



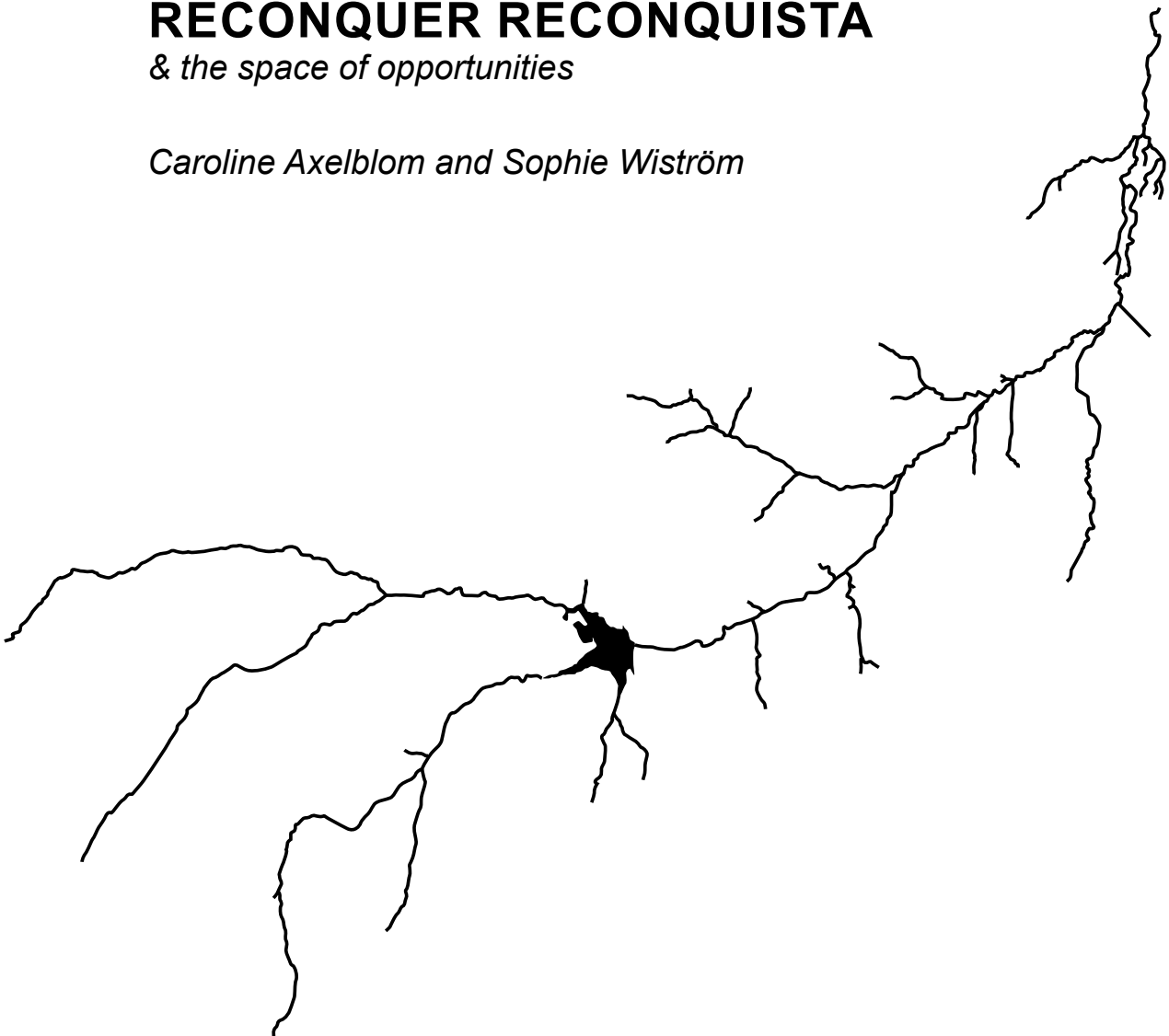
Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Landscape Architecture, Horticulture
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RECONQUER RECONQUISTA

& the space of opportunities

Caroline Axelblom and Sophie Wiström



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PROLOGUE

The issue of global challenges such as climate change is present in our minds. Both the landscape architects and urbanists disciplines work with an arena where the global challenges impact the spatial organization of society. This thesis is written as a part of the collaboration named '*Critical Urbanity: Water cities – Marginal cities*' between Facultad de Arquitectura, Diseño y Urbanismo (FADU), University of Buenos Aires (UBA) and the Swedish University of Agriculture (SLU). The project aims to educate designers about complex problems and urban development, reaching towards inclusive urban landscapes especially in regards to water related areas.

Participating in this project has enabled us to grow as designers by broadening our understanding of site as a dynamic relational construct. In this process we have constantly altered between reflecting upon the chosen site, the mental object, and experiencing the site.

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*Architecture, Visualization and
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Landscape Architecture



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COMIREC welcomed us in their head office in La Plata, and stirred up a discussion regarding the future of our case study but also provided us with a yet to be released report concerning our site. The Municipalities of Hurlingham and Morón have shared important material for our thesis with us and we thank them for their accommodating way of welcoming us to see their future plans.

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To our Dear and Loved ones', we look forward to see you again after this thesis submission <3

ABSTRACT

This study explores the narratives of the Reconquista's river basin in the greater Buenos Aires Metropolitan Area, in particular the Morón River - the main polluter. The aim is to explore how to design counteractive narratives in regards to the current development. The method is partly derived from the Travelling Transect, a method developed by Lisa Diedrich, Gini Lee and Ellen Braae since 2013. The method is adjusted to fit the specific conditions concerning the river Reconquista.

The complex challenges operate at a global scale which also affect the Reconquista and therefore needs to be addressed. This is done by exploring space, or the simultaneity of ongoing stories-so-far. Trajectories on site are identified and studied as challenges and opportunities.

The operating narratives lead to an unsustainable development which generates informal settlements and pollution. The New Urban Agenda offers a solution in the form of a value codex that points out the direction for the new narratives. Emscher park as a reference case provides tools on how to conceive a transformation. The key findings are juxtaposed into new narratives that challenge the existing reality.

The thesis contributes to the ongoing discussion regarding the river's future development by constructing new narratives. The result is the designed narratives, enabling a new future.

ABSTRACTO

Este estudio explora la narrativa de la cuenca de la Reconquista en el Gran Área Metropolitana de Buenos Aires, en particular el río Morón, el principal contaminador. El objetivo es explorar cómo diseñar narrativas contrarias en relación con el desarrollo actual. El método se deriva en parte de Traveling Transect, un método desarrollado por Ellen Braae, Lisa Diedrich y Gini Lee (2014). El método se ajusta para adaptarse a las condiciones específicas del río Reconquista.

Los complejos desafíos operan a escala global, lo que también afecta a la Reconquista y, por lo tanto, debe ser abordado. Esto se hace explorando el espacio, o la simultaneidad de las historias en curso, hasta el momento. Las trayectorias en el sitio se identifican y se estudian como desafíos y oportunidades.

Las narrativas operativas conducen a un desarrollo insostenible que genera asentamientos informales y contaminación. La Nueva Agenda Urbana ofrece una solución en forma de un código de valor que señala la dirección de las nuevas narrativas. El parque Emscher como caso de referencia proporciona herramientas sobre cómo concebir una transformación. Los hallazgos clave se juxtaponen a nuevas narrativas que desafían la realidad existente.

La tesis contribuye a la discusión en curso sobre el desarrollo futuro del río mediante la construcción de nuevas narrativas. El resultado son las narrativas diseñadas, lo que permite un nuevo futuro.

TRAVELLING IN THE WORLD OF NARRATIVES

INTRODUCTION

**RECONQUISTA
SOURCE OF
POLLUTION**

THE PRESENT RIVER
NARRATIVE

**URBAN
SUSTAINABILITY**

GUIDING VALUE
CODEX

Searching for loose ends

Searching for direction

Background

Aim & Research Question

Limitations

Theory

Method

Two cities in one

Buenos Aires neglected its
rivers

Wastescape Reconquista

Sustainable development

goal 11 & The New Urban
Agenda

The Global Value Codex

**FROM EMSCHER
TO
EMSCHER PARK**

REFERENCE CASE OF
TRANSITION

Searching for tools

Three phases
Emscher's transformation
tools

**RECONQUISTA
SOURCE OF
SOLUTION**

TRACING
TRAJECTOIES
TOWARDS A NEW
RIVER NARRATIVE

*Searching for a
sustainable future*

Tracing trajectories
The New Narrative
Reconquer Reconquista
Manifesto
Actors Network
Strategies
From source of pollution to
source of solution

DISCUSSION



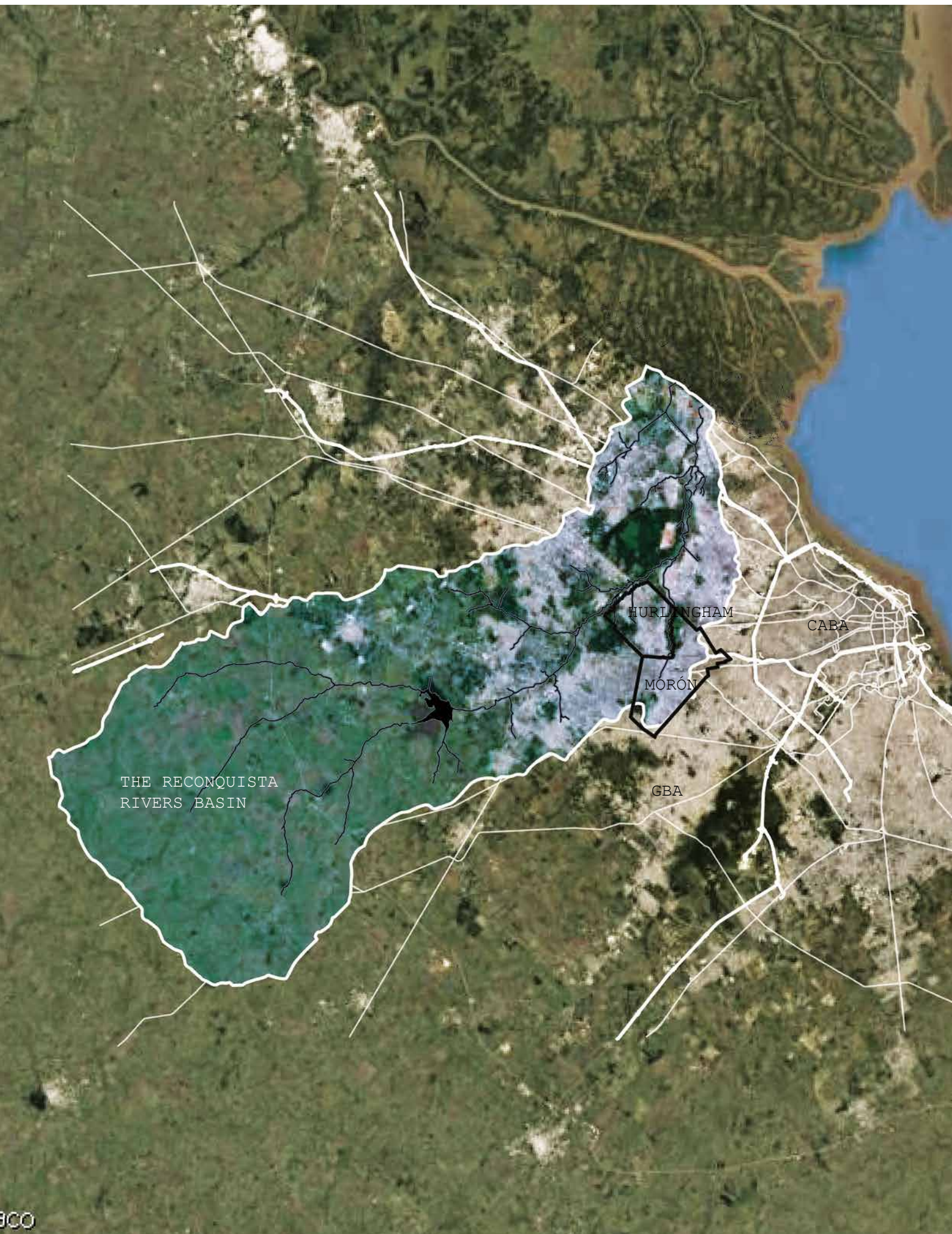
INTRODUCTION

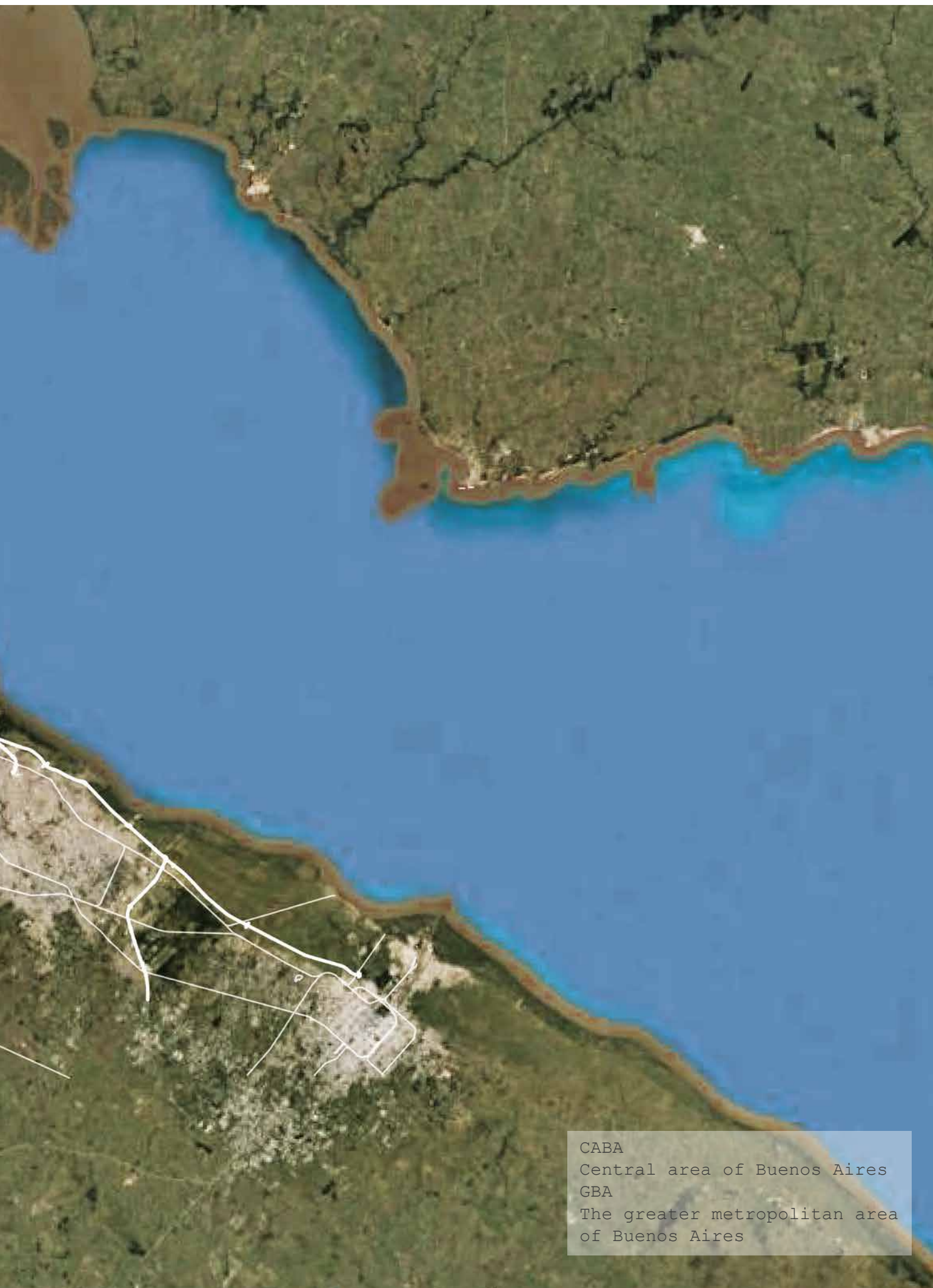


MALMÖ

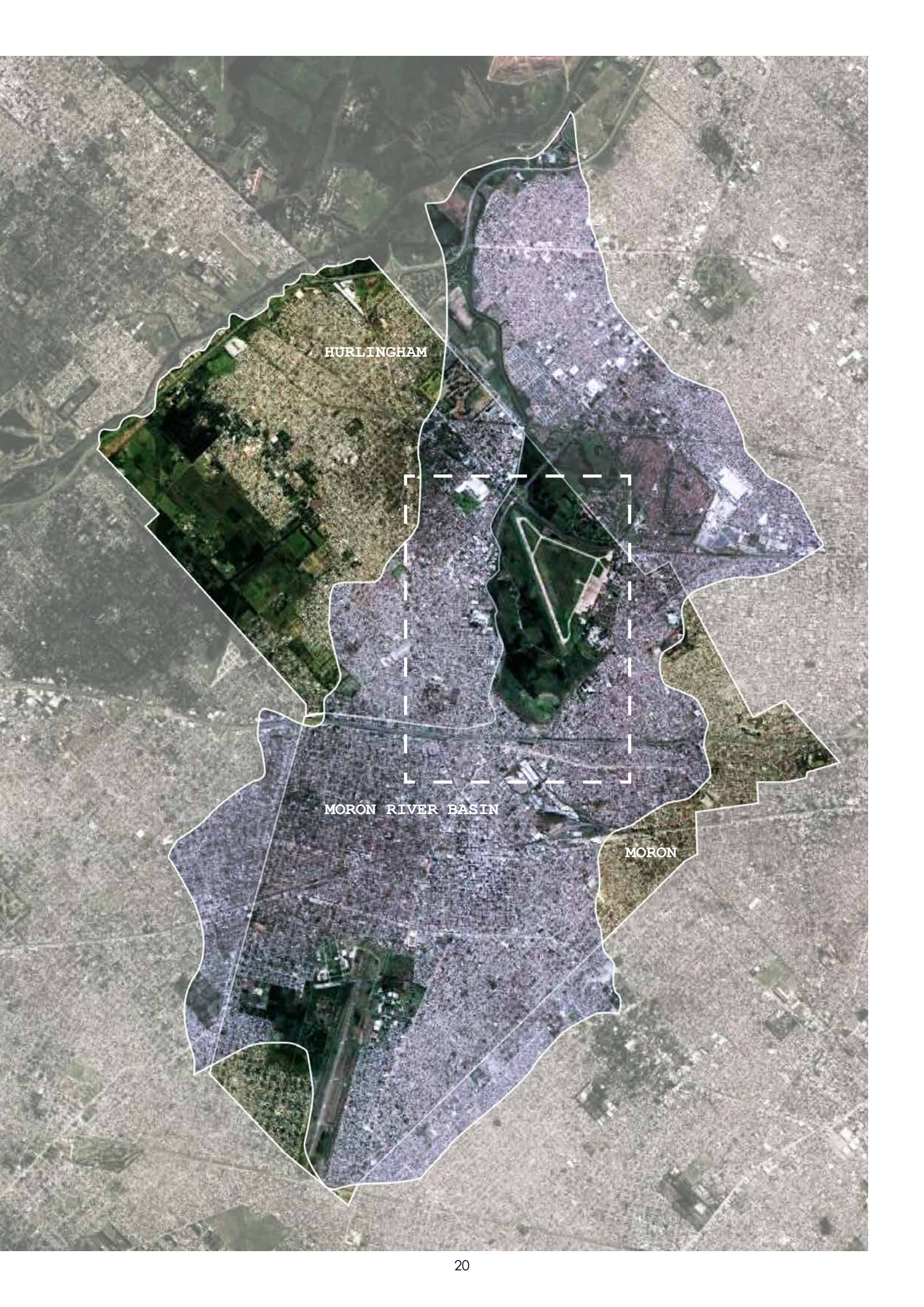
BUENOS AIRES







CABA
Central area of Buenos Aires
GBA
The greater metropolitan area
of Buenos Aires





THE MORÓN RIVER

THE MORÓN RIVER
PIPED UNDERGROUND

BACKGROUND



HIGH-PERFORMANCE OUTCOMES DEMAND A MUCH MORE INTEGRATED COLLABORATIVE APPROACH FROM ARCHITECTS, ENGINEERS, AND OTHER DESIGNERS [...]. A UNIFIED, MORE TEAM-ORIENTED DESIGN AND CONSTRUCTION PROCESS BRINGS TOGETHER VARIOUS EXPERTS EARLY IN THE GOAL-SETTING PROCESS. THIS INTERDISCIPLINARY APPROACH, IN EFFECT, QUICKLY COORDINATES VARIOUS TYPES OF PROFESSIONAL EXPERTISE AT THE START OF A PROJECT, RATHER THAN IN SEQUENTIAL DEVELOPMENT, MAKING A DEPARTURE FROM PAST PRACTICES. DURING DESIGN DEVELOPMENT, INPUT FROM USERS AND OPERATORS CAN ACCELERATE PROGRESS ELIMINATE REDUNDANT EFFORTS, ENGENDER COMMITMENT TO DECISIONS, REDUCE ERRORS AND IDENTIFY SYNERGISTIC OPPORTUNITIES

Burns 2005:307

Deriving from different disciplines but with common points of interest, we met at SLU in 2017, both with many questions concerning the future development of our common world. How do we (as professionals) handle the many and complex issues that we are facing at a global scale? How do we mitigate and adapt climate change, social inequality, and create economic wealth? Can we narrate a positive story from all of these complex challenges. We broaden our perspective of a narrative by embracing our differences to tackle the complex nature that today's issues consist out of.

Our perception of space has ramifications. If we see land as open and empty, it can be crossed and conquered. The imagination of space has social and political effects. Seeing space as the earth, land and sea, continuous and given, allows us to perceive place, people and culture as a phenomenon on the surface. This fairly innocent act deprive them of history. By challenging our understanding of space as a surface, we allow for different histories to meet up. Space is described by the feminist and marxist geographer Massey (2005) as a simultaneity of stories-so-far. How we orient ourselves in the ongoing stories affects the development. A window for new stories to be told opens up.



WHAT IF WE OPEN UP THE IMAGINATION OF THE SINGLE NARRATIVE TO GIVE SPACE
(LITERALLY) FOR A MULTIPLICITY OF TRAJECTORIES

Massey 2005:5

THE COMPLEX REALITY

The unsustainable story

The world is too complex to handle using a conventional autonomous disciplinary approach. How could one possibly fit all the world's challenges into one solution, traditionally defined within one single discipline. It is self evident that an approach with several solutions better answers to the tangled up problems facing our world today. Narratives hold the multiplicity of trajectories and can mirror the complexity through adding dimensions that represent the reality in more than one way. In these trajectories we find the alternative stories, which could offer solutions to the complex challenges of unsustainability.

Cities constitute many contradictory interests and aspects. Here operate a variety of scales, actors with different agendas, counteractive stories and ideas, but also concrete issues, and problems that cannot be tackled with one, repeated procedure. Handling issues of climate change,, which is beneficial from an environmental point of view, could meet opposition from an economical perspective. This derives from what story we start with, what perspective do we choose. Increasing levels of mobility and migration are fuelling a rapid urbanisation, Katz, Altman & Wagner (2007) ask if the world is able of addressing the environmental crisis of global warming and climate change, and move on to stating that urban growth has aggravated the environmental pressures. Urbanisation affects social conditions and challenges which also could be solved differently depending on what your priority as the focal point of solution. These creates a hierarchy were some aspects might be neglected

depending on the expected outcome. Tackling the complex problems that cities hold is difficult for any autonomous discipline. For cities to prevail, generalists who see a holistic picture of connections between challenges are needed, and who advance on multiple objectives at the same time. New methodologies to capture the complexity of cities are advocated for (Katz et al. 2007). Orienting oneself in space of trajectories, one chose which story is being told. The act of neglecting an issue can both be done purposely and unintentionally, in the sense that one might favor the ecological perspective and disregard the economic perspective.

// *CITIES ARE NOT BLACK AND WHITE, BUT SHADES OF GREY, INCREASINGLY BLURRING THE LINE BETWEEN THE WORKING WORLD AND THE LIVING WORLD, INFORMAL AND FORMAL ACTIVITIES*

Katz et al. 2007:480

The forces of globalization tied the world closer together, meanwhile others were left out. The shift in the economical discourse from keynesianism to the epoch of privatizations, deregulation and open borders all relates to the systemic edge (Sassen 2014). Which is not tied to geographical borders but the global drivers. This switch of the dynamics can easily incorporate people and in the same move push people out. A new systemic logic arises from the declining political economy of the 20th century. The decay started in the 1980s as the welfare state was being subverted in the West and many Latin American countries. Today economic growth play a more vital part than during the nation-building era. Growth was a means to increase the welfare, even though some benefited more than others. The country's economic space decreases but the corporational opportunity of making profit expands. This era which was known by social and economic inclusion did also take place at areas that are now thought of as hopeless and beyond rescue (Sassen 2014).

Sassen (2014:215) wish to make visible the "moment of expulsion". How people have been evicted from their land because of large scale corporations profit that materialize as slums in the megacities.

Complexity is a foundation in the relationship between economy, politics, nation-states and the shift in ideologies from communism to capitalism, which makes it hard to allocate the source of the problem. There is a correlation between the complexity of a system and the chance of anyone in the system to feel accountable. Today we do not have enough well-developed tools to interpret the system and to trace the links of causality within it.



THE TOOLS WE HAVE TO INTERPRET THEM ARE NOT UP TO DATE, SO WE FALL INTO OUR FAMILIAR CATEGORIES: WE TALK ABOUT GOVERNMENTS THAT ARE NOT FISCALLY RESPONSIBLE, HOUSEHOLDS THAT TAKE ON MORE DEBT THAN THEY CAN HANDLE, CAPITAL ALLOCATIONS THAT ARE INEFFICIENT BECAUSE THERE IS TOO MUCH REGULATION, AND SO ON

Sassen 2014:216

The obscure trends that crossway the established concepts which we use to explain our economies and societies, creates a material moment of when the complex dynamic expel people outside the systemic edge. The instruments that enable the expulsion gets absorbed by reinforcing trajectories which positioning itself at a distance from the previous age of incorporation an increasing middle class (Sassen 2014:116).

The assemblages of powerful actors, markets, technologies, and governments creates different formations that governs the trajectories that enable the expulsion. Sassen describes that not even the most powerful actors can fully control these assemblages, they are juxtaposed of many different components that generates new dynamics outside the institutional scene that are out of reach for the source institutions. These sorts of institution is not a new phenomenon in the history of mankind but what is notably today is the complexity of key factors. For instance the emergence of financial tools that cut across a variety of economic sectors to coerce their own logic. Regardless of the previous shape or aim they adapt to the new order. Another major instance is the supreme environmental degradation. The ecological destruction hits hard on the entire earth and affect places and fluxes that never was involved in the demolition (Sassen 2014:220-221).

Sassen (2014) describes how major dynamics cut across different systems which generate expulsions at different places. The systemic edge is defined as a space of expulsion in today's world. In the past Sassen explain how the systemic edge in contrast was a space of incorporation (ibid. 221). She concludes with stating that spaces of the expelled needs a conceptual recognition. Since they are increasing in numbers and are hidden in the conceptual subterranean an effort is needed to make them visible. The conceptual space is full of possibilities, they are provided with potential of being new spaces for making.

RESPONDING TO THE COMPLEXITY

The Discipline of Landscape Architecture

The discipline of landscape architecture is responsible for designing spaces and places which will accommodate the complex challenges of our time. Sustainable development requires more than using sustainable design technologies. Design is a cultural act, embedded with social values. Landscape shape our behaviour, enabling social routines and spatial practices, that are present in our daily life, when walking to the store and commuting to work. Landscape is an aesthetic experience that can affect human's environmental ethics. Cultural values are transformed into forms and spaces that affect humans, by challenging, amplify or convert our ideas and perception of beauty. Elizabeth Meyer (2008) writes that landscape moves people and create behavioural changes which can awaken awareness, engagement and activism. Other tools than rationality is fundamental to achieve a change of policies and manners. Imagination and engagement are vital for the implementation and creation of a new reality. The aesthetic experience of landscape can move people and create a behavioural change that requires more than data can convey (Meyer 2008).

The challenges expressed in the New Urban Agenda regarding flood risks in low lying lands are striking examples of problems in global south cities, leading to Buenos Aires, a city prone to flood risks due to its geographical location. Buenos Aires is built on flatlands and has large urban areas along river courses; the Río de la Plata in the east; the Riachuelo in the south; the Maldonado in the city centre; and the Reconquista in the north. The rivers add another challenge, that of pollution through industrial and domestic waste discharging into the watercourses.

WASTESCAPE

The Reconquista river

A collaboration project between The Swedish University of Agricultural Sciences (SLU) and The Facultad de Arquitectura, Diseño y Urbanismo (FADU), University of Buenos Aires (UBA) was set up in 2015 in order to research the Reconquista river. The Reconquista landscape is characterized by injustice and plagued with social, environmental and ecological challenges. Wastewater from 3 million inhabitants along with 12'000 industries are causing pollution in the Reconquista. The population of the basin is estimated to be 171,900, and 2'400 families have a high degree of social-environmental vulnerability, many of which

The suffix *-scape* promotes the apprehension of an extensive view or a representation, pictorial or close, of land-based conditions. In recent theoretical examinations, *-scape* has been serving as to highlight more abstract aspects beyond the physical and visible, to embrace the intangible forces that impact upon the human dimension.



live in informal settlements (COMIREC 2017). The Reconquista river is divided into three basins and has 134 watercourses connecting to the 82 kilometers long river. The second basin is densely populated and has suffered hard due to floods since the 1940s caused by intense agriculture cultivation (Álvarez 2010). Connecting to the second basin of the Reconquista river is the Morón tributary, which has the worst measured water quality in the whole catchment area (COMIREC 2017), and runs in large between the municipalities Morón and Hurlingham but also Tres de Febrero.

During a visit to the planning office in municipality of Morón we were informed that the Morón river is the biggest pollution source to the Reconquista river. The Morón river is 16 km long and one of the main tributaries of the Reconquista river, of which the first 4.5 km are piped. The Morón river drains the urbanized and industrialized area next to it. The river is located in the middle basin of Reconquista, which has characteristics typical to a plain course that affects the frequency of flooding, influenced by rainfall which has increased in Argentina since the late 1970s, and indirectly by fluctuations from the Paraná river and the tides of the La Plata River (COMIREC 2017). The submerged and piped stream runs through Morón municipalities residential areas, and is unable to take care of intense rain and as a result floods take place in these highly populated areas.

Emergency changes has been done to increase the flow runoff to avoid flooding, but further long-term work to adapt the Morón river is needed (COMIREC 2017). Today, the Morón river offers services and is being used as a sewer, but the potential to offer more is there and will be explored in this thesis.

The middle and lower sections of the Reconquista river have been canalized with embankments and a pumping system to reduce the risks of flooding in adjacent areas. The natural environment has been modified (the greatest transformation took place during the 20th century) and most of the streams are partly piped. The alteration of agricultural land to urban land has led to fragmentation and loss of natural ecosystems and the loss of agricultural land among other environmental consequences (COMIREC 2017). In the Morón river basin, the natural environment is entirely modified by man. Both flora and fauna have declined, and the fauna is now existing within in the urban environment except for two areas, the Urban Reserve of Morón and the base area of the Palomar airport. COMIREC defines the Morón river as an urban basin within a metropolitan area of mixed non-green urban and suburban quality fabrics.

The context of the Morón river becomes the point of departure for our understanding of the problems that paves the story of Reconquista. By studying the operating challenges in Morón river a broader understanding of the driving forces behind the current situation in Reconquista can be achieved. This ambition requires an exploration of the Reconquista river basin and the greater metropolitan area of Buenos Aires. By exploring the operating narrative, insightful knowledge regarding the site specifics emerge. The key aspects of the present narratives will assist the creation of an alternative narrative for the future development. To change the current untenable patterns, the source of pollution; the Morón river, needs to become the source of solution. For this to become a reality, the development needs to change course using a non- autonomous disciplinary approach. A distance to the standardized site discourse can grow through acknowledging the existing narratives and constructing a new narrative. But first we need our place to become a site, which can be done through advocating for a change using a new narrative. Taking the narratives into account means acknowledging the place's social relations, and thereafter constructing a new narrative with care helps the place turn into a site. A constructed narrative can serve as a tool for developing a place into a site, and furthermore into a more sustainable site through being open to new impressions, finding the site specifics and turning the expulsion around.

AIM & RESEARCH QUESTION

This research's aim is twofold: 1) to explore the potential of narratives as a method for sustainable urban transformation (method design), and 2) to propose a transformation of the Morón river, resulting in a new narrative (narrative design).

The landscapes of the polluted Reconquista basin in the greater Buenos Aires Metropolitan Area are studied, in particular the landscapes of the Morón River - the main polluter. We wish to gain a broader understanding of how a narrative as a method can be adopted at this site in order to resist the present paradigm of homogenous development and turn it into a more sustainable future.

Research question:

WHAT NARRATIVES CAN INITIATE THE TRANSFORMATION OF THE RECONQUISTA RIVER LANDSCAPES?

THEORY

Theory can help us unveil unknown situations. For the purpose of this thesis we are looking into theories regarding narratives and how narratives intersect with site. Building our theoretical foundation around a concept of narrative, place, site, space and transformation helps us to better understand the case we are studying.

