

editorial note

"a major modification of the human organism, namely its ability to pay attention, occurred when a major cultural innovation, domestication, was adopted. ... the house ... should be viewed as a technical and cognitive instrument, a tool for thought as well as a technology of shelter."

— Peter J. Wilson, *The Domestication of the Human Species* (Yale, 1988).

When our species domesticated itself – started living in permanent dwellings rather than temporary encampments – architecture remade our sensory world in a revolution never seen before or since. In Peter J. Wilson's study of what we did to ourselves, he argues that domestication cut off our visual horizon, shifting our focus to small, bounded spaces in which we had to "pay attention" to each other and to tasks in new ways, triggering new social burdens as well as possibilities for "creating and expanding." And thanks to the opportunity for secrets, transgression and accumulation afforded by our closed miniature realms, the dual notions of privacy and hospitality emerged. Architecture was a deeply mysterious, all-consuming pursuit, Wilson says, which completely reconfigured our species and society "[w]ithout people necessarily knowing what has happened."

What this book investigates is how the key functional components of the house – elements of architecture – accrue outside psychic and symbolic clout while constantly evolving aesthetically, culturally, and technologically, as a solution to the bedeviling problems that come along with living in enclosed worlds. Since the first domestication, elements has always been tasked with mediating or repelling an aspect of the outside world. The four classical elements of nature conceived by Empedocles (5th century BC) pitted against the four "original" elements of architecture assumed by Gottfried Semper (1851):

Empedocles		Semper
earth	vs.	mound (floor)
wind	vs.	enclosure (wall)
water	vs.	roof
fire	vs.	hearth (fireplace)

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(In the case of fire, the challenge was to exploit it domestically while preventing it from consuming the house, and now from consuming/destabilizing our world, entirely...)

With this primal connection to the biggest ever shift in our species and our relationship to the world, it should have been no surprise to us that such an overwhelming amount of material could be mined from the human experience with architecture's component parts. This book is an effort to construct architecture's full range of "options," unpacking the intelligence, histories, and wonder embedded in its seemingly banal parts. As Sigfried Giedion puts it in one of our touchstones, *Mechanization Takes Command* (1948): "The sun is mirrored even in a coffee spoon."

Whereas the house today is hell-bent on taking data from its inhabitants, we look at architecture as a vast repository of data emanating centuries of knowledge. Like running a record player needle over tree rings, what happens when you "play" the information stored in elements of architecture...

The book started with Koolhaas's realization that two architectural historians and theorists were, independently, focusing their entire study on specific elements: the corridor (Stephan Trüby) and the ceiling (Manfredo di Robilant). Their approach immediately felt like an incredibly exciting and fresh way of looking at architecture: obsessively focused and "small" but at the same time limitless across history and geography. Trüby then introduced us to the work of Friedrich Mielke, who has spent 60 years cataloguing staircases. With three elements in sight, it seemed only logical to expand. Why not 12? Why not 15?

As a first foray, in the fall of 2012, OMA's Rotterdam office hosted a Harvard GSD studio on the elements, with 12 students sifting mountains of data, histories, and anecdotes for key turning points in a kind of sub-architectural history. It was intense document-based research, but also became a form of simply paying attention: every indoor environment could yield fresh instances of innovative or generic exploitation of elements. Students were hands-on too, "assisting" the demolition of a nearby building, ripping toilets from the floor (and gagging), stripping off layers of partition

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walls, carefully dismantling and reconstructing false ceiling “sandwiches” to study their qualities IRL. It was a form of three-dimensional archaeology, figuring out what architecture was actually made of, since it has to be made of something.

The GSD students tried to identify (and lionize) unknown historic innovators, but also track down archives and surviving experts who’d devoted their entire lives to individual elements of architecture and been forgotten or ignored by the architectural establishment. Along with Friedrich Mielke, there was Tim Nugent (ramp) and Charles Brooking (window); there were historians devoted to door handles, museums dedicated to the toilet, to the elevator, to the roof...

A design template for the book, provided by Irma Boom, helped tame the material at a point when it was threatening to run riot, introducing a narrative system of captions, quotations, ‘mini essays,’ and essays. Images became black and white, with worthy exceptions, avoiding a cacophony of color palettes. But the main impact of the design template was to radically open up the book-making process: using the template, chapters could be built and refined simultaneously in real time by a host of contributors and editors, like a wiki. An iterative process ad infinitum...

Koolhaas’s commission to curate the Venice Architecture Biennale upped the ante and provided a target. The idea grew to make the main exhibition in the Central Pavilion a reflection and extrapolation of the still-growing book (ca. 2,000 pages at this mid-point and counting). A second Harvard studio pulled focus on the material – without reducing it – as we started to corral dozens of collaborating writers, editors, historians, archivists, scientists, and bemused building industry insiders into the project...

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To survive this book, a brief reading note from the editors:

- larger-sized texts, in color, are annotations by Rem Koolhaas and Irma Boom, extrapolating and personalizing key historic moments; together with occasional color images and regular translucent overlays, they offer an alternative, faster route through the book...
- this book is something between an incomplete encyclopedia – a seemingly objective depository of found material – and an paranoid’s scrapbook decoding the motivations and rules hidden everywhere in our built environment. We try to drag everything into the light, while ultimately exposing how little we can know...
- it’s not “The” elements of architecture, just elements of architecture. Historical architectural treatises, which typically used the elements as the means of grasping architecture as a harmonious whole, each claimed a definitive list. This book makes no such claim. There could even be a sequel...
- we tended towards elements that might be considered scenography rather than structure, suggesting architecture as a (flimsy) stage-set, rather than a serene unified entity and order (so, no column).
- the book encompasses elements from their most desultory to most exultant manifestations. We look at “firsts” (Giedion) and “mosts” (Banham), groundbreaking innovation and common practices when it comes to the development of elements.
- most chapters are highly selective chronologies, from the first Paleolithic innovation to the latest digital manifestation...
- of particular interest to us are roads not taken during this timescale: innovations that failed or were actively suppressed (the multi-directional elevator), regional intelligence that barely survived the homogenization wrought by modernity (the mashrabiya)... elemental practices that could have created a radically different “normal.”

LXXII

- the book maintains an almost autistic focus on the elements as isolated components. Meeting points between them – assemblages, overlaps, compositions – are generally not considered (with the exception of façade, arguably a composite element consisting of wall, window, door, balcony, roof).

- we embrace the fact that, unlike in the treatises of old, no unifying theory emerges. The reader “must be calm and must read without haste; he must not be ever interposing his own personality and his own special ‘culture’; and he must not expect as the ultimate results of his study of these pages that he will be presented with a set of new formulae.” (Nietzsche, “On the Future of Our Educational Institutions,” 1872).

- For us, this book reveals how architecture stubbornly remains an open system, subject to an infinity of cultural variations, utterly dependent on accumulations of shared knowledge and shared delivery systems; iterative, a mess, a collage of compromises, corrections on corrections, stimulated and curtailed by institutes, laws, and corporations which can only ever scramble to ascertain it, let alone control it...

- Maybe this book is the growing realization of a secret: that architecture’s parts are worth more than their sum.

— james westcott & stephan petermann

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