

## Pseudo-Ptolemy *De Speculis*

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### Introduction

#### *The Text.*

The present article provides a new edition of William of Moerbeke’s Latin translation of a lost Greek work on mirror optics, together with an English translation that attempts so far as possible to recover the sense of the original Greek text, which was presumably entitled *κατοπτρικὰ* or *περὶ κατόπτρων*, “On Mirrors.”<sup>1</sup> It has been printed before: first at Venice in 1518 (**ed**), with a reprinting the following year;<sup>2</sup> secondly by Valentin Rose in 1870; and most recently by Wilhelm Schmidt in the second volume (1900) of the Teubner edition of Hero of Alexandria. Largely on account of the manner of its inclusion there, *De Speculis* is now commonly cited as Hero’s *Catoptrics*.

The text as given below is transcribed from William’s autograph, *Ottobonianus Lat.* 1850 (**O**). All previous editions depend on a somewhat debased version of the text. It was Rose himself who rediscovered the collection of Latin translations of Archimedes and other scientific authors in **O**, but this was in 1884, long after his publication of *De Speculis* from the fourteenth-century Erfurt manuscript *Amplonianus Qu.* 387 (**A**).<sup>3</sup> By the time that Schmidt came to reedit the work, Heiberg had not only reinforced Rose’s suggestion that the translations in **O** (or most of them, at any rate) were by William, but also had pointed out clear signs that **O** was William’s autograph.<sup>4</sup> Schmidt, however, seems not to have been familiar with Heiberg’s article, and his knowledge of **O** was at first only through the medium of a

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<sup>2</sup>*Sphaera mundi noviter recognita cum commentariis et authoribus* (Venice, dated June 30, 1518); *Sphaera cum commentis in hoc volumine contentis* (Venice, dated January 19, 1518 [i.e. 1519 modern reckoning]). Schmidt (1900, 307–308) describes the June issue as the reprint, not realizing that in Venice the new year began with March.

<sup>3</sup>Rose 1884 (*non vidi*).

<sup>4</sup>Heiberg 1890, 3–10.