

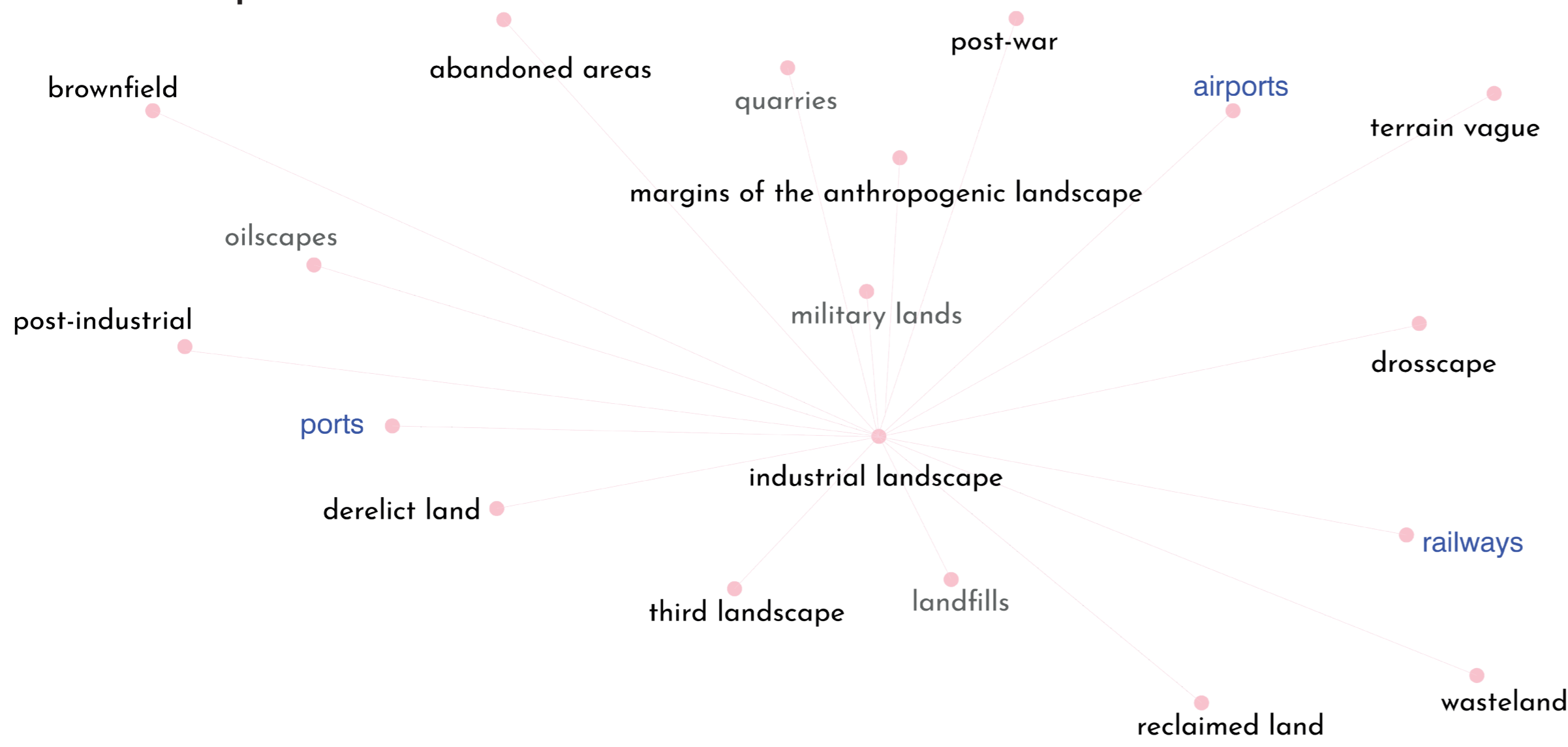


"In the entropology of globalization, all management generates abandoned spaces. All creation as applied force entails negation; all production entails neglect."  
-Gilles Clément

# The Landscape of Transportation Nodes: A Design Statement for the Transformation of Abandoned Railway Landscapes into Public Places through Case Studies

