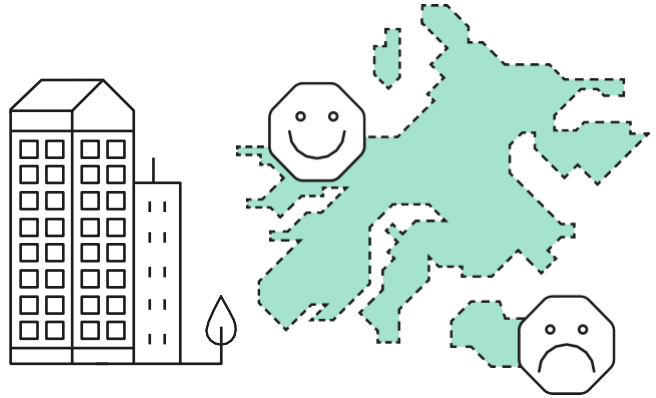
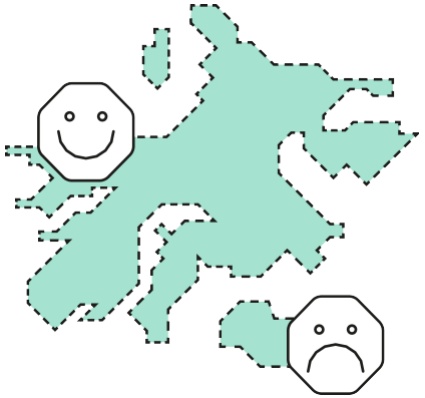


The territorial diagnostic approach

Workshop for the City Lab II Malmö
01-05 September 2025
Charlotte Bernier

The territorial diagnostic - Urban diagnosis approach



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  - **SWOT framework** → strategic challenges & project definition

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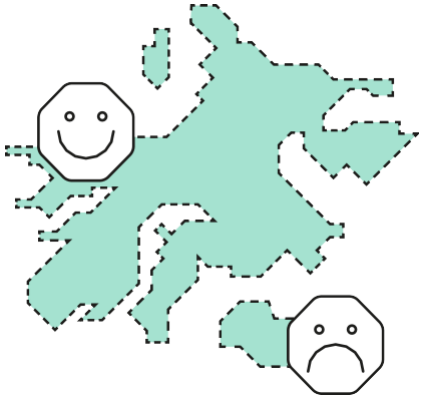

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Setting the framework → Collecting the data → Analysing the data → Synthetise the analysis → Defining an action strategy → Communicate the results

STEP 1. Setting the framework

- **Deciphering the order :** For whom ? Why ? What is expected ?

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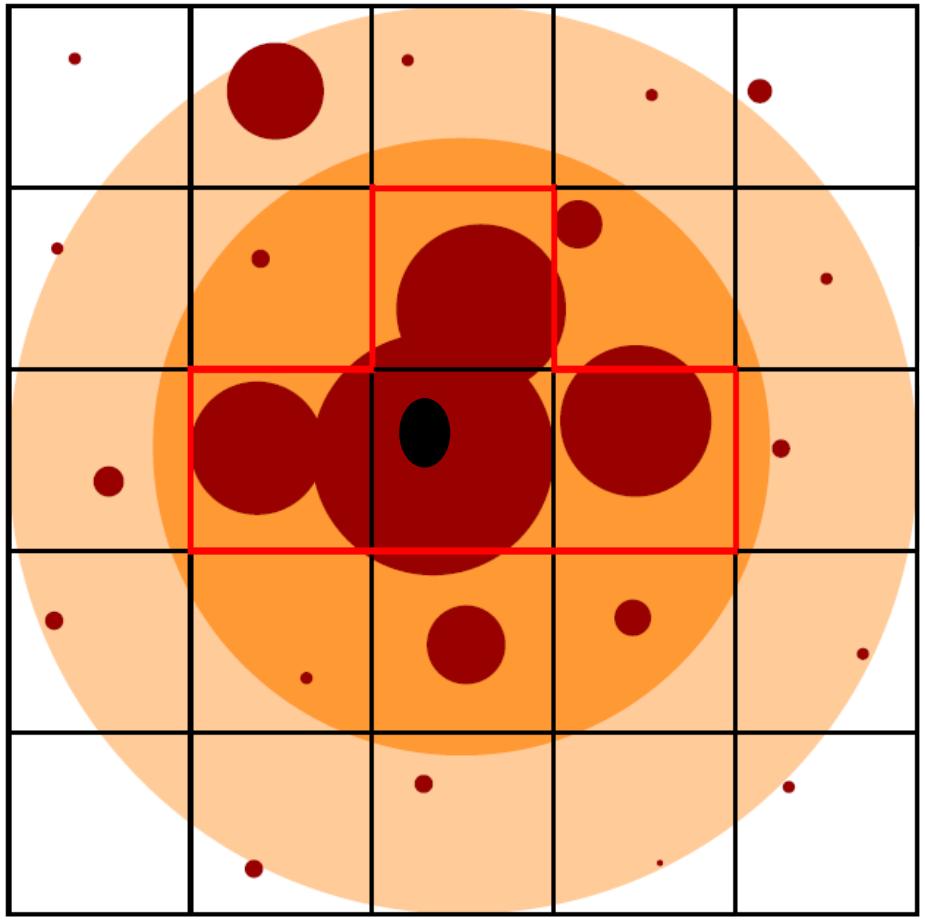
e.g. Study of a city :
Which city are we talking about ?!

+ multiplication of actors



Commuter area

Peri-urban area

Morphological agglomeration

Operational agglomeration

City center

STEP 1. Setting the framework

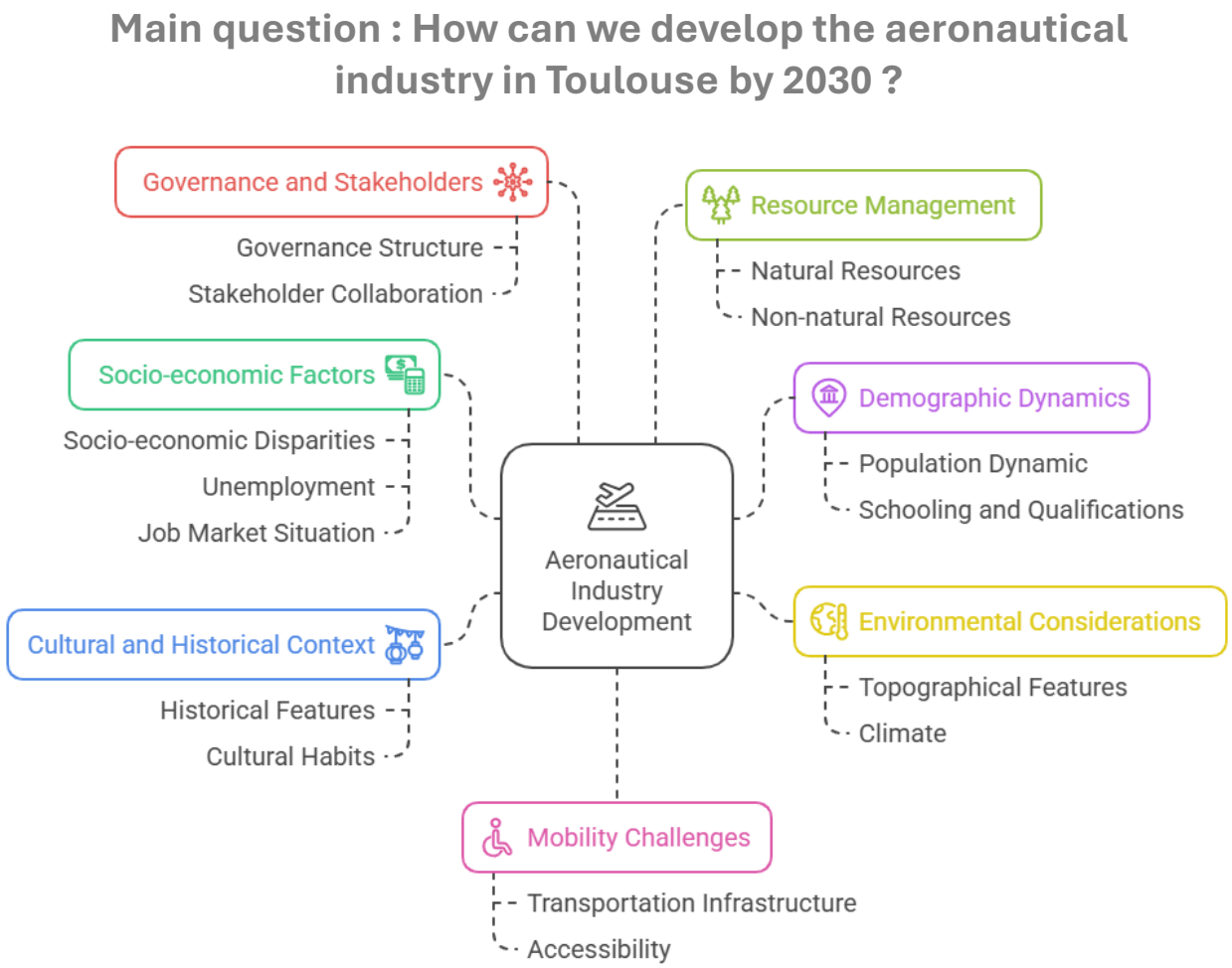
- **Deciphering the order :** For whom ? Why ? What is expected ?
- **Define the scope :**
  - What are the geographical and administrative boundaries of the concerned territory?
  - Who is the target population?
  - **What is the subject/theme/main question ?** It can be very general or very specific *Example: New city by 2050, improving housing affordability in a city or region, health, solidarity between residents, how can we develop the aeronautical industry in Toulouse by 2030 ? etc*.

STEP 1. Setting the framework

- **Define the scope :**
  - **Clearly define the main question !**

➔Break down the main question into themes/sub-questions for a full overview

➔Use e.g. brainstorming with the team & stakeholder meetings to identify them



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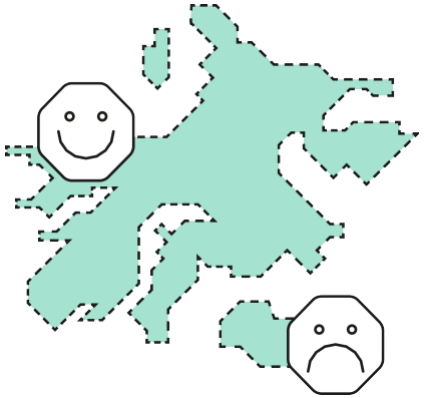
- **Stabilise the working framework**
  - Determining everyone's place and role
  - Allocate material and financial resources
  - Set a timetable with clear milestones

The territorial diagnostic - Urban diagnosis approach



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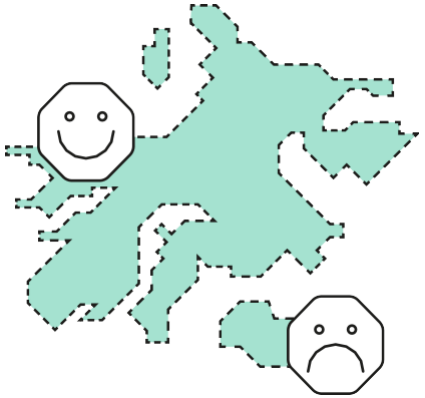

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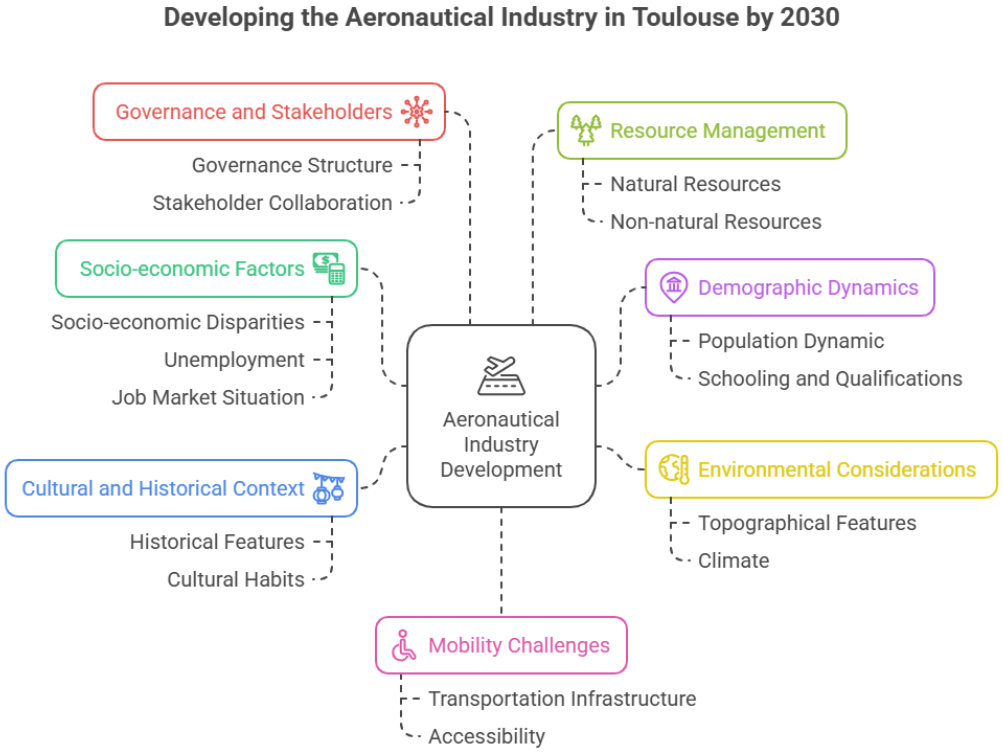
STEP 2. Collecting the data

Once the scope is defined, based on the main question and sub-questions that were determined the step before : collect the data needed !



