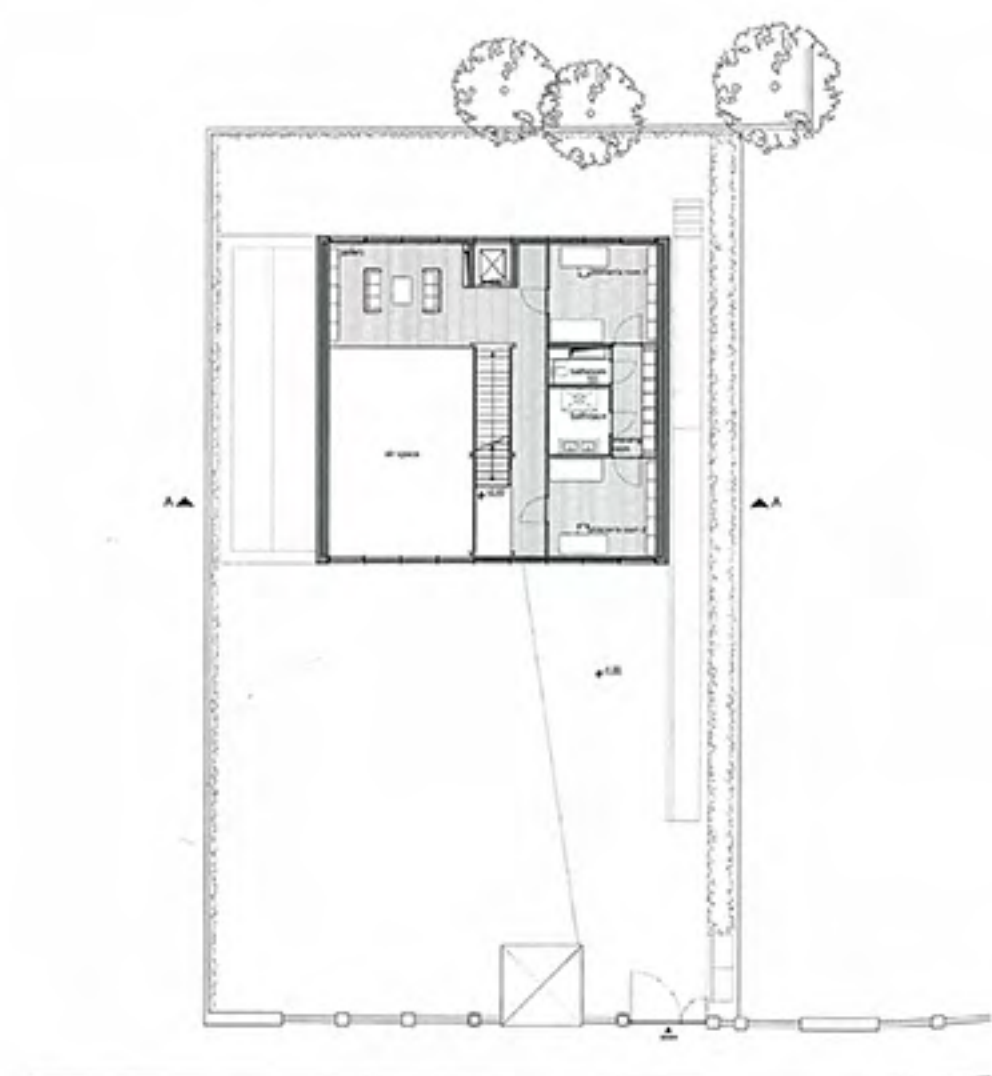
