PORR, demolition of Südbahnhof in Vienna, https://porr.at/projekte/abbruch-suedbahnhof-wien/

Hardware / Software in architecture

ABBRUCH ABBRECHEN

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Großes Entwerfen ● 253.H57 ● 10 ECTS ● SS2022 ● applications with portfolio via TISS

Intro meeting Thursday, 04.03.2022 ● 15:00 ● Site excursion (tbc)

Weekly meetings Thursdays ● 13:30 - 18:00 ● hybrid format ● English

Final presentations ● 23.06.2022

We live in a rapidly changing world: economically, climatically, politically, and culturally. With the transition from industrial society to informational society the traditional methods of construction infrastructure are not fast and flexible enough to satisfy ever-changing needs of the users. Sometimes requirements to the buildings change faster than concrete gets hard. It causes constant reconstruction and demolishing of recently built structurally strong buildings. The gap between obsolescence of the building and structural dilapidation gets inevitable. It makes the construction industry one of the most ecologically harmful industries, accountable for almost a half pollution on the planet.

“Hardware/Software in architecture” is an attempt to imagine alternative approach to design and construction of buildings. Admitting inevitability of buildings to undergo unforeseeable changes the concept proposes to develop from the beginning architecture-to-change. The building consists of two main parts: 1) everlasting structure (Hardware) and 2) flexible functional infill (Software). The Software of the building could be easily adjusted to host a new function, while the Hardware would remain untouched, addressing urban, architectural and aesthetical challenges. Exactly like in IT: to update an application there is no need to by a new computer.

Most of the human history existing structures were naturally used for new construction. Old buildings were valuable resources for future development. Practical thinking combined with economic efficiency almost excluded demolition and all built structures were reused at their maximum as construction material or as parts of new buildings. This practicality simultaneously developed historical and cultural values of this architecture.
Today, we can see adaptive reuse as the most ecological methods of construction. Smart use of resources of existing structures is probably the most efficient way to react on ecological crisis and make construction industry less harmful for the environment.

We will work with existing structures doomed for demolition. Buildings which do not have any historical or cultural value. We will look at the built structures first of all as at resource for the future development. Our goal is to show what could be an alternative to demolition. How can we work with existing structures, so the new construction require less material, new buildings will not reduce comfort for the users, construction process will go faster and in much more ecological way, and cities become more beautiful and exciting places to live.

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