STEP 2. Collecting the data

Two type of data

- Quantitative: figures to measure *who, what, where, when*
- Qualitative: observations & testimonies to explain *how & why*

Challenge

Combine both → enrich analysis & compare perceptions with realities

STEP 2. Collecting the data

Data can be :

- **Already available/analysed**: official statistics, institutional reports, press… → identify, collect & check reliability

STEP 2. Collecting the data

Data can be :

- **Already available/analysed**: official statistics, institutional reports, press… → identify, collect & check reliability
- **To be researched/constructed**: interviews, surveys, fieldwork → tools & methods must be prepared in advance

STEP 2. Collecting the data

How to collect data on the field ?

- **With people**:
  - Interviews (portrait, testimony, street survey, structured, semi-structured, unstructured…)
  - Citizen participation workshops
  - Informal talks in the streets
  - Serious games…
- **By observation:** transects, free walks, schematization, identifying key features…

STEP 2. Collecting the data

How to transect : a structured walk

Objectives of a Transect

- **Observe & analyse spatial diversity**
- **Describe spatial organization** (built/unbuilt, functions, populations, continuities & breaks)
- **Identify correlations** → explanatory factors & models
- **Produce standardized observations** for comparability

It's a sensitive, on-the-ground reading of urban space but it also allows to collect comparable data, "standardize" observations along a specific line or route for better comparison

STEP 2. Collecting the data

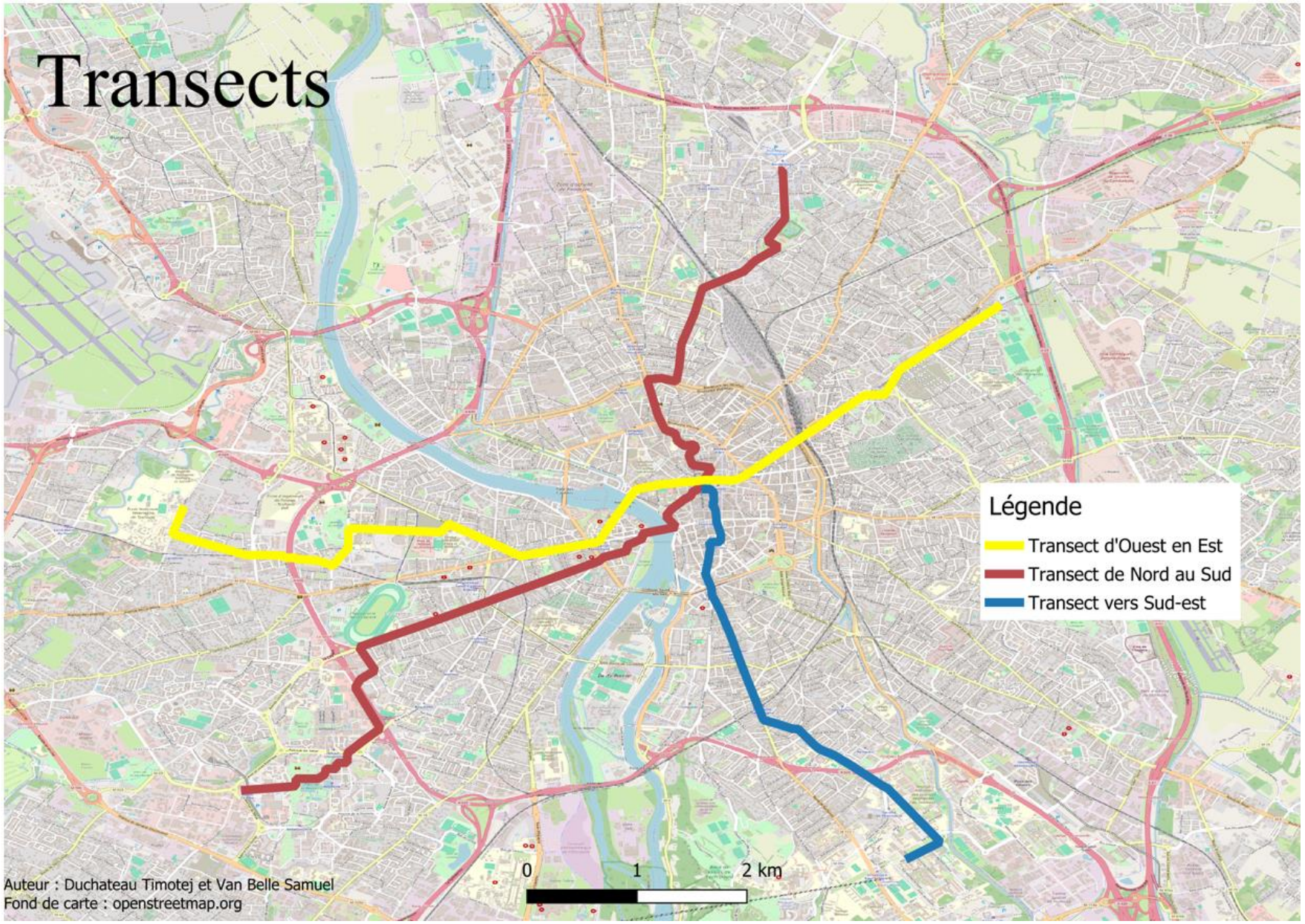
How to transect : a structured walk

Method & Guidelines

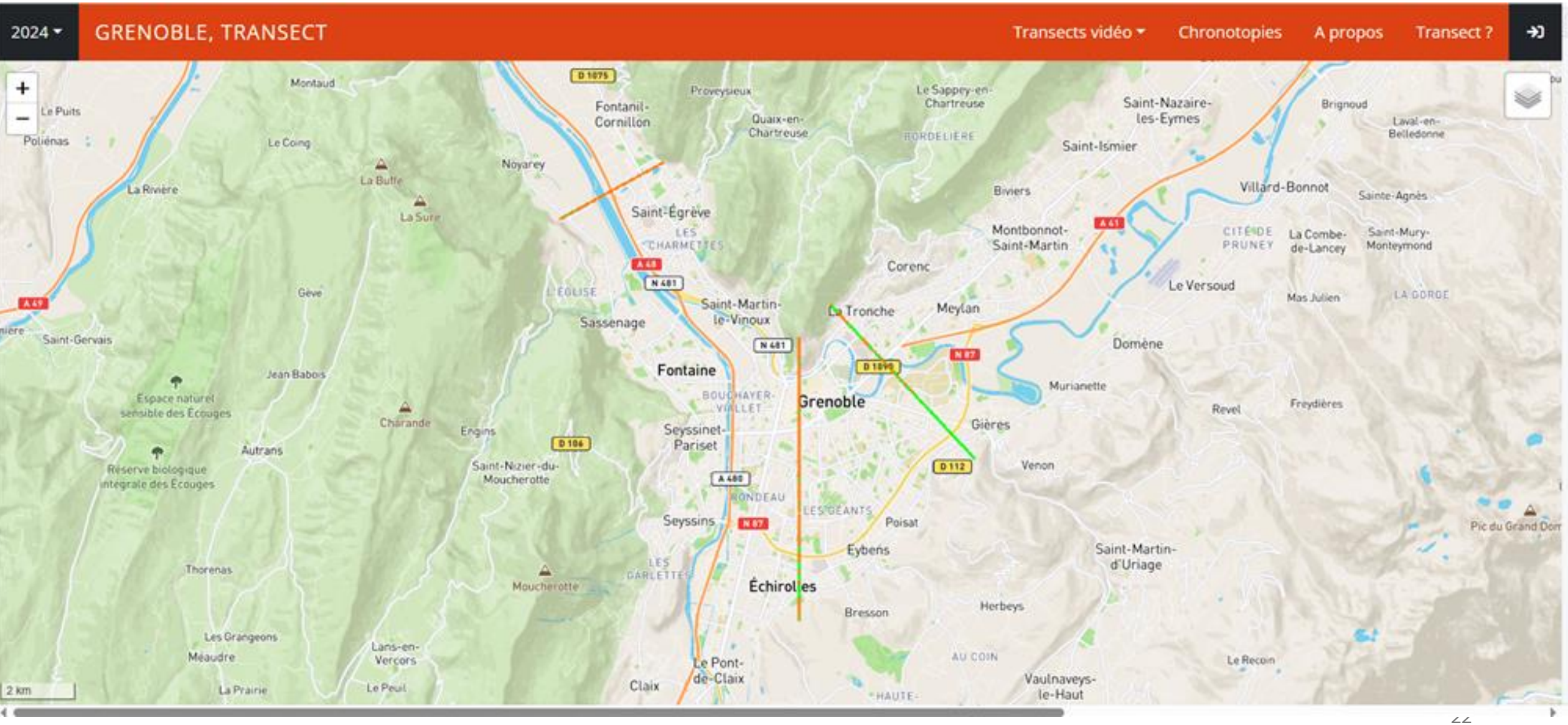
- Move along a defined **route (A → B)**

→ Adapt to city context (center–outskirts, port, valley, etc.)