// THE NARRATIVES OF THE WORLD ARE NUMBERLESS. NARRATIVE IS FIRST AND FOREMOST A PRODIGIOUS VARIETY OF GENRES, THEMSELVES DISTRIBUTED AMONGST DIFFERENT SUBSTANCES - AS THOUGH ANY MATERIAL WERE FIT TO RECEIVE MAN'S STORIES. ABLE TO BE CARRIED BY ARTICULATED LANGUAGES, SPOKEN OR WRITTEN, FIXED OR MOVING IMAGES, GESTURES, AND THE ORDERED MIXTURE OF ALL THESE SUBSTANCES, NARRATIVE IS PRESENT IN MYTH, LEGEND, FABLE, TALE, NOVELLA, EPIC, HISTORY, TRAGEDY, DRAMA, COMEDY, IME, PAINTING (THINK OF CARPACCIO'S SAINT URSULA), STAINED-GLASS WINDOWS, CINEMA, COMICS, NEW ITEMS, CONVERSATION. MOREOVER, UNDER THIS ALMOST INFINITE DIVERSITY OF FORMS, NARRATIVE IS PRESENT IN EVERY AGE, IN EVERY PLACE, IN EVERY SOCIETY: IT BEGINS WITH THE VERY HISTORY OF MANKIND AND THERE NOWHERE IS NOR HAS BEEN A PEOPLE WITHOUT NARRATIVE. ALL CLASSES, ALL HUMAN GROUPS, HAVE THEIR NARRATIVES, ENJOYMENT OF WHICH IS VERY OFTEN SHARED BY MEN WITH DIFFERENT, EVEN OPPOSING, CULTURAL BACKGROUNDS. CARING NOTHING FOR THE DIVISION BETWEEN GOOD AND BAD LITERATURE, NARRATIVE IS INTERNATIONAL, TRANSHISTORICAL, TRANSCULTURAL: IT IS SIMPLY THERE, LIKE LIFE ITSELF

Barthes 1966

ONCE UPON A TIME...

Narrative: The ongoing stories

We are constantly recipients of narratives, from the world surroundings us, from cellphones and magazines, books and movies as well as family and friends. Abbott explains how we all encounter narratives everyday, and they exist in all human phenomenon and activities that involve representation of time (Abbott 2008).



WE ARE ALL NARRATORS, THOUGH WE MAY RARELY BE AWARE OF IT

Abbott 2008:4

The main function of a narrative is its ability to organize the human perception of time. In contrast to how the sun, or a watch expresses the consecution of time, a narrative allows for the events to organize the order of time. Humans use narratives to read and perceive the world, even when we look at something static, like a picture, narratives simply come into play. We compose what we see by asking what is there and how it happened (Abbott 2008:6-7).

Narratives are presented as the “representation of an event or series of events” (Abbott, 2008:13). The events or actions are the linchpin of the construction. There are inseparabilities whether the narrative is dependent on one or a variety of events, but the component of time is inevitable. A narrative discourse emphasis an adaptive interpretation of the events. Its perceiver can encounter a narrative presented in a plural of orders, and still reorganize it in their minds to construct a story. Therefore a narrative does not have to be presented in chronological order to make sure that our minds will comprehend the story. Even if a series of actions is presented backwards we will most likely to be able to organize its order. A narrative is the representations of actions or events, which consists out of story and narrative discourse. The story is the sequence of events and the narrative discourse is the representation of events (Abbott 2008).

WHERE IS THE SITE

Site operates at a variety of scales

The fundamental values are mirrored in the designers way of approaching a site, the methods reflect the imagined future. The mental approach permeates all the following steps in the design process. Therefore our understanding of site is pivotal for the project outcome and the larger urban system. How does a site constitute its area and interact with the adjacent landscape? Even the smallest

square in a city connects to the larger city-building project. Site is represented by a variety of boundaries and multiplicity of scales at once.

Andrea Kahn, professor in Architecture at Columbia University and guest professor at SLU, explains that site is often misconceived as one simple entity with fixed boundaries. Physical conditions influence the given site and the final project. Design has the ability to recognize influential conditions, such as geological, hydrological, topography, drainage and other features. Large systems operate with the given site through various scales. When conceiving site through time, Burns & Kahn distinguish three distinctive areas; firstly, the *area of control* which is found within the stated borders of the plot. The second is the *area of influence* which encompasses forces affecting the site. The last domain is the *area of effect* which covers the impact of the changed conditions. The concept of site encompasses contradictory understandings and demands a dynamic process of working with time, limitation, driving forces and spatial definitions (Burns & Kahn 2005).

REWRITING NARRATIVES

Place turns into site



ALL SITES EXIST FIRST AS PLACES

Beauregard 2005:39

A site is a representation of space, and a social construct. It is therefore conceived from the human relations and the complexity they hold. How the places are imagined is preconceived, in the sense that the perception of places constructs narratives. Regardless of one's relation to a place, even though it has never been seen on site, it still tells a story. If nothing else, at least it might be seen as distant, obscure or mysterious. This story allows for an alienation of the place, perhaps as uninhabited and free to take. To perceive a place as empty is to say that it is free from content and prior construction. But a place is never empty of stories.

By incorporating place in an urban development project, it becomes site. Narratives are found embedded between the planner or designer and the site. Although they can be neglected, there they are, because places hold narratives. Our imagination of a place is preconceived, in the sense that our perception of a place assists in constructing narratives. The perceived narrative effects the planner's or designer's approach towards the place, and how they move forward from it. Narratives operate in plural, there are a myriad of stories, competing

with each other, often with contradictory content. The planner and designer hold certain narratives closer due to their personal views, professional ability, knowledge and experience. At the same time the narratives offers a richness that can be turned into creative opportunities (Beauregard 2005).

Beauregard (2005) states that place comes before site, and that through telling a convincing story, a place can developed into site. Planners and designers take control of a place by collecting, twisting and constructing narratives. By modifying place, site comes into be. The process consists out of removing the contradicting stories and preconcievements so that they can be replaced with a representation that is simplified and coherently aligned with the dominant story.

// A SITE IS A SOCIAL CONSTRUCT, A REPRESENTATION OF SPACE. IT IS CONCEIVED APART FROM THE COMPLEXITY OF HUMAN RELATIONS. IN EFFECT, A SITE IS A PLACE THAT HAS BEEN DENATURED, FORMALIZED, AN COLONIZED, ITS MEANING MADE COMPATIBLE WITH THE RELATIONS OF PRODUCTION, STATE IMPERATIVES, AND THE ORDER THAT BOTH IMPLY

Beauregard 2005:40

Beauregard encourages designers to include nonprofessional understandings and ongoing stories, *adding* meaning instead of *subtracting*. The narrative constructions of sites differ. The end result of the site depends on the input of stories and the filtration by the designer and the encompassing discourse. Beauregard clarifies that no development can take place until the site is under control, and by reducing the preconceived narratives the site is controlled.

The discipline of landscape architecture has had an ongoing shift from perceiving sites as static to fluctuating and integrated with each other (Corner 1999; Burns & Kahn 2005; Braae & Diedrich 2012). A site can therefore not be defined by the borders disconnecting it from its surroundings (Burns & Kahn 2005). When understanding a site, one should therefore also pay interest to the adjacent area. Physical conditions of the surroundings have both direct and indirect effects on the site, since the site operates within a system of conditions. Understanding this opens up for a possible dialogue between sites concerning how they relate to each other. Considering this, Burns & Kahn (2005) state that site is a dynamic relational construction.

A SIMULTANEITY OF STORIES-SO-FAR

Space

Massey (2005) draws a few propositions for how one can recognize space. Firstly she sees space as a product of interrelations, *“from the immensity of the global to the intimately tiny”* (Massey 2005:9). Secondly space is seen as a sphere of possibilities that constitutes the existence of plurality, it is the domain where a variety of different trajectories coexist. *“Without space, no multiplicity; without multiplicity, no space”* (Massey 2005:9). Finally Massey states that space is constantly under construction, and therefore it is forever evolving. *“Perhaps we could imagine space as a simultaneity of stories-so-far”* (Massey 2005:9).

To imagine space as a constant process sounds as if it goes hand-in-hand with the modernist idea of a linear, constant progress. Though that is not what Massey sees in space, instead one should accept space as relational, and be open to different paths in order to genuinely change a linear development, and make a real difference instead of moving towards what has always been “known”. It is a way of no longer legitimizing a development solely on the basis that it has always been done that way. Imagining space as a realm of opportunities and possibilities recognizes heterogeneity and says that the world can not be told as one. The story of the white heterosexual man is not the only story there is. These stories challenge the preconceived image of an all-embracing perspective, and add dimensions through the stories of others. If space is open, it allows for new juxtapositions. Space then becomes a product of relations, and to make this possible there must be multiplicity. Despite this there is not a coherency among the trajectories, space does not imply that everything is related to everything else. Space can never be arranged so that all relation are connected to one another, this would entail a closed holistic system. Instead, space is made out of loose ends with missing links.



THE IMAGINATION OF GLOBALISATION AS A HISTORICAL QUEUE DOES NOT RECOGNISE
THE SIMULTANEOUS COEXISTENCE OF OTHER HISTORIES [...] AND FUTURES [...]

Massey 2005:11

When using the terms *“trajectory”* or *“story”* Massey wishes to highlight the process of change. Her understanding of space opens up for an alternative imagination of the world. Space needs to be removed from the constellation of concepts surrounding it which are of static nature and instead be connected with more challenging ideas, as contemporaneously and heterogeneity. This change would awaken more challenges and new possibilities.

THE COMPLEXITY OF SPACE

The simplicity of maps

Maps are an archetype of representation. The representation is understood as a spatialisation. They order the representation and follow a taxonomic procedure. Maps operate as *technology of power*. Massey (2005) point out an inherent problem to the map, the complexity with portraying space as a surface. Spaces can be described as *a sphere of a dynamic simultaneity, constantly disconnected by new arrivals and waiting to be determined (and therefore always undetermined) by the construction of new relations*. Space is constantly being produced and reproduced, and is therefore never complete, though that was never the goal.

// IF YOU REALLY WERE TO TAKE A SLICE THROUGH TIME IT WOULD BE FULL OF HOLES, OF DISCONNECTIONS, OF TENTATIVE HALF-FORMED FIRST ENCOUNTERS

Massey 2005:107

We sometimes say that “everything is connected”, which Massey explains as a metaphor for a political reminder that our actions have consequences, but this is a simplification of space. We should rather think of space as if there exist connections “yet to be made, juxtapositions yet to flower into interaction, or not, potential links which may never be established” (Massey 2005:107). We constantly orient ourselves between “loose ends and ongoing stories” (Massey 2005:107). Space can therefore never reach a state where all interconnections are linked together.

A map could never let someone drive off the edge into the unknown, but space as Massey (2005) presents it, does precisely that. Spatial configurations, or unconnected narratives, can be interlinked and at the same time previously connected ones can be wrenched apart (Massey 2005:111). This ongoing chaos is understood as the “chance of space”. This spatiality allows for a variety of temporalities and other voices, which must find accommodation. There is a question of how the chance of Space responds to the chaos. Massey states that space is undecidable due to “the spatial configuration of multiple (and indeed complex and structured) trajectories” (Massey 2005:113). Space is not a horizontal surface of closed composition, but is made up by intertwined open trajectories which can be connected.

// UNLIKE TIME, IT SEEMS, YOU CAN SEE SPACE SPREAD OUT AROUND YOU. TIME IS EITHER PAST OR TO COME OR SO MINUTELY INSTANTANEOUSLY NOW THAT IT IS IMPOSSIBLE TO GRASP. SPACE, ON THE OTHER HAND, IS THERE

Massey 2005:117

Space is easier to comprehend than time, space is understood as something material, while temporality is rather a dimension of change. Time is the abstract interior in relation to space, which has an extension, the face of the earth. To comprehend the relation behind the two concepts Massey gives the examples of when one travels by train. There are traces of history buried everywhere, if one starts to dig, sometimes it is also evident by a castle, a fort, a rivers shape or any object from a historical period. Space is a product of social relations so we are constantly not only travelling across space, but actually transform it. When travelling through space one is simultaneously contributing to the constructing of space. One is constantly taking part of the ongoing process of connecting and disconnecting links, the open trajectories (Massey 2005).

THE LAND OF TRAJECTORIES

Landscape offer solutions

Hille von Seggern, Julia Werner & Lucia Grosse-Bächle (2008) write that all disciplines must look for new strategies when designing complex development processes. Landscape architecture is a creative discipline and its main mode is design. The discipline is broad enough to manage everyday phenomenons, and sufficiently grounded in engineering and natural sciences to include it as a part of sciences. This two sided ability makes the discipline suitable for initiating development processes that can support a successful life while also promise a good future. The design process answers to the question of how to link ongoing processes. Design can both act and innovate, especially in cases of complex, non-linear systems with uncertain development to serve a transformation of the landscape (Seggern et al. 2008).

The active landscape

The term landscape can accordingly to James Corner (1999) be used in a number of trajectories, generally defined as beyond an idyllic scenery. What has been reaffirmed and examined is that landscape is not equivalent to land or environment, but a less “quantifiable object that is an idea, a cultural way of seeing, and as such it remains open to interpretation, design and transformation” (Corner 1999:4). The term landscape can be described as “...diverse and rich, embracing urbanism, infrastructure, strategic planning, and speculative ideas alongside the more familiar themes of nature and environment” (Corner 1999).

Corner suggests that landscape design projects can serve as tools to intervene in cultural conventions. The Landscape shifts from being a cultural product and becomes an agent which empower and enriches culture. Landscape is then

seen as an activity or a process, instead of an object or a scene. Landscape could be identified by the formal features but by enhancing the formative effect of landscape seen in relation to time, it becomes an Agent. The Agent affects how the landscape operates and what it does. In the development process of making landscapes, the formal characteristics may depend on the specific situation and the given conditions. Although the vital aspects are how the shapes and geometry respond to the issues raised while entering the project. Landscape architecture offers an instrumental function to design projects that might shape the evolution of culture and how it relates to the surrounding world (Corner 1999).

The Landscape idea is never detached from physical space. Landscape space is inseparable from culture and milieu, it affects how we act and perceive the world. One must remember that both the idea and artifact of landscape is neither static or stable and the idea changes with culture and over time. Neither the physical appearance or the values are fixed (Corner 1999).

// *Landscape is an ongoing medium of exchange, a medium that is embedded and evolved within the imaginative and material practices of different societies at different times*

Corner 1999:5

The importance of aesthetics

The discipline of Landscape architecture holds the potential and the responsibility to design the solutions that will accommodate the future. Landscape research and design is the arena where awareness could awaken, as well as acceptance and engagement to handle the plurality of complex relationships that have emerged in the current epoch. Meyer sees that beauty can play a vital role for the sustainable agenda, the aesthetic experience embedded in landscapes could enlighten the public. Beauty affects our psyche, offering one to contemplate on the world outside. *The Somatic experience of beauty could inculcate environmental values to the perceiver* (Meyer 2008:17). The experience of beauty is found somewhere in between the sense and reason. The process transform people, the unfolded, unknown relationships between the human and non-human. Beauty changes us, provokes us, challenges us and makes us act (Meyer 2008).

The battlefield is found at the edge

Denis Cosgrove sees that multiperspectivism has accompanied the postmodern era. No longer can one raise the advantage of the single story or represent one world, instead one may rather encounter an infinity of local stories, which are

spatial, social and personal. These individual stories simultaneously deconstruct and construct the fixed spatial framework. Implacably, the economy and technology are compressed through space and time, simultaneously erasing the local and familiarizing the exotic (Cosgrove 1999).

// CONTEMPORARY PHYSICS TELLS US THAT SPACE-TIME ITSELF IS WARPED AND THAT GEOMETRIES ARE NO LONGER A SIMPLE MATTER OF GRIDS AND GRATICULES, OF VERTICAL AND OBLIQUE, BUT OF INCONCEIVABLE MULTIDIMENSIONALITY. IN THIS THEY CORRESPOND TO THE PRACTICALITIES OF EXISTENCE FOR AN EVER-INCREASING PROPORTION OF LIFE ON EARTH, NOT ONLY HUMANS MOVING ACROSS ITS SURFACE, PHYSICALLY IN PASSENGER JETS OR VIRTUALLY THROUGH THEIR MODEMS, BUT ALSO OTHER FORMS OF LIFE - ANIMALS, PLANTS, BACTERIAS, INDIVIDUAL ORGANS - ALL INCREASINGLY MIGRANT, CIRCULATING, AND CONNECTING IN PATTERNS BEYOND THE SCOPE OF GRAPHIC REPRESENTATION

Cosgrove 1999:118

Cosgrove says that in the discipline of Landscape architecture, as in every other academic field, we find the most critically intriguing questions at the frontier, which no longer exist due to the postmodern era. Today these boundaries are found in the ecotone while moving in nature, and socially where identities merge and hybrids dominate. Current landscape design is influenced by geometry of global imagery (Cosgrove 1999).

LISTEN TO THE ONGOING STORIES

The power of narratives

Braae & Diedrich (2012) write that transformation through the design lenses can be defined as one unfixed state changing into another unfixed state. Transformation is linked to the existent, but also indirectly linked to theories of preservation and connect the past, present and future. Transformation can be differentiated to traditional design act through its “ability to create a dialogue with the existent”, and as such focus on “enhancing relations between the nostalgic/place-bound and the un-nostalgic/nomadic, between the material and the immaterial, and between the present (including the past) and the future” (Braae & Diedrich 2012).

// TRANSFORMATION, CONVERSELY, TAKES THE EXISTENT AS ITS POINT OF DEPARTURE AND OSCILLATES BETWEEN FINDING OUT WHAT IS THERE AND TESTING WHAT IT COULD BECOME, CONSIDERING THE READING AND THE WRITING TO BE TWO REFLEXIVE AND MUTUALLY CONSTITUTING PROCESSES. THIS DOUBLE REFLEX CAN BE UNDERSTOOD AS CREATIVE ENGAGEMENT IN THE SITE THROUGH OPEN PROCESSES BY MEANS OF INTERVENTION.

Braae & Diedrich 2012:24

The Reconquista river is literally at the edge, facing poverty, pollution, climate change and expulsion from society. Sassen (2014) suggests that places of the expelled need conceptual recognition. The space of expulsion needs to be made visible to highlight the possibilities they hold. The conceptual space holds many potential opening, or loose ends as Massey puts it, which can be transformed into spaces for making. From which new stories and ideas can blossom (Sassen 2014:222).



THEY ARE, POTENTIALLY, THE NEW SPACES FOR MAKING - MAKING LOCAL ECONOMIES, NEW HISTORIES, AND NEW MODES OF MEMBERSHIP

Sassen 2014:222

Reconquer Reconquista aims to design a narrative, a story that shapes the immaterial, creating new trajectories that explore new land in people's minds. The new narrative prepare for a later potential design intervention on site - the conventional design project.

METHOD

The work has a qualitative nature, hence it is not aimed at confirming or rejecting a hypothesis. Instead it is exploratory, and its logic inductive rather than deductive through using an interpretative approach. The following text is divided into three parts: Experiencing the operative narrative, literature study, and the compiling of the first two results in the final component - the design of a new narrative: Reconquer Reconquista.

EXPLORING NARRATIVES

In the Reconquista river landscapes

This research draws upon studio work regarding the site, literature about the site, interviews with actors active on the site and site visits. The case study has not been conducted from any systematic methodology, but has been inspired from the Travelling Transect method apart from occasions when we were unable to perform it as it is described and therefore had to adapt it to our study.

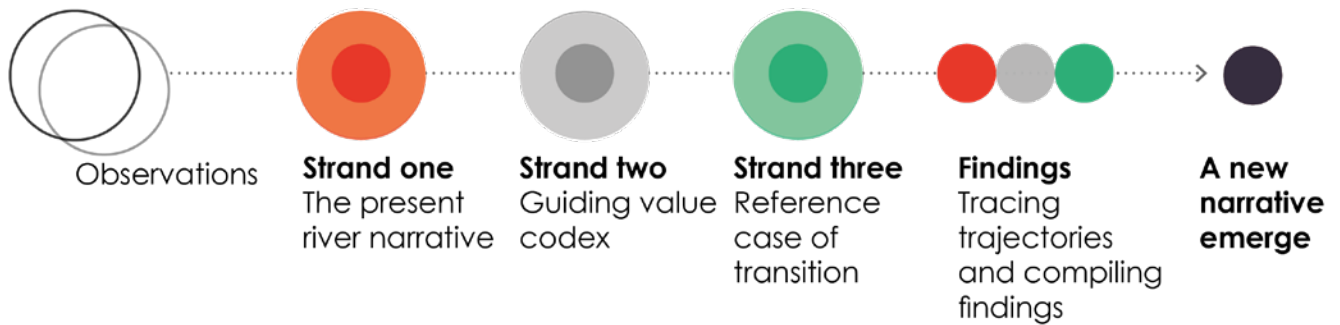
The site visits contribute to our personal reflections of the site and the situation in need of improvements. They also gave a great insight in the people affected by the existing conditions.

The literature regarding the site has been collected from the actors with connections to the site. It has been provided partly from lectures in FADU, contributing to an understanding of the city's complexity in which this thesis navigate. Literatures regarding the specific site have been retrieved from actors whom we have met with, such as COMIREC who were kind enough to share their not yet published report on the Morón river, contributing with valuable intelligence on floods, pollution and the geographical locations of these. Atlas de la Basura shared their work on the mapping of open dumps in the area and industries whose discharge has negative impacts on the river.

The collected data in this thesis consist of studio work on site, site visits, interviews with site actors and literature about the site. When analyzing and processing the data it was important to attempt to grasp the potential cause and effect of the problems encountered. The operating narrative is not exclusively constructed out of facts or figures but from data concerning personal, social and cultural experiences through the sharing of imaginations of the Reconquista.

Data collected during site visits have been processed through a qualitative

The study area



content analysis in order to examine certain attributes or characteristics in the present river narrative (Reconquista source of pollution). We therefore approached the data found in meetings and literature, and extracted parts that were meaning-bearing to the aim of our thesis. These parts are named *Findings* in our thesis. When conversing with people we took on a latent approach with some, which demands an interpretation of what is being said, and a manifest approach with people who have represented an organisation instead of an individual interest. What was interesting to our thesis was to collect their site specific knowledges to add to the amount of narratives collected. We took notes during the conversations and correlated it with other findings.

Throughout our thesis we construct diagrams to seek a broader understanding of the processes enabling the Emscher transformation and Reconquista's present state. By using Edward Tufte's method of juxtaposing a multitude of dimensions we ended up with visual illustrations of multiple data. The analytical diagrams present the relation of causality between different events and how they relate to each other over time.

Imagining space as a sphere where a multiplicity of trajectories as Massey (2005) suggests, provided the possibility of creating a new narrative. "The loose ends and the ongoing stories" (Massey 2005:125) which coexist in space, create instruments to navigate in the narrative space of Reconquista. The research aim is to explore and transform narratives, hence a definition of the term is needed. Narrative is understood as the perception of an event over time. It is not a singular noun, and therefore this thesis is aware of the existence of the plurality of narratives in the Reconquista. Representing the vast range of narratives is an impossible undertaking, and we therefore conclude to present our perceived narrative of the site, in singular.

By exploring Reconquista's current narratives' open ends, or opportunities if one prefer, and ongoing trajectories, we allow for a new set of connections. A constructed narrative partly derives from the findings encountered by travelling in the operating narrative of Reconquista. But to construct the new narrative, we also find directions and tools. A literature study of The New Urban Agenda assists with a value codex showing possible directions and of the transformation of Emscher to Emscher Park which provide tools for constructing a new narrative.

To comprehend the narratives of Reconquista and Emscher by understanding the correlation between events, the change of actions are traced by analytical

diagrams.

“Reasoning about evidence should not be stuck in two dimensions, for the world we seek to understand is profoundly multivariate” (Tufte 2006:130). Through adding dimensions, the representation is closer to the complex reality. In the process of understanding and constructing narratives with the help of Tufte’s analytical way of representing a situation, facts and general views are shown in relation to each other and overlapping to highlight the causality that could transform a narrative. The developed diagrams of the operating narrative of the Reconquista and the successfully transformation of Emscher are studied and merged together with our directions from the New Urban Agenda, which allows us to find and suggest potentially important components that could push forward a transformation of the Reconquista. The causality diagrams could be viewed as Tableau Physiques, containing pictorial representations of the complex narratives we encountered and comprehended.

STRAND ONE
Experiencing the present narrative

Data is gathered to apprehend the operating narrative of the Reconquista and find vital drivers. The site is understood as both a physical area, but also as a discursive space of Reconquista. Therefore the Travelling Transect is conducted both within our Area of control and Area of influence. Various approaches are then required in an exploration of the narratives of Reconquista.

Defining site

Applying Kahn’s site theory to our area results in the following:

Area of Control

The Morón River became the Area of Control since it holds a great potential in affecting the issues on a larger scale. Being a the largest contributor to the pollution in the Reconquista meant that it is a logical first step in dealing with the challenges that Buenos Aires faces on a larger scale.

Area of Influence

Narrowing down the exact Area of Influence into one area has proven difficult, therefore it is studied at different scales - the municipal level, the provincial level and also briefly on a global level. The Area of Influence also encompasses its history which is still affecting the Reconquista today. Still today, history has a way of telling stories about places and the story reader acts accordingly.

MARCH

Morón municipality
Morón River
Tigre Delta
San Martín, informal settlements
Río de la Plata

APRIL

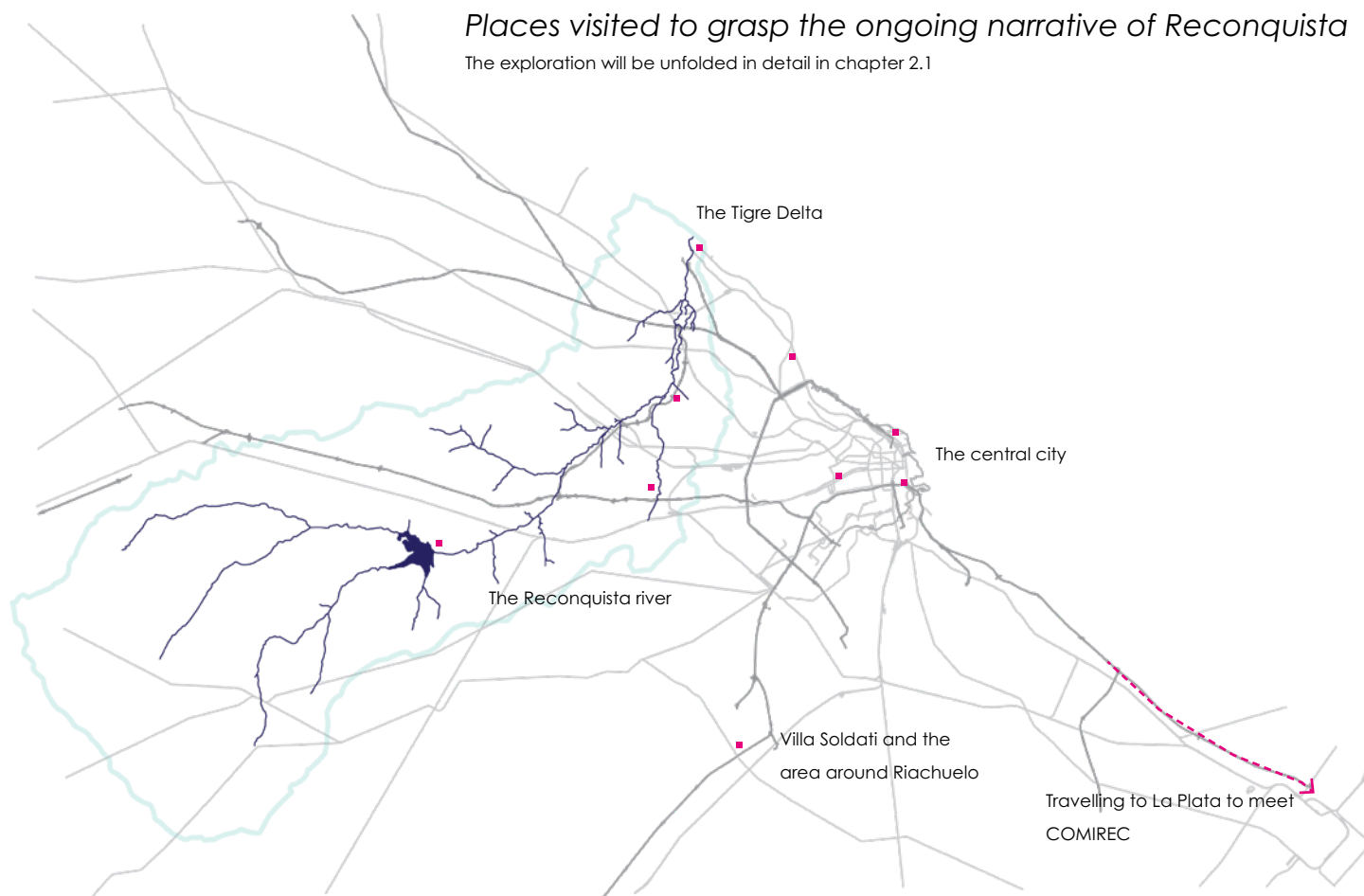
Morón Municipality
Morón River
Reserva Ecologica
Río de la Plata

MAY

Tigre Delta
Matanza-Riachuelo
Villa Soldati
Social Housing areas
Morón & Hurlingham
La Plata
El Maldonado
Hurlingham
Reserva Ecológica
Dique Roggero

Places visited to grasp the ongoing narrative of Reconquista

The exploration will be unfolded in detail in chapter 2.1



Travelling Transect

To filter space on the obscure trajectories, the untold stories, Lee and Diedrich (2017) introduce the transareal excursion to expose narratives, to collect the tangible and intangible knowledge. The Travelling Transect allows one to approach, document and represent a place. It is theoretically inspired by the eligible traveller, writer and explorer Alexander von Humboldt (1769-1859). Humboldt was active during a time encompassed by global movement in form of seafaring and increasing trades with colonies. These conditions are comparable to the present situation, driven by the globalized economy, the climatic threat and escalating population. Humboldt provides a perspective to approach research through an empirical procedure. The transect claims to employ relational thinking by an emphasized articulation of a local site and research across a variety of disciplines. The transect is a moving procedure, the suffix “travelling” suggest that it is a bodily immersion, open-ended by allowing and also including deviations from the planned itinerary. The produced knowledge serves well to tackle the complex challenges of the current century, due to their adaptational nature and ability to perceive multifaceted relations (Lee & Diedrich 2017).

The Travelling Transect consists out of a simple line drawn on a map, an itinerary, which one later on deviate from. The Travelling Transect results in material and non-material site specific findings which are juxtaposed in a Tableau Physique. Humboldt’s transect was synthesized in a graphic artwork, depicting the landscape as well as the narrative, an illustration of the complex symbioses that manifests at a site (Lee & Diedrich 2017).

Studio work on site

We were invited to participate in an Urban Planning studio at the Facultad de Arquitectura, Diseño y Urbanismo (FADU), University of Buenos Aires (UBA) during our stay in Buenos Aires. The studio provided valuable opportunities, such as field trips and lectures from different experts of the site which sometimes leads to certain places or texts being studied further. The studio visited the Morón municipality where a presentation concerning Morón as it is now and how it is envisioned was presented to us and discussed. Several employees from the planning office in Hurlingham municipality held a presentation in their office building about their future plans for the site.

Site visits

Through visiting the site, impressions are collected before returning

to the studio, where the findings are arranged. At some places, due to geographical limitations, the Travelling Transect proved difficult to perform as it is explained by Diedrich, Lee & Braae (2014). So we deviated from the transect. The sites visited with geographical limitations were the Riachuelo river, the Reconquista river, the Morón river, Informal settlements and the Dique Roggero dam. The Travelling Transect is instead conducted in other water landscapes in Buenos Aires to broaden our understanding of the cities relation to water. The places visited are the natural reserve Reserva Ecológica, the Tigre delta and the Maldonado river. The site visits are elaborated on in the thesis. Visiting the sites provides a greater understanding of their physical attributes and their social meanings to the people using the sites.

Meetings with site actors

Interviews were held on our encounters with experts, settlers, lecturers, municipalities and students to expand our perceived narrative of the site and to gather more data. We met with COMIREC in their head office in La Plata to discuss their forthcoming report on the Morón river, Atlas de la Basura who are mapping hazardous industrial waste to learn more about the wastes that exist on our site and students in our studio regarding how they perceive the rivers.

STRAND TWO *Study literature*

The second part contains the findings of vital aspects needed for a transformation of the current narrative.

The theories are a mixture drawn from several perspectives from the discipline of landscape architecture, and organized in different themes; *Once upon a time; Finding site; Rewriting narratives; A simultaneity of stories-so-far; The complexity of space; The land of trajectories; Listen to ongoing stories.* The selection of materials aims at providing an understanding for how narratives can be defined and used within the discipline of landscape architecture and how the narratives respond to the complex challenges a site faces today. We have been guided by key authors Beauregard, Massey & Sassen from whom this thesis very much derives from, but have also found valuable contributions in other authors within the field of architecture. The theories have been selected on the grounds that they are:

- Contemporary in the sense that that they apply to the world's complex issues
- Will contribute to the discussion about what narratives are used for within

landscape architecture

- Critical to a conventional practice

Although they relate to each other and overlap throughout the theory chapter, their contribution to the thesis is emphasized through sorting their meanings into the seven titles. Here we explain the gathering and selection of theories, and how they are organized within the seven themes:

Once upon a time... Narrative: The ongoing stories

The thesis required a comprehensive overview of narratives and how they are as tools in landscape architecture, which is explained in the first part of the theory. The ongoing stories give an understanding of the constant presence of narratives and a general description of them through Abbott (2008) who also contribute by stating their importance when organizing a place.

