Architecture in the sand

Panigyrakis, Phoebus I.

Publication date
2023

Document Version
Final published version

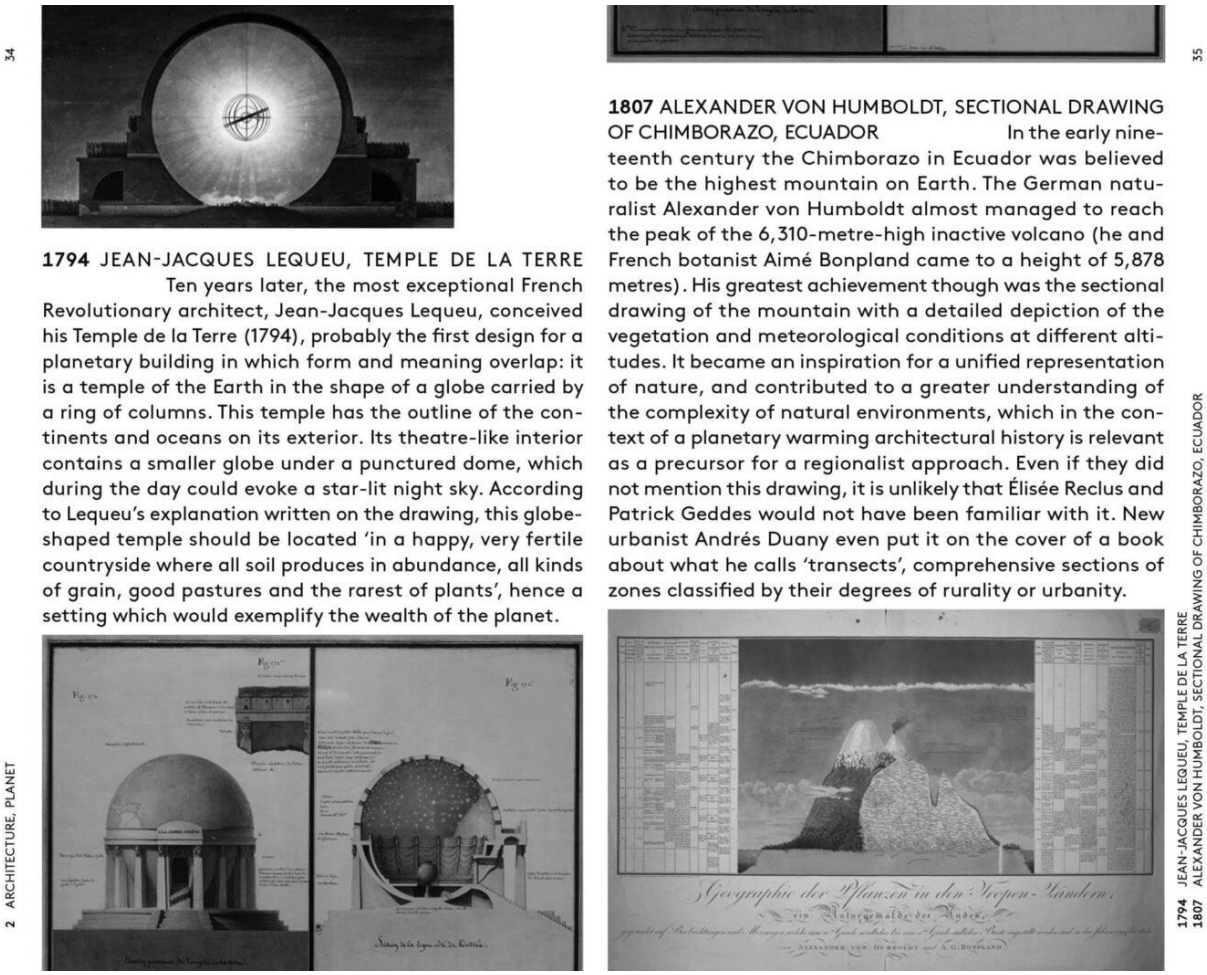
Citation (APA)
Panigyrakis, P. I. (Author). (2023). Architecture in the sand. Web publication/site, Archined.

