

**Ian Lawson, “Bears in Eden, or, This Is Not the Garden You’re Looking for: Margaret Cavendish, Robert Hooke and the Limits of Natural Philosophy.” *The British Journal for the History of Science* 48.4 (2015) 583-605.**

Ian Lawson’s main purpose here is to shed light on Margaret Cavendish’s disparaging characterization of the Royal Society’s early fellows (especially Robert Hooke) as bear-men in her utopian satire the *Blazing World* (1666). In particular Cavendish turned her ire on microscopical observation, whose techniques were enjoying considerable popularity, thanks in large part to Hooke’s *Micrographia* (1665).

Lawson’s introduction sets out the belief among the Royal Society’s fellows that newly built instruments were enabling microscopy to exceed by far the limitations of human sight, as well as Cavendish’s reservation that this ambition inevitably elevated humans above their natural station and could not but generate dangerous misconceptions. Next, he introduces the *Blazing World* and its population of anthropomorphized characters, dwelling on the role and standing of the philosopher bear-men. The following section explores seventeenth-century microscopy more deeply, arguing that the age’s natural philosophers presented optical instruments in terms suggesting them as natural, rather than artificial, extensions of the sense of sight. Turning to bears, Lawson sketches some early modern perspectives on bear-baiting and ursine nature, as well as some ways in which the behaviour of experimental scientists recommended itself to Cavendish’s pen for this kind of lampooning. He then turns to the status of knowledge after “the Fall,” setting out the Royal Society’s ambition to reconstruct what fragments of Adamic learning may be recovered, and its inevitable collision with Cavendish’s organic sense of epistemology, as knowledge, for Cavendish, inheres in all creation’s objects to the extent, and no further than, divinely apportioned. Observation, Cavendish believed, could not generate new knowledge in humans beyond that which was naturally theirs. Finally, Lawson emphasizes the importance he feels Cavendish attached to social and political, as well as natural rank, concluding with a discussion of her visit to the Royal Society in 1667 and a suggestion that Cavendish approached the Society on this occasion as she would any other public entertainment.

At the centre of this essay is an interesting point about Cavendish’s decision to cast bears in the roles of Royal Society virtuosi: the bear when properly restrained was quite fit for baiting in the name of public entertainment, but in popular literature bears were invoked to suggest danger or pomposity; they were prone to “overstepping their proper place” (594). The sense that the Royal Society too had exceeded its natural remit seems to have been the basis of Cavendish’s criticisms of its fellows in the *Blazing World* (criticisms that were echoed by others as Lawson points out), and her fundamental assumptions about natural knowledge and their differences from those of the Society are the appropriate contexts in which to offer an analysis of her bear-men philosophers. There are, however, some shortcomings in the case presented. Lawson is eager (perhaps too eager) to paint the Royal Society in the colours Cavendish chose for it. He is at pains to insist that seventeenth-century mechanistic understandings of the eye as a lens and screen “allowed optical instruments to be naturalized as parts of the body of the experimenter” (591). But the argument that Hooke’s celebration of the microscope in *Micrographia* “upon occasion, renders it completely transparent” is

surely questionable: there can scarcely be a text in which the technology that enables its observations is more consistently and explicitly apparent (590). This is the most startling, but several points are stretched or finessed to help describe a community of experimenters susceptible to dispraise. Sometimes Cavendish's position is simplified too. Speculation that Cavendish treated her visit to the Royal Society "rather like any other London entertainment – a trip to the theatre or bear garden" neglects her engagement in print and through correspondence with experimentalism and the Society, as well as the influence of various Society figures on her own natural philosophy (605). Cavendish may have disliked many of the Society's practices, she may have rejected some of its assumptions, but her relationship to the institution was more complex than Lawson's account of disdain, alternating with engagement as a mere forum for passing amusement, allows.

Flaws notwithstanding, the article has value for scholars of literature and science in its unpicking of the rhetoric used by an influential detractor of the infant Royal Society's experimental programme; the bear, Lawson shows, entertains intellectual, political and social meanings, which Cavendish exploits. There is perhaps more to do in uncovering the meanings of bears in the *Blazing World*, and in early modern intellectual discourse more broadly, and certainly potential for further exploration of the circulation and reception of Cavendish's text and its influence in the seventeenth century's later decades.

David Thorley  
Independent Scholar