How is it that the high school analysis of polynomial equations and the modern algebra of the research mathematician—so seemingly different in their objectives, in their tools, and in their philosophical outlook—are both called “algebra”? Are they even related? The fact is that they are. This talk will sketch the long and complicated story of how they are related via a 4000-year-long history that stretches from Mesopotamia around 1800 B.C.E.—when mathematicians recorded an algorithm for solving quadratic equations on clay tablets like BM 13901, held today in the British Museum—to the publication in 1930 of Bartel van der Waerden’s classic text, Moderne Algebra. (Received May 10, 2007)