

WATER AS CATALYST

Int

Interventions

AR

Adaptive Reuse

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A METROPOLITAN PARK OF WATER

by RENZO LECARDANE & PAOLA LA SCALA

For three decades now, numerous urban renewal projects have been focused on European cities built on rivers, demonstrating how an interpretation of the urban and peri-urban areas is related to issues of high-quality ecological development and environmental sustainability. This connection places the majority of large projects involving river cities among new environmental practices, usually linked to big events, which are seen as tools for transforming the region and the image of the host city. In this context, fluvial cities are becoming increasingly aware of the natural environment which shapes the identity of the place and which demands ordinary and extra-ordinary renewal projects¹.

This paper, in pursuing two themes, aims to grasp the multiple inflections of the ambitious project of the Spanish city of Saragossa, which, in 2008, hosted the *International Expo*², integrating it into a strategy geared towards transformation of the river basin area: the river basin as object of study and the urban project for the event. The case-study chosen is emblematic of these two phenomena, especially as regards the position of Saragossa at the crossroads of four Spanish cities (Madrid, Barcelona, Bilbao and Valencia), which has helped advance its development since the beginning of the 1980s. Furthermore, the subsequent decade, from 1990 to the early years of the 21st century, signalled a step forward for the city and the river valley of the Ebro, with the arrival of the High-Speed railway and the selection of Saragossa as candidate to host the 2008 International Exhibition.

The actual description of the event may well seem ephemeral by nature, but is permanent as regards the durability of the transformations, and sums up the contribution of the Saragossa Expo to the regeneration of the region. *Expo*, on the theme of *Water and Sustainable Development*, was designed to last and then to

capitalize in the long term, and provided ample evidence of the skills that can be put to the test on occasions such as these. These events, in fact, not only permitted the city to show itself off as a whole, but also enabled it to confront its own physical dimension and that of the surrounding region, with environmental, social and cultural values added to the mix. Consequently, Saragossa suggested holding an Expo on the left bank of the River Ebro; the chief virtue of choosing this area lay in the opportunity to work on different levels of intervention, in the area's relationship with the river and other water courses and in the construction of a system of linear parks in the urban environment. Connected to the city, visually and physically, via new road-bridges and foot-bridges high above the water, the river-bank connected thematic squares and the *Water Park* to an ambitious global project combining green spaces with areas for recreational activity.

Not only did this project resurrect a recreational area, but it also became a bustling hive of activity in the large urban park. Agricultural working of the land was supplanted by operations on a grand scale, in order to resurrect, on the one hand, a vast area of marshy terrain and, on the other, to refurbish and enhance the eco-systems on the river-banks. The water-courses flowing through the city became natural and cultural elements of the new axes shaping the *Metropolitan Water Park* project, which represents the principal element in linking up the city's new processes of natural and urban redevelopment. The Saragossa Expo, by respecting the global phenomenon of great cultural events, incarnated the reciprocal relationship between the event (which aimed to transform the areas of water) and its resources, which this very region enhanced with a view to refurbishing its identity. The theme and its message, as chosen by the city, along with consideration





of environmental and urban resources, fuelled the theme of recycling of urban material, renaturation of embankments and the more complex theme of renovating the city.

The sustainable event as a developmental strategy

Referring to the contribution of the Great Exhibitions³ in cities that have hosted them, allows one to insert Saragossa in the broadest national and international context, which, since 1888, has seen Spain among the nations most involved in organizing these cultural events of great import. The Universal, International and Regional Exhibitions organized in Spain were aimed almost exclusively at local people and heralded a search for an architectural style and local trends in the hosting cities. In this context, the Saragossa International Exhibition of 2008, as reported by the *Consortium Zaragoza Expo 2008*⁸, developed a strategy in support of both the *Expo Integrated Plan* and actions to enhance the water-courses.

The planned operations, such as the construction of new railway stations capable of accommodating the new high-speed trains, all the new tertiary, technological and commercial areas and the modernization of basic infrastructure (including the international airport, navigable stretches on the River Ebro and the redevelopment of the *Canal Impérial*) were all duly completed; consequently, Saragossa contributed effectively to reinforcing its geographical centrality, both on the regional and national scales, and establishing modernization principles to improve the quality and quantity of public transport infrastructure and boosting the city's economy.

The challenge faced by the city, therefore, consisted in consolidating its regional role. This was based on its clear ambition to re-establish its centrality through innovative urban operations of national significance and with respect for the environment. These lines of thinking were

supported by the strategic choice to address environmental development in harmony with urbanization along the river-banks and the river-valley of the Ebro. The backbone of the system of water-courses and the spontaneous vegetation along the Ebro, the various tributaries Gállego, Huerva and the *Canal Impérial* with the two large parks of Valdespartera and Arcosur, did, in fact, form a still visible natural system, which countered the occupation of land by the recent urban sprawl. Further to this resistance, interest emerged in redeveloping the riverside and linking it up with the International Exhibition project over the vast marshy area of *Meandro di Ranillas*, west of Saragossa.

The urban project

The Saragossa *Expo* entered the annals of great Exhibitions and became a key tool for future transformations of the city, capable of generating structural changes that had been almost impossible to implement using ordinary planning tools. As a result of its geographical location, not far from the city centre and the new intermodal railway station, Expo represented the new structural centre of a larger project of urban regeneration (Blasco 2008)⁴.