Source: Panigyrakis, P. I. (2023, November 6).*Architecture in the sand*. Archined. Retrieved January 15, 2024, from https://www.archined.nl/2023/11/architecture-in-the-sand/

Architecture in the sand

Phoebus Panigyrakis

Architecture historian Hans Ibelings wrote *Modern Architecture: A Planetary Warming History*. It differs from the history books you know in terms of format, narrative, subject and presentation. If form and function have been the points of contention for the past two hundred years, ecological footprint and nature-inclusiveness might be those for the coming centuries.



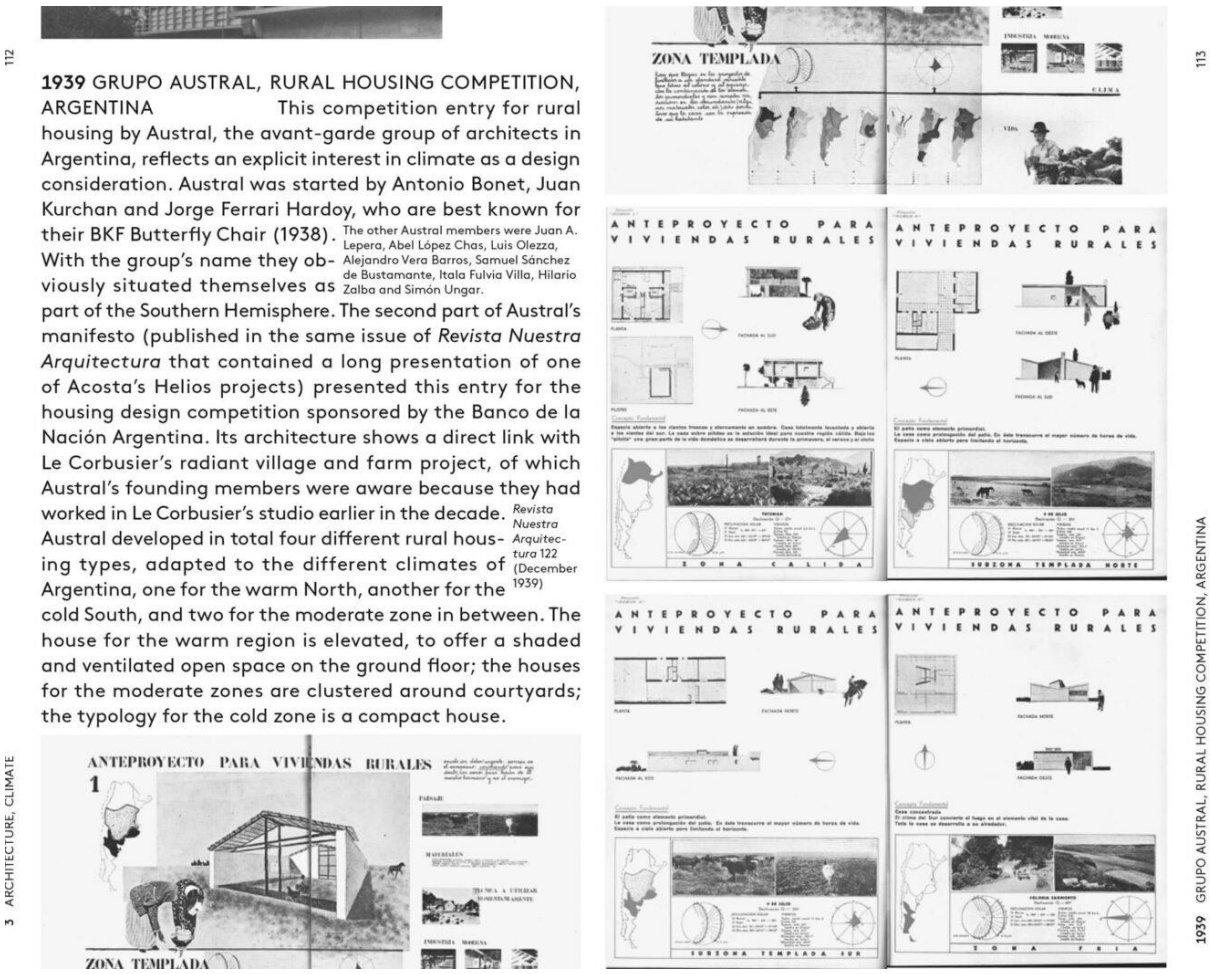
spread uit *Modern Architecture: A Planetary Warming History*, chapter 1 Revolution, Modern Architecture, Planetary Warming

