

REINFORCEMENT OF INTERDISCIPLINARY SKILLS IN THE FIELD OF ARCHITECTURAL COMPOSITION/CONSERVATION. THE “CABAÑAL RECORD”

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Abstract

The “Cabañal Record” educational experience, which took place in the 2015/2016 academic year at the Higher Technical School of Architecture of the Universitat Politècnica de València, has provided a common framework for the development of interdisciplinary skills, both characteristic and tangential to two disciplines, Conservation and architectural composition. The work presented by the authors is linked to the development of a joint project carried out by students from three different subjects (Architectural Conservation, Architectural Composition, Conservation of Non Monumental Historic Architecture).

This teaching action aims to ascertain the architectural details of a historic neighbourhood in the city of Valencia, the Cabañal, whose unique urban layouts and residential buildings stand out for both their architectural value and their extreme decay. Under the lemma “learning to conserve” the students executed three axes of action based on recording information and onsite didactic experience.

First, the historic blocks were documented, selecting unique buildings within them and studying possible conservation projects applied to specific cases. Subsequently, constructive characteristics common to several historic buildings were identified, propping them up and classifying them with a view to identifying conservation criteria. Finally, the distinctive composition characteristics of the historic buildings in the neighbourhood were studied to be used as guidelines in the design of new buildings and for empty plots. These three joint actions were then combined in an exhibition open to the entire School and providing a common interpretation of the project carried out.

Keywords: work by projects, active methodology, cooperative work.

1 INTRODUCTION

Over the 2015/2016 academic year the department of Architectural Composition of the Higher Technical School of Architecture of Valencia examined several subjects jointly in a practical teaching activity connected with a real construction setting in the city.

The location chosen for the study was the historic neighbourhood of Cabañal, which is linked to the city's seafaring tradition. The challenge of conserving popular architectural heritage in the face of urban speculation is greater in this district than in others [1]. This has been especially true since the late 20th century, when Cabañal came under threat from the extension of an avenue [2], potentially entailing the destruction of its 19th century historic layout, its popular architecture and Modernist buildings. Although this “Sventramento” has not yet been executed, it has been facilitated by an urban policy of expropriations, demolitions and neglect. Currently, the uniqueness of the Cabañal is that, although part of the city, it has an extremely complex identity of its own, but one also marked by problems of substandard housing, decay and conflictive social classes which have failed to adapt.

2 COMMON PRACTICE FOR THREE DIFFERENT SUBJECTS

The subjects involved in the practical study were Architectural Conservation (RES), Architectural Composition (COM) and Conservation of Non Monumental Historic Architecture (RAHM). The three subjects, part of the same curriculum and department (Architectural Composition), are studied in different years and have different contents. At the same time, the analysis of the teaching guides [3,4] shows common learning and skill objectives, and methodological guidelines. This has encouraged and favoured the development of a practical exercise common to all three courses, as can be seen below.

The subject of ARCHITECTURAL COMPOSITION (4th year, 5.5 credits) comprehensively examines architectural interpretation, analysis and creation throughout the entire process, from idea to completion. Thus, the Composition subject aims to initiate students into the methodology for a self-aware and carefully thought-out project. In addition, the main aim of the subject of ARCHITECTURAL CONSERVATION (5th year, 4.5 credits) is to provide all students with knowledge of the methodology, allowing them to understand the importance and complexity of the problem, in addition to the necessary basic theoretical training for adopting intervention criteria. Finally, in the Official Master's in Architecture subject CONSERVATION OF NON MONUMENTAL HISTORIC ARCHITECTURE (4.5 credits) the aim is to raise awareness among students of the "alternative" facets of historic architectural heritage, enabling them to study, catalogue, protect and restore it. Students are expected to carefully examine constructions, in many cases anonymous buildings with no "apparent" value, to discover the underlying identifying features of this architecture, revealing the design mechanisms behind the purpose of their construction.

All three subjects are taught by the Department of Architectural Composition, aiming at teaching students in a common cognitive research process which uses resources including data, drawings, and written documents to extract methodologies, theories, forms, techniques and solutions. These training activities are rounded off by an assimilation and "metabolization" process that encourages carefully executed design and conservation.

