

1163-01-942

Joseph W. Dauben* (jdauben@gc.cuny.edu). *The Students' Lament: Three Multi-Tasking Problems in the Suan shu shu, a Western Han Dynasty Mathematical Work from Ancient China.*

In 1983–1984, a mathematical work dating to the second century BCE was discovered in the tomb of a government bureaucrat excavated from a burial site near Zhangjiashan, in Jiangling county, Hubei Province, China. Archaeologists and historians of mathematics, however, agree that the contents of the *Suan shu shu* in general reflect the state of mathematics in the pre-Qin and primarily that of the Warring States period (475–221 BCE). The *Suan shu shu* is not a printed book but an ancient work written on bamboo strips, which when tied together originally formed a bamboo roll. The recovered pieces thus constitute an authentic document from the very time at which it was created. This presentation will begin with a brief discussion of certain special features of ancient Chinese bamboo texts in general and the challenges researchers face in dealing with these ancient materials. It will then focus on three closely related problems in the *Suan shu shu* that exhibit some especially interesting features, particularly in the methods applied for their solution. In conclusion, questions related to the possible pedagogical significance of these three problems will also be considered. (Received September 14, 2020)