Lesic Dimitri Palace at Korcula

Description of the heritage and state of conservation and use of the heritage

The building of the Lešić-Dimitri Palace complex consists of two part, historically and structurally different, four storey Palace and the line of five monocellular ruins. The complex originally evolved as part of Korčula's medieval urban matrix. A city set on a hill of an island, the town has a disciplined plan that is both organic, its form derived from fishbone, feather or leaf, and geometric, a simple network of parallel east-west alleyways crossing a no less narrow north-south spine. These streets respond to wind and sun. Straight lanes stepping down to the west and the setting sun are open to the cooling maestral breeze in the summer, while those to the east fall in a gentle bend curving just enough to check the ingress of winter when the jugo blows. Built to a regular plot size and densely packed gable to gable along both sides of every street, the town's houses are double-banked stone dwellings backed onto a shared sewage line. Many no more than low cottage structures at first, most now rise from the same original footprint to a height of four or five storeys.

In common with many other properties in Korčula, the several plots now aggregated to form the Palace have been developed over time. Towards the end of the seventeenth century the aristocratic Lešić family, local landowners prominent in trade and commerce in Korčula, began to acquire a number of contiguous properties with a view to creating for themselves a prestigious urban residence. These plots were located near the top of the town behind the Cathedral of St Mark and immediately east of the old Church of St Peter. By the systematic merging of six single two-storey buildings that lay in two back-to-back rows on streets now known as Ulica Depolo and Ulica don Pavla Poše the basis for a prestigious urban palace was obtained. The separate six properties, dating from the late fifteenth and early sixteenth centuries, were linked by building over the sewage drain running between the rows while three more floor levels were later added to accommodate the family's needs and reflect its significant social position. While a larger volumetric whole was thus achieved none of the visibly monocellular tissue of the original townscape was destroyed. The building reaches the meaning of the Palace in local conditions.

An entrance to the new composite structure was formed on the western gable, off-street adjacent to the former apse of the Church of St Peter. It seems that the creation of a small forecourt here was made possible through the intervention of a prominent scion of the family, Vicentius Lessius, who became bishop of is Rab and later Krk. From the new entrance a flight of stairs rose to the piano nobile where, much in the manner of Venetian palazzo, a single large room extended through the central units of the palace plan from street to street with two corniced doorways in the south wall opening to a balustraded corbelled balcony. Further aggrandizement entailed the acquisition of a row of low sixteenth century cottages opposite the Palace across the street. These initially functioned as outhouses and service buildings but were later partially increased in height and connected to the Palace by two narrow bridges which crossed the street at the level below the piano nobile. While the simple forms of these late medieval cottages have substantially survived to the present, the Palace itself displays the more sophisticated revisions and decorative detail characteristic of the later eighteenth century. Indeed, work on the Palace was not finally completed until the nineteenth century.

By the time of Napoleonic rule in the early years of the nineteenth century, the buildings were suffering neglect. Rendered ill-suited to the needs of more modest family living by virtue of their adaptation to aristocratic pretension, the buildings were put to public use. For a period, part of the property was leased as a school during 50's, while part was given over to occupation by a large number of tenants. Finally, the Palace stood empty. Soundly constructed and secure, the buildings' structural masonry did not suffer unduly from this regrettable abandonment. Basic bearing construction of the palace (bearing stone walls) are partially damaged, fractured and dipped but the stability has not been seriously disturbed meaning that damage can be resolved with horizontal consolidations. Timber elements were less fortunate and without proper maintenance roofing spars, floor and ceiling beams, windows and doors were all considerably damaged. Most of horizontal wood constructions could not be used due to damage and the fact they do not correspond with allowed sinking. Stone plastic (window frames, doors, thresholds, wells, sinks) was more or less damaged mechanically.

The old cottage properties were left roofless and the space within their walls full of soil, used for a long time as a garden, a fate which caused serious damage to retaining walls and foundations. Most of the walls represented the remaining parts of houses that had been reconstructed and upgraded unequally on several occasions and the architecture of the entire sequence was in a very bad condition. Since openings were closed or perforated on particular units and all units were missing roofs or upper floors, completely opened construction had been for a long time exposed to different atmospheric conditions. Most of them were thus entirely damaged since their wall structure initially lacked quality. These circumstances lead to ruptures, serious damages of the construction and vertical and horizontal sinking of walls. At the same time, all elements connected with openings and niches suffered serious damages related to mechanical or time influences.

