



SESSION 1 - RESEARCH AND GEOMETRY  
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THE INVERSE PERSPECTIVE FOR ANALYZING  
A PAINTED ARCHITECTURE BY PAOLO VERONESE  
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#### ABSTRACT

The research we present in this paper is focused on the analysis of a painting that Paolo Veronese produced in 1573 and it is now collected in the Gallerie dell'Accademia Museum, in Venice. The title is *The Feast in the House of Levi* and it was painted for the refectory of the Basilica di SS. Giovanni e Paolo in Venice, known as a *Last Supper*. Thanks to the presence of an architectural scene, based on some great pillars and archways of a porch realized in frontal perspective, and two staircases on the left and on the right, it is possible to analyze this work using the rules of Descriptive Geometry that allow to transform a perspective in a orthogonal projection. Although the rules of inverse perspective are already codified, the particularity of this painting generates some difficulties to identify all the elements of the perspective. After the geometrical analysis of the perspective, we decided to realize the 3D digital model of the architecture, in order to verify, using an electronic superposition, the correspondence between the painted scene, represented on the canvas, and the virtual perspective, realized starting from the modeling activity. The research allows us to construct two models: the main one is that of the portico with staircases, the second one represents the refectory, such as we found in some historical archives of Venice buildings. This experiment was very useful to the didactic activity because it allowed us to teach students the rules of perspective and the importance of Descriptive Geometry to understand a work of art, but also because it was a relevant example in which research and teaching activities could be unified.

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