BIRKHÄUSER

WATER AS CATALYST

IntAR

Interventions | **Adaptive Reuse**

Vol. 08

Department of Interior Architecture, Rhode Island School of Design

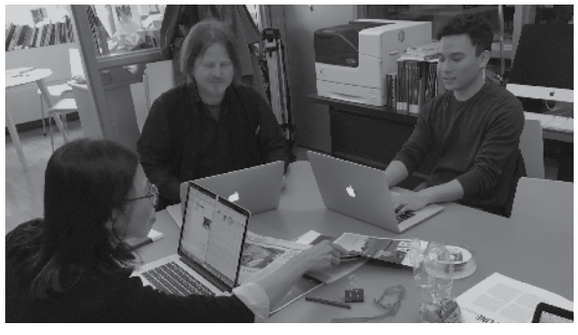
Int | AR

Interventions | Adaptive Reuse

Int|AR is an annual publication by the editors in chief: Markus Berger + Liliane Wong,
and the Department of Interior Architecture, Rhode Island School of Design.

Layout + Design Coordination_Cara Buzzell, Sungkyu Yang
Editorial + Communications Assistant_Toban Shadlyn
Cover Design_Ernesto Aparicio, Cara Buzzell
Cover Photo_Browning Cottage, Matunuck, RI_Aerial Photograph by John Supancic
Inner Cover Photos_Markus Berger, Jeremy Wolin
Support Team_Iris Kuo
Copyediting_Amy Doyle, Clara Halston, Jeremy Wolin
Printed by SYL, Barcelona
Distributed by Birkauser Verlag GmbH, Basel P.O. Box 44, 4009 Basel, Switzerland,
Part of Walter de Gruyter GmbH, Berlin/Boston

Int|AR Journal welcomes responses to articles in this issue and submissions of essays or projects for publication in future issues. All submitted materials are subject to editorial review. Please address feedback, inquiries, and other material to the Editors, Int|AR Journal, Department of Interior Architecture, Rhode Island School of Design, Two College Street, Providence, RI 02903 www.intar-journal.edu, email: INTARjournal@risd.edu



CONTENTS

The 'Shepherd Path' of the Agro Tourism Albania project in Qeparo

THE BLUE LINE

REUSING TRADITIONAL RURAL WATER MANAGEMENT SYSTEMS

by FRANCESCO GAROFALO

Abstract
In the last century agriculture experienced a leap in scales, shifting from small scale production to large and mechanized industrial production. Such dramatic change has impacted local communities and associated traditional, agricultural techniques and infrastructures which have become, in many cases, derelict and abandoned. Traditional water infrastructures have been left behind, substituted by centralized large scale solutions. This paper investigates the importance of reusing traditional water management systems in order to create a resilient water supply chain, pinpointing the multifold benefits of preserving rural cultural heritage for agriculture and tourism. Traditional water management systems can become the link between rural communities, agriculture, and tourism — a concrete example of embracing heritage as a means for improvement and development.

Change of rural landscape: A leap in scales
In post-World War II Europe and, more generally, developed countries, agricultural production has changed dramatically in scale, specialization, and mechanization. From small scale farming, agriculture has moved towards large scale specialized production typical of 'agro-industry.' In developing countries the so called Green Revolution that occurred between the '30s and the '60s, resulted in 'new, high-yielding varieties (HYVs) of cereals, especially dwarf wheats and rices. These new varieties were developed in tandem with chemical fertilizers and agro-chemicals, and also with controlled water-supply (usually involving irrigation) and new methods of cultivation (including mechanization). All of these together were seen as a 'package of practices' to supersede 'traditional' technology and to be adopted as a whole.'[1] Such revolution resulted in an increase in water demand (for most of the high-yielding varieties), and the abandonment of small scale traditional water supply methods, shifting instead to large infrastructures for the support of the new scale-intensive farming. Large scale agricultural production has made derelict a great variety of irrigation channels, aqueducts, tanks, and wells that were the foundation of traditional agriculture. This has contributed to the further decay of areas abandoned due to the loss of jobs. The resultant movement to the city from industrialized agriculture has decreased the rural population from 66% in 1960 to 46% in 2015.[2]

