

What is construction? Building, of course. But it builds on activities prior to building such as design, project development, and the production of construction materials. Likewise construction leads to processes of use, appropriation, transformation, and even demolition of buildings. Construction, therefore, is much more than a mere act of production; it is a multilayered process of re-organizing matter, taking place in a variety of scales and time frames.

Most of today's construction is based on concepts, technologies, materials, and social models, which are more than hundred years old, and does not take advantage of the knowledge we currently have. But with climate change, shrinking resources of raw materials, radical demographical shifts, and exacerbating social inequalities resulting from the rise of neo-liberal economy, construction needs to be re-invented now more than ever.

This book presents two complementary approaches: On the one hand, it gives an overview of new construction technologies, material research, energy concepts, as well as ownership models and development strategies in architecture. On the other hand, it rediscovers the wisdom of vernacular architecture with its smart use of locally available building materials, building methods and typologies, as well as the ingenious understanding of natural principles.

Wiping off the dust of any quaint technocratic allure formerly associated with construction, this book celebrates its re-invention with an effervescent effort of research, produced by 38 international architects, engineers, and scholars who contributed a kaleidoscopic set of essays and case studies. In addition, the book features a lavishly illustrated index containing more than 230 dictionary entries that take the reader on an eye-opening journey across the expanding universe of construction.