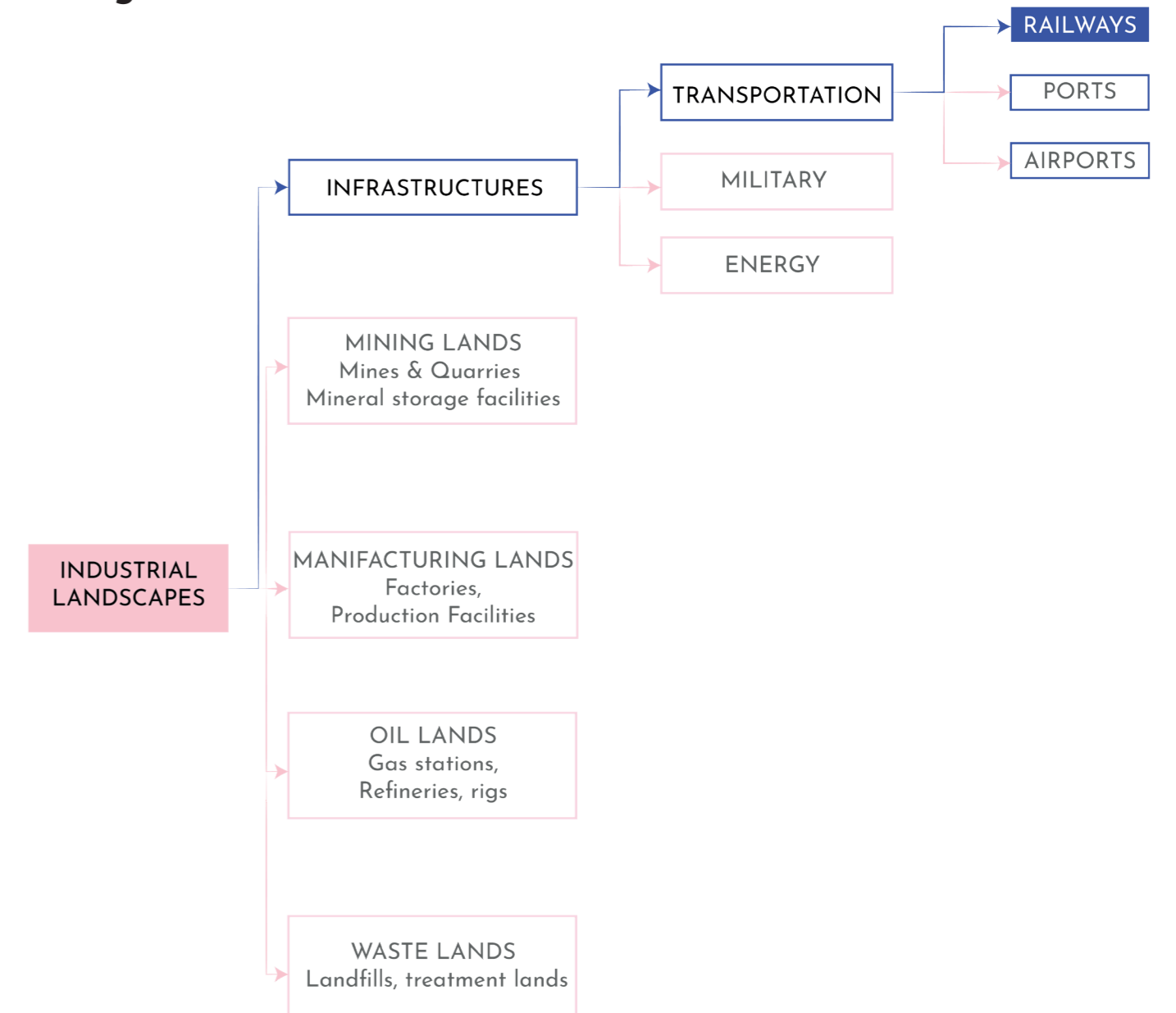
Like everything else in our environment, they are born and they grow, yet, they do not have to perish; they can be repurposed while still reflecting history. They are a part of the transportation network and they are an expression of the various technological-industrial eras.

## Industrial Landscapes



After the emergence of industrial landscapes and logistics landscapes, many terms were developed to describe these lands. The cognitive map here shows the different norms that are related to the industrial landscape theme.