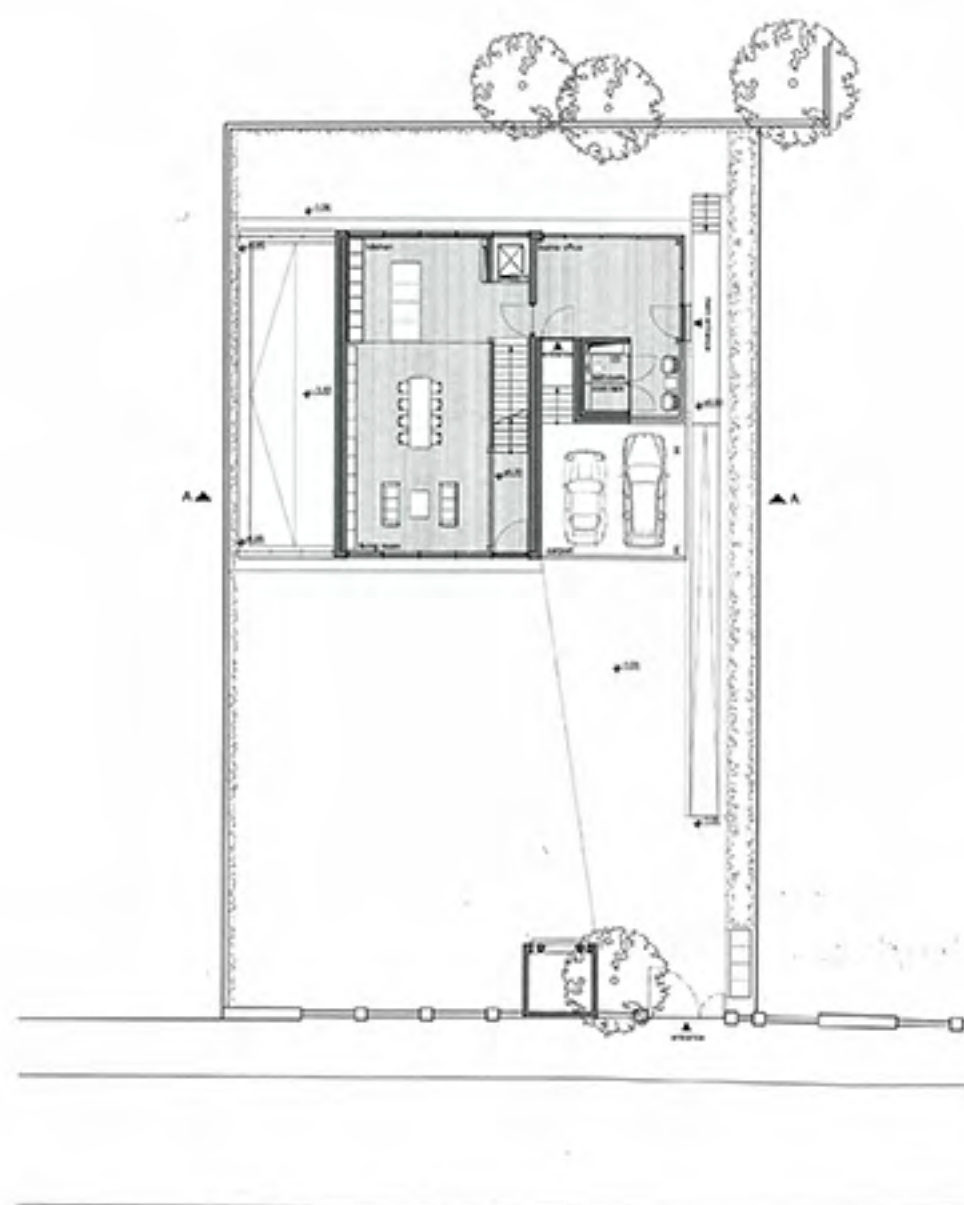
