

# Exploring dynamic movements in geometry with Cabri géomètre

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In this paper I solve a problem in Plane Geometry by exploring the continuity of the movement of the points in the space. Moreover, I analyze how to use Cabri Géomètre to explore these movements in teaching Euclidian Geometry. A nice feature of this software is that it offers the possibility to observe the dynamic movements of geometrical constructions, a task that would otherwise be done step by step if using ruler and compass. More important, this dynamic observation stimulates the mental construction of the visual image in a stronger way than in the step-by-step procedure. Different geometrical problems and conjectures can emerge by letting the student or the instructor imagine how the geometrical figures result out of the movements of points in Cabri. I borrow Vigotsky's ([6]) ideas about how spontaneous and scientific concepts are formed to suggest that the dynamic construction of geometrical concepts and figures with Cabri adds flexibility to the learning process. Moreover, such flexibility also depends on the close participation of the student in moving and constructing geometrical figures in Cabri.

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