



Good practice: creating a conceptual framework as a guideline for urban redevelopment

Introduction: a fruitful Brazilian-Dutch exchange

This article presents a good practice that resulted from the long-term cooperation and exchange between Brazil and the Netherlands in the context of the Shared Cultural Heritage programme. This project focused on heritage management and cultural landscapes, and in particular on urban planning and the redevelopment of Recife in Brazil. The city was founded in 1537 during the Portuguese colonisation of Brazil, and in the seventeenth century it became the capital Mauritsstad of the brief colony of New Holland, established by the Dutch West India Company with Johan Maurits van Nassau-Siegen as its governor. The part of the city today which corresponds to the former Mauritsstad is the Antônio Vaz island, in the historic centre of Recife.

Recife is situated in the delta of three rivers (Beberibe, Capibaribe and Tejiçó) and is made up of islands and mangroves. Its layout dates to the seventeenth century, when Mauritsstad was built and provided with bridges, dikes and canals to handle the geographic conditions. This layout constitutes the basis for Recife's urban structure, still readable today, and it embodies a shared heritage between Brazil and the Netherlands. One practice that revealed itself particularly successful in the context of this Brazilian-Dutch exchange was the development of a conceptual framework – the 'Water Tree' concept – that guided discussions and reflections concerning Recife's urban redevelopment.

The exchange of knowledge and expertise between the Netherlands and Brazil started in 2011, when professionals, professors and students from both countries and different fields (such as architecture and urban planning) came together to discuss future visions for Recife and Amsterdam, cities that share historical ties and a strong relationship with water. One goal of



The photo shows the Antônio Vaz island and some of the water systems and bridges that characterise the city (photo: Portal da Copa/ME / licensed under CC BY 3.0 BR).

this initial exchange (rXa) was to examine the potential of the Capibaribe river for addressing ecological and socio-economic issues, and to raise awareness of its role in structuring a complex water system. Following a first exchange in Amsterdam, the second took place in Recife in 2012. In 2019, the second edition (RxH2019), in the form of a workshop, focused on creating a vision of sustainable redevelopment for the Antônio Vaz island.

Between 2012 and 2019, the exchange continued through conference calls and email communication. This long-term project involved several partners in both countries, being the INCITI/ UFPE – Research and Innovation for the Cities (Federal University of Pernambuco) the executing agent. The Cultural Heritage Agency of the Netherlands has been part of this exchange since 2012, within the framework of the Shared Cultural Heritage Programme.



Workshop rXA in Recife, April 2012 (photo: Paulien Hartog).

Developing the Water Tree concept

The Water Tree concept was developed in 2012, and derived from the focus on the potential of the Capibaribe river. Before 2011, the water systems of Recife were not integrated into urban planning and redevelopment projects, despite the fact that they constitute the basis of Recife's urban structure. Many water ways in the city are occupied by construction work, roads and favelas, which can be seen as both cause and effect of a lack of consideration for Recife's water systems. Contrastingly, the Netherlands has a long history of working with water, and a tradition of integrating water in urban planning, design and redevelopment projects. This experience, and the discussions between the Dutch and Brazilian partners led to the realisation that Recife's water systems constitute a central part of the (historical) cultural landscape of the city, and represent great potential when thinking and planning its future. This realisation was the starting point for the joint development of the Water Tree concept during the workshop in 2012.

The Water Tree concept views the entire city of Recife as a large tree, taking into account the many structuring dimensions that make up a city, with water as the connecting element. The city is seen as a complex system composed of overlapping dimensions that create assets and difficulties: the built environment, vegeta-

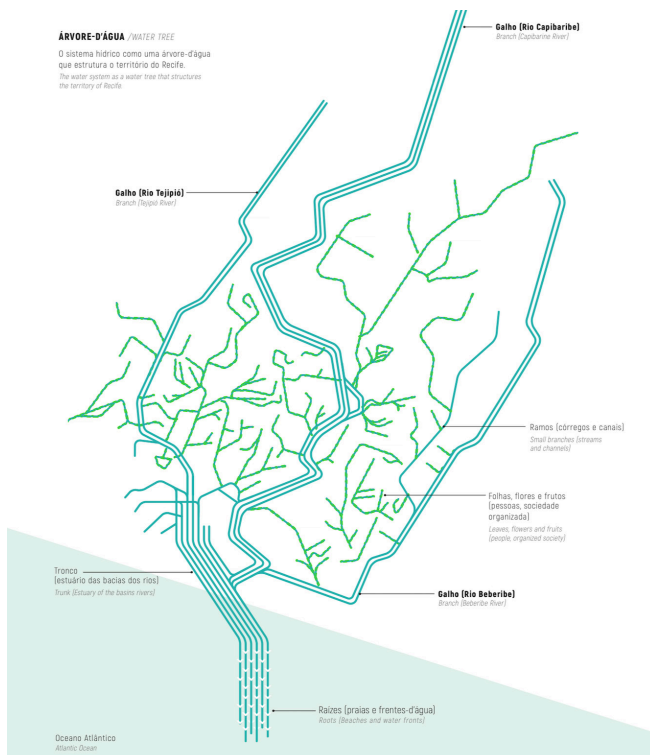


Results of the Baobab garden pilot project (photo: Luiz Vieira).

tion, water systems and topography. The Water Tree brings the city together under one narrative: beaches and waterfronts form the roots of this system; the estuary holds the city together like a tree trunk; the rivers distribute the water throughout the city like branches; and leaves, flowers and fruits represent the city's inhabitants and civil society.