Centralized vs. Decentralized
Of the global water supply, over 96% is saline; of the total freshwater supply, over 68% is locked up in ice and glaciers while another 30% of freshwater is in the ground. Thus, rivers and lakes that supply surface water for human use only constitute about 0.007% percent of total water, yet rivers are the primary source of human use.[3] Availability of freshwater is a current urgency for humankind, with the availability predicted to worsen in the near future. "By 2025, 31.8 billion people will experience absolute water scarcity and 2/3 of the world

could be living under a water stressed condition." Water availability is further threatened by overexploitation: "water use has been growing at more than twice the rate of population increase in the last century."[4] Climate change is increasing this stress, with the most serious impacts, which paradoxically can be expected at the same time, being an increase in the frequency and severity of flooding events[5] and a decrease in the availability of freshwater.[6]

Such huge demand of water for both domestic and agricultural uses has been supported by the development of centralized water management solutions which are now proving to have limits, especially in terms of expensive and inflexible long-term building and maintenance strategies. 'Centralized systems are not resilient in cases of damage because their structure is a chain of linked and interdependent parts'; while 'decentralized rainwater management, including retention, storage, and reuse strategies that are integrated into spatial planning and urban design, can reduce flood risks while simultaneously enhancing freshwater availability.'[7] Measures for decentralized water management are not meant to take the place of centralized systems, but they can complement them, improving the resilience of the water management system as a whole.

Reuse of traditional water supply system: New opportunities

Generations of villagers and farmers located in areas affected by water scarcity have been developing techniques and solutions for rainwater collection and reuse throughout history, making certain rural (as well as partially urban) civilizations independent and self-sufficient in terms of water supply. There is a great heritage of rural artefacts and infrastructures that were developed in water-scarce areas. They have now been overtaken in the past decades by centralized systems that render them redundant and, therefore, derelict.

These old, vernacular systems are of critical importance in many ways. First of all, they can complement (and integrate into) centralized systems, making the water supply chain more resilient. Secondly, such infrastructures are, in many cases, part of the cultural heritage of rural civilizations and, therefore, create a link to the identity of rural communities. Returning such infrastructure to use would preserve and maintain the relevance of such cultural heritage and knowledge. This is the case of Battir, a Palestinian village in the West Bank, located to the SouthWest of Jerusalem. Its landscape is characterized by stonewall terraces that are either dry — planted with grapevines and olive trees — or irrigated, enabling intensive market gardening. The irrigation is served by a 4,000-year-old elaborate channel system that collects and distributes water coming from natural stream sources. Battir was designated UNESCO World Heritage Site in 2014 for outstanding universal values: "The complex irrigation system of this water supply has led to the creation of dry walls terraces which may have been exploited since antiquity. The agricultural terraces, exploiting this irrigation system, were the basis for a strong presence of agriculture through the cultivation of olives and vegetables. The area still today has the same use."[8]

The striking cultural landscape is, in fact, still in use; the ancient water supplies have molded a landscape which is still cultivated with different crops, establishing a virtuous cycle that has made Battir an outstanding agricultural and cultural site, as well as touristic attraction: an example of balanced—sustainable—interaction between community, landscape and natural resources.

Another best-case can be found in the Indian *Kattas*, dams built by farmers across creeks to store water, once popular in the Kerala and Karnataka states. Made of stones and mud, these low-cost dams are temporary so that they can be dismantled before the monsoon arrives. With the arrival of running water, this practice has largely been abandoned. *Kattas* were part of the local rural culture and implied a savoir-faire, which has become lost in time. The cultural importance of such engineering works and the need for complementing the current water supply infrastructure are, now pushed by campaigners for cultural preservation, bringing the traditional system back to life. Workshops have been organized where farmers could meet and share their experiences, reinforcing the rural communities whose identities are threatened by industrialized agriculture. Besides being the platform to recall and share the *Kattas*' construction techniques, the workshop becomes an opportunity to improve the structures by the consideration of different material options. New *Kattas* have been appearing in the last years, with bottom up processes, led by local communities. Despite these developments *Kattas* have not been integrated into the government's water conservation awareness programs.