## Categorization

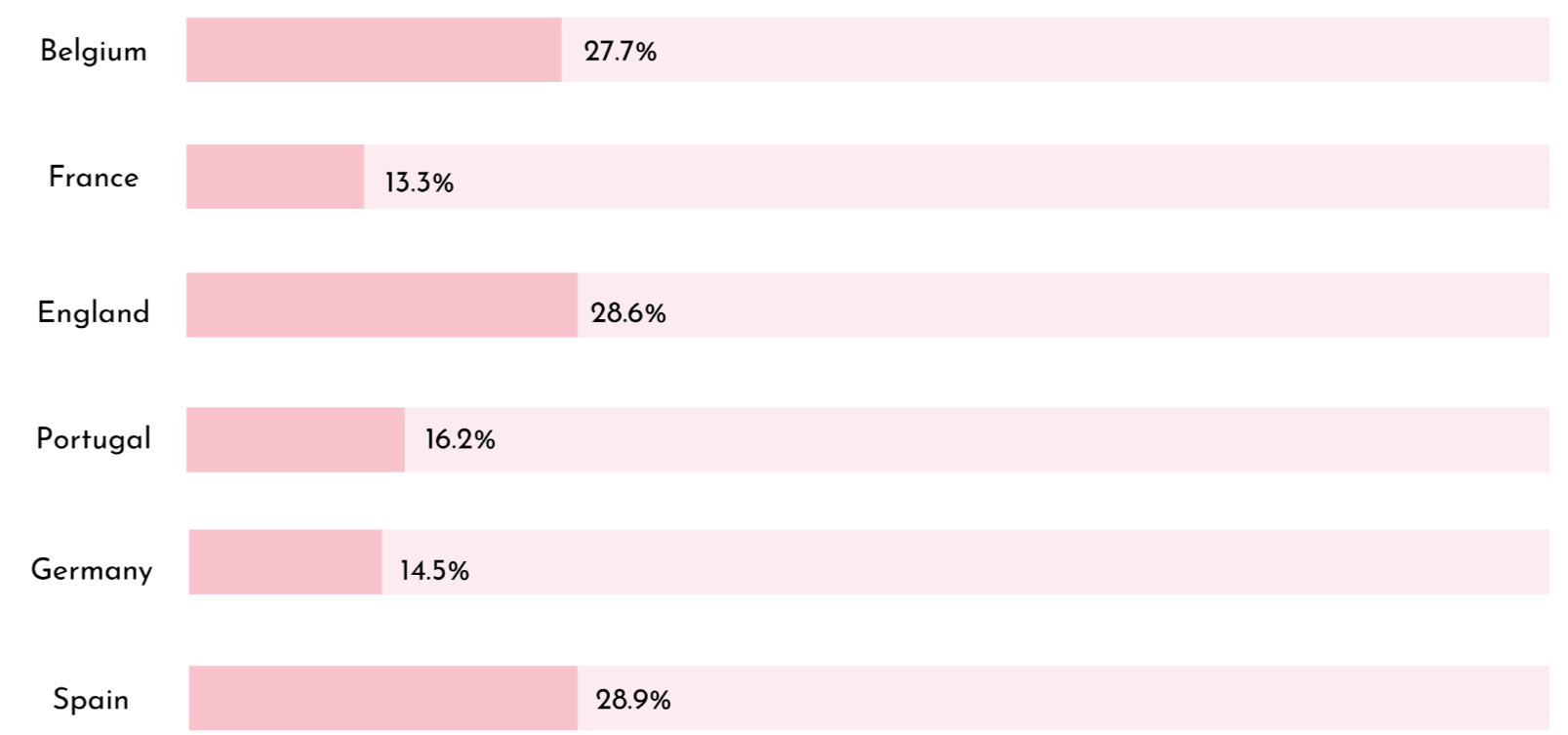


Industrial landscapes have been categorized differently in different articles depending on the aim of each one. For this thesis study, a categorization based on the function is presented. While some of the other categorizations have a different approach about the transportation group, here it is taken as a part of infrastructure landscapes and it consists of 3 different typologies such as railways, airports and ports.

