

FRIDAY, APRIL 12
SESSION 6
15:30 - 16:30

ROOM A - SALA DE PROYECCIONES

Eva Sollgruber

**Designing the Conversion.
Sketching as a Tool for
Experimentation and
Reconstruction**

DESIGNING THE CONVERSION

Sketching as a Tool for Experimentation and Reconstruction

In 1989, the Austrian architect Hermann Czech published the text "Der Umbau" (The Conversion), in which he sets out his theory on the practice of reconstruction.¹ He uses the term "Umbau" as an operator for reflecting not only on the architectural and constructive facet of reconstruction and refurbishment of existing buildings, but also on the design process as well as urban and cultural issues. He defines the term very broadly by setting out "urban", "structural-spatial", "cultural" and "methodological" aspects of conversion. With the methodological aspect he touches upon the design process which he considers as a process of constant conversion. He argues that if the characteristic of conversion is the existence of predetermined decisions and their remodeling, then every design process is a reconstruction: "If one realizes that every design process represents a series of decisions in which later decisions are determined by earlier ones, it makes no significant difference whether the earlier decisions were one's own or those of others."² Designing within the constraints of an existing building conceived by others, or designing a new structure/building – for Czech it all falls under the concept of "Umbau". Thereby considering the design process as well as the (newly designed or refurbished) building as open end, ever changing and evolving, being under permanent reconstruction and allowing us to look backwards (preserving, learning from etc.) and forward (changing, inventing etc.) at the same time. Through the lens of Czech's writings, architecture, the built environment and the practice of designing become an open, circular process, which can foster a change in the way we design and construct buildings and thereby changing parameters of the existing spatial-political system we live in.

Within the design process, this notion of an open end, of constant reconstruction, manifests itself most vividly in the act of sketching. The cyclical, non-linear process of sketching helps to test and evaluate abstract ideas and theories, probing the "contours of an unknown territory"³. "As the pen moves across the paper, the ideas both concretize and evolve. After each stroke, it is possible to re-evaluate what is already there and whether the decisions made earlier make sense, whether a new variation emerges, whether the idea needs to be tested differently, or whether the idea is discarded."⁴ Each stroke of the pencil is informed by existing images within the designer's mind (Pallasmaa: "Hand-Mind-Fusion") and strokes just made a second before, merging past, present and future.

The aim of sketching in the context of architectural designing is not solely to analyze and thereby understand an existing situation or "wicked" (Rittel) problem, but also to explore possible adaptations and changes of the status quo. According to the architect Simon Kretz, "the world is not first analyzed and then designed through the practical activity of designing, but is experimentally changed and examined at the same time through designing."⁵ Here designing means to experimentally test and research ideas and theories and at the same time apply them, thereby combining the two seemingly separate procedures of analysis and synthesis. According to Kretz designing is a knowledge-oriented experiment in which analysis and synthesis intermingle, with the aim of investigating and altering reality. He is referring to Donald Schön, who characterized the tasks carried out by practitioners (e. g. designers) as "an experiment which serves to generate both a new understanding of the phenomenon and a change in the situation."⁶ When describing the practice of architecture in particular,

¹ Czech, Hermann (1996): „Der Umbau (1989)“, in: Czech, Hermann: Zur Abwechslung. Ausgewählte Schriften zur Architektur, Vienna: Löcker Verlag, pp.125-127.

² Idem., p. 127. Quote translated by the author, original in German: "Macht man sich einmal bewusst, dass jeder Entwurfsprozess eine Entscheidungsreihe darstellt, in der spätere Entscheidungen von früheren determiniert sind, so macht es keinen wesentlichen Unterschied, ob die früheren Entscheidungen eigene oder fremde waren."

³ Pallasmaa, Juhani (2009): The Thinking Hand. Existential and Embodied Wisdom in Architecture, West Sussex: John Wiley & Sons Ltd, p. 73.

⁴ Quote by Theresa Schleinitz, designer of one of the case studies presented in this research.