"*Sous les pavés, la plage!*" goes the saying. Beneath the pavement, the beach. Metaphorically speaking, this implies that an ideal way of life, one close to nature, is just a glimpse away under the artificial world that we have built for ourselves. And one that we can have if only we try. More literally, Hans Ibelings' latest book confronts the impact of architectural production on our environment, and the natural resources, be they water, soil, energy and fuel, that each building project requires. The Anthropocene, the term coined to describe humankind's impact on the planet's climate, ecosystems and geology, has finally got its architectural history book. As we look back to a summer of record temperatures that have extended into a record-breaking autumn, this timely book bears renewed urgency in raising awareness among architects, in case we ever want to peek beneath our pavement and see the damage done.

Under the title *Modern Architecture: A Planetary Warming History*, and published earlier this year, the book states that its mission is to "rewire" history by revisiting "conventional highlights of architecture and geo-engineering" that provide a "planetary ecological consciousness". In addition, the book subtly

wages an attack on mainstream histories of architecture that present a “pyramidal environment of big predators” (read here: Mies van der Rohe, Le Corbusier, and the other solitary figures of modernism), and instead presents a web-like framework for architectural history as an ecosystem of small and big creatures.

In terms of content, this rewiring is attempted by listing historical buildings, books and projects in nine separate strands, thereby avoiding the more typical linear narratives of most architectural history books. Each strand of history represents a different facet of modernity’s development towards industrialization through a “planetary” outlook: Architecture and our planet; Cities and their relation to climate; Cityscapes and landscapes; Technological and infrastructural projects; and so on. This structure effectively means that each chapter begins in 1800 and progresses up to the present by chronologically listing projects in nine successive retellings of history. Surprisingly, the chapters are left without conclusions and are open-ended, making the lists seem never-ending and the book itself like a work under construction. Not the most reader-friendly environment, but this, surely, is not an accident.



spread uit *Modern Architecture: A Planetary Warming History*, chapter 3 Architecture Climate

The book’s use of lists acts an operational tool for dismantling “conventional” history. It is a clinical way to avoid analysis as a form of argumentation, opting instead for the use of paradigms through which the historian builds our pictures of the past. This was also the case with other revolutionary publications such as the alphabetically ordered encyclopaedias of the Enlightenment, the grid-like taxonomies of Durand, and the evolutionary lineages of Gottfried Semper, all of them shuffling the historical cannon of linear narratives. And probably the closest precursor of this history must be Giedion’s *Mechanization Takes Command* (1941).

Ibelings' lists also serve as an easy fix for another big problem for architectural history – cohesion – simply by ignoring it. In each Chapter List we find projects from all around the globe, of various authors, cultures, scales and functions. Unrealized projects and literary projects are mixed with built projects, and we even find some far-reaching futures verging on science-fiction. The variety in the book is at times refreshing, unearthing projects that are rarely presented in standard curricula, such as the Roosevelt dam, 1972 (on page 270 and also on the book's cover), Humboldt's drawing of a mountain in section, 1807 (p. 35), a French underwater eco-village (p. 221), Chicago's meat-packing industry (p. 311), a pedestrian London tunnel from 1825 (p. 236), and projects for space colonies around the Earth on behalf of NASA (p. 173) or even on Mars in "the near future" (p. 302)!