Toulouse : departure from City Center



Grenoble : cross section through the valley



STEP 2. Collecting the data

How to transect : a structured walk

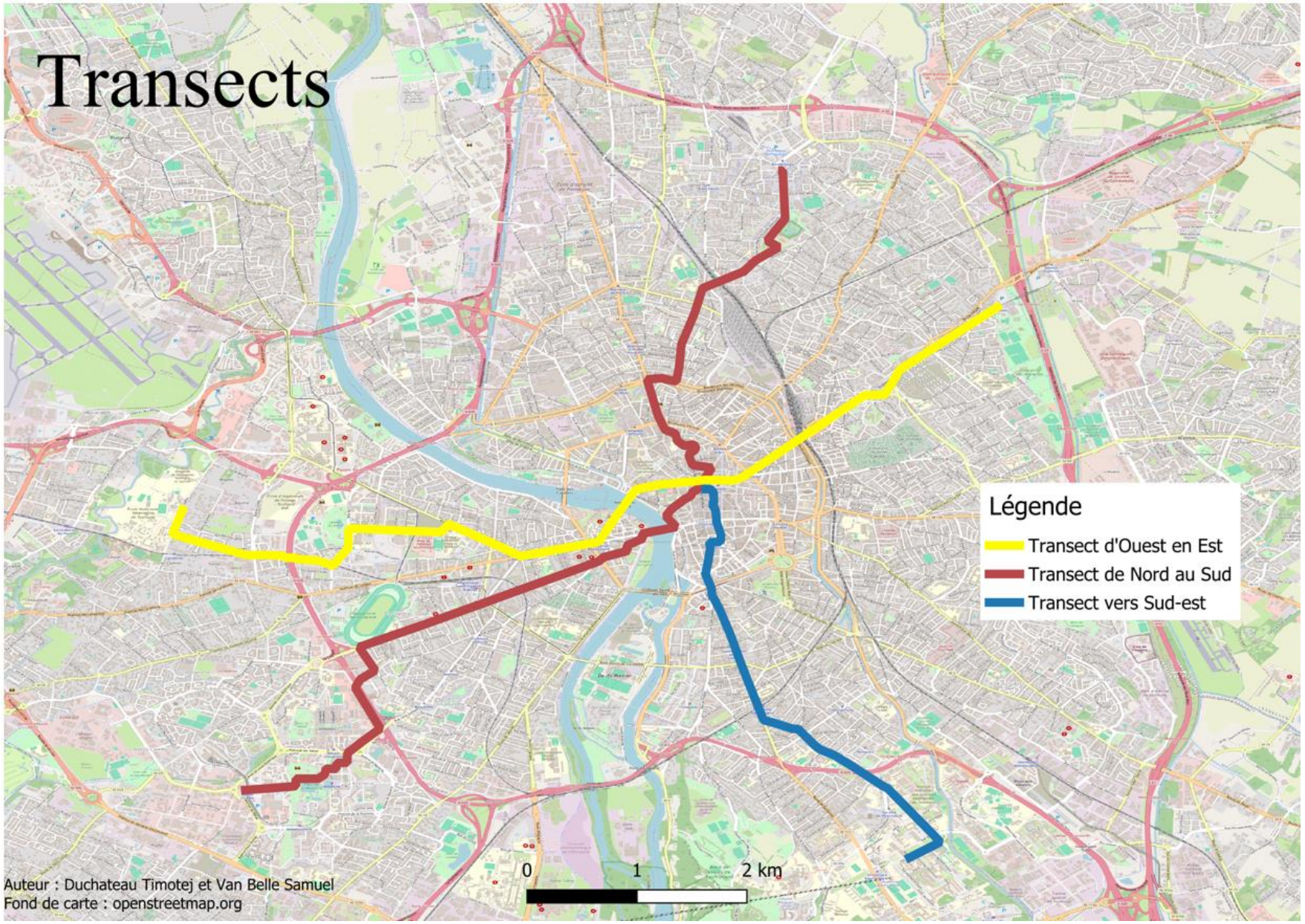
Method & Guidelines

- Move along a defined **route (A → B)**

→ Adapt to city context (center–outskirts, port, valley, etc.)

- **Systematic sampling** at regular intervals (distance/time)
- Collect predefined **indicators** at each stop:
  - Building form (style, height, materials, age)
  - Building function (housing, business, school, etc.)
  - Socioeconomic profile of residents
  - Continuities, breaks or gradients (e.g. land use, density, human activities).
- Create a **typology** (classification of homogeneous groups)
- Support with **sketches, photos, maps, interviews, videos**
- Allow deviations from route to refine observations
- Possibility of **participatory approach** → involve local stakeholders

Toulouse : departure from City Center



D'ouest en est

Ouest

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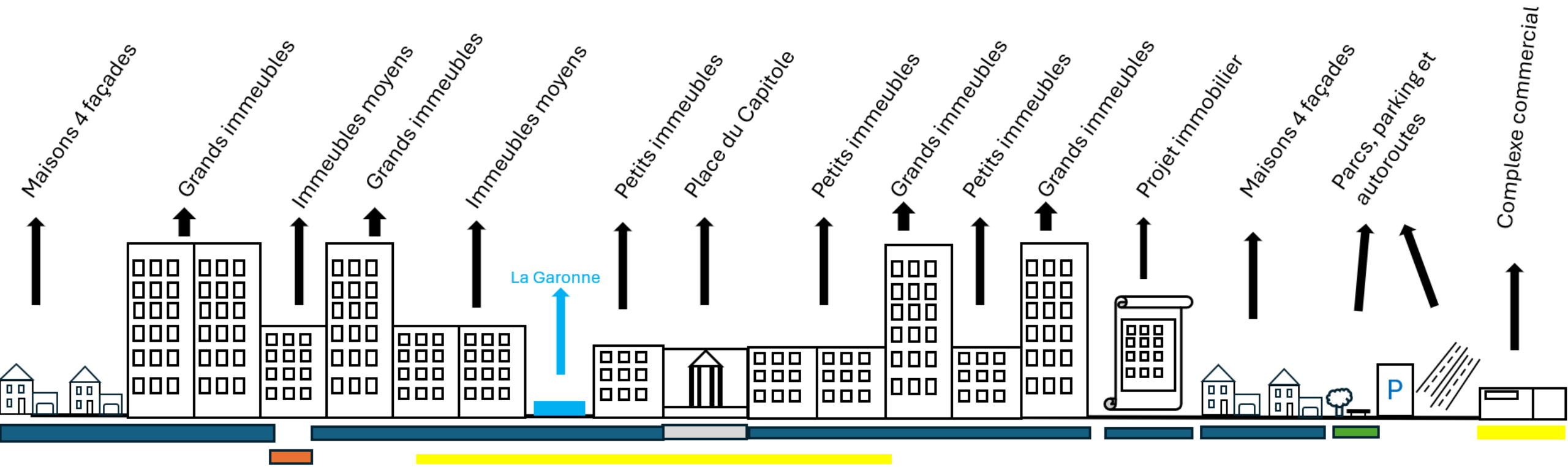

Légende : Fonction résidentielle
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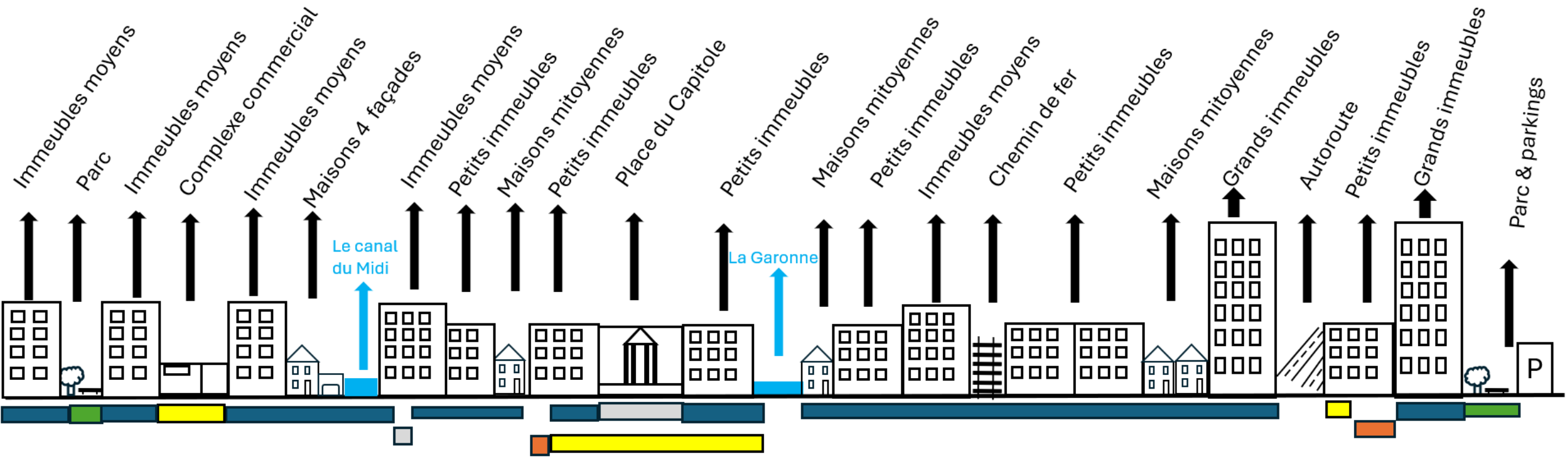

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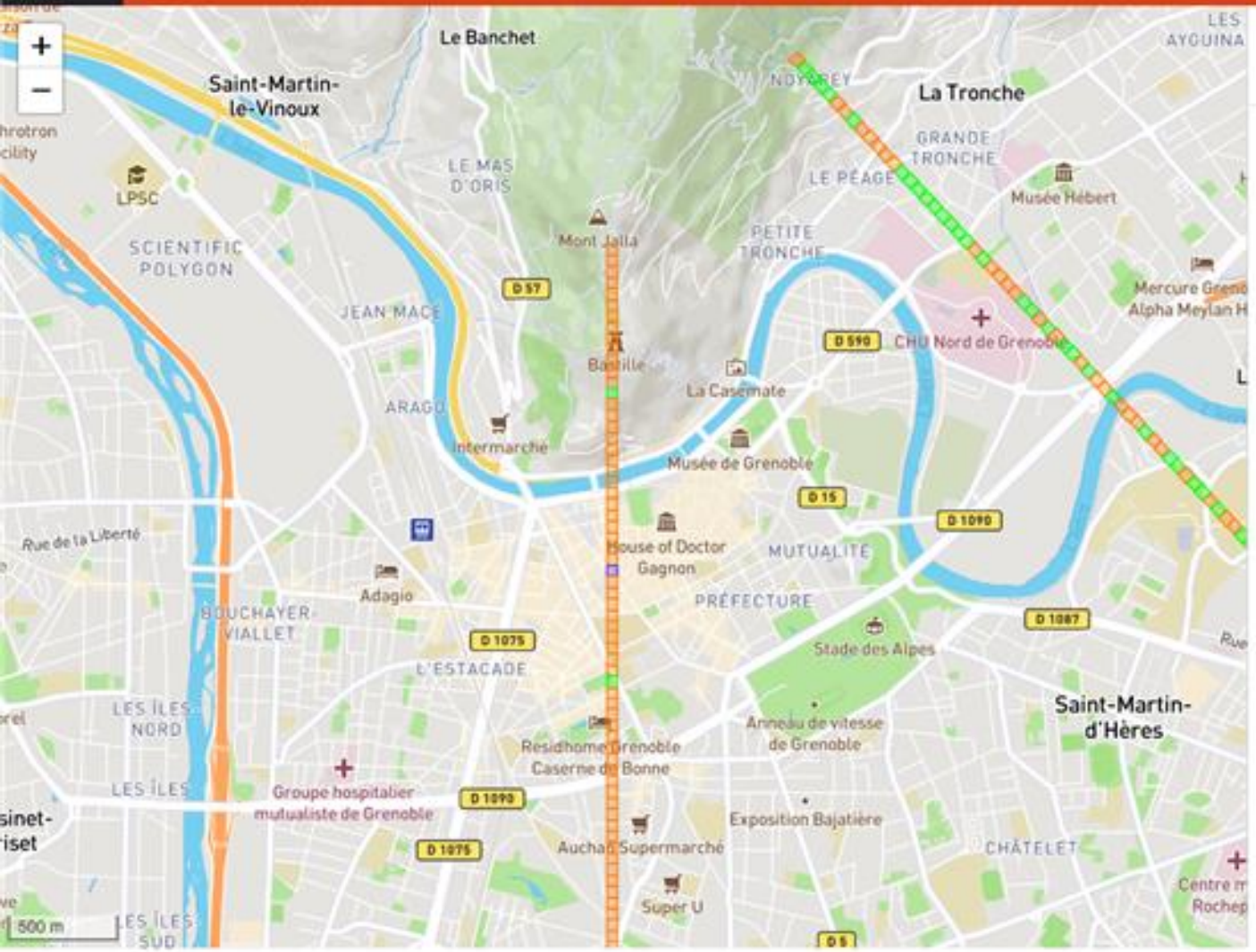


