

1056-H1-1420      **Toke L Knudsen\*** (toke.knudsen@oneonta.edu), Department of Mathematics, SUNY Oneonta, 108 Ravine Parkway, Oneonta, NY 13820. *Geometry and Algebra in Ancient Civilizations by B. L. van der Waerden: A Text Exploring the Origin and Development of Ancient Mathematics.*

Bartel Leendert van der Waerden (1903–1996) was a Dutch mathematician, famous for his work in the field of algebra, but also respected for his contributions to the history of mathematics. His *Ontwakende wetenschap* (1950), translated into English as *Science Awakening* (1954), has provided much inspiration to students of the history of mathematics. In *Geometry and Algebra in Ancient Civilizations* (1983), however, van der Waerden entered a more speculative path in his investigation of ancient mathematics, following ideas articulated by scholars such as Abraham Seidenberg. A basic theme of the book is the idea that there is a pre-Mesopotamian ancestor to the mathematics in the ancient cultures of Mesopotamia, Egypt, India, Greece, and China. Van der Waerden argued that in mathematics, diffusion is much more likely than independent discovery, and that therefore the mathematics of these cultures is derivative from the mathematics of the older, pre-Mesopotamian, culture. This and other assumptions made by van der Waerden are problematic, and will be critiqued both in the light of the knowledge available at the time of the publication of the book, as well as in the light of more recent research. (Received September 21, 2009)