Finding site Why it matters

uses Burns & Kahn to lay out an understanding of what site is, stretching beyond its physical borders, which later on broadens how our site is perceived and provide grounds for the chosen site as not only within its physical borders

Rewriting narratives Place turns into site

provides an understanding on how narratives can be used to turn a place into a site using Beauregard (2005), which is our objective for the Reconquista case. Beauregard contributes by stating that designers should stay aware of narratives to increase the amount of stories instead of diminishing the place. From this standpoint, this thesis aims to listen to and collect narratives.

A Simultaneity of stories-so-far Space

Massey (2005) assist to relate narratives in the globalized world, and relates them to the complexity of space. The acknowledging of multiple trajectories provides grounds for not telling a story as one.

The complexity of space The simplicity of maps

Once again one of our key authors Massey (2005) stresses that complexity can not be told on a flat surface, everything is connected and should therefore be presented in its context. This supports a broadening of the site as suggested by Burns & Kahn (2005), and urges for multiple stories to be told which is the objective of the gathering of narratives in *The Present River Narrative*.

The land of trajectories Landscape offer solutions

Focus on defining landscape and shows that landscape architecture holds potential in operating within the complexity of space. Landscape architecture is introduced as a discipline which holds the potential to design within the complexity of space by Meyer (2008). With the help of Seggern et al. (2008) emphasize is put on design as a tool for handling the complex world. Furthermore, landscape is introduced using Corner (1999) as a possible agent, making it active as to enrich culture. Once again, but with this time in relation to landscape, Cosgrove (1999) state that showing one story is insufficient.

Listen to the ongoing stories The power of narratives

Traces contemporary trends within the view on narratives as a powerful tool for depicting and turning a site around. Through Braae & Diedrich (2012) we understand transformation as occurring from one unfixed state to another, and through time. Sassen (2014) gives the thesis an understanding of the cause and effects in our case study the Reconquista by explaining that expulsion is causing people to live on the systemic edge, which is the development we wish to turn on our site.

Urban sustainability

To find the directions for the transformation of the narrative, urban sustainability is studied. The foundation is made out of the UN's New Urban Agenda, which contains 171 guidelines relevant for sustainable urban management. Through a thorough reading of the New Urban Agenda, 37 guidelines were identified as relevant to the Reconquista setting, and were extracted. The guidelines were then studied to find different patterns or themes which could categorize them. The Sustainable Development Goal 11 is studied using the same approach to complement the New Urban Agenda. All but one guideline were extracted from the Sustainable Goal 11. Since this selective method is partly subjective due to its relation to the findings from the operating narrative of the Reconquista, its outcome would be different if it were to be carried out another time or place. The seven themes are not used to measure how sustainable the transformation is in relation to numeric values, but is instead used as qualitative directions.

The transformation of Emscher to Emscher Park

We look to the Emscher Park in Germany as a good example of transformative

development with narrative as the main components of the process.

As Bent Flyvbjerg (2006) states, generalization can be difficult coming from a single case study. The ability to generalize increases when the case study is strategically selected. The chosen case study here (Emscher park) offers a situation that once was similar to the one of Reconquista. Although the result from studying the Emscher case is not meant to be broadly applied on other cases, but only on the Reconquista case. While several case studies once were included in the thesis, we came to a point where we decided that the objective was not to gather as much information as possible about the transformations of rivers, but instead to understand how one river, the most similar to our chosen project, allowed for a change to happen. Bent explains that when the objective is to achieve as much data as possible, a representative single case study may not be an appropriate strategy (Flyvbjerg 2006), since our aim is not to find a method for any river, but for Reconquista only, Emscher provided us with a deeper knowledge of how to change the Reconquista.

The transformation of the Emscher Park contributes with information about how another narrative has initiated a transformation of the physical reality. Emscher park reveals specific factors that are of interest for the transformation process and provide the process from new narrative to physical outcome with realistic expectations.

The Emscher Park's transformation is studied to understand which tools changed its narrative. A qualitative text analysis was conducted of several texts. Through a literature study we unfold the transformation of Emscher to Emscher park. From the documents studied we extracted data which we found relevant for the changed narrative of Emscher and compiled these in a Tufte-diagram to explain how such a process could be developed, which allows for a comprehension of the transformation, to decay important aspects that played a vital role in how the narrative could be implemented before the physical transformation took place.

STRAND THREE

Constructing a new narrative

Through reshaping and adding to the operating narrative this chapter is constructing new narratives for the Morón river as a part of Reconquista. Site specific values are taken in along with direction and tools to aid in a new

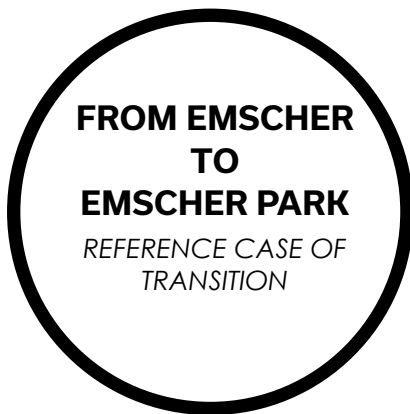
DELIMITATIONS

The thesis aims to explore the ongoing stories from The Operating Narrative in Reconquista, directions from the New Urban Agenda and tools from the transformation of Emscher to Emscher park. In the Reconquista case, our aim is to change its current narratives, which means that our focus does not lie in solving its challenges in detail. Our strategy should not be considered as a recipe for any development similar to our case, as this would be an impossible undertaking. The outcome of the same method used on another site will be different, as will the outcome on the same site in another time be. Considering the material important from the Emscher transformation concerns inspirational tools and the result should not be considered as a deep analyze of the transformation.

The narratives collected are found on our journeys. Presenting all the existing narratives would be beneficial for the validity of our thesis, though hard to find since it would require an enormous amount of time and effort trying to give them all justice.

There are geographical limitations to our investigation. The site is difficult to reach and dangerous to stay in. To access the entire site is next to impossible due to different barriers. We can only visit the landscape of the Reconquista river and its tributaries, such as Morón river if we are accompanied by people who are familiar with the area. This further limits the amount of times we can visit our site, the Morón River.





TRAVELING IN THE WORLD OF NARRATIVES

This chapter named "working with narratives" consists out of four subchapters, the first one aims to grasp the operating narrative, the second helps explain the potential of transforming a narrative by studying current narrative of Reconquista with an already performed transformation of the Emscher park, the third situates Reconquista in ongoing global discussion about sustainable urban development and the fourth compile findings from the previous chapters to array a new narrative.

An aerial photograph of a lush green landscape with a complex network of rivers and streams. The rivers are light brown and yellow, winding through the dense green vegetation. The overall scene is a top-down view of a natural water system.

RECONQUISTA SOURCE OF POLLUTION

The Present River Narrative

Searching for loose ends

Here follows a description of how the narratives in Reconquista were perceived by us. The narratives are not presented in a chronological order, but in layers of actions and consequences. The chapter contains three parts; *Two Cities in One*, *Buenos Aires Neglected its Rivers & Wastescape Reconquista*, starting at a global and metropolitan scale, aiming at looking to the underlying layers which affect the smaller scale. After introducing the effects of the ongoing regional development and how it has affected the rivers, then the site is presented and how it came to lead us to its tributary - the Morón river. Lastly the administrative, cultural and physical landscapes of the Reconquista in general, and the Morón river in specifically are presented.



TWO CITIES IN ONE

Historical events and global driving forces are still affecting the city of Buenos Aires. The fragmented city and the cultural patterns affect and control how the inhabitants live their everyday life in regards to the existing challenges. Here the foundation for how the city grid took form is presented along with its consequences.

1. View from FADU over the Río de la Plata, in the adjacent area of some smaller informal settlements
2. The city center
3. Casa Rosada
1. View over villa next to harbor
4. Informal settlements next to bus station & La Boca - "Buenos Aires most instagrammed place"
5. Informal settlements next to Riachuelo
6. Social housing next to the informal settlement Villa Soldati
7. Open dump next to Riachuelo



THE CENTER AND THE PERIPHERY

Footprints from the colonization of Buenos Aires persist in the city grid. After a failed attempt to found the city in 1536, a more prosperous effort was carried out in 1580. The second establishment occurred according to the *Laws of the Indies*; a set of rules implemented in colonized cities by the Spanish Crown. Certain criterias were set out when following the Laws of the Indies - its grid was an important feature with a plaza situated in the city centre. The cities had access to points of interest by sea and land, ensuring easy departures for commerce while also establishing defenses. Buenos Aires location was partly chosen due to its security reasons; further up north, and far away from the open ocean and pirates. The Laws of the Indies also affected the current urban fabric of Buenos Aires, with Plaza de Mayo as the main square, from which the central axes derive (Crouch & Mundigo 1977).

After a huge debate concerning the future expansion of the city, a plan was drawn with an extensive urban grid in 1888, that was published to the public in 1904 (Gorelik 2010). The first expansion was towards Río de la Plata but the provincial government cared more about the agriculture and therefore expanded away from the waterfront. The city's outer borders were defined by an imaginary line drawn up in the middle of the pampas, where the highway General Paz now is located. In 1898, after a ten year long debate on how to occupy the area, a plan was drawn by the municipal bureaucracy which later on was published in 1904 (Baez 2005). In accordance with visions of continuity and regularity, a block grid was laid out, tram networks were being built along with streets. An embryonic network of parks was planned, parks which later on would be of great importance to the inhabitants. It was a plan that foresaw and prepared for the coming urbanisation (Baez 2005).

The city population escalated during the early 20th century. During the first expansion era (1887-1938) the population quadrupled while the urbanized area quintupled. During the second expansion era (1938-1978) the population doubled from four million to eighth million, while the urbanized area expanded as much as 15 times (Gorelik 2009). The first expansion era covered 100 % of the sanitation infrastructure, while not even 50 % of the sanitation infrastructure was covered during the second expansion, which is still causing problems.

The city has a distinct center and periphery, turning its back towards the waterfront. The city connected South America to Europe, which gave a main role to the port. In the 1860's the railway system was developed, leading all the way to the port. Railways were developed in order to move the cargo, distributing resources from and to Buenos Aires, connecting to Europe. In 1863 trams started operating in Buenos Aires and for a while the city had the most

FINDING

Despite the metropolitan city being encompassed by water (Río de la Plata in the north, Riachuelo in the south-east and Reconquista in the west), the presence of water is ambiguous/concealed. Major infrastructure expands along the riverfront between the city centre and Río de la Plata, preventing people from enjoying the riverfront.

FINDING

Though the presence of the water is not obvious to the residents, major infrastructure expands along the riverfront between Palermo and Río de la Plata, preventing people from enjoying the riverfront.

trams per capita in the world. In line with modernism the automobile made an entrance and the trams slowly had to step aside for the development of new car dependent infrastructure and in 1963 the last tram was taken out of use.

Peronism: In 1945, Juan Domingo Perón won the election with the party Peronism or Justicialism. The party rejects both capitalism and communism and instead advocate for corporatism and to mediate between different classes of society.

FINDING

The city is car dependent and it takes a lot of time to commute, usually one have to enter the city center to change bus which creates tedious traveling patterns. The social housing we visited were missing local connections, you need to think about the the social fabric, both in design and concerning how to plan a new living situation, so that people can get a job, get groceries.

FINDING

The modernistic way of thinking in large-scale is causing segregation

During the first Peronist years, the Ezeiza international airport was linked to the city center through the first highway. A gesture that made the city move its city front from the river towards the Plata instead (Gorelik 2010). In 1976 the military dictatorship took power and carried out a plan of elevated urban highways as a part of the National Reorganization Project. The highways cut through the existing city fabric of the metropolis with ten million inhabitants to connect the center with the periphery. Buildings were demolished to make room for the new ers. The highways are a key factor in the city fabric today, 3 million commuters enter CABA each day, arriving from the metropole area and to leave the city at night. Buenos Aires is a centralized city which causes much traffic congestion when people travel to the central city for work or leisure. It is a very dense, centralized area in the province which holds more than 13 million inhabitants. People need to commute into CABA and then out again, if you live outside the city center and commute to another destination in the periphery. When heading to the south part of Buenos Aires in the morning there is a lot of people going in the opposite direction. The connections are not of high maintenance and the short distance takes a long time to travel. Modernization lead to an expansion of the city fabric. A distinction between the center and the periphery developed (Gorelik 2009).

To reach a social housing close by Villa Soldati in the south part of Buenos Aires we change mode of transport at least two times, the distance is relatively short which makes the travel time illogical. The spatial segregation here is not so much the distance in land covered but distance in time. This makes the social housing district disconnected to the city fabric. The modernist idea of separating activities is detectable since residential buildings dominate the area, apart from a few exceptions. The planners that designed the buildings did not consider the bigger picture, so there is a lack of connectivity regarding how people get to their jobs and where they buy their groceries. A skewed scale can be found in another social housing area as well, leaving large, green spaces unused and more to be sought after.

In the 1980's the paradigm of neoliberalism led to a cut down in social infrastructure and subsidisation provided by the state. Public space used to be seen as the solution of how to overcome the problematic relation between the city center and the periphery, but now the idea of public space as a tool to reach

integration, instead vanished. During this era there were two new urban elements that answered to the need of public space: shopping malls and private security guard booths. The shopping malls in Buenos Aires are found in the city center and became a manifestation of a city that no longer strives towards expansion but instead to connect different parts of the city. A new archipelago structure emerged in the city, separating the wealthy from the poor, even though they were living next by each other. This new structure relates to the name of this chapter, the new center and the periphery (Gorelik 2009).

To view the metropolitan Buenos Aires from a greater perspective one can see the outlines of the city's defining historical characteristics. The first shows how the modern Buenos Aires was shaped through a process of expansion, the popular areas occupied a succession of peripheral rings, each further away from the city center. This revitalised the city core as a place for the upper and middle class, contributed to the creation of the city center as a hub for civic, administrative and commercial events and a popular leisure site.

During the early 20's century the periphery became a popular site itself, appropriating traditional functions usually belonging to the city core and its established political, social, and cultural spheres. This initiated a creation of new public space in the areas usually referred to as the periphery, which allowed for a continuity acting inertially throughout the city's cycle of expansion. This development could be viewed as a creation of subcenter's. These features of public space embedded in the city fabric was not repeated after the 1940's.

After the 1970's the expansive cycle ceased and the abrupt end of expansion rings was seen in the decay of the socio-urban patterns. A new features emerged in the 90's an archipelago. This urban fabric the suburbanization was pushed by the upper and middle class by a system of expressways and private enclaves, as in malls and gated communities. The poorer communities were living next by the wealthier ones, but there are sometimes subtle and sometimes very apparent, separating the classes from each other (Gorelik 2009).

TWO CITIES IN ONE

The formal and the informal

Buenos Aires is sometimes described as two cities in one, with the formal society living next to the informalized one. In the 1970s policy changes were made during the military dictatorship (1976-1983), in line with neoliberal values.

FINDING

People on the edge of the system coexist with wealthy people in the sense that they are neighbours. The informal settlements live among garbage and industrial waste meanwhile the gated communities provide their residents with services enough to not leave the area.

FINDING

Buenos Aires are increasing the city infrastructure, having four airports and planning to build more

Neoliberalism: a modified form of liberalism tending to favour free-market capitalism.

FINDING

The informal settlements are scattered and do not follow the city grid. They are located in places unsuitable for housing.

Private actors entered the service sector due to privatization, controlling both urban service provision and territorial expansion. During the 90's the amount of gated communities increased rapidly and are still trending to this day. Since the gated communities were built outside of the metropolitan area on low-cost land they ended up next to low-income settlements. To handle the flooding in the gated communities affected in Nordelta, barriers were built for flood protection, causing more floodings in the surrounding area with lower lands which affects the informal settlements.

The urban fabric is full of complexity. Informal settlements are found across the city, both in the city centre and in the outskirts. They are often situated in cramped or alarming areas unsuitable for housing; between highways and railways; next to polluted areas and under bridges. These are all examples of informal settlements we have come across. In general, informal settlements are found in areas where the formalized city disapprove of housing. Here people live in dense formations, on the edge of the system or outside.

When visiting Villa 20, an informal settlement next to the polluted river Riachuelo in the east, a transformation is apparent. The informal settlement is being regenerated - old buildings are improved for safety reasons, some are torn down, and new buildings are being built in the adjacent area - an old car cemetery - contributing to a contrasting environment. Streets are broadened and paved to make way for people and cars as to increase the accessibility to the residential settlements. According to the municipal workers who accompany us on site, the development is proceeding collectively with the residents. There are apparent difficulties in representing the 30'000 inhabitants, but at least an interest and understanding of developing together with the residents is transparent to the visitor. What sparked the investments in the informal settlement is the place's history - at one point their homes were taken away from them to get rid of informal settlements, but during a riot carried out by the settlers, they were taken back. Today, the state of the buildings is better than what one could expect - the residents have invested in several storage buildings, often made out of concrete or bricks.

Despite workers being on the construction site next to the informal settlement, entering the area is complicated. What marks our entry is both that security guards take it upon themselves to accompany us and the fact that one person in the informal settlements starts filming us.

INDEX OF TRASH

Atlas de la basura

Atlas de la Basura is a transdisciplinary project at FADU and CEAMSE that works with mapping the garbage dumps and landfills in the metropolitan area. They have studied seven municipalities at depth to examine the location of landfills, based on information from CEAMSE and ACUMAR. One of the seven is San Martin that holds many SDR (open dumps) which are both controlled landfills but also uncontrolled open dumps. The informal settlements in San Martin are surrounded by landfills and waste.

Close to the informal settlement named La Independencia is a 60m high landfill, owned by CEAMSE. This is a controlled area and people from the informal settlement are only allowed to enter for 45 minutes per day (Iconoclasistas 2016). The polluted river cause health problems to people, diseases from the waste are common in the informal settlement and will eventually spread outside and affect people and the environment located further away from the Reconquista.

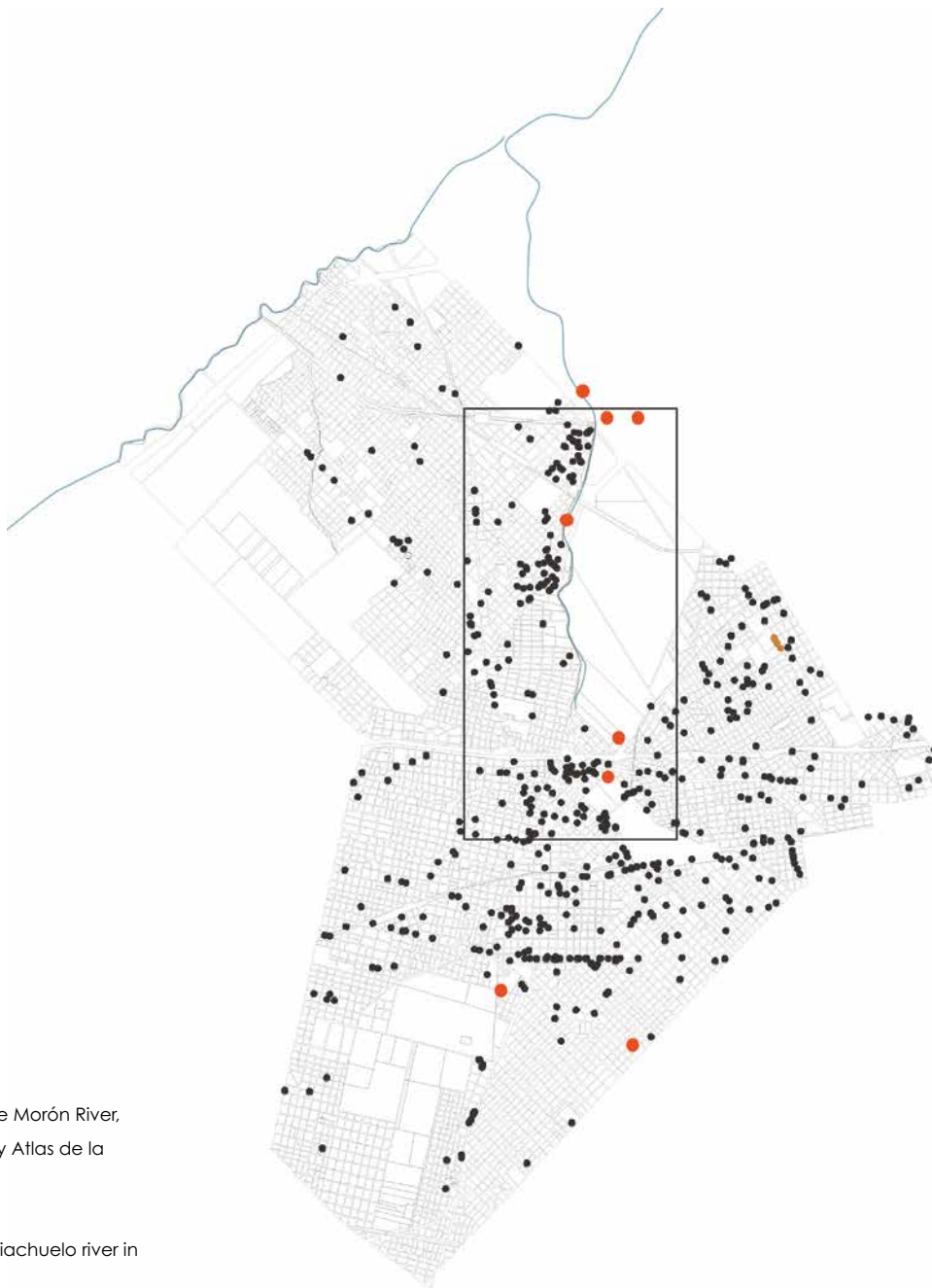
Garbage management in the metropole is a constant problem. A new law was passed during our stay which allows for the city to incinerate waste produced in urban area. This method was forbidden in 2007 during an era paved with ideas of promoting recycling, recovery of materials and the reduction of waste generation. The metropolitan area produces circa 17 tons of waste per day, and what today is not recycled is being buried. CEAMSE has previously brought causation to that the space for dumps is running out. (The Bubble 2018)

FINDING

There is a huge need to implement a holistic awareness about recycling instead of the new law which order to burn the trash.

FINDING

A lot of trash, There is a huge need to implement a holistic awareness about recycling instead of the new law.



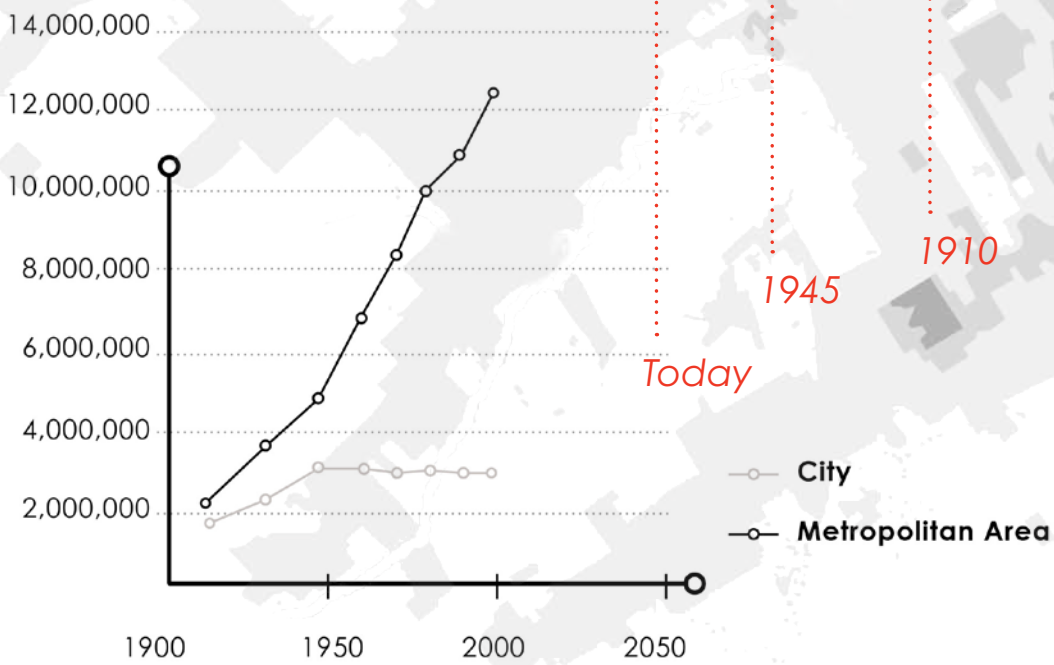
A myriad of industries polluting the Morón River, and open dumps found on site by Atlas de la Basura.

Example of a landfill next to the Riachuelo river in south-east Buenos Aires

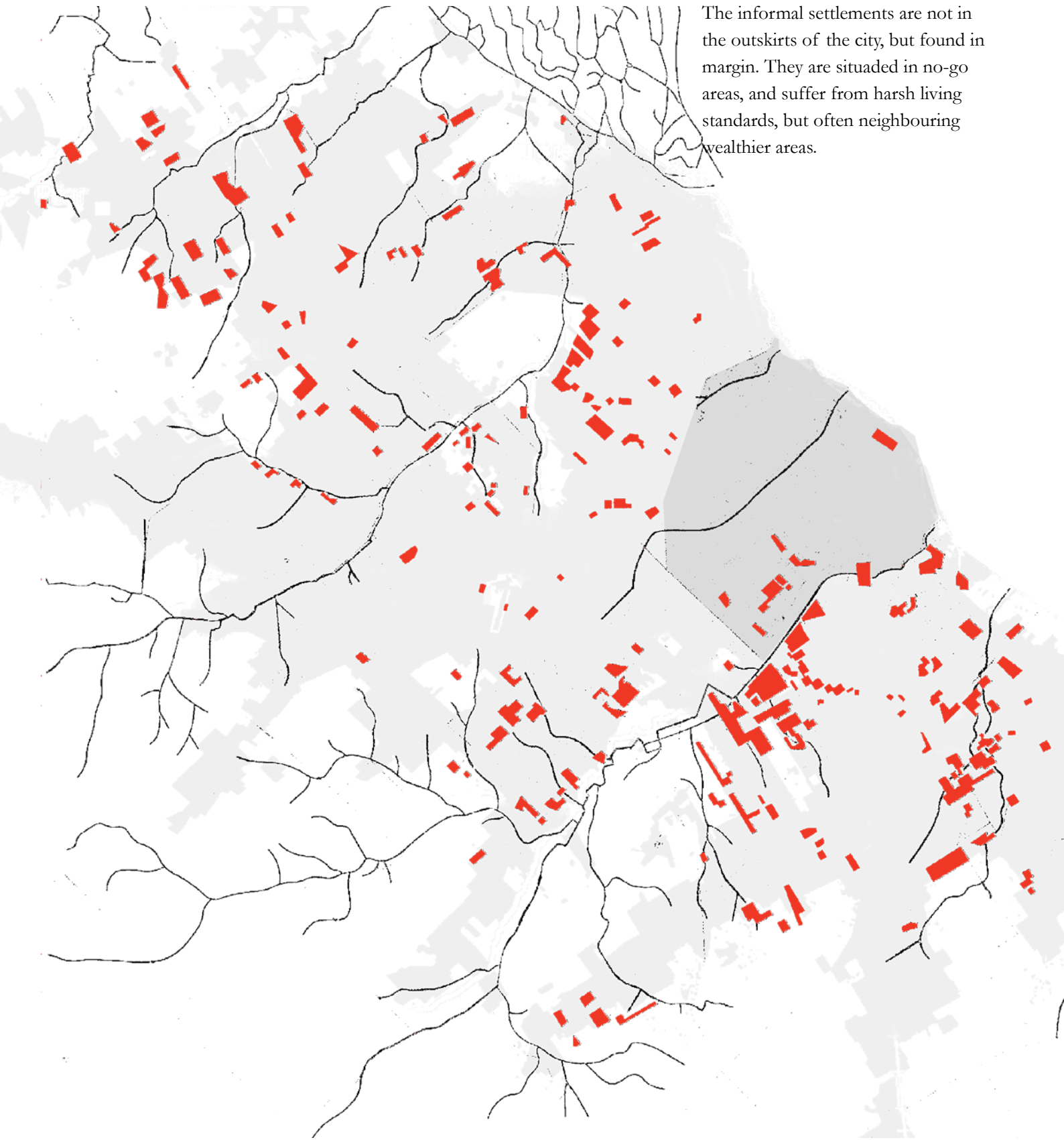


The population growth lead to a growing city, from 1836, 1895, 1910, 1945 to present times

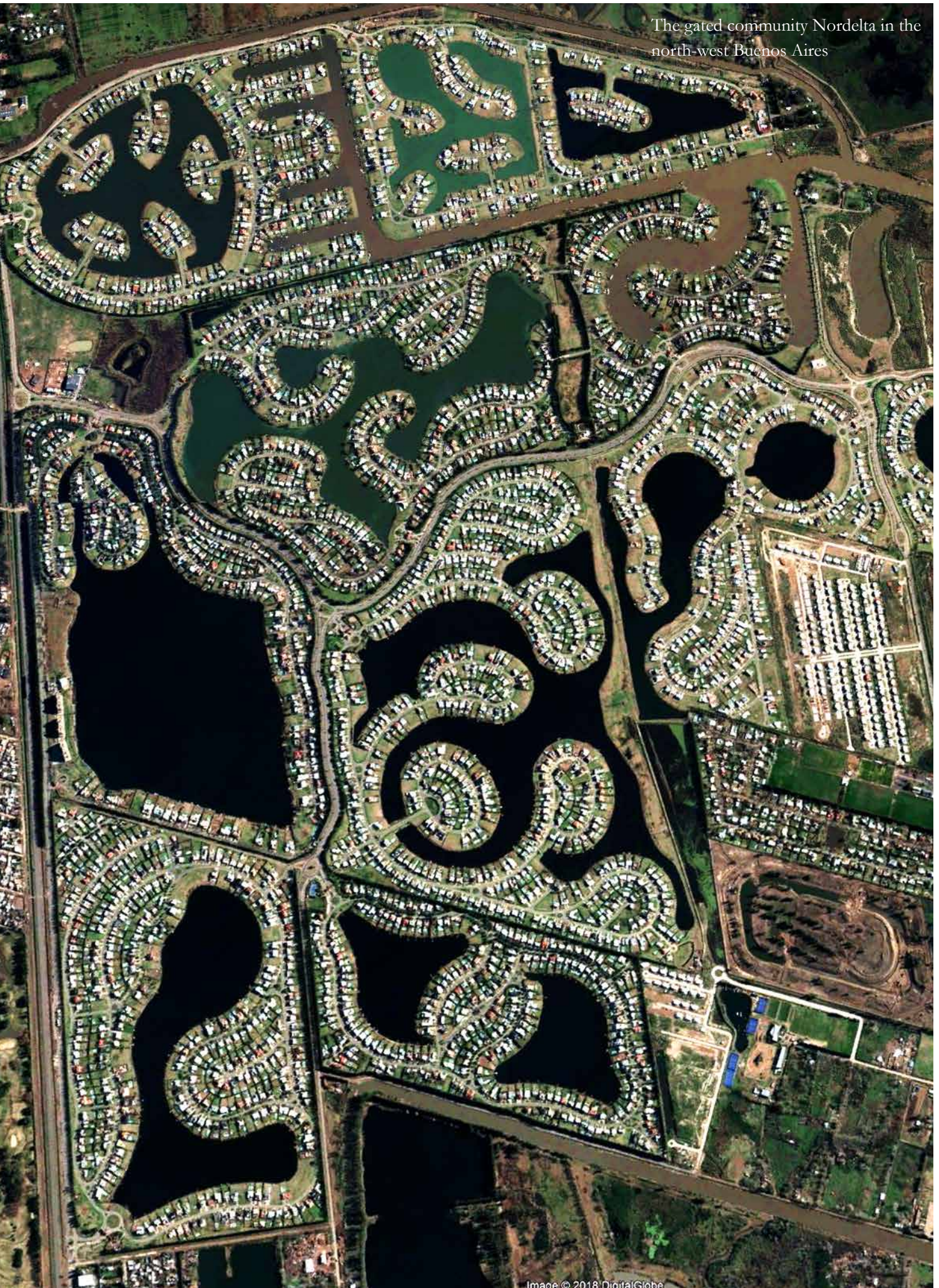
Population



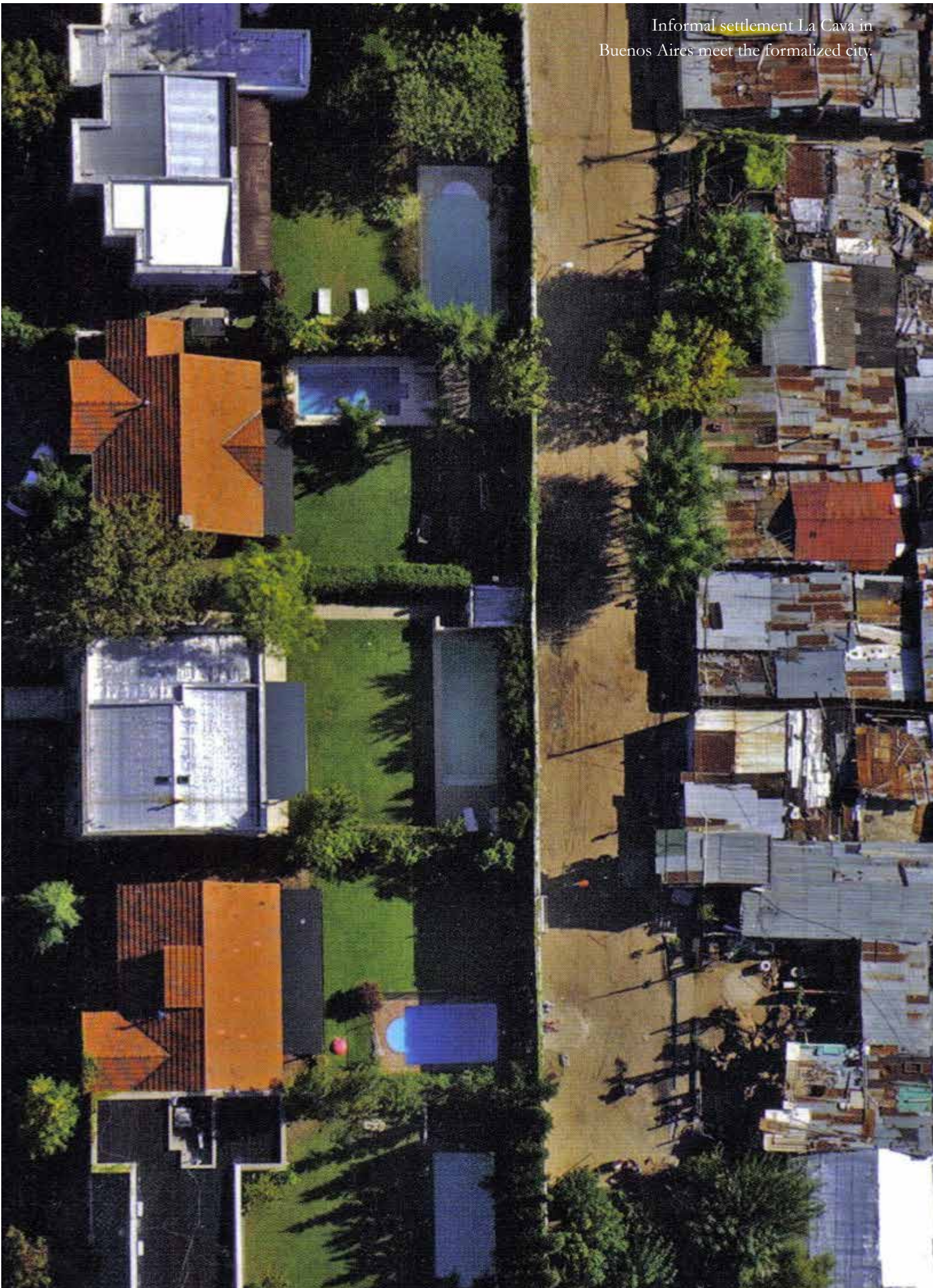
The informal settlements are not in the outskirts of the city, but found in margin. They are situated in no-go areas, and suffer from harsh living standards, but often neighbouring wealthier areas.