In line with the importance attached to the event's impact and legacy, Saragossa proposed that Expo become the pivotal element in the mosaic of operations envisaged for the city's natural and urban environment over the following decades. In fact, Expo mobilized extraordinary national, regional and municipal resources. Aragon's government committed itself to building the cultural and linking infrastructure, such as the Congress Centre, the Goya Space and improvements in the metropolitan and road networks. The government of Aragon and the Aragonese community also participated jointly in the environmental projects, to redevelop the embankments, the countryside and the nature reserve of Alfranca. The city of Saragossa purchased the 25 hectares of the *Recinto of Expo*, building new structures for the event, new access-points with linking road-bridges and foot-bridges over the river.

Once the hypothesis of creating a theme park had been abandoned (Masad, Guerrero Yeste 2008), the environmental predisposition and the water theme shaped the city's objectives and the eventual choice of Saragossa as the site of the Expo, based on an ambitious environmental project along the banks of the Ebro. The *Water Park* project by the landscape architect Christine Dalnoky was included in the programming, which envisaged the laying down of guide-lines for Expo and post-Expo[5]; in fact, this was a fragment of a large-scale urban operation geared towards consolidating the city's relationship with the river through the creation of an eco-system of green spaces linked up and included in natural surroundings. The traditional



idea of the Park was here associated with open spaces destined to become a promenade connecting the green spaces with the areas for recreational activity. It was to be not only a place for relaxation and fun, but, above all, an *ecological park, a specific life-space and not an anecdotal park* (Dalnoky 2008), a concentration of leisure-time activities for urban society, in a place characterized by a large green space accommodating, within its borders, numerous areas for leisure-activities.

The vast Expo site today occupies about 145 hectares of the agricultural land of the *Meandro di Ranillas*;

inside this, there is the *Recinto*, extending over 25 hectares, designed by the architects Enric Batlle and Joan Roig. It opens out on to the Ebro and joins up with the right bank of the river via road-bridges, foot-bridges and the Pavilion-Bridge, the main access-point to the *Recinto*, designed by Zaha Hadid. Inside it, there are many buildings by architects of international renown: the International Pavilions by Azcárate y Banbó, the Spanish Pavilion by Francisco Magnado, the Aragon Pavilion by Olano y Mendo, the Congress Centre by Nieto y Sobejano, the Thematic Squares by Batlle y Royg, the



View of the Water Tower, Expo 2008

Expo Building by Basilio Tobías, the River Aquarium by Planchuelo y Coutant, the Water Tower by Enrique de Teresa, the Water-city Pavilion by Italo Rota, the Digital Pavilion by Carlo Ratti; the Funicular Railway by Hualde y Ramos and many more thematic constructions dotting the Water Park in the immense *Meandro di Ranillas*. All Pavilions are designed as flexible and multifunctional space where multi-sensorial, audiovisual and interactive exhibitions lead the spectators through an experience narrating the importance of water and its different uses in countries culture and history. We might also add the area of the Water Park to all these emblematic Expo buildings and it becomes evident that the contribution of the actual event, with all the political, economic and financial machinery set in motion, constituted the driving force for developing the city's riverside area, projecting in the direction of a vast environmental transformation plan.

Furthermore, in the wake of the construction of the *AVE-Delicias* railway station, numerous emblematic operations were carried out in urban and extra-urban settings, in service of certain specific themes. The issue of public space and its central role in the city was tackled in the redevelopment plan for the railway zone of *El Portillo*, approved in 2005, which envisaged the future construction of new residential buildings, services for both the city and the neighbourhood (offices, exhibition hall, auditorium and multi-media library), on the fringes of this area, as well as an outlying railway station. Then there was the theme of sustainability and innovation in support of the economy of the new Saragossa, which was tackled in planning the innovative and digital locality *Milla Digital*, in an open area on the River Ebro, between the areas of *Delicias* and *El Portillo*.

Fresh perspectives: towards 2020

The project described thus far was the challenge that Saragossa accepted via large-scale urban operations, in accordance with its environmental qualities, in an attempt to eradicate several blemishes on the urban picture; in this way, it inverted the previous radio-centric trend characterizing the city's outward expansion from the historical centre, in the years of the population explosion.

The events following the recent economic crisis, which hit Spain hard, put a stop to the dream of a short-term urban transformation and its anticipated, associated development. The present situation takes much of the blame for the difficulty in putting into operation the proposed post-Expo ideas, a plan which had been conceived before the event and implemented during it. However, it can be seen that the city has, nonetheless, shown that it has gained insight from the previous experiences of Spanish cities hosting similar events; consequently, it worked out a strategy of long-term interventions, geared towards activating virtuous

processes of urban development. Moreover, in spite of the crisis, Expo did not represent an isolated event for the city. On the contrary, it constituted the beginning of a process of regeneration that rendered the relationship between the river and urban development mandatory, representing the first step in subsequent transformations.