The conditions for reusing traditional water infrastructures require both a platform where the community can meet and interact, and seed capital (in the form of subsidies) in order to bring such systems back to life. What is crucial in each different situation is to act before the local knowledge and savoir-faire become lost. The advantages are clear and multi-fold: traditional rural water management systems are usually small in scale and low cost, which makes the construction feasible and quick.

Furthermore, traditional water artefacts can be linked with tourism alongside the territories for which they are best suited, including associated landscapes and local products.

An example is a rural development strategy developed for the Albanian village of Qeparo by a multidisciplinary team (formed by: Openfabric, MVO Nederland, Cityförster, Alterra, Sawadee, Boer Bos, GutundGut, Arber Togani). Qeparo, located in the southern coast of the country, has always been linked to the nearby village of Borsh by economic and cultural ties. These ties became 'physical' when, in the '40s, an irrigation channel was built, bringing water from Borsh downhill to Qeparo, irrigating a lush terraced landscape defined by the cultivation of citrus and olive trees. If reactivated, as proposed, the old irrigation channel bears the potential of restoring the now abandoned terraces by creating continuous irrigation.

By providing an amount of water ranging from 9.660-20.125 cubic meters, the channel can irrigate a surface of 161.000 sqm of terraces. With the channel restored, the summer irrigation demand can be solved, fostering a more intensive cultivation (mixed-farming) of the terraces and consequentially, better maintenance. This would result in a drastic improvement of both the local landscape aesthetic and its productive qualities. In addition, a simple path can run along the infrastructure rendering it accessible and creating a new alternative pedestrian connection between Qeparo and Borsh. By restoring the water inlet, the channel can feed the terraces and also serve as a touristic attraction.

In this case, the link between rural heritage in terms of water infrastructure and agro-tourism exploitation is evident. A clear connection can be drawn between water supply as traditional artefacts (both architecture and agriculture) and larger touristic and regional development strategies.

The blue line: sustainable landscapes, sustainable communities

This paper is not advocating for a return to past technologies. The need for large scale water infrastructure is clear, especially when it comes to supplying cities, villages and agricultural areas. At the same time, the limit of centralised water management systems is also clear, as is the relevance of decentralized small-scale solutions. This holds particularly true when the small-scale solutions complement the large-scale water supply network and favor an integrated yet independent resilient system. Applying systems of adaptive re-use to traditional water management solutions, besides serving to augment large infrastructure through the creation of diversity and redundancy, opens up a new range of opportunities.

Artefacts, as well as agricultural techniques and crop species' selection, have been developed through generations in balance with the environment. Exploiting the cultural value of water infrastructures can enhance tourism in rural areas, activate bottom-up processes for sharing knowledge, and strengthen rural communities that are suffering the 'invasion' of the agro industry. Through reuse, indigenous communities can preserve their heritage, built over time. Preserving and enhancing the role of rural communities can re-establish the often-lost direct relation between sustainable landscapes and sustainable communities.

Capillary water distribution supported by traditional small-scale solutions can be the backbone to support agro-biodiversity on small, even family-scaled farms, improving the water supply and giving farmers a potentially broader range of crops. Enabling the farmers to act directly in the direction of reused rainwater facilities gives them the responsibility of their water use, re-establishing a balance between supply and demand (critical for sustainability), that has been, in many cases, lost with progress. Empowerment is the first step towards reinforcing the awareness of being a responsible actor within a system of supply/demand.

Adaptive-reuse can be the tool for water to be a medium of a holistic approach on regional development: the (blue) line serves as a link between the cultural yet, pragmatic, and past and present infrastructures.

ENDNOTES:

1 B. H. Farmer, "Perspectives on the 'Green Revolution' in South Asia". *Modern Asian Studies*. 20 (01) (1986): 175 –199.

2 World DataBank, World Bank. "Rural population (% of total population)". http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS (accessed November 6th, 2016).

3 I. Shiklomnov;. "World fresh water resources" *Water in Crisis: a guide to the World's Fresh Water Resources* (New York, Oxford University Press).