Square 30

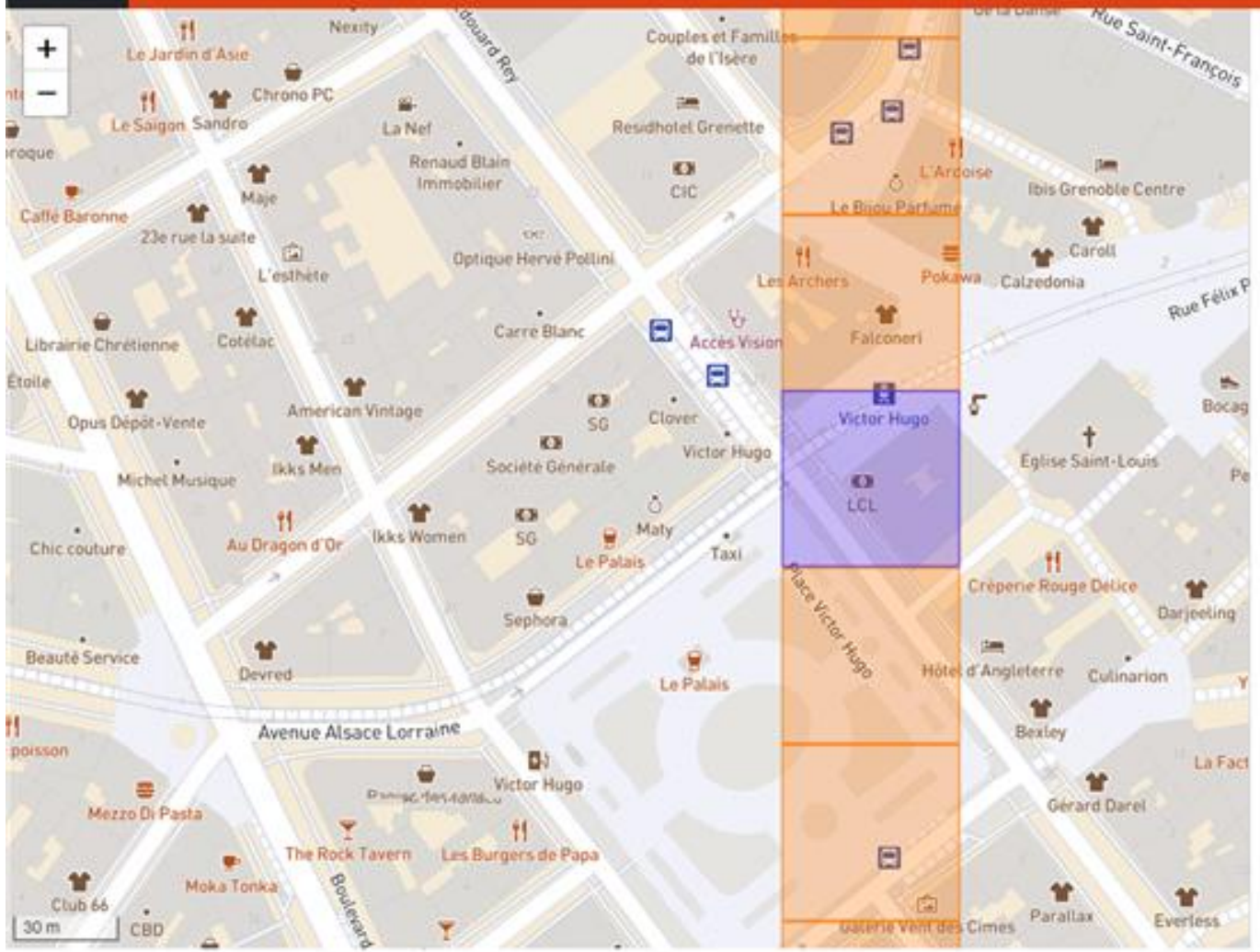
Study square reserved by Clara Berny

At the crossroads

Place name: **Place Victor Hugo**

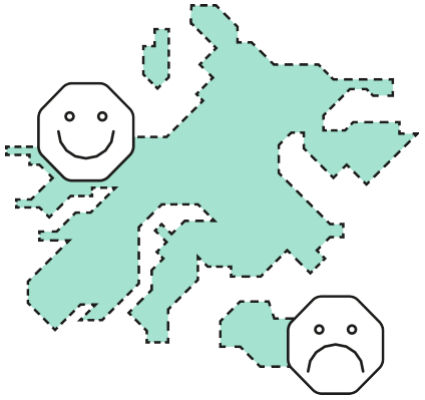
On a Friday at 11 a.m., like on a Tuesday at 4 p.m., the square is always bustling with residents crossing it. People walk quickly, or slowly, almost non-stop. Everyone is focused on what they have to do: turn left, right, avoid the person walking in front of them. You can hear the screeching of the tram on its tracks and its bell, which repeats endlessly as it approaches the stop. This sound, among many others, takes over for a few moments before blending together and drowning out the hubbub of the city. Everyone is free to listen, hear, or perceive whatever they want: the wheels of a trolley on the asphalt, conversations coming from every street corner, the distant roar of cars... So many noises and sounds that form an atmosphere that everyone perceives in their own way. It can be oppressive or, for others, banal. But it persists, changing with the schedule and the passing of time, only to begin again the next day, like an infinite loop.The graying sky weighs down on the Haussmann-style buildings that

2024 GRENOBLE, TRANSECT Transects vidéo Chronotopies A propos Transect ?



Attention à ne pas rater l'arrêt !

The territorial diagnostic - Urban diagnosis approach



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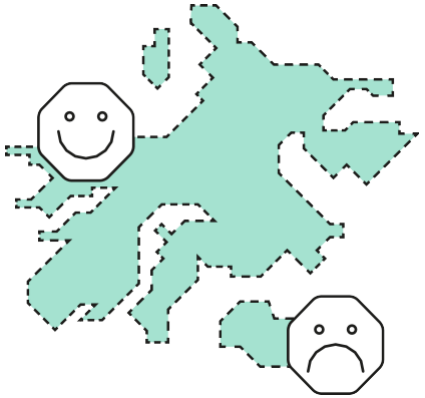

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STEP 3.1. Analysing the data

Objective: Understand the territory & its challenges
→ identify strategic elements for adapted projects/actions

STEP 3.1. Analysing the data

- Map – organizational chart of **governance structure** & **jurisdictions** (strengths/weaknesses of this organisation)

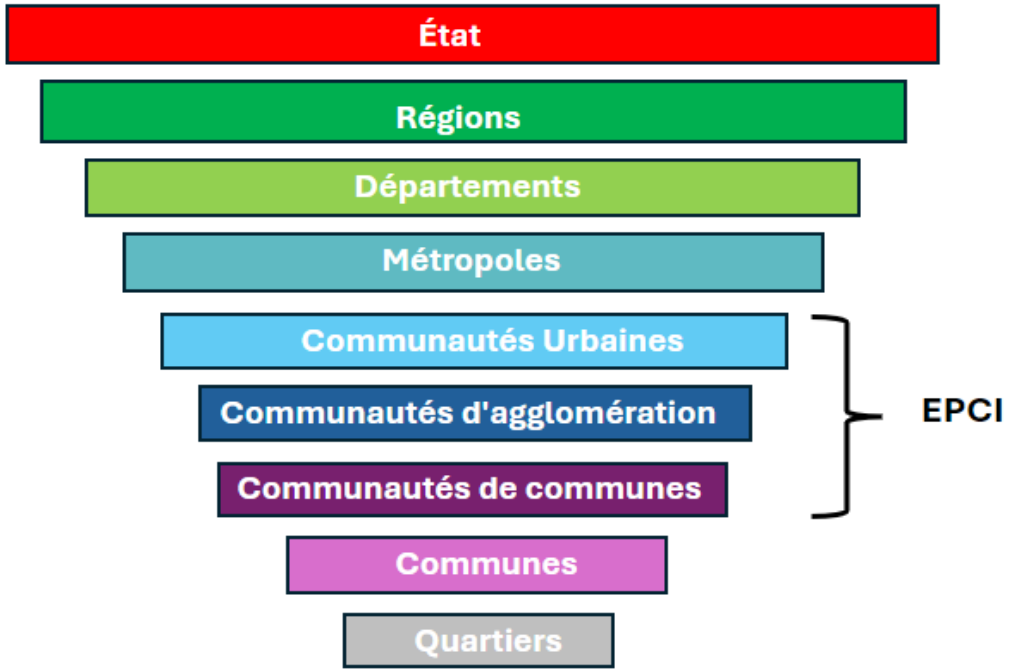
Here is an example of the multi-layered governance structure in France

- Multiple governance levels share jurisdictions :
  Land use, culture, tourism, sports, digital, infrastructure, mobility…

- Each has its **own administrative & financial system**

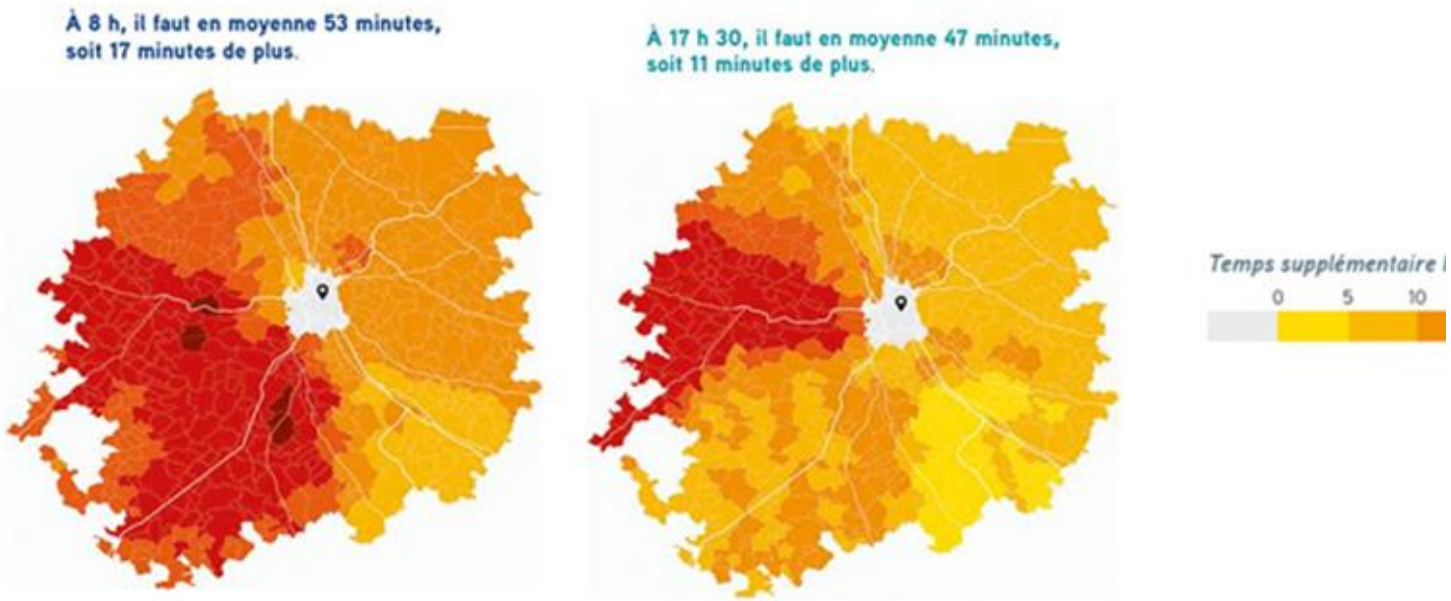
<u>Key questions:</u>

Who initiates projects?
Who finances them?
Who manages them after completion?
…



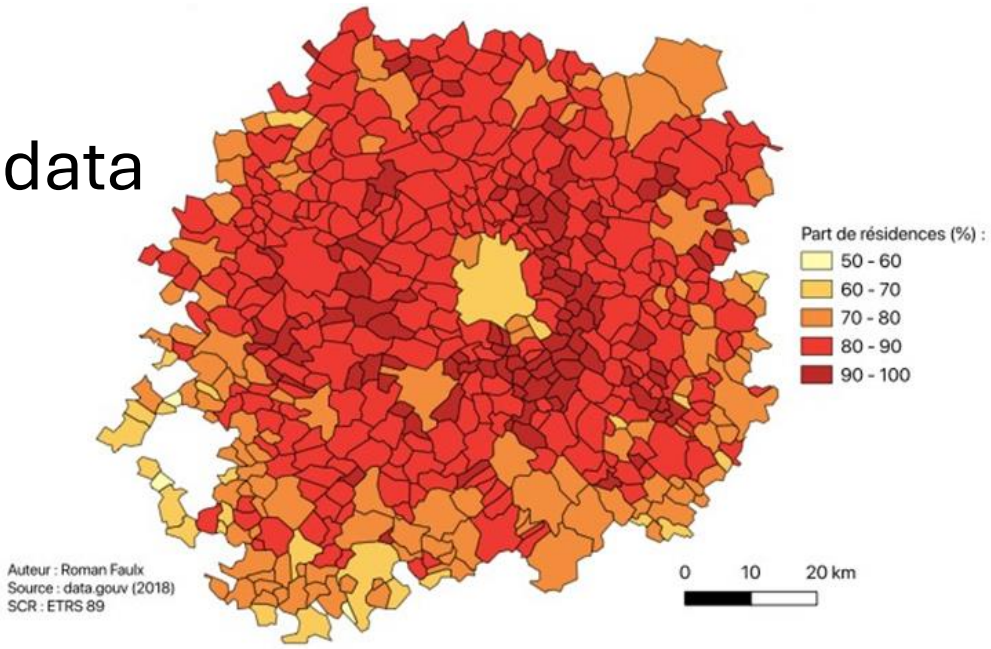
STEP 3.1. Analysing the data

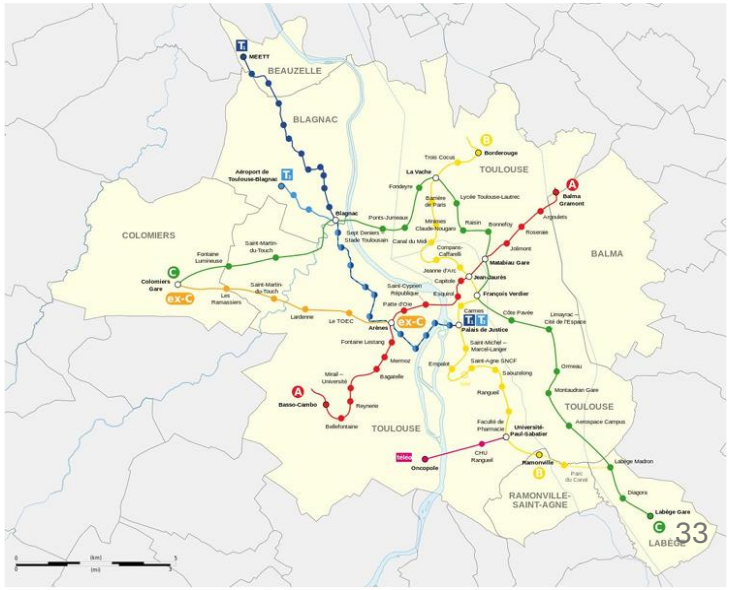
- Produce/use **maps & charts** from statistical data