Including the post-Expo period in its timeline, the 2006 Strategic Plan was proposed as the driving force behind the city's development up to 2010; it was to individuate a system of indicators to verify whether the pre-set aims had been achieved, so as to refine the planned strategy in accordance with the results obtained. Some positive data did emerge, being amassed during a series of checks immediately after Expo 2008, but contrary to general assumptions at the time, it appears that the economic crisis had a negative effect on both the socio-economic issues and those regarding urban transformation, which, hitherto, had not seemed to cause any anxiety. Precisely as a result of these observations, a new strategic document (*Estrategia 2020*) was prepared in 2011, with the duty of supervising the development of the city and the metropolitan area for a decade, and with a long-term thirty-year perspective, laying down some priority objectives: *integrating* nature in the city and in its area of influence, *improving* the air-quality, *bolstering* the development of clean technology, *adopting* operational systems for handling waste disposal, *improving* the water-quality and *reducing* its consumption.

ENDNOTES:

- 1 Cfr. R. Lecardane, "Fleuve en ville. Infrastructure touristiques à L'Expo 2008 Saragosse", *L'Infraville / Futurs des infrastructures*, (2011), 242-251
- 2 The International Exposition in Zaragoza proposal took shape and reached its official recognition during the municipal elections of 1999, through the electoral promises of Juan Alberto Belloch, Mayor candidate.
- 3 Entity responsible for coordination of all public administrations involved in the Expo. Cfr. *Bollettino Expoagua 2009*.
- 4 The definition of the different areas of the *Recinto* was built starting from the candidature project, presented in December 2004, which also included the successive reuse of the sites in a cultural and scientific park.
- 5 The Expo guideline assumed the integration of the river with the city in an irreversible manner following the principle of diffuse growth of cities along its fluvial margins. To this it added flexible planning, before and after the event, all the urban renewal operations, based on the principle of double temporality, launching a process of conversion of building in view of future works. The *Association for Strategic Development of Zaragoza (Ebrópolis)*, responsible for elaborating the Expo guideline approved two strategic plans for Zaragoza, the first in 1998 and second in 2006.

PROJECT CREDITS, INFORMATION AND BIBLIOGRAPHIES

EDITORIAL

Project Name_ Projecting Change

Image Credits: Neethi Abraham, Angelica Carvahales, Udeeta Jain, Mengran Jiang, Vinoti Kabara, Krishna Lingutla, Sneha Mathreja, Hana Mehta, Gloria Ramirez, Eshank Rishi, Eder Romero, Yinghua Tan, Rohit Vantaram, Ananya Vij, Plub Warnitchai, Mengyue Zhou

BREATHE, LOOK, STAND UP

Project Name 01_ DC ExchangeProject_Site_ McMillan Slow Sand Filtration site_ Location_ Washington DC_ New use 01_ Community center, marketplace, performance_ Project Name 02_ People's Liberation Army No. 1102_ Location_ Shenyang China_ Original architect_ Communist Party China_ Rehabilitation architect_ META-Project_ New use 02_ Exhibition space, mini theatre

Image Credits_ Figure 01,02, 08_ McMillan slow sand filtration site, Washington, DC, Lewis Francis; Figure 03 –07_ Public Folly, Shenyang, China, META-Project; Figure 09_ Courtesy of Lindsay Winstead

BIBLIOGRAPHY:

- Burian, S., J. Stephan Nix, Robert E. Pitt, S. Rocky Durrans. "Urban Wastewater Management in the United States: Past, Present, and Future." *Journal of Urban Technology* 7, no. 3 (2010): 33 – 62, <https://dx.doi.org/10.1080%2F713684134>.
- Cartwright, M. "Aqueduct — Definition." *Ancient History Encyclopedia*. 2012. <http://www.ancient.eu/aqueduct/> (accessed September 5, 2016).
- EHT Traceries, Inc. "McMillan Slow Sand Filtration Plant." Historic Preservation Report for the Proposed Redevelopment of the McMillan Slow Sand Filtration Plant. 2010.
- Greenberg, S. *Invisible New York: The Hidden Infrastructure of the City*. London: The Johns Hopkins Press Ltd. 1998.
- Harper, D. "Infrastructure." *Online Etymology Dictionary*. <http://dictionary.reference.com/browse/infrastructure> (accessed January 10, 2014).
- Hobsbawm, E. *The Age of Revolution: Europe 1789-1848*. United Kingdom: Weidenfeld & Nicolson Ltd. Vintage Books, 1962.
- Jacobsen, T., and L. Seton. *Sennacherib's Aqueduct at Jerwan*. University of Chicago Press: Oriental Institute Publication. 1935.
- META-Project. "Public Folly — Water Tower Renovation PR Text." Dongcheng District, Beijing: August 5, 2013. September 3, 2016.
- META-Project. "Water Tower Renovation — Industrial Heritage Reuse." December 2012. <http://www.meta-project.org/projectdetail?projectQueryCon.id=47&select=2,1> (accessed September 3, 2016).
- Metcalf, L.; Harrison P. Eddy. "American Sewerage Practice." New York: McGraw-Hill. Vol. I, Design of Sewers, 1914.
- "Public Folly — Water Tower Renovation / META – Project." *ArchDaily*. August 20, 2013. <http://www.archdaily.com/417034/public-folly-water-tower-renovation-meta-project/> (accessed September 3, 2016).
- "Reference Terms — Infrastructure." *ScienceDaily*, 2006. <https://www.sciencedaily.com/terms/infrastructure.htm>.
- Rodda, J. C. and Lucio Ubertini. "The Basis of Civilization — Water Science?" International Association of Hydrological Sciences, 2004.

