GLIMPSES OF A LAUNDRY

from a SCOPIC to a SOMATIC RIVERFRONT

Written by Dinu Hoinarescu

INTRODUCTION by the transect & urban atmospheres

The exploration between a city and its penetrating rivers is a topic relevant to most capitals around the world as 148 out of 195 capitals of the world are situated along a river. Water bodies have been the catalyst for most settlements ranging from Ancient Mycenaeans around the Mediterranean Sea and Babylonians on the Euphrates to new-built cities such as Sejong on the Geum River. Even though the etymology of Spain's capital is unknown, the various interpretations all depict the toponym's relation to the water: from Arabic mazra (channel or water stream) to Mozarabic matriz (matrix or source, regarding a spring of water), or even Celtic magetortum (-ritu = river ford). (Pérez Orozco, 2007). Madrid is situated between the Lozoya/ Jarama (downstream) and the Manzanares River. Both had important political significance and were battlegrounds during the Spanish Civil War between 1936 and 1937. The relationship between the Madrileños and Manzanares has evolved parallel to the development of the river: from the intimate and laborious washerwomen leading to the social core of the urban beach and Piscina la Isla up to the Madrid Rio Park finished in 2015.

This essay is divided into three parts: a theoretical framework exploring the early starting points of the research, namely the relationship between architecture and the moving image and body, then a historical survey of the water in the urban context of Madrid, and finally a chapter discussing water as a metaphor for immersion. The initial chapter presents the fascination for the dialogue between architecture and cinema, developing a cinematic toolset to represent inhabitable narratives in the urban landscape. The second part established the ontological framework that became necessary to advance potential design methods and approaches regarding the ecotone between the city and the river, landform and built-form. The following chapter further contours the historical significance and potential decay of the cultural heritage of the Manzanares. Finally, the essay attempts in the last chapter to explore the experiential scale of water and specifically how its flows may generate architecture in the urban context.

RESEARCH QUESTIONS

1. WHAT ARE CINEMATIC GEOGRAPHIES

What does the Madrid geographic imaginary look like? Which subtype of factors (e.g. movie genres, locations, atmospheres, cinematic techniques) converge and collage the new geographies? What are cinematic tools and how can they be used in the design process?

2.HOW CAN WATER WEAVE NARRATIVE THREADS?

Where does it start? Who owns it? What are the linked networks still connected to it? What is left? What is the water heritage of Madrid?

3.SHOULD AN ECOTONE BE DESIGNED BY A GARDNER, A BIOLOGIST AND A CIVIL ENGINEER?

Where and how can the urban context transition into a riverine landscape? What does Maznares mean to the Madrilenos? Where can the Manzanares perforate the social urban fabric of Madrid? Which actors are lacking from the artificial atmosphere of the Madrid RIO project? (Builtform vs. Landform) What role does the architect have in shaping the inbetween?

SPACE, MOTION& EMOTION

from SCOPIC to SOMATIC design

Filmmakers have engaged with the city of Madrid more than just using it as scenery, a backdrop, or a stage, but also as a character, a narrative framework, a catalyst, a historical anchor point, a platform for expression and a source of inspiration. As the consumption of the **moving image** and cinema have translated into a dynamic "space-independent" act, the city has unfolded a new way, a more developed way of perceiving it. Rather than treating cinema and architecture as intersecting, converging disciplines, the concept of the frame pertaining to virtual cinematic spaces should be taken into consideration as a major diverging point between them. However, this difference opens up the potential of reciprocal sites of **deterritorialization**, reterritorialization, potentiating, using and desiring each other.

"To desire is to construct an assemblage" (Deleuze).

Paintings such as Canaletto 's depictions of Venice and London or even the earliest representation of the relationship between the Manzanares and the city of Madrid (Fig 8) were an early start in expanding new projections of landscape and urban spaces. This art form was called **vedutismo**, a panoramic detailed framing of a city, a landscape or both. These framed touristic sights have invited the exploration of the virtual spaces that would eventually lead the *voyeur* to become the *voyageur* of these landscapes introducing mobility as a guiding principle.