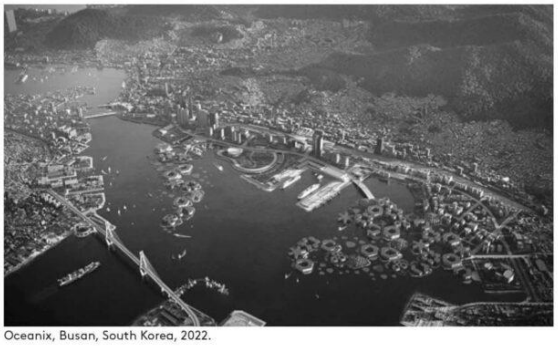
In the various retellings of modern history we sometimes encounter the same protagonists, or different instances of the same episode, but these connections are circumstantial and don't take the primary narrative space that most "standard" histories take. The list itself is here the protagonist. According to the author, the book is only a sketch, not a complete picture, inviting additions and reactions to the open-ended chapters. In that respect, the design of the book is in itself a marvellous manifestation of this emphasis *on the list* as method of communication. Images are cropped haphazardly throughout the book, splitting in halves and continuing on the next page. This creates the impression that one is scrolling through a webpage, not a physical book. And maybe this list approach to history reveals the influence of a digital culture affecting the form as well as the content of architectural history. The small size of the book (to minimize emissions, the author says) also invites a casual reading, like a Penguin book, instead of the usual big formats of academic guidebooks favoured by architectural histories.

It should also be stated that the publishing organization is a commercial one, directed by the author himself, aided financially by the architect/developer Nanne de Ru, and with a grant from the Creative Industries Fund, as the colophon informs us. The book is thus free from the restrictions of academic publishing and peer review processes, making the list approach a testament to an anything-goes attitude, both chaotic and refreshing in its liberties. Another recent publishing initiative on a similar topic by the CCA opted, interestingly, for open-access digital publishing (also to limit emissions), as well as a more scientifically defined curation, raising questions about the format, audience and general foundations for this new field of environmental histories of the built environment. Indeed, the histories of both Ibelings and the CCA can easily be applied in architectural education programmes. For me as a casual reader, Ibelings' physical copy and quick interchange of architectural snippets comes out the winner.

carbon offset, yet a relentless horizontal greening of cities fits in a long tradition of blurring the boundaries between city and countryside, culture and nature, which may help to overcome the erroneous idea that the human habitat of the city is separate from the planet, and from larger planetary concerns.

Forest City Shijiazhuang, 2015.

2019/2022– BIG, OCEANIX CITY, AND OCEANIC, BUSAN, SOUTH KOREA The current interest in floating marine habitats is driven by either libertarian and panarchist ideologies or environmental concerns about rising sea levels (and perhaps sometimes both). The Oceanix project of BIG appears to belong to the second category. It is a proposal for a storm-resilient modular town that could eventually house 10,000 seasteaders. The hierarchical configurations of clusters of different dimensions repeat the schematic patterns common in land-based urbanism of, for instance, Constantinos Doxiadis. A second iteration is projected in the North Harbour of Busan, South Korea: a mixed-use development to be built in phases. It is supposed to become a template for sustainable expansions of coastal cities, which are confronted with rising sea levels.



Oceanix, Busan, South Korea, 2022.

2022 THE LINE, SAUDI ARABIA The most radical proposal to date of the Saudi plan for The Line is a 170-kilometre-long linear megastructure, 200 metres wide, through a desert. It is one of three regions of the new development of Neom, which also consists of Trojena, which is – simply put – an unprecedented ski resort, and Oxagon, a floating city for clean industry. In its current iteration The Line, whose designers are not disclosed, consists of two parallel bars, 500 metres high with carefully protected courtyards in between. High-speed underground trains travel from one end of The Line to the other in no more than twenty minutes. The Saudi crown prince Mohammed

spread uit *Modern Architecture: A Planetary Warming History*, chapter 5 Cityscape Landscape

But returning to the methodological approach to architectural histories with endless lists, it comes with caveats. While reading the book I kept thinking that *"this* project should have made this list" or *"that* project shouldn't be included". Surely the writing of history by one sole author can be a daunting feat, and no individual can name all projects of one kind, and what Ibelings attempts here is in fact nine separate retellings of history, not to mention the demand for global, diverse, inclusive and ethical standards that he wants them to have. So in terms of omissions, the book leaves big empty holes that are hard to fill. One item worthy of inclusion that I cannot resist mentioning: Knud Lonberg Holm's invention of the production cycle and environmental design (with Theodor Larson), almost a hundred years before the *Cradle to Cradle* book.

