962-01-161 **Craig G. Fraser*** (craig.fraser@utoronto.ca), Inst. Hist. Phil. Sci. & Tech., Victoria College, University of Toronto, Toronto, Ontario M5S1K7, Canada. *Hilbert's Grundlagen der Geometrie and Its Relation to Euclid's Elements.*

Hilbert's Grundlagen der Geometrie (1899) is widely regarded as a canonical work of "modern" mathematics. Howard Eves and Carroll V. Newson write, "By developing a postulate set for plane and solid geometry that does not depart too greatly in spirit from Euclid's own, and by employing a minimum of symbolism, Hilbert succeeded in convincing mathematicians, to a far greater extent than had Pasch and Peano, of the purely hypothetico-deductive nature of geometry" (Foundations and Fundamental Concepts of Mathematics [1966, p.94]). The origins and historical influence of Hilbert's book have been examined in the writings of Michael Toepell and Leo Corry. The purpose of the present paper is to provide a comparative study of the Grundlagen and Elements I-VI in order to elucidate points of similarity and difference in approach, concept and outlook between the two works. The paper also explores the meaning of deduction in the modern mathematical tradition. (Received August 17, 2000)