

The Shophouse

In the tropical climate of Malaysia, the small town Melaka inspired me with the architectonic beauty of the 'shophouse'. This typology combines Chinese building principles with Western giving it an almost perfect balance between inside and outside. Since Explorelab is a fascination driven lab, the shophouse is the foundation of this project.

Asian Urban Growth

Asian regions change from small towns to a metropolis in the blink of an eye, traditional architecture, and with it traditions itself disappear without notice. This fast renewal has lots of positive effects and the living standard is increasing each day. In the Architecture however we see the tendency of building high dens and large scale buildings, not only designed by Asian architects, but for a great part designed by western architects. My thesis focusses on the question if it is possible to create a small scale architecture in Asia, which can fulfill the modern needs.

Melaka

The town of Melaka is put on the list of UNESCO world heritage meaning that if a building collapses it has to be rebuilt with the same architectonic principles. However, this might turn Melaka into a 'open air museum', making it loose its qualities of micro economies and family businesses. I see a chance to rebuild a broken shophouse in a modern way, but sticking to the basic architectural qualities of the shophouse. In some ways the goal is to extract fragments from the historical form and simplify them, in order to apply them later freely on adapted to some contemporary global necessities.



The plot of the design is a very long (+/- 70m) and only 6 meter wide plot with a 5 degree bend in it. All roofs are vanished making it more a 'ruin' than a building.

Typological Research

In order to find these principles a typological research is made to find the basic architectural qualities of the shophouse. All shophouses are researched over time, and important qualities are found. The shophouses, for example, are all build in basic Chinese proportions, consist an 'air-well' and have 'screens' to separate public and private space. These principles are simplified and applied in the design.

Dutch style 1600-1700	Southern China style 1700-1800	Early shophouse st. 1800-1850	Early transitional st. 1840-1900	Early straits eclectic style 1890-1920	Late straits eclectic style 1920-1940	Neo-classical style 1850-1950	Art-deco style 1930-1950	Early modern style 1950-



On the left a photo of a traditional shophouse in Melaka, on the right the new design including the basic principles of the shophouse.

Contemporary Western architectural practices typically involve surrounding a building by an open yard on the property. This contrasts with much of traditional Chinese architecture, which involves constructing buildings or building complexes that take up an entire property but enclose open spaces with itself. Following these principles the existing separation walls will be kept in order to create this 'closed' complex.

