

## Rehabilitation of a residential building in Nicosia.

*Offering today's comfort to a historic building.*

### Type of intervention

Restoration  Rehabilitation / Renovation

### Concerned elements on the intervention project

- 1. Foundations and underground structures
- 2. Vertical structures
- 3. Horizontal structures and vertical connections
- 4. Roof and terraces
- 5. Façade and building envelope
- 6. Finishes and completion elements
- 7. Integrate services
- 8. General strategies for building recovery

**Site** Grivas Digenis 39, Kaimakli, Nicosia, Cyprus

**Objectives** Restoration and extension of a remaining half of a traditional house to create a three bedroom house.

**Property** Private

**Designer** Architect: Yiorgos Hadjichristou

**Date** 1997-2007  
Realization 2005-2007



## Background to the intervention

A building abandoned for many years in the center of the walled city of Nicosia has been given a facelift, despite the problems of the area due to the occupation of the north of the island.

## Description of the building

Built back in 1899 in the Buyuk (big) Kaimakli, a former traditional village famous for its masons, and now part of the south part of the divided capital of Nicosia. In parallel to the division of the capital by the Buffer Zone, the small and Big Kaimaklis also separated by the so-called green line, the house itself was a result of a division due to the dowry system still enacted in the island of Cyprus. The various divisions of the structure and the surroundings led to the implementation of an architectural idea full of fluidities and porosities.

The renovation revealed and restored hidden, covered traditional elements while the extensions were proposed of mobile vertical elements. This ultimate flexibility manages to organically blend with the traditional adobe and stone elements.



Fig.1: View of the cemented plastered elevation before restoration.  
© Y. Hadjichristou



Fig.2: View of the door that replaced the arch of the 'iliakos' sun room. © Y. Hadjichristou

## The Diagnosis of the building (values and state)

The house served as a challenge to rethink and revisit the notions of the courtyard typology which apparently was the most amputated part of the house. In order not to just heal this trauma, an understanding of a 'malleable courtyard typology' was developed. This decision influenced the way the existing structure and materials were treated in synergy with the light, fluid spatial and material solutions of the annexes.

