Why is there Math in my Archaeology?

The modern foundations of quantitative archaeology, written decades too soon.

Fifty years ago, what was arguably the most important paper ever written for modern work in quantitative archaeology was published in American Antiquity. Unfortunately for its author, and generations of archaeologists, few took notice of it at the time. With few citations, more than half of which have occurred in just the last few years, its elegance and mathematical precision went largely unappreciated – even by the growing cohorts of computational and quantitative archaeologists whose work would have greatly benefited from it. In this paper, we demonstrate that John Justeson’s 1973 article “Limitations of Archaeological Inference” was not only accurate and precise in its implications, but also very much still at the forefront of archaeological thought… even if the field at large doesn’t yet realize it.