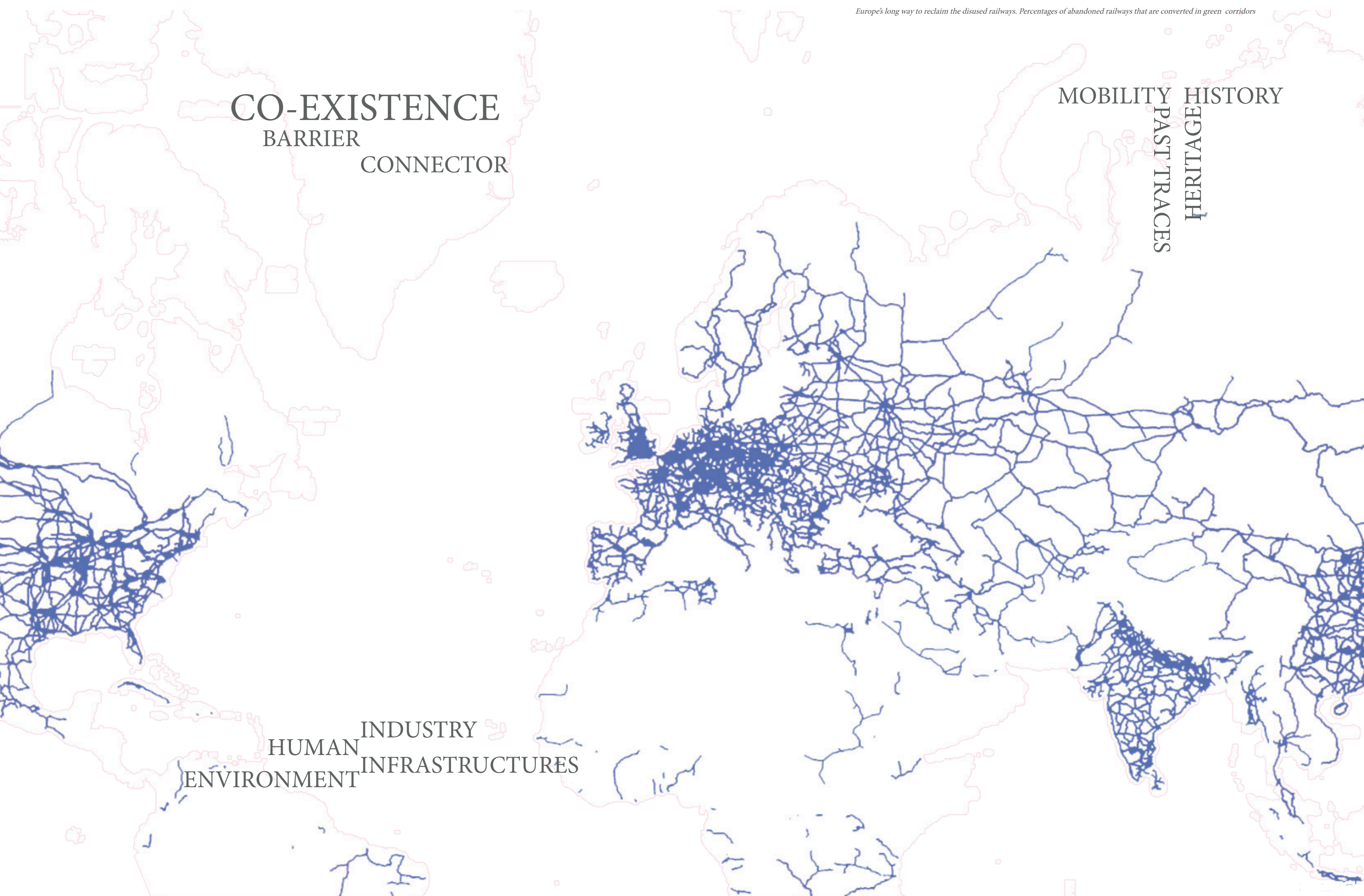
## Potentials of the Railway Landscapes

About **2000 kms of lines no longer active** railways exist **in Italy** with Sicily hosting the half of it with almost 1000 km of dismantled lines.

This number is **7600 km in Europe** and **35,750 km in the US**. They were one of the major systems that shaped the cities once, now they are left abandoned, waiting for their new functions in the cities.



Europe's long way to reclaim the disused railways. Percentages of abandoned railways that are converted in green corridors



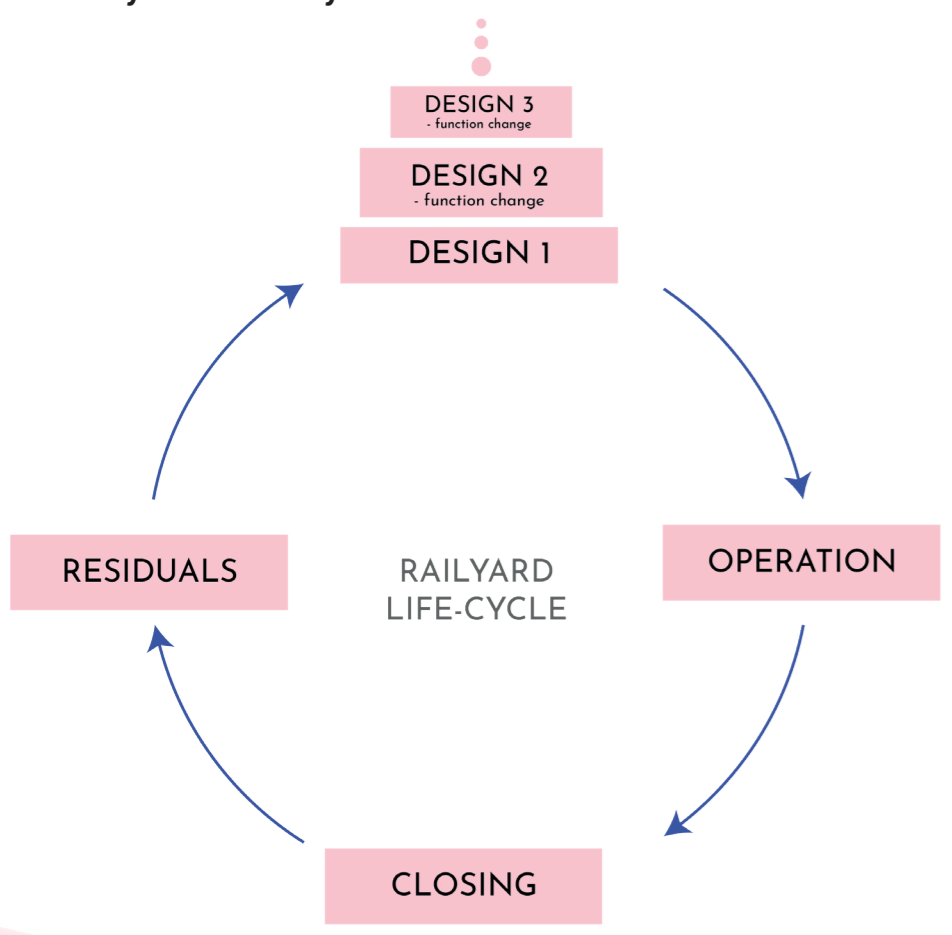
Railroad lines in the world

What role does "history" play in post-industrial railway landscapes? And how can we use design to convey the many layers of history?

Can we talk about resilience to change during the transformation of a former railway landscape?

Is it possible to create a guideline that shows not specific actions but the approach and strategies towards post-industrial railway landscapes?

What are the factors that contribute to the success of the project?



Understanding the series of changes that railway infrastructures undergo, hence their life cycle, is important in order to assess the future phases of the areas related with these infrastructures.

