SPATIOTEMPORAL WEAVING

Creation of Canal Space Based on
Ecological Restoration and Spatiotemporal Sharing

Country /City China/Suzhou

University / School Soochow University

Academic year 2020–2021

Title of the project Spatiotemporal Weaving

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TECHNICAL DOSSIER

Title of the project Spatiotemporal Weaving

Authors Xinyue Zhou ,Yuhong Xie , Yufei Shen , Suyang Shen

Title of the course Landscape design (4)

Academic year 2020–2021

Teaching Staff Jiesi Wang

Department / Section / Program of belonging Department of Landscape Architecture

University / School Soochow University

Written statement, short description of the project in English, no more than 250 words

The Beijing-Hangzhou Grand Canal, which began construction in 770 BC, is one of the oldest and longest ancient canals in the world. From Hangzhou in the south to Beijing in the north, it connects 5 major water systems, 6 provinces, and 18 cities. It passes through regions with complex terrain, facing technical challenges such as flooding, water scarcity, and sediment management. Several sections of the canal were abandoned as a result of natural causes. Misguided artificial modifications have also adversely affected the canal's historical appearance. It is the goal of this design project to achieve a balance between ecology, city, and history by integrating the historical and cultural significance of the canal using ecological and sustainable development. Our goal is to respond to the site naturally and intervene minimally in the relationship between humans, nature, and the city. For three thousand years, the Beijing-Hangzhou Grand Canal, which runs from north to south, had numerous historical relics and cultural artifacts in its vicinity. Unfortunately, however, many of the historical relics have disappeared over time. Due to a relatively dry climate and inadequate water supply, the northern section of the canal has narrowed and river channels have disappeared.

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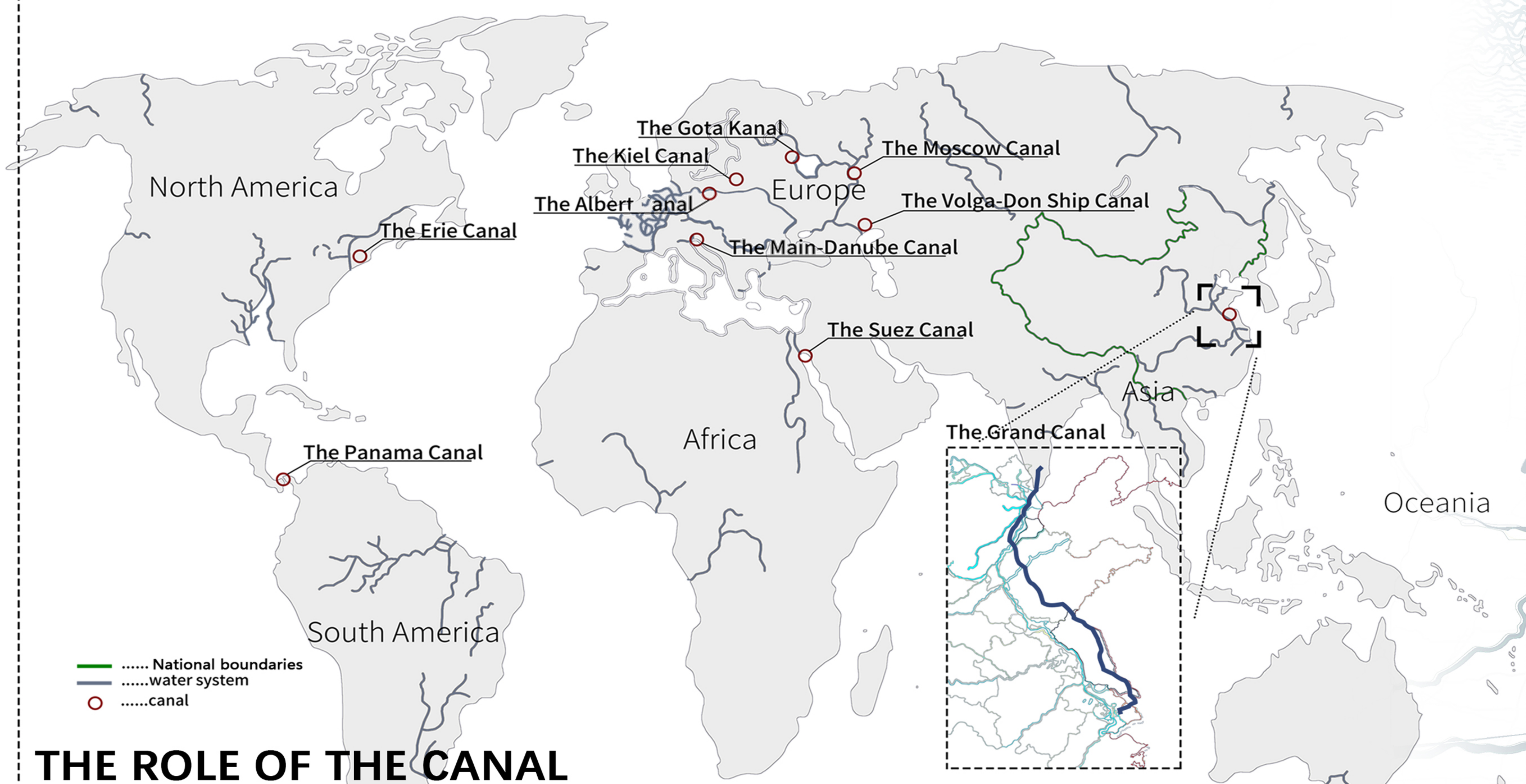
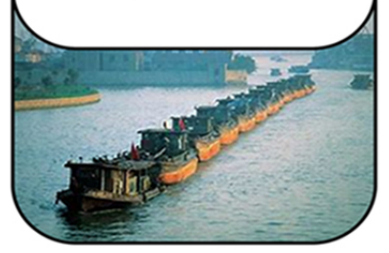
WORLD CANAL DISTRIBUTION