"The changing position of a body in space creates architectural and cinematic grounds" (Bruno, 1997)

Corbusier resurfaced the concept and coined the term promenade architecturale, the sequential of spatial experience of an architectural ensemble. During the modernist period, another discipline evolved in parallel to architecture as its estranged and long-lost sibling, cinematography. Buster Keaton had already realised One Week by 1920 and Charlie Chaplin would release Modern Times in 1936. The relationship between film and the architectural ensemble was first discussed by Eisenstein in his essay 'Montage and Architecture'. Both managed to utilise the movement of the human body in relation to its surroundings and its building environment and translate that into spatial comedy while satirizing and utilizing the new tools of their time. Their very precise choreographed movements and set design infrastructures and illusions, reminding of the painted, distorted corridors in the German Expressionist movie The Cabinet of Dr Caligari (1920), shaped inhabitable emotions and generated architectural deframing of mise-encadre spaces. Cinematographic techniques have also evolved and started to link to architecture in a more haptic way than just being the main protagonist of early cinematography and specifically photography, by trying to move the camera along tracks and therefore stepping into a new dimension of transitioning from **filmic** to **cinematic**.

ARCHITECTURE

as PSYCHO-SOMATIC DEVICE

One of the earliest writings concerning the field of cinematography and architecture is Eisenstein's essay "Montage and Architecture", which sets the pedestal for analysing an architectural ensemble as a path, a sequence of shots, from a filmmaker's point of view. This opened up a **trans-disciplinary** approach that was to be seen across the modernist period, later in the post-modernist, until now in the 21st century of digitalisation and instant access to media. The layered analysis format of Eisenstein experimented early with the **synaesthetic**, but rather more aesthetic notation system for the movie *Battleship Potemkin* (1925). Complemented by Kulshov's editing technique, these represented the basis for **montage** in film. The notation system was later translated into an architectural research project by Bernard Tschumi in his *Manhattan Transcripts*. Tschumi's experimentation with **seriality** later materialised in the La Villette Park in Paris, where a grid of folies superimposed over the park's overall plan would create a filmic experience.

Lawrence Halprin approached landscape design from a cross-disciplinary point of view by embracing his Anna Halprin's, his wife's, profession, namely dancing, as a potential notation system for his projects. The standardised, clear and ambitious notation system named Motation, published in July 1965 in the magazine Progressive Architecture, had its roots in depicting the movement of the body in space, the dancer on the stage. The page was divided into 'tracks', orthogonal projections: a Horizontal one, a series of plans at various scales; a Vertical one, merged visual elevations from the voyageur's perspective. However, what his Motation acknowledged was the lack of the time dimension in the architectural drawings or classical notation. He proposed a third and fourth track on his standard Motation sheet, namely a Duration and Speed track. As opposed to Kevin Lynch's View from the Road (1965), where the voyeur was standing still in a car and the surroundings were moving at various speeds, the Motation system has a different frame of reference, the voyageur, a moving observer in space, being the central point, the experiential dimension. It can be considered a very early cinematic representation tool script for three-dimensional representation depicting design for mobility at various scales, ranging from a stage to a landscape, water system or feature, such as his fountain drawings, to an urban scale.

"The horizon of siteseeing—is the mapping of tangible sites" (Bruno,1997)

Тор

Fig.1 Sergei Eisenstein's Alexander Nevsky notation system

Bottom

Fig.2 On-site multisensorial analysis notation





7.



by CINEMATIC TOOLS

"Photogrammetry lies at the heart of contemporary digital place making... it locates us, and others, in real and imaginary world" (Wilken & Thomas, 2022

The computational power of nowadays machines has translated the cinema into a new challenge questioning the film's actuality as a medium. (Kluge, 2019). This process of doubting started along with television and further translated into the Internet and its corresponding mediums of entertainment and communication. While television's early time included gaps and lapses such as stations turning off for the night, the smartphone surpassed these issues and accelerated the consumption of on-demand media and the **perception of time**, morphing it into a new dimension of digital time. (Stine, Volmar, 2021).

Cinematic approaches have breached the field of cinematography in the 21st century through the development of technology. Drones have unlocked the absolute (within specific parameters such as altitude, wind speed, etc.) liberty of the three dimensions which merged with technologies such as LIDAR or even post processes using camera footage have been used in cartography, military, even animal husbandry, tracking migration paths of reindeers. The accessibility of these tools has now reached the public market: drones, VR headsets, AR on smartphones, and programs on personal computers. The navigation of most of the 3D software, or even compiled satellite images and 3D viewers Google Maps and Earth, has become a cinematic experience on its own that often is overlooked and disregarded. The interaction with the virtual and surrounding built environment, and urban landscapes has become exponentially more cinematic as the amount of data has increased and technology advanced and become more accessible. The potential of the kinema in static cartographic depictions has enabled new representation of previously too complex systems involving movement, time and coordination. Digital mappings such as the New York Metro system interactive map (map. mta.info) story directed by Gary Hustwit in his short documentary The Map, have proven the unexplored potential of cinematic tools in cross-disciplinary research projects.