The gated community Nordelta in the north-west Buenos Aires



Informal settlement La Cava in
Buenos Aires meet the formalized city.



BUENOS AIRES NEGLECTED ITS RIVERS

This part examines how the Metropolitan's development has affected the ecological systems circuiting the urbanized area. Buenos Aires is partly distinguished by the geographical borders made out of the Río de la Plata river in the north and Riachuelo in the southeast. The flatland La Plata establish good conditions for strong winds and close access to water resources. Compared to other great cities in Latin America as São Paulo and Mexico City, Buenos Aires does not have to struggle with water shortage and air pollution. Though instead water resources have been taken for granted and the rivers got to make up for the inadequate sewer system (Kozak 2018). On the other hand these questions never grow big on the political agenda. The city is battling between urbanism and ecology. Important players are:

CEAMSE: A company created by the provinces of Buenos Aires which carry out the waste management in the metropole area

ACUMAR: Autoridad de Cuenca Matanza Riachuelo, the governmental organization that works with upgrading the river Riachuelo

COMIREC: Comité de cuenca del río Reconquista, the governmental organization that

FINDING

The rivers were not acknowledged as resources to the city and eventually became polluted.

1. The Tigre Delta
2. The outflow of the Maldonado river
3. The street where the Maldonado is buried
4. Reserva Ecológica
5. The harbour
6. Río de la Plata and the airport next to it
7. Under a bridge crossing the Maldonado river



A STRAINED FLOODING BUFFER

The Tigre Delta

The Parana river opens up in the Parana delta before ending up in the mouth of Rio de la Plata. The delta is 320 kilometers long and divided into three parts which are operated by various ecological functions that regulate the flood patterns. The regulative factors are mainly the river flow discharge, tides, rain and the southeastern winds also referred to as the Sudestadas. The Sudestada push water from the estuary of Rio de la Plata into the delta. Different flooding events occur in the delta due to the combinations of these incidents. The ecological balance that regulate the water levels are strained which put extra pressure on the city's ability to mitigate floods.

A climatic phenomenon that frequently affects Buenos Aires is the Sudestada. The phenomenon consists out of rotation of cold southern winds to the south-east. The cold temperature loads the air with oceanic humidity which pushes heavy rain and the strong winds into the mouth of Rio de la Plata basin. The winds gets intense due to the air circulation. This phenomenon is most likely to occur between july to October. The delta plays an important role to mitigate the consequences of Sudestada for the city. Parts of the water is swallowed by the delta that functions as a buffer. This function is of high importance for the city not be drained by water as the winds hit.

Buenos Aires was located on the pampas, meaning the flatland. The physical attributes of the flatland lack natural borders such as mountains that could put a stop to a city expansion. The original ecological vegetation consisted mostly out of shrubs and small trees. During the 19th century, before the urban expansion, the immigrants from Europe found the natural setting a bit frustrating.

THE VILEST PLACE I EVER SAW, AND I WOULD CERTAINLY HANG MYSELF IF I COULD FIND A TREE TALL ENOUGH TO SWING ON. SO ODIOS A COUNTRY NO EYE EVER SAW A LAND OF MUD AND PUTRID CARCASSES NO HORSES, NO ROADS, NO HOUSES, NO BOOKS, NO THEATRE THAT CAN BE ENDURED... NOTHING GOOD BUT BEEF

FINDING

We can't shut the water out. We need to design with ecological dynamics in mind. The water is out of reach, urban fabric, infrastructure barricades the river

Ponsonby 2007

THE RIVER BEHIND THE WALL

Rio de la Plata

FINDING

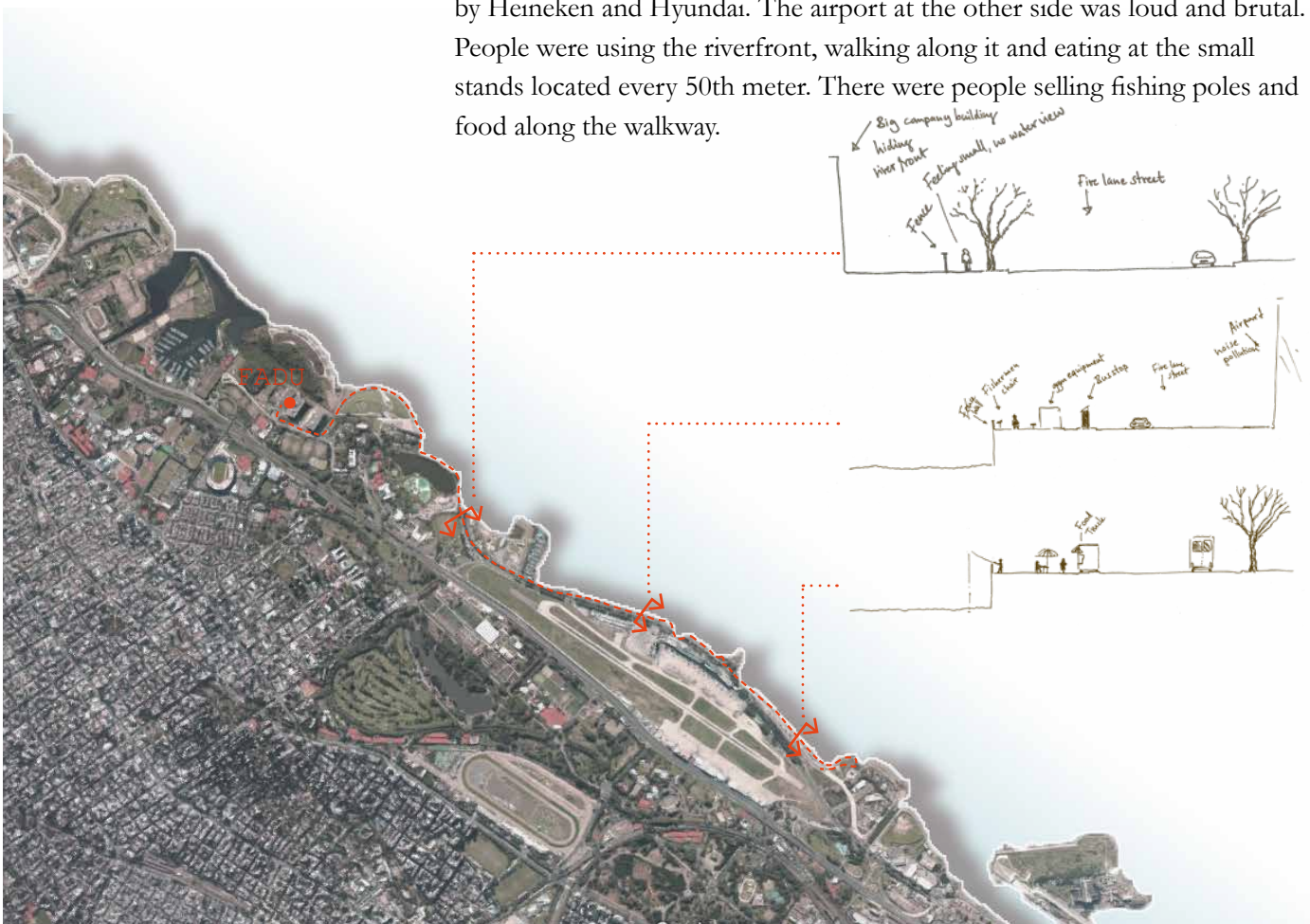
The Riverfront does not allow access with the water except but through a fishing pole

FINDING

Major infrastructure expands along the riverfront between Palermo and Rio de la Plata, preventing people from enjoying the riverfront.

As we sat out to experience the waterscape of of Buenos Aires we saw new tendencies in the city planning. El Parque de La Memoria, a memorial park that was constructed in memory of the victims during the military junta between 1976-83, had been constructed just by the river. One enters the park through a visitor center with an comprehensive introduction to the dark history. The park offers a close experience with the water. Slowly leading the visitors down the water by a zigzag shaped wall with names of the victims engraved to it.

The riverfront continued outside the fence of the memorial park and was occupied by fishermen. The path was framed by a wall, leaping all the way along the water edge, keeping people out of the water. It was possible to maintain eye contact with river, rio de la plata, for the parts of the stroll. Close by the airport it was hidden behind brutal company buildings, owned by Heineken and Hyundai. The airport at the other side was loud and brutal. People were using the riverfront, walking along it and eating at the small stands located every 50th meter. There were people selling fishing poles and food along the walkway.



THE WORLD'S MOST POLLUTED RIVER

Matanza-Riachuelo

Buenos Aires is located at the northeastern edge of the fertile flat plain called Las Pampas and by the river Río de la Plata which constitutes a path to Europe, a constant inflow of garbage and a source of threat. The city connects to the point where the Paraná river opens up in a delta and turns into the Río de la Plata estuary. The river is always full of sediments since the Río de la Plata is shallow which provides a constant inflow from connecting rivers. The river is in need of constant dredging since the average depth is four meters, which is very costly. Río de la Plata affects the other rivers of Buenos Aires, making them prone to flooding. The Matanza-Riachuelo river is the largest river in the metropole of Buenos Aires and follows the south border of CABA. Its former reputation was “*the world's most polluted river*”.

The Matanza-Riachuelo river connects to the Río de la Plata where the colourful La Boca is. At a visit to La Boca boats circle around the bay area, collecting trash in the water. In 2001 there were political decisions being made to clean up the Matanza-Riachuelo, after years of neglect. A hopeful politician said that it would take one hundred days until he could enjoy a fresh glass of clean water, served directly from the river. The promise was broken but the political will-power is leading to a rearranging of the river landscape. *The Mendoza case* was a new law that pushed settlements further away from the water edge. Previous informal settlements located by the water were moved and demolished to be replaced by a highway.

All the districts in Buenos Aires has there own theme, and La Boca is known as the art district. The area is a colorful neighborhood and different artist have contributed to the vibrant setting which turned La Boca into the most instagrammed place in Buenos Aires. Tourists pilgrimage here but they only visit two or three streets, there is a distinct border that they do not pass. A new art museum is located right at the bus stop in an attempt to emphasize the art identity, along with festivals being held here. There is a new pedestrian walk lane leading from the tourist street, three blocks away where it abruptly ends at an old harbour edge with industries next to it. For people living in La Boca it is hard to transport oneself since public transport only goes one way. People takes the train to Puerto Madero or Retiro but they do are not able to return the same way.

Standing by the river one can not miss the huge bridge crossing it. The highway on the bridge connects the south Metropolitan area with CABA, increasing accessibility on a larger scale. What is evident from walking around the Riachuelo is that the small scale accessibility is not taken into account - when walking along the river one has to cross a heavy trafficked street without pedestrian crossings.

FINDING

The Rio de la plata is shallow which in combination with the Sudestada makes the city flood easily

FINDING

While the city is surrounded by water, geographical conditions are neglected.

FINDING

Global and local scale connects in the port, the panama canal changed the importance of Buenos Aires as a harbour city. While the city is surrounded by water, geographical conditions are neglected

FINDING

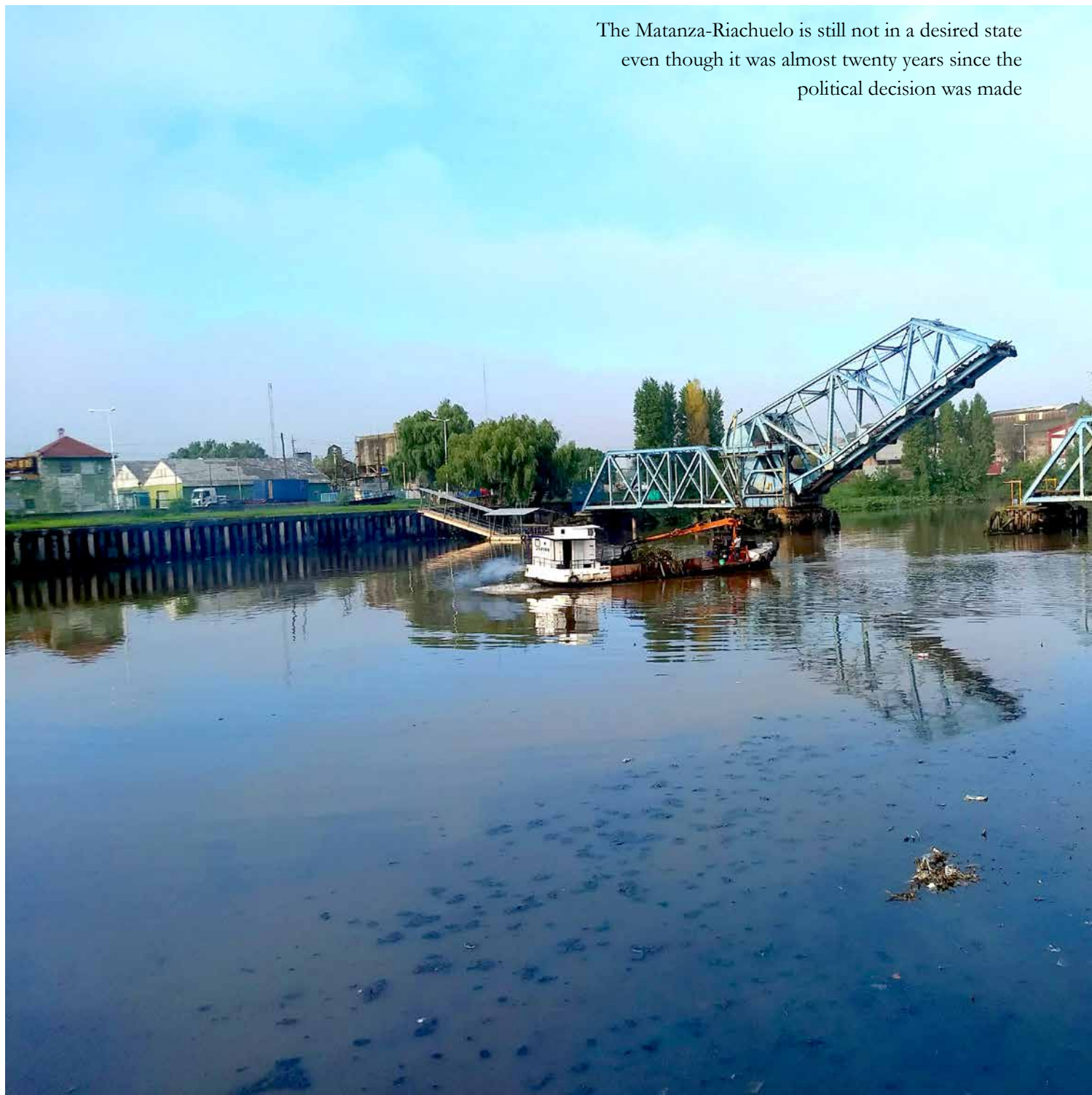
Infrastructure control how people move in and out of the area and it is a beneficial situation for the car driver.

In the cleaning up process from the world's most polluted river the poor are not taking into account

FINDING

Spatial segregation is incorporated in the city fabric and institutions

The Matanza-Riachuelo is still not in a desired state even though it was almost twenty years since the political decision was made



FINDING

The political borders create physical barriers as in Riachuelo and the south districts between the south districts and CABA, as the new highway is being constructed along the river

On the other side of the bridge, leaving CABA, one walks into informal settlements expanding along the river. The only way to cross is going up on the bridge, several floors high, and walk across next to heavy traffic.

HIDING AWAY THE PROBLEMS

EL Maldonado

Palermo is one of Buenos Aires wealthiest neighborhoods. It is a vibrant area with shops and bars, despite it being divided by a huge barrier, Avenida Juan B. Justo. Hidden underneath the four lane street, next to train tracks, lies a buried river, the Maldonado. Due to this rivers existence, all the old buildings have an articulated front door step, preventing water from entering the buildings during flood events.

The Maldonado is 21.3 kilometers long and runs through ten of the 48 districts in CABA. It was decided to be tubed underground in 1924 and four years later the excavation started. The measurements were taken to put an end to the flooding events that was related to it, but during our time living in Palermo it became evident that water still fills up the streets during heavy rain.

At the present day we could not guess that there was a huge river outside the door, next to where we lived. But under the big avenue was the most central river in the city. This was also the reason to why there was stairs and big thresholds in front of every door in the neighborhood.

FINDING

El Maldonado is one great example of how the city treats the water resources, as a problem that needs to be managed, hidden and forgotten.



The outlet of Maldonado into Río de la Plata



The second phase in the construction work started in 1929 and required a hundred of workers to rise columns to support the road Juan B. Justo Av



Above the Maldonado river

THE OASIS

Reserva Ecológica

Reserva Ecológica distinguishes itself from the average riverfront meeting Río de la Plata. The reserve is full of people enjoying nature, some walk in a slow pace while others use the opportunity to exercise. The green and lush space is crowded also during cold days, unless it rains cause then it close to prevent accidents due to floods. Educational signs are to be found everywhere, informing visitor about the diversity of plants and animal species. The most popular site is found at the waterfront, a little beach invites people to sit down and enjoy the sunset.

Tons of debris was created from the demolished buildings during the military dictatorships National Reorganization project (1976-83). The debris was collected and deposited together with the dredged material from a nearby port. Argentina's economy thrived due to the sale of raw material, and the military junta decided to construct a district on the water, as a elongation of the city center Puerto Madero. The location allowed the military to be located close by downtown but the planned elevation created a topographical separation. The construction started with creating a new district on armored levees in 1977. By 1983 the circumference was completed and the interior started to be filled, but a flood in Río Paraná that year caused a the mean level in Río de la Plata to rise nine meter above average. This event brought a enormous quantities of water hyacinth and other wetland plants from the Paraná biome to the interior lagoon which was just partly filled at the time. Many of the seeds took root in the varied topography which was rich in micro-habitats (Davis p. 2-4).

After the Falklands War failure in 1984 Argentina faced a stagnated economy, the military dictatorship was allocated and replaced by a new democratically elected government. The national reorganization project was ended but had created a space of opportunity for the vegetative process. In 1986 the 8th of June the terrain got declare as a nature preserve in the City of Buenos Aires. It would be open to the public and a place where wildlife would be protected. Today the Reserva Ecológica is a huge green island that is a major attraction to the city of Buenos Aires. It provides opportunities to exercise, walk in the forest, view to river and relax from the city buzz (Davis p. 5-8).

Walking out of the park we encounter a big street market, a large road is taken out of traffic and instead holds tons of people. The cheerful atmosphere is palpable and people are making the most of the streetscape occupation. It is unusual to see a street being used mainly for pedestrian and people make the most of it. Street festivals are highly appreciated and it is nice to see people in all ages taking part in the celebration. The place is La Costanera Sur, which used to be a public spa facility operating until 1980's. Here people could swim in Río de la Plata, before it was a threat to your health.

FINDING

Reserva ecologica shows how people want and use the opportunity to get closer to nature in Buenos Aires.

FINDING

There are old traditions of embracing the water and bath culture



Reserva Ecologica happened by chance, but is now a very popular site to visit all over the week and is localized in the central heart of Buenos Aires, next o the finacial district and Casa Rosada





WASTESCAPE RECONQUISTA

Rivers equal problems in the minds of the people in Buenos Aires. The rivers are agglomeration of pollution and social injustice. Sassen (2014) helps us to unfold how the complex tangle of trajectories on a global scale affects the development at a local scale. Reconquista could be acknowledged as a being found outside what Sassen defines as the systemic edge, it is affected by the systemic logic. Reconquista's shoreline is paved with poverty thriving in the informal settlements, the expelled. People that are not included in the welfare-system, expelled from public interest (Sassen 2014). The Reconquista river basin is located in the northern metropolitan area of Buenos Aires. The river receives discharges from industrialized and highly polluted settlements. The basin is 1,547 km² and the river runs through 18 districts. The lower areas contain the most critical social and environmental issues. Here we find Buenos Aires largest sanitary landfills as well as the metropolitan area's highest concentration of informal settlements. A wide spectra of industry exist in the district San Martín, textile mills, chemicals, slaughterhouses amongst other, are found in here in the second largest industry area of CABA (Metropolitan area of Buenos Aires). Much of the effluents are discharged to Reconquista basin which has turned the river into a landmark of environmental problems (A. Ferraro 2012).

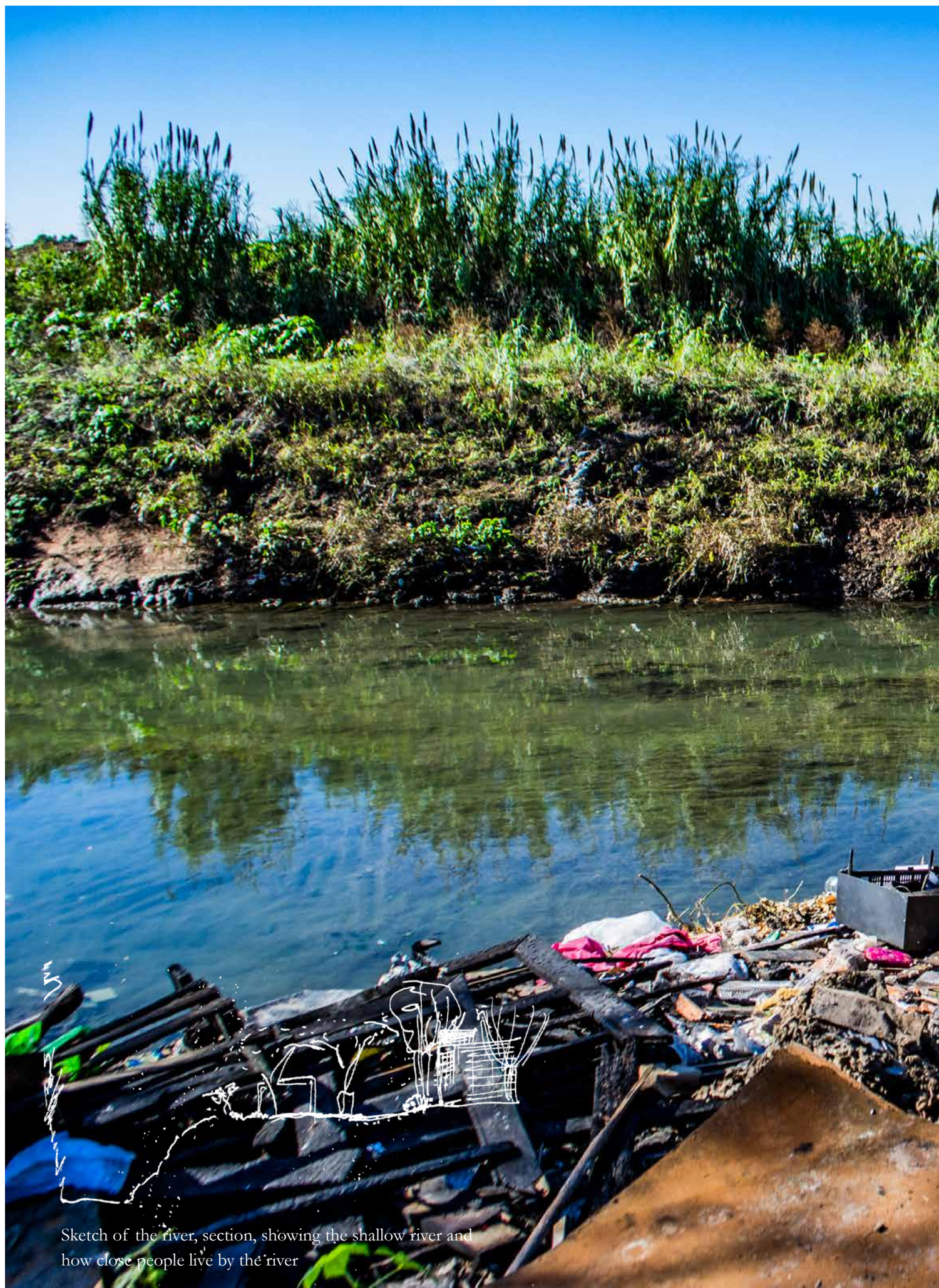
1. Diggero
2. Tigre
3. Morón river





// I have to lie about my address when applying for jobs, otherwise I wouldn't get any
- Man from informal settlement





Sketch of the river, section, showing the shallow river and how close people live by the river





We use the water to wash our clothes,
clean our house and remove makeup
- Lady from 9 de Julio



TRAVELLING ALONG RECONQUISTA

The vast land is divided in different overlapping parcels of functions and historical growth rings. There are traces from the industrial era, neglected settlements, infrastructure projects from the modernism prime time, and then the calm untouched, waiting to be activated. The landscape is a mixture of different historical eras, a variety of ideals and visions accommodate the river landscape.

Tigre is a popular location for the inhabitants in Buenos Aires. It attracts people with a fruit market, daily tours to the delta and highrises. The Tigre delta has a narrative that is very different from Reconquistas which is an opportunity, it shows that the narrative can be turned around. So even if Reconquista today is paved with complex issues, this story could be turned around and seen as an opening. The potential green areas close by the river could mitigate floods, the hard surface of the urbanized municipalities with infrastructure surrounding them, could benefit from the greenery which the river could provide. A river is a great tool to accommodate the problems that encompass Reconquista.



We had a session where we asked the students about their perception of Reconquista, we made a cloud where we asked about the characteristic of Reconquista. The river is seen as a problematic area - polluted, dangerous & dirty.



The Tigre Delta

As we continue our journey through the landscape of Reconquista we start to see shimmering high rises. We followed the highway running along Reconquista to the outlet in Tigre. Tigre was described as the Miami of Buenos Aires, with skyscrapers dissolving into the velvet soft sky. Tigre is located next to the Paraná Delta, a beautiful forested archipelago which reaches out next to Río de la Plata. The water was brown to our surprise and disappointment. It differed from the romantic idea of the beautiful water edge. At first we thought it was colored by pollution but the entire river, as far as we could see in the direction towards Uruguay had the same nuance due to sediments, we were told. Fairies were constantly arriving and departing into the forested delta. People have been living in the delta for centuries, in symbiosis with natural flux. Until recent days as new constructions start to emerge in the delta, SPA designed to attract global tourists. New constructions are created to keep the water out, preventing the natural flow between the delta islands and the river, a function that harmonizes the water level.

Autopista Acceso Oeste

The river landscape is ignored and disregarded. Reconquista used to be called Río de Las Conchas a gentleman informs us. The origin for the name is unclear, but a probable cause is that the word concha is a vulgar word referring to vagina. A more fitting word for it right now could be wastescape. The river has been diminished into a sewer and is expected to provide humans with services, due to the poor or nonexistent sewer system. It gets nothing in return, except for piles of trash. The river is buried, at some places physically but foremost mentally for the ones who are not at the lowest step of the social ladder. For the ones who are more well-off the river makes its biggest appearance while driving on the Autopista Acceso Oeste due to the smell.

San Martín

Reconquista is hidden and disconnected from the urban fabric, it is hard to follow its path along the landscape. At one field trip to the river we tried to drive along the scattered river by car, and saw glimpses of the marginalized meandering river. Shortly after it appears it disappears again. We made a small stop as we visited one of the informal settlements in San Martín briefly. The densely built and self-constructed houses appeared in clusters from afar, before we were asked to get back in the car, quickly. The road is lush and green, the one thing that lets the driver know about the presence of Reconquista is the strong smell, which lingers after you have left the river behind.

MEET MORÓN RIVER

During the beginning of our stay we had the benefit to meet planners at Morón municipality, an office that has a myriad development plans. Morón has big plans on extending its connections to the surrounding metropol of Buenos Aire; new highway connections, submerging the train tracks underground and upscaling the two airports into one domestic and one international. A new climate park was emerging as well as a new highway next to Arroyo Morón. Arroyo Morón was presented as the biggest source of pollution to Reconquista.

Reconquista's largest tributary is Arroyo Morón (Morón river), which has its starting point in Morón municipality. The river connects to the second basin (Comirec 2017) of Reconquista and divides the two municipalities Hurlingham and Morón. The river runs underground and opens up to the sky at the edge of Hurlingham and Morón, a site heavily affected by garbage and trash. The state of the second part of the river is critical due to point and nonpoint sources of pollution from human settlements and since there is a lack of depuration stations and reverse the cleaning process taken place at the reservoir a few kilometers upstream (A. Ferraro 2012).

After the meeting we went to visit the river with group of professionals. Our first visit to Reconquista was full of exhortations that we could not come here on our own. It was not safe. The place is the mouth of Arroyo Morón, where the piped water meet the daylight. The place is small and modest, with a few spartan looking houses lining up to the river. To actually see the water you need to wade through piles of trash. There were furnitures, food, electronics, and next to it a horse-carriage in which they transport garbage for selling. The river hid behind a fence, which function was to keep people away from the water. In the river we could spot another outflow coming from the neighboring municipality Hurlingham, slowly pouring grey colored water into the somewhat blue and green river. Trash was also prominent in the water.

FINDING

Morón river is the biggest source of pollution to Reconquista. Hence Morón river become the focal point of interest for our thesis and is the starting point for the new narrative presented in 2.4 Reconquering Reconquista

FINDING:

Our first visit to Reconquista was enclosed by admonitions that we could not come here by our own. This was a dangerous place. Reconquista is hidden and disconnected, it is hard to follow its path along the landscape. We tried to drive along the scattered river by car, and saw only glimpses of the river.



Where Morón river meets the daylight, at the border to Hurlingham

MAIN ACTORS OF MORÓN RIVER

The Morón river is scattered. Anonymous and neglected for some, vital and essential for others. While some people rely on the river to provide them with ecosystem services and cover up for the city's lack of social services, others depend on the river as their water source. The population has poor resources and live close by the river in lack of social services which poses a threat to their health. The low income population are most vulnerable to the high levels of pollution (PDR 2015 p. 13 2018-04-08). The key actors along the Morón river are the two municipalities Morón and Hurlingham, and also the organization COMIREC.





ARROYO MORÓN

MORÓN RIVER

COMIREC is the commission responsible for the implementation of services and realization of the integration of the reconstruction of the Reconquista Catchment area, and has the legal capacity to plan, coordinate, execute and control the integral administration of the basin. The report *Cuenca Arroyo Morón* provide solid data of the actors such as the municipalities involved with the work of the Reconquista basin and the Morón basin. COMIREC encourage the municipalities next to the Morón river to cooperate, since they share many of the socio-environmental problems identified in the basin (COMIREC 2017).

