

Margaret Cavendish

Margaret Cavendish, the Duchess of Newcastle, was one of the most prolific and outspoken female philosophers of the early modern period. While Elisabeth's philosophy is confined to her correspondence, Cavendish published no less than six philosophical treatises in defence of her own distinctive form of monistic materialism.¹ In these lengthy works, Cavendish deliberately and self-consciously defines her position alongside those of the leading philosophers of her day. Like Elisabeth, Cavendish is inspired by the rise of the new 'egalitarian' style of philosophy in seventeenth-century Europe; she is a champion of reason above the senses in natural philosophy; and she too addresses the problem of how two entirely distinct substances, the soul and the body, can causally interact. But unlike Elisabeth, Cavendish's mature philosophy was conceived in England in the 1660s, a period of growing mistrust and opposition to Cartesianism – particularly from the Cambridge Platonists, who, after an initial period of acceptance, were rather dissatisfied with the 'atheistic' overtones of Cartesian mechanism.

In this chapter, I examine Cavendish's responses to three key philosophical figures of her time: Descartes,² Thomas Hobbes, and Henry More. Recent scholars emphasise that Cavendish has many views in common with Hobbes.³ Like the materialist philosopher, Cavendish

¹ These are *Poems, and Fancies* (1653; second edition, 1664; third edition, 1668), *Philosophical Fancies* (1653), *The Philosophical and Physical Opinions* (1655; second edition, 1663), *Philosophical Letters* (1664), *Observations Upon Experimental Philosophy* (1666; second edition, 1668), and a much-revised edition of the *Opinions* titled *Grounds of Natural Philosophy* (1668).

² Cavendish is the only English woman who met Descartes in person – but it seems that she did not form a very favourable opinion. In her *Philosophical and Physical Opinions*, she says that 'I never spake to monsieur *De Cartes* in my life, nor ever understood what he said, for he spake no English, and I understand no other language, and those times I saw him, which was twice at dinner with my Lord at *Paris*, he did appear to me a man of the fewest words I ever heard' (Cavendish, *Philosophical and Physical Opinions*, 'An Epilogue to My Philosophical Opinions', sig. B3^v).

³ Anna Battigelli, 'Political Thought/Political Action: Margaret Cavendish's Hobbesian Dilemma', in *Women Writers and the Early Modern British Political Tradition*, edited by Hilda L. Smith (Cambridge:

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believes that the only substance in the created world is matter; she rejects Cartesian dualism on the grounds that the idea of immaterial substance is inconceivable; and she supports Hobbes's separation of theology and philosophy. But here I emphasise that Cavendish's position is also shaped in response to the Cambridge Platonists, and especially Henry More. In the 1660s, Cavendish actively courted the attention of this circle of thinkers. She dedicated prefaces to 'The Most Famous University of Cambridge'; she sent lavishly bound copies of her books to More and the university libraries; and from around 1666–7, Cavendish engaged in a correspondence with Joseph Glanvill (1636–80), an admirer of the Cambridge circle and a fellow of the Royal Society.⁴ Glanvill once told Cavendish that she had 'convinced the World, by a great instance, that Women may be Philosophers, and, to a Degree fit for the Ambitious emulation of the most improved Masculine Spirits'.⁵ Yet Cavendish has an ambivalent attitude to the theories of the Cambridge men. In so far as Cavendish supports materialism, her position radically differs from the Cambridge school; but where she diverges from Hobbes, Cavendish holds a surprising number of the Platonist's views. Like the Cambridge men, Cavendish explicitly rejects Hobbes's mechanistic conception of nature, and she defends the view that animals have the capacity for sense and reason. She also employs a method of argument that is distinctive of Henry More's explanatory approach to the natural world. Cavendish takes More's method to its logical extreme, to develop a full-bodied monist theory in which the entire natural world possesses intelligence, and the soul is material and extended.

I

Cavendish was born in 1623 as Margaret Lucas, the youngest daughter of Sir Thomas Lucas, a wealthy gentleman of Colchester. Her father died when Margaret was only an infant, and she and her siblings were brought up by their mother Elizabeth. Margaret was given a typical female

Cambridge University Press, 1998), pp. 40–55; and Sarah Hutton, 'In Dialogue with Thomas Hobbes: Margaret Cavendish's Natural Philosophy', *Women's Writing* 4:3 (1997), 421–32.

⁴ Glanvill's letters to Cavendish are in *A Collection of Letters And Poems: Written by several Persons of Honour and Learning, Upon divers Important subjects, to the Late Duke and Dutchess of Newcastle* (London: Langly Curtis, 1678). In their correspondence, Glanvill and Cavendish discuss a number of issues that Cavendish brings up in her published works: the origins of the immaterial soul, the existence of witches, the Platonist doctrine of plastic nature, and questions concerning God's role in his creation.

