

# Wet Architecture

Elizabeth Farrelly

Book Review / SUSTAINABILITY

***More Water, Less Land, New Architecture  
Sea Level Rise and the  
Future of Coastal Urbanism***

By Weston Wright

With forewords by Kenneth Frampton  
and Ana Tostoes,

and afterwords by Rasmus Waern and  
Karsten Harries

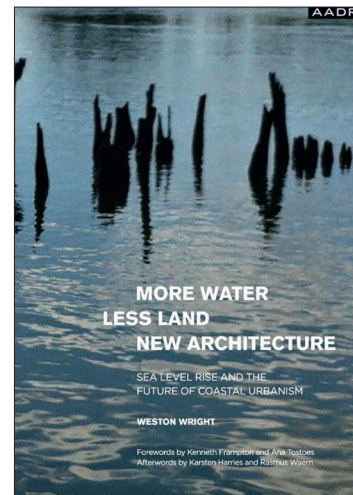
Baunach, Ger.: AADR - Spurbuch Verlag,  
2022

17.3 x 2 x 24 cm

[6.8 x 0.8 x 9.4 inches in.] illustrated  
176 pages

€38 / \$36.42 paperback

ISBN: 978-3-88778-588-8



*We solicited this book review to renown critic and author Dr. Elizabeth Farrelly, for her remarkable record on the topic discussed in Weston Wright's book. However, we publish it simply to abide to the principle of free speech. We disagree with Dr. Farrelly's critique, for content and style. Wright's book is a much valuable contribution to an increasingly pressing global issue, as the book's distinguished foreworders, afterworders and endorsers have rightly highlighted. We invite our readers to check also our TPJ vol. 2 (2017), issue 2 on "Resilient Edges." (MS)*

Wet urbanism? Even the idea sounds gently soggy, a little squelchy underfoot. But as Weston Wright's new book "More Water, Less Land,

New Architecture” points out, wet urbanism will perforce be a thing of the future. Quite a big thing, in fact. A few years ago, Australians watched in fascinated horror as a suburban oceanfront pool wobbled, broke apart and crashed into the wild storm tide. That was a tiny taste of what is now everywhere inevitable.

Sea-level rise is expected to hit perhaps 300 mm by mid-century, and that is without melting the polar ice sheets. Land-loss will be huge. Even as world population explodes, dozens, possibly hundreds, of cities (including Ho Chi Minh City, Manila, Shenzhen, Dubai, London, San Francisco, Amsterdam, Bangkok, Hamburg and New York) are expected to lose significant land area. In China alone, some 43 million people will be displaced – even without the additional impact of flooding coastal rain and major storm events. Some countries, like the Maldives, will be mostly submerged.

How, then, should we pattern our cities? Is it possible to create an urbanism that responds to, withstands or transcends inundation at this scale? This question is bigger than any biblical deluge, bigger than Noah, and it sits at the core of Weston’s book.

So yes, the book is timely. It is more than generously accoutred, being topped and tailed by two forewords, two afterwords, an introduction, an author’s note and a lengthy acknowledgement. We read accolades from the likes of Paul Goldberger (“an important book”), Kenneth Frampton (“well-researched, stimulating and disturbing”) and Karsten Harries (a “bold proposal”). Such attachments create lofty expectations. Question is, does the book satisfy them?

The answer is part yes, part no. The question is significant and the research interesting but the propositions are less persuasive.

The book is from German-Swedish publishing house AADR but, due to a clunky layout, slightly awkward structure and a proliferation of typos and punctuation errors, feels a little less than professional. In many ways that is fine, and such flaws trivial. But they contribute to a feeling that the treatment is more an introduction to than a treatment of this important and under-recognised topic.

Water is life. Along with sunlight, it underpins both our sciences and our poetics. Water’s particular molecular structure, with its gentle hydrogen-oxygen polarity and the low-level inter-molecular attraction so established, enables all life. At the same time, the sparkle of dew on spider webs, the terror of cataclysmic flood and the fact today’s rain is water drunk and peed by dinosaurs have inspired countless poetic imaginings.