- Staley, Cady; George S. Pierson. *The Separate System of Sewerage, Its Theory and Construction*. New York: D. Van Nostrand Co. 1891.

THE TEARS OF THE U.S.S. ARIZONA

Project Name_ A tomb that lives; Location_ Pearl Harbor, Hawaii

Image Credits_ Figure 01_ View of USS ARIZONA taken from Manhattan Bridge on the East River in New York City on its way back from sea trials. December 25, 1916, Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA http://hdl.loc.gov/loc.pnp/pp.print;photographer_EnriqueMuller,Jr./E.Muller;1916;Wikimedia; Figure 02_ A TOMB THAT LIVES Monument proposal, illustration by author; Figure 03_ An aerial view of the USS Arizona Memorial, U.S. Navy photo by Photographer's Mate 3rd Class Jayme Pastoric, Wikimedia

BIBLIOGRAPHY:

- Henderson, S. "Submerged Cultural Resources Study, USS Arizona Memorial and Pearl Harbor National Historic Landmark". Santa Fe, NM: Submerged Cultural Resources Unit.
- Shapiro, T. "Arizona Memorial Seen as a Dedication to Peace." *Honolulu Star Bulletin*. May, 2002. Southwest Cultural Resources Center. 1989. "Section IV: Biofouling and Corrosion Study."
- Stille, M., and A. Hook. *Yamamoto Isoroku: Leadership, Strategy, Conflict*. Oxford: Osprey. 2012.
- Stillwell, P. *Battleship Arizona: An Illustrated History*. Annapolis, MD. Naval Institute. 1991.
- The National World War Two Museum, New Orleans. "The D-Day Invasions in the Pacific". December 2001. <http://www.nationalww2museum.org>
- U.S.S. Arizona Preservation Project 2004, "Baseline Environmental Data Collection." http://128.146.17.149/previous-programs/Arizona/Legacy_2.html (accessed 10 December, 2016).

THE EDGE OF CONDITION

Project Name 01_ Three Mills_ Bromley-by-Bow_ River Lee_ London, England_ Project Name 02_ The White Building_ Lee Navigation Canal_ Hackney Wick_ Stratford, England_ Project Name 03_ The Marine Engine House_ Walthamstow Reservoirs

Image Credits_ All images courtesy of the authors; Figure 01, 02_ Three Mills Island, London_ Figure 03_ White Building_ Hackney Centre Wick_ Stratford_ Figure 04_ The Sinking Future Post Apocalyptic Flood Survival Centre.

BIBLIOGRAPHY:

- Bluestone, Daniel. "Challenges for Heritage Conservation and the role of Research on Values" In *Values and Heritage Conservation*, ed. Erica Avrami, Randall Mason, Marta de la Torre. Los Angeles: The Getty Conservation Institute, 2000.
- Evans, Graeme. "The Lee Valley: an industrial river system and heritage landscape". In *Patrimoine Paesaggi : Costruiti Dall'acqua*, ed. Margherita Vanore, 90 – 101. Milano: Mim Edizioni Srl-Udine, 2016.
- Foucault, Michael. "Of Other Spaces: Utopias and Heterotopias," *Architecture, Mouvement, Continuité*. 5, 1984, 46 – 49.
- Hollis, Ed. *The Secret Lives of Buildings: From the Parthenon to the Vegas Strip in Thirteen Stories*. London: Portobello Books, 2010.
- Knight, Jasper. "Development of Palimpsest Landscapes", 2012, <http://serc.carleton.edu/68942>, (accessed December 16, 2016.)
- Lewis, Jim. *London's Lee Valley: Britain's Best Kept Secret*. Chichester: Phillimore & Co, 1999.
- Machado, Rodolfo. "Toward a Theory of Remodelling — Old Buildings as Palimpsest." *Progressive Architecture*. 11, no. 76, (1976): 48.
- Marshall, R. *Waterfronts in Post-Industrial Cities*. London: Spon, 2001.
- Norberg-Schulz, Christian. *Genius Loci: Towards a Phenomenology of*

Architecture. New York: Rizzoli, 1985.

- Norberg-Schulz, Christian. "The phenomenon of place." In *Theorizing a new agenda for architecture: an anthology of architectural theory 1965 – 1995*. ed. Kate Nesbitt. New York: Princeton Architectural Press, 1996.
- Pallasmaa, Juhani. *The Eyes of the Skin*. Chichester: J.Wiley & Sons, 1996.
- Solà-Morales, I de. "Terrain Vague." In *Anyplace*. ed. Cynthia C. Davidson. 118 – 123. Cambridge: MIT Press, 1995.
- Strong, Brian. "A tidal mill tale." *Journal of the Islington Archaeology & History Society* 4, no. 1 (2014): 16 – 17.
- Symmons Roberts, Michael & Paul Farley. *Edgelands*. London: Vintage, 2012.
- TICCIH (The International Committee for the Conservation of the Industrial Heritage), *Industrial Heritage Re-tooled: The TICCIH guide to Industrial Heritage Conservation*. James Douet (ed.) Lancaster: Carnegie. 2012. 236.
- Weizman, Eyal. *Forensic Architecture: Notes from Fields and Forums*. Kassel: Documenta. Series 062.

