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Johannes Buteo's The Shape and Capacity of Noah's Ark

Translated by

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with an introduction by
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JOHANNES BUTEO'S THE SHAPE AND CAPACITY OF NOAH'S ARK

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Abstract

Sixteenth century French mathematician Johannes Buteo published an influential logistical study of Noah's Ark in 1554. The treatise *Arca Noë, Cuius Formae, Capacitatisque Fuerit, Libellus* originally appeared as part of his *Opera Geometrica*. This was the first work to seriously consider the logistical details of the Ark, including its construction, capacity, and an estimation of the number of inhabitants and food and provisions required. Other logistical studies of Noah's Ark appeared in the 150 years following Buteo's work, and all based their innovations on Buteo's pioneering study. Presented here for the first time is Buteo's entire work in English.

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Johannes Buteo, Accommodation, and the Integration of Faith and Learning

TODD CHARLES WOOD

The sixteenth century is notable in Europe for the rejection of traditional knowledge in favor of empirical observation. After studying the Bible, Martin Luther clashed with Catholic authority over its meaning and application. In the area of natural philosophy, 1543 was a particularly important year, with the publication of Copernicus' correction of Aristotle's cosmology and of Vesalius' correction of Galen's anatomy.¹

For most scientists today, the struggle between authority and free inquiry is personified in Galileo's struggle with the Catholic church over the Copernican cosmology at the beginning of the seventeenth century. In his *Letter to the Grand Duchess Christina*, Galileo outlined a hermeneutical tactic that he believed answered the biblical objections to Copernicanism. According to Galileo,

I think that in discussions of physical problems we ought to begin not from the authority of scriptural passages but from sense-experiences and necessary demonstrations.... It is necessary for the Bible, in order to be accommodated to the understanding of every man, to speak many things which appear to differ from the absolute truth so far as the bare meaning of the words is concerned. But Nature, on the other hand, is inexorable and immutable; she never transgresses the laws imposed upon her.... For that reason it appears that nothing physical which sense-experience sets before our eyes, or which necessary demonstrations prove to us, ought to be called in question (much less condemned) upon the testimony of biblical passages which may have some different meaning beneath their words.²

This principle of accommodation afforded Galileo a means of explaining biblical passages such as Ps. 104:5, "the foundations of the earth ... should not be removed for ever." According to Galileo, this verse and others like it were not meant to communicate literal truth but rather to

1 Copernicus (1543) and Vesalius (1543).

2 Drake (1957, pp. 182-183).