Road congestion varies by direction & increases every year

Share of households with a car in Toulouse (2018)





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A few methods:

- Map – organizational chart of **governance structure** & **jurisdictions** (strengths/weaknesses of this organization)
- Produce **maps & charts** from statistical data
- **Confront findings** with field observations & stakeholder discussions
- …

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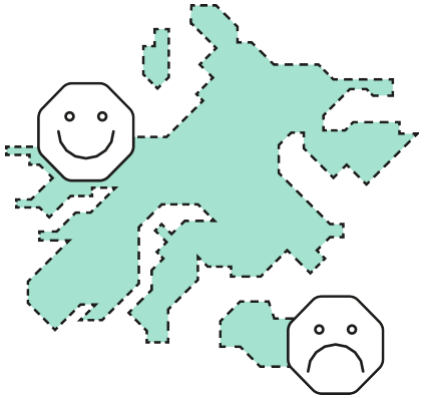

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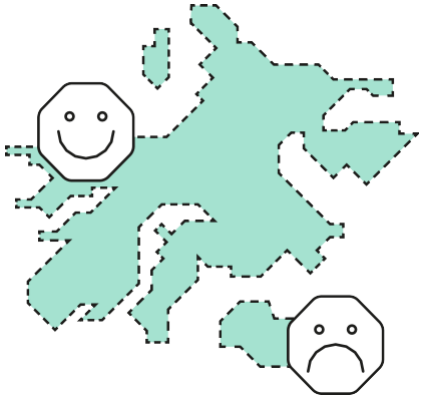

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STEP 3.2. Synthetise the analysis

- **Schematize territorial organization** (from transects, walks, maps)

2 examples

- Schematize the result of the transects
- Schematize the spatial organization with “chorematic principles”

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Ouest

Est

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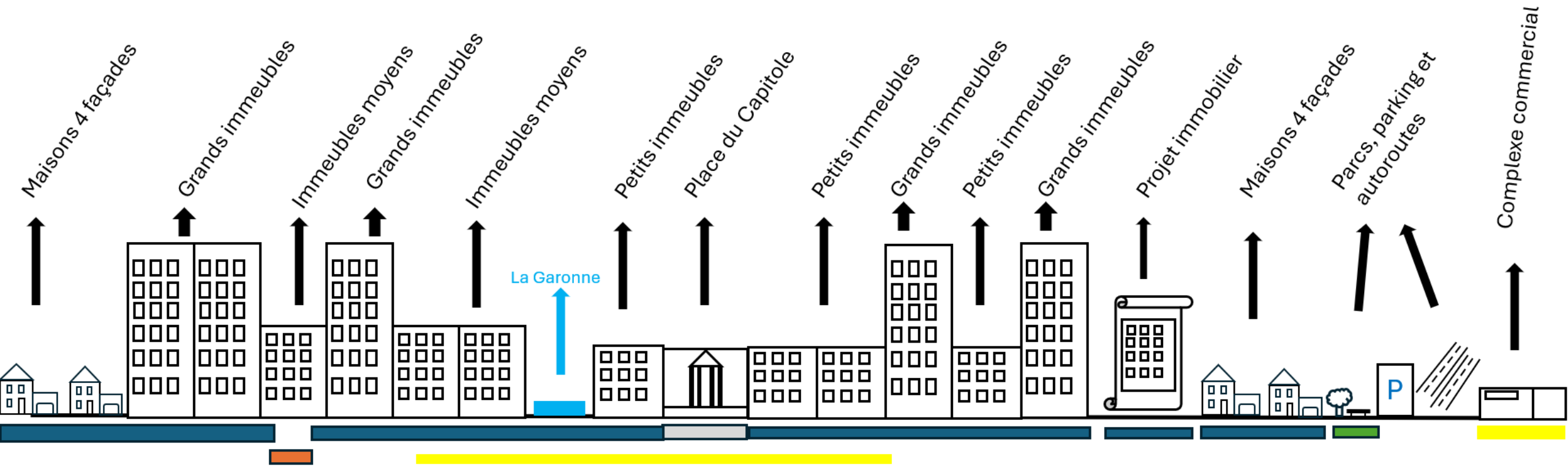

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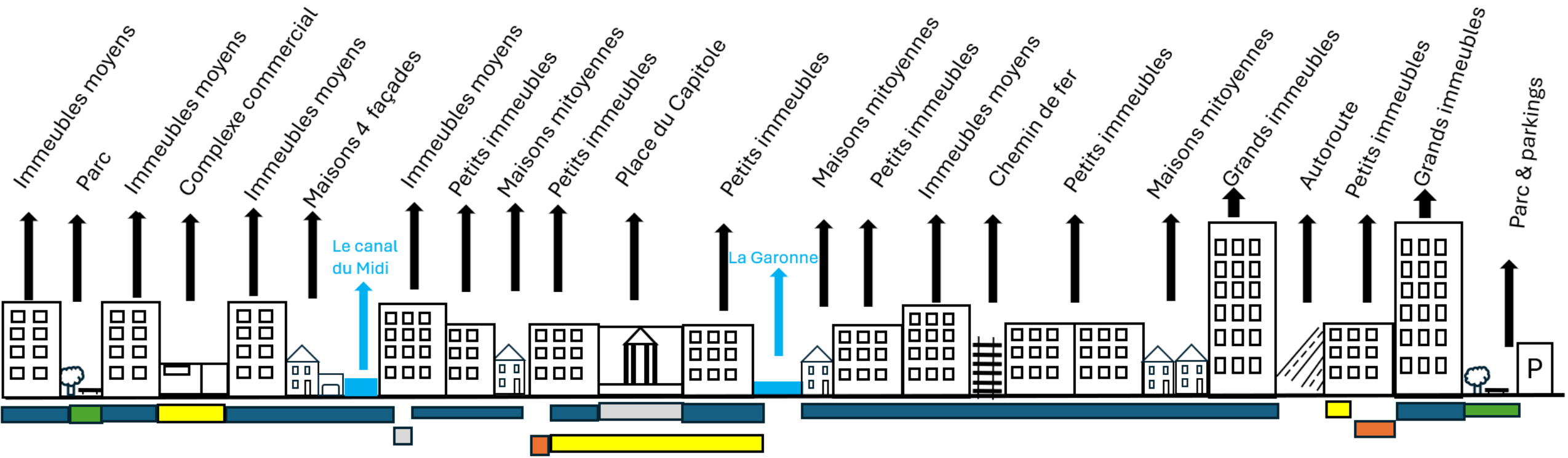

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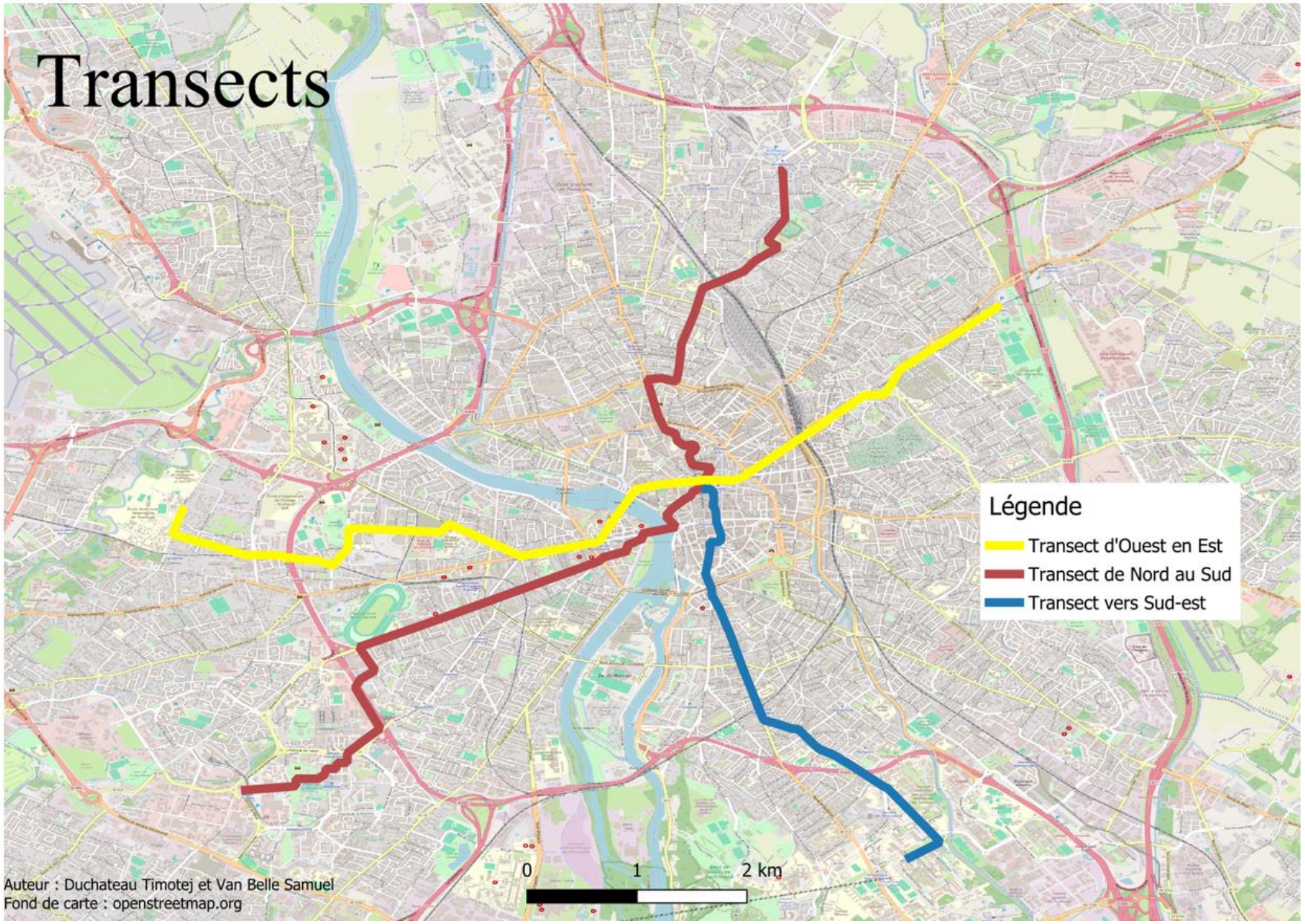
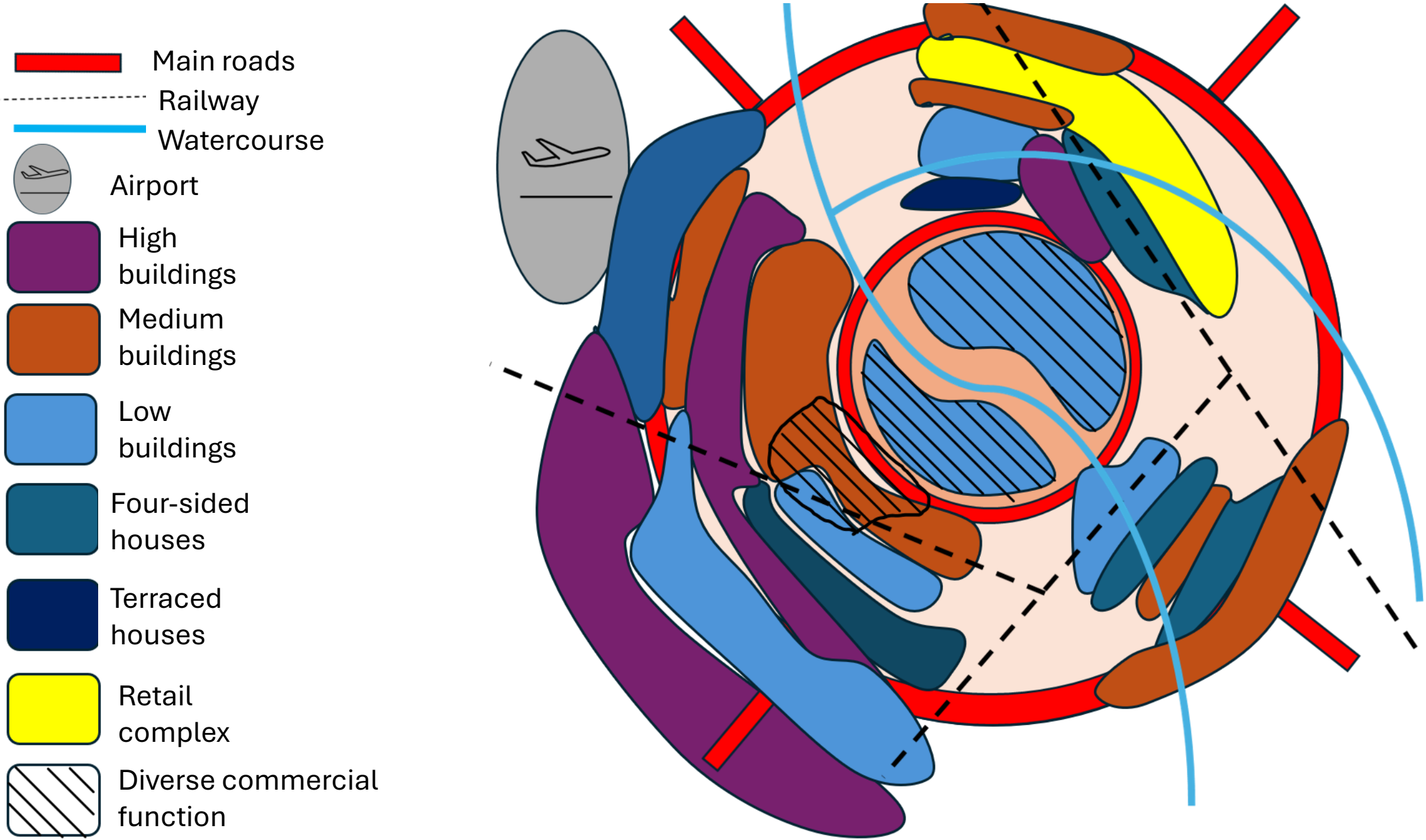