Value and significance

The buildings of the Lešić-Dimitri Palace complex make an important part of town's overall vista because it occupies almost one entire street and a large part of another. One of facilities is located at the end of street line thus forming town's east façade. The value of this building complex is related to ambient quality of late Baroque housing facility in the Mediterranean environment and to the role and position within Korčula's urban core.

Heritage protection status

Buildings are protected cultural monuments as of 1970 and are part of protected urban core of the Protected historical core of the City of Korčula, classified under number RST 541 and registered at the Register of immovable cultural assets of the Republic of Croatia – the List of protected cultural assets.

Aims and objectives of the project

The Lešić Dimitri Palace and five derelict cottages from 15th - 16th century had been neglected and uninhabited for some decades when it was bought by the current owners, Maša and Michael Unsworth, in late 2001. The total complex amounts to some 1300 m2 and contains a host of original features, mainly in stone, that reflect the long history of the site. The owners decided to create six luxury apartments, one on each floor, in order to preserve the existing floor plan as much as possible, as well as other common facilities. The whole would be supplied with luxury five star hotel services.

It was decided very early that a full restoration of the complex would be carried out in such a way as to restore the structural integrity of the buildings to the highest standard, preserve all existing features, maintain as far as possible the existing floor plan, and present the intrinsic qualities of the buildings. The aim of the conversion was to create a comfortable facility fully equipped with infrastructure usually present in luxury tourist facilities out of an old and damaged building lacking any infrastructure.

Socially, the intervention was supposed to draw attention to a great potential and value of old stone buildings and their potential functions following the reconstruction process. At the same time, the intervention may also serve as a set of guidelines for planning future reconstructions in the town as well as tourist development. Island's infrastructure cannot bear the burden of mass tourism and increasing number of low-quality accommodation facilities. Therefore, the palace intended to prove that the island of Korčula still has capabilities to develop high-class tourism which corresponds to the size and infrastructure of the island and city itself.

In order to reach that goal, comprehensive research work was necessary and it included architectural measurements, historical research and evaluation, archaeological research, conservation and restoration research. The conservation guidelines were crucial element for the reconstruction which had to be harmonized with competent conservation institution. Only after basic guidelines were adopted, it was possible to prepare sustainable programme, conceptual and construction design, supervise the implementation process, solve all unforeseen problems and

implement interior design solutions that would allow the beauty of the palace to be projected but would also have its own richness and importance.

Design and technical problems and solutions

The main issue was how to provide comfortable space with all the facilities needed for residential functions and at the same time preserve existing spatial concept.

The task of making one comfortable space meant the total improvement of thermal comfort and sound insulation.

The stone walls, traditionally not plastered from the outside, were impossible to insulate in contemporary manner. However, we can improve their characteristic through the process of constructive reconstruction. The walls consist of two layers of stone, one outside and one inside, with the loose material in the middle, became a dust through the time. Stone joints mostly cracked and become transparent and leak. The first stage was cleaning old joint and removing the old plaster. Then, after the constructive consolidation of the walls, the walls are injected with filling of lime, ground brick, white plaster, some additions, with previous cleaning of inside with blowing of compressed air. After all the walls are filled, the joints are closed in traditional way. From the inside, the walls are plastered with plaster with good thermal conditions. The openings in the wall are closed with new windows. New windows are made of oak, with IZO glass. We developed the products that are completely satisfying in the sense of thermal insulation, and completely traditional by appearance. The roof and floors on the grounds are treated like in any modern building. All the outer surfaces are consolidating, and now we go inside, up to sound insulation.

The existing horizontal constructions (wooden beams and wooden boards) don't offer any sound insulation, and the new content demand high sound insulation. The problem is that it is almost impossible to expand the height of horizontal constructions. The limiting factor for horizontal divisions was related to low height of the stone console on which wood beam was placed as well as the height of the first stone threshold above the ceiling that needed to be presented. The both feature are highly protected from the conservationists, valuable and beautiful. We find the answer in implementation of two very thin layers of lead sheets, with some small addition of some other hard insulation wherever possible.