A second caveat of this history-by-lists is the retreat of the clear-cut, analytical author-figure of the historian. Projects do not represent high and low points on a linear history of architecture but take their place on an egalitarian basis in the web-like network that they form. And while this is a gentle approach, purposely warning us against the mistakes of absolutist historians of the past, who falsely honoured colonial monumental architecture, or deified "heroic" architects while ignoring significant collaborators (mostly women and people of colour), this approach has its drawbacks. It transforms the relation between author and reader into a passive transition of information with no meaningful end. And climate change in particular is a delicate matter to deal with. Its historicization should not make it appear as a thing of the past, but should keep reminding us of its continuing urgency. But there is no anger or desperation invoked in this book, nor any solutions offered to address the built environment's impact on ecosystems and resources.

It is remarkable that Ibelings includes projects of both negative and positive environmental impact. Some projects are mentioned because of what they claim to do, not what they actually do. Examples include Soleri's Arcosanti city, which claimed to be ecological while burying underground the settlement's industrial infrastructure; Stefano Boeri's green towers in Milan; and the recent proposal for The Line, whose designers claim will be a 170-km-long fossil-fuel free and walkable megastructure in the Arabian desert. The question here is whether any distinction is needed between environmental rhetoric and actual environmental change achieved through the projects referenced. On that aspect, the historian here is not offering solutions or model paradigms, but a record of architecture's visions for the planet.

300

2007– GREAT GREEN WALL, AFRICA The forestation project, creating an eight-thousand-kilometre green wall from Senegal to Djibouti on the southern edge of the Sahara (and the Sahel) has been ongoing since 2007. It comes with high expectations: 'The Great Green Wall is an African-led movement with an epic ambition to grow an 8,000 km natural wonder of the world across the entire width of Africa. A decade in and roughly 15 percent underway, the initiative is already bringing life back to Africa's degraded landscapes at an unprecedented scale, providing food security, jobs and a reason to stay for the millions who live along its path. The Wall promises to be a compelling solution to the many urgent threats not only facing the African Continent, but the global community as a whole – notably climate change, drought, famine, conflict and migration. Once complete, the Great Green Wall will be the largest living structure on the planet, three times the size of the Great Barrier Reef.' To date it is the largest geo-engineering project of the world. *Great Green Wall*. Accessed 17 May 2022, https://www.greatgreenwall.org/about-great-green-wall.

2011–2023 GREAT ETHIOPIAN RENAISSANCE DAM, ETHIOPIA The largest hydro dam of Africa has a capacity of 6,450 megawatts, a length of more than 1,700 metres, and a height of more than 500 metres. It is built forty kilometres east of the border with Sudan and is damming the Blue Nile, which is the main tributary of the Nile. The project has been built despite initial concerns of Sudan and fierce opposition from the main user of the Nile, Egypt, which has tried to stop the dam's construction. Ethiopia claims that the dam, while serving irrigation purposes, will not significantly alter the volume of water downstream. Because the Blue Nile and Nile flow through several countries, the dam project has become a flashpoint of geopolitical tensions about who owns the river's water. Yet, these disagreements about water rights neglect the more fundamental question of the river's rights (a growing number of nations is recognizing the rights of rivers and other natural features, following the lead of countries like Ecuador, Bolivia and Bangladesh).