4 UN, "International decade for action 'Water for life' 2005-2015". http://www.un.org/waterforlifedecade/scarcity.shtml (accessed November 6th, 2016).

5 A. De Sherbinin; A. Schiller; A. Pulsipher. "The vulnerability of global cities to climate hazards". *Environ. Urban*. 19, 2007, 26–39.

6 R. I. McDonald; P. Green; D. Balk; B. M. Fekete; C. Revenga; M. Todd; M. Montgomery, "Urban growth, climate change, and freshwater availability". *Proceedings of the National Academy of Science*. 108, 6312–6317, 2011.

7 T. Scheutze; 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.

8 UNESCO World Heritage Convention, "Palestine: Land of Olives and Vines — Cultural Landscape of Southern Jerusalem, Battir". http://whc.unesco.org/en/list/1492 (accessed December 4th, 2016).

9 Accessed December 4th 2016. https://hijazih.wordpress.com/palestine-walks/battir-walk/

10 Openfabric. 'Agro Tourism Albania'. Openfabric. Accessed December 4th 2016. http://www.openfabric.eu/projects/agro-tourism-albania-qeparo-albania/

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_Enrique Muller, 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_ Wlathamstow 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 Patrimonie 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, JJ., 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.
- Wancharoen, Supoj. "Fish pulled from New World pond." *Bangkok Post*, January 13, 2015.
- Wancharoen, 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:
- Brocaneli, 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 Europa1992 – 2002. Efectos duraderos sobre la ciudad y apropriación 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: Inge Donné; 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 Belgie.* Brussels: NAVEWA, 1991.

COLOPHON

Ahmed Abbas holds a Bachelor Degree in Architecture from the Technical University of Avans and a Master in Interior Architecture from Hasselt University in Belgium. He has six years of experience as an architect in leading his own company. He has been a lecturer at the University of Newroz (Iraq) since 2014, where he teaches Modern Design and coordinates Working / Drawing and Building Construction. Since 2015 he has been working on his Ph.D. entitled "A Proposed Methodology for the Adaptive Reuse of Traditional Buildings in the Buffer Zone of Erbil Citadel".

Brian Ambroziak is an Associate Professor of Architecture at the University of Tennessee, Knoxville. His publications include *Michael Graves: Images of a Grand Tour* (2005) and *Infinite Perspectives: Two Thousand Years of Three Dimensional Mapmaking* (1999) with Princeton Architectural Press. In 2008, Brian Ambroziak founded time[scape]lab with Andrew McLellan and Katherine Ambroziak.

Katherine Bambrick Ambroziak is an Associate Professor of Architecture at the University of Tennessee, Knoxville. Her publications include *DeadSpace Arlington*, *Material Scribe: Memoirs of the Collective Individual*, *Surrogate Stones*, *Odd Fellows: Constructing the Positive Place|Self*, and *Codification of Ritual in Design*. Since 2009, she has served as the primary designer and coordinator of the Odd Fellows Cemetery Reclamation Project, a conservation and rehabilitation initiative that aims to educate and support the minority communities of East Knoxville through the design and implementation of a responsive memorial landscape.

Michael Leighton Beaman is the founding principal of Beta-field, a design/research office run with Landscape Architect and educator Zaneta Hong. Michael is also a co-founding member of the design nonprofit GA Collaborative. Michael currently teaches at the University of Virginia where he is an Assistant Professor in Architecture and at the Rhode Island School of Design, where he is a critic in the Interior Architecture Dept. In addition to teaching and practice, Michael is a writer for *Architectural Record* focusing on design technologies and techno-centric design practices.

Inge Donné completed her bachelor's degree in Interior Architecture at Lucca School of Arts, Brussels, and her master's degree on the topic of adaptive reuse at Hasselt University. After internships at Baccarne and Lens°ass architects, she researched the reuse of water towers and created a masterproject for the water tower of Hoeilaart (BE) as co-working space.