Diagram of the urban morphology of the municipality of Toulouse based on transects



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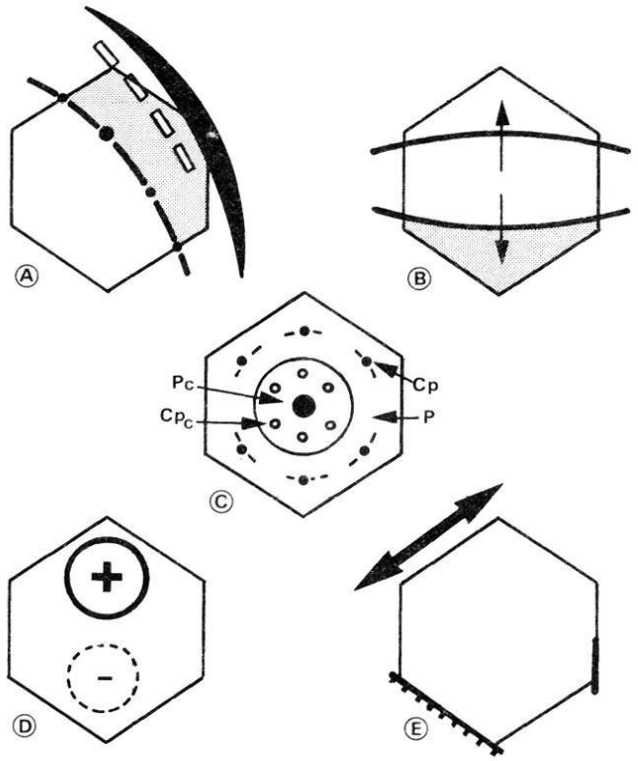
2 examples

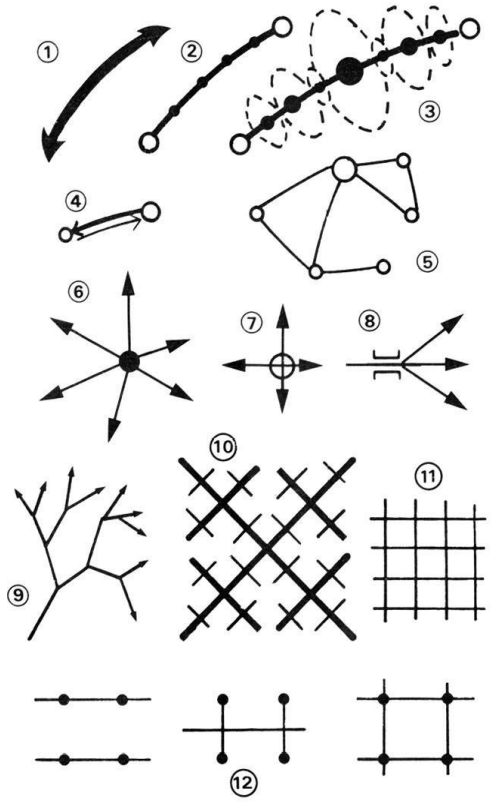
- Schematize the result of the transects
- **Schematize the spatial organization with “choromatic principles”**

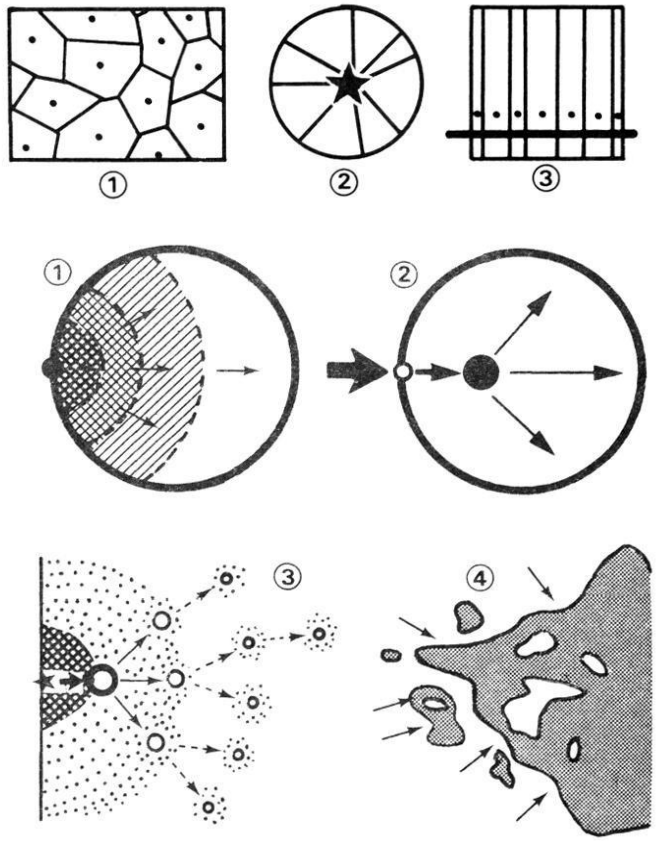
STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

- Uses simple **geometric figures (chorèmes)** to represent structural elements and territorial dynamics







STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

- Concept developped by **Roger Brunet (1980s)**
- **Powerful tool** to conceptualize space, reveal dynamics, and communicate
- Not just a simplification, but an **interpretation** of the territory
- Identifies **essential structures & key analytical elements** such as poles, flows, boundaries, networks…
- Helps **understand territorial dynamics** such as hierarchies, polarizations, empty spaces… and **share** them clearly !
- Uses simple **geometric figures (chorèmes)** to represent structural elements and territorial dynamics

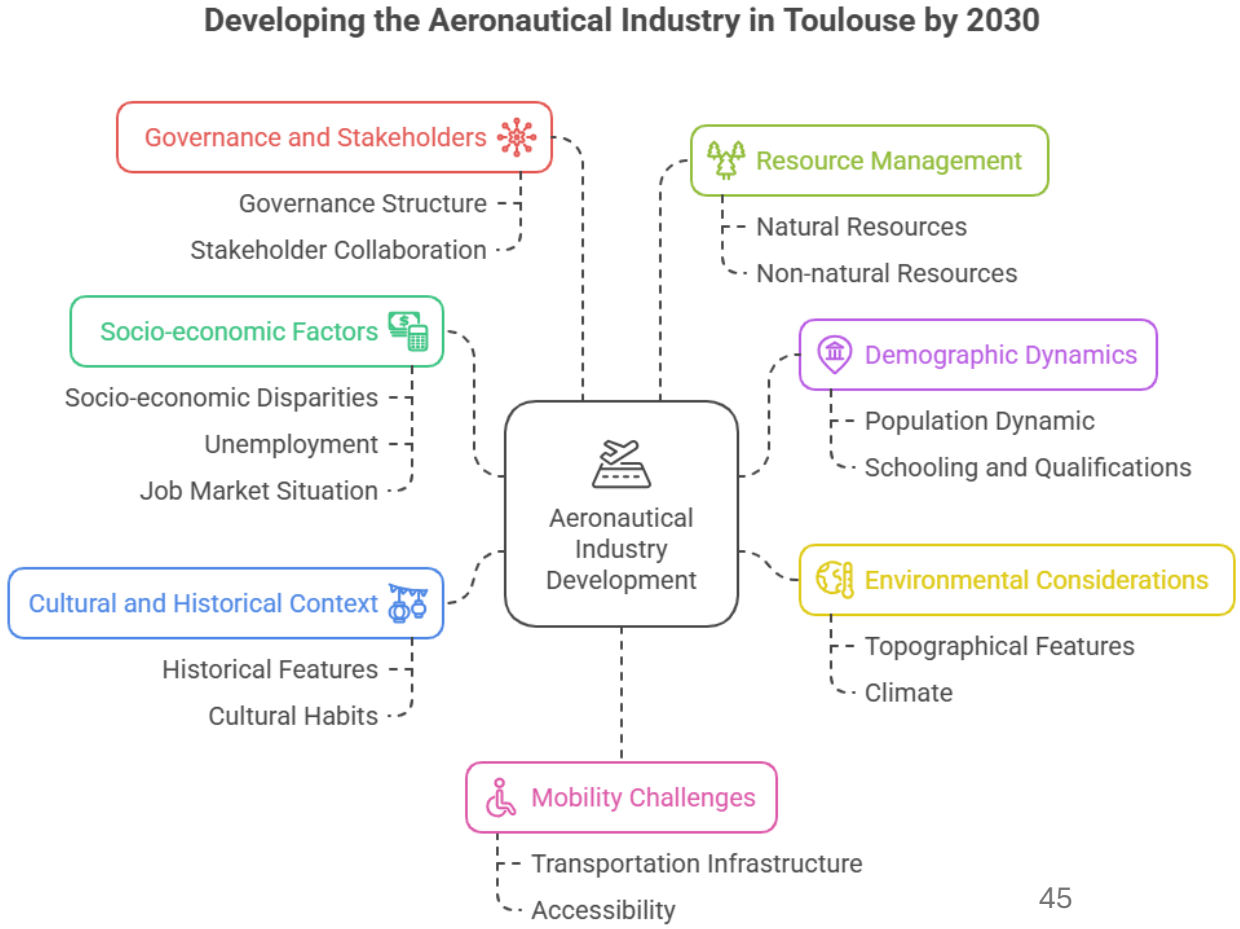
STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