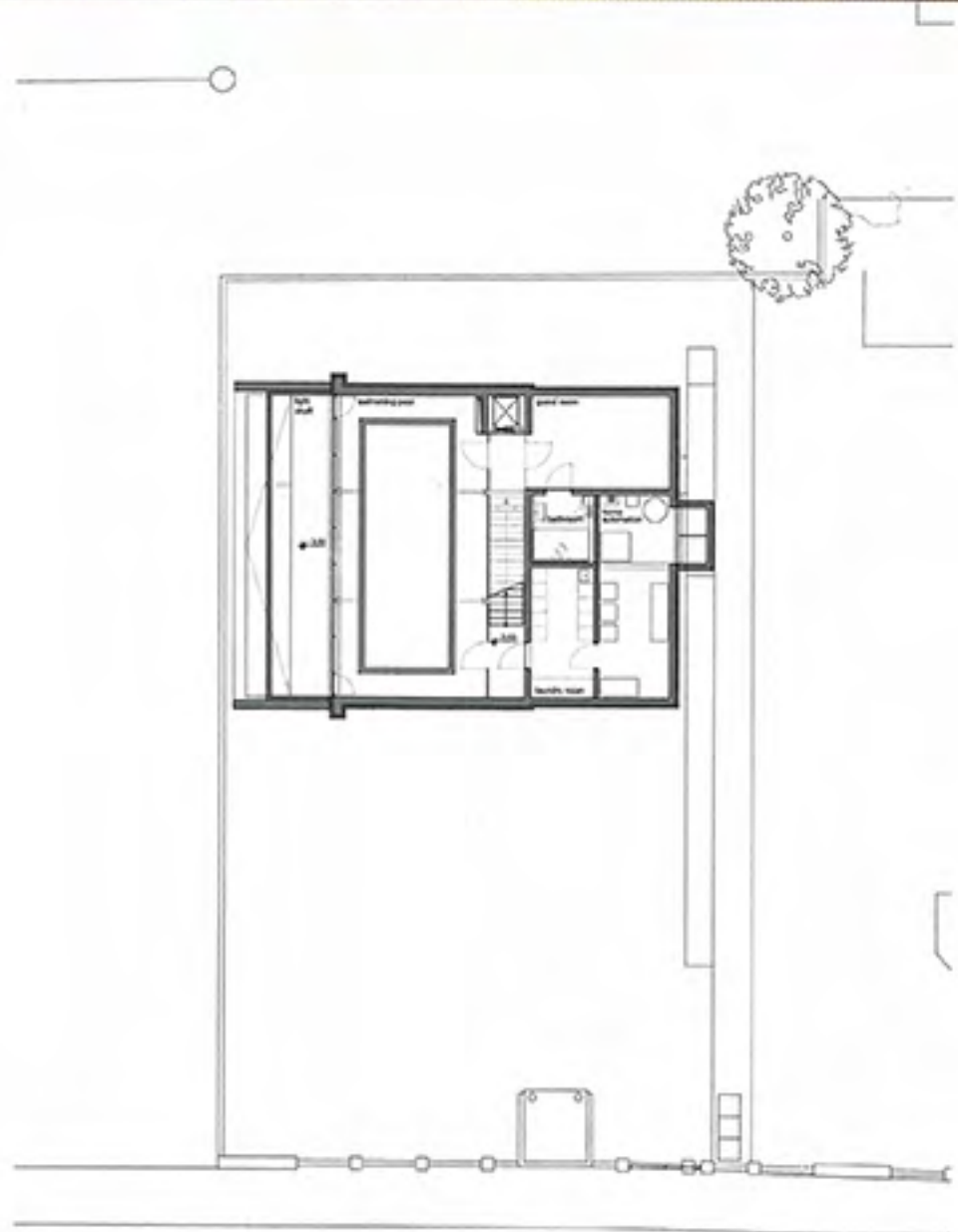