All digital tools are cinematic tools. One should embrace the emerging technologies and resist the urge to remain comfortable in the already explored waters of previous researchers, but use that as a foundation to move forward and use it to one's advantage, be it by augmenting, complementing, aiding or even replacing fragments of navigable physical space. A varied palette of digital tools in the arsenal of the 21st-century architect implies a better filtration capacity and embraces the role of a mediator for the overflow of data and information.

Тор

Fig.3 Photomatch movie shot location with 3D data in Unreal Engine

Bottom Fig.4 LIDAR scan of the Manzanares river





THE LAUNDRY

by WATER AS RECOURCE

While approaching the city of Madrid through the lenses of a **filmmaker**, a few relationships are established between the user and the city depicting key factors: the actors, the narratives, the frame, the space and mise-en-scene, the **moving body** and the **flows**. Natural promenades architecturale occur within the city, visible and invisible systems of successive moving images constantly transmitting data on all sensorial fields.

One of the most obvious yet unexplored, historically overlooked promenades is the Manzanares river in Madrid, a city building catalyst, a classical fortification method that would represent a barrier. While the city has evolved over time the nucleus remained constant, tangent to the Manzanares, yet it has expanded eccentrically away from it. Planar analysis would result in an uncontested connection between the two, however a simple perpendicular, sectional shift would depict the spectacular 70m height difference. The topographical discrepancy has been at the core of the lack of social engagement and connection to the city of Madrid. From the early establishment of the capital to the city of Madrid until the 19th the riverbank was mainly used as a **laundry** due to its location and low flow.

The main water source for the city until 1858, when the Isabel II Canal (Fig. 9) was inaugurated, were the *Viajes de Agua* (Water journeys). The old Arab vertical water mine system called qanat was distributing the water through underground galleries from the Lozoya as the Manzanares low altitude water was not suitable for consumption. This underground, invisible network of endless water corridors, approximately 70km around the city, were each unravelling its own **narrative** and illustrating the issue of urban **commons**. A good example of the political issue of water in the 17th century is the Amaniel water trip that connected directly to the Royal house and had no public wells. The waterway, comparable to a narrative thread, would furcate into thinner threads leading to noble houses. This led to a lack of water at the end of the journey, namely the Royal Palace which led to the development of the waterway. This branch only diverted 12% of its water to the public as opposed to the Abroñigal Alto which allocated 55%.

Тор

Fig.5 Alfonso Sánchez García's photograph of the Manzanares laundry in 1910

Bottom

Fig.6 Washing Place on the Manzanares by Pérez Valluerca, Eusebio





THE LAUNDRY

by WATER AS LABOUR

Madrid's early inhabitants initially turned to the river as a vital resource for survival. However, as the population grew, the river also became a source of employment, particularly for laundry-related activities. Until the 1930's a whole landscape of hanging white laundry overtook the riverbank, especially between the Toledo Bridge and the Segovia Bridge. This spectacle was a result of the extensive network of *lavaderos*—wooden and reed huts that sprawled along the river's edge and even extended over the water. These structures were interconnected bybridges and walkways creating a water-level landscape. The connection to the water would later be barricaded by the canalization of the river Manzanares and sought after by attempts of social hubs and clubs on the river such as the *Madrid Urban Beach* and the *Piscina La Isla*.