Dr Graeme Evans is Professor of Urban Design at Middlesex University, Department of Design and Director of the Art & Design Research Institute. He has been leading a research project in the Lee Valley as part of a 3 year Arts & Humanities Research Council-funded project: Towards Hydrocitizenship, exploring the changing relationships between people, ecosystems and urban water landscapes, and the legacy of waterside architecture and heritage. In June 2015 he curated the Hackney Wick & Fish Island Connecting Communities Festival including an exhibition of site-based design schemes including BA Interior Architecture student work, as part of the London Festival of Architecture. Graeme is also Professor of Culture & Urban Development at Maastricht University, The Netherlands where he has been working on several industrial heritage re-use schemes.

Alexander Ford earned a B.S. in Architecture from the University of Arizona in 2014, and an M.S. in Historic Preservation from Columbia University in 2016. Ford currently works for Daniel Libeskind in New York. His architectural work has been published internationally.

Francesco Garofalo founded Openfabric in 2011, an office specialized in landscape architecture and urban planning based in the Netherlands. Francesco Garofalo studied Landscape Architecture in Van Hall Larenstein Arnhem, the Netherlands and in Genoa University. Through Openfabric he has led various awarded competitions and commissions, including: a proposal for New Tahrir square in Cairo, Egypt; an AIDS memorial park, New York, USA; renewal of the main boulevard in Genoa — Via XX Settembre, Italy (First prize); an urban square, realized in The Hague, The Netherlands (First prize). Francesco currently teaches at the Amsterdam Academy.

Nicholas Gervasi earned a B.ARCH and M.ARCH from Tulane University in 2012, and an M.S. in Historic Preservation from Columbia University in 2016. Gervasi currently works for AYON Studio Architecture and Preservation in New York.

Naomi House is a Designer, Educator and Writer with an approach to the Interior that is framed through forensic investigation. A Senior Lecturer in Interior Architecture at Middlesex University she is also a Tutor in Critical and Historical Studies at the Royal College of Art. Naomi is a founding member and Superintendent of C.I.D — the *Council of Inordinate Design*.

Catherine R Joseph is an architect based in New York City. She earned a Master of Architecture from Cornell University and a Bachelor of Science in Structural Engineering from Duke University.

Paola La Scala PLS, architect, she is *Doctor Europaeus in Museography* (Palermo). In 2013 attended, as a guest PhD student, the School of Museum Studies at University of Leicester (UK). Since 2013 she has been taking an active part in L@bCity Architecture, a research group headed by Prof. Renzo Lecardane at Department of Architecture in Palermo, concerning architecture and city planning, focusing on culture as important strategy for urban regeneration. Currently she is working on the use of digital technologies to enhance architectural heritage.

Renzo Lecardane, Ph.D. in Architectural Design (Palermo) and *docteur de l'Ecole Nationale des Ponts et Chaussées* (Paris), is Associate Professor in Architectural Design at Department of Architecture of University of Palermo. From 2000 to 2005 he carried out research and teaching activities in France (EAPMalaquais, EAPLa Villette, EAPVal de Seine; LATTS/ENPC-Paris; GRAI). From 2002 is associate to *Laboratoire Infrastructure, Architecture, Territoire* (ENSAPMalaquais). Since 2009 he is member of the Academic Board for the PhD in Architecture at University of Palermo. In 2013 he founded the research group *L@bCity Architecture* creating connections between architectural design and urban shape.

Karen Lens holds a Master in Architecture and Architecture Sciences from Sint-Lucas and KU Leuven, both in Belgium. She worked for 10 years as an architect specializing in adaptive reuse, energy efficiency and design for all. In 2012, Karen started a Ph.D. on the reinterpretation of underused monastic sites in Limburg (Belgium) and Western Europe at Hasselt University. She is also engaged in several design studios concerning adaptive reuse and collective dwelling at the same university.