BACK TO THE FUTURE

Image Credits_ Figure 01_ The Big U, Courtesy of Bjarke Ingels Group; Figure 02, 03, 05) by Julia Casol; Figure 04_ Courtesy of H+N+S Landscape Architects; Figure 06_ Dijkdoorbraak bij Bemmel, 1799, Christiaan Josi, naar Jacob Cats (1741 – 1799), 1802, source: Rijksmuseum, Amsterdam

BIBLIOGRAPHY:

- de Vries, J. "The Netherlands and the polder model: Questioning the polder model concept." *BMGN — the Low Countries Historical Review* 129, no. 1 (2014): 99 – 111.
- Dutch Water Authorities. 2015. *Water Governance: The Dutch Water Authority Model*. URL: <http://www.dutchwaterauthorities.com/wp-content/uploads/2015/05/Water-Governance-The-Dutch-Water-Authority-Model1.pdf> (accessed August 30, 2016).
- Gunn, C. "Acequias as Commons: Lessons for a Post-Capitalist World." *Review of Radical Political Economics* 48, no. 1 (2016): 81 – 9.
- Lewis, M. E., and Craig L. Torbenson. "Cultural Antecedents of J. W. Powell's Arid Lands Report." *Journal of Geography* 89, no. 2 (1990): 74 – 80.
- Lokman, Kees. "Dam[ned] landscapes: Envisioning fluid geographies." *Journal of Architectural Education* 70, no. 1 (2016a): 6 – 12.
- Lokman, K. "Exploring a New Paradigm: Water management in Mexico City." *Topos: European Landscape Magazine*, no. 96 (2016b): 44 – 50.
- Lokman, K. "Progressive Pragmatism: The Next Generation of Dutch Landscape Design Practices." *Proceedings of the Cracow Landscape Conference*, (2016c): 19 – 28. http://www.clc.edu.pl/wp-content/uploads/2016/09/VOL_1_CLC2016.pdf
- Merlín-Uribe, Yair, et al. "Environmental and Socio-Economic Sustainability of Chinampas (Raised Beds) in Xochimilco, Mexico City." *International Journal of Agricultural Sustainability* 11, no. 3, (2013): 216.
- Parsons, J. R. "Political implications of prehispanic chinampas agriculture in the Valley of Mexico." In H.R. Harvey (ed.) *Land and politics in the Valley of Mexico. A two thousand year perspective*. Albuquerque: University of New Mexico Press, 1991.
- Powell, J. W. *Report on the lands of the arid region of the United States: With a more detailed account of the lands of Utah with maps*. Washington, DC: Government Printing Office, 1878.

- Raheem, N. "A Common-Pool Resource Experiment in Acequia Communities." *International Journal Of The Commons* 9, no. 1 (2015): 306 – 321.
- Raheem, Nejem. "A common-pool resource experiment in acequia communities." *International Journal of the Commons* 9 (1) (2015): 306 – 21.
- Salewski, C. *Dutch new worlds: Scenarios in physical planning and design in the Netherlands, 1970 – 2000*. Rotterdam: 010 Publishers, 2012.
- Sanders, William T., Robert S. Santley, and Jeffrey R. Parsons. *The Basin of Mexico: The Ecological Processes in the Evolution of a Civilization*. New York: Academic Press, 1979.
- Santistevan, M. "Acequia Culture and the Regional Food System." Coyote Gulch. URL: <https://coyotegulch.blog/2016/10/16/acequia-culture-and-the-regional-food-system-miguel-santistevan/> (accessed November 15, 2016).
- Schmidt, J.J., and D. Shrubsole. "Modern Water Ethics: Implications for Shared Governance." *Environmental Values*, vol. 22, no. 3 (2013): 359 – 379.
- Torres-Lima, P., B. Canabal-Cristiani, and G. Burela-Rueda. "Urban Sustainable Agriculture: The Paradox of the Chinampa System in Mexico City." *Agriculture and Human Values* 11, no. 1 (1994): 37 – 46.
- van Tielhof, M. "Forced Solidarity: Maintenance of Coastal Defences Along the North Sea Coast in the Early Modern Period." *Environment and History* 21, no. 3 (2015): 319 – 350.
- Worster, D. "A River Running West: Reflections on John Wesley Powell." *Journal of Cultural Geography* 26, no. 2 (2009): 113 – 126.
- Zevenbergen, Chris, et al. "Taming Global Flood Disasters. Lessons Learned from Dutch Experience." *Natural Hazards* 65, no. 3 (2013): 1217 – 1225.

THE OYSTER BLOCKS PROJECT

Project Name_ The Oyster Blocks Project

Image Credits_ Figure 01 – 07_ courtesy of the author

BIBLIOGRAPHY:

- Agrest, D. "Design Versus Non-Design," *Oppositions*, no. 6 (1976).
- Christian, R., F. Steimle, and R. Stone. "Evolution of Marine Artificial Reef Development — A philosophical Review of Management". *Gulf of Mexico Science* 16, no. 1 (1998).
- Crutzen, P. "Geology of Mankind." *Nature* 415 (2002).
- National Oceanic and Atmospheric Association. "Ocean Pollution" <http://www.noaa.gov/resource-collections/ocean-pollution>. (accessed Jan 12, 2017).
- Wilkenson, B. "Humans as Geologic Agents: A Deep-time Perspective." *Geology* 33, no. 3 (2003).

