

*Valerian Magni`s vacuum experiments in support of the light metaphysics*

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In 1647, in Warsaw, in the presence of the royal family, the Capuchin Valerian Magni, then Legate of the Congregation De Propaganda Fide, conducted an experiment to prove the existence of the vacuum. He published a description of the experiment the same year in Warsaw under the title *Demonstratio ocularis*, and it was the first printed text to report on the experimental confirmation of the existence of a vacuum. The text aroused stormy reactions from both opponents of Galilean science and its proponents, who suspected Magni of plagiarism, so *Demonstratio* was published several more times, supplemented by the author's reactions to the controversy.

The philosophical background of the experiment, which was the Neo-Platonic metaphysics of light, is somewhat obscured by its importance in the history of science. The aim of my paper is to show that it was actually the support of the light metaphysic which led Magni to the experiment. The purpose of the experiment was to demonstrate the unsustainability of Aristotelian natural philosophy through the sensory confirmation of light as a principle that is not bound to matter: the experiment showed that light passed through a glass tube from which the air had been exhausted, i.e. there was no substance in it. For Valerian Magni, then, light becomes a fundamental physical principle, complementing his earlier emphasis on light as an epistemological and metaphysical principle.