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Brief Biography:

Erin Webster is a PhD Candidate in the Department of English literature at the University of Toronto. Her research investigates the connections between experimentalist and imaginative literature in seventeenth-century England, with a focus on the topics of vision and perspective. She has published an article in "English Studies" on Margaret Cavendish’s socio-political interventions into Descartes’ physics. The current paper is part of a larger study into the connections between Milton’s poetry and the optical writings of Kepler, Descartes, and Newton.

Paper Title:

The Eye as Camera Obscura in Kepler, Descartes, and Milton  

Abstract:

John Milton begins book 3 of "Paradise Lost" with an invocation to Light that reflects upon the relationship between physical and spiritual vision. Personal in tone, the invocation is all the more powerful due to Milton’s own autobiographical experience of blindness. Yet in spite of the invocation’s extensive description of the physical experience of blindness, it has rarely been discussed in terms of Milton’s physical understanding of vision. Instead, critical analysis has tended to gravitate towards discussion of the Neoplatonic sources and allusions behind the two types of vision outlined in the invocation: bodily sight and spiritual insight. These allusions are certainly important to Milton’s understanding of spiritual vision, but by framing the discussion of Milton’s epistemology solely in terms of Neoplatonism, this criticism overlooks equally illuminating parallels between Milton’s work and seventeenth-century optical theory.

In this paper I contextualize Milton’s invocation within the framework of the optical theory of his period by examining the parallels—and the distinctions—between the role played by light in Milton’s model of vision and models proposed by Johannes Kepler and René Descartes. It is my position that in the invocation Milton adopts Kepler’s theory of the retinal image, further developed by Descartes, which posits that the human eye operates according to the mechanical principles of a camera obscura in which light is refracted through the eye’s lens, projecting an inverted image of exterior objects onto the retina. Whereas Kepler and Descartes use the camera obscura to discover the properties of light as it relates to vision, Milton uses the analogy of the body as a camera obscura to express the fragility of vision. Milton phrases the relationship between light and vision in Kepler and Descartes’ terms, but also explores the theological and epistemological implications of having light at “one entrance quite shut out,” thereby being “presented with a Universal blanc” (PL 3.48-50) in the place of the retinal projection screen.