NEAR FUTURE TERRAFORMING MARS Despite humankind's disappointingly dismal achievements in dealing with planetary warming, even on the level of mitigation or resilience, ambitious plans abound: to protect coastal cities and countries from rising sea levels by building seawalls; changing the albedo of the atmosphere through

301

2007– GREAT GREEN WALL, AFRICA / **2011–2023** GREAT ETHIOPIAN RENAISSANCE DAM, ETHIOPIA / **NEAR FUTURE** TERRAFORMING MARS

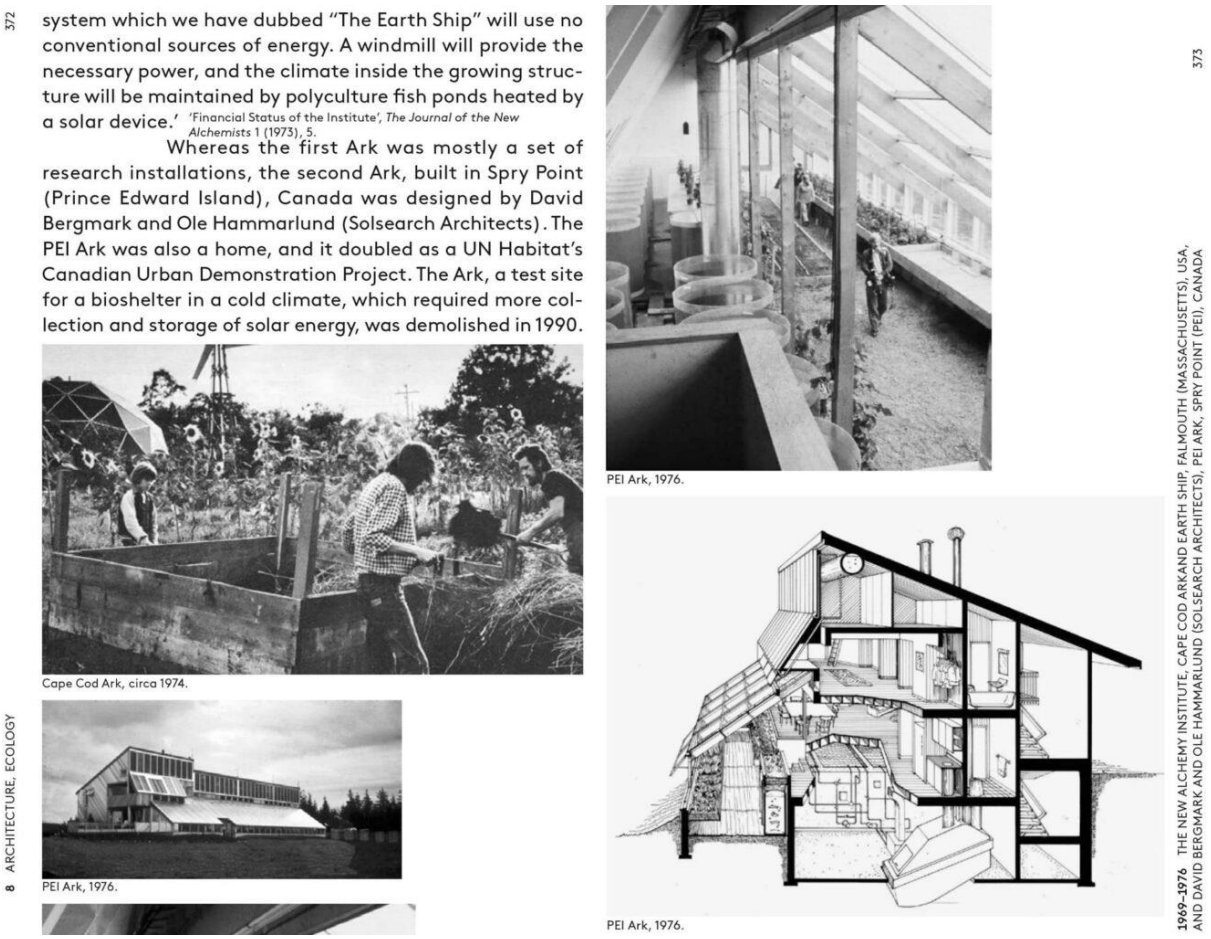
6 TECHNOSPHERE

spread uit *Modern Architecture: A Planetary Warming History*, chapter 6 Technosphere