The lavaderos were ingeniously designed, with water channels strategically diverted to flow underneath the huts. This allowed women to work in a shaded environment. The entire process, from scrubbing to drying, became a communal activity that contributed to the livelihoods of thousands of washerwomen. By the end of the 19th century, there were reportedly over 4000 hired washerwomen and over one hundred such laundries along the Manzanares. However, this widespread practice prompted concerns about noise and water cleanliness. Despite these challenges, the laundry industry thrived, employing not only washerwomen but also a supporting team of carriers who traversed the city, collecting and delivering laundry. The children of the working women of the Manzanares River were playing and enjoying the river throughout the day. Due to the high number of washerwomen, an Asylum for children was built in 1872. Unfortunately, there is little to no evidence of the lavanderos or the Asilo de Lavadera left on site, only images, drawn or shot on camera, and The tradition of using the Manzanares for laundry persisted well into the 20th century. However, it eventually gave way to technological advancements and urban development. The introduction of running water and washing machines in private households, coupled with the Canal Isabel II, marked the decline of the riverside laundrettes. The canalization project aimed to alter the nature the Manzanares River's flow, transforming the once wide-open waterway into the narrow, high-sided channel seen today. This engineering feat not only impacted the river's hydrology but also signified a significant shift in the city's reliance on traditional laundry practices. While the visible remnants of the lavaderos may be limited today, the historical significance of these riverside laundrettes endures. The Manzanares River, with its hidden and transformed history, continues to be a testament to Madrid's ever-changing urban narrative.

Top Fig. 7 Lavan

Fig.7 Lavanderas Asylum in 1872 by Fernando Miranda

Bottom

Fig.8 Manzanares, Segovia bridge early 17th century painting



THE LAUNDRY

by WATER AS OWNERSHIP

To understand the **water cycles** of Madrid one has to look at the Canal Isabel II project started in 1851, owned by the company with the same name. The stages of the water cycle are as follows:

1. Water is collected from 13 immense water reservoirs situated in the North mountains above Madrid. It is also collected from 78 groundwater collection facilities.

2. The collected water undergoes a treatment process to ensure it meets quality standards, typically involving processes such as filtration, disinfection, and chemical treatment to remove impurities and make the water safe for consumption.

3. Once treated, the water is distributed through an extensive network to the consumers in Madrid and the area around it. Consumers use the supplied water for various purposes, including drinking, bathing, cooking, and industrial processes.

4. After use, wastewater is collected through a separate network of sewage systems. This wastewater contains domestic and industrial pollutants which need to be treated before its release back into the river.

5. The second treatment process involves removing contaminants and pollutants to ensure that the treated water can be safely returned to the Manzanares.

6. The largest underground stormwater tank system in the world ensures that the huge water debit does not pollute the river, due to the first hour of rain collecting all the pollutants from the street and atmosphere. The tanks store that quantity and redirect it to the water treatment facilities.

7. The treated water and non-polluting rainwater may be recycled and reused for non-potable purposes, such as irrigation, industrial processes, or environmental conservation. This secondary use network is also named the *M40 del Agua* (M40 of water), a ring road of water surrounding Madrid.

Even in the present, one might consider the Manzanares as a laundry for the people of Madrid, as most of the water is collected very high up at the spring of the Manzanares and after serving its purpose to the city it is finally evacuated back into the river. In the 1950's a set of locks was built along the Manzanares as part of the **canalization** project of the river. They were intended to keep a high level of water constant throughout the city's centre. The locks were kept locked until 2016-2017 when they were finally opened again and allowed the natural low flow of the river to unveil a **biodiverse riverbed** that started to grow each year, creating a natural buffer between the city and the river. Paradoxically, by keeping the water away from the human level, 4-5 meters lower than it used to be, the natural environment flourished, which in turn benefited the humans.



POSITION

by SECOND NATURE/ PROMETHEAN PROJECT

"Architecture is situated between the biological and the geological – slower than living beings but faster than the underlying geology" (Allen, 2011)

The 20th Century and decades after the Industrial Revolution have stimulated ambitions of redefining the relationship between **nature** and **humans**. The accelerating need and process of the city's dependency on the evolution of the water system and urbanization led to **taming** nature from a fearful and threatening beast to a harmless and serviceable element in the Early-Modern city (Swyngedouw, 2004). Examples such as the Greek **Promethean** Project discussed by Maria Kaika (2005) open up the conversation about the Power of Water, named by her as 'Selective Export of Modernity's Promethean Project'. She uses the British Empire as an example of the 'selective modernization' and internal water-related projects in London used to facilitate trade within the Empire, specifically India.

In the case of Madrid, its two rivers, namely Manzanares and Lozoya and their development are a historical section of the water ownership. In 2024 the Canal de Isabel II is the public company managing the entire water system of Madrid. It belongs 82% to the Community of Madrid and the rest of 18 to the 111 town councils within the Community. The Ownership started in the early 17th century as a Royal Council ' Board of Fountains' and in 2008 it was legally established as a public limited company, limiting the private investors to 49% of the shares. The company is also the parent one providing water to 3 million people in Latin America.