THE ROLE OF THE CANAL

Convenient transportation

a major transportation artery connecting the five major water systems



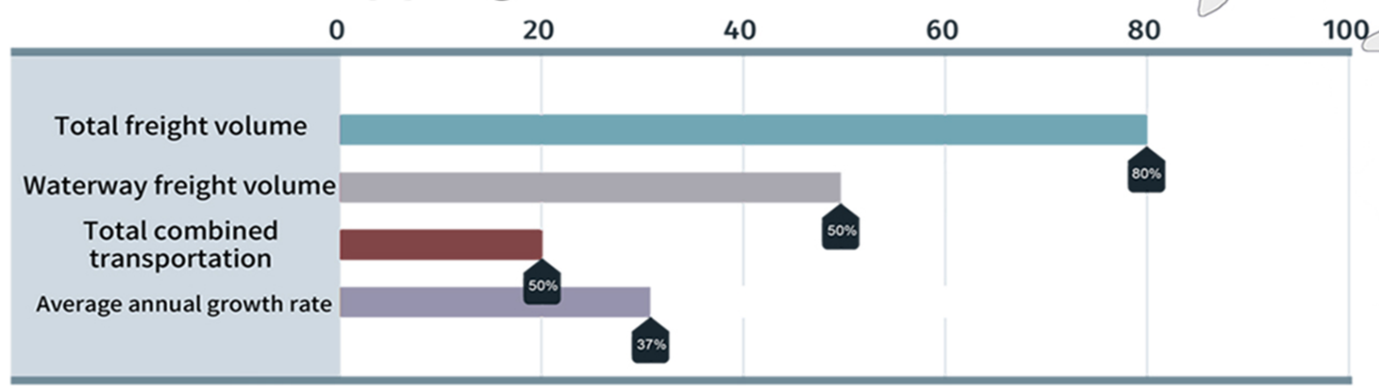
Agricultural development

the water conservancy fields in the canal area have been greatly expanded

Business booms

greatly promoted the development of commerce and handicrafts in the canal area

The Canal shipping



URBAN POPULATION CHANGE

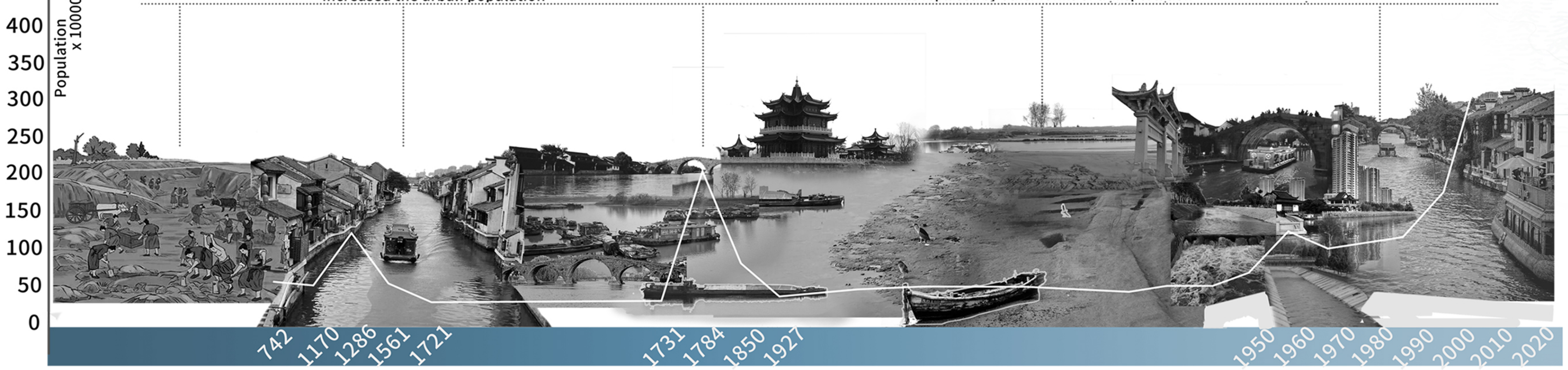