Another aim of the three disciplines is for students to get to know and to carry out a detailed analysis of their nearest built-up environment in the region of Valencia. This encourages the creation of practices and exercises reflecting students' personal involvement through data collection in situ and a degree of familiarity with both the geography and context of the case studies [5].

3 ANALYSING THE PRESENT OF A NEIGHBOURHOOD, KNOWING ITS PAST AND THINKING ABOUT ITS FUTURE

The practical activity proposed consists in the development of a professional practice which works on effective skills so that studies carried out on a real context, such as the Cabañal neighbourhood in Valencia, may indeed be of future use to these aspiring architects.

For this the practical exercise designed incorporates an initial approach that is common to all three subjects in terms of urban scale analysis, development of a prior study and of an intervention project for different historic buildings in the Cabañal neighbourhood (RES). An additional process involves the interpretation and taxonomical analysis of some of the main constructive features in the neighbourhood (RAHM). The main historic composition features of preserved buildings were also studied to analyse and design guidelines for sites and new construction in this urban area (COM). Below is a detailed account of the different practices as well as their aims and main results.

3.1 Architectural Conservation

Each group of 5 or 6 students was put in charge of a block or part of a block in this project. Thus each group carried out the prior studies required to get to know a historic block and its urban layout with the depth and precision essential to a correct intervention proposal.

The prior studies were carried out after a general description of the block and characterisation (location, historic description, metric-descriptive survey, study of materials and constructive techniques, stratigraphic study of the architecture, study of decay phenomena and mechanisms, study of structural problems). Finally, a preview was prepared for the Conservation project of one or two unique buildings which stood out for their degree of conservation, construction interest or urgent need for intervention. Special attention was paid in these cases to intervention criteria and specific aspects of the intervention (structural consolidation, interventions on damp, recovery of openings, functionality, etc.) as well as any needs and problems arising during the study stage [fig.1 and 2].

INTRODUCCIÓN Y EMPLAZAMIENTO

Ref. Manzana 267, Calle Pare Lluís Navarro-Calle Progrés-Calle Columbretes-Calle Empar Guillém

EMPLAZAMIENTO



HISTORIA DEL CONJUNTO

El cabanyal es el conjunto histórico que se extiende paralelo a la costa de la ciudad de Valencia. La tipología edificatoria son tradicionales barracas de la huerta adaptadas al uso de los pescadores. En 1936 se constituye el Ayuntamiento del Cabanyal, dando origen al nacimiento de un pueblo con plena autonomía municipal, siendo Francisco Curbellà el primer alcalde. En cuanto a la tipología edificatoria, el poblado se constituye de tradicionales barracas de huerta adaptadas al uso de los pescadores. La pesca que se practicaba era un tipo de pesca de arrastre, la conocida pesca de les boies. Así pues, algunas de estas casas se constituyen de dos plantas, la barraca o casa en sí y una especie de concha para los arrastres. Las barracas eran esenciales y rectangulares y con el paso del tiempo se consolidan en series de hileras transversales a la calle. El trazo del conjunto se ordena como se ha mencionado en parcelas rectangulares. Estas parcelas se agrupan en manzanas longitudinales con sus lados largos orientados a este-oeste. Aparecen así una serie de calles paralelas de norte a sur y de este a oeste que permiten una mejor conexión con el mar así como el paso de las brisas. En lo que a la manzana a estudio se refiere, esta pertenece a la parte del ensanche del siglo XIX.

SITUACIÓN ACTUAL



PROPUESTAS PARA EL FUTURO

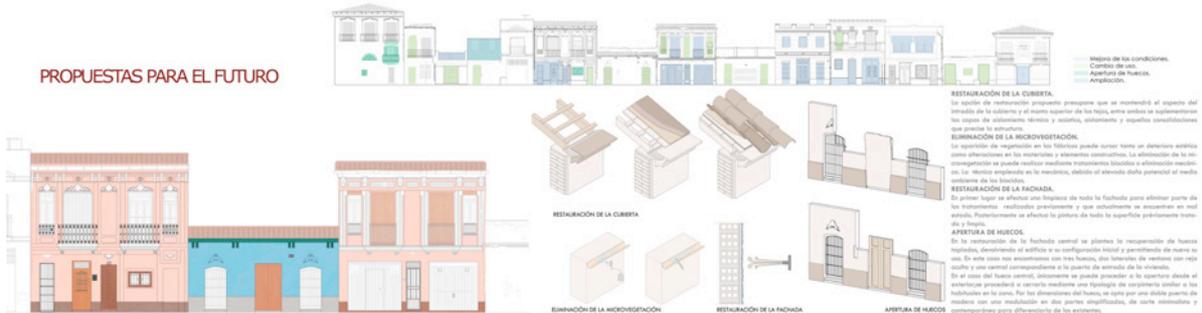


Fig. 1 and 2. Details of practical activity presented by students of Architectural Conservation. (Credits: Fiumara, Mancini, Onetti, Ortuño, Sánchez, Torres, Abellán, Bañuls, Di Diego, García, Ruiz).

