LEARNING THEIR LANGUAGE: 
CAVENISH’S CONSTRUCTION 
OF AN EMPOWERING 
VITALISTIC ATOMISM 

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In 1664 under the persona of a female natural philosopher and epistolier, Margaret Cavendish urges her reader that one might not spend her time more “honourably, profitably, and delightfully, then in the study of Nature” (Philosophical Letters 414). Because Cavendish’s childhood education inadequately prepared her for a career in natural philosophy, she embarked on a program of self-education. This study must have been most pleasing to a woman who at an early age identified her vocation as one of reading and writing (True Relation 205–06). Like Cavendish’s kidnapped heroine of The Blazing World who “took courage and endeavoured to learn their language” (130), Cavendish established for herself the authorization to speak publicly by learning the male-dominated language of seventeenth-century science. Cavendish’s scientific writing embodied one of the numerous strategies she used to gain a voice, one that might speak in public not only to formally educated men but to all of her female readers, as well. To resuscitate Cavendish’s philosophical works and demonstrate the empowering nature of self-education and philosophical study for a seventeenth-century British woman, I examine in this essay Cavendish’s brand of atomism, focusing on where she takes issue with contemporary natural philosophers on debates about matter and motion, perception, and knowledge acquisition. Cavendish’s natural philosophy contributes to seventeenth-century natural philosophy, and for this reason alone, it is valuable, but more important is its empowering nature for a seventeenth-century English woman denied active participation in the schools and laboritories of the day.

Through her marriage to William, then the Earl of Newcastle, Cavendish gained admission to the Cavendish Circle, a group of natural philosophers associated with William and his brother, Charles. The
Cavendish Circle was active from the 1630s to the latter 1640s and 1650s, though Margaret did not join the group until the 1640s. Prior to the war, William and Charles opened their residence, Welbeck Abbey, to natural philosophers including Robert Payne, Walter Warner, John Pell, Marin Mersenne, Sir Kenelm Digby, and Thomas Hobbes; they corresponded with William Oughtred and Francois Derand, and they are said to have invited Descartes to England. This “little academy,” as Jean Jacquot describes it (19), studied matter theory, optics (particularly the telescope), mathematics, and Galileo’s works. Hobbes introduced the group to ideas he encountered on his numerous trips to the Continent, such as Galileo’s theories, Italian treatises on hydraulics, and Claude Mydorge’s work with telescopes (Jacquot 14–26).

During the upheaval of the civil war, neither William nor Charles enjoyed time to continue his studies, and, having lost hope in victory, both sailed for Germany in July of 1644 and then moved to Paris in the following year. In France, the circle was extended to embrace Margaret Cavendish, Descartes, and Roberval; from his extant letters, we know that Charles also communicated with Father de Rheita, a renowned maker of telescopes, and the German mathematician Joachim Jungius. During these years of exile, members of the group investigated current theories on telescopes, “phoranomics” or the science of movement, analytics, and the ancient materialists. They followed the metaphysical dispute about Cartesian dualism of mind and body between Descartes, on the one side, and Hobbes and Gassendi, on the other, finally witnessing reconciliation between the two parties (Jacquot 175–85). Cavendish contributed to the circle’s work by writing and publishing her own original brand of vitalistic atomism.

As a participant in the natural philosophy of a period teeming with various opinions, Cavendish created her own complex model of matter that early on in her career much resembled Epicureanism but that she later developed into her own brand of vitalistic atomism. Believing in a natural order consisting of intelligent matter, she felt compelled to transform her materialism into a vitalistic system. Cavendish’s first work, Poems and Fancies (1653), explores in poetry the principles of her early atomism. In the same year, her Philosophical Fancies also appeared. Cavendish found after some study that her early Epicurean materialism failed to explain movement and change, and so two years