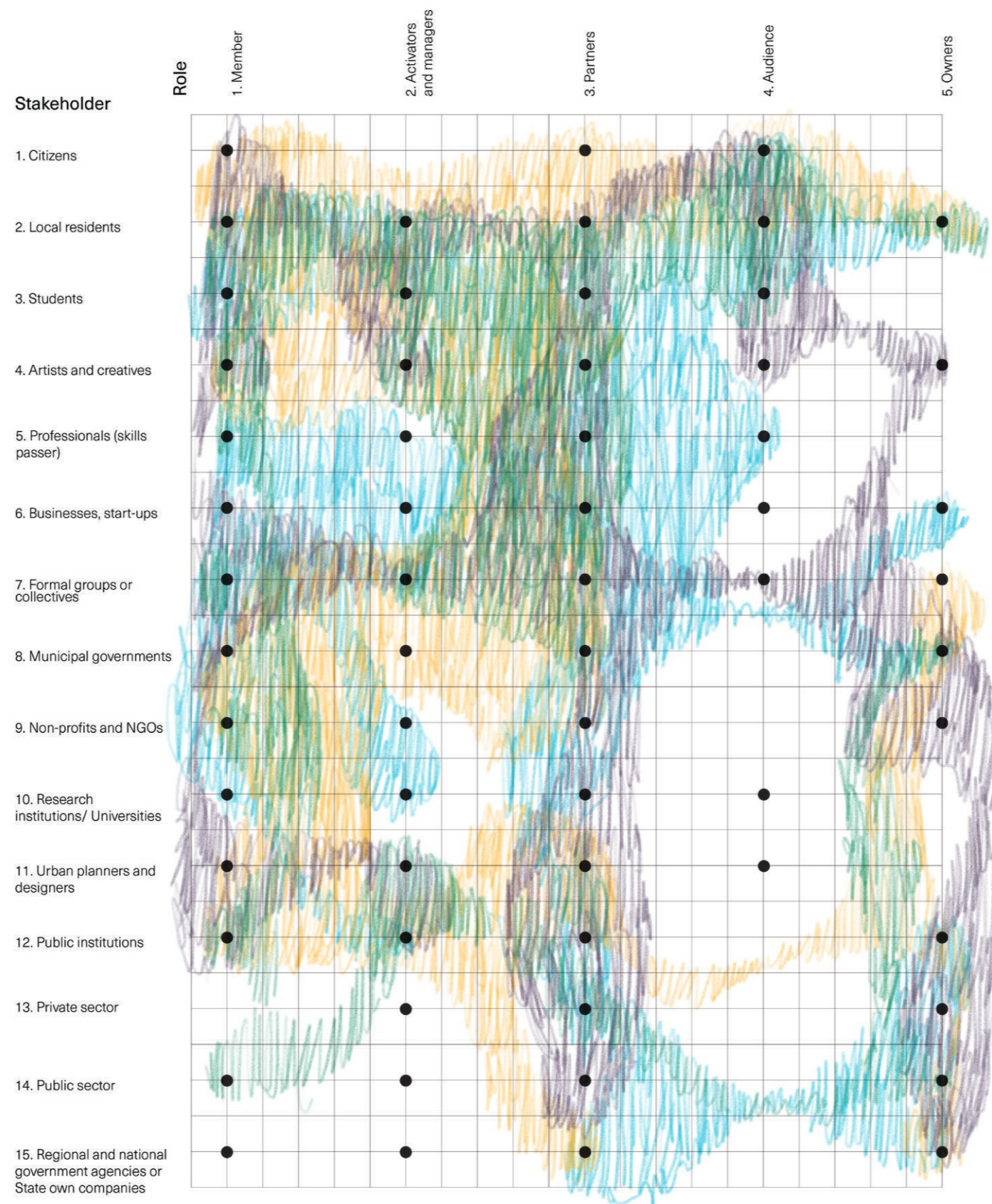






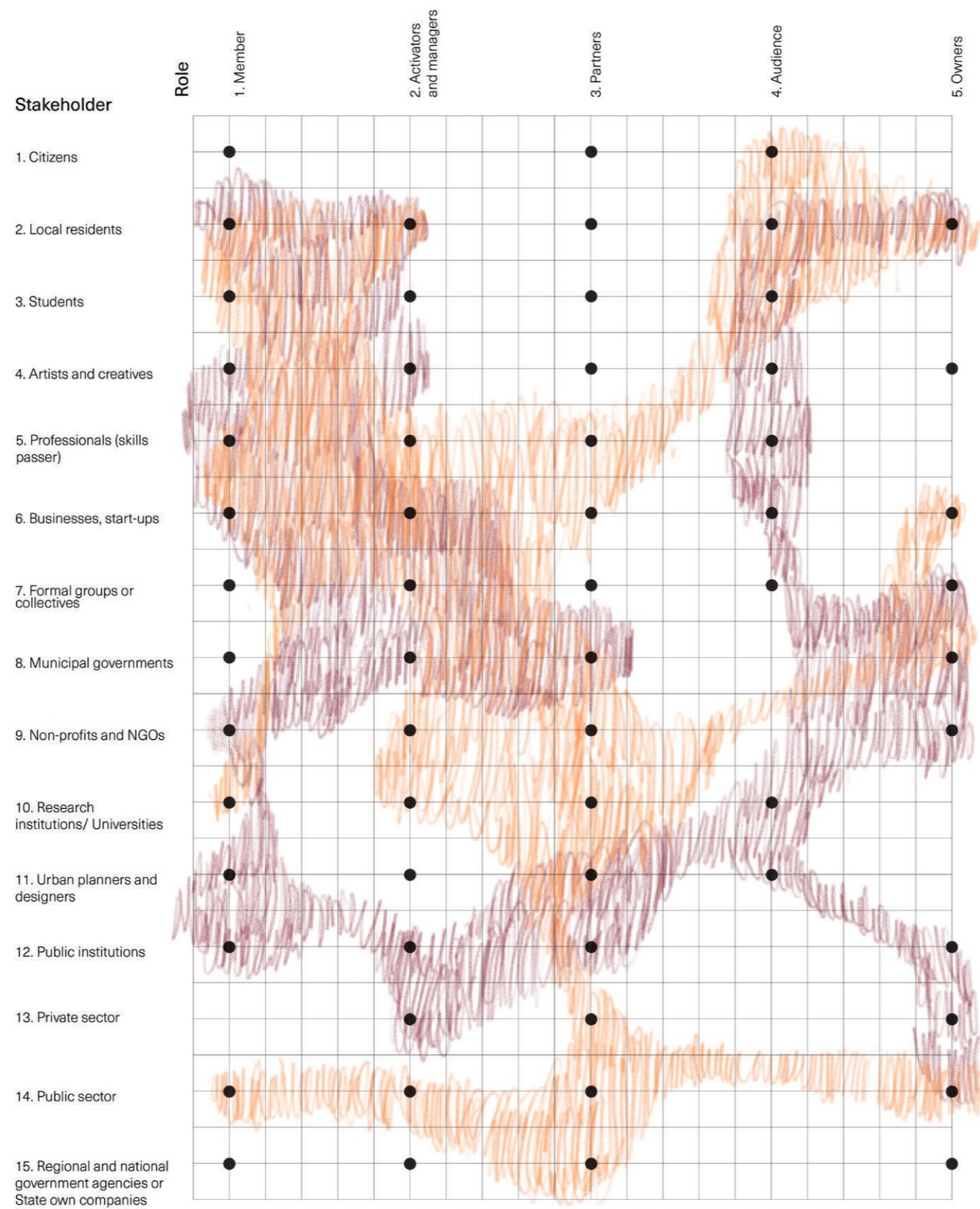
Equity and coexistence

- 1. Activism and politics
- 2. Co-design
- 3. Ecology and environment
- 4. Social infrastructure
- 5. Accessibility