3.2 Conservation of No Monumental Architecture

The students, organised into groups of 5 or 6, were guided by teachers in choosing some of the main constructive features of the Cabañal neighbourhood (including ventilation systems, continuous and non continuous renderings, balconies, balustrades and covered balconies...).

Therefore, the study of each group in this case was not limited to a specific block, but rather to a complete review of specific constructive details in different points of the neighbourhood.

The analysis focused on the metric, geometric, construction and material parameters of different constructive elements which included original constructive features and a state of conservation good enough to enable their identification in detail.

Photographs were combined with drawings and a study of the material and/or structural decay in order to complete the taxonomic and documentary study of some of the main original constructive characteristics of the neighbourhood [fig.3 and 4].

3.3 Architectural Composition

Each group of 5-6 students was assigned a previously selected block for a practical exercise on the particular different cases found in this extremely irregular urban fabric. As a result the fields of study present urban voids of different scales and geometries, together with unrelated buildings dating from the second half of the 20th century and incorporated into the setting with no compositional connection.

The analysis of the location, the study of the site geometry, the shape and volume permitted by regulations, the surrounding urban structure to which it could provide new values, the accesses and routes connecting each site with its surroundings, the incidence of daylight on the site, materials and perception, and the potential social function to be developed are some of the parameters that the students studied to extract compositional tools and mechanisms guiding the architectural interpretation, analysis, creation and/or reintegration.

This work resulted in proposals for new constructions on open sites and reintegration of existing architectures into the consolidated historic nucleus in line with a logical graphic progression [fig.5 and 6].

4 BEYOND SUBJECTS: INTERDISCIPLINARITY

Working on the tool of interdisciplinarity [6] in architecture encourages relational and complex knowledge that aspires to mutual dialogue - without denying or annulling the different subjects - to

resolve specific design problems associated to a neighbourhood with patent constructive, urban and social problems of different scales and orders.

Different pedagogues including Michaud, Keckhausen, Piaget and Jantsch [7] have shown that interdisciplinarity acts as an incentive to possible design activities. In addition, the design of joint practices avoids isolated, disperse and fragmented results. Instead, a dynamic process is promoted which seeks transversal solutions to the problems of urban voids, scales of existing buildings, decay of the neighbourhood's historic buildings and their valorisation.

This is why the practical activities executed in the three subjects studied implement a general critical analysis process, essential for a more aware, versed and self-critical conservation and valorisation of the neighbourhood.



Fig.3 and 4. Details of practical activity presented by students of Conservation of No Monumental Architecture (credits: Ricart, Aroca, Clares, Mayordomo, Ortín).

5 CONCLUSIONS

The aim of the three practical activities completed in the different subjects was to propose the different intervention criteria and ways to safeguard the neighbourhood, by using its potential to transform and take on new purposes, either for itself or for what it harbours. In addition, these practical activities allowed students to work on concepts including “restoration” and “design” as veritable tools for the socioeconomic revitalisation of the neighbourhood and as alternatives compatible with self-aware urban development.

This practical activity also allowed different interdisciplinary aims to be developed in the different subjects. This encouraged the integration of historic construction knowledge into the design process in a system promoting true valorisation of a problematic neighbourhood.

This also demonstrated the possibilities for coordination between different subjects, both proposals and potential results. This study process therefore encourages alternative solutions to characteristic problems through the rationalisation of the resources of each subject.

Moreover, a final exhibit of the best projects allowed students and members of the university community to share the results obtained, encouraging promising dynamics for future interactions between the course subjects found in this study.



Fig.5 and 6. Details of practical activity presented by students of Architectural Composition. (credits: Abietar, De Marchi, Maracchi, Pascual, Soler).

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