



SESSION 4 - ARCHITECTURE AND GEOMETRY
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DESCRIPTIVE GEOMETRY LEARNING IS NO MORE THREATENED
BY DYNAMIC GEOMETRY SOFTWARE THAN STAIRS BY ELEVATORS¹

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ABSTRACT:

The Author intends to introduce the debate on the need to reorient Descriptive Geometry teaching in Portuguese High Schools, so that better responses to the present requirements are achieved: for students, a better understanding of the correlation between three-dimensional objects and what it is intended for them to represent and, for teachers, a series of resources to be constructed and shared in the educational context, that may improve teaching methods, without compromising the purposes of the subject-matter itself.

With this intent is demonstrated an introduction to the potentialities that simple augmented reality samples can present to improve students understanding, as well as the valuable contribution of a dynamic geometry software as versatile as GeoGebra for the explanation of specific themes on the Descriptive Geometry subject. Brief examples of some of GeoGebra's advantages are referred: the possibility of exploring, in class or as an online resource, dynamic or step-by-step constructions with the purpose of simplifying the learning process from the student's perspective.

Descriptive Geometry teaching has nothing to lose with the introduction of dynamic geometry software in the classroom, on the contrary.

Rephrasing Stephen Fry, the author that inspired this paper's title, a new technology doesn't substitute its precedent, quite the opposite, it complements it.

It is for us to learn how to adapt it and use it the better way.

¹ Stephen Fry's quote appropriation:

"This is the point. One technology doesn't replace another, it complements. Books are no more threatened by Kindle than stairs by elevators" (<https://twitter.com/stephenfry/status/1312682218>).

This paper is an extension of the author's presentation in "III GeoGebra Day" Conference held at Universidade de Aveiro on June, 2013.