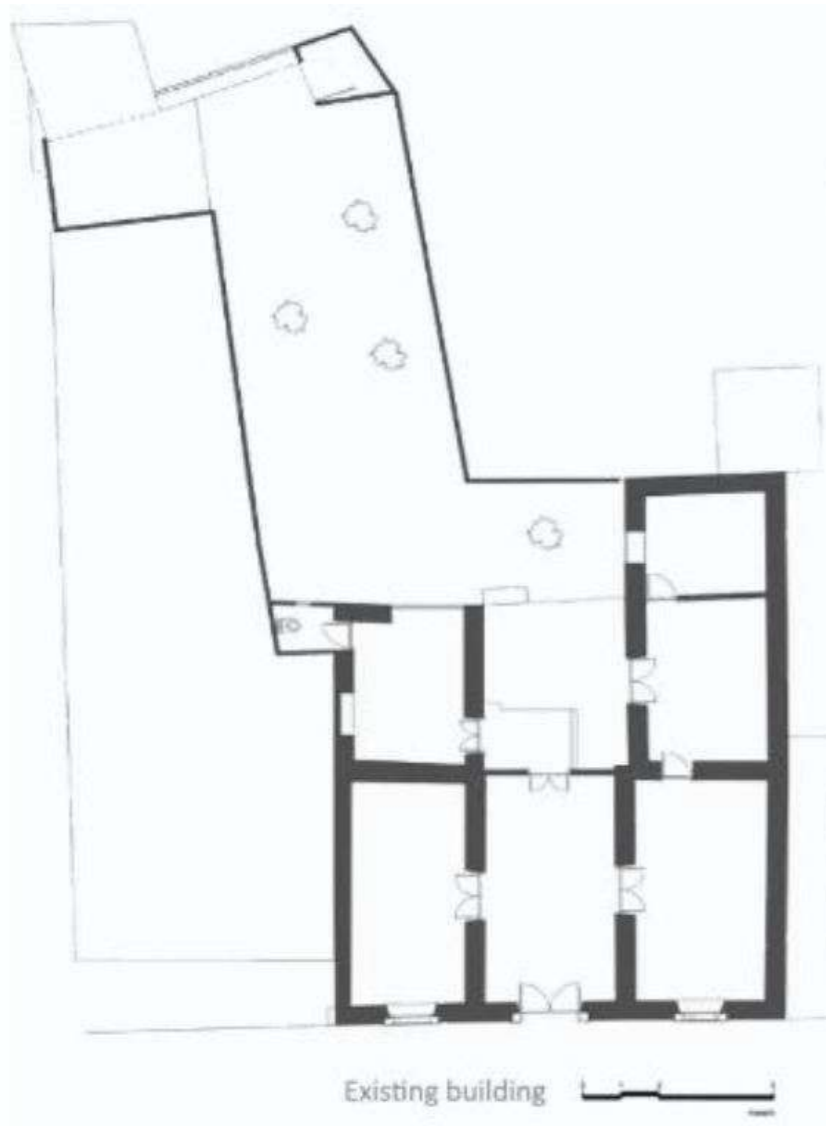


Fig.3: Existing floorplan. © Y. Hadjichristou

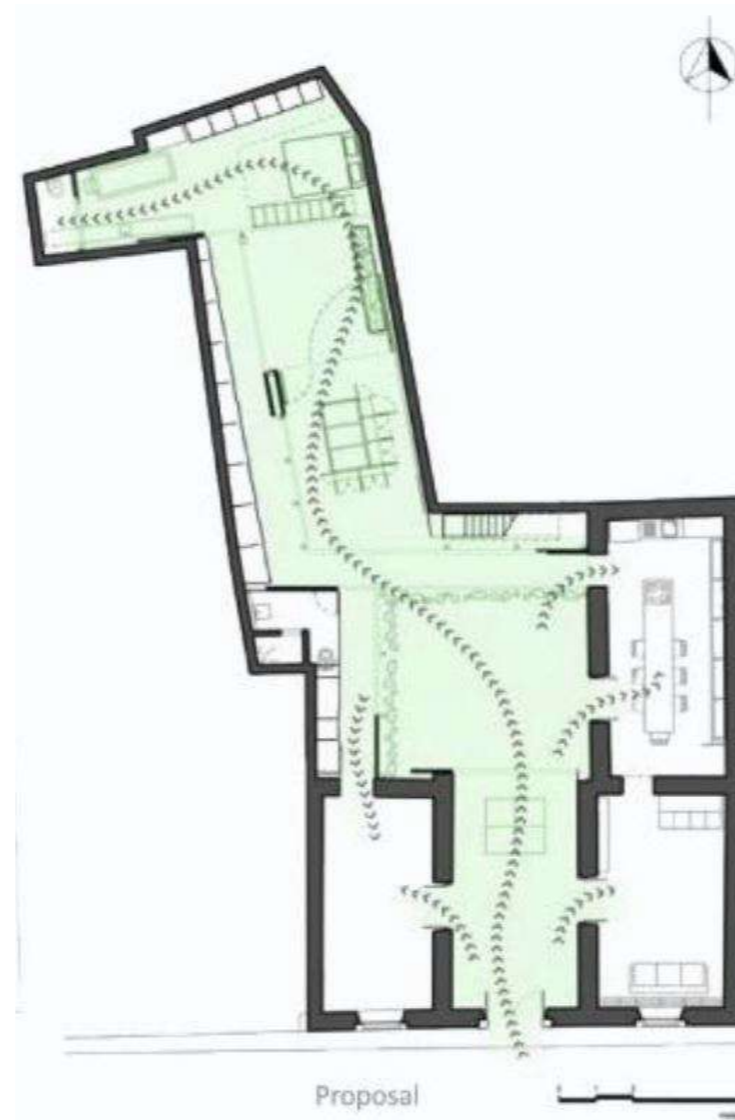


Fig.4: Proposed floorplan. © Y. Hadjichristou

Some parts of the walls were already falling and there was not any sanitary infrastructure that responded to the current human needs. Additionally, after an investigation about the house's street and neighbourhood context, a problem of sinking of the foundations was probably rising as there was an underground current running along the street.