**OPERATION**

**CLOSING**

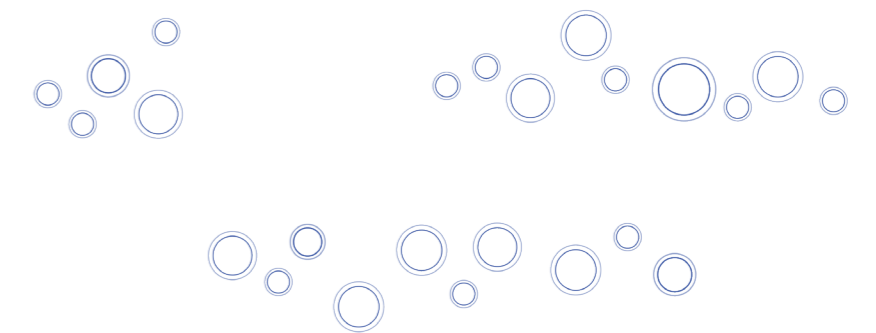
**RESIDUALS**

**DESIGN 2**

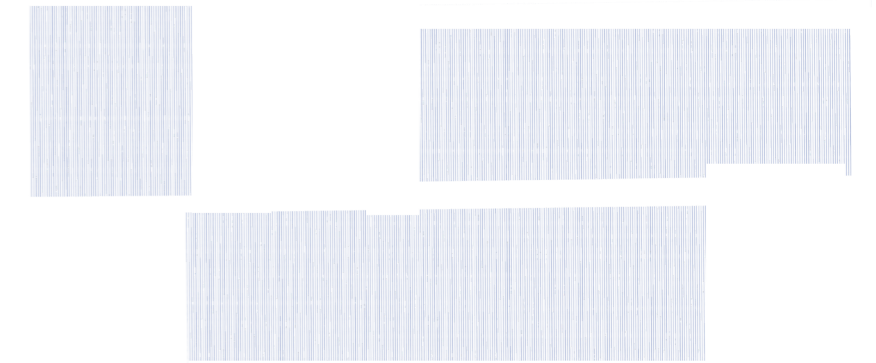
**Railway Landscapes**

Railway landscapes consist of 3 elements which are lines, points and areas.

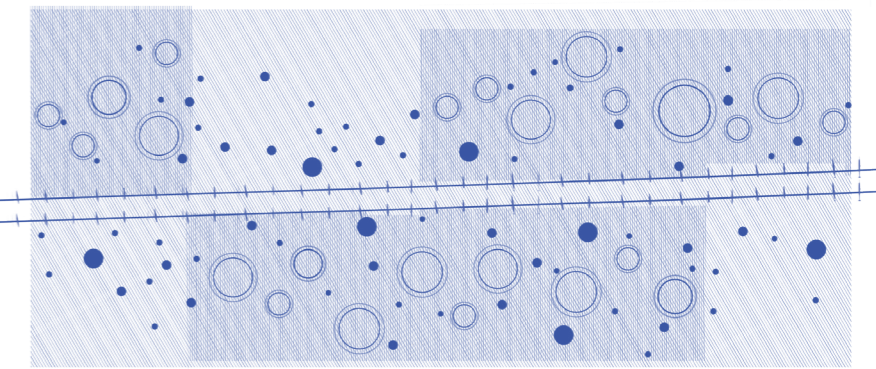
Rail tracks can be represented as lines.



Stations or other vertical elements can be represented as points.



Multiple points can create surfaces with their relativeity.



Together, lines, points, and areas constitute railway landscapes which can act as barriers as well as connectors. After the transformation, new public place increases the connection by acting as a new layer on the existing site with new programs and by providing extensions into the neighbouring communities. New nodes are developed by users and designers in the process of transformation.

**Case studies**

**1 High Line**

- elevated characteristics
- variety of rooms
- phasing strategies
- giving wide-ranging perspectives to the user
- re-introducing the city from different angles to the locals
- introducing the surrounding to the tourists
- exceptional planting design in harmony with the existing structures

**2 Promenade Plantée**

- first example of reclamation projects on abandoned railways.
- place-making, planning, and design tactics
- adaptable qualities and multi-layered traits to accommodate Parisians and visitors
- the Viaduc de Arts, displaying the features of the neighborhood
- the communication it exemplifies between the society, the history and today's city life

**3 Parque Lineal Ferro-carril de Cuernavaca**

- offering solutions to urban problems such as the drought problem of the city which created a water crisis caused by low rainfall
- answers to these needs as well as the lack of green space
- water serving as didactic element during the design phase
- a long-term project that will be built and improved throughout time in accompany with the city's ongoing evolution.
- a continuous red line along the corridor created a connection between features as well as a celebration on the rail lines

**4 Scalo Porta Romana**

- aims for a quality of open and green spaces in the urban context
- it reflects the site's industrial past while reviving it with contemporary initiatives centered on a sustainability mindset with the principles of inclusivity, biodiversity, resiliency, connectivity and wellbeing
- meanwhile use strategies to engage users during the construction phases and for properly meeting the demands of the users, allowing for a test run before the completion

**5 Shelby Farms Greenline**

- one of the most popular trails in the city of Memphis
- it creates connections along many districts, increasing security in the low-secured neighbours, increasing the wealth and wellbeing and contributing to user needs
- the extensions are continuing to be developed with new amenities and service points
- it corresponds with municipal planning strategies that changed the city into a cyclable environment, given the fact that there were no bike lanes in the city in 2010 when it was built
- anchored by the Shelby Farms Park that is 5 times larger than the Central Park, offering variety of activities from horseback riding to fishing and kayaking
- a natural and woodland theme