HIGH- ARCHITECTURE LIGHTS

Hu Yanli He Jiaxin

5

Dalian University of Technology Press



Germany

House R

Karlsruhe, Germany



The house is located at the "Stadtgarten" (city park) in the centre of Karlsruhe. The property once was a part of a northern situated villa. A pavilion which belongs to the historic ensemble is part of the wall, which encloses property at three sides.

The 4-storey single family house is reached via a forecourt and a ramp. The main entrance on the northern side and a second entrance via the carport lead to the entrance area. The storeys are connected by an open stairway and an elevator. North side ramp and the integration of an elevator refer to demographic development and possible handicap.

Entrance area, home office, double-height living room with a kitchen and a dining area are settled on the ground floor; gallery as a more private living area, two children's rooms with dressing room and bathroom on the first floor; the attic floor with a roof terrace on three sides is reserved for the parents. It is not divided into rooms; the individual functional devices (bed, washbasin, bath tub, bathroom-box and dressing area) are accordingly loft kind arranged.

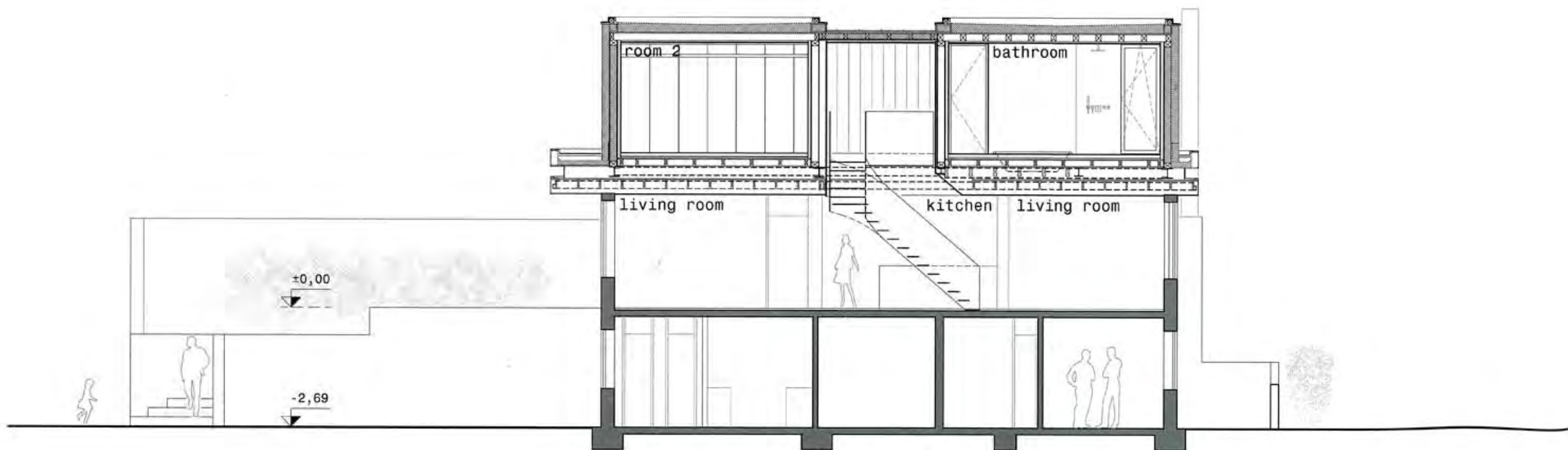
Cross-ventilation is via automatically controlled louver windows. The glass areas are equipped with exterior sun protection, which screens the residents from view at the same time. Because of night cooling and exterior sun protection, it was not necessary to install an air condition system. The thermal mass of the concrete walls functions as a cooling storage and cools the rooms throughout the day. By the employment of triple glazed windows, highly effective insulation and a solar thermal system, an energetically optimized building could be realized.

Photography: Thomas Herrmann









Germany

House S

Wiesbaden, Germany

This specific construction assignment is a central topic of today's urban development: the roof area as building site which can be covered with independent buildings – urban compression by utilization of roof areas as valuable building land.

Thereby the architect is always confronted with the question of how to handle with the existing building in a contemporary sense. House S, a 60's bungalow, was built by interior architect Wilfried Hilger for himself and his family.

Due to space limitations, the new owners, a family of four, decided to heighten the existing bungalow and furthermore to renovate the basic structure.

To keep the bungalow's typical character, three single boxes were placed on a cantilevered flat roof, which are connected only by a glass corridor.

The new structure creates zones with different qualities: in the south-west a meadow with a small apple tree, in the north a stone paved courtyard with a pine tree and in the east a roof terrace with a magnolia.

On one of the new boxes the master bedroom, dressing room and bathroom are located. The two other boxes function as personal living room and home office for the landlords.

On the first floor nearly all walls and installations were removed, so that a large living room could be created. An open kitchen was placed in the midst of that living area. This floor additionally includes the children's rooms with dressing room and bathroom. On the ground floor a guest room and an additional apartment is located.

By the use of triple glazed windows and highly effective insulation an energetically optimized building could be realized.

Photography: Thomas Herrmann



