Thomas Drucker* (druckert@uww.edu), Dept. of Mathematical and Computer Sciences, University of Wisconsin-Whitewater, Whitewater, WI 53190. Applications of Geometry in the Philosophy Classroom and Beyond. Preliminary report.

Geometry as presented in Euclid's Elements has served as a model for the presentation of philosophical ideas through the millennia. Even before Euclid, Plato wanted to keep those ignorant of geometry out of the Academy. What is it about geometry that makes it especially appealing to philosophers in expounding their subject? This talk will seek to answer that question in the time of Plato and then in the seventeenth century in the work of Descartes, Spinoza, and Leibniz. The discussion will conclude with an examination of the effects of changes in the geometry curriculum in the schools in the role the subject can play in presenting philosophy. (Received September 09, 2012)