Digging the Grand Canal

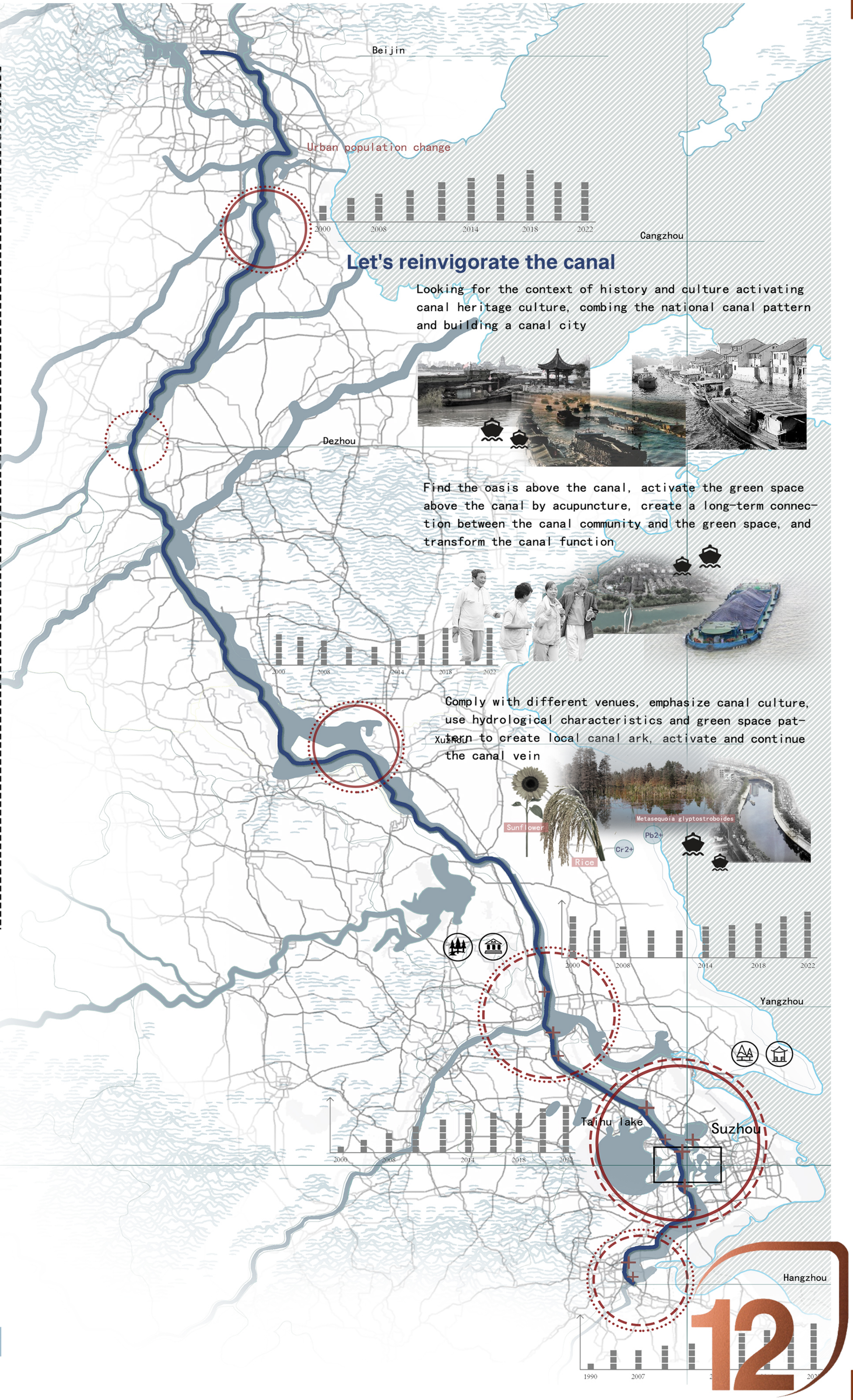
The Grand canal has driven the economic development of Jiangnan, promoted the sparse distribution of funds, food, and construction materials, and increased the urban population

Peaceful times, social stability, population migration, population growth, until the Opium War in 1850, when the Taiping Army captured Hangzhou, and the war caused a sharp decline in population.