The biggest problem with the design was how to provide facilities needed for residential functions and at the same time preserve existing spatial concept. For example, the building previously had two sanitary systems and new functions demanded one fully equipped kitchen for each residence and a bathroom for each room, meaning that the complex presently holds 13 toilets, 7 bathtubs, 13 showers, 20 bathroom sinks, 6 kitchen sinks and 6 washing machines. While finding solutions for this problem, present spatial organisation was kept with a central representation room leading to three or four rooms. Bathrooms were organised according to different conditions found on each floor mainly within the area belonging to the medieval division canal which served as a sewage system while a bathtub and sink were placed inside each room, evoking traditional psyche with a basin and a sink. This little architectural trick solution was a compromise between disharmony of given situation and necessary functionality.

Biggest technical problems were related to new standard utility functions such as hot running water in all parts of the facility and heating and cooling. Previously off course cooling and heating systems did not exist and there were no water supply lines (limited amounts of water were preserved in underground tanks). Solutions for such problems constituted in precise and meticulous work which could not have been done with a single comprehensive intervention but in each room separately. Most vertical installations were located in the division canal area. We choose the heating and cooling VRV system with very good characteristics with the spending of electricity and also acceptable concerning the low noise emission. Outer units are placed on one roof terrace but also hidden from the fifth facade view which is very important for Korcula, and inner units are usually found their place in some piece of furniture, and don't disturbing the beauty of the interior as a whole.

In the reconstruction process we used both modern and traditional materials and skills:

appropriate building and conservation techniques;

- Protection of archaeological excavations by cleaning, disinfection, geotextile and dry send
- Non-aggressive opening of walled up walls, restoration and reconstruction of damaged stone windows and door frames
- Removing and marking stone flooring and then placing it back
- Fitting of stone wells, sinks, gutters and other stone features, restoration and new instalment
- Non-aggressive elimination of recent vertical and horizontal concrete constructions
- Dismantling iron finish hardware from stones and recovering fissures
- Repairing a sequence of stone elements, entire facade and seriously damaged parts with stone inlays. Elements with smaller damages were repaired with a composite made from lime and stone dust
- Fortifying stone walls above openings with straps of stainless steel sheets glued with epoxies resin
- Deflating existing smaller fissures with compressed air, wetting and injecting
- Fortifying larger fissures with passive stitching and anchors made from shear reinforcing bars, injecting
- Removing mortar, cleaning, deflating, wetting and filming joints and fortifying all bearing walls with artificial cement gravitation procedure
- Covering inner wall faces with lead SilicoFluid on places where damaging salts were found
- Mounting anchors on top of marginal walls
- Reconstructing wall tops, cracked masonry arches, ruined parts of walls and etc.
- Fortifying vaults and cisterns with steel felts and epoxies resin
- Cleaning and impregnating wood beams for purposes of preservation
- Embedding new wood beams connected with laminated wooden plates and interconnecting with the construction with screws, anchors, epoxies resin and sheet metal made of stainless steel
- Gluing carbon bands on the walls for earthquake resistant reinforcement at the same height as horizontal constructions and anchoring
- Cleaning façade and other stone elements with an adequate paste, fine sand blasting, washing with water under high pressure and hydrophobing

use of traditional crafts and skills;

- manual masonry and stone cutting
- Producing irregular shape flagstone with handmade bevelled edges; surface: hand-made blinded and split, bush hammered and hand pineappled
- Constructing compound two face walling in lime mortar
- Stone cutting and surface dressing of parts or whole faced stone window and door frames, lintels, thresholds, sinks and other stone elements
- Plastering interior and façade walls with lime
- Covering with clay roofing tiles in lime stucco with wet wood battens
- Preparing wooden constructions with classic carpeting bonds

The project reached the quality in every aspect of the restoration, accentuated the beauty of the building and the whole street, and both the originality and the richness of the interior, as well as its quality, reflecting the committed efforts of a lots of collaborators. The finalised project immediately achieved great interest, both from the local community as from the future customers.

High quality and scope of all works on the reconstruction has prolonged building's life for many future generations.

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