

ROBERT THOMAS, University of Manitoba, Winnipeg, MB R3T 2N2
Euclid's Non-Euclidean Geometry

One sometimes hears it said that Euclid's *Elements* is a compendium of the mathematical or geometrical results that were known at the time of writing. While Euclid's *Conics* ought to be a counterexample, it is not extant and so is useless. Another of Euclid's books, his astronomy book the *Phaenomena*, is not itself a counterexample either because it contains no significant geometrical results. But it makes definite presuppositions of geometrical theorems well outside the material of the *Elements*. The paper illustrates some of these.