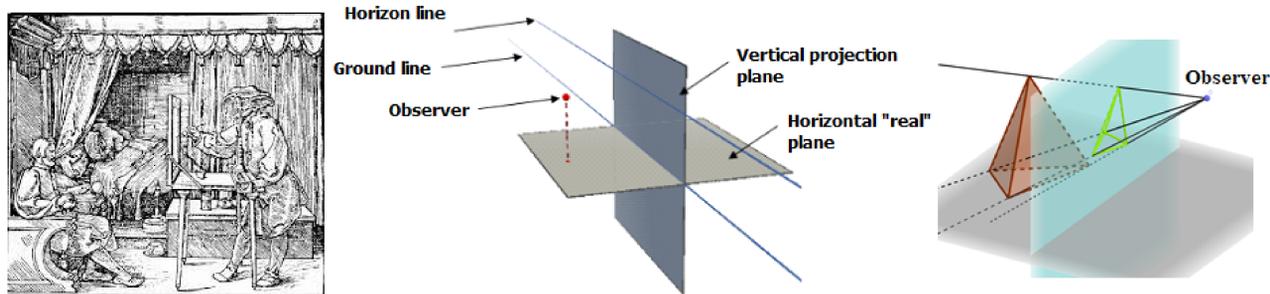


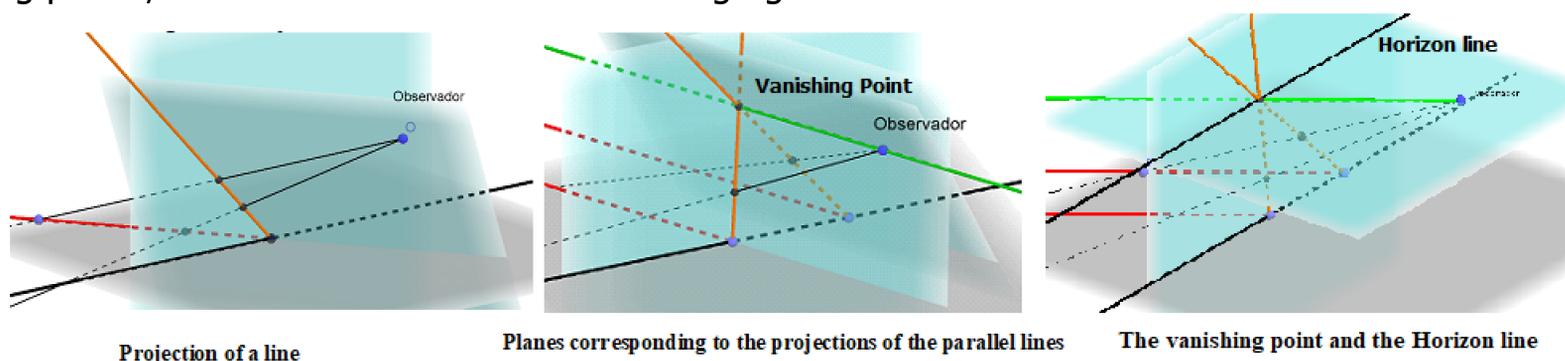
REVISITING PERSPECTIVE TECHNIQUES IN A DINAMICAL ENVIRONMENT FOR HIGH SCHOOL STUDENTS

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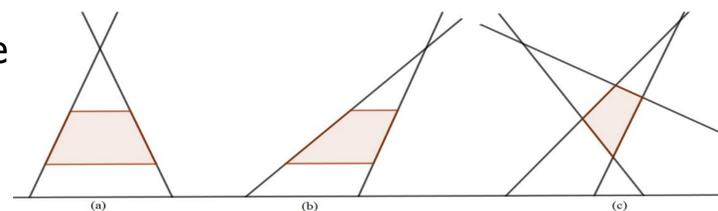
The purpose of this study is to present results of a proposal using perspective ideas for Geometry's teaching, developed with High School students. Based on historical evolution of techniques for bidimensional representations of spatial figures and supported by Parzysz's and Gutiérrez's studies on those representations, activities were developed to explore the techniques for constructing images in perspective in a Dynamic Geometry environment.



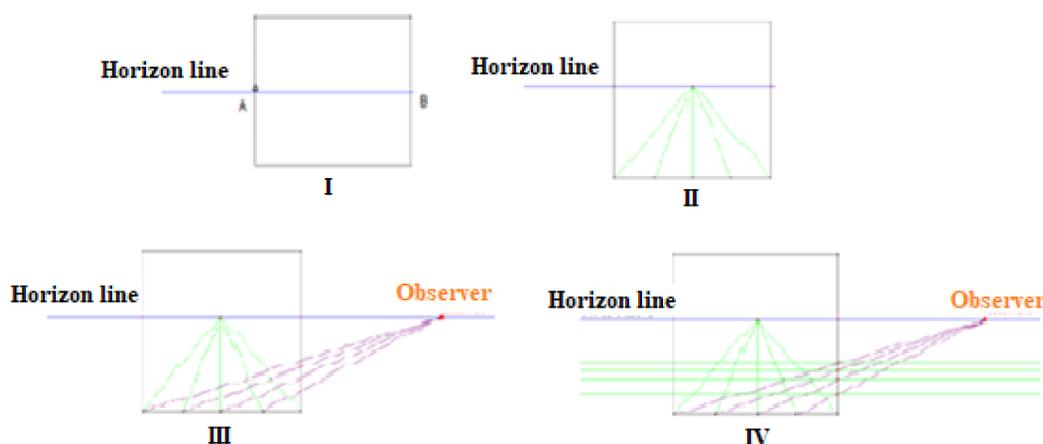
The first perspective techniques emerged in Italy in the 15th century, but since the 13th century artists already pursued to create images closer to reality: the painter, with his head held in a fixed support, reproduced the image on a transparent screen placed between him and the scene to be painted. Revisiting the ancient practices with the aid of a dynamic geometry software, geometric arguments allowed us to identify some of the fundamental elements of perspective representation as intersection of planes or lines: the ground line, the vanishing points, the horizon line as in the following figures.



Students discussed possible representations in perspective for parallelograms and issues associated with these representations, the original figures and their properties.



This revisiting also made possible to understand the first rules for the plane representation of three-dimensional figures, which were described as steps I to IV by Leon Battista Alberti (1404-1472) in his work "Della Pictura" or "On Painting" (ALBERTI, 1991).



Data analysis show that the dynamical context may provoke interest on geometric constructions and Geometry, and that a work of this nature may promote learning in Geometry.

References

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