The **privatization** of the natural entity of the rivers Manzanares and Lozoya is only the legal taming of the rivers, as the Promethean project of the Canalization of the Canal Isabel Segundo, was the major paradigm shift in the water history of Madrid and early Modernization and expansion of the city. The canalization of the Manzanares was a huge step in 'taming' nature by building hard boundaries, embankments on both sides and a set of locks. Eventually, the M30 highway would get built along the river edges, permanently scaring the potential of the river taking back any territory from the anthropocentric landscape.



CONDITIONS OF WATER

by HUMANS & WATER

Shifting the scale from an urban planning and social power perspective to an experiential one a set of threads emerge, the processes of connecting to water, the landscapes it carves and shapes, and the narrative the stream contains both historically and physically.

Firstly, on a Maslowian physiological needs scale, water sits as the foundation and plinth of the pyramid. (Maslow, 1943) This dimension together with the further use of water as a tool are included in the previous chapter under the discussion of the Social Power of water. Going up the ladder to the need for safety, water shifts into a self-cleansing and protective role, discussed as early as the Ancient Greek times by Hippocrates around 400 BCE. However, by this simple step up one might rocket directly to the peak, namely the selftranscendence. Water was immediately related to polytheistic deities in the history of human civilizations: Poseidon (Greek) and Neptune (Roman), Suijin (Japanese), Varuna (Hindu), and Oshun (Yoruba). In many cases, the deity was not simply correlated to water as an element but either in relation to its form, river (the Osun River) or Ocean (Titan born out of Gaia and Uranus, sky and earth deities), or to others such as the sky (Varuna).

The need for water has been the earliest **catalyst**, alongside the social efficiency of a group of people, for human settlement's location selection. Even though some of the earliest cases of taming of water were found in Mesopotamian water channels and Egyptian wells (Tvedt, 2010). One of the largest and earliest Promethean projects in history, specifically European, was the Roman aqueduct infrastructure, fulfilling the base need of existence to a whole other scale. This allowed the development of the Roman Baths, which became pillars for self-cleaning and leisure activities in ancient times, a very important role within the Empire's culture as well, which influenced the Turkish bath, the hammam, and spread all around Christian Europe throughout the Middle Ages and

by ARCHITECTURE & WATER

The **baths** fulfil the most needs at the human scale, except for the nourishing, within one built complex, that of physical cleaning, exercising (the gymnasium was the entrance courtyard in the Roman bath layout) mental cleansing, and socialising. The first two are self-explanatory while the latter two have more depth and potential ramifications to be explored. Jung argues that water in dreams is a representation of our stream of unconsciousness. Following his logic, it can be argued that by immersing oneself in water, one gets closer to

Right Fig.11 Frame from Nostalghia (A. Tarkovsky, 1983)



the **unconscious**, therefore exploring a path of self-exploration and mental clarity. Taking the Roman Baths as an example, the baths are a typology of water **immersion** that was designed as a narrative promenade, including socialising and exercising areas (Palaestrum), preparation areas (Apodyterium, locker room and Caldarium, warm in preparation for hot). This **sequencing** of spaces has also considered water in more than just its liquid form but also in terms of humidity levels, temperature, and vapour. One of the most primal forms of immersion is the one into water and its corresponding atmospheres. Peter Sloterdijk defines architects as designers of immersion, which he describes as more than just a 'wet element'. I would like to further discuss water as an immersive environment, to use it as a narrative thread for historical data, shaping of atmospheres and social landscapes. He also concludes his paper with the suggestion that anthropologists could help architects 'take into consideration that humans are beings who oscillate between the desire to be embedded and the desire to break free' (Sloterdijk, 2011). Should not civil Engineers and biologists do the same for designing for and with water? What about a gardner and a landscape project?

"Mood is closer to an embodied **haptic** sensation than to an external visual percept...We gaze intentionally at visual objects and events, whereas atmospheres come to us omnidirectionally, similarly to acoustic and olfactory" (Pallasmaa, 2016)

The intangible forms of water are as unperceivable to a designer as the impossibility of determining the atmospheres their spaces convey. The acceptance of the visual as obedient is hard to grasp for a designer, to embrace the other senses. Water has fascinatingly managed to elude the deterministic nature of atmospheres. The exemplification of the subtleties of water in relation to its generating and surrounding environment, outside of untamed nature, could be observed in man-made projects such as the Therme Vals by Peter Zumthor or the Leça Swimming Pool by Alvaro Siza.