One sub-thematic

=

one choromatic diagram



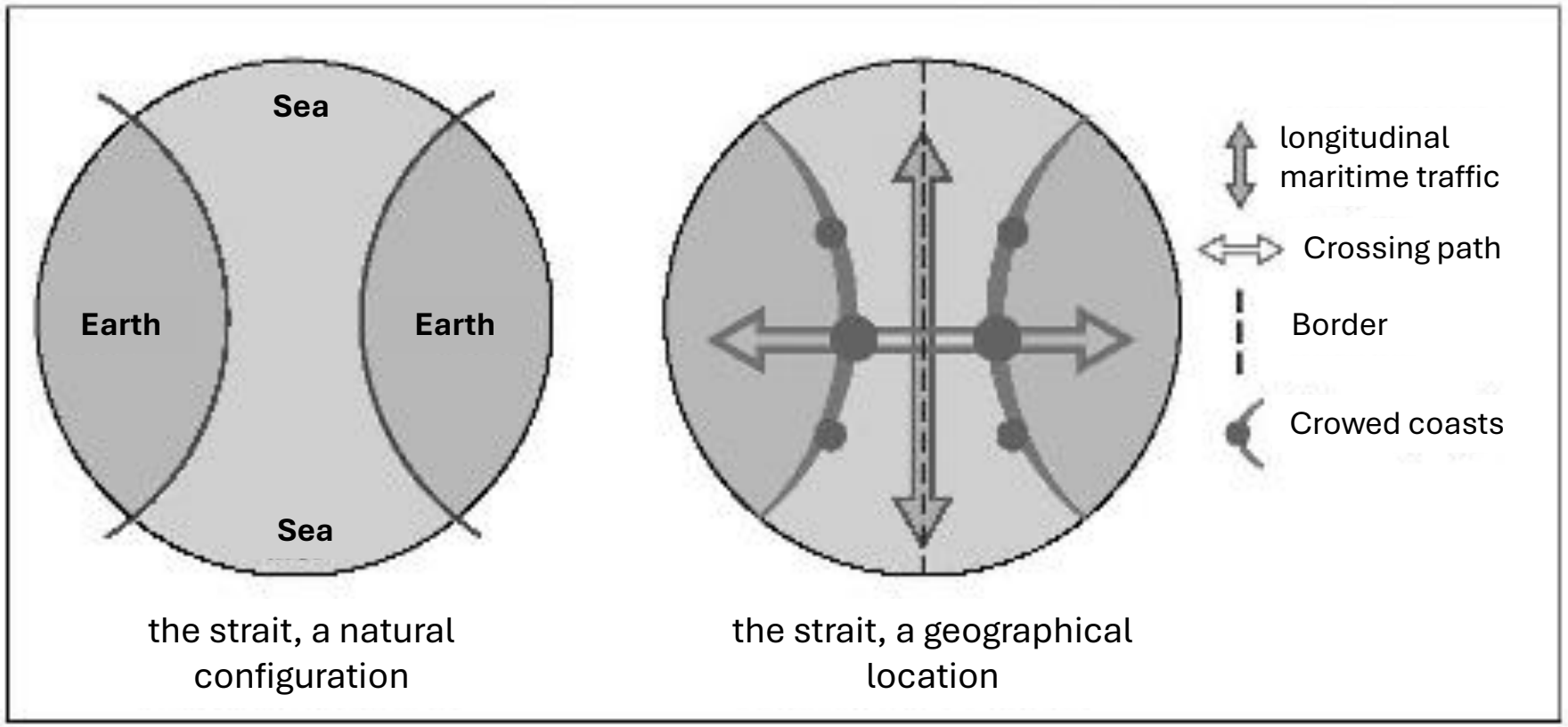
STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

Chorèmes ≠ Maps

A **map** shows the state & dynamics of a territory

A **chorematic diagram** goes further: it **explains how the territory works**



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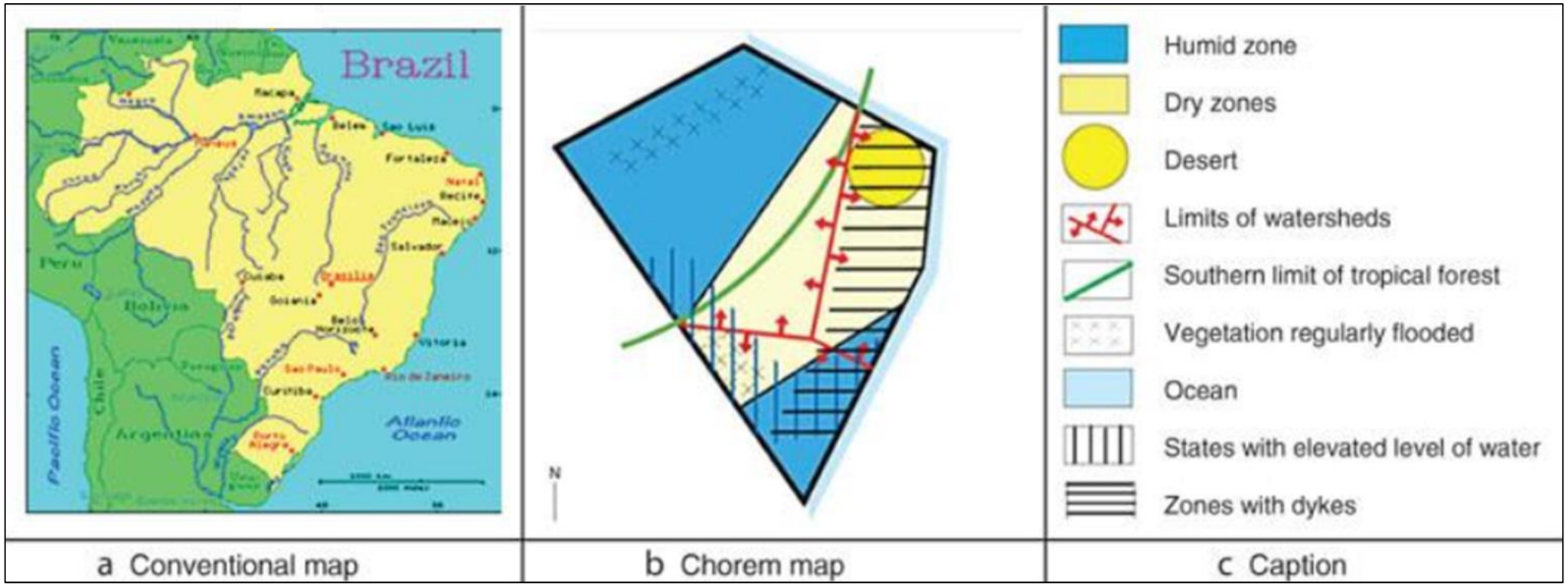

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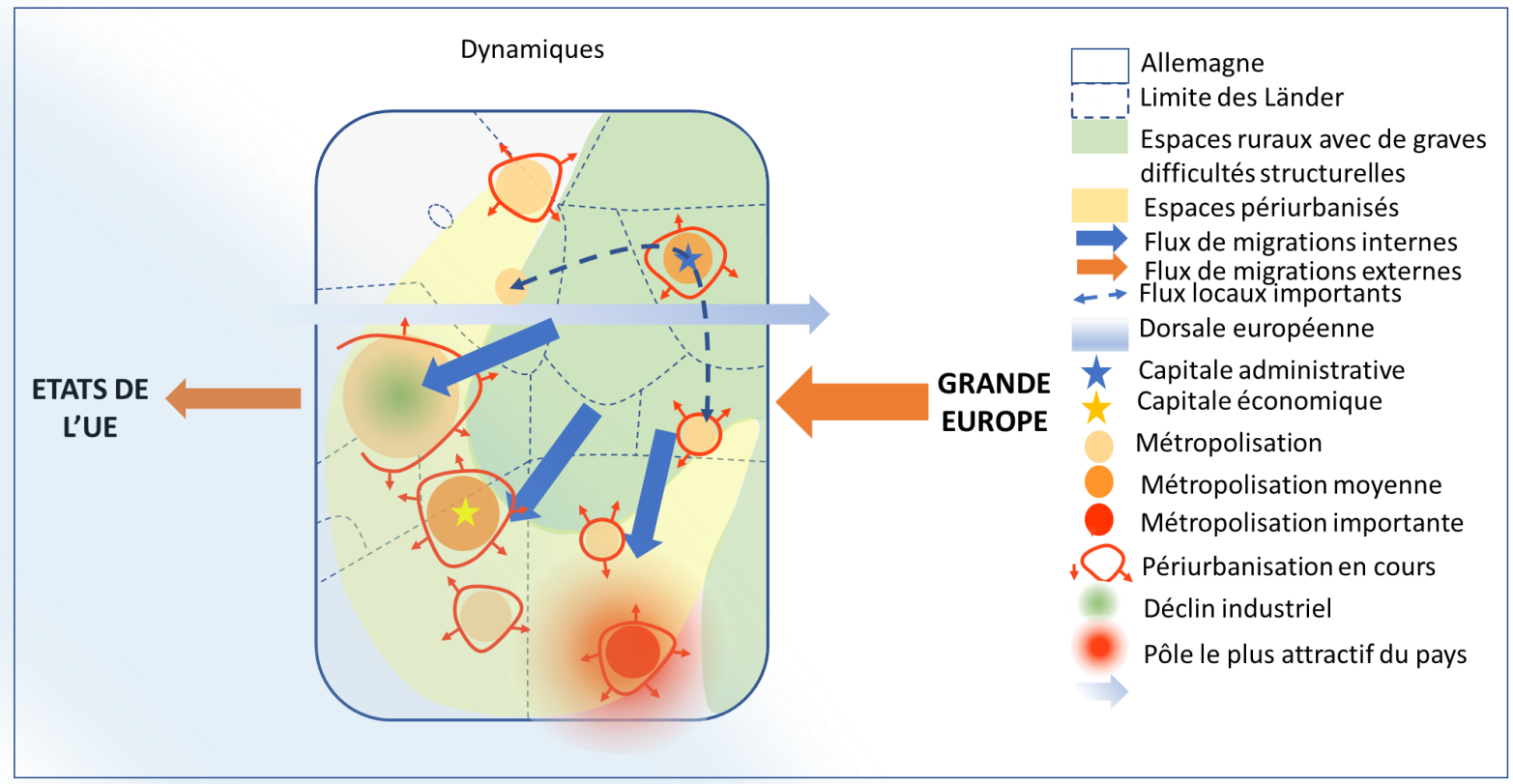
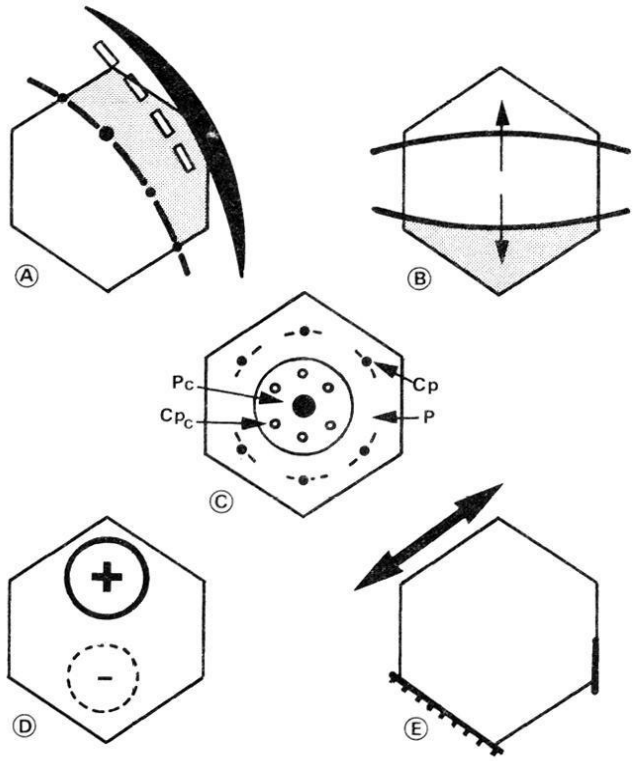
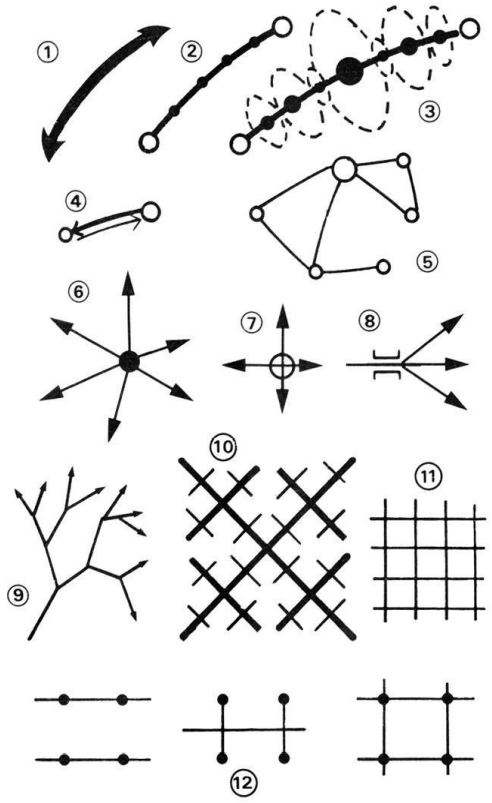