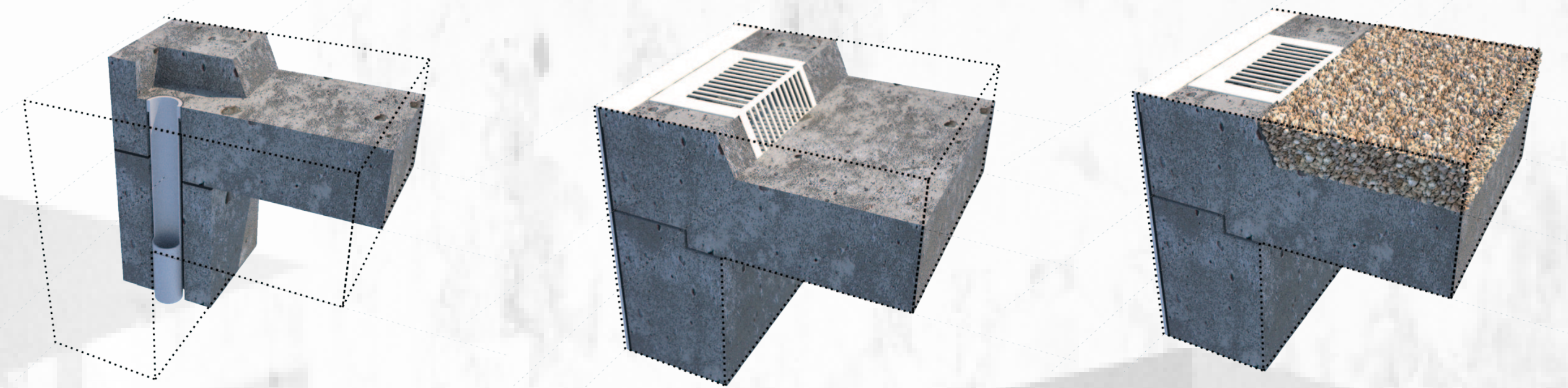
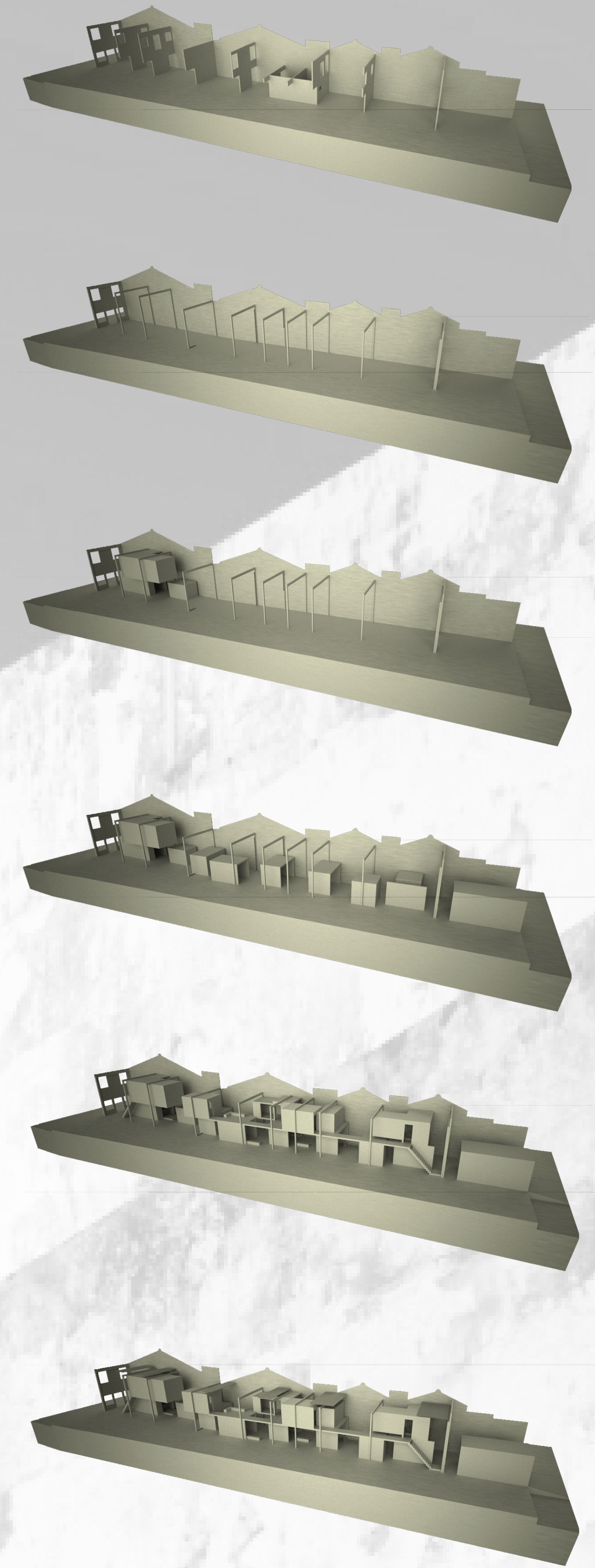
The interior walls will be removed and replaced by steel frames. These frames are for structural reasons but also link the old building with the new. The frame between the shop and the dwelling will have a high door-step, simulating the traditional screens that are found in the shophouse.

As a rule residential projects tend to have a fixed correlation between the number of occupants and the number of room. In this project however each function was given its own room independent but overlooking each other. The spaces between the blocks will act as outdoor space and 'airwells' for ventilation and full use of the tropical climate. All the 'rooms' are made following the traditional proportions of the shophouse: 1:1 and 2:3 are the proportions used for this project. Combining 1:1 with 1:1 makes it 1:2. For the heights there are 3 differences: 2,5 meter for 'wet rooms', 3 meter for living dining sleeping rooms, 3,5 meter for the shop and for storage.

The shop is placed in the front making it the buffer between the busy street and the calmer dwelling. On the same level the more private living functions are placed, with closest to the shop a meditation room and office, and the more you reach the back of the plot the more intimate the functions get (living, eating, cooking).

On the higher level all the private rooms are placed, combining a bedroom with a bathroom for each compound. Each block can be reached individually and in case of problems there are two escape routes. Since there were no columns in the original shophouse the higher volumes are conceived as habitable 'blocks' in an 'impossible' balance structuring the outdoor space.

As a final layer shutters are placed between the frames, the shutters can be closed for rain but open for ventilation, they can provide shade, and they can be fully opened, making the plots climate fully controllable.



The building is constructed in a prefab system, detailing involves the same basic shophouse principles like "Feng Shui". In this example the water drainage system

