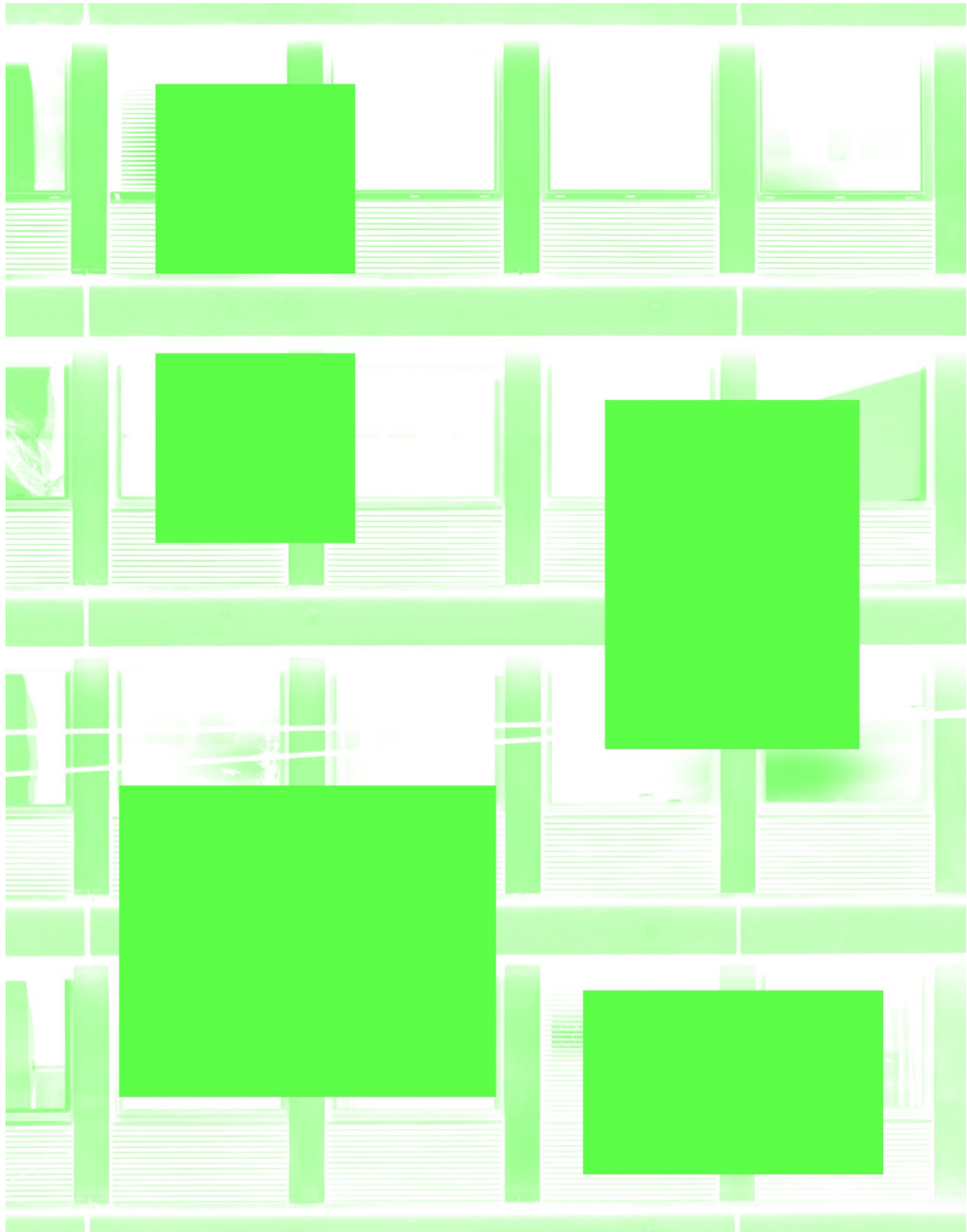


**Core Program Master-Thesis HS 2022:
“Durability and/or Change? – Commitment to the long term”**

Cooperation Partner 1: Annette Gigon - Annette Gigon/Mike Guyer, Assistant Cornel Stähli

Cooperation Partner 2: Silke Langenberg, Assistant Reto Wasser

Cooperation Partner 3: Marcel Bächtiger



“Durability and/or Change? – Commitment to the long term”

Our topic is twofold – “Durability and/or Change?” How can existing buildings be preserved and at the same time repurposed and extended? This question is especially relevant with regard to the current situation, where a large portion of the existing buildings in Switzerland have to reduce their operational carbon footprint in the near future, while keeping the corresponding embodied energy and emissions in balance.

We know that about 30% of CO₂ in Switzerland is generated by buildings and households, but the process of construction and renovation also entails substantial greenhouse gas emissions.

We will take a close look at existing buildings, with a respectful and caring eye, also considering the embodied energy in the buildings in relation to the operational energy and the respective greenhouse gas emissions.

Furthermore, the title **“Durability and/or Change? – Commitment to the long term”** expresses our interest in the ongoing transformation of people’s everyday environment and the gradual dissolution of the spatial barrier between working and living. The (re-)connection between living and working is important from an architectural and urbanistic point of view, as well as from a sociological, economical, and not least an ecological perspective.

Following a specific approach – static and in motion –, we will not only rely on historical plans, but also use photography and film as tools to engage with the buildings and their context. Both will help us to conceive, create and test new interventions according to the conceptual, functional, aesthetic and ecological qualities.

The result of the master’s theses will be both digital and physical. The designs and the preceding research will be presented in plans, sections, detail drawings, renderings or models, but we will also use audio-visual media as a tool of representation and provide the decisive figures on energy and emissions.

Preparation and elaboration phase

The aim of the preparation phase is obtaining profound knowledge of the investigated object, as well as its evaluation through research. This will reveal the historical, material, social, memory, scientific value of the object.

Their history as well as their present qualities and deficiencies will be the basis for a remodelling or extension.

Video and photography as media will be used to critically assess the existing buildings. Besides audio-visually witnessing and documenting the buildings, their mood and everyday use, film serves to make the potential of a conversion visible and audible: The possibilities of imagination that are implied in the cinematic means of motion, framing, montage and sound not only allow to show what *is*, but also what *could be*.

Dr. Silke Langenberg, Professor for Construction Heritage and Preservation, and Dr. Marcel Bächtiger, lecturer “Spatial Concepts in Architecture and Film”, will support the master’s thesis semester in both phases.

Cinematographer Severin Kuhn, who has several years of experience shooting architecture, will offer consultation during the preparation phase.

In addition, Arend Kölsch, the author of the “vademecum” will be available throughout the semester for lifecycle considerations on energy and emissions in existing and new buildings as well as Fabian Kastner.

Ratio of grading by cooperation partners for preparation and elaboration phase:

Preparation phase: ca. 40%

Percentage will be shared by designers and non-designers equally

Elaboration phase: ca. 60%

Percentage will be shared by designers and non-designers equally