THE HAMMAM OF ERBIL CITADEL

Project Name_ Hammam of Erbil; Location_ Erbil, Iraq

Image Credits_ Figure 01 – 04_ courtesy of the authors

BIBLIOGRAPHY:

- Al-Haidari, A. *Urban renewal for Erbil Citadel: tafseer office Erbil* (2014).
- Al-Haidari, A. *Popular bathrooms in Erbil between past and present: Modern Discussion* (2014).
- Al Yaqoobi, D. *Highlights of Erbil Citadel*. Erbil: Government Governorate of Erbil High commission of Erbil Citadel Revitalization (2012).
- Ahmed, A. *Hammam – Herbestemming als brug naar de toekomst van Erbil*: Universiteit Hasselt (2014). not published.
- Derbandi, N. A. *Hammam as a Koerdish heritage*. Subartu: Issued

by Kurdistan archaeologists syndicate. Second year, no. 2 (2008): 140–141.

- MacGinnis, J. *Erbil in the Cuneiform sources*. Erbil: Ministry of Culture and Youth, Kurdistan Regional Government (2013).
- Musatafa, M. J. *Art of Decoration and Ornaments on the Stone in Erbil*: University of Salahaddin-Erbil in partial fulfillment of the requirements for the degree of M.A.in Islamic Archaeology, 2011.
- Plevoets, B. & K. Van Cleempoel. "Adaptive reuse as an emerging discipline: an historic survey," In *Reinventing architecture and interiors: a socio-political view on building adaptation*, ed. G. Cairns, 13–32. London: Libri Publishers, 2013.
- Resul, E. *Erbil, a historical study of Erbil's intellectual and political Role*. Cultural Centre of the Ministry of Culture — the Kurdistan Regional Government publications (2005).
- Yaraly, B. *So do not forget Arbil*: tafseer office of publishing & advertising / Erbil (2001).

(re)MADE BY WATER

Project Name_ New World Mall, Bangkok, Thailand

Image Credits_ All images courtesy of the author; Figure 01_ Mall; central court, Photograph by Perfect Lazybones; Figure 02_ Floating market in Bangkok, Photograph by Georgie Pauwels; Figure 03_ Mall, escalators, Photograph by Olga Saliy; Figure 04_ Mall, koi, Photograph by Olga Saliy; Figure 05_ Mall, escalators, Photograph by Olga Saliy.

BIBLIOGRAPHY:

- Behnke, A. *Angkor Wat*. Minneapolis: Twenty-First Century Books, 2008.
- Benjamin, W. and M. Jennings. *The Writer of Modern Life: Essays on Charles Baudelaire*. Cambridge, MA: Belknap Press, 2006.
- Bharne, V. *The Emerging Asian City*. London: Routledge, 2013.
- Bharne, V. and K. Krusche. *Rediscovering the Hindu Temple: The Sacred Architecture and Urbanism of India*. Newcastle-upon-Tyne: Cambridge Scholars Publishing, 2012.
- Budziak, A. *Text, Body and Indeterminacy: The Doppelganger Selves in Pater and Wilde*. Newcastle-upon-Tyne: Cambridge Scholars, 2008.
- Burke, P. *The New Cambridge Modern History: Volume 13*. Cambridge: Cambridge University Press, 1979.
- Byrnes, Mark. "Removing Fish from a Surreal Abandoned Shopping Mall." *The Atlantic*, January 16, 2015.
- Foucault, M., and Miskowiec, J. "Of Other Spaces." *Diacritics* 16, no. 1 (1986): 22–27.
- Fredrickson, Terry. "Bangkok's hidden fish pond," *Bangkok Post*, July 1, 2014.
- Goldstein, Sasha. "Abandoned Bangkok shopping mall Becomes incredible koi pond after years of neglect," *New York Daily News*, July 1, 2014.
- Grossman, N. *Chronicle of Thailand: Headline News Since 1946*. Paris: Editions Didier Millet, 2009.
- Hadjiyanni, T. "Rethinking Culture in Interior Design Pedagogy: The Potential Beyond CIDA Standard 2g." *Journal of Interior Design* 38, no. 3 (2013).
- Heberle, L. and S. Opp. ed. *Local Sustainable Urban Development in a Globalized World*. London: Routledge, 2008.
- Hill, C. *South Asia: An Environmental History*. Santa Barbara: ABC-CLIO Publishing, 2008.
- Kongarchapatara, B., and R. Shannon. "Transformations in Thailand's Retailing Landscape: Public Policies, Regulations, and Strategies" in *Retailing in Emerging Markets: A Policy and Strategy Perspective*, ed. Malobi Mukherjee, Richard Cuthbertson, Elizabeth Howard. New York: Routledge.