Kees Lokman is an Assistant Professor of Landscape Architecture at the University of British Columbia. He holds degrees in planning, urban design and landscape architecture. Current research focusing on the intersection of landscape, infrastructure and ecology has been published in the Journal of Architectural Education, Topos, Landscapes|Paysages and New Geographies. Kees is also founder of Parallax Landscape, a collaborative and interdisciplinary design and research platform. klokman@sala.ubc.ca www.parallaxlandscape.com

Gregory Marinic an associate professor and head of the environmental and interior design program in the Syracuse University School of Design. His research and practice are focused on the intersection of architecture, interiors, obsolescence, geography, and adaptive reuse. A widely published design scholar and researcher, Marinic has served as an editor/associate editor of several international peer-reviewed publications, and as co-founder of the *International Journal of Interior Architecture & Design*. His most recent publications include *Journal of Architectural Education*, *Journal of Interior Design*, *AD Journal*, *Design Issues*, *International Journal of Architectural Research*, *IntAR Journal of Interventions and Adaptive Reuse*, and various publications of the Association of Collegiate Schools of Architecture.

Bie Plevoets studied Interior Architecture at the PHL University College in Hasselt (BE) and Conservation of Monuments and Sites at the Raymond Lemaire International Centre for Conservation in Leuven (BE). In 2014, she obtained a PhD in architecture at Hasselt University; her thesis was entitled 'retail-reuse: an interior view on adaptive reuse of buildings'. Her current research focuses on the theory of adaptive reuse, and preservation of spirit of place. She teaches courses on adaptive reuse at Hasselt University in the specialized master programme in Interiors 'Adaptive Reuse — exploring spatial potentials and the poetics of the existing'.

Anne Schraiber is a practicing architect based in São Paulo, Brazil. She holds a bachelor degree in Architecture and Urban Planning from Universidade Mackenzie (2006) and a Master in Business Administration from Fundação Armando Álvares Penteado (2010). She continued her education at a postgraduate course in Ephemeral Architecture at Escuela Técnica Superior de Arquitectura de Madrid (2015). Anne was a participant at the 10th São Paulo Architecture Biennale (2013) and won a best interior design project award at CASACOR TRIO (2011). Her academic interest focus on the research of the ephemeral design in the contemporary culture.

Lindsay Winstead is an architectural designer working in San Francisco, California for Rapt Studio. She began her career at Davis Brody Bond in New York City, after which she received a Masters of Design in Adaptive Reuse, from the Rhode Island School of Design. Some of her built work includes the US Embassy Compound in Jakarta, Indonesia, Vivint Solar's headquarters in Lehi, Utah, and Lydian Dental in Tempe, Arizona.

EDITORS

Ernesto Aparicio is a Senior Critic in the Department of Graphic Design at RISD. Aparicio earned his BA at the Escuela de Bellas Artes, La Plata, Buenos Aires and completed his Post Graduate Studies at the Ecole des Art Decoratifs, Paris. Prior to moving to the US, he served as Art Director for Editions du Seuil in Paris, while maintaining his own graphic design practice, Aparicio Design Inc. Best known for his work in the world of publishing, Aparicio has worked on corporate identities, publications, and way-finding for corporations and institutions in France, Japan, and the US. Recently, Aparicio was named Creative Director for the New York firm DFA.

Markus Berger is Associate Professor and Graduate Program Director in the Department of Interior Architecture at RISD. Berger holds a Diplomingenieur für Architektur from the Technische Universität Wien, Austria and is a registered architect (SBA) in the Netherlands. Prior to coming to the US, Berger practiced and taught in the Netherlands, Austria, India, and Pakistan, and currently heads his own art and design studio in Providence. His work, research, writing, and teaching focus on art and design interventions in the built environment, including issues of historic preservation, sensory experience and alteration. He is a co-founder and co-editor of the Int|AR Journal.

Liliane Wong is Professor and Head of the Department of Interior Architecture at RISD. Wong received her Masters of Architecture from Harvard University, Graduate School of Design and a Bachelor of Art in Mathematics from Vassar College. She is a registered Architect in Massachusetts and has practiced in the Boston area, including in her firm, MWA.She is the author of *Adaptive Reuse_Extending the Lives of Buildings*, co-author of *Libraries: A Design Manual* and contributing author of *Designing Interior Architecture and Flexible Composite Materials in Architecture, Construction and Interiors*. A long time volunteer at soup kitchens, she emphasizes the importance of public engagement in architecture and design in her teaching. Wong is a co-founder and co-editor of the Int|AR Journal.