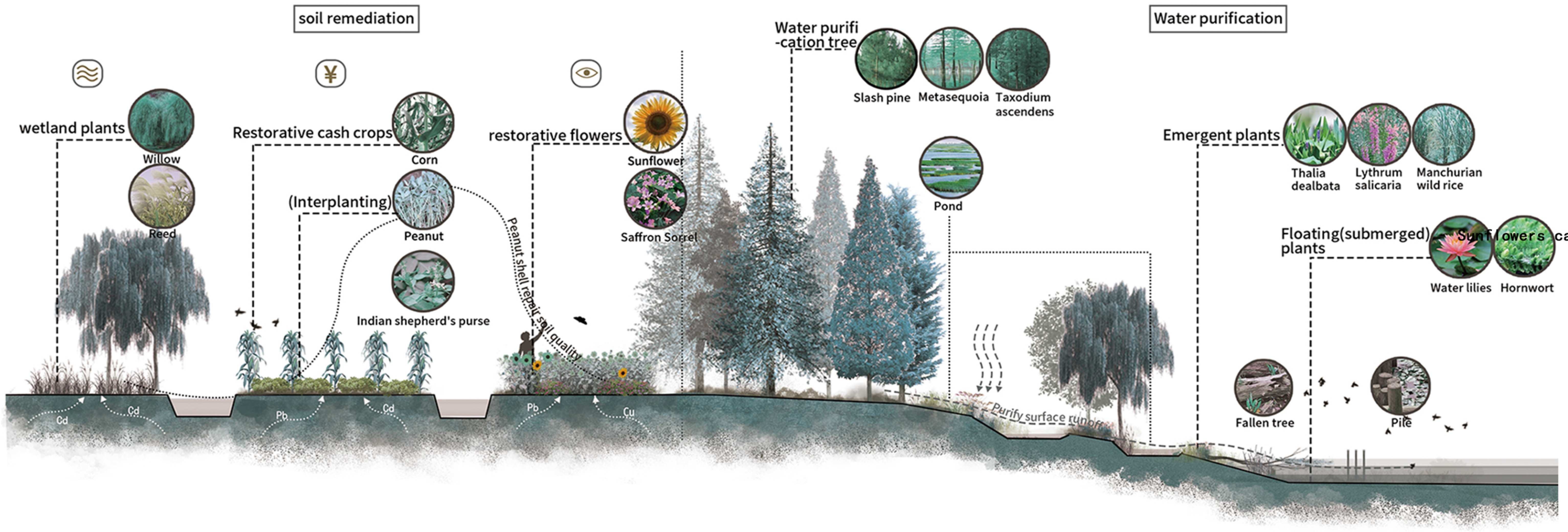
The Grand Canal was once the main transportation route in China. However, it began to decline due to the rise of sea and rail transport and the silting up of the canal by the Yellow River. The government was unable to maintain the canal due to its sheer size and complexity. The canal was also vulnerable to flooding and other natural disasters. As a result, the canal gradually fell into disuse and was replaced by other forms of transportation

After the governance and repair, the Grand Canal has regained vitality, focusing on the protection of canal heritage and the development of tourism.

