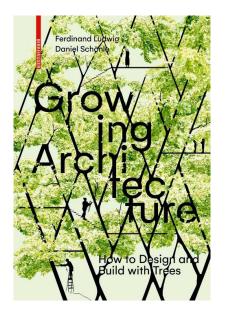
Growing Architecture How to Design and Build with Trees

Authors: Ferdinand Ludwig, Daniel Schönle Publisher: Birkhäuser, Basel 2023



Buildings are incapable of growth, evolution and adaptation? No! "Baubotanik" is about architectural structures formed through the interplay of technical elements and tree growth. Ferdinand Ludwig and Daniel Schönle, both architects, are leading researchers in this field. Living buildings exemplify the positive traits of trees, fostering pleasant microclimates and facilitating material cycles—a promising approach in the face of environmental challenges.

The book provides a well-structured introduction to Baubotanik. It covers a wide range of topics, including botany, intergrowth techniques, tree-building integration, environmental interaction, design experiments, utopian visions, and the future tree architecture. It begins with a captivating journey into the ancient living bridges of rural Indian villages and the graceful Dance Linden trees of Europe. Moving forward, the book meticulously covers fundamental knowledge, including the basic structure and growth of trees, selection of suitable plant varieties, cultivation and maintenance of tree-integrated structures. It delves into design, engineering, and real-life cases, offering valuable insights into the possibilities and challenges of implementing tree-based structures.

One of the notable strengths of this publication is that it moves beyond architecture and adopts a city-scale perspective. It presents an urban vision in which trees and buildings are integrated at an architectural level, resulting in a novel urban landscape. Besides, by delving into the historical tree pruning techniques, it showcases the development and innovation in the field, providing insights into new possibilities for intergrown structure. While there are many excellent aspects, it does come with certain shortcomings. It assumes a certain level of knowledge in botany and building construction from its readers. Beginners may find the opening sections complicated, since it covers the complexities of tree and structural fundamentals. But the rich illustrations help to alleviate this problem. Another drawback is the lack of diversity in the real-life cases mentioned in the book, with a majority coming from European contexts primarily driven by Ferdinand Ludwig's team. This leads to a lack of diverse support for the techniques it presents. Finally, the publication lacks a comprehensive depiction of the topiary culture in garden history. While the article about the techniques and tree species mentions historical topiary techniques, the topiary culture, as the origin of Baubotanik, holds significant importance in history.

Highly recommended, the book explores the world of integrating living trees into architectural structures, reexamining the relationship between man-made constructions and nature. It's a valuable resource for professionals and enthusiasts alike, offering knowledge, inspiring examples, and practical insights. It's a must-read for anyone interested in the intersection of built environment, nature, and sustainable design.

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