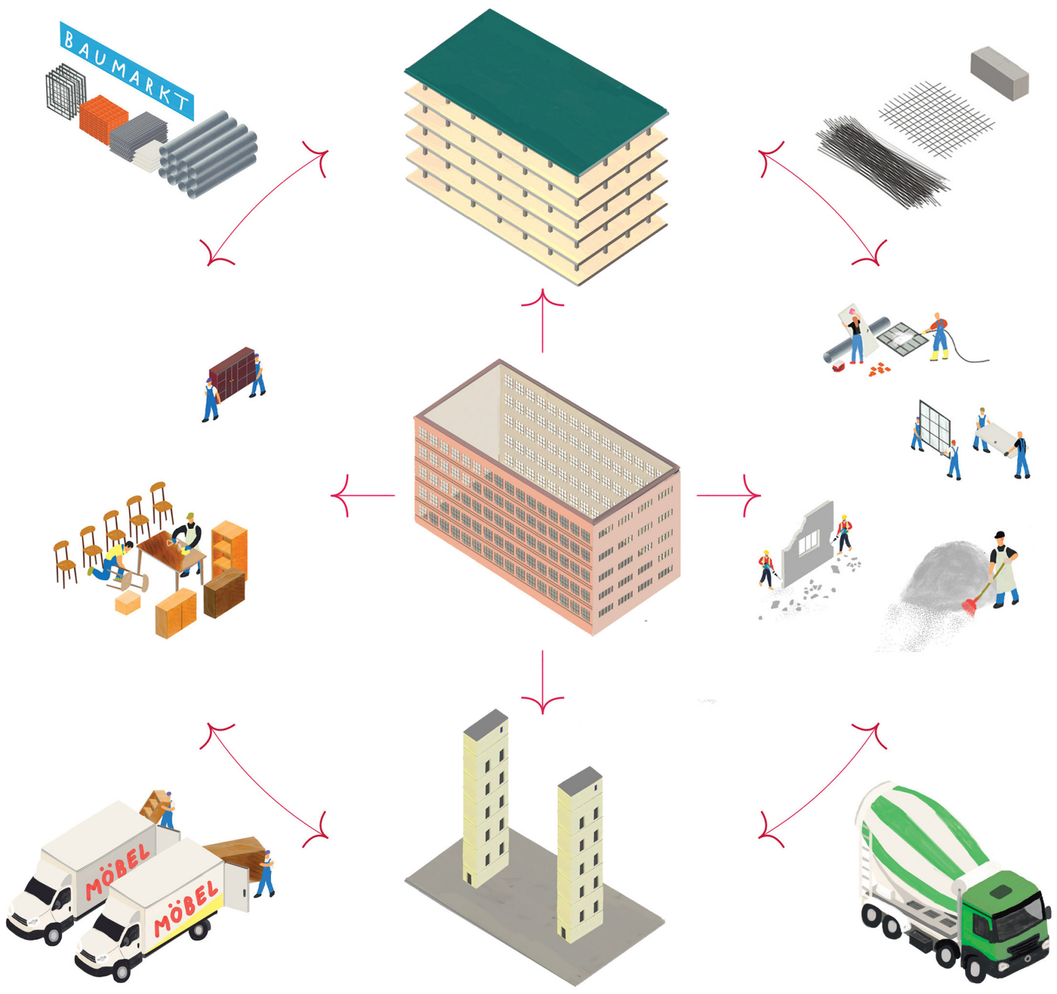

KOSMOS architects, from “Chief Builder” to “Chief Curator”, Klybeck+, 2020

Hardware / Software in architecture

Campus

Artem Kitaev

Großes Entwerfen ● 253.N32 ● 10 ECTS ● SS2025 ● applications with portfolio via TISS

Weekly meetings Thursday ● 13:00 - 19:00 ● present format ● English

Kick-off ● 06.03.2025 ● 16:00

Study trip to Zürich ● 19.03.25-21.03.25

GROWTH AND CHANGE ARE ESSENTIAL QUALITIES OF ARCHITECTURE

Growth and change are essential qualities of architecture. Urban infrastructure evolves and transforms alongside society, responding to new needs and requirements. Understanding architecture as a continuous process of creating and adjusting built infrastructure to meet new demands suggests the conversion of the design approach from addressing current needs to anticipating future developments under unpredictable circumstances. Any transformation should be viewed not as a final composition but as one of many possible configurations of built material on the site. In this context, an architectural project should incorporate possibilities for future modification.

EXISTING BUILT STOCK AS A RESOURCE FOR THE CREATION OF ARCHITECTURE

Environmental challenges place resources, their availability, and their impact at the center of professional discourse, offering an opportunity to revisit the practice of reinterpretation and utilization of existing spatial, material, and technological resources as a method of creating architecture. Existing buildings, regardless of their architectural, cultural, and historical qualities, or the absence thereof, represent an important material resource. Fragmental deconstruction allows the transformation of obsolete buildings into open structures, making them available for reinterpretation by new programs and users. “Ultimately it is not forms but their transformations that reveal whether a configuration is live or not.” (Habraken 2000, 18).

HARDWARE AND SOFTWARE IN ARCHITETURE

Hardware and Software in architectural design is an approach inspired by the Structuralist division of building elements based on their temporal and material significance—what Hertzberger describes as ‘ephemeral and enduring.’ We categorize these layers as Hardware and Software in architecture. This approach distinguishes between permanent and temporary elements based on their functionality and placement within the building. Elements that can serve multiple functions are considered permanent (Hardware), while those designed for specific uses are viewed as temporary (Software).

In the case of adaptive reuse, we consider the Hardware to be already built and simply needing to be recognized and revealed within the existing structure. Minor modifications allow the existing building to be adjusted into an open framework of Hardware, enabling further reinterpretation for required functionality. To adapt the Hardware of existing structures to new demands, we create the necessary environmental conditions and facilitate required functionality through lightweight construction and furniture—Software.

Institut für
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