- Lefebvre, H. *Critique of Everyday Life, Volume II*. Brooklyn: Verso, 2002.
- Leslie, E. "Ruin and Rubble in the Arcades," in *Walter Benjamin and the Arcades Project*, ed. Beatrice Hanssen. London: Bloomsbury, 2006.
- McDonough, T. *Guy Debord and the Situationist International: Texts and Documents*. Cambridge: The MIT Press, 2004.
- Peng, H. *Dandyism and Transcultural Modernity: The Dandy, the Flaneur, and the Translator in 1930s Shanghai, Tokyo, and Paris*. London: Routledge, 2015.
- Pleasance, Chris. "Splashing out at the shops: Hundreds of fish take over abandoned Thai mall after it's Flooded." *Daily Mail*, June 26, 2014.
- Sobocinska, A. "The Expedition's Afterlives: Echoes of Empire in Travel to Asia." In *Expedition into Empire: Exploratory Journeys and the Making of the Modern World*, ed. Martin Thomas. New York: Routledge, 2015.
- Turnbull, D. "Soc. Culture: Singapore." In *The Architecture of Fear*, ed. Nan Ellin. New York: Princeton Architectural Press, 1997.
- Vidler, A. *The Architectural Uncanny: Essays in the Modern Unhomely*. Cambridge: The MIT Press, 1994.
- Wacharoen, Supoj. "Fish pulled from New World pond." *Bangkok Post*, January 13, 2015.
- Wacharoen, Supoj. "A New World fish pond." *Bangkok Post*, June 30, 2014.

T-HOUSE

Project Name_ T-HOUSE, theoretical project; Location_ Hains Point, Washington, D.C.

Image Credits_ Figure 01 – 08_ courtesy of the authors

BIBLIOGRAPHY:

- Bell, Catherine. *Ritual: Perspectives and Dimensions*. New York: Oxford University Press, 1997.
- DeFerrari, John. "The Vanished Teahouse at Hains Point." Paper presented at the 40th Annual Conference on DC Historical Structures, Washington, D.C., November 14–17, 2013.
- "EPA, D.C. Area Students Officially Launch World Water Monitoring Day 2008." *US Newswire*, Alexandria, Virginia: September 18, 2008. Ga |A185264601.
- Howes, F.N. "Tea." Review of *Tea* by T. Eden. *Nature* 4649 (1958): 1577.
- Jackson, J.R. "Tea." *Nature*, July 14, 1870: 215–217.
- James, H. *The Portrait of a Lady*. New York: Random House, the Modern Library, 1851.
- Okakura, K. *The Book of Tea*. Rutland, Vermont: Charles E. Tuttle Company, 1956.
- Proust, M. *Swann's Way*. Translated by Lydia Davis. New York: Penguin Books, 2003.
- Sen, H. Afterword to *The Book of Tea*, by Kakuzo Okakura. Translated by the Urasenke Foundation, Foreign Affairs Division. Tokyo: Kodansha International, Ltd., 1989.
- Tafuri, M. *The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s*. Cambridge: The MIT Press, 1992.
- Thomas, F. "Tea." *New England Review* 33, no. 1 (2012): 82–87.
- Wedzicha, B.L. "Tea." *Nutrition & Food Science* 79, iss. 6 (1979): 2–4.

THE BLUE LINE

Project Name_ blue developments; Location_ Battir, Palestine; Qeparo, Albania

Image Credits_ Figure 01- illustration by author

BIBLIOGRAPHY:

- De Sherbinin, A.; A. Schiller.; A. Pulsipher. "The vulnerability of global cities to climate hazards." *Environ. Urban.* 19 (2007): 26–39.
- Farmer, B. H. "Perspectives on the 'Green Revolution' in South Asia." *Modern Asian Studies* 20, no. 1 (1986): 175–199.
- McDonald, R.I.; P. Green; D. Balk.; B.M. Fekete.; C. Revenga; M. Todd; M. Montgomery. "Urban growth, climate change, and freshwater availability." *Proc. Natl. Acad. Sci. USA* 108 (2011): 6312–6317.
- Schuetze, T.; L. Chelleri. "Integrating Decentralized Rainwater Management in Urban Planning and Design: Flood Resilient and Sustainable Water Management Using the Example of Coastal Cities in The Netherlands and Taiwan." *Water* 5 (2013): 593–616.
- Shiklomnov, I. "World fresh water resources" in *Water in Crisis: a guide to the World's Fresh Water Resources*. edited by Gleick P.H. New York: Oxford University Press.
- UN, "International decade for action 'Water for life' 2005–2015." <http://www.un.org/waterforlifedecade/scarcity.shtml> (accessed November 6th, 2016).
- World DataBank, World Bank. "Rural population (% of total population)." <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS> (accessed November 6th, 2016).

ENVIRONMENTAL IDENTITY

Project Name 01_ Caiaques kayaks; Location_ Pinheiros River, São Paulo, Brazil; Artist_ Eduardo Srur; Project Name 02_ Pets; Location_ Tietê River in São Paulo, Brazil; Artist_ Eduardo Srur

Image Credits_ All photos courtesy of Eduardo Srur; Figure 01_ Caiaques, kayaks, Pinheiros River, photo_ Eduardo Nicolau; Figure 02_ Caiaques, kayaks, Pinheiros River, photo_ Alexandre Schneider; Figure 03_ Pets, Tietê River, photo_ Eduardo Srur; Figure 04_ Pets, Tietê River, photo_ Almeida Rocha

BIBLIOGRAPHY:

- Brocanelli, Pérola Felipette. *O ressurgimento das águas na paisagem paulistana: fator fundamental para a cidade sustentável*. Phd diss., Universidade de Sao Paulo, 2007
- Carvalho, Fabíola Araújo de. *Caminho das águas: A água na cidade de São Paulo*. Sao Paulo, Revista Belas Artes 13 (2013): 1–43, url <http://www.belasartes.br/revistabelasartes/?pagina=player&slug=caminho-das-aguas-a-agua-na-cidade-de-sao-paulo> (accessed February 25, 2017)

A METROPOLITAN PARK OF WATER

Project Name_ Metropolitan Water Park project, Location_ Saragossa, Spain

Image Credits_ Figure 01_ Bridge Pavilion & Third Millennium Bridge, Río Ebro, Zaragoza, España, Source_Pabellón Puente y Puente del Tercer Milenio, Author_ Juan E De Cristofaro from Zaragoza, España, CC-BY-SA-2.0; Figure 02_Google Earth aerial view of Zaragoza, Spain; Figure 03_ Plano topográfico de la ciudad de Zaragoza del siglo XVIII, Wikimedia;

BIBLIOGRAPHY:

- Ebropolis, *Plan Estratégico de Zaragoza y su entorno*, Zaragoza 2006.
- Ezquiaga, J.M., "El lugar: Zaragoza y la Expo", *Arquitectura viva* 117, *Pabellón de Espana Expo Zaragoza 2008*, (2007).
- La Expo de Zaragoza acumula unas pérdidas de 502 millones de euros, *El Periódico de Aragón*, April 04, 2010.

- Lecardane, R., G. Cimadomo. "Las grandes exposiciones en Europa 1992–2002. Efectos duraderos sobre la ciudad y apropiación por parte de la ciudadanía", in *Proceedings of International Seminar on World Events and Urban Change, Grupo de Investigación HUM-700*, Siviglia, 2012.
- Lecardane, R., "Expo, ville, architecture. Lisbonne et l'héritage de l'Expo'98, in *Cahiers thématiques — L'architecture et l'événement*, 8 (2009), 127–135.
- Martínez Ramírez, I.M., "Las estaciones del ferrocarril Zaragoza-Caminreal, vistas por sus autores, los arquitectos Luis Gutiérrez Soto y Secundino Zuazo Ugalde." *Artigrama* 14 (1999): 99–107.

BETWEEN RESILIENCY AND ADAPTATION

Image Credits_ All images courtesy of the author; Figure 01_ by author, background_ by Aleks Dahlberg at www.unsplash.com; Figure 02_ by author; Figure 03, 04_ graphic by author, background_ by Frantzou Fleurine; www.unsplash.com

BIBLIOGRAPHY:

- Buchanan, L., H. Fairfield, A. Parlapiano, S. Peçanha, T. Wallace, D. Watkins and K. Yourish.
- Erickson, C. "Crumple Zones in Automobiles," *Sourced through the American Institute of Physics*. (accessed July 28. 2015).
- Guattari, F. *The Three Ecologies*. 1989, Trans. Ian Pindar and Paul Sutton. New Brunswick, NJ: Athlone P, 2000.
- "Mapping the Destruction of Typhoon Haiyan", *The New York Times*. November 11, 2013. <http://www.nytimes.com/interactive/2013/11/11/world/asia/typhoon-haiyan-map.html>
- NOAA. "Storm Surge Overview", *National Hurricane Center | National Oceanic and Atmospheric Administration*. <http://www.nhc.noaa.gov/surge/>. August 27, 2015.
- Reed, C., and N. Lister. "Parallel Genealogie." In *Projective ecologies*. New York, 2014.
- Schwartz, J. "How to Save a Sinking Coast? Katrina Created a Laboratory", *The New York Times | Science*. August 7, 2015. http://www.nytimes.com/2015/08/08/science/louisiana-10-years-after-hurricane-katrina.html?_r=0
- Wu, J., and W. Tong. "Ecological resilience as a foundation for urban design and sustainability", In *Resilience in Ecology and Urban Design* 3 (2013): 211–229.

WATER AS MEDIUM

Project Name 01_ Water tower in Delft, Architect_ Rocha Tombal; Location_ Delft, NL; Project name 02_ Water tower in Brasschaat, Architect_ Crepain-Binst Architects; Location_ Brasschaat, Belgium; Project name 3_ Water tower Sint-Jans convent, Overijssel; Architect_ Zecc Architects; Location_ Overijssel, NL

Image Credits_ All images courtesy of the authors_ Figure 01_ typological evolution of the water tower, Source: Ingeonné; Figure 02_ Water tower in Delft (NL), photo by Christiaan Richters; Figure 03, 04, 05_ Water tower in Brasschaat (BE), Crepain-Binst Architects, photo_ Crepain Binst; Figure 06, 07_ Water tower Sint-Jans convent, Overijssel (NL), Zecc Architects, photo_ Stijn Poelstra, <http://www.stijnstijl.nl/>;

BIBLIOGRAPHY:

- Cercleux, A.-L., Mercliu F.-C., Peptenatu D. "Conversion of water towers — An instrument for conserving heritage assets." *Urbanism architectura constructi* 5, no. 2 (2014): 3–19.
- Norberg- Schulz, C. *Genius loci: Towards a phenomenology of architecture*. New York: Rizzoli, 1980.
- Van Craenenbroeck, W. *Eenheid in verscheidenheid watertorens in België*. Brussels: NAVewa, 1991.

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