This straddling of the cultural divide should make water a natural architectural substrate. Wright, himself a practising architect, mirrors this breadth, opening his book with an “Ode to Water” and ending with an examination of some new materials (metal foams, transparent aluminium and metallic glass). And yet the book’s response to the key question is

somewhat myopic. This manifests in two ways. First, a sin of omission. This book grew out of a waterfront design project in Boston, so some design bias is to be expected. But the biggest and most urgent challenges of land-loss, though – before we even get to design – are likely to be financial, cadastral and socio-political; challenges in particular to our Lockean idea of property-based capitalism.

If the coastal fringes were the preserve of the poor and indigent this might be less of a threatening; likely the world would remain as indifferent as it is currently to the inundation of Kiribati and Tuvalu. But it happens that our urban waterfronts are hogged by the rich and powerful.

In recent decades world cities from Boston to Sydney, London to Bilbao have invested hugely in their waterfronts. Relentlessly converting brownfield land into high-end residential and retail, they have established waterfront urbanism as a standalone genre. At the same time, riverside, harbourside and beachside living has become the universal goal, restricted therefore to the privileged few. So when these prize peripheries start to vanish, the socio-political ramifications will be huge.

According to some insurers,<sup>1</sup> waterfront property is already becoming uninsurable. Sooner or later, it will vanish. A section diagram in Wright's book shows the drowned neolithic settlement of Atlit-Yam in Israel and documents others, such as Catalhoyuk in Turkey, which for 1400 years beat the sea levels by building on top of itself, much as coral reefs do. We have our own drowned villages, like Old Adaminaby, the 1830s heritage-listed town that, sacrificed to the state's energy appetites, sits beneath Lake Eucumbene. But the pathos of these images will soon become normalised. In the autumn of 2022 Australia faced such an issue following the unprecedented and repeated inundation of the northern NSW town of Lismore. Inside a month, two devastating floods – one of them a supposedly 1-in-500-year event – destroyed much of the town, killing several, displacing some 14,000 and leaving the town traumatised. Many of those affected were uninsured or underinsured. Government faced critical questions about whether to compensate, rebuild or relocate.

Any design solution must therefore take this immense disruption on board. As an architect, however, Wright chooses to ignore this primary determinant, to focus solely on the design question. So, can we build towns and cities to withstand flooding? This is more challenging than it sounds. Although humans are mainly water - wetware, as they say – and many (perhaps even most) cities are built on water: harbours, coasts, wetlands, rivers and deltas. Yet our architecture, especially as agglomerated into cities, is designed principally to oppose and remedy liquefaction. As cities grow, they strive assiduously to remove or relegate the water – draining swamps, canalising rivers, leveeing against floods, building sea-walls and reclaiming harbour land. Indeed, you might say land manufacture has been one of urban planning's primary tasks.

This dryness instinct could signify our hopeless craving for permanence or some atavistic revulsion against returning to the swamp. Either way, it runs deep. Can it be reversed? Are we capable of seeing liquid as a viable substrate? Can we treat water as ground?

Here, Wright's book offers both analysis and ideas. Faced with inundation, cities have three options: move away, grow taller or float. So we look at Ron Herron's legendary Walking City, a vision developed with Archigram in London in 1964; at the 18th century floating palace on the lake at Udaipur (which featured in the Bond film *Octopussy*) and at the Lausitz Geierswald floating resort, supported by lightweight metal pontoons on one of several artificial lakes created to rehabilitate an opencut coal-mining landscape in the former GDR.

There are more contemporary proposals too, like the 2008 Gyre-Seascraper project from Canadian firm Zigloo, an immense floating submarine tower more than a kilometre in diameter and 400m deep. Wholly powered by sun, wind and ocean, it bills itself as a floating city for 2,000 people complete with gardens, restaurants, tourism and retail. Wright also cites US business tycoon Robert Bigelow's Mars Habitat, a cluster of living modules set against the dry red dust of Mars.

