

## South of Cancer: Modern Architecture's Tropical Diasporas

BY PEDRO GUEDES AND JOHANNES WIDODO

Over twenty years ago in the shadows of an architectural conference in the USA several of us from outside the American/European axis left early, finding the mainstream presentations and discussions boring, predictable and stuck in the ruts of well-worn paths. We were aware that in the wider world genuinely new ideas were emerging with rich traditions at play, altogether less constrained by self-conscious architectural production. We were keen to find a name for these new approaches emerging across latitudes below the Tropic of Cancer and settled on "South of Cancer" as a suitable catch-all for these diverse tendencies.

Sometime before 2010, Fernando Lara, one of our group of conference dissidents, took a world map and plotted locations of "seminal buildings" identified in "Global" overviews of architecture. The map was very telling, it showed dense clusters of these buildings in North America, parts of Europe and Japan with the rest of the world mostly untouched, a *terra incognita*, except for small enclaves like Brasilia, Chandigarh and Sydney's Opera House. Things have changed since then but the vast majority of buildings and architects providing benchmarks and canonical exemplars remain on their lofty perches supported by well-known, unchallenged narratives that easily blend into fables.

We felt that we needed to bring attention to the unnoticed architectures developing in the blank, uncharted areas of this "Global" map. Consequently, in Australia, during our Antipodean summer of December 2019, some of us at the University of Queensland in Brisbane, decided to host the 7<sup>th</sup> conference of the International Network of Tropical Architecture (iNTA),<sup>1</sup> inviting participants from many tropical and subtropical countries in Asia, Africa, and the Americas. Our debates and discussions ranged across a broad spectrum of issues informed by markedly different local experience and visions for diverse futures.<sup>2</sup>

For this issue of *docomomo Journal* we invited contributions with a focus on the architecture of warm countries during pivotal periods in the 20<sup>th</sup> century. We felt that this less trodden area of discourse and scholarship might question what was already "known" and that these contributions from outside the mainstream might provide new and unique solutions for a global architectural culture. A small start perhaps to our lofty ambitions!

Our many discussions circled around aspects of modernism and its diaspora across cultural boundaries.

Modernism was not developed in a vacuum but evolved through sustained development of its ideas along a historical timeline. We agreed that our broad umbrella would cover the ideals of Modern architecture disseminated to remote places by displaced yet talented individuals bringing with them fresh ideas. Often these were Europeans exiled for their beliefs, their race or as victims of conflict who interacted with local architects keen to make their cultures resonate with present change and future difference.

Far from metropolitan centers, these semi-autonomous manifestations of modernism could be seen as another form of displacement not only of individuals but also of ideas and emphasis. However, instead of repeating the limited, orthodox vocabulary of European modernist architecture in its pre-WWII and post-war reconstruction periods, new vigorous strains of modern architecture were emerging overseas transcending "the modernist transplant" by becoming autonomous modernisms rooted in different cultures.

The truth of the matter may now be very different, with the peripheries of any such center contributing to its revitalization. New ideas with less circumscribed expectations are being forged in these environments. Perhaps the real future of our planet is being made not in collapsing post-industrial rustbelts but in the rapidly urbanizing warmer countries with unchecked population growth and the explosive dynamism of Asian industry.

In commissioning the essays for this issue of *docomomo International* we focused on architectural themes from that "periphery." We made our selection based on historical accounts and speculations spanning from about the late 1920s to the 1970s when architectural ideas, developed in times of uncertainty and rapid change, hoped to improve life in the tropics.

In his paper Pedro Guedes chooses examples that fall outside any narrow definition of modernity, bringing together two themes often intertwined in the diasporas of modernism. In combining the celebration of local identity with tempering of the sun's heat architectures evolved that resonated with local culture, fully adapted to harsh physical environment. Other, very different examples, demonstrate how European colonial architects and engineers saw the tropics as environments that only needed their "advanced" technical solutions.

Margarida Quintã's essay studies the role of climate research in Angola, focusing on the post WWII period when the main climate types of the country were characterized based on empirical data. The study tracks the development of this research and the individuals involved in setting up institutions, educating technical personnel and producing publications, arguing that this work was contemporaneous with that of well-known English language authors. The work and influence of Vasco Vieira da Costa (1911-1982) in setting up the Engineering Laboratory of Angola (LEA) and Henrique Novais Ferreira (1922-2016) in building research are highlighted.

