

PROBLEMS OF PRESERVATION: CASE STUDY OF NINETEENTH-CENTURY BUILDINGS WITH PREFABRICATED METALLIC STRUCTURES IN COSTA RICA

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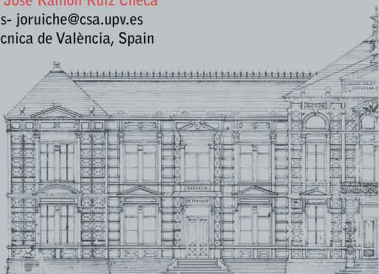
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INTRODUCTION

A detached feature of Costa Rican heritage is the group of prefabricated buildings, visible throughout the different central provinces of the country, built at the end of XIX Century, thanks to a Belgian Export Company/ "Herrerías de Aiseau".

The prefabricated metallic structures travelled from Ambers-Belgium to Limón, the Costa Rican harbor/port on the Atlantic Coast.

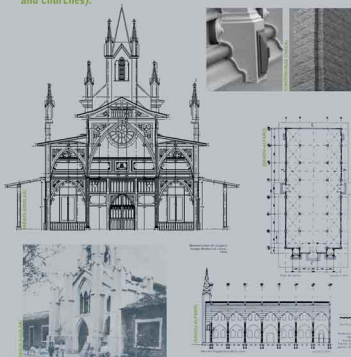
The main feature of these constructions is their complex system of structures, typical of the European Metallic Revolution. Thanks to a precise assembly process, great examples of typologies were built in the middle of the country (above all public buildings, such as schools and churches).



FEATURES OF METALLIC ARCHITECTURE

Metallic architecture formed part of a series of town planning and architectural projects led by the new governing classes in Costa Rica, who had become rich thanks to the export of coffee throughout the 19th Century.

The aesthetical criteria adopted for public real estates aspired to reflect the brand new technology and to represent a nation capable of sharing European constructive innovations (above all the advances in the galvanized iron industry).



CASE STUDIES AND PROBLEMS OF PRESERVATION

The case studies are the Church of Grecia, the Temple of Cartago and the Metallic School Building of San José. The study has taken into account general architectonic analysis and survey but, above all, the authors have focused on the different pathologies (both material and structural).

These are linked to incorrect maintenance of the structures (like inadequate paint cycles, incompatible materials...) or risks associated with current uses and space transformation (layout extensions, improving of sanitary facilities, urban and district transformations...).



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