A RIVER RUNS THROUGH IT

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The revitalization of Momposino public spaces through water.

COMMITMENTS

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Participatory work in Mompox led to several agreements and new ideas for urban space design. It has been an opportunity for the city's inhabitants to rethink how they interact with the flooded environments of this amphibious landscape of high biodiversity in one of the tributaries of the Magdalena River.

Due to its geographic location on the Magdalena riverbank, Mompox has a long history of flooding that has taken over its spaces. Although these do not endanger the lives of the area's inhabitants, they significantly affect people and businesses' mobility. Likewise, hotel occupancy does not reflect the attractiveness that - one might suppose - is implied by the fact that the city was declared a World Heritage Site by UNESCO in 1996. Faced with this panorama, architects from Opus proposed a landscape, urban and architectural project to revitalize the urban axis of La Albarrada de Mompox, Bolívar.

Carried out within the framework of the Mompox Special Management and Protection Plan (PEMP after its name in Spanish), the project proposed the intervention of 2.7 km in length and an area of approximately 180,000 m², including the Santa Barbara, San Francisco, and La Concepción squares. Despite their initial skepticism towards the project, the city's inhabitants contributed to adjusting, rethinking, and improving many of its components through different instances of participatory work. And together with the Ministry of Culture and the local mayor's office, they rethought their relationship with water.

Thus, the people of Mompox found spaces to rethink their dynamics with the flooded areas, to make them more productive and beneficial. Therefore, the city has managed to boost its economic development, considering its historical heritage as an amphibious community that knows how to interpret and respect the bodies of water with which it coexists. In this sense, the process results also outline a broader form of heritage, a **living heritage** that transcends physical structures to contemplate a landscape, a cultural legacy, and a way of inhabiting a territory such as the Momposina Depression.

DESIGN AND COMMUNITY: THE FIRST MAJOR CHALLENGE

In its pilot phase alone, the project faced its most tremendous controversy: the community's claim of not being part of the objectives, the intervention criteria, and the decisions that were being made about their spaces. In response to this need, a **participatory design** strategy was created, which involved meetings with the inhabitants of each sector to be intervened, representatives of the mayor's office, local media, members of the tourism industry, the history academy, urban collectives, school principals and teachers, and vendors.

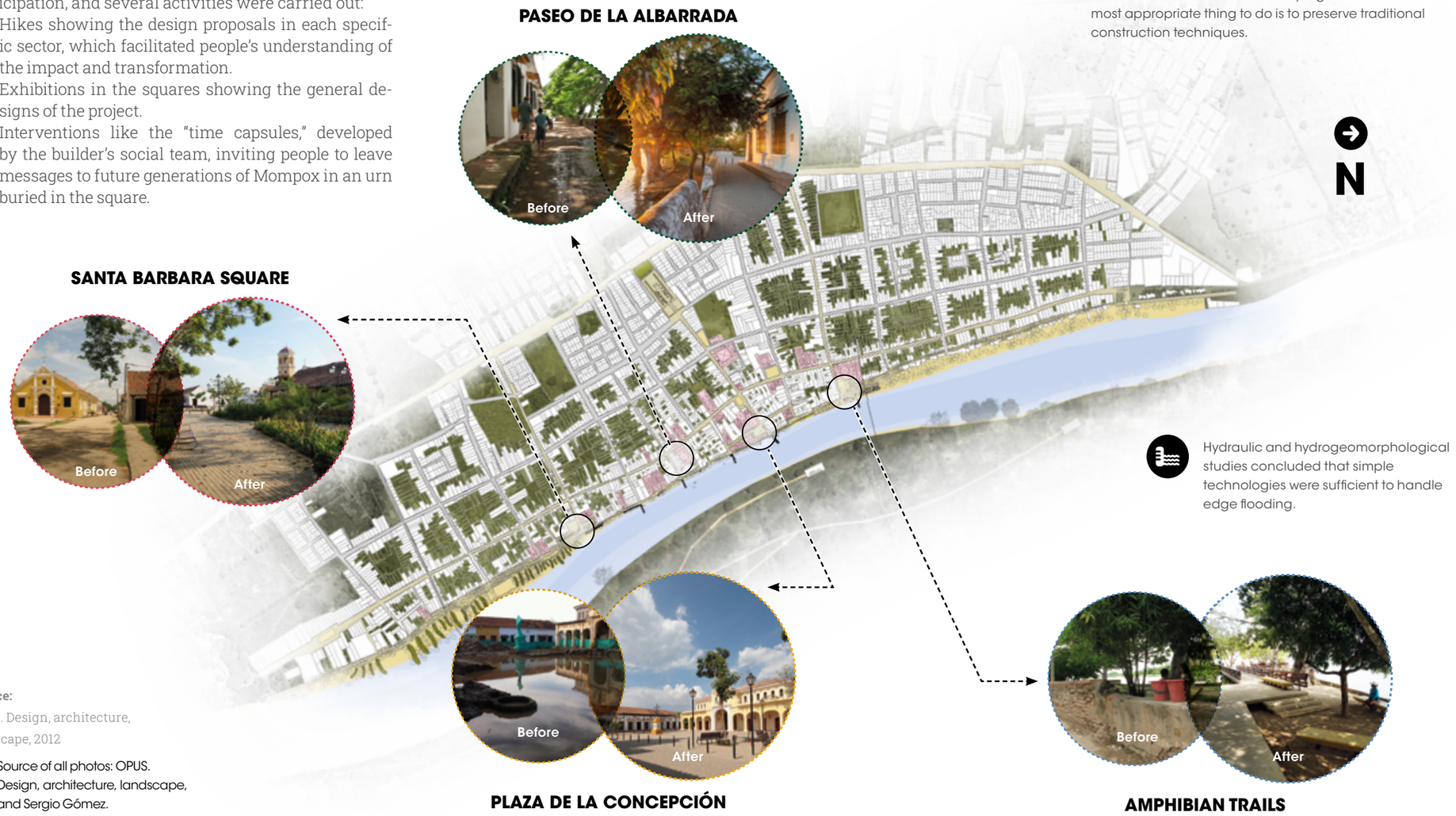
The public space was also used as a platform for participation, and several activities were carried out:

- Hikes showing the design proposals in each specific sector, which facilitated people's understanding of the impact and transformation.
- Exhibitions in the squares showing the general designs of the project.
- Interventions like the "time capsules," developed by the builder's social team, inviting people to leave messages to future generations of Mompox in an urn buried in the square.
- Technical talks about the project (e.g., on the results of the hydraulic studies).
- Design workshops with the Mompox Workshop School.
- Exhibitions on the archaeological findings that resulted from the works.

This outreach and cooperation effort led the project's new street furniture to be designed with local materials and techniques (such as the bollards that evoke local goldsmithing with the filigree technique). Species of cultural value according to the community, initially discarded because they did not represent a significant ecological value, were also considered:

- Golden Shower Tree. *Cassia Fistula*.
- Cañaguate (Tecoma,Yellow Bells). *Tecoma Spectabilis*.
- Royal Poinciana. *Delonix Regia*.
- Elephant's Ear Tree. *Enterolobium Cyclocarpum*.
- Rosy Trumpet Tree. *Tabebuia Rosea*.
- Rain Tree. *Albizia Saman*.

Soft structures are not always the answer to flooding. There are not enough public resources for soil maintenance in cities like Mompox, whose buildings may be several hundred years old and where the water table fluctuates and reaches very high levels. So the most appropriate thing to do is to preserve traditional construction techniques.



Hydraulic and hydrogeomorphological studies concluded that simple technologies were sufficient to handle edge flooding.

Source:
OPUS. Design, architecture, landscape, 2012

Source of all photos: OPUS. Design, architecture, landscape, and Sergio Gómez.

FROM DEFENSE TO COEXISTENCE: FLOOD MITIGATION STRATEGY

The main proposal to mitigate flooding consisted of moving from a static to a dynamic design concerning the water: amphibious design. The project incorporated water cycles into its aesthetics and functionality by rethinking the city's relationship with the river. This changed the logic of the city's conventional flood risk mitigation infrastructures: the walls and the *jarillones* (longitudinal mounds).

Inspired by the *camellones* (ridges) of the **Zenú society**, the project employed biotechnologies such as **geotubes**, flexible tube-shaped structures made of high-strength woven geotextile with unique filtration and retention properties. This intervention was based on hydraulic and hydrogeomorphological studies, which concluded that complex works such as retaining walls were unnecessary, and rather efforts should be focused on simple technologies.

KEY LESSONS

Although the project design incorporated existing native and culturally valuable vegetation to define the space and conserve biodiversity, conflicts between humans and wildlife began to arise, for example, with the appearance of the blood snake in one of the project's gardens. Therefore, it was necessary to rethink the ecological connectivity proposal and the creation of undergrowth in some of the gardens.

Professional knowledge must be complemented with local knowledge and uses. An example of this was the work of tree planting in squares to reduce the temperature and provide spaces for new outdoor businesses.

A correct interpretation of the ecological dynamics of the territory can give better results than the conventionally accepted alternatives to phenomena such as flooding. For example, strategies to permeabilize the soil, such as rain gardens, are not viable in the historic center of Mompox. The water table of the Magdalena River is highly fluctuating, so seepage would destabilize the ground, putting at risk the foundations of the city's three-century-old buildings. Therefore, no changes in drainage patterns were sought in these sectors.

Although the municipality's economic, social, and spatial dynamics have changed a lot, and the inhabitants have accepted the challenge of opening up to cultural tourism and ecotourism, it is clear that the physical transformation of the space is not enough. Other tools (e.g., training) are needed to improve the local economy.