**6 Atlanta BeltLine**

- located on an historical area with several railway corridors.
- the transformation took place on a 35 km long railway loop and the total trails are 53 km
- a 6 months program to consult to community input to shape the project of multi-use urban trails
- connects 45 neighbourhoods in which the poorest and the richest exists.
- the ability to transform the city considerably more profoundly than similar projects

**7 Parkland Walk**

- due to its natural characteristics, botany and ecological conservation plays an important role
- viaducts and arched bridges slowly present themselves along the trail
- since the main theme is having a "nature trail" the railway sections are not designed in an urban context, they appear as natural, inhabited by wild meadows
- considering the fact that in the last century, the UK has lost 97% of its meadows, creating a concern among naturalists, the meadow areas created in this project are highly important

**8 The 606 Bloomingdale Trail**

- connects diverse communities along its 4.3 km route which is promising for weaving the neighbourhoods within this designed landscape
- transformation into a slow mobility parkland with paths for cycling and walking
- its finance relied heavily on the cycling infrastructure, receiving \$50 million in financing from the US Department of Transportation, covering a significant portion of the project's total budget because it qualifies as an alternate transportation route
- the program includes recreation, performance venues, poplar grove and phenological planting

**9 Le Chemin Des Carrières**

- the design has 4 chapters on the 4 train stops, each one demonstrating different characteristics of the surrounding landscape through framing different views with steel-work as well as creating openings in the site
- an artwork of story-telling with 3 stories; the water, the land and the most obvious one; travel.
- it showcases a beautiful mixture of human-made world and the nature with structural interventions with the idea of reconversing the rail tracks with cultural pavilions

**10 Lines of Life**

- incorporates green space, walking and cycling paths and the development of the surrounding area over the next few years, ensuring that the entire old train line is well integrated
- aims to establish a "seamless connectivity" that allows users to feel the emotional, functional, and experiential advantages of the area's rich past and ecosystem

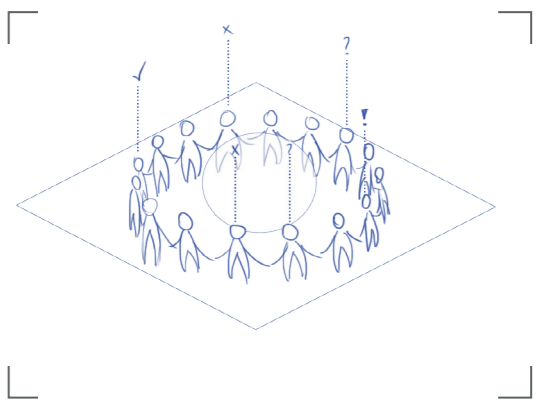
**11 Parco Lineare**

- develops the theme of the landscape by 2 levels that are continuously intersecting:
- 1. the material construction such as the row of trees, surfaces, gardens, colours, smells, etc.
- 2. the construction of ways of seeing as well as recognizing agricultural and natural landscapes
- reforming this railway landscape into a field of aesthetic, economic and social energy
- one the first examples in Sicily to initiate the reuse of old railway sites with recreational and cultural activities.



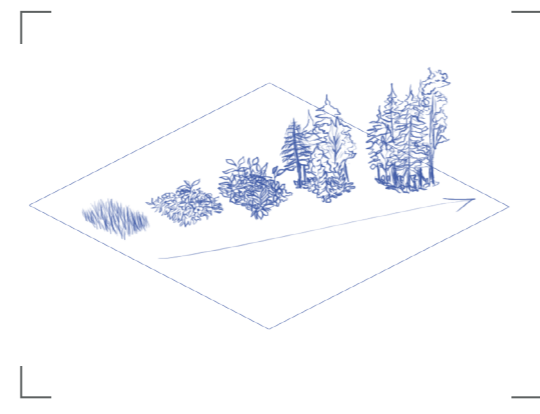
Community involvement

- **non-profit organizations** for maintenance and **future growth**
- medias to **communicate with locals** and their needs
- a **sense of belonging** provided to locals through their involvement in the process
- **competitions** as an indirect way to reach community opinions because the entry teams provide research on the area based on **surveys**



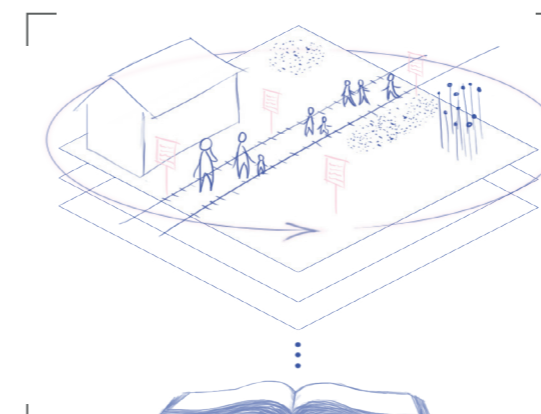
Natural process as a design form

- dealing with the **residuals** of the previous **industrial activity**
- sites usually have already been **reclaimed by nature**, with wild vegetation growing on the rail tracks, generating spectacular images taking attention as a **wake up call**.
- designing the process rather than the state of the place - **process design**
- **natural phases**