The Water Tree, as a conceptual framework, is useful for understanding the city's origins and development, and its topography and built environment as an integrated system. It helps reconnect the city, within a narrative that takes Recife's natural and cultural heritage into account when considering the future of the city. The city's heritage stock and its historical centre combined support different stakeholders in finding and recognising mutual elements which function as a starting point. The Water Tree works as a guideline for initiating and developing long-term strategies that can be applied to any part of the city. As a narrative, the Water Tree enables stakeholders to realise more cohesion in the urban fabric and structure of Recife. Through this integrated concept, strategies and solutions to create a more liveable city can be developed to create spaces where people can meet, to improve sanitation, to create social housing, parks, biking routes and transport over water.

Central to the creation and development of this concept was the long-term cooperation and the reciprocal exchange of knowledge and expertise, practices and methodologies between the Brazilian and Dutch professionals, professors and students. Dutch experience with water management and urban planning revealed the potential of working with the water systems in Recife, in combination with a re-interpretation of the historic urban landscape, which represented an important change of perspective for the Brazilian partners. On the other hand, the Dutch partners gained an understanding of the added value of developing a concept that regards a city as an integrated system, with the potential to guide



An illustration of the Water Tree concept (image: Amélia Paes/Thiago Lyra).

long-term strategies and actions for urban planning and redevelopment projects. Hence the use of such an instrument has since been advocated in the Netherlands.

Application of the conceptual framework

After the development of the Water Tree concept, the Brazilian partners set out to implement it in practice. This started in two parts of the city and resulted in specific actions within the Capibaribe Park Project – The Reinvention of Recife City Park (2013-2020) by the INCITI/UFPE, contracted by the City Hall of Recife. First an extensive study was carried out to assess the situation of the Capibaribe river and its relationship to the surrounding urban spaces, which led to the establishment of guidelines that were applied to a pilot project, the Baobab garden. In practice, the water banks that were in use by parking lots were recovered to create more liveable spaces.



Construction taking place in the Graças neighbourhood (photo: Luiz Vieira).

A second intervention was carried out in the neighbourhood of Graças, upon request of the local residents. Several busy roads were transformed into routes with more vegetation, where walking and cycling became possible. These two interventions, although different and located in different parts of Recife, were carried out keeping in mind the structuring narrative and integrated vision encapsulated in the Water Tree concept. They have allowed to open up and oxygenate parts of the city, by creating public spaces that are more liveable, open and in contact with nature.

During the 2019 workshop, the Water Tree concept was applied to the island of Antônio Vaz. This phase represents the consolidation of the concept, after years of experimentation and development. The area was approached as a landscape where different systems overlap: the red system (referring to traditions, cultural heritage, etc.), the blue system (rivers, canals, etc.) and the green system (mangroves, protected areas, public spaces, etc.). These systems were first identified individually and when thinking about strategies for redevelopment, came together to complement each other. These strategies included, for example, the creation of an integrated crossing connecting one point of the island to the other through green, public spaces (encapsulated in the term “crossing”), and the creation of usable waterfront areas for residents (“bordering”). This project resulted in the “Ilha de Todos” vision (Everyone’s Island). Particularly during this workshop, the structuring force of the Water Tree concept became clear to both Brazilian and Dutch partners.



Crossing, walking, irrigating, bordering and pulsing constituted the integrated strategies encapsulated in the “Ilha de Todos” project (image: Luiz Vieira)

A sustainable practice

The Water Tree concept proved itself a good practice throughout the course of this Brazilian-Dutch exchange, and its implementation to different parts of the city. Its main advantage is that it provides architects, urban planners, policy makers and other professionals an integrated narrative and vision of the city. Part of its success derives from the fact that different stakeholders identify and share different parts of the narrative of Recife,



Participants of the workshop 'RxH 2019' on 2 September at the Marco Zero Square in Recife (photo: Ariano Rodrigo).

therefore creating a mutual framework. The creation of such a conceptual framework is valuable for understanding a given urban space, and it provides a common starting point and guidelines for coherent future developments, particularly when new challenges arise and urban interventions are needed.

Because it was thought of in relation to the city as an integrated system it allows one to focus on different parts of the city, while

maintaining consistency. Hence the Water Tree concept constitutes a sustainable practice for integral spatial planning and urban design. The development of such a conceptual framework could be done in any urban space, when adapted to the specific urban, cultural and natural characteristics of a place. In the case of the Netherlands, for instance, there are plans to make use of such an instrument when the suitable opportunity arises.

Questions?

Please send an email to Frank Altenburg, f.altenburg@cultureelerfgoed.nl or have a look at our website <https://english.cultureelerfgoed.nl/topics/shared-cultural-heritage>

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