Vandana Baweja tracks Otto Königsberger's serial relocations and multifaceted career across several continents disciplines and practices. From Germany to Egypt and Switzerland, he then became the chief architect of Mysore, India. There his work expressed a commitment to modernism alongside his adaptations to local expectations and the use of local building techniques. After an ill-fated mass-housing project in India, Otto Königsberger went to London to undertake several consultancies and founded the Architectural Association's (AA) School of Tropical Architecture training architects and planners for nations emerging from their colonial pasts.

Tom Avermaete's essay follows several projects of Michel Écochard (1905-1985) working in post-colonial Africa where the architect designed buildings to suit local aspirations and climates. In university projects, new nations sought buildings embodying identity linked to ideas of progress. An approach Écochard explored at the University of Yaoundé was for buildings with a firm order of framing elements with infill of more ephemeral local materials and craftsmanship.

Elizabeth Musgrave's essay looks at architectural responses in tropical Northern Australia, where the sparsely populated warm tropics were perceived as another world separate from the more temperate south of the continent. After WWII, pressures for development combined with the modernist ideas of émigré architects helped create responses that broke the mold inherited from British colonial paradigms for building in climatically hostile regions. This produced an expanded modernist architectural vocabulary.

Laura McGuire focuses on the domestic interiors of Alfred Preis (1911-1993) who brought his Viennese design sensibilities to Hawai'i, where he arrived in 1938 soon after graduating and escaping from Nazi-occupied Austria. McGuire traces Preis' blending of Viennese tendencies with the tropical climate's need for openness. He created spatially vibrant and colorful environments suited to the islands he had made his home. His designs thus became Hawaiian, combining careful attention to natural ventilation and the creation of comfortable environments in harmony with the landscape.

Rui Leão and Charles Lai focus on Hong Kong and Macau, former British and Portuguese colonies in the estuary of the Pearl River Delta in China. They study parallel developments in post WWII architecture in these tropical cities, where architects prioritized the deployment of solar control devices such as the *brise-soleil* and

perforated blocks to temper the sun and facilitate cross ventilation to craft comfort in hot, humid environments. The authors track local and international influences as well as the educational backgrounds of key architects practicing in these cities.

With the smoke of Australian bushfires still on the horizon the iNTA conference closed in December 2019 and, only a month or so later, our entire world was turned over by the COVID-19 pandemic. All our futures were further threatened and completely unpredictable.

Upon reflection, similar disasters that had changed the lives and careers of the people and places in our essays had also opened up new beginnings and opportunities for them.

It is likely that any future for our Anthropocene will be played out South of Cancer for the simple reason predicted by the Swedish/American inventor Captain John Ericsson in *Scribener's Monthly* of 1879. He did not foresee the oil age that took us from then to now but he did imagine an end to our dependence on fossil fuels:

*Due consideration (...) cannot fail to convince us that the rapid exhaustion of the European coalfields will soon cause great changes with reference to international relations, in favour of those countries which are in possession of continuous sun-power. (...) The time will come when Europe must stop its mills for want of coal. Upper Egypt then, with her unceasing sun-power, will invite the European manufacturer to remove his machinery and erect his mills on the firm ground along the sides of the alluvial plain of the Nile, where an amount of motive power may be obtained many times greater than that now employed by all the manufactories of Europe.<sup>3</sup>*

#### Notes

- 1 The previous iNTA 2017 conference took place in Florida soon after Hurricane Maria had ravaged Puerto Rico and, in many parallel ways, we were again in an extreme situation aware that time was running out, leaving us with ever-narrowing options for equitable or even viable futures.
- 2 As a background for readers of this *docomomo Journal*, iNTA was founded in Singapore in 2004 by academic staff from the Departments of Architecture and Building Sciences at NUS with the aim of establishing a networking platform for international students, academics, practices, and policymakers, so they can collaborate and learn from each other about problems and solutions pertaining to architecture, regional planning, urban design, and building technology in tropical (and sub-tropical) regions of the Tropical Belt.
- 3 William C. Church, "John Ericsson", *Scribners Monthly*, Vol. 17, 1879, 844.

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