Industry

The Morón river receives discharges of pluvial collectors, but is also flowing due to underground water. COMIREC states that the discharge from pluvial collectors come from industrial zones, contributing to the pollution of the water. Few studies have been carried out to measure the water quality of the Morón stream, but COMIREC mention pollution in the form of textiles and heavy metal concentrations is above the limit of protection of aquatic life. Low values of electrical conductivity have been measured in the river, as well as low values of oxygen, high ammonium concentrations and more, probably as an effect of residential and industrial effluents (COMIREC 2017). The same conclusion can be done in Zanjón Céspedes concerning industrial effluents. Before the mouth of the Morón river in the Reconquista river, the water quality is worse than before the entry of Morón. In Tres de Febrero, precarious settlements are assumed to discharge directly into the Morón river. The pipeline section in the Morón river has been calculated to have a high contamination, but a study has not been done to furthermore support this. Between 2008 and 2017, several industries close to the Morón river were closed down when continuing letting out discharge.

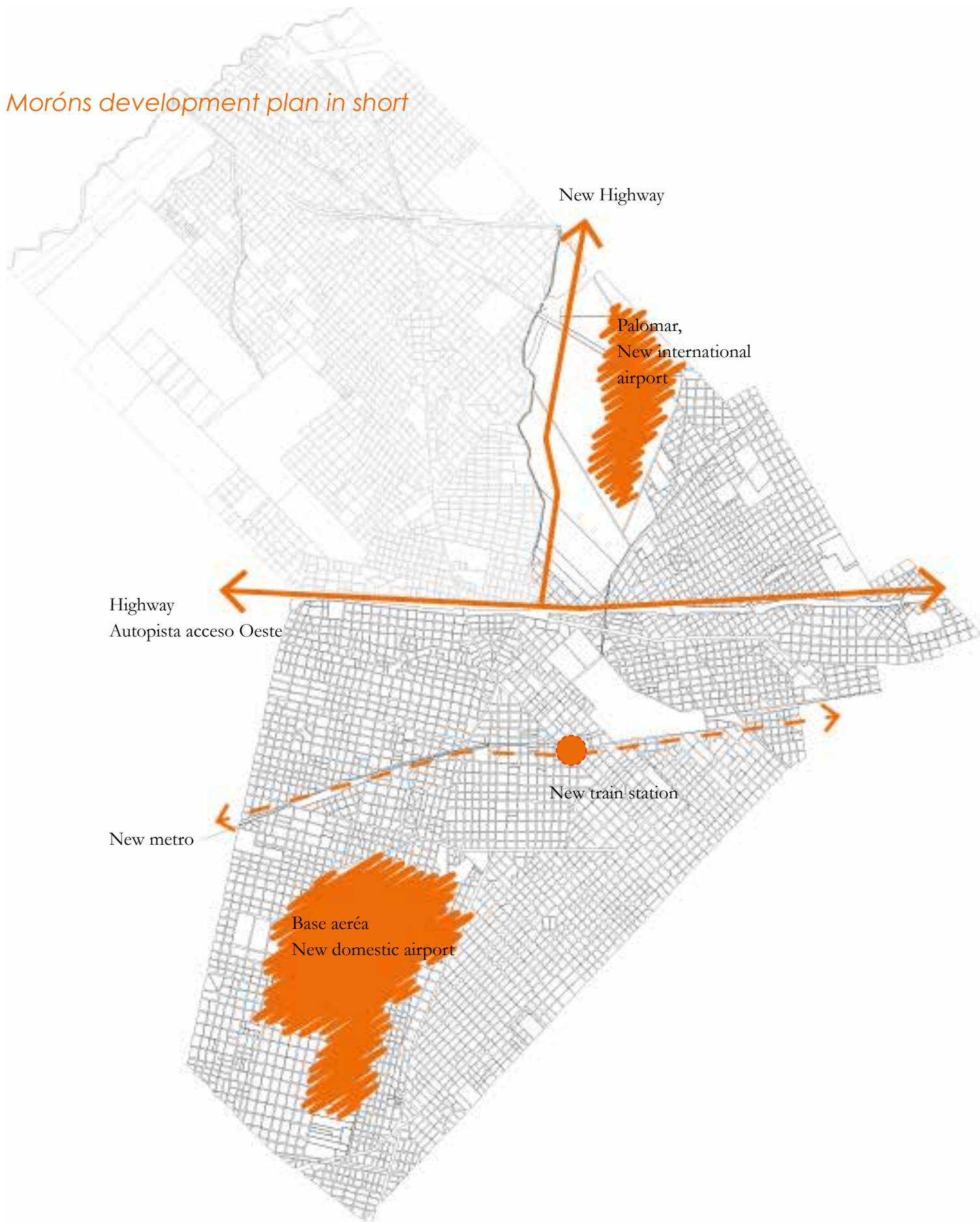
Ecological effect

The Morón river works as urban drainage but can't handle intense rain, which results in occasional floods. This has caused a decline in both flora and fauna, it exist two areas that has been partly preserved. COMIREC defines the Morón river as an urban basin within a metropolitan area of mixed non-green urban and suburban quality fabrics. The loss of vegetation and fauna, natural habitats and biodiversity is apparent in the area surrounding the Morón river. Water and waste management are poor, causing destruction the ecosystems which need to be restored (COMIREC

FINDING

The garbage system is dysfunctional. The city is harvesting the benefits from having much water close by, but are not acknowledging the ecological system, people throw garbage in the river and industries discharge in it. The environmental awareness is low.

Moróns development plan in short



2017).

Waste management

All the municipalities near the Morón river have one or more areas devoted to Waste Management, although taken cared by two different departments making an integral vision of solid waste management difficult. According to a survey carried out by COMIREC, the majority of the municipalities claim they lack personnel in the phases of management.

The municipalities also indicated that the waste collection services covers approximately 100 %, however the micro and macro garbage waste in the river show that the municipalities do not have a full coverage. The same survey presented answers as to why the collection services in informal settlements are so poor; several municipalities stated that narrow streets, poor traffic conditions or insecurity sometimes hinders the services to be carried out. COMIRECs report also shows that no municipality in the basin has a collection service that is covered entirely by municipal management, and Tres de Febrero, Morón and Hurlingham are amongst those who have an entirely privatized system.

Modernism is modern again

When meeting Morón municipality, it became transparent that they struggle with managing the municipality. According to an architect working in the planning office of Morón, political issues causes unequal distribution of resources to the different municipalities. The low population growth is problematized and visions of expanding internationally through developing the airports is stressed as a solution. Despite having two airports, Morón municipality wants to develop the north airport Palomar, next to the Morón river. The south airport of Morón was limited from 3500 meters to 2450 meters due to surrounding urbanisation, and stopped being an international airport when the international airport of ezeiza was built. Palomar is one of two areas in Morón that still holds vegetation and fauna outside of an urban area. The Ministry of Transport has indicated that The Palomar Airport will be regionalized in two stages, becoming the third most important airport in the Metropolitan area of Buenos Aires. The incorporation of expanding the commercial market especially through low-cost companies in Palomar has led to conflicts. The Air Force reject civil and military use of the airport and has left formal complaints, human right organizations have also objected the plans, and residents in Hurlingham request environmental impact studies. Neighbours have said that the area should be declared a natural reserve (COMIREC 2017).

FINDING

Waste management are partly privatized in the municipalities, and 100 % privatized in Morón. To have different municipalities in the area further complicate the matter.

FINDING

Morón river has the worst measured quality of the tributaries. The river thrives of garbage and is polluted with heavy metals, but the resources for managing the pollution are insufficient according to Morón Municipality. The perceived ability to manage the waste is contradictory to the pollution found in the water.

FINDING

Morón the biggest source of pollution to reconquista, which leads to la plata where drinking water is collected. The pollution is cocktail of waste, industrial and residential discharges which causes low aquatic life a risk of sickness.

FINDING

While Morón have two airports, one is planned to be developed further. This is the only area except for one other that still holds vegetation and fauna outside of an urban area - where green qualities are sparse. Investing in the airport would further destroy the natural habitats that exist today.

FINDING

Infrastructure surrounds the river and creates barriers which make it difficult to reach by bike or foot. Morón wants to invest in connectivity by constructing a new highway, submerging train tracks underground and upscaling the two airports.

FINDING

The area has a potential of offering recreational activities, but getting here is difficult due to the infrastructure, especially when commuting.

FINDING

The residents next to the Reconquista are exposed to threats due to polluted water and floods, especially informal settlements are at risk. The foundation on which the informal buildings are constructed have too high values of toxics.

Finding

Nobody would settle in such a hazardous environment if they were given a choice.

While there are good connections moving east-west, the north-south connections are sparse. The Morón municipality envisage a train station in the heart of Morón, making the connection to the east stronger, but also connecting to the Palomar airport which then will be the only airport connected by trains. A new Metrobus line will hopefully also connect Morón to Buenos Aires. The municipality has plans for creating a park where the old tracks are today, but does not have strategies as to how to implement this at the moment. A new centre is to come along together with the train station, offering hotels and commerce. Some industries in the centre of Morón are planned to be moved to the north-west side of Palomar, next to the Morón river. The fact that these are letting out industrial discharge is mentioned, but not how they would tackle this if they are to be relocated.

Informal settlement

The Morón river is encompassed by informal settlements in Hurlingham, close by the river where the ground is heavily polluted and the formalized city is not allowed. In the informal settlements in Hurlingham there are high levels of organization. The everyday life in the villas, as the informal settlements are called, is the life of the emaciated. In 9 de Julio people meet every day in the afternoon the cook together, making sure that everyone gets at least one meal per day. Life is hard in the settlement and one of the biggest problem is the high expenses for doctors appointments. There is a connection between the polluted water and the high medical expenses. We ask how they use the water in their everyday life.

During a visit to an informal settlement next to the Morón river, we are told by the settlers that their relationship with the river is complicated which in their minds is considered a sewer. When asked how they perceive the river, they reply that it is the most contaminated river in the world. Despite this, due to the almost non-existing system for drinking water, they are using the river at times since buying water is too expensive. They continue bringing up the topic of infrastructure, and explain that sometimes they have electricity, sometimes not, some have sewers, some not and some have drinking water, and some not. Preparing for flooding is difficult, at one time, a woman says, she so much water she couldn't open the door. The polluted water had reached all the way in to the kitchen, she says.

The waste management is insufficient, they leave the waste at one place where it



at times is collected through private initiatives. They are eager to improve their quality of life, and say that if they would have police, security - everything. According to the settlers they would not chose this place for housing, but are forced to live here due to their economical situation. They state that they have knocked on many doors to seek help from the authorities, and do not know where to turn next. Still, the informal settlements has a community of its own and help each other out. Gathered under a roof with concrete and brick walls facing the river and a fence towards the informal settlement area, the settlers offer cooling drinks and bread and explain that they make sure every child in the settlement gets food at least once a day. Through a narrow opening in the wall, a path leads to a small garden with hens and some waste, and there one can peek through fences and see the river only a few metres away.

This picture shows what Hurlingham sees as a potential future for the riverbank

The majority of the women have housekeeping jobs in Buenos Aires according to a settler, and men work with constructions. These jobs are also mostly found in the city but also at other places in the province, and to go there they use public transport. Another way to earn money is collecting and selling waste such as metal, paper and plastic.

Equal access to river moron

The network is fragmented and pedestrian streets are of low quality, and almost without exception next to traffic. The public places are few in our area, and green spaces per capita low. Still children are playing and running around chasing each other on the streets. They also are difficult to use during floodings, making them non-resilient. In the larger scale, Buenos

ÁREA DE INTERVENCIÓN

CALLE CAÑADA DE RUIZ – RIBERA ARROYO MORÓN



EJES DE LA PROPUESTA

- Regularización dominial y relocalización de familias
- Plan de viviendas
- Urbanización y reordenamiento territorial
- Programa de reciclado y planta de tratamiento



INTENDENTE
JUAN ZABALETA

The municipality of Hurlingham have plans to move people in the villas to new constructed buildings with a higher living standard. When asked if they wanted to move the reply was without hesitation "Yes".

PROPUESTA DE NUEVAS VIVIENDAS LOCALIZACIÓN

ZOOM TERRENO A LOTEAR



El terreno de implantación de destino se encuentra en Villa Tesei, sobre unos terrenos cedidos por el INTA al municipio. Allí se construirán 120 viviendas con destino exclusivo para las familias a relocalizar



INTENDENTE
JUAN ZABALETA

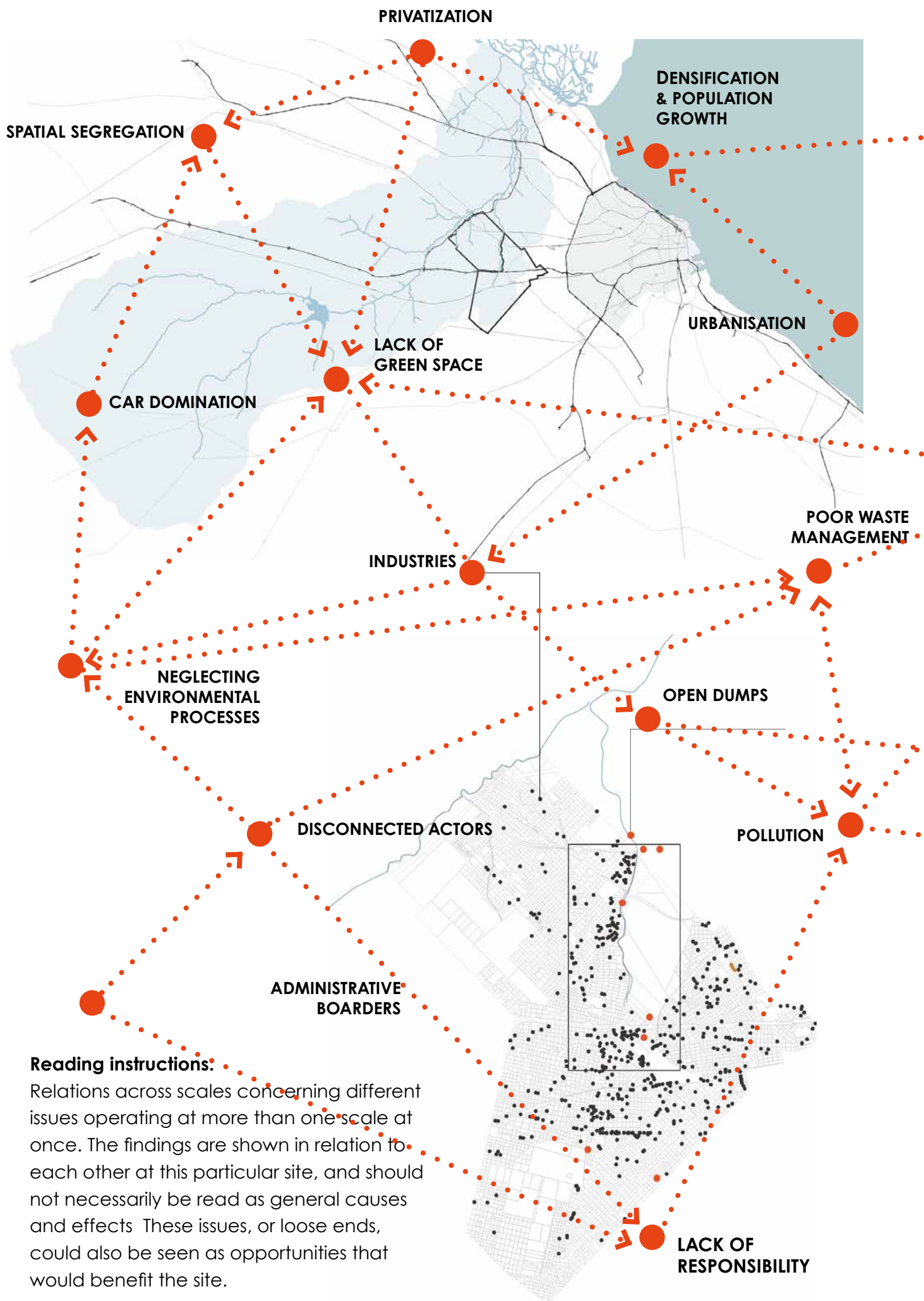
PROPUESTA DE NUEVAS VIVIENDAS AMANZANAMIENTO Y LOTEOS



162 LOTES
5 MANZANAS

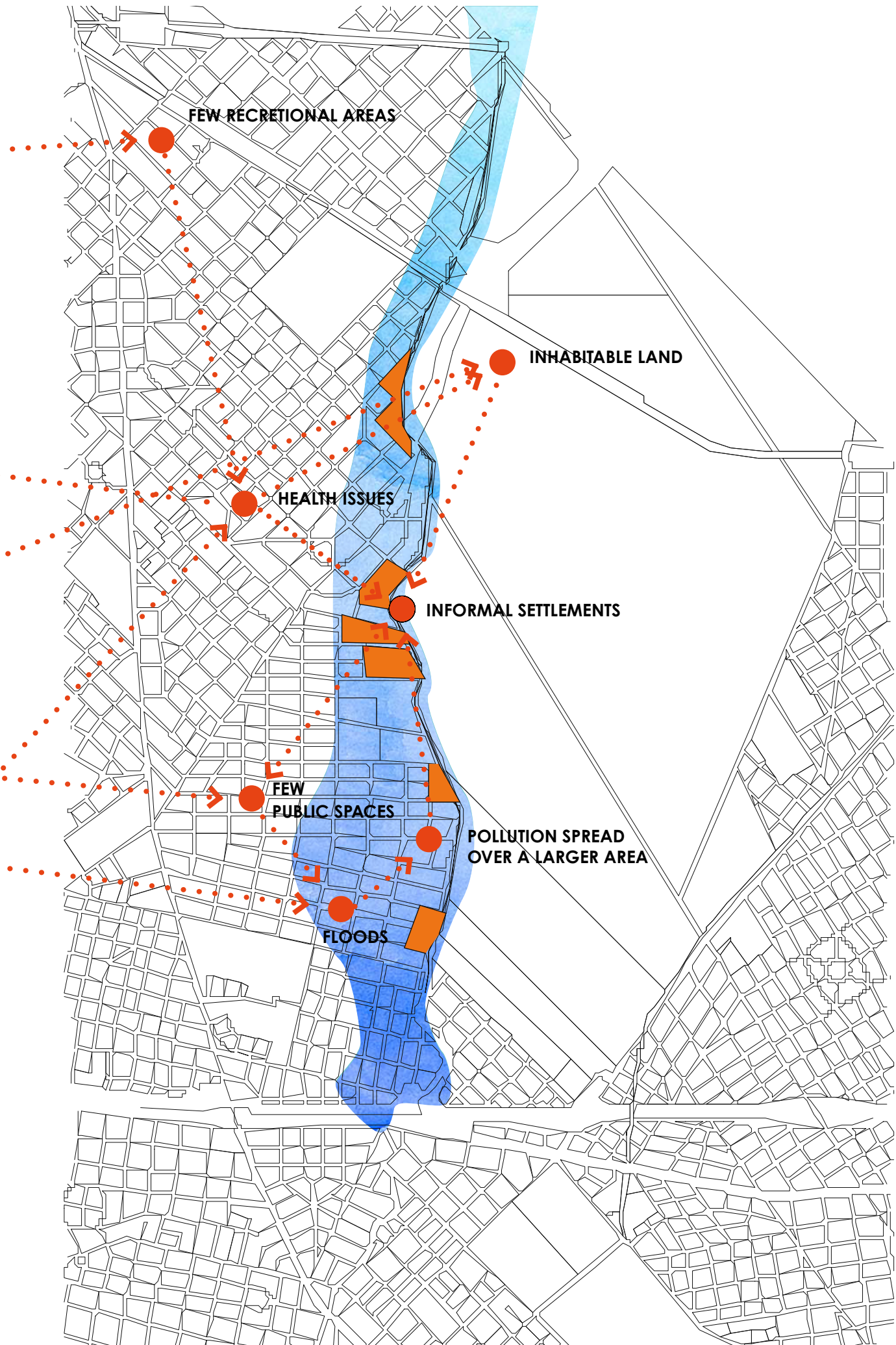


INTENDENTE
JUAN ZABALETA



Reading instructions:

Relations across scales concerning different issues operating at more than one scale at once. The findings are shown in relation to each other at this particular site, and should not necessarily be read as general causes and effects. These issues, or loose ends, could also be seen as opportunities that would benefit the site.







SEARCHING FOR DIRECTION

The findings leave us with an overwhelming complexity of the problems encountered. First we need to design the idea of a new direction in the minds of people, a story to empower action.

To find a story on an overarching value codex beyond the local level we study the New Urban Agenda and the SDG 11, both tackling global issues of urbanisation in cities.

URBAN SUSTAINABILITY

Guiding value codex

Searching for direction

To direct our design towards a more sustainable future we look to discourses of urban sustainability. First the SDG 11 is introduced and its guidelines, after which the NUA is presented in seven different topics that were put together from 37 guidelines from the NUA. Here, we look at the current narrative through NUA lenses, focusing on the five topics; equity, equal right to enjoy the city, physical accessibility, cleaner cities, connectivity among actors quality (green) public places and resilience in order to state what needs to change.

SUSTAINABLE DEVELOPMENT GOALS

sustainable cities and communities

The SDG 11's targets fixate around the year 2030, when several goals are hoped to be achieved. Some of these are providing access to safe affordable, accessible and sustainable transport systems for all while also enhancing road safety, expanding public transport and in particular in regards to people in vulnerable situations. Another target is similar, envisaging universal access to safe inclusive and accessible green and public spaces. SDG 11 also calls for enhancing inclusive and sustainable urbanization. Another target is protecting the world's cultural and natural heritage. SDG 11 also brings up direct economic losses due to disasters, including water-related disasters with a focus on protecting poor or vulnerable people. The environmental impact cities have should according to SDG 11 be reduced, especially reducing effects on air quality and waste management. The support of positive economic, social and environmental links between the urban, peri-urban and rural areas is also called upon. A goal set for 2020 is to have more cities and settlements working towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters and to have holistic disaster risk management. Finally, SDG 11 calls for a support of the least developed countries.

THE NEW URBAN AGENDA SHOWS THE DIRECTION

The 175 guidelines touch upon a broad spectrum of goals or methods, relevant to reaching a sustainable development. While some guidelines' purpose are defining a problem, others are about recognizing that there is a problem or making commitments to solve the problem. The following text is a summarization of the 37 guidelines in the NUA that are relevant to us, with reference to the guidelines in parenthesis.

Equity

Extracted from The New Urban Agenda's
 paragraphs:
 2; 3; 4; 13; 20; 25; 53; 58; 120; 155

Several initial guidelines state challenges concerning inequity, among these concerning urbanization and poverty are infrastructure, basic services, health and natural resources (2). An improvement of quality of lives within slum and informal settlements is called upon and the persistence of poverty, the growing inequalities as major barriers for reaching a sustainable development, referring to social and economic exclusion and spatial segregation is highlighted (3). The NUA stresses that prioritization should be given to informal settlements, among other less well-off citizens (20). Poverty is addressed several times in the NUA, which states that poverty is the greatest global challenge, and has to be eradicated for a sustainable development (25). The growing inequalities and persistence of poverty, including the increased number of slums and informal settlements where “...*spatial organization, accessibility and design of urban space, as well as the infrastructure and the basic services provision, together with development policies, can promote or hinder social cohesion, equality and inclusion*” are recognized (25).

The NUA envisage an inclusive and sustainable economic growth that will harness local economies, acknowledge the contribution of informal economy and support a transition to formal economy, provide safe and accessible urban mobility for all, linking people, places, goods, services and economic opportunities (13). On the same topic of inclusion and accessibility, the NUA promotes safe, inclusive, accessible, green and quality public spaces as drivers of social and economic development for increased social and economic value and facilitate business and public private investments and livelihood opportunities for all (53). The economic development is addressed further (58), recognizing difficulties met by local businesses and encouraging a support of enterprises over different scales, especially business in the social and solidarity economy, both in the formal and informal economies. Equity is also mentioned by addressing a promotion of initiatives (155) that empower people with conditions inferior to others, and also involving the same people in decision-making of urban development.

The challenge of public water and sanitation is stressed (120) which promotes implementation of sustainable water management systems.

Equal right to enjoy the city

Extracted from The New Urban Agenda's
 paragraphs:
 11; 36; 99; 100

For a city to be socially sustainable, everyone should be able to benefit from it, taking special consideration to marginalized people, older (elderly) persons, women, children, people with disabilities and other groups that might be

exposed to vulnerabilities. The NUA envisage equal use and enjoyment of just cities by making them safe, healthy, accessible, affordable, resilient and sustainable for a better quality of life (11), and especially focusing on vulnerable groups is constant throughout the text. The equal right to enjoy the city is emphasized further supporting access to quality public spaces for all (99) and by promoting safe, accessible, green and quality street networks and other public spaces for all, while also adding the fostering of both formal and informal local markets and commerce, attracting people to public spaces by walking and cycling and by doing so increasing both the health and wellbeing of people (100).

Cleaner cities

The NUA urge a commitment to waste management and reduce waste, especially benefiting the environment in coastal areas by reducing marine pollution (74). By ensuring integrated, green ways of transport such as rail systems and safe pedestrian and cycling infrastructure the NUA want to encourage national, subnational and local governments to develop financial instruments that can take on the matter of congestion and pollution (118). Renewable and affordable energy and sustainable and efficient transport infrastructure are arguments for achieving connectivity, reduce financial, environmental and public health costs of inefficient mobility, congestion, air pollution, urban heat island effects and noise (54). A commitment to the energy and transport needs of all people, in particular those living in informal settlements as also called upon.

Extracted from The New Urban Agenda's paragraphs:
74; 54; 118

Connectivity among actors

While the NUA indirectly talks about a transdisciplinary approach throughout the text in multiple ways, some guidelines are more focused on highlighting the partnerships between actors. The NUA promotes fostering an enabling environment for businesses and innovations (45), and encourage participation between all relevant stakeholders, including local governments, the private sector, the civil society and more (48). Local economic development is mentioned, with the aim to foster integration, cooperation, coordination and encourage dialogues between stakeholders and different levels of government (47). Finally the NUA promotes a development that takes the abilities of multiple stakeholders and institutions at different levels of governance and the individual, societal and institutional capacity to develop public policies into account (147).

Extracted from The New Urban Agenda's paragraphs:
45; 47; 48; 147

Physical accessibility

Extracted from The New Urban Agenda's
paragraphs:
50; 52; 114

Not only does the New Urban Agenda call for a more ecologically sustainable transport and mobility, but also an enhancement of urban-rural connectivity and interactions (50), or planning accessible and integrated infrastructure such as new neighbourhoods well connected to the urban fabric to prevent urban sprawl and marginalization (52). The NUA encourages accessibility to enable an inclusive society with social and economic activities for all, which can be done through prioritizing non-motorized options over private motorized transportation and coordinated transport to enhance connectivity between urban, peri-urban and rural areas, especially in coastal cities (114).

Quality (green) public spaces

Extracted from The New Urban Agenda's
paragraphs:
37; 67; 100; 113

The NUA promotes more public spaces such as sidewalks, cycling lanes, squares, waterfront areas, gardens or parks, and also an increase in their quality, safety, inclusiveness and accessibility (37). The NUA also brings up that the areas should be multifunctional for social interaction and inclusion, human health and well-being, economic exchange and cultural expression and dialogue between different people, enhancing the possibility of connectivity and social inclusion (67). Measures to improve road safety is called upon and awareness-raising initiatives are seen as a method to do so (113). Further on, pedestrian safety and cycling mobility is mentioned while stating that this should be promoted and that: “We will promote the safe and healthy journey to school for every child as a priority”. The NUA further stresses the need of a well-designed network of safe, accessible, green and quality streets and other public spaces, adding that they can foster both formal and informal local markets and commerce and promote walkability and cycling (100).

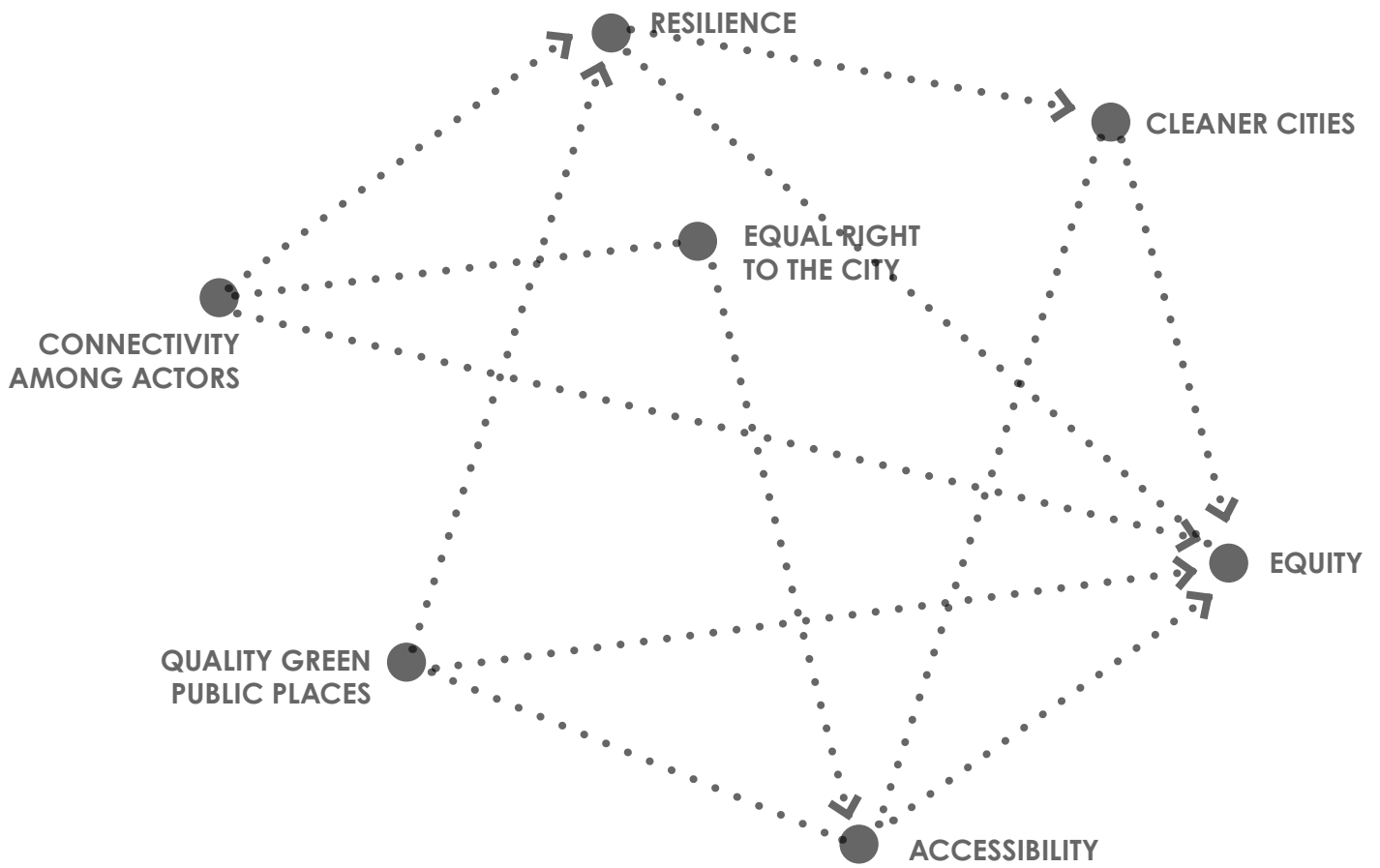
Resilience in cities

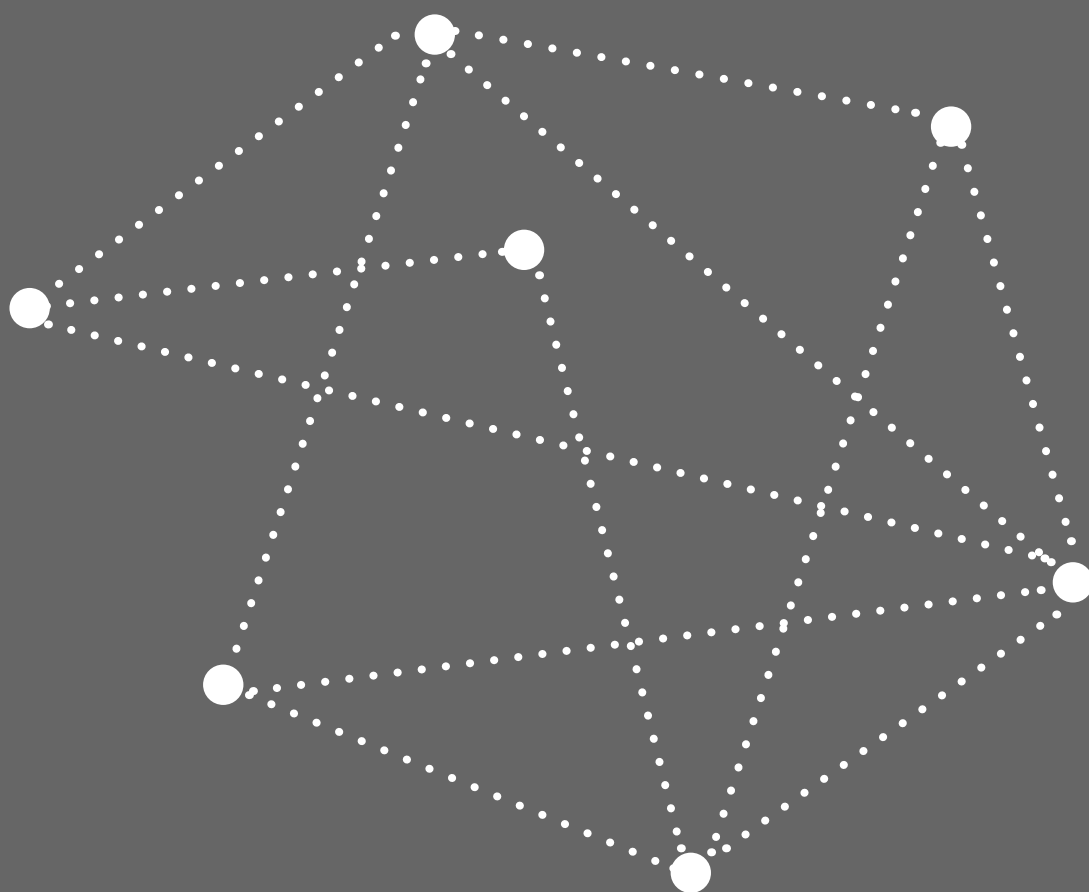
Extracted from The New Urban Agenda's
paragraphs:
13; 63; 64; 65; 68; 77; 78; 79; 119

The NUA points out the different scales in which climate action should take place; internationally, nationally, sub-nationally and locally (79) and support strategic developments that protect and improve the urban ecosystem and environmental services and reduce greenhouse gas emissions, air pollution and disaster risks (65). The urban coastal areas and deltas are narrowed in on (68), highlighting their ecosystem functions. To improve safety in case of water-related disasters, improve health, ensure universal and equitable access to potable water and sanitation and hygiene, the NUA promote protective, accessible and sustainable infrastructure and systems for water, sanitation and hygiene,

sewage, solid waste management, urban drainage, reduction of air pollution and stormwater management (119).

