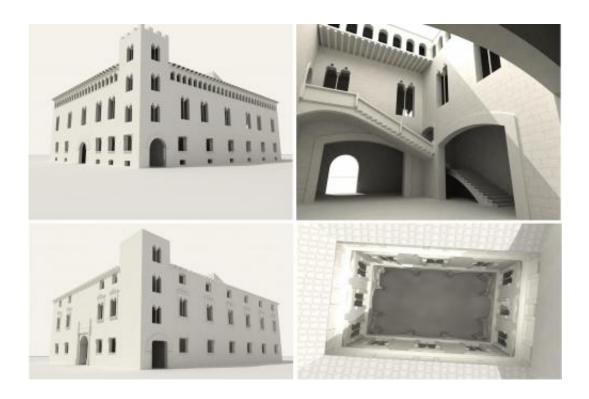


New method for reconstructing long-gone historic buildings in 3D

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Ambassador Vich's Gothic palace (above) in Valencia was transformed into a Renaissance palace (below). The style of the patio was also changed. Credit: Mercedes Galiana

Researchers from Murcia and Valencia (Spain) have recreated the palace that belonged to Ambassador Vich, a Gothic-Renaissance jewel that was demolished in the 19th Century. The technique, which uses historical and archaeological data of the building, can be utilised to learn more about other architectural monuments that have been destroyed.



The ambassador to the Vatican during the reign of Ferdinand the Catholic and Charles I was Jerónimo Vich y Valterra. The Renaissance styles that this noble discovered in Rome were introduced by him in around 1527 in his Gothic palace in Valencia, transforming it into one of the first pure examples of Renaissance architecture in Spain. Unfortunately, as with so many other historic buildings, it was demolished during the 19th Century to be used as a building site.

Now a team of researchers from the St. Anthony Catholic University of Murcia, the Polytechnic Universities of Cartagena and Valencia and the University of Murcia, have managed to bring the building back to life, at least virtually. The work has been published in the 'International Journal of Architectural Heritage'.

The method involves compiling all the historical, literary and graphical documents about the monument as well as information obtained from archaeological remains. Unknown aspects are determined from information obtained from other similar buildings. And at the end all the information is used to create 2D and 3D computer graphics of the different parts of the building, by using graphic design and animation software.

"This methodology can be applied to other architectural structures that once existed to establish aspects such as the general characteristics of the building, its appearance or where its interior elements are situated, such as patios and staircases," the main author, Mercedes Galiana, from the St. Anthony Catholic University of Murcia, told SINC.

For the palace belonging to Ambassador Vich, the demolition file from the end of 1859 was used, together with old drawings and photographs and the famous map of Valencia by Father Tosca. This documentation was used to establish the exact location in the neighbourhood of San Francesc and its architectural features.



Today there are two buildings situated on the plot which was once occupied by the palace during the 16th Century. When one was demolished in 1999 archaeological remains were discovered which have also been used as a reference for the project. Structures of other palaces, such as the Almirante and En Bou in Valencia or the Roman Palma-Baldassini, helped with the deductive analysis to show how it changed from a Gothic palace to a Renaissance palace..

Also, the artistic importance of the <u>palace</u> enabled its marble to be maintained to this day. Today the Renaissance building can be enjoyed once again, with its classic columns, capitals, arches, cornices and gables in Valencia's Museum of Fine Arts.

More information: Mercedes Galiana, Ángeles Más, Carlos Lerma, M. Jesús Peñalver, Salvador Conesa. "Methodology of the Virtual Reconstruction of Arquitectonic Heritage: Ambassador Vich's Palace in Valencia". *International Journal of Architectural Heritage: Conservation, Analysis, and Restoration* 8 (1): 94-13, 2014. DOI: 10.1080/15583058.2012.672623

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