# The role of landscape in city making

The masterplan celebrates the riverine nature of this part of Paris and would help to restore the unique identity of the area explains John Letherland

Most of the world's great cities have a clear and coherent mental map; New York is known for its strict grid-iron plan and Central Park, Amsterdam for its concentric network of canals and Berlin for its grand axes. London is less formal and concentric in nature but distinctive nevertheless, made up from a network of small towns and villages that have gradually coalesced over time. Of them all, Paris is probably the most treasured for its grand boulevards, formal gardens and majestic palaces.

They have in common an infrastructure of community, commerce, movement and architecture that is very much a construct of centuries of human endeavour. However, underlying this is the imprint of the natural landscape which first gave birth to these cities, and this is much less apparent in today's urban morphology.

Over the last year, I have been working with a group of MA students at the Kent School of Architecture to explore how our urban landscapes have been shaped and influenced by the natural landscape in which they are located, and how we can use this knowledge to create places that are truly liveable and successfully accommodate population growth. Our work this year focussed on Paris, with the objective of exploring the geography from which it is derived, to reveal the impact that the natural landscape has had on the structure and evolution of this particular city, and to use this knowledge to show how a greater understanding of landscape might reveal the potential for growth and place making.

### The Landscape Context of Paris



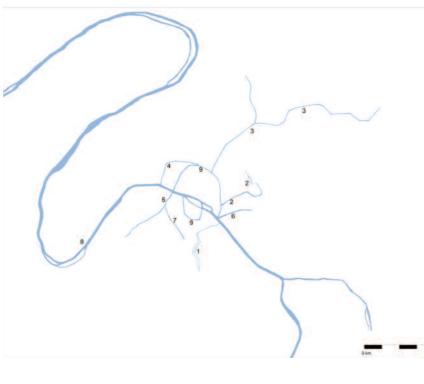
John Letherland is an independent masterplanner and urban designer. He currently teaches an MA in Urban Landscape at the Kent School of Architecture, Canterbury. The Student Research and Masterplan Team were Liz Paola Arias Ruiz Diaz, Jie Huang, Xianyang Wang, Yang Guo and Zhou Liu.

### Like most fluvial cities, the lifeblood of Paris is its river and, the reason for its very existence has always been its waterways.

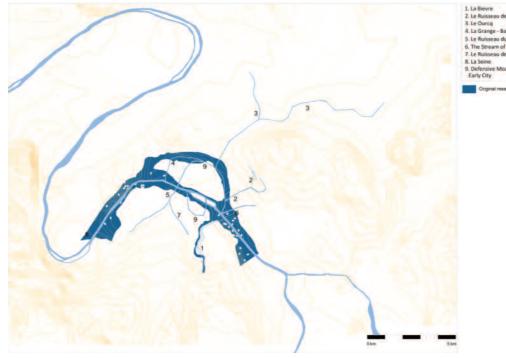
The valley of the River Seine has attracted settlers since the Neolithic Age. The river was once broad and shallow flowing through a flat, marshy valley. Numerous islands were found between the river banks that provided opportunities to ford the river; they were also attractive to early settlers as more easily defendable territory with a natural moat. Long before the Roman Conquest, the Gallic tribe of the Parisii built a fort on a small island that stood in the middle of the Seine. An important port, Lutetia was connected to the right and left banks by two wooden bridges. This island is known as the Isle de la Cité and even today is considered to be the spiritual and historical centre of Paris.

The River Seine has gradually changed its course over the millennia, long before the appearance of humans. Nearing the end of its long journey to the coast, the wide meander it formed on the right bank became redundant when the waters eventually established the shorter, straighter channel it follows today. The large 'oxbow lake' that resulted was used by

### PARIS: RIVERS



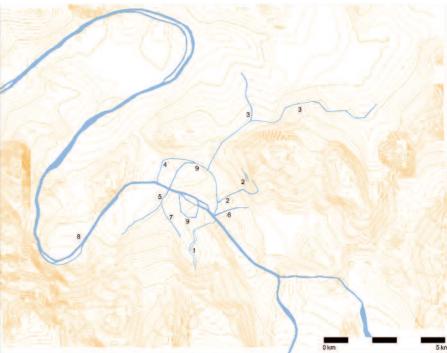
# PARIS: RIVERS & ORIGINAL MEANDER



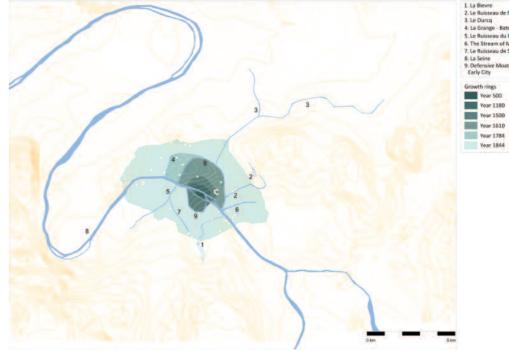
# PARIS: RIVERS & CONTOURS

1. La Bievre Z. Le Ruisses 3. Le Ourcq 4. La Grange - Bateliere 5. Le Ruisseau du Bac 6. The Stream of Montre 7. Le Ruisseau de Saint-Ger 8. La Seine 9. Defensive Moats around the Early City