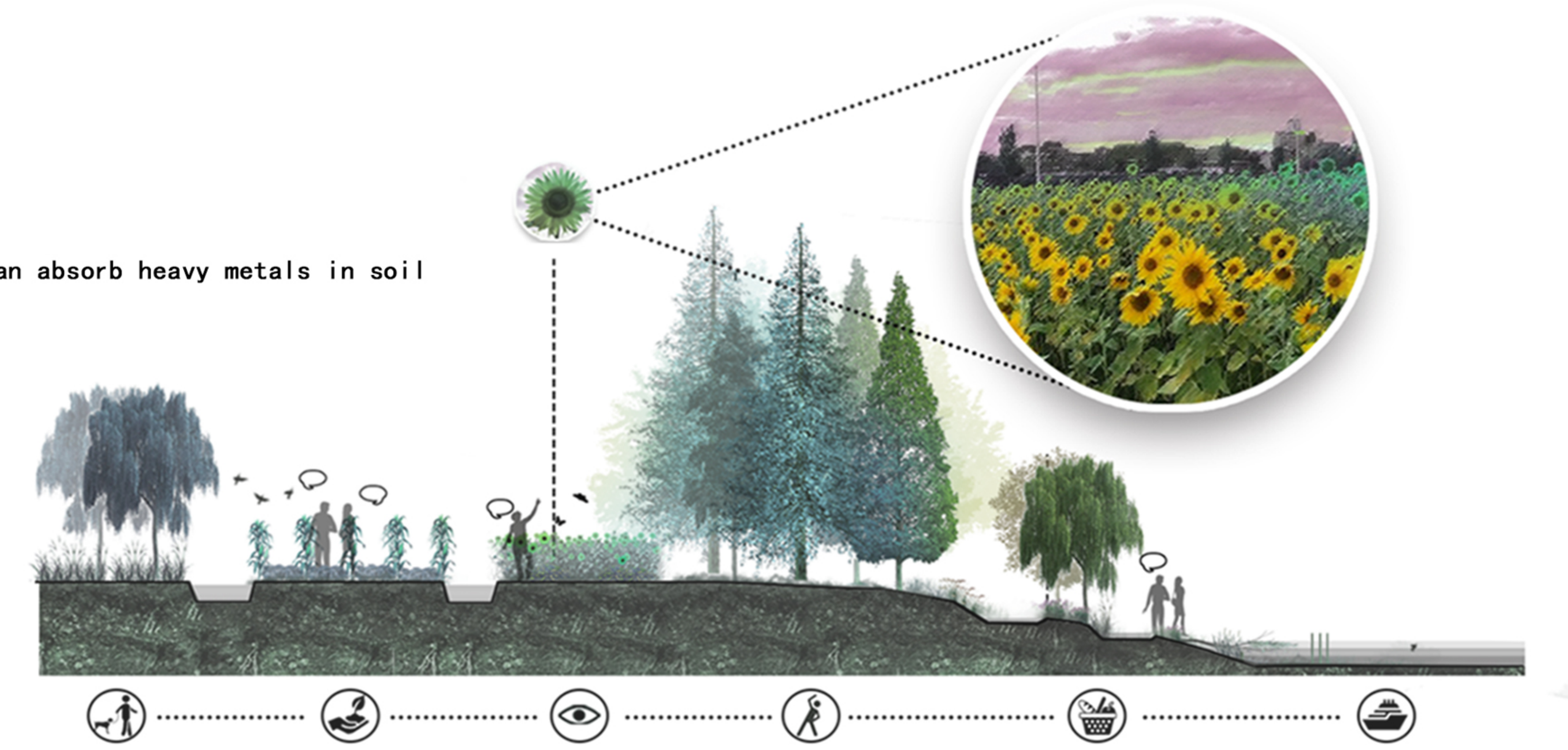




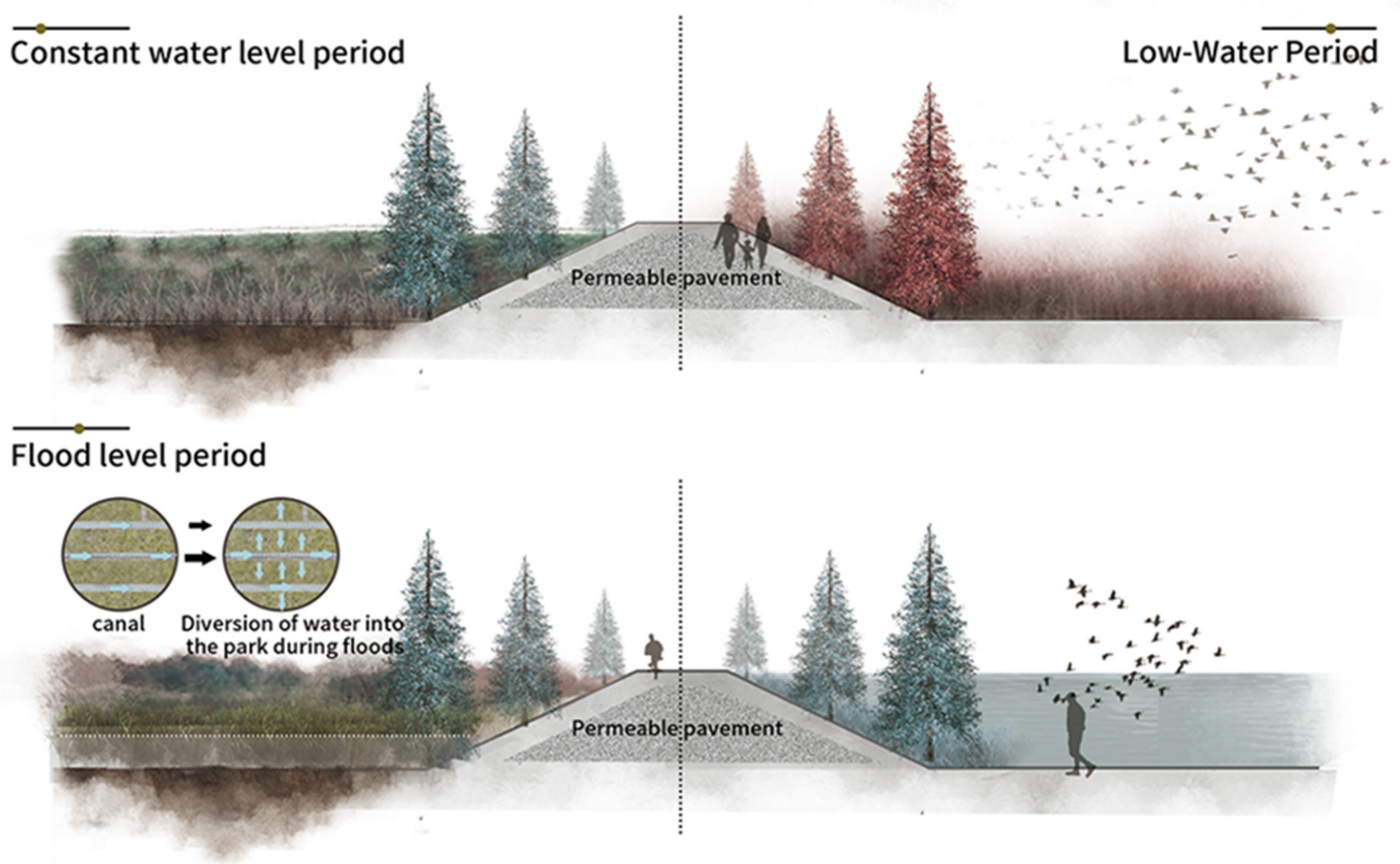
STRATEGY 1 PLANTS RESTORATION

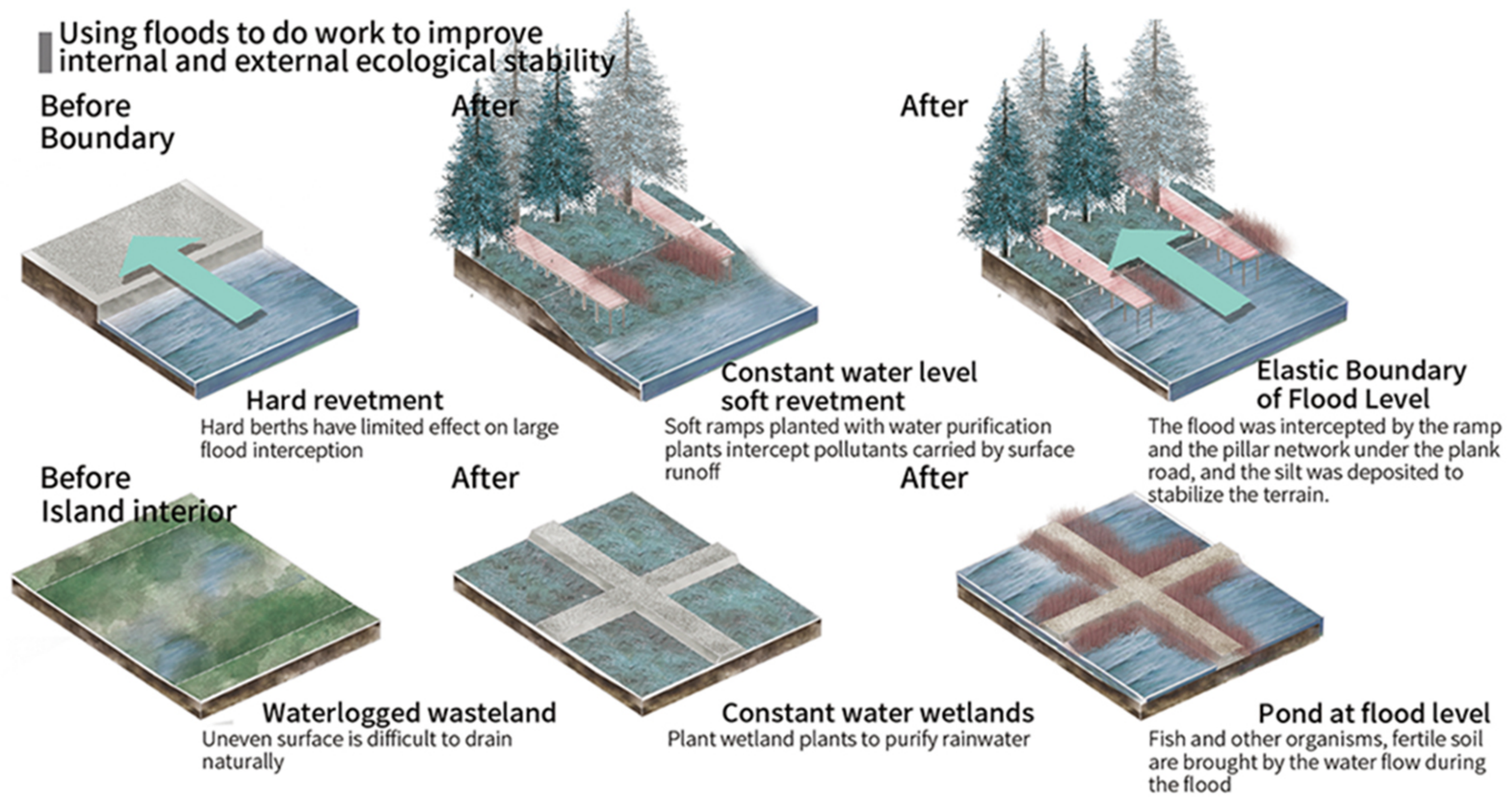


PURIFIED PLANTS