Knowledge, culture, and leisure

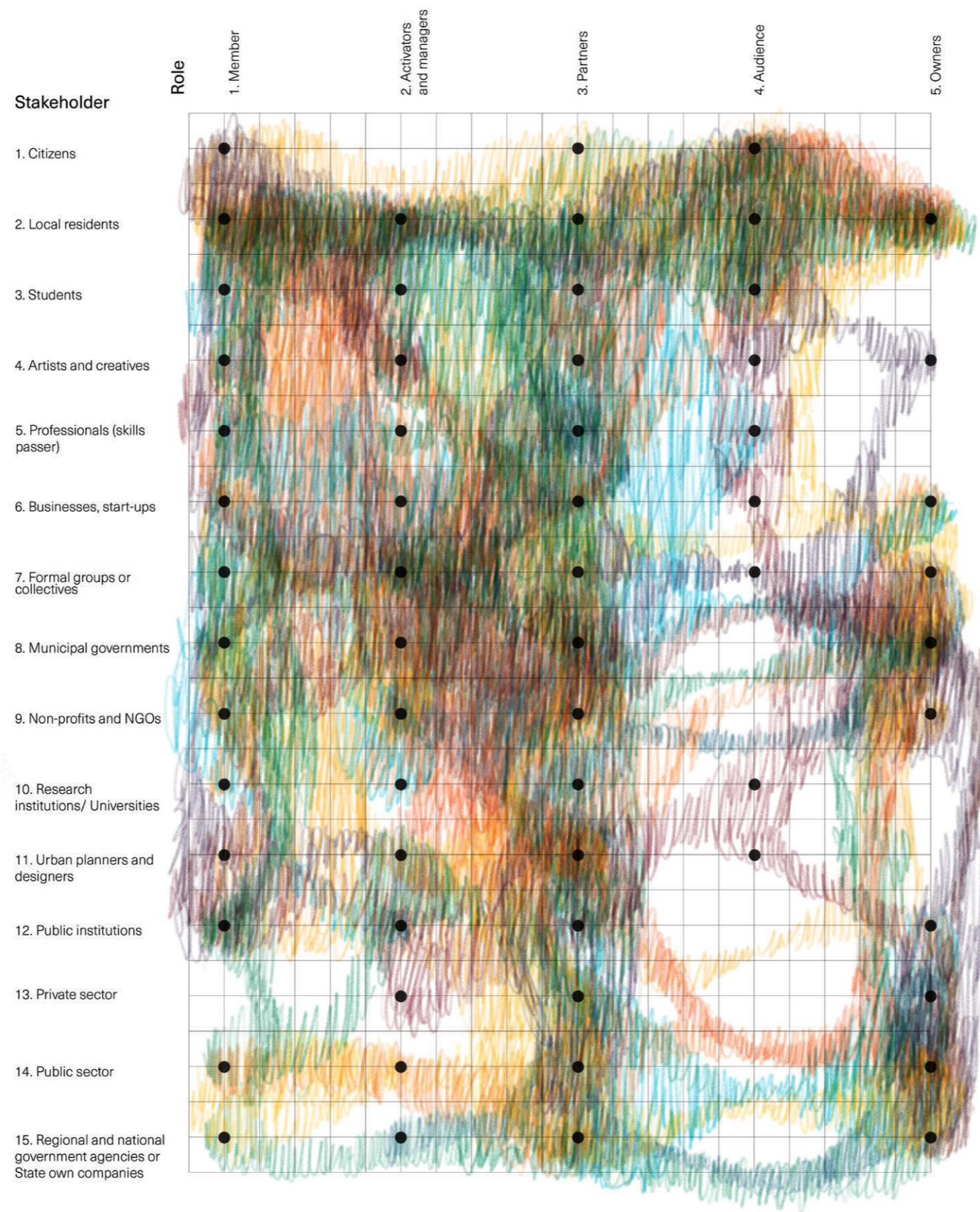
- 1. Culture and arts
- 2. Education and training
- 3. Leisure
- 4. Tourism