u du Bar



# PARIS: RIVERS & GROWTH RINGS



BELOW: Paris Rivers & Growth Image Credit: MA Urban Landscape Students, Kent School of Architecture

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RIGHT The Paris coat of arms

BELOW Paris Layers Image Credit: MA Urban Landscape Students, Kent School of Architecture

the early inhabitants of Paris as a natural defensive moat and PARIS: RIVERS & BOULEVARDS so was an early landscape influence on the morphology of the city. The marshy enclave of land that it surrounded became a known as Le Marais; it was drained in the 11th century and became one of the first areas of Paris to be developed when the settlement grew beyond the islands.

Over time, as the city grew, the banks were reinforced to protect the city from flooding and the backwash from passing boats. The river channel has gradually become narrower and deeper, and wharves for shipping were constructed. Trade and wealth followed, and powerful merchants organised themselves under the protection of the Guild of the Boatmen of Paris or Nautes Parisiens. This powerful corporation has played a prominent role in the city's politics, administration and economy through the centuries. They became responsible for the administration of the capital in 1260 and gave Paris its present coat of arms, a silver vessel which sails fiercely over the waters.

### Tributaries of the Seine

The Seine is not the only river that has helped to shape Paris; several secondary streams and water-courses also drained into the Seine (both north and south) within the urban centre of Paris. Although mostly hidden now in underground culverts, they have played their part in affecting the shapes and patterns of Paris and their strong presence is still evident in the street network, place names and the undulations of the urban landscape. These are gradually being mapped by the students to create a better understanding of the origins of the city.

The rivers of the right and left banks have differing characters and histories, although all played their part in bringing the Parisian communities to life and sustaining them by providing water and food supplies, navigation channels, power for mills and tanneries as well as a means of waste disposal.

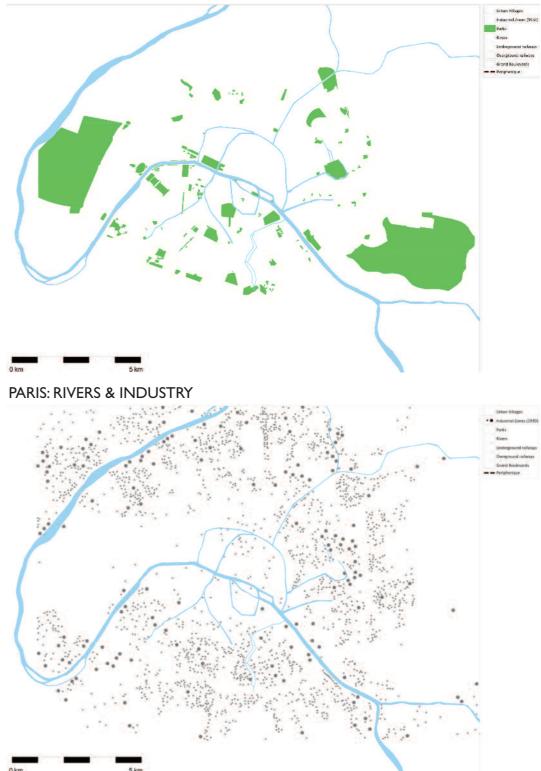
The Ourcq river for example, was adapted in the 17th century to become the Canal Saint-Martin, supplying Paris with water and enabling the transport of freight. The Stream of Montreuil once flowed from Montreuil to the Seine, and where it entered the main river became the present port of the Arsenal. The moat surrounding the fortress of the Bastille was fed by this stream but it has long since disappeared under Paris.