"Give every sacred site a place, or a **sequence** of places, where people can relax, enjoy themselves, and feel the presence of the place. And above all, shield the approach to the site, so that it can only be approached on foot, and through a series of **gateways** and **thresholds** which reveal it gradually" (Alexander, 1990)

In the chapter 'Sacred Sited', Cristopher Alexander discussed the required preservation but also preparation of the individual in approaching a sacred site. Immediately after that chapter, he discusses the 'Access to water' of human settlements. It is not arbitrary that these two topics are consecutively listed. In Siza's Swimming Pools, he elegantly blends his intervention onto a longitudinal strip of road, gradually preparing the inhabitant for disinfection from the city and slowly cleansing into the waterscapes. He manages so through a series of gateways and decisions that the user needs to make, wet or dry, guick, or slow. His intervention transitions from the hard boundary of the city to the hard landscape and soft borders of the seaside. Once the viewer is prepared for exposure, subtle interventions blend within the landscape guiding between the playful **tamed** landscape and **untamed** waterscape. The project lies on both edges of its inhabiting and proposed ecotone, gradually and sequentially allowing the Atlantic Ocean to unleash. It does not attempt to hide itself but rather rests like a gateway that mysteriously melts into the landscape once you cross it. The lack of handrails is another uncredited, and probably unsafe to today's standards, decision that would have disrupted the immersion of the user were it to be placed at every concrete stair cast into the existing stones and every pool edge.

Left

Fig.12 Sacred Site depiction from A Pattern Language by C. Alexander

Тор

Fig.13 Leça Swimmin Pool by Aalvaro Siza

Bottom

Fig.14 Bellinzona Bathhouse by Aurelio Galfetti



CONCLUSION

This research paper aims to explore the potential of cinematic tools within an urban context, using water as a medium between built form and tamed nature in the context of Madrid's fading riverine landscape. It reflects on the role of architecture as a mediator between the city and its natural heritage, harmonising the different speeds and rhythms at which both operate: the fastpaced monotonic urban development and the slow, seasonal, and cyclical evolving rate of the landscape.

The issue of the Manzanares embankment in the Madrid portion of its flow and its lack of connection to the Madrileños opens up a small door to a reverse Promethean Project, untaming the tamed. The MadridRIO project has achieved quite well what it set out to do, namely to cover up the M30 highway project, which started in the early '60s and became one of the busiest roads in Spain. Unfortunately, its aim was limited to the neglectful urban scheme of the second half of the 20th century. The last remnants of the connection between the inhabitants and their river was the Piscina La Isla, a swimmer's social club, a small retreat from the hectic, accelerating pace of the city, which was demolished in 1954. The Manzanares lost its social quality ever since, slowly to the point that it is no longer part of the identity of the city. The first step forward in untaming it and reintegrating it was reopening the locks in 2016 and allowing natural sedimentation of the riverbed which led to a revitalisation of the seasonality of the river flora and fauna. The process of reaccommodating the voyageur to transition from the urban to the natural back again needs to happen at a similar rate as it faded. A well-lit tunnel has a smooth transition on both ends to prepare the voyeur's sight for the contrasting environment of the artificially lit ceiling to the sky. The architecture has the potential to accommodate this transitory stage to the new waterfront in both space and time. It should attempt to acknowledge more than the optic and embrace a multisensorial approach. The noise of the street, the pollution of the city and the hard asphalt and granite need to morph into the stream of the river and the sounds of the fauna, into the olfactory bouquet of the flora and its soft transition and surfaces.

The need for a gradual in-between, a set of gateways demands a sequential approach to the design medium for such a landform, defining new architectural fundamental elements such as surfaces rather than elevation, openings not windows, time-based and process-oriented over an end-phase. Cinematic serialism provides a guiding design framework that could generate an understanding of design over time, a dialogue between the two habitats. Water in its various states covers the range needed to exemplify, test, and accommodate the agenda above. Even more, in the case of Madrid, the water carries within its flows the cultural heritage of the washerwomen, the waterboys, the social clubs, the Viaje de Agua, the old waterways, the display of power that is embedded in the water system and its ownership.