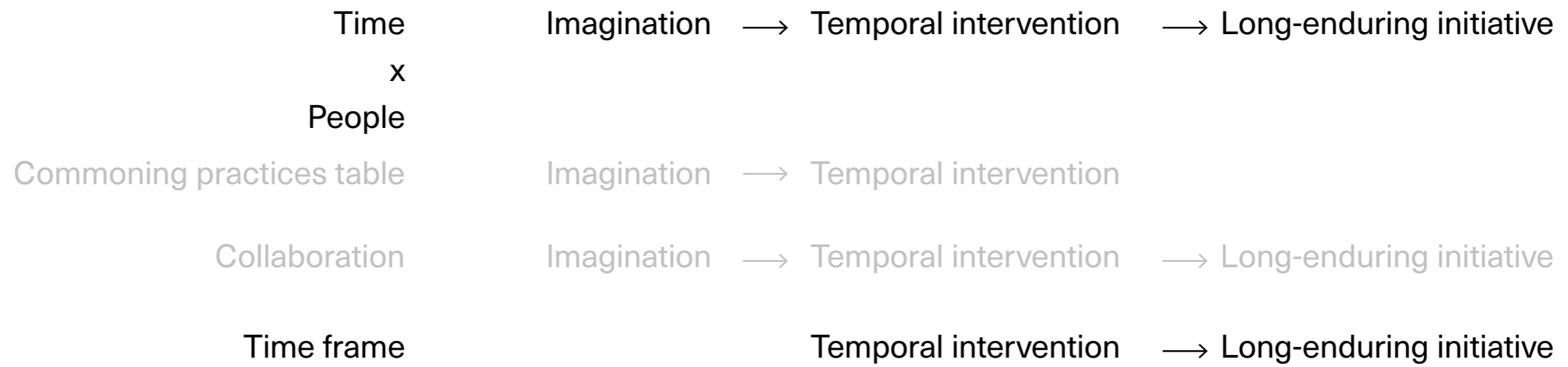


Production and innovation

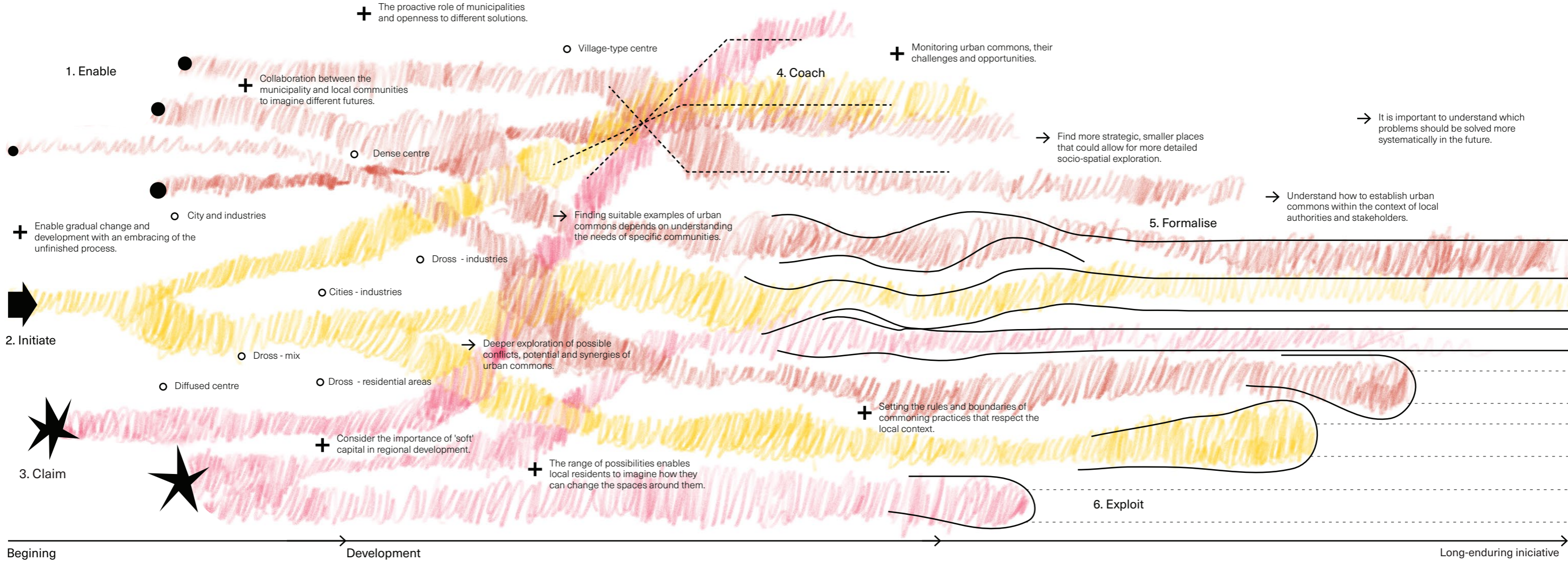
- 1. Crafts and production
- 2. Technology







# Timeline



Based on "Power of temporary use" by Philip Oswalt, graphic from the book was adapted by the author.