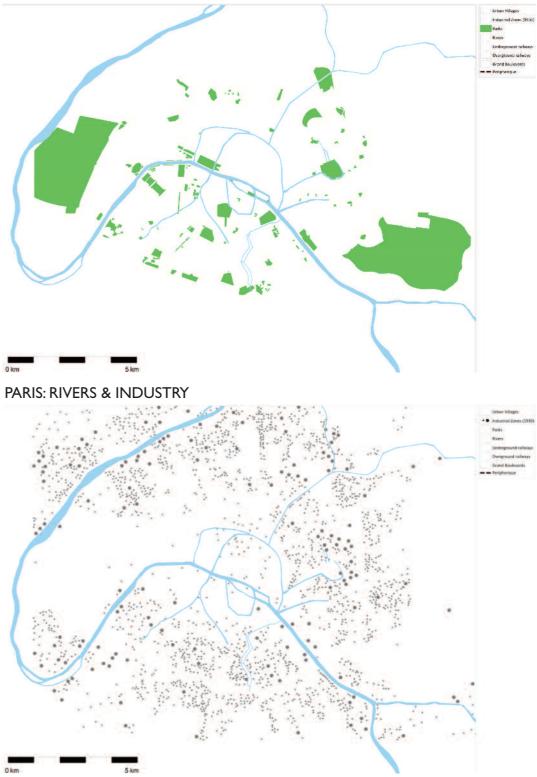
The 'lost' rivers have also provided many of its most notable and historic place-names. La Grange-Batelière was covered by the street of the same name. Le Ruisseau du Bac was a small creek located in what is currently the 7th Arrondissement and owes its name to a ferry which existed here before the construction of the Royal Bridge. It was culverted long ago, but its course can still be traced by the Rue 5 km

### PARIS: RIVERS & URBAN VILLAGES



### PARIS: RIVERS & GREEN SPACES





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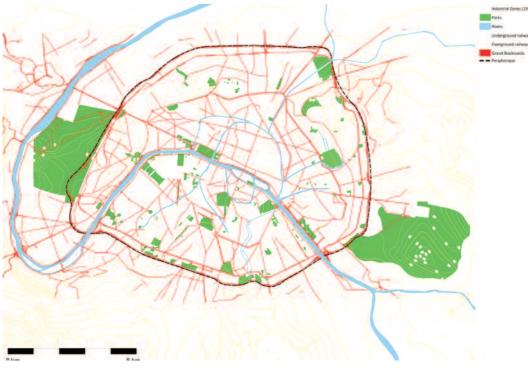
RIGHT: Map of Paris 1615

**BELOW:** Historic photos of La Bievre Image Credits: Jean-Baptiste Gallot et Alain Passerel

ing up opportunities for new growth and intensification, through the redevelopment of former industrial land. La Bièvre, once the largest and most important tributary river in Paris, became the subject of our more detailed study.

As Paris began to expand and industrialise, the Bièvre was harnessed as a resource for drinking water, food and transport, and communities began to grow along its banks. The original course of the river was deliberately split into divergent waterways to create more river frontage, and in the process many islands (or 'llôts') were created between the numerous channels. The river and the islands referred to above are no longer visible, but their role in the history of Paris is very significant; the neighborhood around Les Gobelins in the 13th Arrondissment became a focus for tapestry makers, textile fabricators, cleaners, dyers and other similar craftsmen who needed abundant water to do their work. Unfortunately, over time these businesses dumped large amounts of waste into the river's once-clear waters. Centuries of overuse and abuse from the businesses that depended on the Bièvre polluted it so badly that it became a foul smelling danger to people, thick with industry waste and the blood of animals. In 1875 Haussmann decided that the Bièvre was a health hazard for Parisians and had to go; by 1912, the Parisian half of the river was completely covered over and the urban Bièvre is now 'lost' within the sewage system.

# PARIS: RIVERS, GREEN SPACES & BOULEVARDS



PARIS: RIVERS, GREEN SPACES, BOULEVARDS & URBAN VILLAGES



# PARIS: RIVERS, GREEN SPACES, BOULEVARDS, URBAN VILLAGES & INDUSTRY

>>> du Bac which was built above it.

Given the city's massive growth in

the 18th and 19th centuries, the

need to rid Paris of its waste dictated

that the central tributaries were cul-

verted as part of the Paris drainage

system. Le Ruisseau de

Ménilmontant that once descended

from the hills of Belleville,

Montmartre and Pre-Saint-Gervais

and circled the hill of Menilmontant

was channeled and transformed in

the sixteenth century into an open

sewer known as 'Le Grand Égout'. The

course of the river was modified and

channeled into a large loop around

the northern limits of the city, fol-

lowing the original course of the

redundant meander in the Seine.