A creation and maintenance of well-connected and well-distributed networks of open, multipurpose, safe, inclusive, accessible, green and quality public spaces is once again stressed, but this time in order to improve the resilience of cities to disasters and climate change, such as floods, air quality, noise reduction, attractive and liveable cities (67). The NUA stresses the importance of adopting and implementing disaster risk reduction and management, reduce vulnerability, build resilience and foster mitigation of and adaptation to climate change, while also protecting, conserving and restoring existing ecosystems, water, natural habitats and biodiversity (13) and recognize that cities will face threats due to unsustainable production patterns and consumption, loss of biodiversity, pressure on ecosystems, pollution, natural and human-made disasters and the risks related climate change (63). The existence of vulnerable characteristics in urban centres are recognized as extreme weather events, flooding, subsidence, storms, water scarcity, droughts, water and air pollution, sea level rise, especially affecting coastal areas and delta regions among others (64). The threats are dealt with by strengthening the resilience of cities using ecosystem-based approaches and especially reducing threats in risk-prone areas of formal and informal settlements and help human settlements better respond to the stresses (77) and by raising awareness (78).





SEARCHING FOR TOOLS

The seven foundations from the New Urban Agenda provide directions, but we need tools as well. To get inspiration of how others, facing similarly devastating futures, have turned their fate towards a brighter perspective, we study a renowned reference case that has already shown success in driving concrete action to transform the physical reality by starting in a narrative.

EMSCHER'S TRANSFORMATION

Reference case

Searching for tools

The transformation of Emscher into Emscher park provides us with tools for how a narrative managed to transform the physical reality. Emscher provides inspiration and tools which played a vital part in the transformation of how the open sewer turned into a regional living space. At the height of industrialisation, the surrounding industries and households used it as a reliable wastewater drain. From the early 19th century, rapid industrialisation and dynamic population growth severely damaged the Emscher's natural ecosystem, turning an idyllic river into an open wastewater canal. That was the price the Ruhr area paid for becoming the industrial heart of Germany and Europe. Reconquista is in its current state in a similar situation to what Emscher was at the time before the transformation. Regarding pollution, spatial segregation, health issues and disconnectivity among actors erving form a variety of interest. Emscher's transformation into the Emscher Park has been through three shifts which needs to be presented to understand the transformation process.

PHASE ONE

The ecologically sound original river

PHASE TWO

The functionally sound industrial sewage canal

PHASE THREE

The urban river



Lush beautiful river in the pittoresk landscape

The river was used as a wastewater canal. The result was a complete deterioration of the ecological conditions and it was known as the dirtiest river in Germany for decades.

Today the smoking chimneys has been replaced by winding pahn and green areas. The transformations guiding principles was to recreate the natural setting and adapt the riverbanks to fit the demands of recreational areas. With new technical infrastructure an underground wastewater canal will stop the discharge of wastewater ito Emscher. This technical work is still in the process but by that time Emscher will be able to be ecologically upgraded.





PHASE ONE

the ecological river

The once 109 km long Emscher river used to meander through the Ruhr region, when it was still a sparsely populated area all the way to the Rhine. This was before the industrialisation changed the landscape, during a time when it was characterized by small villages and farms, and the ecological processes were in large scale untouched. The river was considered unpredictable and would occasionally flood even back then due to its winding course.

PHASE TWO

the industrial infrastructure

The second phase is characterized by Emscher being a vital component in the regional industrial infrastructure 1850-1906. The Ruhr area was once Germany's industrial heart, which today has been outsourced to other parts of the world. The Emscher river was used for the ecosystem services it provided to the region and helped with cleaning water and transporting waste and dirt.

The industrialisation phase led to a massive population growth. The Emscher valley's catchment area population grew a six fold between 1871 and 1905, from 90,000 to 590,000. The coal mining industry expanded with a result of severe floods, an increase of industrial wastewater and sewage discharge from the growing population had a tangible effect on Emscher. The once clear water instead became murky with pollution, which created an increased risk of epidemics with for instance malaria, typhoid, diphtheria and cholera. The ecosystem of the Emscher river basin was in large parts ruined.

From 1906 to 1949 hygiene situation degraded and both individual communities and industrial enterprises got together to deal with the escalating problems. In 1899 the mining companies, industries and cities gathered to found the Emschergerossenschaft. The common goal was to ensure that the discharge of wastewater held a hygienic standard. The mine subsidence prevented the chance of channeling wastewater underground in the regional area, so instead the Emschergerossenschaft agreed upon channeling wastewater in an open, paved canal. Between 1906 and 1920 Emscher went through a fundamental systemic transformation. The river was straightened in a three meters deep concrete bed. The rivers natural meandering movement were forced to stop and adapt to the





1899

THE EMSCHER

The river Escher at the beginning of the 20th century. Industrialization has transformed the river landscape from a small river to an area constantly affected by inundation of contaminated water.

IBA (u.d)

wish of humans. Mine subsidence forced the river to sink to new depths, and to sustain Emscher's connections to Ruhr the river had to be moved twice, in 1920 and 1949. Dykes were constructed to counteract the mine subsidence and to keep the area from floods. Pumps were also put in place to move water from the tributaries to Emscher. Willy Brandt, candidate for chancellor of West Germany 1961 demanded that:

// THE SKY OVER THE RUHR REGION MUST BE BLUE AGAIN Willy Brandt

Through his speech, Brandt his speech on the 28th of April in the Bonn Beethoven hall, he shone a light on the previously ignored problem of environmental politics. He focused on the downside of the economic miracle of Germany. The smoking chimneys were seen as a sign of economic prosperity, but the fume affected the health and well being of the people living in Ruhr. In the 1960's the air pollution was visible. Dust, ash and soot from the steel industry, furnaces and coke ovens polluted the area all year around. This resulted in respiratory diseases. The concentration of Sulphur dioxide (SO₂) led to trees dying and to acidification in soil and water voids (German Environment Agency 2011).

In 1974, the fetor from the river was making the residents call for action. The focus began to shift from socio-political problems to ecological ones. In the 1968-1973 Ruhr development programme, a step towards acknowledging the ecological processes was taken as it was possible to improve the quality of air and water in the area by utilising filter systems in industrial production. An effect of acknowledging and working with ecological processes was the decrease in air pollution.

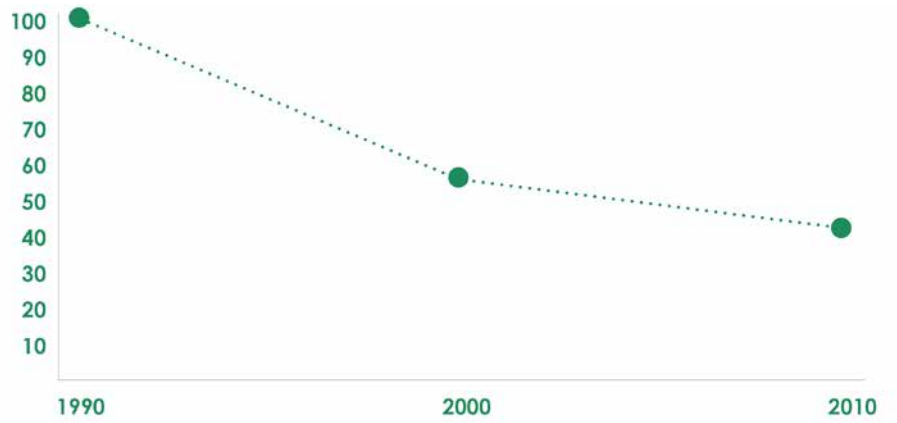
The mining industry slowly faded out at the end of 1950's. The pits started to ebb and coal mining industry was coming to an end. The population was steadily increasing, considerable increasing domestic wastewater. In 1977 the Emschergerossenschaft initiated what would become Europe's largest sewage treatment plant at the Emscher estuary Dinslaken. The aim was to stop contaminating the water of Rhine, which Emscher connects to. Incidents with mine subsidence led to the need to install pumping stations. The amount of pumps increased from 40 to 92 from 1949 to 1985.

Finding:
Increased pollution, decreased health and well being led to awareness about the environmental degradation.

FINDING
Increasing pollution and decreased health and wellbeing led to awareness about the environmental degradation.

FINDING
Voices raising questions about ecological processes sparked a discussion concerning the state of river and how to move forward

FINDING
Acknowledging the ecological system
can be a first step to overcoming
environmental issues.



PHASE THREE

Regional living space

In 1974 many of the former mines had closed down, which led to a decrease in mine subsidence, and the risk of channeling wastewater was reduced. The environmental awareness grew as the constant smell grew difficult to disregard due to the open canal. In 1981 EmscherGenossenschaft did their first try to free Emscher from the concrete bed and rerouted the wastewater in underground pipes. The river could once again receive spring- and stormwater and nature quickly adapted to its former patterns. The pilot had been successful and encouraged new projects.

The Emscher region encompasses several administrative borders. The interests of several actors therefore had to be coordinated for the Emscher project, encompassing municipalities, residents, planners and more. For some time, the planning authority levels ensured an ineffective regional planning. Over a period of one year and a half these actors were involved in dialogues when putting forward a Master Plan which finally was agreed on by all partners.

The Ruhr Association is a regional hub of the 11 independent municipalities and four districts of the Ruhr Metropolis, and sponsor the Emscher Park. EmscherGenossenschaft is one of the main actors contributing to stop the pollution from industries, and functions as a central actor in the region that coordinates its activities together with other actors. The EmscherGenossenschaft, serving as a managing actor and cooperative, also serves as a commercial enterprise and holds a social and cultural association. It does not seek to maximize the economic growth, but instead offers solutions for the common good such as integrated system services. As a cooperative, they are appropriate in finding solutions to the challenges of ecological crisis and does this while creating long-term values. Its members are the cities, local communities and industries and districts in the area. The cooperation between major actors made innovative projects beyond local authority and administrative boundaries possible. The members are aware of the effects that waste has had and rely on each other to not act disadvantageous for the aims of the cooperative. During the 1990s, the EmscherGenossenschaft reformed its organisational structures and appointed an IBA representative. One example of collaboration between the EmscherGenossenschaft and another actor is the New Emscher Valley Working Group (Arbeitsgemeinschaft Neues Emschertal), together with the Ruhr Regional Association (Regionalverband Ruhr). The New Emscher Valley Working Group is a network of actors coming together to revitalise Emscher. The aim of the collaboration is to create an attractive urban, cultural and aquatic landscape together with members, citizens, local authorities, politicians & companies.

Governance - the action or manner of governing a state or organization

// ONE MAJOR GOAL OF THE EMSCHERGENOSSENSCHAFT IS TO CREATE A SUSTAINABLE BALANCE BETWEEN THE DEMANDS OF HUMANITY AND NATURE. THE EMSCHER CONVERSION MISSION STATEMENT DESCRIBES THIS IN TERMS OF THE INTERACTION OF ECOLOGICAL UPGRADING AND QUALITY OF LIFE, THE COEXISTENCE OF NATURE, TECHNOLOGY AND NEW ECONOMIC POTENTIAL. THE EMSCHERGENOSSENSCHAFT HAS BEEN CAMPAIGNING TO CONNECT ISSUES AROUND WATER, WASTEWATER AND ENERGY, AND NOT JUST SINCE THE BEGINNING OF THE TRANSITION TO RENEWABLE ENERGIES.

WIKUE 2013:68

When turning the vision into a physical reality, eight focus areas are guiding the developments

1. Flood protection remains the highest priority
2. Ecological potential will be fully utilised
3. Leisure and recreational facilities with high amenity quality
4. Quality of life and new economic potential
5. Pride in local history in a new design context
6. Clear, linear design elements emphasis continuity
7. A recognisable material and symbolic language ensures a distinctive look
8. An outstanding attraction, object of identification and economic platform

(WIKUE 2013)

The goal of the Emscher Future Master Plan is to restore the Emscher into a “...contiguous, ecologically functioning living space for all kinds of aquatic life” (WIKUE 2013:47). The process for the Emscher Future Master Plan opened up for new governance structures. An intelligent management of a reconstruction process is vital for achieving a robust and resilient region. Through both regional governance with the Ruhr Regional Association and the Emschergenossenschaft, an innovative governance model is created to manage the complex connections. The Master Plan was put together over a year and a half in intense dialogues with all actors to come up with a plan that all could, and did, agree on (WIKUE 2013). The Emscher Dialogue, brought out continuously by the Emschergenossenschaft since 2001, collect ideas from planners, environmental agencies, companies in the Emscher Valley and city marketing departments. Jointly shared goals were defined among the different actors. The residents came up with valuable ideas and proposals for the development which were considered as important as the ones coming from engineers who were working with technical innovation in the Emscher project. Also, The Emscher Future Master Plan functions as an innovative method to get both local administrations and other actors on board and enabling unconventional processes and plans. The Master Plan in this way serves as a platform where visions and topics around water are discussed and later on performed.

While the Federal Government define climate protection goals and economic policy guidelines, the town authorities and country districts are responsible for developing the concepts that can be implemented.

Transforming the Emscher was not done singularly and not in one day. The area stretches over several municipal boundaries, implying both the need of an actors network but also a long time investment. By connecting the different municipalities along with other actors, their shared knowledge increased, contributing to resilience in the region’s capacity to improve the Emscher river. Innovative and informal planning is found in the Emscher Future Master Plan. Through the Emscher Future Master Plan, the network of actors were aimed towards integrating knowledge and could gather around a document with convincing and holistic concepts.

FINDING:

By building a network of knowledge, the shared knowledge becomes greater and challenges concerning administrative boundaries are more easily overcome

The networking of knowledge was essential to the Emscher project. By recognizing the importance of integrated knowledge, in contrast to separate knowledge, resilience is reinforced in the face of challenges and crises. The shared understanding of challenges facing the region was vital to the integration of knowledge, and through instruments, such as mission statements, such an understanding could be achieved. The Emscher Dialogue is an example of such an instrument that continuously integrated knowledge from experts, environmental agencies, local companies, representatives from city marketing departments and people from different professions into the Master Plan. The cooperative process of developing the Master Plan also generated a greater understanding and awareness of the concerns of others.

FINDING

Shared knowledge goes hand-in-hand with understanding one another

The immense project that laid ahead required more than water management and technological expertise; it also had need for a wider theoretical and practical knowledge, such as urban development fields. In the process of transforming Emscher expertise such as architecture, development planning, landscape architecture and housing cooperatives was integrated. The extensive width of social and technical solutions to see the project through ensured that the Emschergenossenschaft and other actors had to keep learning through observing, reflecting on and managing regional self-organisation. An example of this is achieving the goal of converting the Emscher, formulated by IBA, which both then and now is generating new knowledge.

New knowledge also extends to the children and young people living in the Emscher who through their schools become parts of Back (creek) Partnerships and the Emscher Kids. They are thought about their surroundings and the importance of an intact environment.

In 1991 the Emschergenossenschaft agreed to convert the entire river system by channeling wastewater in underground. The transformation of the river system became a symbol for a structural change in the region. This is a plan which does not just happen over one night. The technical segment is to construct or modernise four sewage treatment plants

FINDING

The highest investment ever into wastewater treatment was made able by the collaboration among actors

Second ‘ecological’ conversion phase — 1991 until today. After initial hesitation and some small further conversion measures, the Emschergenossenschaft decided in 1991 to convert the entire Emscher system, channelling wastewater into underground canals, all now operating (at Dortmund-Deusen, Bottrop, the Emscher estuary and Duisburg — Alte Emscher). The project aim to submerge

421 kilometers of wastewater i canals along Emscher and its tributaries, carrying wastewater from 2.2 million people and industries 421 kilometres of underground wastewater canals will be built along the Emscher and its tributaries. The estimated cost is 4.5 billion Euros and the plan is to be finished by 2020.

The International Building Exhibition (IBA), Emscher Park was a 10 year programme of the Land Northrhine-Westfalia, Germany, between 1989 and 1999. It was designed to initiate restructuring in the part of the Ruhr region, the Emscher, which has been suffering the most from economic, environmental and social decline for many decades. The IBA was initiated to provoke integrated development and regeneration, and not only considering economic or job creation factors but instead giving value to the society, environment and culture. Through the IBA initiative, 117 design projects were built during the ten years they were active. To select projects to be initiated, a committee of ministers, public bodies, trade unions, towns, companies and environmental planning and architectural bodies were chosen (Danielzyk & Wood 1993). The design projects initiated by IBA are grouped in six guiding topics: Working in the park, new buildings and modernising housing estates, ecological renewal of the Emscher system, promotion of urban development and social stimuli for urban development and the establishment of a regional park structure called the Emscher Landscape Park” (IBA u.d).

Technology can, if used right, also harmonize with nature. Once used to concretize the watercourse, now instead aids in revitalizing the river. Technical infrastructure is finally ceasing the discharge of wastewater through underground wastewater canals. Such investments not only make the Emscher region more attractive, but also contribute to the residents’ quality of life.

For the sake of turning the Emscher from an artificial, polluted river and into a natural watercourse technical and water management measures are essential. In large parts, the Emscher transformation is a water management project. Four biological waste treatment plants were installed in 2001 and are treating both domestic and industrial wastewater.

The initiation of underground wastewater canals is one of the technical infrastructure measurements that improve the ecology of the waterways (WIKUE 2013). Also, to stop the river turning into a lake several pumps have been installed, a necessary measure because of the mining subsidence affecting the lake. Pumps have been installed to ensure that no more wastewater will

reach the water. Natural rainwater management has been implemented as flood protection, reducing the effort and costs that would follow with other measurements while also enhancing the urban landscapes and improving urban microclimates. House and property owners also plays a vital part in managing stormwater by having green roofs, rainwater use or ground with the ability to store water.

By reducing high water flows and increasing low water flows, plants and animals can thrive in their natural habitats. Allowing for ecosystem services through technology shows that technology can provide the area with services that benefit flora, fauna and the people. It With the help of technology the Emscher is becoming more green and blue.

A change in how the nature is perceived has changed, where its role as a contributor to biodiversity is more clear to its cities. In The Emscher Future Master Plan, the acknowledge of ecological processes is very much reflected. Its ecological concept seek to develop spaces by the river and link them together, both existing and new sections, in order to develop a functioning ecosystem.

Once a vital lifeline for industry in the Ruhr area, the river has now become a symbol and an element of structural change, helping to make the region a valuable living space in which quality of life has noticeably improved in recent years. What was once a coal-mining region is now a modern metropolitan area, with a change in role. The vision for change is becoming a reality and the river a symbol for structural change.

Much has been achieved during the past twenty years, and the region now showcases their achievements but also the extent of what a transformation can signify. The transformation tells the story of a river that was forgotten and neglected for over a century and is now back to stay, although with new characteristics and qualities than before. Naming the Emscher river the Emscher Park created connotations far more pleasant than its nickname it used to be known for - Köttelbecke.

The beauty of the Emscher can only be communicated if it is in fact beautiful and people can experience it. It seems essential to me that creeks and streams in our urban landscape are recognisable and usable as such. Nature must not everywhere be allowed to develop just as it likes [...]

Prof. Dr. Christoph Zöpel (WIKUE)

FINDING

Stormwater management occurred on several scales and at different costs

FINDING

Technology can make nature thrive

FINDING

Acknowledging the ecological processes found its way into the Master Plan

FINDING

What started as a mere vision of change is now turning into a reality

FINDING

Naming the area the Emscher Park, a political positioning which accelerated the transformation

Köttelbecke - Open sewe

Ruhr Regional Association

11 independent municipalities and four districts of the Ruhr Metropolis

Master Plan 2006

Planners, environmental agencies, companies in the Emscher Valley and city marketing departments

Local administrations and other actors

Residents

New Emscher Valley Working Group

Members

Citizens

Local authorities

Politicians

Companies

Emschergenossenschaft 1899

Districts

Cities

Local communities

Invited by Mayor?? 1988?

The International Building Exhibition (IBA) 1989-1999

Committee choosing design projects: ministers, public bodies, trade unions, towns, companies, environmental planning and architectural bodies

The opinions and suggestions of people were taken seriously, giving a voice to the people on site (WIKUE 2013) but also involving them in constructing a vision for change.

The Emscher can be experienced on a bike or by walking, and are able to witness the transformation. Around 120 kilometres of green bike and walking paths connect to different places. The infrastructure improves the quality of life for the residents, offering access to nature and activities. Bridged have been built as to not create a barricade when moving between areas and municipalities. Several places in the region are accessible through public transport. During the past twenty years the area has become much greener, partly because of a structural change and the IBA Emscher Park.

FINDING

Valuable living space

FINDING

What was once inaccessible to the public is now public space of high quality, offering recreation, ecosystem services and activities thanks to the new wastewater infrastructure and revitalisation of the river



The Slinky Springs to Fame in the Emscher Park

// THE EMSCHER IS NO LONGER REGARDED AS JUST AN INSTRUMENT OF INDUSTRIAL PRODUCTION, BUT IS SEEN AS A VALUABLE LIVING SPACE THAT CAN CONTRIBUTE TO UPGRADING THE REGION AND ENHANCING ITS QUALITY OF LIFE.

The modernisation and revitalisation are giving the area space for leisure and recreation. The region accommodates community gardens, spaces for leisure and recreation, cultural achievements, bike paths, local lakes, water meadows, natural waterways and art projects (WIKUE 2013). And there is more to come, new space for nature is allowed along rivers and creeks. Large parts of the park are still to be developed, but despite this the completed parts have affected the urban environment greatly. The result has made the region more attractive for housing, business and industry and is improving the quality of life for the residents. Places have been developed to create space for nature while keeping in mind the needs of people visiting.



EMSCHER'S TRANSFORMATION TOOLS

1899

_PROBLEM
Health issues

_NETWORK OF ACTORS
Choosing to collaborate

_VISION
Control the water

_VISION
The Blue Sky

**ACKNOWLEDGE
ECOLOGICAL
PROCESSES**

_INVESTMENT IN KNOWLEDGE
Sharing knowledge

When there are floods, entire city districts are regularly inundated with contaminated water. The results are major damage, sickness, and epidemics.

Awareness about health issues

Awareness about ecological neglect

1956: 141 co

1906

Decision taken to control the river in a concrete corsette

WASTEWATER TREATMENT PLANT

The first Emscher river wastewater treatment plant commenced operation in 1928 and was in use until 1990.



1906



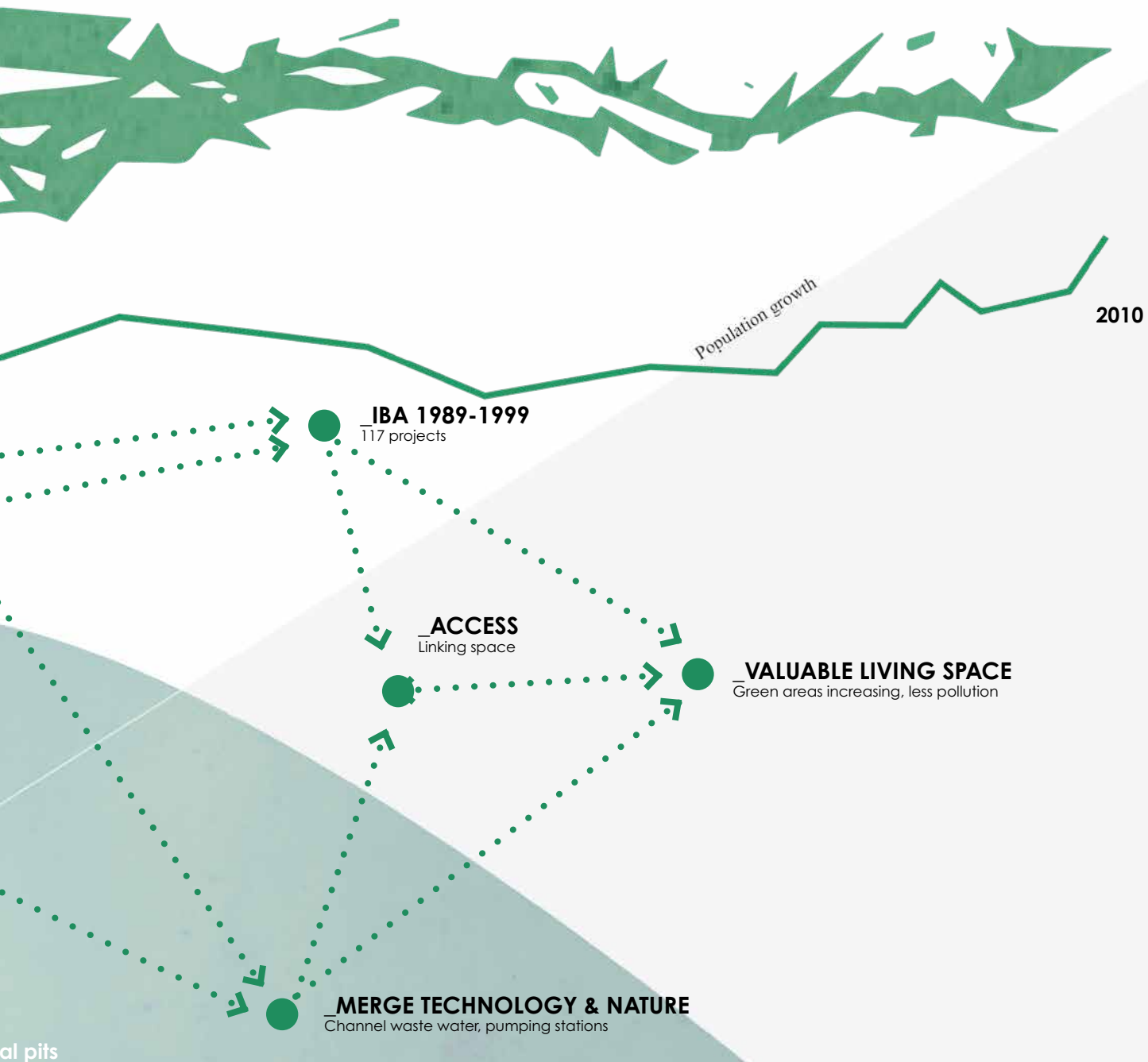
1914



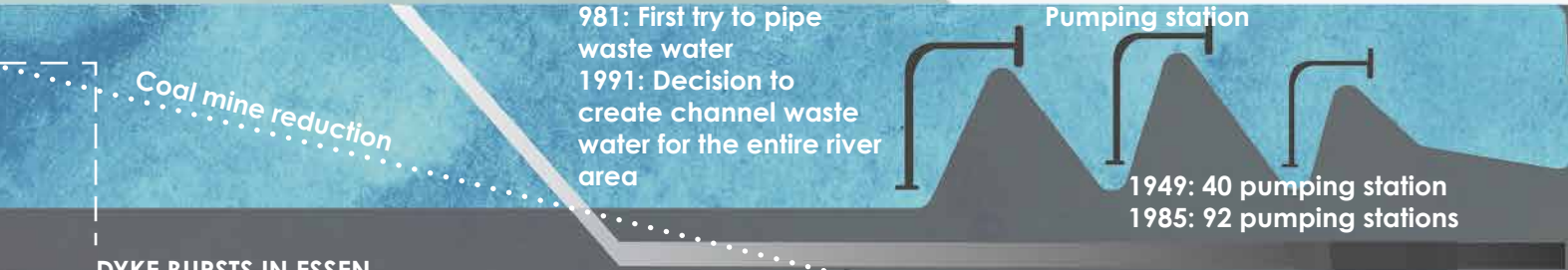
1928

1900

1950



al pits

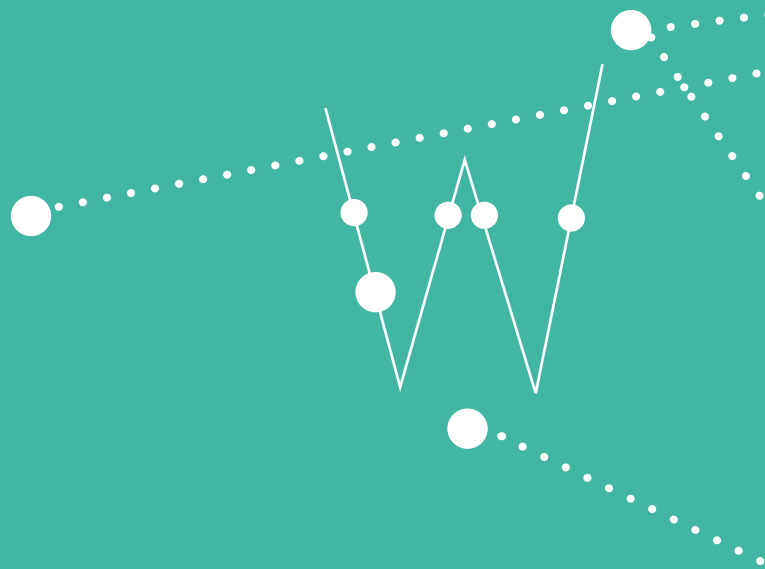


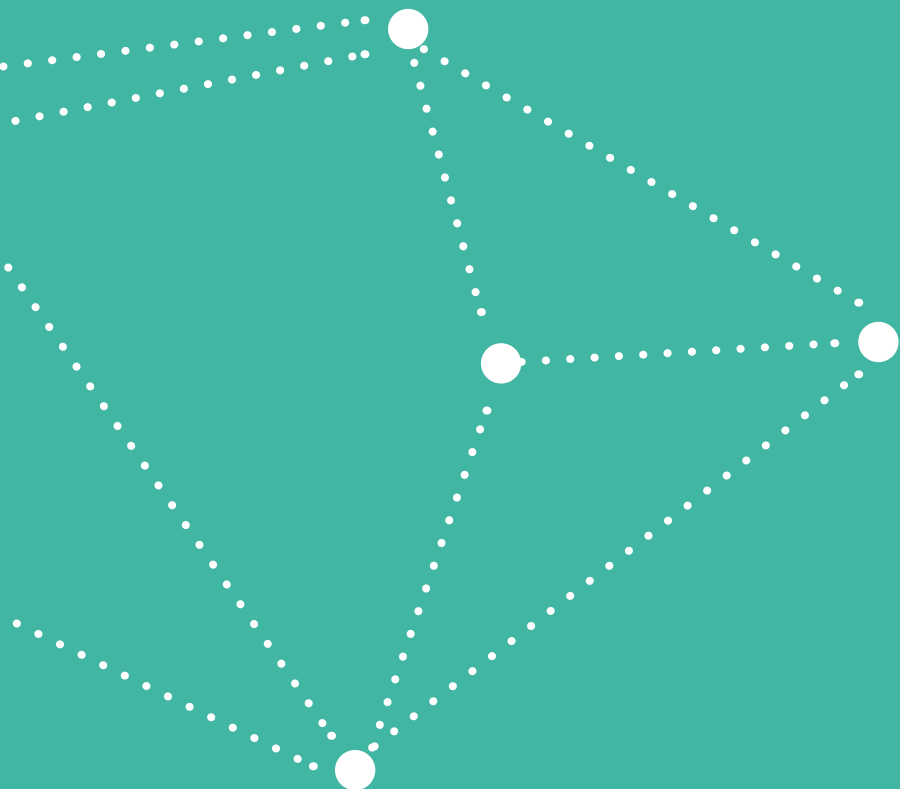
DYKE BURSTS IN ESSEN

On 8th of February 1946, a dyke breaks in Essen. A wave move the dyke 50 m, resulting in floods

➤ 2006: 6 coal pits







RECONQUISTA SOURCE OF SOLUTION

Tracing trajectories towards a new river narrative

Searching for a sustainable future

Reconquer Reconquista addresses people, flows, praxis trajectories and stories. The new narrative connects loose ends at Reconquista and creates new stories among the existing trajectories. The sample slice of time we got by studying Reconquista provided us with disconnections, or tentative half formed first encounters, as Massey (2005) puts it. Reconquer Reconquista gathers inspiration for the process in the narrative of Emscher Park and identifies loose ends with assistance from the New Urban Agenda. By tracing past and present actions a new story takes form.

NEW TRAJECTORIES

Constructing Reconquer Reconquista

The construction of the new narrative consists out of unpacking the findings and reorganizing them according to the preconditions found in Reconquista basin and Morón river basin in particular.