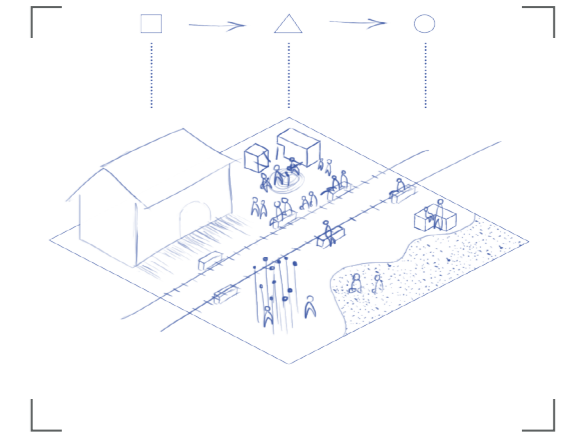
Heritage & history

- **intangible and tangible heritage** in different forms
- railway lines, reflecting **past traces, societal mobility**
- stations representing the spots where people welcome their loved ones across large distances or even on a daily basis
- the **linearity** depicting the panoramic view of the scenery that the traveller enjoys as they go across yards with thousands of memories
- encompassing the **industrial development** through new modes of transportation as well as the evolution of society through new technologies
- **story-telling** of the site's history



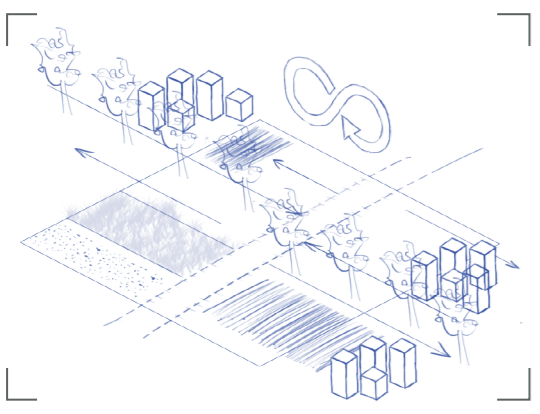
Adaptability - ability to answer the needs of today

- **answering the changing needs** of the society
- **re-use strategies**
- old materials **continuing to live in other forms** to accommodate new users while saving budget on new material production
- making the features of the site more **resistant to change** since **adaptable design** preserves the features and helps in their survival while the environment changes and evolves



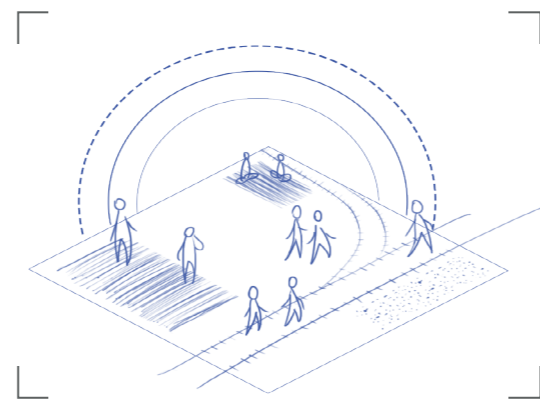
Sustainability

- **environmental, social and economical** sustainability
- the site continuing to exist without the need for more assistance
- to **self-sustain** without an additional labour
- a **large-scale process design**
- making sure to **assist environment** deliver ecosystem services
- creating **liveable environments** to achieve the greater goal of creating **healthy, equal, and just cities** as well as to assist the **socioeconomic development** of the communities with whom the site is associated



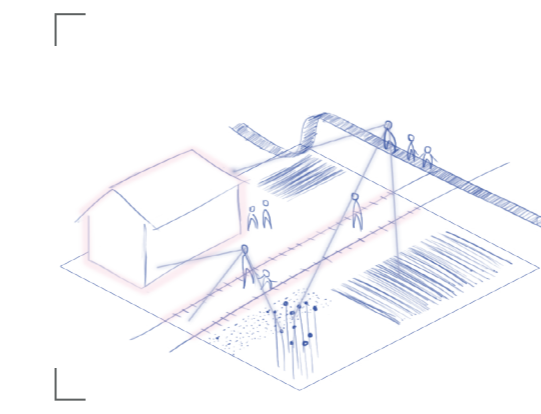
Integration of users

- transformation of a **space into a place**
- users being the essential component of **place-making** practices
- **engaging users** is a crucial part of the process design
- provides attractiveness for the place with the new function
- taking advantage of the construction process by mapping out **areas to be developed in phases** to communicate with target groups
- each phase contributing to the success of the next because user's interactions with project features provide the best outputs for the following phases
- **meanwhile uses**