It is all quite dystopian – technically proficient but experientially punitive. MOMA describes Herron's Walking City as an "instant and itinerant metropolis,"<sup>2</sup> a series of military submarines that stalk across oceans "with insectlike exoskeletons and periscoping legs...linked by a superstructure of retractable corridors..." Zigloo's hotel and residential quarters are slung deep below the surface, well into those depths where only blue light penetrates. Views out exist, but mainly of krill and jellyfish and, given that 50% of visible light is absorbed within 10 m [32.8 ft.]<sup>3</sup> of the surface, not a lot of that, either.

There are practical issues here. Do we really think, given not only rising sea levels but the dramatic increase in flooding rains and major storm events, a floating city on anything other than an artificial lake is plausible? Even a great ocean-top platform pegged down to the seabed starts (in my imagination) to look, after twenty years or so, like a vast, rusted and clanking container ship, internally hermetic against a hostile environment and externally grim. Are we really thinking we will bring up our children there?

We have plenty of fictional precedents for such dissociative futures. Ridley Scott's *The Martian*, where Matt Damon must grow four years' worth of vegetables from his own excrement to the 2020 TV series *Snowpiercer* imagine futures where hermetic habitats protect humanity from ultra-hostile environment. True, our planetary future may be that bleak (though personally I reckon we will more likely muddle through). Even so, it is clear that these propositions share the old modernist misconception we might call the "Corbusian Fallacy," misunderstanding both ourselves and our cities as having merely material existence and merely mechanical needs.

Weston does not altogether avoid this trap. No doubt he knows that the city, far from being mechanistic, is our greatest collective artwork, a reification of desire. No doubt he also knows that while the objects – buildings, pods or insect-legged submarines – may be the repositories of that desire its all-important conduits, critical enablers of the flux and flow of the hive, are the streets.

And it is here, in the interstitial spaces, that wet urbanism becomes problematic. We think of buildings as permanent and the spaces between as ephemeral, almost irrelevant. Typically, though, a city's street outlasts its buildings. Street patterns ink our ancient desire lines onto the sand. Can we even pencil them in on water?

Sure, there's Venice. But Venice relies on many special conditions - handcart boys in velvet slippers in lieu of a retail supply chain - and, even so, is far from flood-proof. Can we in fact imagine something that would pass as urban life in a water-based environment?

Wright wants the answer to be yes. But it will take more than a cluster of hermetically sealed pods to persuade me that a defensive future qualifies for the title, urbanism.

## Notes

1. Gerard Cockburn, "Beachfront Homeowners at Risk of Losing Millions as Properties Uninsurable against the Sea," *News.com.au*, July 28, 2020- <https://www.news.com.au/finance/business/beachfront-homeowners-at-risk-of-losing-millions-as-properties-uninsurable-against-the-sea/news-story/2d9d3f73f7a03f248448f62731800a12>.
2. Cf. <https://www.moma.org/collection/works/814>.
3. Cf. <https://manoa.hawaii.edu/exploringourfluidearth/physical/ocean-depths/light-ocean>.

**Elizabeth Farrelly**, PhD, trained in architecture and philosophy, practiced in Auckland, London and Bristol, holds a PhD in urbanism from the University of Sydney, and is a former Associate Professor (Practice) at the University of NSW Graduate School of Urbanism. Born in Dunedin, New Zealand, she has made Sydney her home since the late 1980s. The author of several books, including *Three Houses* – a 1993 monograph on renowned architect Glenn Murcutt - and *Blubberland: The Dangers of Happiness* (2007), she is a Walkley-shortlisted journalist, critic and essayist and served as a Councillor for the City of Sydney from 1991 to 1995. Her portrait by Mirra Whale was a finalist in the 2015 Archibald Prize at the Art Gallery of New South Wales and she is currently building a passive off-grid dwelling in rural NSW. E-mail: [emfarrelly@brokenecreek.org](mailto:emfarrelly@brokenecreek.org)