Reconquer Reconquista emerges from stories found during the transect. It is evident that The New Urban Agenda stresses the importance to combat the inequalities of people living in informal settlements, and in particular also stresses the importance of public water and sanitation. Sustainable water management is a paramount for a multiple of aspect for sustainable future. The need of increasing awareness concerning the water quality, the ecological processes and ecosystem services can no be enough emphasized. Of course, we are not the first ones to promote water management. What this thesis contributes with is not the solution for the problems on site, but rather embedding the solution in a new narrative which goes beyond neutrality worded technical documents that sit in a drawer in the municipality office, and disappears the same time as a mayor is replaced.

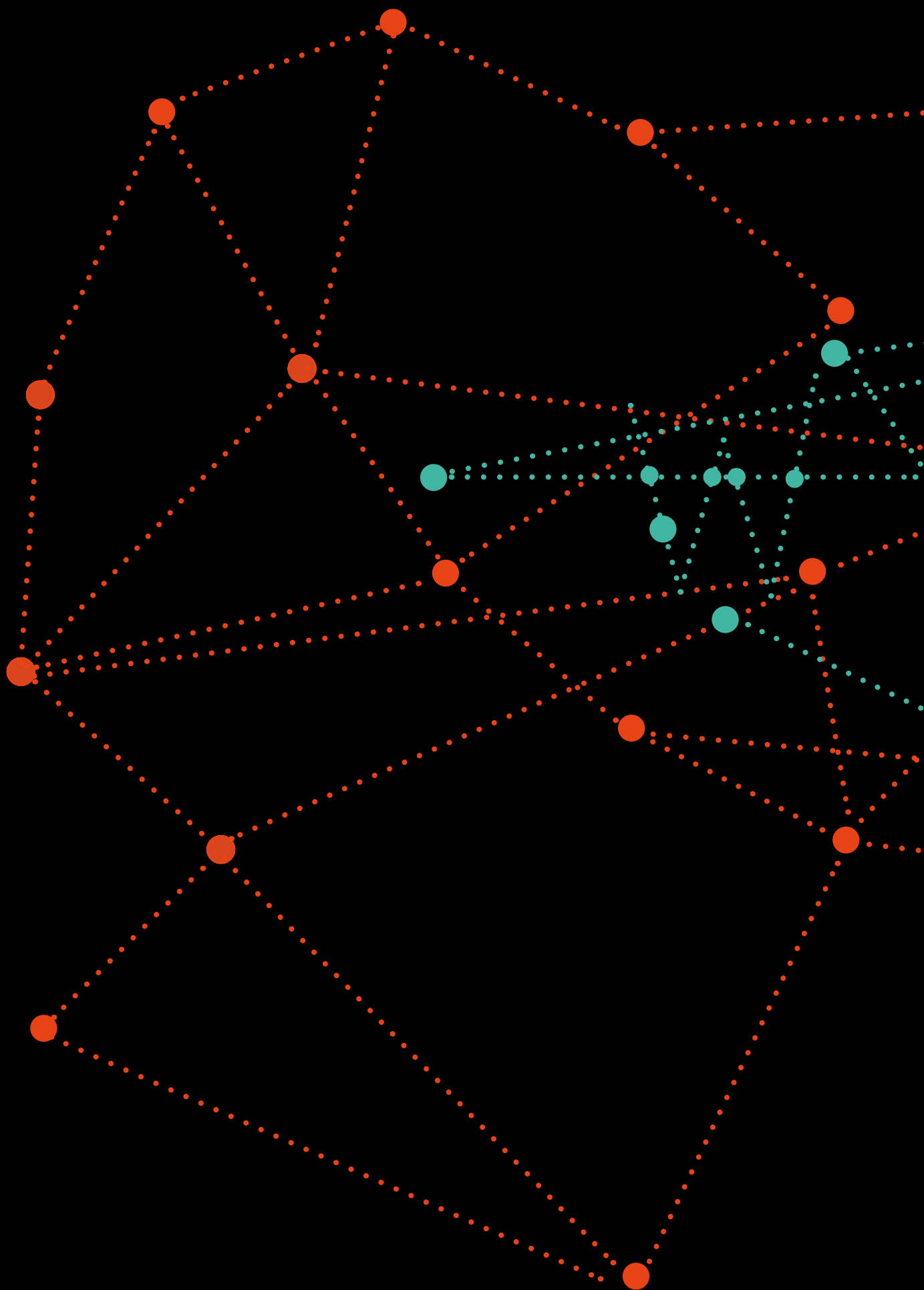
The actions proposed come in a suggested hierarchy; a process in which steps are carried out after each other, still intertwined and dependent on each other for the outcome to be the same. The narrative goes in first, and technical documents follow. An actor network is found in between along with inventivity for how to raise the costs for the projects. The new narrative promotes dialogue tools and highlights the focus on the

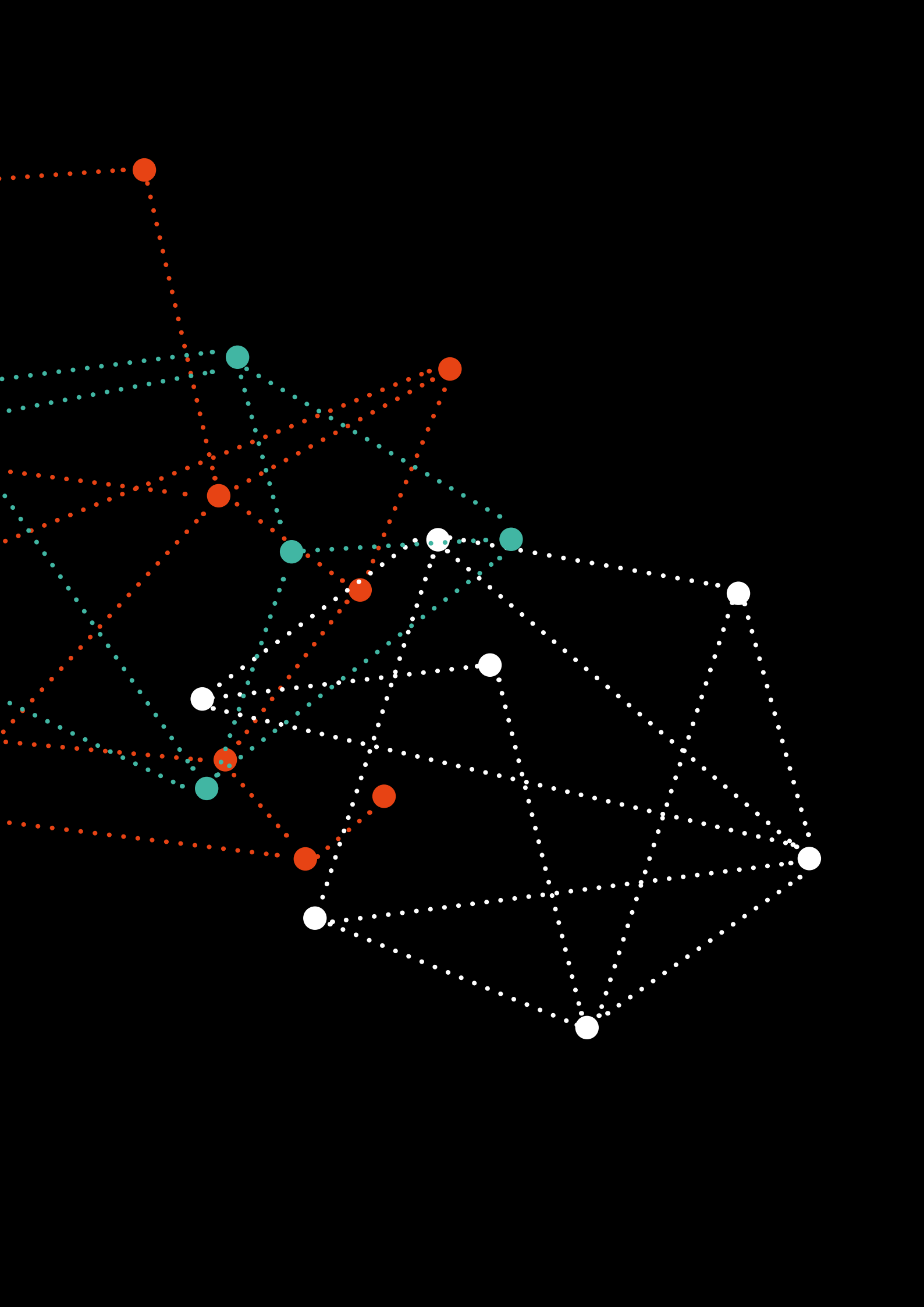
democratic process. It needs to be paved with understanding, mutual respect, transparency, social cohesion, equality and inclusion. A slow and safe process could in the long run lead to increased local economy, economic inclusion, spatial integration and a good offering of basic services.

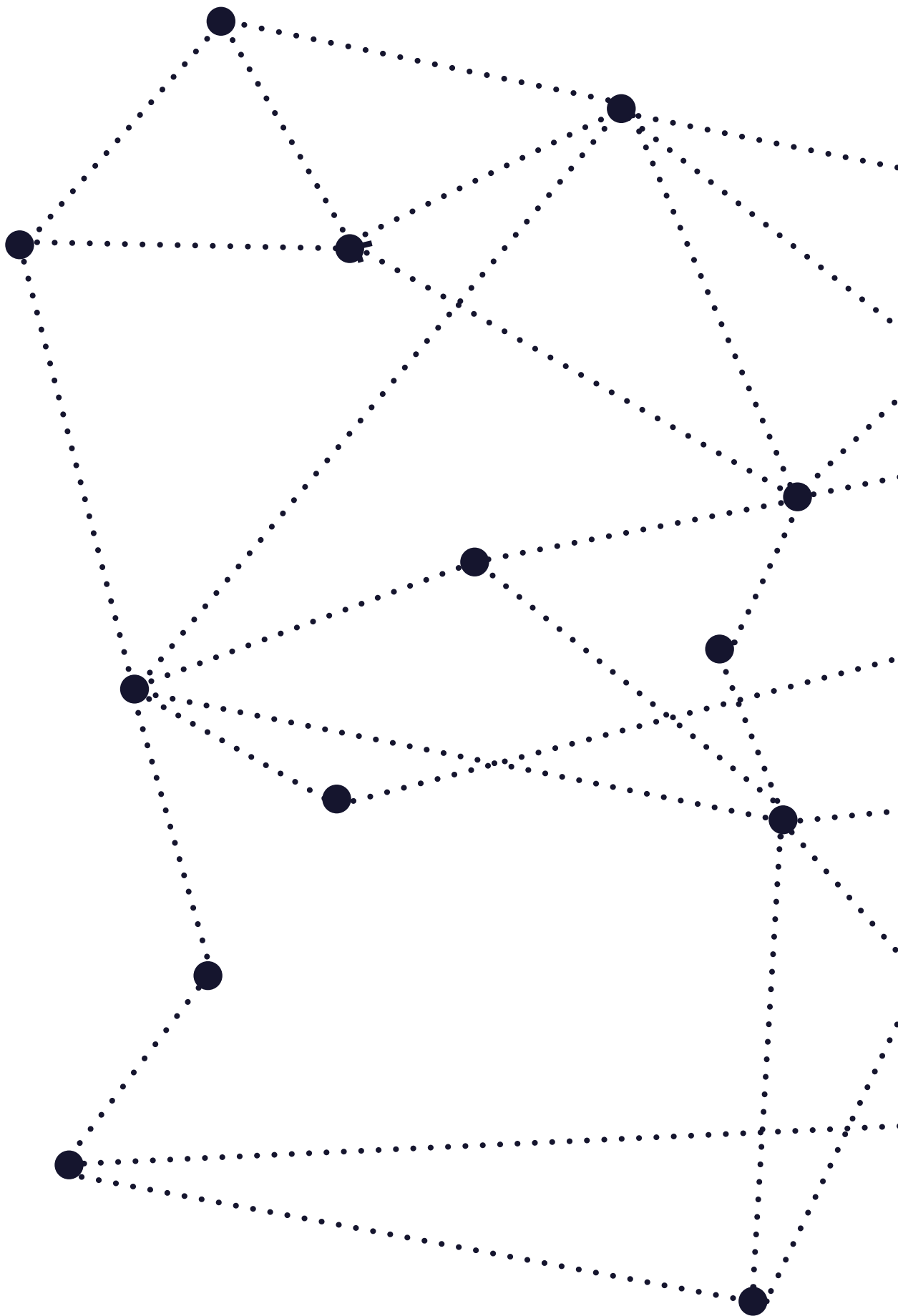
The expulsion is apparent in the unbalanced development of Buenos Aires. Car orientation in combination with a centralized city-planning has led to a lack of public green places. Administrative borders are reflected in the physical infrastructure which leaves some places without functioning systems, in turn affecting the ecological processes. Informal settlers are located on the physical margins, always neighbouring the formal city. Despite the proximity, these areas are without the basic services one can be sure to have in the formal city. Instead, pollution and health issues are key factors when living on the systemic edge. These are loose ends, affected by a complex city's development. For the development to turn around, trajectories are traced between the loose ends as to formulate opportunities.

The new narrative in the Emscher case caused a change to happen. In the new future, the tools and directions found are applied to the Reconquista case to spark a development that could counteract the ongoing expulsion. The Emscher was given a new name with positive connotations - the Emscher Park. The new name for the Reconquista narrative is Reconquer Reconquista, a wordplay for the river's name, meaning reconquest, urges to take back the river from the industries and waste. It is taken back to reappropriate what has been taken by force, like colonies have been taken by conquerors and then were reconquered. While Spaniards were the conquerors of colonies in Argentina, industries and waste are the conquerors of the river.

The Emscher Park told the story of a peaceful transformation, whereas Reconquer Reconquista implies a more forceful change. While the transformation of Emscher was somewhat agreed on by all parties, the motives of the actors in the Reconquista stands more in contradiction to the changed narrative, and are still letting the unsustainable development pursue. Considering the ongoing expulsion and the prioritization of economic growth, a more forceful narrative is put forward as a reaction.







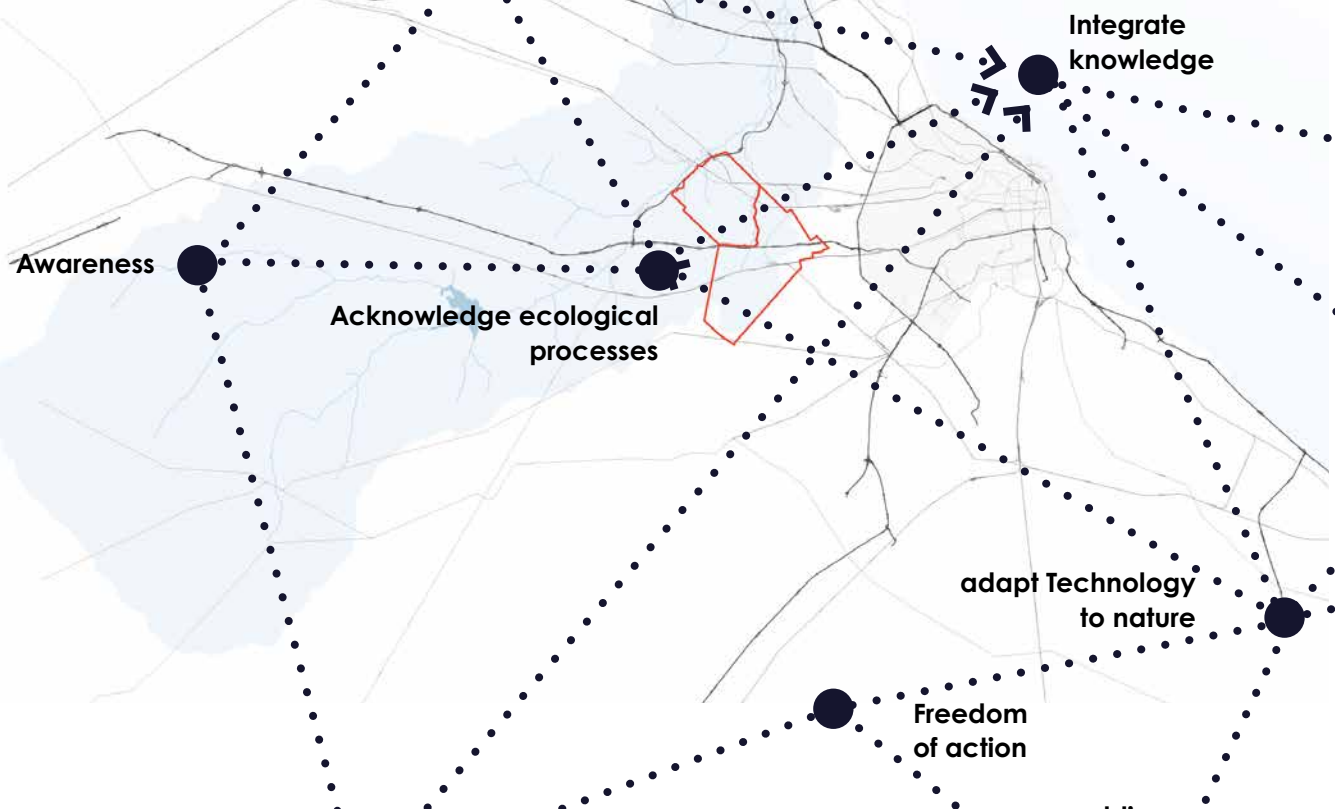


RECONQUER RECONQUISTA

A vision inspired by NUA and SDG gather the actors to work together to achieve a more sustainable future for the river

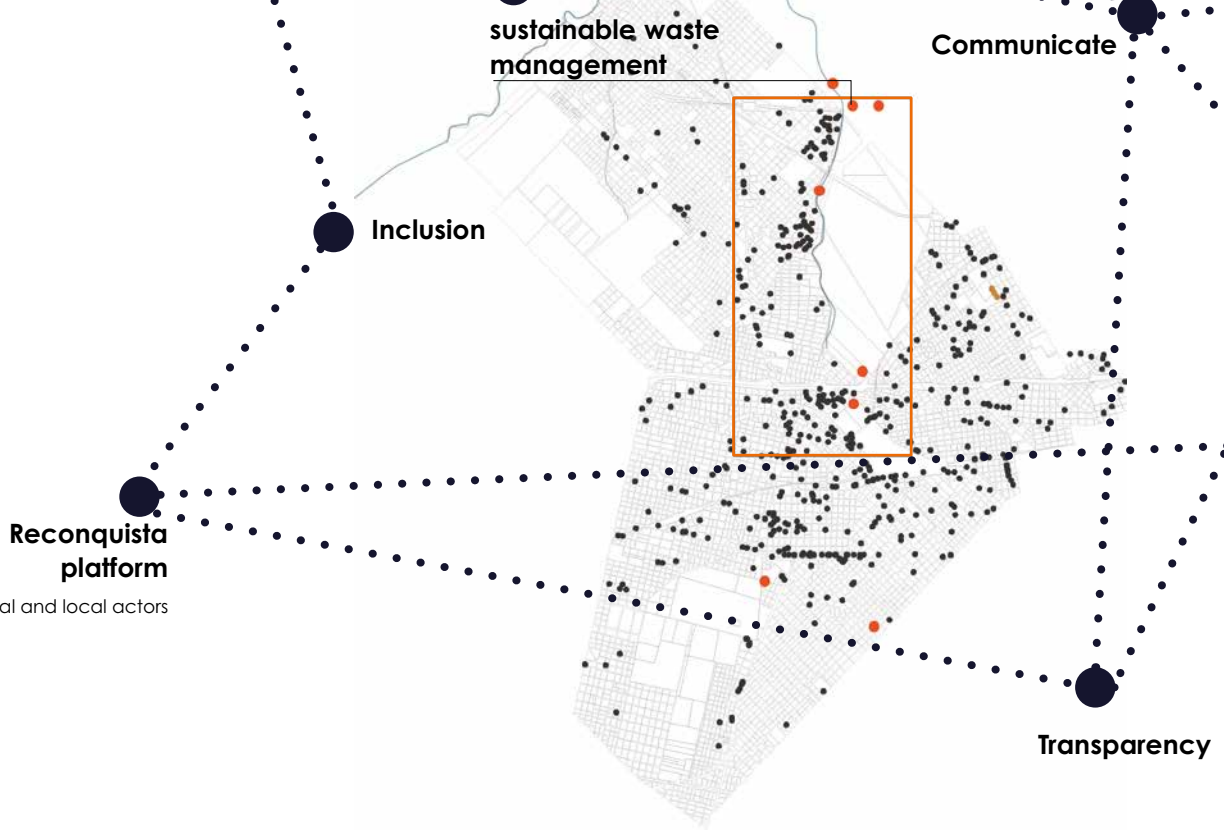
landscape

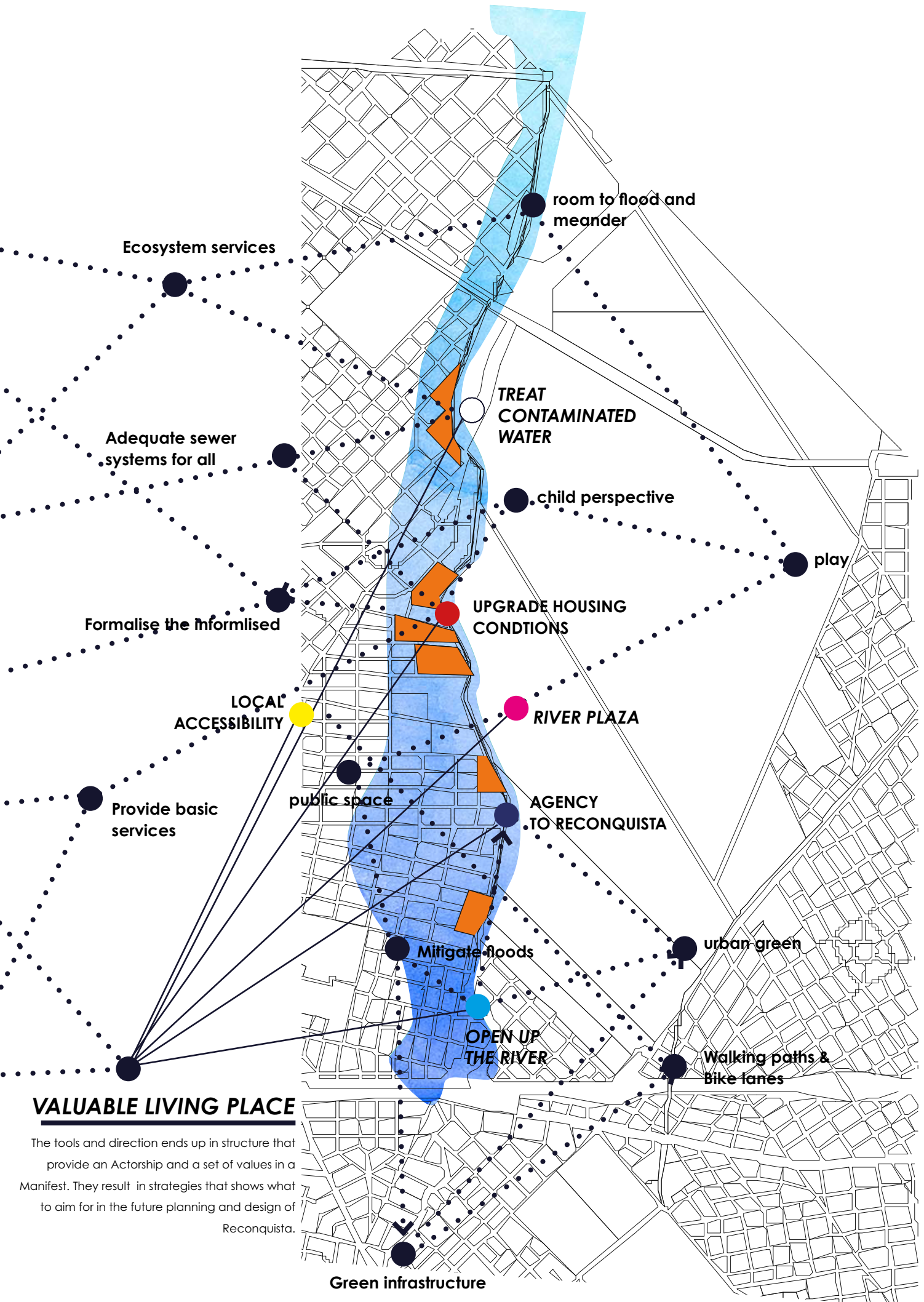
MANIFESTO



CONNECT ACTORS

The key actor alongs river Morón organize in a non hierarchical structure and agree on the vision





MANIFESTO

RECONQUER RECONQUISTE RECONQUISTA LA RECONQUISTA

Reconquer Reconquista is the turning point where the river receives a voice. The industries, the waste and the polluters takes a step back. Reconquista becomes an actor and is acknowledged through its ecological dimensions. A relation of harmony will eventually encompass the river landscape.

Reconquista es el punto de inflexión donde el río recibe una voz. Las industrias, los residuos y quienes contaminan dan un paso atrás. Reconquista se convierte en un actor y es reconocida a través de sus dimensiones ecológicas. Una relación de armonía que eventualmente abarcará el paisaje del río.

RIVER ENTREE

Reconquer Reconquista finds inspiration in the physical and mental disconnections existing around the Morón river. Car oriented streets, lack of public space, no-go areas such as informal settlements or enclosed nature are recognized as barricades and removed.

Entrada del río

Reconquista encuentra inspiración en las desconexiones físicas y mentales que existen alrededor del río Morón. Las calles orientadas a los automóviles, la falta de espacio público, las áreas prohibidas, como los asentamientos informales o la naturaleza encerrada, se reconocen como barricadas y se retiran.

RIVER CITY

A common agreement between ecology and the urban provide a foundation of equality. Social justice and a city for all are guiding principles for the solutions.

Any development should acknowledge formal and informal economy as driving forces for economic inclusion, with the aim to formalize the informal economy. Creating public spaces while caring for the relocation of informal settlements is done to enhance everybody's living conditions. Poverty is handled on a deeper level than fixing it with make up, and basic services and spatial integration taken seriously.

Derechos del río

El potencial de Reconquista de ser un atractivo paisaje urbano, cultural y acuático florece. Junto con los miembros, los ciudadanos, las autoridades locales, los políticos y las compañías, el río recupera su agencia y sus derechos ambientales. Los ecosistemas son reconocidos como factores importantes y dignos de protección, no solo por sus beneficios en el medio ambiente sino también social, brindando a las personas valiosas oportunidades de recreación, ocio

RIVER CITY

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Ciudad fluvial

Un acuerdo común entre la ecología y lo urbano proporciona una base de igualdad. La justicia social y una ciudad para todos son principios rectores de estas soluciones. Cualquier desarrollo debe reconocer a la economía formal e informal como motores de la inclusión económica, con el objetivo de formalizar la economía informal. Se crean espacios públicos mientras se cuida la reubicación de los asentamientos informales para mejorar las condiciones de vida de todas las personas. La pobreza se maneja a un nivel más profundo que un simple arreglo estético, y los servicios básicos y la integración espacial se toman en serio.

RIVER NATURE

Strategic developments are implemented to protect and improve urban ecosystems and reduce greenhouse gas emissions, air pollution and disaster risks. The great nature in the Reconquista tackles global challenges on a local scale, helping out the city of Buenos Aires by reducing air pollution and handling floods and stormwater and therefore improving safety in water-related risks. The area is especially vulnerable to sea level rise, making the ability to deal with such threats of higher importance.

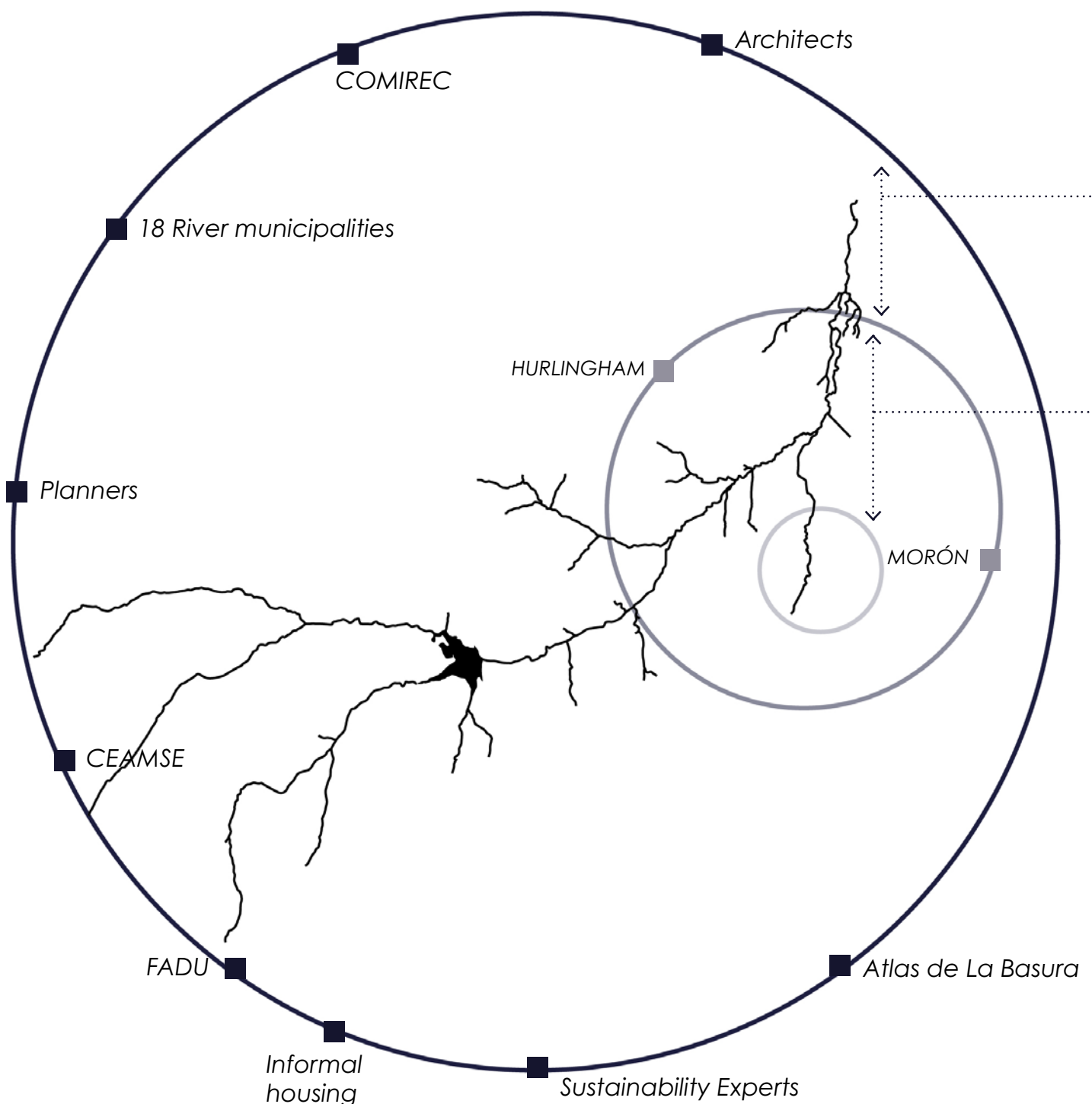
La mayor área verde de Buenos Aires

Se implementan desarrollos estratégicos para proteger y mejorar los ecosistemas urbanos y reducir las emisiones de gases de efecto invernadero, la contaminación del aire y los riesgos de desastre. La gran naturaleza en la Reconquista aborda los desafíos globales a escala local, ayudando a la ciudad de Buenos Aires al reducir la contaminación del aire y el manejo de inundaciones y aguas pluviales y, por lo tanto, mejorar la seguridad en los riesgos relacionados con el agua. El área es especialmente vulnerable al aumento del nivel del mar, lo que hace que la capacidad para hacer frente a esas amenazas sea más

CONNECT ACTORS

Transparency and diversity

The lack of holistic understanding and strong administrative borders results in deterioration regarding the ecological function and human health. The municipalities are politically fragmented, in regards of different visions and counteractive means which affect the river landscape. This is made visible in the actors lack of reflection concerning the effect of their actions. The issues in the Reconquista are too great for any actor we've found on site to be handled alone and need a transdisciplinary approach with a joined effort.



Manifesto



RECONQUISTA REGIONAL ASSOCIATION

→ A network is a great arena to handle issues that are too big for one single actor. The network can together with Morón and Hurlingham produce a shared vision to strive for through a more effective processes.

MORÓN & HURLINGHAM

→ The aim of the collaboration is to create a democratic platform involving the actors on site. The common vision evolves into strategies, which are defined and implemented through a network platform.

Designate
representatives

RECONQUISTA PLATFORM

STRATEGIES



ORGANIZING ACTORS

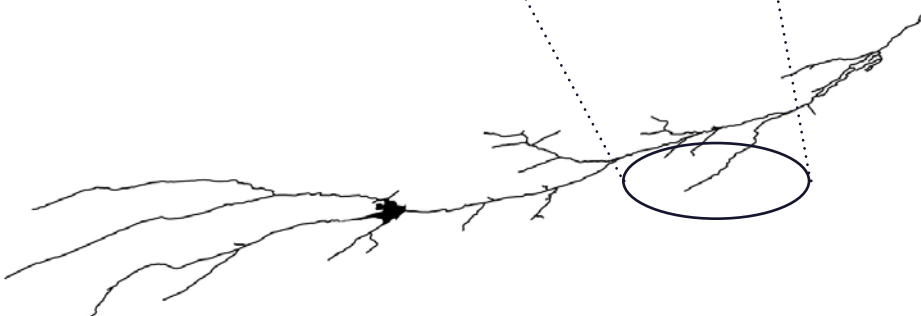
A network of knowledge, experience and visions is created by connecting different actors with valuable input. Together they are stronger and better prepared to handle the complex issues. It is important to include the whole range of actors, from ruling parties to informal settlements. A multitude of stories should be represented.