Fig.5-6: Falling walls due to leakages and abandoness. The arch of the double room 'dihoron' with hidden painted ornaments.  
© Y. Hadjichristou

## Rehabilitation works

The rehabilitation works started by freeing the house from its roof. The original timber beams and roof tiles were treated and reused.

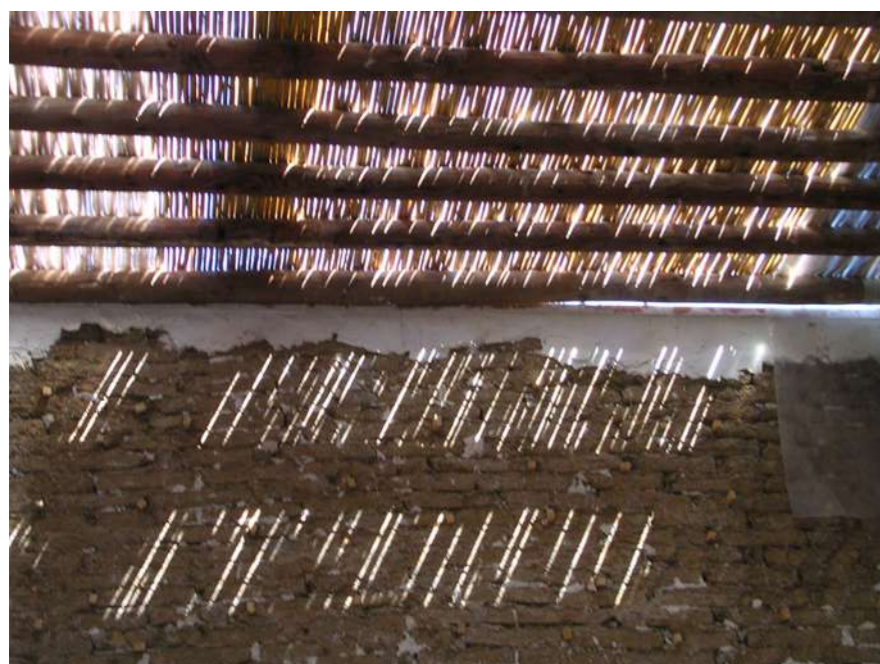


Fig.7: Reconstruction of the roof with treated existing timber beams and reed-work. © Y. Hadjichristou

A new placement of the reeds (bamboo family) was implemented in the traditional way of using them. 'Heraclith' was used in the roof to provide better thermal insulation. A series of steel rods and plates tight together the walls on the level of the roof for improving the house's earthquake resistance. For this reason and to avoid at a certain level the sinking effect, we constructed perimetrical reinforced foundation and drainage system. In various occasions, due to the Continuous urban fabric of the neighbourhood, the drying out of the humidity of the drainage takes place in the interior surfaces of the walls. As the flooring of the house was a result of various interventions, an in situ terrazzo structure was built, while the same pebble was used lose in the courtyard, thus

enhancing the unison of the interior and the exterior of the house.



Fig.8-10: Left to right: Revealing the painted ornamentation of the arch of the double room 'dihoron'. Revealing the walls and the roof structures. Adobe work and reinforcement of the wall with wood to receive plater work. © Y. Hadjichristou



Fig.11: Finding the traces of the arseras, the upper windows for cross ventilation. © Y. Hadjichristou

## Assessment of the results

The restoration works were carried out well in various aspects. Humidity issues at the lower level of the walls appeared, mainly due to the continuous urban fabric. The plaster and painting were replaced a few years after the house's completion with more enduring and breathing materials that evaporate the humidity faster and easily.