⁵ Kretz, Simon (2020): Der Kosmos des Entwerfens. Untersuchungen zum entwerfenden Denken, Zürich: Verlag der Buchhandlung Walther König, p. 28. Quote translated by the author, original in German: „Die Welt wird durch die praktische Tätigkeit des Entwerfens dementsprechend nicht zuerst analysiert und danach entworfen, sondern experimentell durch das Entwerfen im selben Zug sowohl verändert als auch untersucht.“

⁶ Schön, Donald (1983): The Reflective Practitioner. How Professionals Think in Action, New York City: Basic Books, p. 68.

Schön characterizes each action within the design process as “a local experiment which contributes to the global experiment of reframing the problem.”⁷

The case studies presented in this research (see a selection of drawings attached) combine an investigation on the architectural design process with theories of Czech concerning the topic of reconstruction. On the one hand – based upon the theories of Schön and Kretz – the design process is understood as an experiment and on the other hand the projects themselves are considered to be experiments, since the designers aim to develop new ways of designing and thinking about architecture – meaning buildings and the discipline as a whole.

The idea of conversion á la Czech can function as an operator for thinking, not only about the design process, but about architecture in a broader sense, touching upon ecological and social issues. Dealing with given circumstances, the context, is inherent to reconstruction. The question is how can we reconstruct/remodel existing structures for the future; be it our building stock, standardized, structurally manifested patriarchal norms, or the capitalist exploration of people and nature? Touching upon a variety of issues, the common denominator of the presented case studies is the aim of developing an architectural project, considering architectural thinking and its design tools as the driving force for change.

REFLECTION

In this research the role of experimentation is twofold: on the one hand the issues tackled with the presented case studies ask for an experimental approach since they try to challenge the status quo and find answers to issues whose parameters for a solution are uncertain or even unknown. Dealing with burning issues like climate neutrality or gender equality new paths have to be taken. In order to deal with issues which are coined by “uncertainty, instability, uniqueness and value conflict”⁸ experiments have to be conducted which serve to generate new knowledge and possibly change an existing situation. On the other hand, the design process itself is considered to be such an experiment with the aim of understanding and altering the world – reconstruct it. Since every design endeavor is coined by uncertainty and instability, there are design tools, like sketching, which support the task of experimentation and help to develop future visions, not only for the architectural practice and urban planning, but for the society as a whole.

Sample of sketches of the research⁹:

The cyclical, non-linear process of sketching considered as a "tactile probing through sketching"¹⁰.

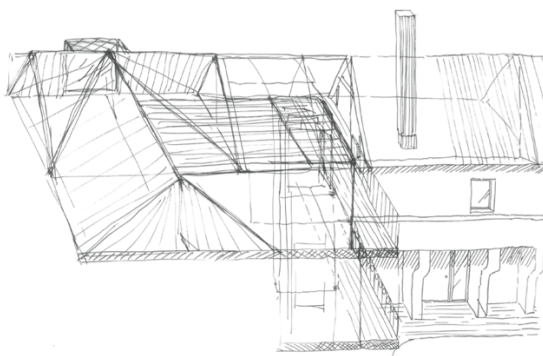


Fig. 01

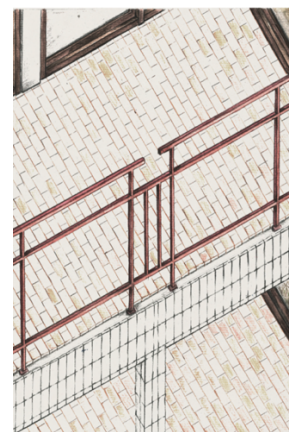


Fig. 02

⁷ Idem., p. 94.

⁸ Schön, Donald (1983): *The Reflective Practitioner. How Professionals Think in Action*, New York City: Basic Books, p. 49.

⁹ Fig. 01 by Theresa Schleinitz, Fig. 02 by Juliane Geldner.

¹⁰ Pallasmaa, Juhani (2009): *The Thinking Hand. Existential and Embodied Wisdom in Architecture*, West Sussex: John Wiley & Sons Ltd, p. 73.