The haptic experience of the open swimming pool typology is one of the only public spaces where a person can physically engage with the water and, even more so, fully immerse oneself. Architecture has the potential to enable the compression and decompression of space as complementary processes rather than binary opposites. Water becomes both the logic of a transitional space but also a fluid generative process resulting in architecture situated between landform and builtform. Architecture becomes a design framework for a dichotomous condition, water and the flows become its logic, and cinematism its decodifier.

EPILOGUE

by SELF-REFLECTION

The initial purpose of the research paper presented as early as the Research Plan was to discuss the potential of cinema and architecture as sites for deterritorialization and its translation into the urban fabric of a city such as Madrid. The initial research and findings have set a strong ontological foundation by merging sources regarding the moving image, atmospheres, data and mobility. However, once the theoretical framework was established and the methodology decided accordingly, namely using cinematic tools in both gathering, exploring and visualising data, the empirical data from the site visit raised new issues that ramified into requiring a better understanding of the systems and networks involved in the topic. Due to these ramifications, the focus of the research paper oscillated between water as a main actor and the water body, Manzanares as the protagonist of the narrative thread and research topic.

Whether or not my approach has worked depends on what the reference point is considered for what was set out to achieve. Due to the new findings and closer look at both the site and the water system and cycles in Madrid, the initial set out methods and questions have also adapted into a more hydrological and urbanistic rather than a utilitarian focus than was the initial pivot point.

The early design approach was directly correlated to the historical surveying of the site and the exploration of cinematism in translating into a design process, by attempting sequential explorations of the envisioned promenades. Due to a better understanding of the site and its condition of a riverine landscape within a metropolitan central area, trough literary review ,gathering of historical data and reassessment of the empirical data through the new lenses uncovered in the research paper, the goals of the design rather than the research have shifted from a practical need for a river park to a potential polemic on second nature and ecotones in a city.

by RELEVANCE

The exploration between a city and its penetrating rivers is a topic relevant to most capitals around the world. 148 out of 195 capitals of the world are situated along a river. Even though rivers, and water, are a primary condition for city settlements in early history, throughout the Industrial Revolution the water's utilization has shifted from an exploited natural element to an almost fully controlled system as part of a larger network. This has created enclosed and embanked riverfronts like London, Madrid or even Bucharest, my hometown. The lack of exposure to water for the inhabitants represents a disconnection from the cultural and ecological heritage of a city. This issue I believe is relevant to most riverside cities and the implied conversation of Social Powers of Water and destroyed, or more positively presented as 'unexplored' potential of untaming the tamed.

The particularities of the Manzanares River are very good example to start with. The water flowing through Manzanares in the Madrid portion is around 90% residual water from the city's purification, irrigation and rainwater management. The rest of 10% is actually a controlled stream by the El Pardo Dam at the start of the river upstream. The river could be considered as natural as an artificial lake in a park. The topic of discussing 'green' within a city as an infrastructure and infrastructure as a landscape could be further explored in more than just the riverine or maritime landscapes.

by PERSONAL FINDINGS

The struggles of the research were mainly previously encountered issues of adapting theories relating time-based medium and the moving image as research topics instead of accepting them as utilitarian focuses. By exploring articles and books by researchers such as Bruno (1997), Tawa (2010) and Pallasmaa (2001, 2016) I managed to tame these ambitions into a method within a larger framework. My personal interests in unexplored, latent, heterotopic spaces of a city, specifically within urban riverine landscapes and cinema would meet eventually through the first design attempts that have eventually reflected back into the research. This feedback loop between research, method and design has enabled me to decipher the site.

Secondly, this project has made me question the role of architecture as a ruling figure over man-made and nature but rather as an intermediary between systemic variables, specialists with their corresponding knowledge base, the users and the client, even if in most academic projects it is a mysterious omnipresent entity. The process of the last academic year, specifically within the Architecture Design Crossovers studio, has shifted the way I understand the relationship between design and research in the architecture field and added greater value to the need to understand systems, networks and their links between the various stages of a design project and all of its constituents. The process has revealed itself as the architectural Hippocratic oath of taking part of the burden from previous researchers and designers, trying throughout my professional and academic life to discover, polish and adapt until it would further be passed on.

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