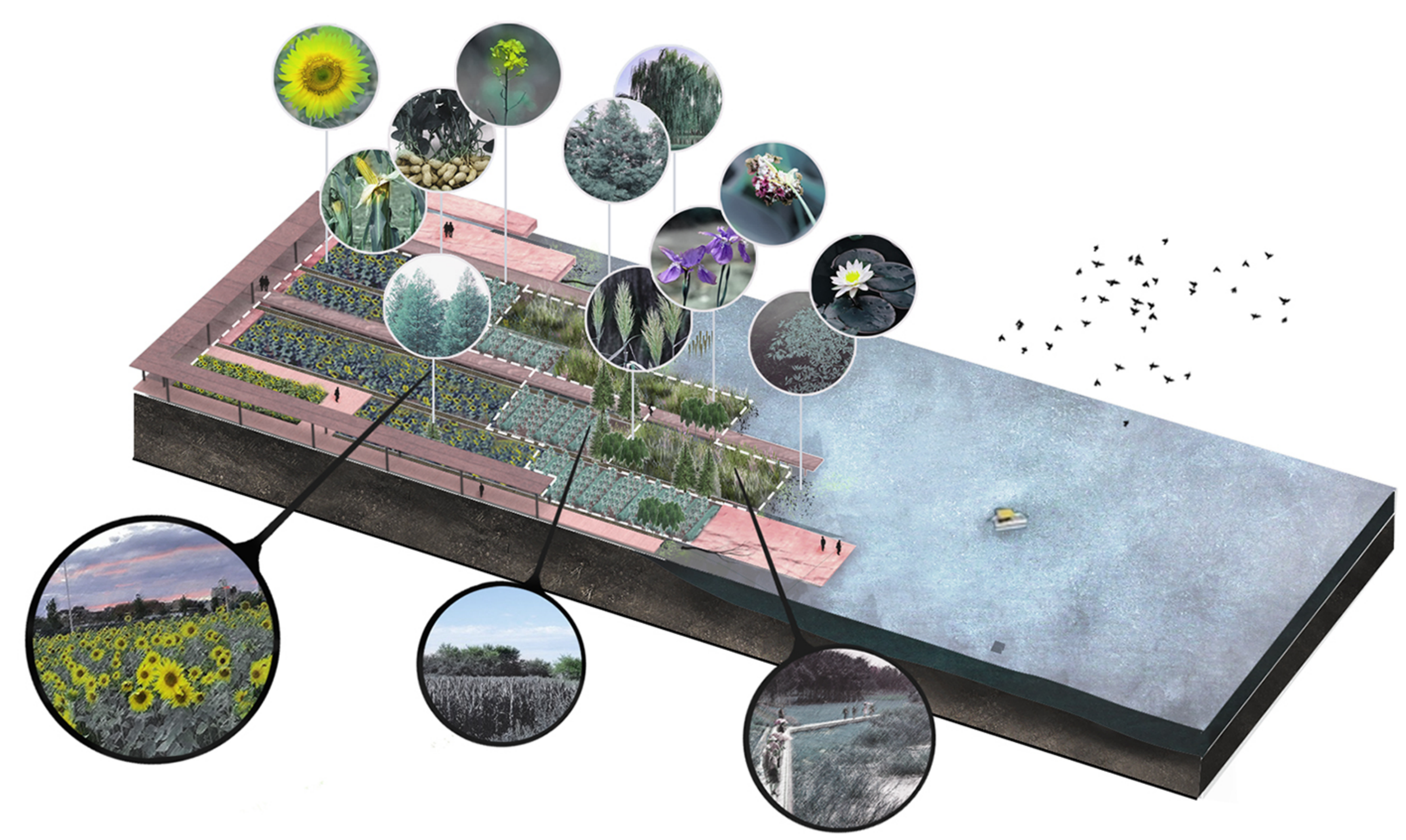


STRATEGY 2 USE FLOOD CLEVERLY

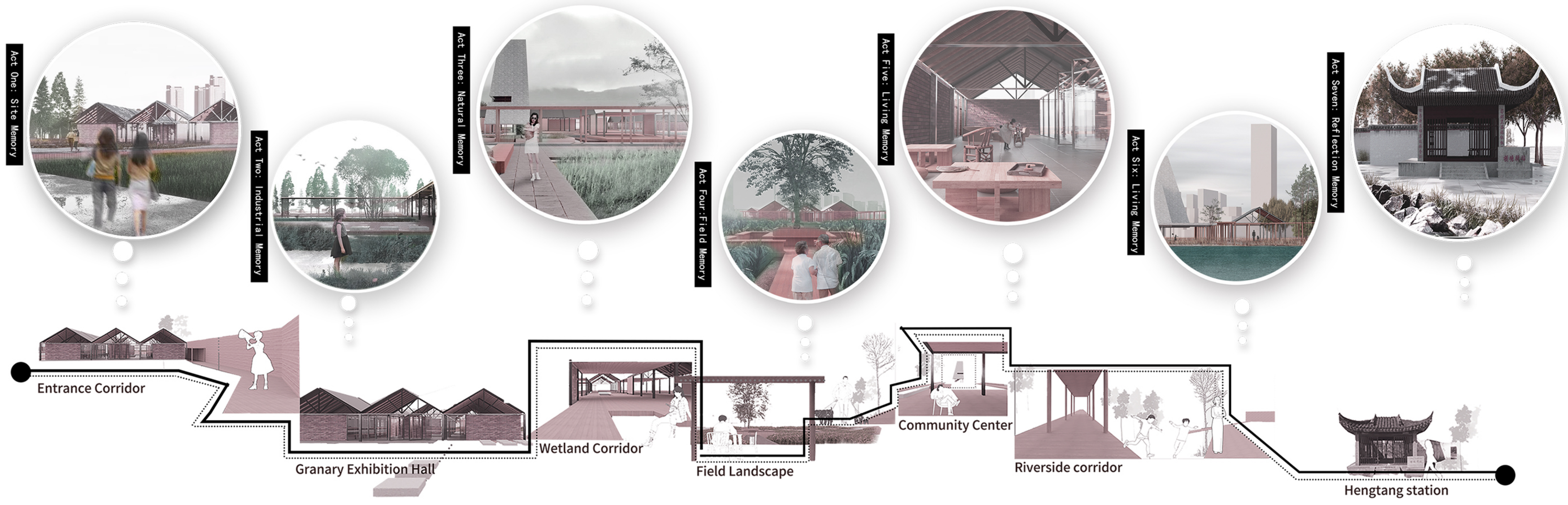




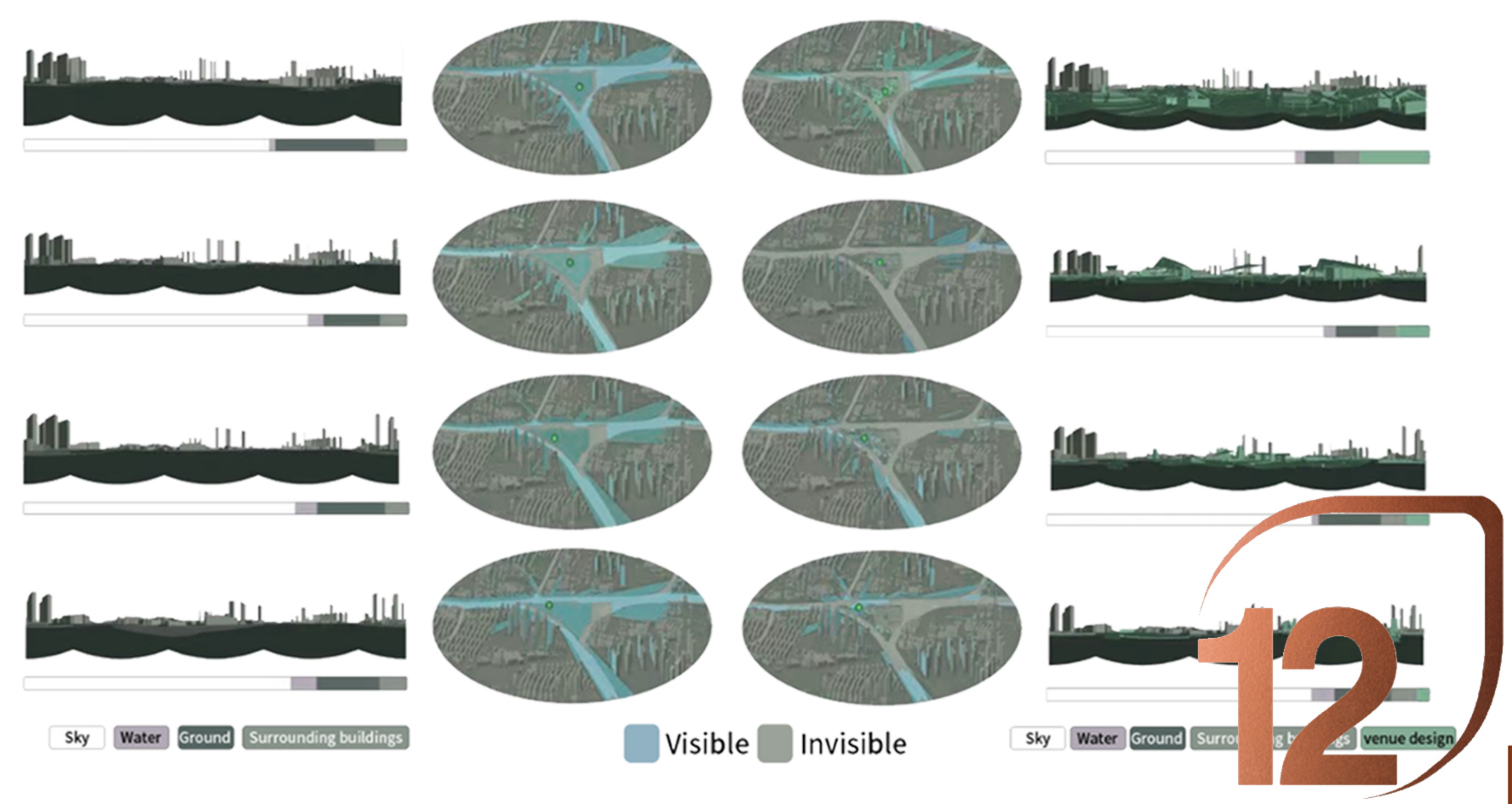
WATERFRONT PLANTS



STRATEGY 3 WEAVING CANAL & COMMUNITY MEMORY



SIGHT ANALYSIS



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Xujiang
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Society
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Ecology
Tower
Forest wetland
Culture
Hengtang Post station
Green space
Canal & River
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