Fig.12: Roof View of the completed intervention. © Y. Hadjichristou



Fig.13: The kitchen and reuse of the 'achieronari' straw space for feeding the animals. © Y. Hadjichristou



Fig.14: Iliakos- sun room open. © Y. Hadjichristou



Fig.15: Iliakos- sun room with glass doors closed. © Y. Hadjichristou

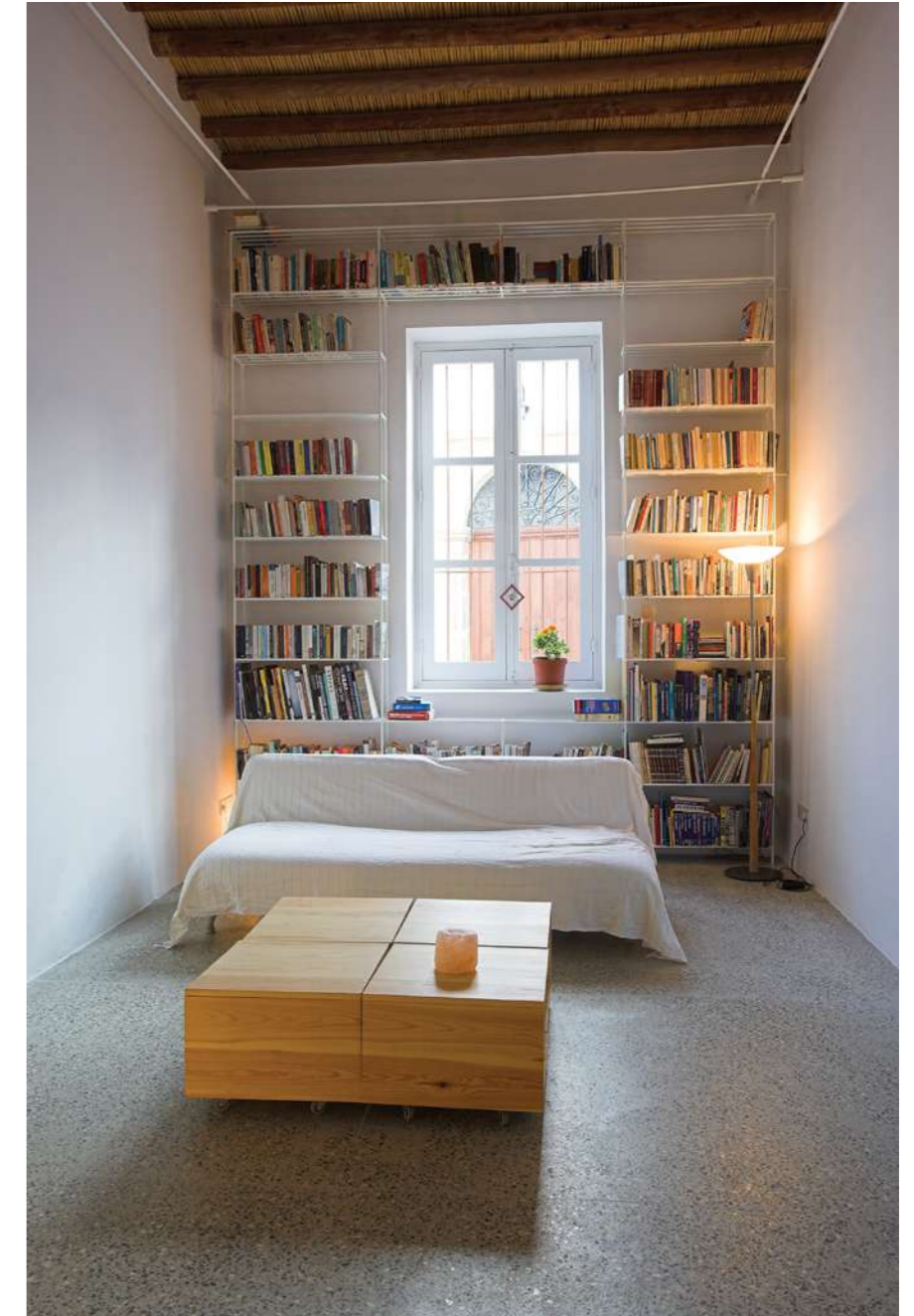


Fig.16: The detached by the wall library and the earthquake reinforcement in sitting area. © Y. Hadjichristou



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Fig.17: The main arch of iliakos sun room viewed from the courtyard. © Y. Hadjichristou

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