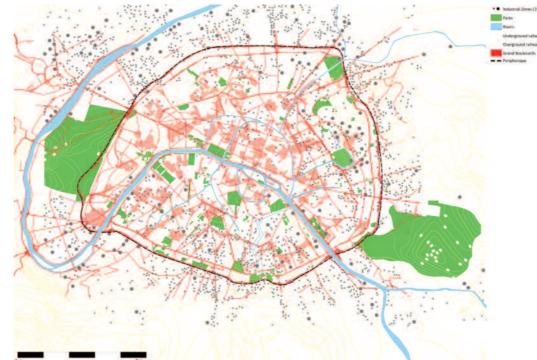
Today Les Grands Boulevards of Paris

In the post-industrial era, it is these

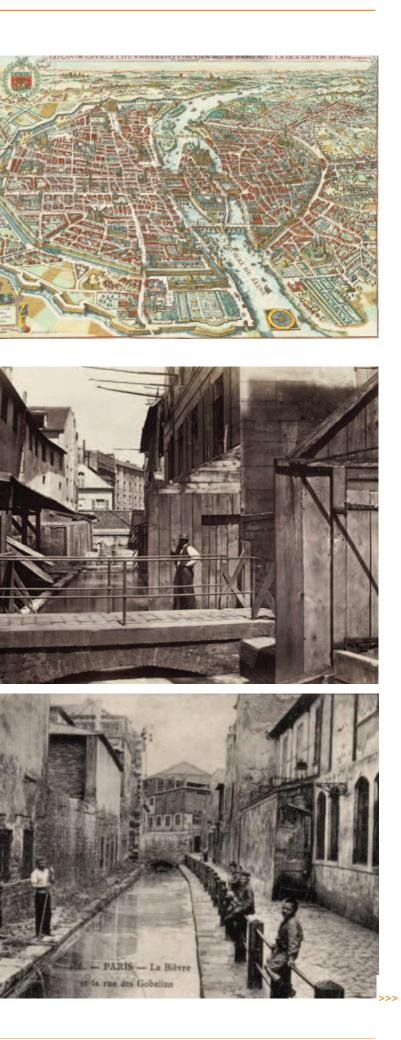
tributary river valleys that are offer-

follow largely the same route.

A Masterplan for La Bièvre



55 Planning in London



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deliberately emphasise the shapes and patterns of the original watercourse, and existing buildings that were originally designed to sit alongside of the river are retained and reused in the plan.

The overall proposal is a collaboration between the whole group, and was conceived to be implemented incrementally as a series of inter-connected 'mini-masterplans'. The compo-



nent parts combine to create a successful masterplan for a newly-restored Bièvre valley that works as a whole, as well as a collection of discrete parts with their own individual urban character. Close collaboration between the group ensured that each section connects seamlessly with the neighbouring sections of those designed by others.

sec- making in an urban setting. Now begins the job of p

The masterplan celebrates the riverine nature of this part of to support and implement the masterplan...

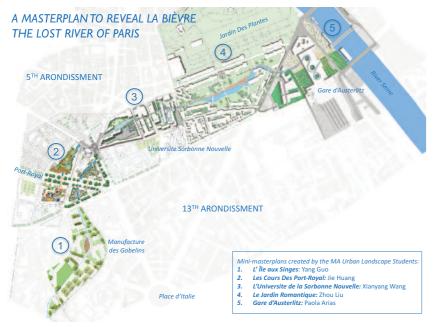
However, the disappearance of a river into the city sewers is considered by many local people today to be a loss. Although eliminated from the city, local residents have been calling for the Bièvre to be restored as a surface river and in 2003, approximately 200 metres of the Bièvre was re-opened upstream in the Parc des Près in Fresnessome.

In response to the historic importance of this part of Paris, the students undertook a detailed study of La Bièvre between River Seine and the 'Jardin des Gobelins' in the 5th and 13th Arrondissements. They researched and mapped many areas in detail, particularly those created in the second half of the 20th century where the neighbourhood has become impenetrable and disconnected from the surrounding context. However, even today there remain memories of the original course of the river and strong evidence of the growing interest in restoring this landscape feature.

In order to reveal what this part of Paris is capable of becoming, the students undertook to create a masterplan proposal that would celebrate the Bièvre valley and open up a newly-restored urban landscape. The new linear park they proposed would provide a healthier part of the city by opening up walking and cycling routes, new green spaces alongside the river and new development opportunities through transformation of the backlands.

BELOW: Combined mini-masterplans by students Image Credit: MA Urban Landscape Students, Kent School of Architecture

This masterplan exploits the possibilities offered by the site history as well as the sinuous curves of the hidden river. The new urban morphology of buildings and garden spaces



Paris and would help to restore the unique identity of the area. The project improves linkages throughout the area by revealing and harnessing the historic course of the Bièvre, and explores the positive role that the natural landscape can play in placemaking in an urban setting.

Now begins the job of persuading the good people of Paris support and implement the masterplan...

ABOVE: La Bièvre then and now Image Credits: Jean-Baptiste Gallot et Alain Passerel