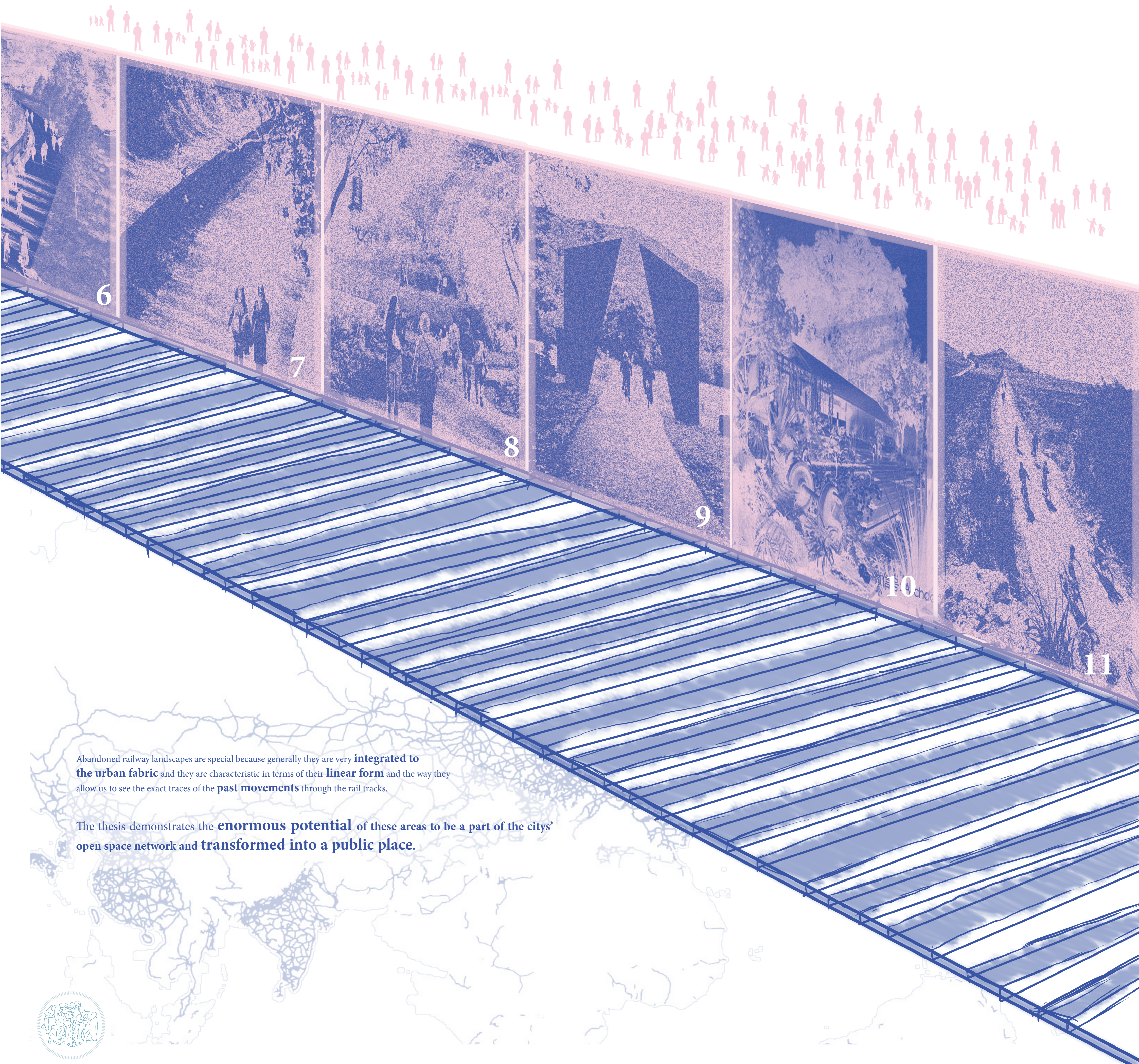
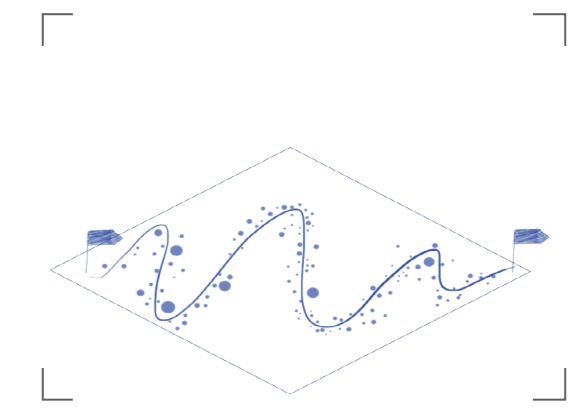
Perception

- **neglected and forgotten** places in poor condition **waiting to be discovered** and used by the community
- giving the community a new perspective on the site through transformation
- changing how the site is perceived by **highlighting the historical layers**, the past traces and its relation with the community
- renovating the harmed features to provide the **storytelling that was not obvious** to the visitor before the transformation
- using the existing structures as a strategy to **elevate the visitor's experience** of their own city, creating new meeting places, activity areas
- **framing views** in a way that the locals have not experienced before.



Mobility

- these sites being once the major **transportation** providers in the history
- the **linear form** of representing the movement
- being able to read this in the site as well as re-using this functionality to adapt to new conditions
- transforming the site while protecting its original purpose, **connecting places**
- employing the mobility function as a design aspect or using it as the entire idea
- making former railway landscapes a part of the **"slow mobility network"** to appeal government funding since it aligns with municipal vision plans' sustainable transportation aims while also poetically enabling the sites retain their **historical purpose** as connectors



Abandoned railway landscapes are special because generally they are very **integrated to the urban fabric** and they are characteristic in terms of their **linear form** and the way they allow us to see the exact traces of the **past movements** through the rail tracks.

The thesis demonstrates the **enormous potential** of these areas to be a part of the cities' **open space network and transformed into a public place.**

