



SESSION 1 - RESEARCH AND GEOMETRY
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PERSPECTIVE AS A REPRESENTATION METHOD
Riccardo Migliari, Jessica Romor, Marta Salvatore

ABSTRACT

Traditional teaching of perspective wants the perspective image to be generated with various procedures, which make use of the orthogonal projections of the object that is to be represented. It is nevertheless well-known that the perspective image also can be generated autonomously, that is to say, without resorting to the orthogonal projections, as part of a method known as 'central projection'.

In many schools and in many textbooks these two paths, which both lead to the genesis of the perspective image, remain distinct, as if they were two different methods, if for no other reason than their vocation; the first, also called, improperly, 'the architect's method', which only focuses on the achievement of the result: an image similar to the natural vision of the space; the second, conceptual, devoted to the study of the central projection in itself and its applications of projective nature: from the genesis of the quadrics to the homography.

In the Roman school, yet, as from the second half of the twentieth-century, it was attempted to bring together into one single method the two above-mentioned approaches to perspective, giving a happy ending to a history that for centuries has seen the perspective split between artists and mathematicians. In this paper, after a short presentation of the characteristics of the 'perspective as a representation method', is highlighted the advantages of the aforesaid method in academic teaching. These are, precisely: first of all the possibility to see in the perspective the generalization of the representation methods, following on from the thought of Wilhelm Fiedler (1832-1912); then the possibility to easily add the concepts relating to infinity (points, straight-lines and the improper plane); and, the possibility to establish a relationship that is not general, but operational, between the graphical perspective and the digitally rendered perspective.