This balancing between good and bad practices also affects the narrative of the book's main subject of "modern history". This does not denote "modern" in the colloquial sense, or in the art-historical sense in use since the Renaissance, but the more architectural one, from 1800 on, focusing on the Modern Movement. Such is the setting that the book cannot avoid the shadow of the familiar modernists Le Corbusier, Mies van der Rohe, Frank Lloyd Wright and Walter Gropius, who appear in all chapters. The additional variation of positive and negative contributions to environmental and planetary "consciousness" makes the story of Modernism hard to trace as a movement of both design and social change. Surely this is not great for the promised rewired and unconventional history, but we can see how it might make it easier to position the book closer to the shelf of canonical books that it aspires to replace. This might also explain why some well-known projects by famous architects were chosen instead of more environmentally minded ones. Wright's Fallingwater (p. 234), for example, is included as "simultaneously addressing the lithosphere, the hydrosphere, and the biosphere" but not Wright's Taliesin, which he described as being "of the hill" and not "on the hill". Similarly, Le Corbusier's Unité

d'Habitation is mentioned for its minimum use of land and its climate adaptability for global application, but not his Mundaneum or his church at Firminy, despite being products of planetary and cosmological thoughts. So while this new history brings up lesser-known projects and designers that have been missing from architectural history, the lesser-known projects by famous designers are not explored in depth.

In all, the Modern Movement is here a step in our civilization's process of industrialization, and stylistic or ideological differences between its various factions (De Stijl, Bauhaus, CIAM, Team X), its predecessors in the early industrial age, and its later extensions in our consumer age are not important. What matters is not who is right or wrong, or more efficient, but the variety that they offer in terms of experiences and interpretations of what planetary and climate-conscious architecture means.



spread uit *Modern Architecture: A Planetary Warming History*, chapter 8 Architecture Ecology

As such, this flat approach to history includes projects from imperial and colonial periods, including Nazi Germany and Fascist Italy, that also make the lists in Ibelings' stories because of their social-engineering, which is seen as a planetary vision. Similarly, socio-political context is provided in more surprising cases, informing us, for example, that UNESCO's cultural programme of environmental conservation was based on the racist views of its director Julian Huxley (p. 321) and his theories of "evolutionary humanism". In such short instances, the environmental topic of the book is combined with the author's anti-colonial historical project. Here and there, amongst the anthology of villas, dams, mines and bridges, the persona of the historian emerges hesitantly to set the record straight and point out a miscredited female designer, forced labour practices, or authoritarian and colonial directives that often make the fight for sustainability a common cause with social and political emancipation. In a

sense, the book presents a very general history, with a very specific outlook. Picking berries from a grand pool of projects to tell specific stories – despite their questionable cohesion – about projects relating to our climate, our cities' connection to the Earth's surface, above or below it, through stories of buildings, mines, highways and their hidden protagonists. In one word: stories of ecologies.

As I have come to learn, when dealing with architecture and the environment, "perfect" is rarely an option, and "being better" should be good enough. In the end, Nature is only a relative term, observable only in contrast to human activity. So *Modern Architecture: A Planetary Warming History* is a small step forward, but a step in the right direction nonetheless. Does it offer a complete picture of architecture's impact on the planet, or tangible proof of its influence on heatwaves? No. But it does make a conscious effort to turn the slow-moving wheels of architectural history towards a consistent interest in sustainability. A long-awaited premise. If form and function have been the points of contention for the past two hundred years, ecological footprint and nature-inclusiveness might be those for the centuries to come. Architects have been building their castles in the sand (literally and figuratively) for centuries, racing higher, digging deeper foundations, constructing gleaming surfaces. It remains to be seen whether this modern architecture in the sand that we have inherited will be washed away by the ebb of climate change, and whether the militant calls of historians will make space on that beach under the pavement for a new generation of architects and architecture.

info

Phoebus Ilias Panigyrakis, PhD, is an architect and academic based in Rotterdam. He is currently conducting post-doctoral research at TU Delft.

Hans Ibelings, *Modern Architecture: A Planetary Warming History*, The Architecture Observer 2023, Eng, p.400, isbn 978-94-92058-16-4 €32,50