

1125-01-1410 **Erik R. Tou*** (etou@uw.edu), University of Washington – Tacoma, Interdisciplinary Arts & Sciences, 1900 Commerce St., Campus Box 358436, Tacoma, WA 98402. *Thousand-year-old geometry: al-Karaji's Treatise on the Extraction of Hidden Waters*. Preliminary report.

Abu Bakr ibn Muhammad ibn al-Husayn al-Karaji (c. 1000 CE) is remembered by mathematicians as an algebraist, and as one who helped make the subject less geometric and more abstract. However, this notion fails to capture the geometric (and more specifically, Euclidean) inheritance of mathematicians of al-Karaji's time and place (11th century Baghdad). Using selections from a forthcoming English translation of his *Treatise on the Extraction of Hidden Waters*, we look at some geometric constructions and proofs from this late-career work of al-Karaji. (Received September 16, 2016)