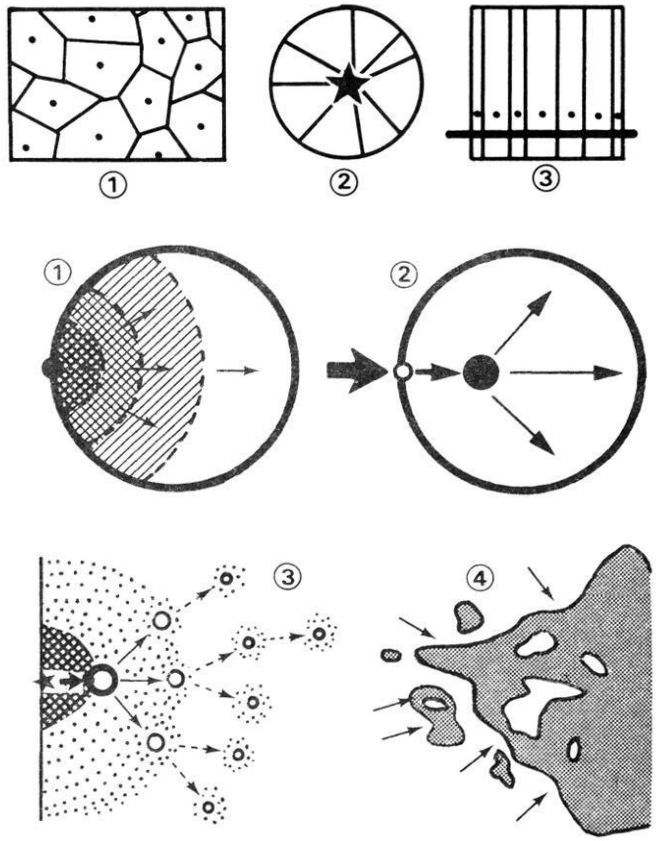
STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

- Uses simple **geometric figures (chorèmes)** to represent structural elements and territorial dynamics







STEP 3.2. Synthetise the analysis

The Chorematic approach - Schematization

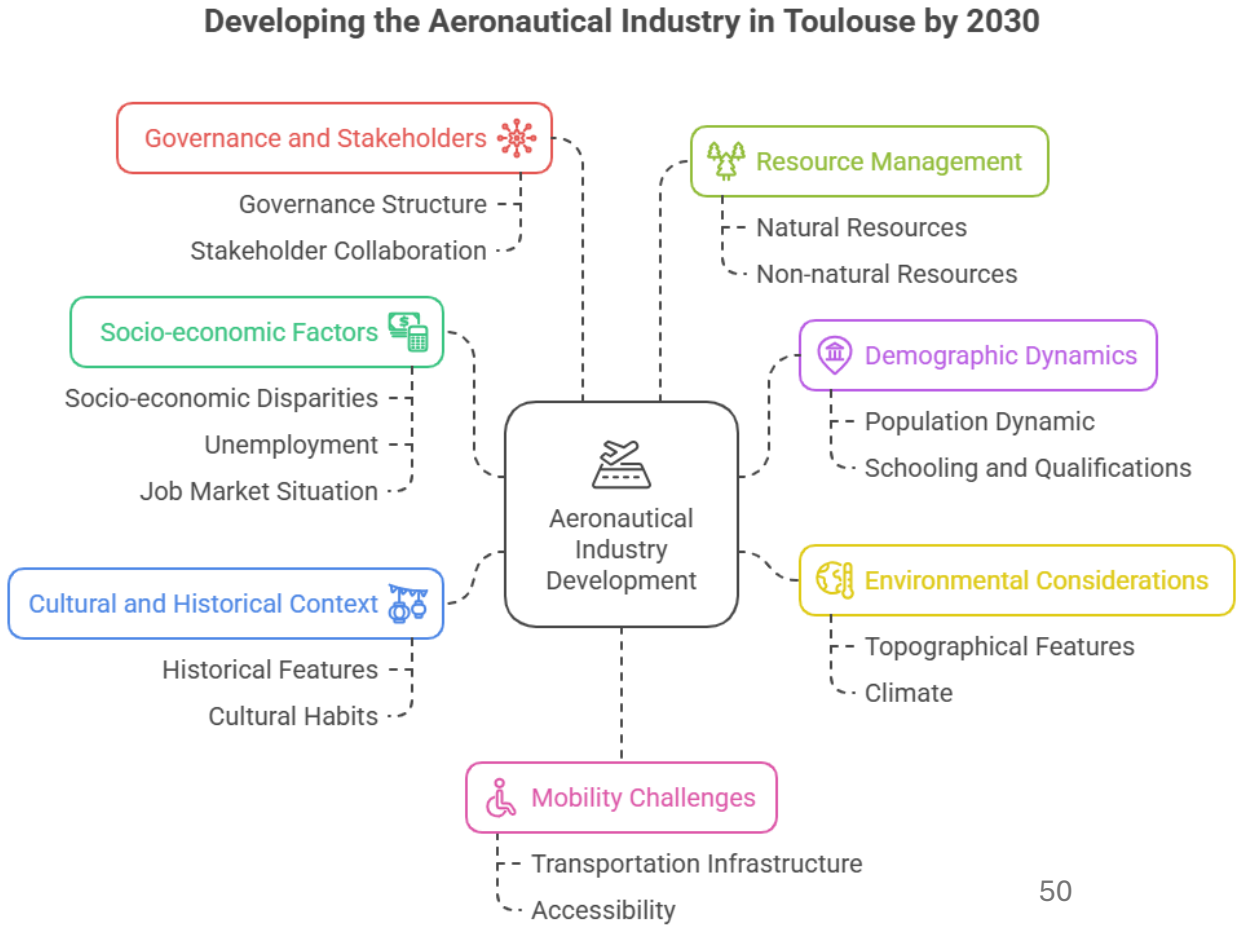
One sub-thematic

=

one choremati diagram

In the end, one synthetic choremati diagram

(mostly for dissemination purposes)



STEP 3.2. Synthetise the analysis

- **Schematize territorial organization** (from transects, walks, maps)

2 examples

- Schematize the result of the transects
- **Schematize the spatial organization with “choromatic principles”**

➔ The idea is to then be able to compare these observations and syntheses with what we thought we would encounter, with the classic models of other cities… and to put forward hypotheses as to why !

STEP 3.2. Synthetise the analysis

- **Schematize territorial organization** (from transects, walks, maps)
- **Using a SWOT matrix to**
  - Structure the analysis of collected data
  - Help to identify key challenges, priorities and strategic issues
  - Provide a framework for building a territorial project

STEP 3.2. Synthetise the analysis

Step 1 – Fill in the SWOT matrix for each theme (mobility, governance, environment…):

Strengths:
internal resources & advantages.

Weaknesses:
internal limitations & gaps.

What we've got

Opportunities:
external trends & dynamics to seize.

Threats:
external risks & constraints.

What's out there

STEP 3.2. Synthetise the analysis

Step 2 – Cross the boxes

- Use strengths to seize opportunities.
- Transform weaknesses with opportunities.
- Mobilize strengths to mitigate threats.
- Anticipate weaknesses + threats as critical points.

What we've got

Help to identify innovative, "out of the box" solutions.

It's a solid basis for defining an action strategy and territorial project

What's out there

Example of a SWOT – theme = mobility

Step 1 – Fill in the SWOT matrix

Strengths

- Good train service (station connected to the city center)
- High cycling prevalence (cycling culture + existing infrastructure)
- Urban compactness → short distances favorable to soft modes.

Weaknesses

- Infrequent bus network and insufficient evening/weekend routes
- Lack of intermodality (few park-and-ride facilities, poor coordination between bus/train/bicycle).
- Roads often congested during rush hour.

Opportunities

- National and European policies for financing sustainable mobility (bicycle funds, climate plans, etc.).
- Development of digital innovations (ride-sharing apps, G. Maps, electric bikes).
- Growing public pressure for more environmentally friendly alternatives.

Threats

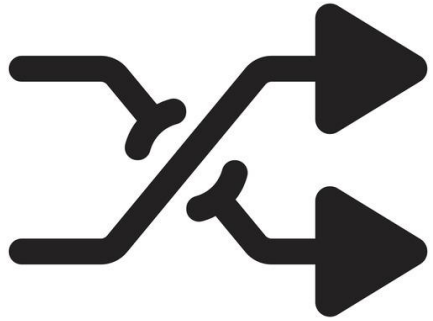
- Rising energy/fuel costs, which can exacerbate social inequalities in mobility.
- Risks related to climate change: heat waves limiting bicycle use, floods blocking roads.
- Increased commuter traffic to the neighboring city, generating more car traffic.

Example of a SWOT – theme = mobility

Step 2 – Cross the boxes

	Strengths	Weaknesses
Opportunities	• Cycling culture + public funding + Urban compactness → development of a structured, inter-municipal cycling network. • Urban compactness + digital innovations → implementation of an easy-to-use integrated mobility system	• Lack of intermodality + European funding → creation of multimodal park-and-ride facilities.
Threats	• Good rail service to reduce car dependence in the face of rising energy costs.	• Road congestion + increase in commuter traffic → risk of asphyxiation of the city center, requiring a traffic plan or strong alternatives.

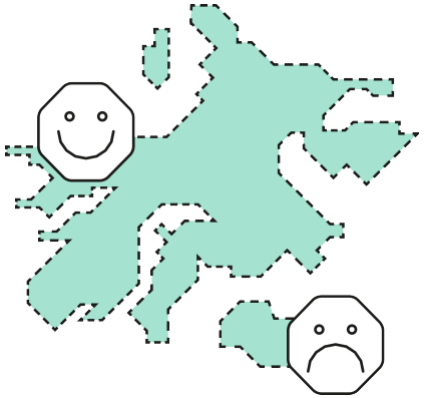
Example of a SWOT – theme = mobility



By cross-referencing the boxes, we obtain:

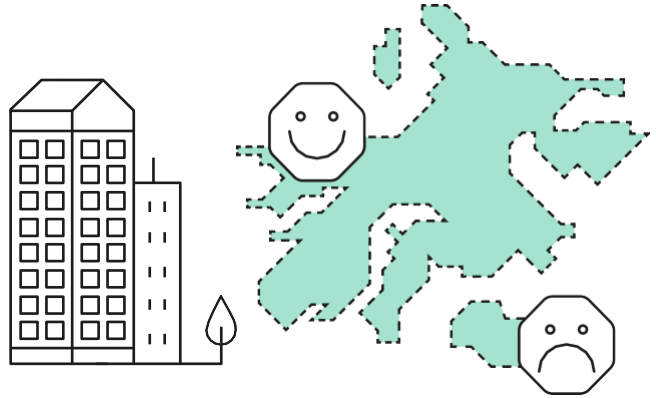
- **Strategic development axes**
  (e.g., soft mobility + intermodality + digital innovation)
- **Points of vigilance**
  (e.g., congestion + lack of public transportation)
- **Structuring projects for the region**
  (e.g., a comprehensive sustainable mobility plan combining bicycles, trains, buses, and digital innovation)

The territorial diagnostic - Urban diagnosis approach



- A key tool to **analyze and understand territorial dynamics**
- Like a **medical check-up**, it examines the city to guide transformation
- Provides explanations of **past developments** and assessments of **future developments**.
- Provides a **cross-analysis** of data and stakeholder's perceptions
- Today's main methods:
  - **Transect walk** → sensitive, on-the-ground reading
  - **Choromatic analysis** → visual synthesis of spatial structures & relationships
  - **SWOT framework** → strategic challenges & project definition

Setting the framework | Collecting the data | Analysing the data | **Synthetise the analysis** | Defining an action strategy | Communicate the results



Thanks for your attention !

The territorial diagnostic approach

Workshop for the City Lab II Malmö
01-05 September 2025
Charlotte Bernier