

# Hobbes on the Order of Sciences

## A Partial Defense of the Mathematization Thesis

ZVI BIENER<sup>\*</sup>  
UNIVERSITY OF CINCINNATI

[http://philsci-archive.pitt.edu/11868/1/Biener\\_Hobbes\\_on\\_Order\\_Preprint.pdf](http://philsci-archive.pitt.edu/11868/1/Biener_Hobbes_on_Order_Preprint.pdf)

**Abstract.** Accounts of Hobbes's 'system' of sciences oscillate between two extremes. On one extreme, the system is portrayed as wholly axiomatic-deductive, with statecraft being deduced in an unbroken chain from the principles of logic and first philosophy. On the other, it is portrayed as rife with conceptual cracks and fissures, with Hobbes's statements about its deductive structure amounting to mere window-dressing. This paper argues that a middle way is found by conceiving of Hobbes's *Elements of Philosophy* on the model of a mixed-mathematical science, not the model provided by Euclid's *Elements of Geometry*. I suggest that Hobbes is a test case for understanding early-modern system-construction more generally, as inspired by the structure of the applied mathematical sciences. This approach has the additional virtue of bolstering, in a novel way, the thesis that the transformation of philosophy in the long seventeenth century was heavily indebted to mathematics, a thesis that has increasingly come under attack in recent years.