ADMINISTRATIVE COLLABORATION

By creating connectivity among actors a greater understanding of cause and effect regarding political decisions and people's everyday-life is achieved. The collaboration between municipalities promotes transparency. Hurlingham has an ongoing program of collaborating with people living in the informal settlements, this initiative grows and invite Comirec, the Morón municipality, Informal settlements, Other inhabitants, Planning offices and Local universities

IMPLEMENTING STRATEGIES

The network of Reconquer Reconquista includes different stakeholders in the area and local governments. It is up to the platform to implement the strategies regarding the future development. The diversity of actors enables transition phases at different scales, encompassing and implementing solutions on all levels. The economically strong municipalities look for revenue and are responsible for installing sewage and water management at a systematic level.



VALUABLE LIVING SPACE

Strategies

The name is multilayered - it urges to take the river back, both from the river's ecological perspective and from the people's point of view who are in need of the river's natural services. The name also implies that the Reconquista is taken back by force, which tells the story of the ongoing development that is preventing it to be a river.

The manifesto and the network of actors generates six strategies with guidelines for a new development. They all include different features that are important for a cultural, inclusive and ecological development paved by equity are portrayed in the following pages.



Meeting the river (Daylight)

The piped part of Morón river open and meets the daylight in all its glory and creating more recreational public space. Nature, once excluded from the urban fabric, is finding its way back. The encounters between the urban and nature creates contrasts, appreciated by the citizens living in one of the largest urban jungles in the world.



River Plaza's

Public space provide opportunities for meetings while also mitigating flood risk by being able to hold water where it is needed. Families living in the risk zones of floods are relocating, making room for these river plaza's. On the urban side the public space is characterized by rural features and on the rural side the public space has urban characteristics.



Local accessibility

Connectivity - created new paths, new modes of communication. Make linkages and connections. Bind the reconquista informal settlement to the city texture, include it in the city. Can offer different modes of transportation



Improved water treatment

Cleaning the water is done in several ways; both on a systematic scale and on a small scale where greenery collects stormwater from reaching the river together and polluting it further. On the administrative scale, methods of treating the water in the river are improving. A holistic waste management system is implemented, taking care of domestic and industrial waste. This means that the discharge into the river is stopped.



Reconquista regain Agency

Giving back Agency to reconquista means a return to the original ecological conditions. Restoring space to flood, wetlands to mitigate floods, provide water treatment and give space to meander. Green infrastructure is a vital part in mitigating increased precipitation. This is initiated by a rising awareness concerning environmental rights which starts by opening up the piped river (See the strategy: Daylight)



Upgrade housing conditions

By involving the informal settlers in the planning process they are given a voice and place among the actors developing the site. Public spaces, infrastructure and flood protection are possible outcomes among other acute issues that can arise from such a collaboration. Formalizing the informal settlements mean including them in the city, acknowledging that they are worthy of being heard.

Local accessibility


If you're not in a hurry, there are other, rather recreational ways of moving around. The network of connections offers bike lanes and pedestrian streets, both following the river but also connecting to certain places of interest. Going by car is not the obvious choice as the local accessibility is enhanced. When going somewhere, the route there is direct if going by bike or by walking. Living in the adjacent area surrounding the river does not mean living outside of the city, the density and the will to move around here are reflected in the human scale opportunities to access a grocery store, the school or perhaps to just wander around. The network is safe, meaning it is clean and non-motorized oriented. The domestic waste and industry discharge are taken care of in safe manners, the streets with heavy traffic are separated from the pedestrian streets and the informal settlements whose conditions were good enough so they could stay have better living conditions. Infrastructure no longer barricade the water from the people.

Upgrade housing conditions

River Plaza's

Meeting the river (Daylight)



An aerial photograph of a city, likely Santiago, Chile, showing a river winding through the urban landscape. A cyclist in a yellow jacket is visible in the bottom right corner, riding on a path. The image is annotated with three text boxes and a red line. The text boxes are: 'Improved water treatment' at the top, 'Reconquista regain Agency' in the middle, and 'Local accessibility' at the bottom. A red line traces a path from the top left, through the city, and down towards the bottom left, passing near the 'Local accessibility' box.

Improved water treatment

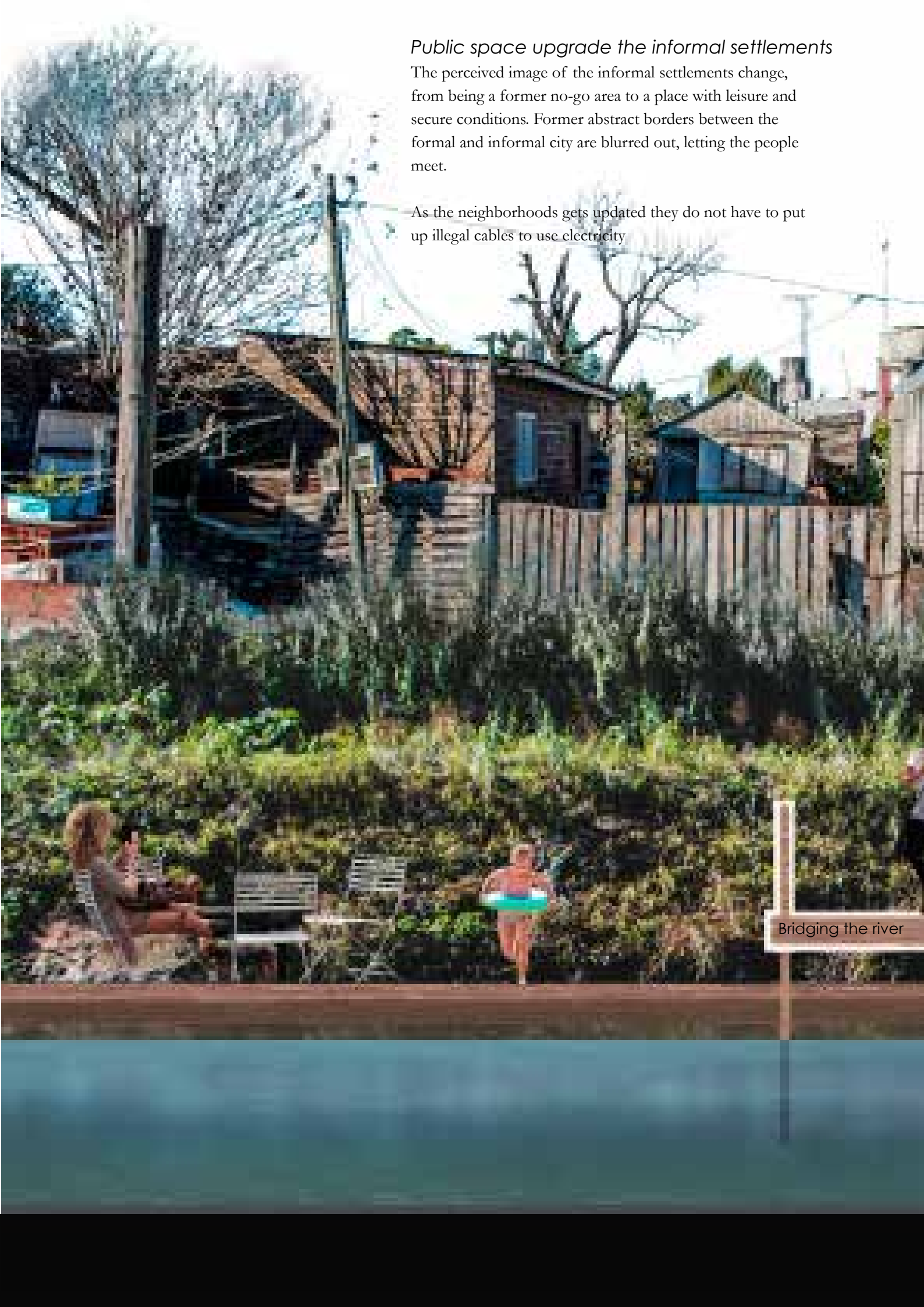
Reconquista regain Agency

Local accessibility

Public space upgrade the informal settlements

The perceived image of the informal settlements change, from being a former no-go area to a place with leisure and secure conditions. Former abstract borders between the formal and informal city are blurred out, letting the people meet.

As the neighborhoods gets updated they do not have to put up illegal cables to use electricity

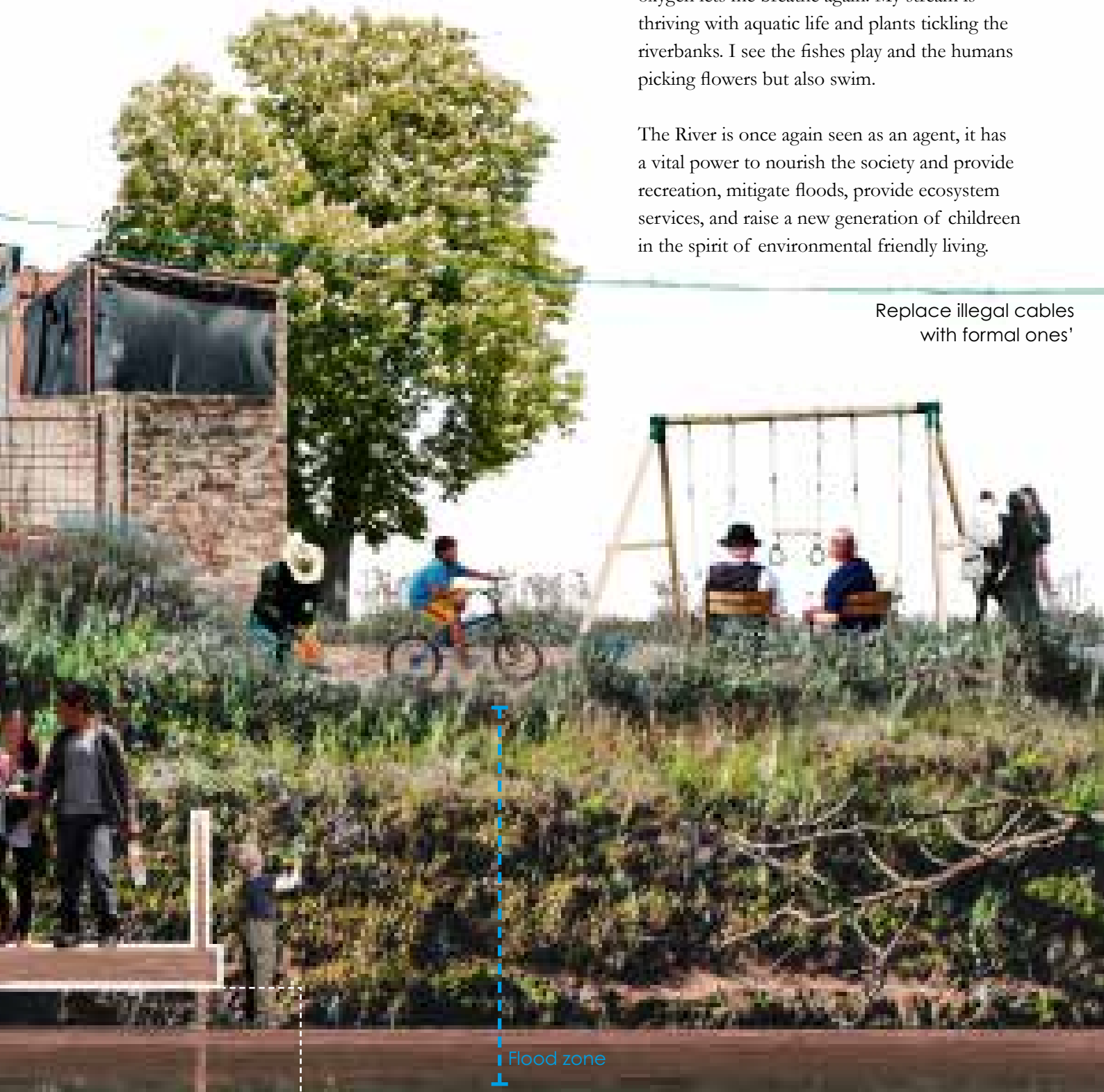


River Agency

I am free! I can finally move as I please no more concrete. I am meandering back and forth. The oxygen lets me breathe again. My stream is thriving with aquatic life and plants tickling the riverbanks. I see the fishes play and the humans picking flowers but also swim.

The River is once again seen as an agent, it has a vital power to nourish the society and provide recreation, mitigate floods, provide ecosystem services, and raise a new generation of children in the spirit of environmental friendly living.

Replace illegal cables
with formal ones'



Accessibility

Bridges allow for new ways to move
around the river

River Plaza's

Along the river several oases are found offering a place to relax, to commerce or to meet. Their functions' double as they are dynamic and can handle the water from the river. Suddenly, we have a small pool on one of the plazas and a water playground on another. They sit like a green necklace of pearls along the river, and offer greenery, places to play, fish or sit. The plaza's make use of the amount of nature to be found here, almost unique for the city of Buenos Aires. The low amount of green spaces existing in Buenos Aires make these river plaza's an extraordinary asset for its inhabitants.

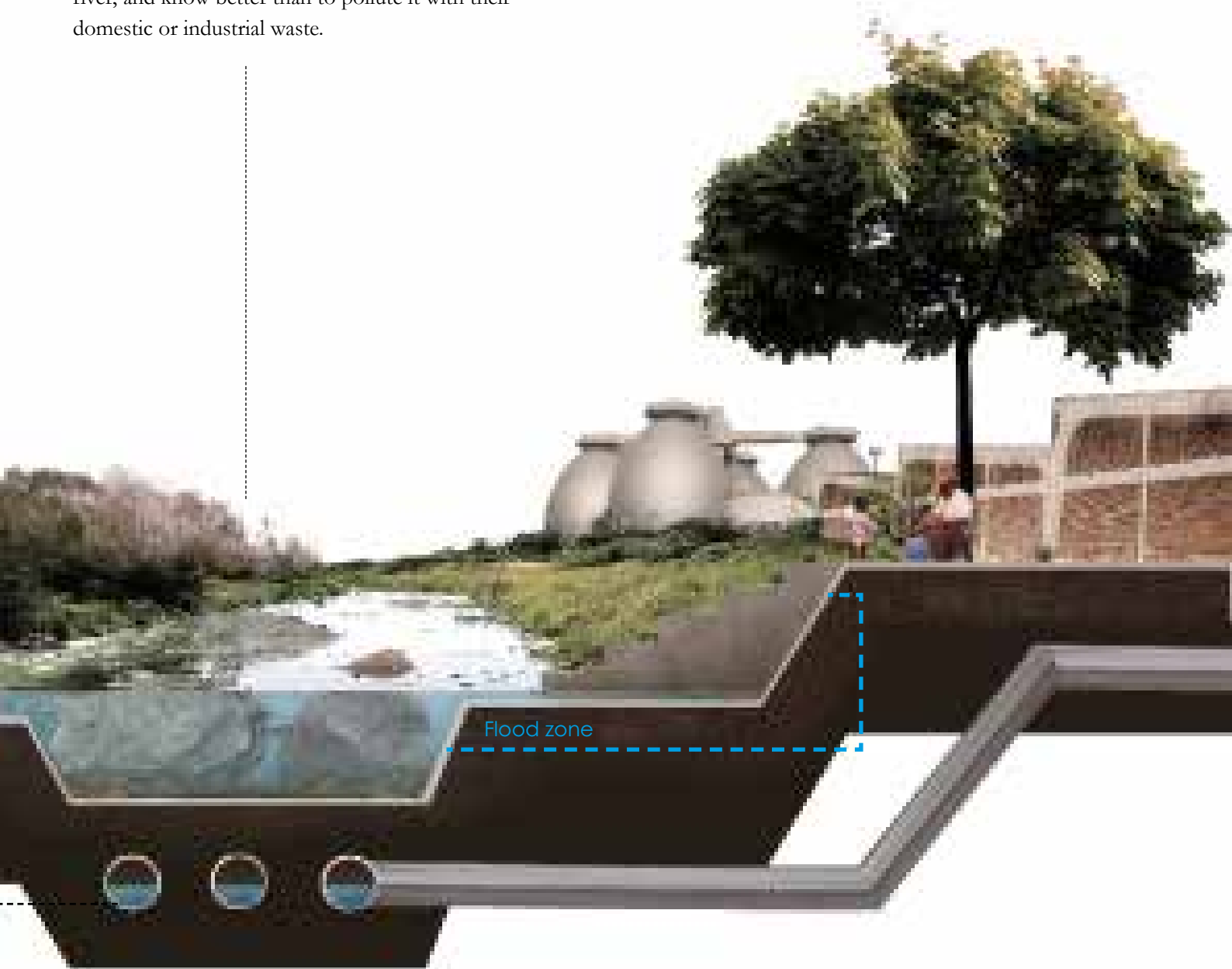


Purify water

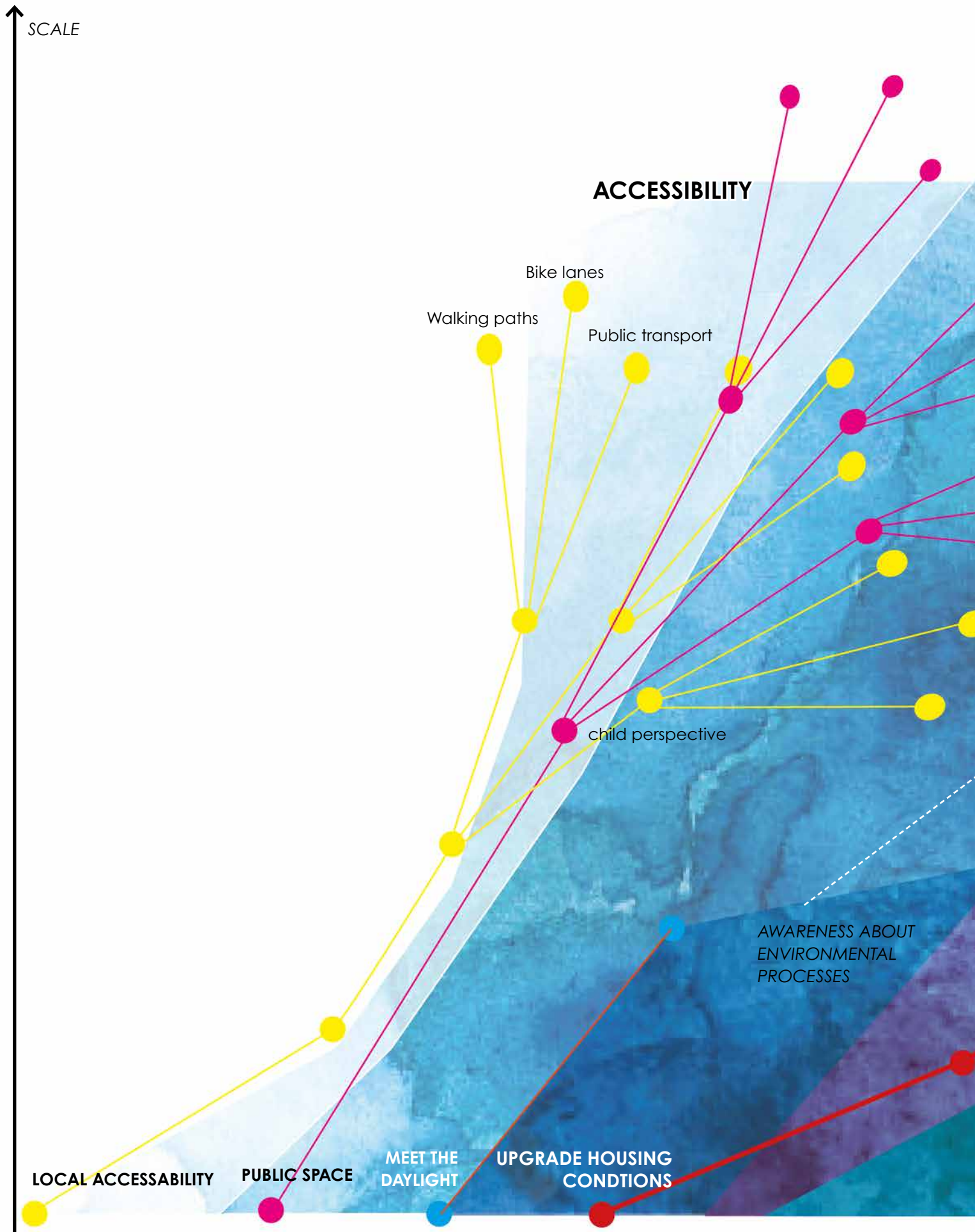
The domestic waste and industry discharge is not contaminating the river which becomes free from pollutants and health issues are not a common problem any more. Investments in wastewater treatment plants are vital

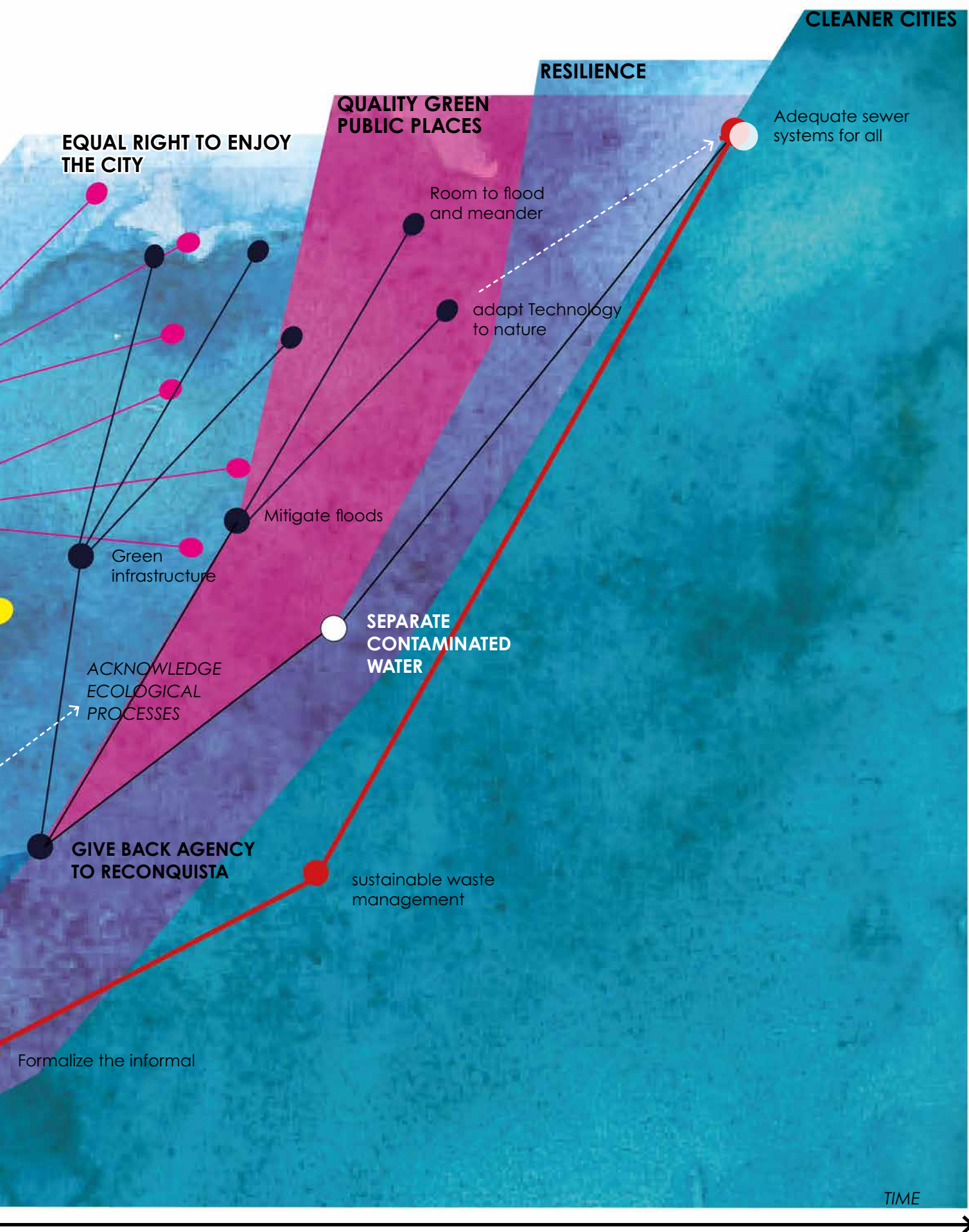
The buried river meets the daylight

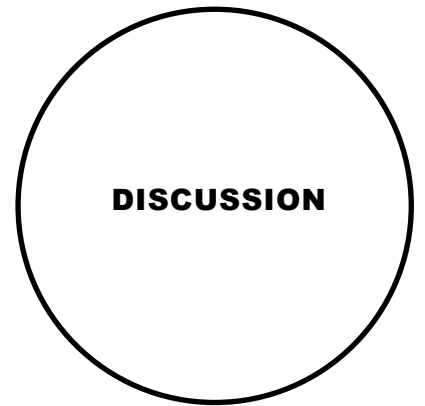
At some places, dynamic functions offers playgrounds on a sunny day, and turn into water playscapes when it rains. It is a way of letting the visitors interact with water, which they have been denied to do for a long time. Through these encounters, an awareness and understanding for ecological processes grows. People see the clean river, and know better than to pollute it with their domestic or industrial waste.



FROM SOURCE OF POLLUTION TO SOURCE OF SOLUTION







The result

The research question was phrased:

What narratives can initiate the transformation of the Reconquista river landscapes?

Reconquer Reconquista consists out of the key findings from spending three months in Buenos Aires where we experienced the present narratives of the river. A direction for the new narratives was inspired by the findings collected from studying the New Urban Agenda. Tools for the transformation was extracted by studying the conversion of Emscher to Emscher park. The key findings were combined and resulted in new components. A Manifesto, a new suggested network for actors and strategies for how to design the landscape of the Morón river. The result consists out of these different elements juxtaposed together, as the new narrative. That shows how actions are organizing a new order of time, which is Abbotts definition of a narrative. The new narratives allow for a counteractive development, an alternative to the main story. It does not follow a global, linear nor the present development in Buenos Aires.

There is not one singular, correct narrative, but instead a multitude could be designed. The one proposed was the most reasonable, concluding by studying the inspiration and reference case.

The method

This thesis explores the possibility to develop a new narrative for the Reconquista river landscape in the metropolitan area of Buenos Aires. The new narrative has been developed through creating a conceptual method deriving from being on site, extracting key findings which serves as openings or potential opportunities. The findings were extracted from experiencing the operating narrative of Reconquista, to perceive the social, political and cultural climate of Buenos Aires.

Reconquista

During our stay in Buenos Aires we met, interviewed, performed site visits and attended a studio at FADU. We refer to this as performing a Travelling transect within the discourse of Buenos Aires in general and Reconquista in particular. The method had to be adjusted according to the Travelling Transect method and convey our method of field studies along other river

landscapes in Buenos Aires. In response to the difficulties in exploring our site, we looked at the site from a larger distance which encompassed a greater area with situations similar to our site, and in this way improved our understanding of the site.

A narrative is consisting of a myriad of different trajectories which are not always obvious at first glances. Beauregard sees that professionals follow a standardized formula of planning and designing, which usually implies that the place is diminished in an abstract sense, the multiple ongoing stories are decreased, to favor a few.

The method developed in this project attempts to listen to the ongoing stories. Being site specific is to locate the present narrative in space and time, which means that this narrative would be another one if it were conducted at another time in a different place. Reflecting upon the method we are left with the doubt concerning the credibility of the result. How can one measure if the result is good enough? One could ask, though the reply could be something like “That question is not accurate, what is more important is the found narrative and how it was collected”. This information leaves us with inspiration of where to go next. We can though see that some components are important for the narrative, and that is to be site specific. These important key aspects are:

One should listen to ongoing stories, do not silence and mute the openings and opportunities. Do not just go along with the professional discourse, even though it is hard not to follow the standardized discourse when entering a design thinking mood. Beauregard sees that design projects are never completely analytical, the design process is only professionalized in an theoretical sense. As a designer one moves between the professional and the personal knowledge. To separate these two spheres is almost unfeasible and would mean to abandon one’s creativity and the multifaceted design task. One should be open to the new experience, embrace it and welcome it with open arms. Though the designer should also be open about one’s background and about being biased. We do not attempt to be objective, instead we state the opposite, we are extremely subjective. We are tinged by our professional background and our social and cultural upbringing. By acknowledging these facts we aim to adapt a distance to ourselves and open up to the new experiences.

With guidelines from the New Urban Agenda and the Global Sustainability goal number eleven a direction consisting of values manifested itself. The

transformation of Emscher to Emscher Park served with tools of how a successful transformation of a narrative could shape a new physical reality.

The new Urban Agenda is developed through a global perspective, aiming to be adaptable to an entire world. For it to be of value when used as inspiration for developing Reconquista it requires to be filtered through Reconquista's perspective. Collecting directions to suit other rivers deemed difficult. The New Urban Agenda had to be adjusted to fit our setting, and is therefore site specific. This means that if the same method is to be performed again, the New Urban Agenda has to be studied in detail by the performer in order to make the directions relevant to their site.

When looking for inspirational cases one have to approach the selection carefully. The transformation of Emcher to Emscher park has certain similarities which makes it interesting to use for case study. Emscher as a sewage river had plenty similarities to the the situation that reconquista faces today and we suggest that one chose the reference study while paying attention to the resemblance.

The method shortly described below would be able to adapt to another site in a different time, though with some adaptations.

Experiencing the present narrative + add direction from the global counteractive discourse + find tools from a reference project = key findings ready to be arranged into a new narrative

First of all, when collecting narratives one should decide upon a method to collect them. We were inspired by the Travelling Transect which allows one to deviate and experience the physical reality. The method contribute to experience by acknowledging site specifics. The method did fit our purpose, to gather stories of the River landscape. For other objectives concerning collecting narratives, another, perhaps another method could be more useful.

Secondly, one must consider that the adaption to the counteractive discourse of what constitutes sustainable development needs to be adjusted to the specific narrative. The New Urban Agenda and SDG 11 have been adjusted to the specific site problematics. Hence, if this method were to be adapted the provided direction needs to be found once more.

Thirdly, the reference case needs to be selected with care. The transformation of Emscher to Emscher park was selected due to the many similarities. Instead of choosing a variety of reference studies that can generate a general idea of how a transformation takes place this study

CORRELATION is a statistical measure (expressed as a number) that describes the size and direction of a relationship between two or more variables. A correlation between variables, however, does not automatically mean that the change in one variable is the cause of the change in the values of the other variable.

CAUSATION indicates that one event is the result of the occurrence of the other event; i.e. there is a causal relationship between the two events. This is also referred to as cause and effect.

focus on quality instead of quantity. Though this topic could be debated, since the social, political and cultural differences are of interest for what creates a transformation. Our advice would be to also incorporate these aspects in the analyze. When studying the reference case one should pay close attention to the main drivers between the transformation, to single them out as well as the relation between them.

Fourthly, there is an uncertainty concerning whether the events spring from casualties or in fact are correlations that should not be seen as leading to one another. We rely on the material studied to provide accurate causalities between different events or actions. While the casualties have been studied thoroughly, there is always the possibility of leaving out other points of interests, minor but also vital, to enable the process' casualties. Therefore the causality could be questioned and should be studied critically.

Correlation is a statistical measure (expressed as a number) that describes the size and direction of a relationship between two or more variables. A correlation between variables, however, does not automatically mean that the change in one variable is the cause of the change in the values of the other variable. Causation indicates that one event is the result of the occurrence of the other event; i.e. there is a causal relationship between the two events. This is also referred to as cause and effect.

Experience from working in an unknown context

By staying in Buenos Aires for three months we have gained a broader understanding of the site we try the method on, and began to eliminate speculations about people we have not met or changing a landscape we have not seen. Through staying on site, our collected narratives are grounded in the site specifics.

By defining our understanding of site as the discursive space of Reconquista, the imagination of the river, we can explore the narrative through other channels than explicitly the physical site. The limited time affected the range of narratives gathered, and performing this method at places and among people where the language constituted a barrier probably also changed the outcome. There will always be barriers when understanding the narratives, constituted by language, time or other

factors. Would the narratives be more accurately presented if collected over a larger period of time? Perhaps, but the narratives collected at the start might also no longer be applicable. For instance, during our time in Buenos Aires the economy in Argentina declined significantly, causing an inflation unheard of since 2001. The minds of people changed during this time. Stating that more time would result in a more grounded outcome is therefore dubious.

Experience working together

Having two similar, but at times very different backgrounds proved to be helpful for the thesis' process. Understanding each other's point of view becomes crucial, and this has broadened both our understanding but also the thesis' content. Also, while proposing a more transdisciplinary approach when taking on complex challenges feels extra grounded when you are two people with somewhat different objectives writing it.

Future research paths

In accordance with the thesis' subjective method, there exist ambiguousness in saying that its result is strictly scientifically grounded and the thesis does not necessarily lead the way towards a potential need of doing so. With that said, there are some aspects that if studied could enforce the method applied, such as:

- How to collect a range of narratives that are site-specific
- Risks in constructing new narratives to initiate a development
- How do narratives help answer to the complex challenges
- How can the new narratives for the Reconquista result in a new development
- What defines a trustworthy narrative
- To replicate narratives

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