# Key learnings - Spatial approach

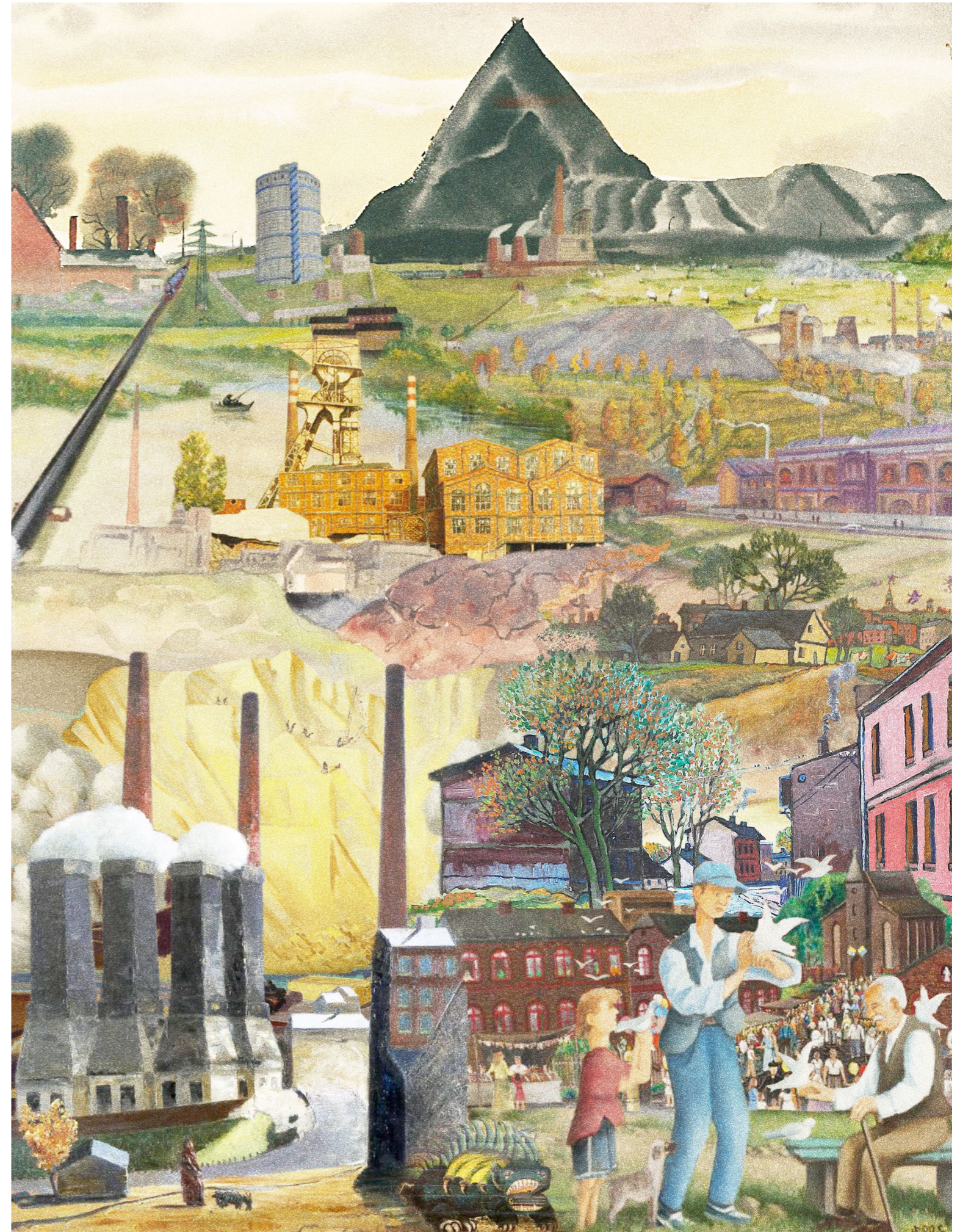
Working with the place  
Partnering with the spaces

Regeneration approach and commoning

**"The act of materially reclaiming a place through actions of "care" based on collaboration and sharing has a wider value: the material action taken upon the common also rebuilds the sense of identity and belonging of a community and allows it to define itself as such"** (Erica Ferigo et al., 2020, p. 17).

Scenarios a way to tackle complexity  
Spatial concepts as tools for imagination

**"The greatest work of imagination is 'its ability to imagine how we might be otherwise'"**(Yusoff & Gabrys, 2011, p. 12).



# Key learnings - Unforeseen

Embrace the unknown and uncertainties

See unfinished as opportunity

*“The incomplete, the dissimilar, the transitory, the temporary become part of the cityscape.*

*They harbor the chance for fields of tension of a more hybrid and multifaceted city” (Oswalt et al., 2013, p.36).*



So, what comes in between?