⁵ Glanvill to Cavendish, 22 April 16 – [?]; in Cavendish, *Collection of Letters And Poems*, p. 136.

education in singing, dancing, music, reading, and writing. She was given no tuition in the learned languages, and nor did she receive any formal education in philosophy or science. But in 1643 she became a maid of honour to Queen Henrietta Maria, and followed her into exile in 1644. In Paris, Margaret met William Cavendish (later the Duke of Newcastle), whom she married in 1645 following a brief courtship. The couple remained abroad in exile for fifteen years, returning to England upon the Restoration in 1660.⁶ Thirty years her senior, the Duke (1593–1676) introduced his young wife to a circle of intellectuals that has been described as an ‘unofficial “university” of the mechanical philosophy’ in Paris.⁷ The members of this group, known as the ‘Cavendish’ or ‘Newcastle Circle’, included the Duke’s brother, Charles Cavendish, as well as Thomas Hobbes, Kenelm Digby, and Walter Charleton. At one stage the network also extended to Descartes, Pierre Gassendi (1592–1655), and Marin Mersenne (1588–1648). It has been claimed that the Newcastle Circle was responsible for the re-introduction of atomic philosophy into England in the mid-seventeenth century.⁸ They promulgated the view that all natural phenomena can be explained by the action of atoms in motion, and they adapted the mechanistic explanations of Gassendi toward this end.⁹

Shortly after her marriage, Margaret Cavendish became an active and enthusiastic participant in this group, and eventually developed her own ideas on natural philosophy. In a preface to *The Philosophical and Physical Opinions* (1655), she says that just as some women go from house to house for dancing, dining, and gossip, she would accompany her husband and ‘dance a measure with the muses, feast with the Sciences, or

⁶ Margaret Cavendish did spend an extended period in England with her brother-in-law Charles, from 1651 to 1654, in an attempt to raise money for her husband. For biographical details on Cavendish see George Ballard, *Memoirs of Several Ladies of Great Britain (who have been celebrated for their writings or skill in the learned languages, arts and sciences)*, with an introduction by Ruth Perry (Detroit: Wayne State University Press, 1985), pp. 277–82, 415, 455–7; Douglas Grant, *Margaret the First: A Biography of Margaret Cavendish, Duchess of Newcastle 1623–1675* (London: Rupert Hart-Davis, 1957; Toronto: University of Toronto Press, 1957); Kathleen Jones, *A Glorious Fame: The Life of Margaret, Duchess of Newcastle, 1623–1673* (London: Bloomsbury, 1990); and H. Ten Eyck Perry, *The First Duchess of Newcastle and her Husband As Figures in Literary History* (Boston and London: Ginn and Company, 1918).

⁷ Robert Hugh Kargon, *Atomism in England from Harriot to Newton* (Oxford: Clarendon Press, 1966), p. 68.

⁸ *Ibid.*, pp. 63–76.

⁹ More recently, however, Stephen Clucas argues that Pierre Gassendi was not the principal influence on the Cavendish circle as a whole, and that there is a persuasive case ‘for an independent English atomistic milieu’ (see Clucas, ‘The Atomism of the Cavendish Circle: A Reappraisal’, *The Seventeenth Century* 9:2 (1994), 256).

sit and discourse with the arts'.¹⁰ Cavendish was not the first woman to take an interest in the Newcastle Circle. Elisabeth of Bohemia was acquainted with the scientific innovations of Charles Cavendish, a frequent visitor to her home; and in her letters to Descartes, Elisabeth comments on Kenelm Digby's views about the immortality of the soul. Queen Christina of Sweden was also interested in the Epicureanism of Gassendi, a key influence on the Newcastle Circle;¹¹ and Anna Maria van Schurman communicated with both Gassendi and Mersenne. It is possible that the reputations of these women boosted Margaret Cavendish's confidence as a philosopher, and legitimised her intellectual endeavours. By 1668, Cavendish had published thirteen original works ranging in style from philosophy and biography to poetry and drama.

Upon her return to England, Cavendish's reputation for eccentricity made her something of a celebrity. Her visit to London in 1667 aroused so much interest that crowds thronged the streets to catch a glimpse of her carriage; and her admission to a session of the Royal Society in May that year was the talk of the town.¹² But the contemporary judgements made on her intellect are stark reminders of seventeenth-century prejudices about women thinkers – the general consensus was that she was 'mad'. Upon meeting her, Mary Evelyn remarked that Cavendish's conversation was as whimsical and rambling 'as her books'.¹³ Dorothy Osborne wrote that there were 'many soberer People in Bedlam';¹⁴ Samuel Pepys said that she was mad, conceited, and ridiculous; and Katherine Jones, Lady Ranelagh, claimed that 'she [e]scapes Bedlam onely by being too rich to be sent theather'.¹⁵ In this century, Cavendish's

¹⁰ Cavendish, *Philosophical and Physical Opinions*, 'To the Reader', sig. A4^r.

¹¹ Åkerman *Queen Christina*, pp. 73–4.

¹² Cavendish was the first woman to be invited to a meeting of the Royal Society. For details, see Samuel Pepys, *The Diary of Samuel Pepys*, edited by Robert Latham and William Matthews (London: Bell, 1974), vol. 1x; and Samuel Mintz, 'The Duchess of Newcastle's Visit to the Royal Society', *The Journal of English and Germanic Philology* 51 (1952), 168–76.

¹³ Mary Evelyn to Ralph Bohun, April 1667; in the British Library, London, the 'Evelyn Papers' (uncatalogued). I am grateful to Dr Frances Harris in the MSS Department for referring me to these letters and those of Katherine Jones (below).

¹⁴ Dorothy Osborne to William Temple, 8 May 1653; in Dorothy Osborne, *Letters to Sir William Temple* (Harmondsworth: Penguin, 1987), p. 79.

¹⁵ Katherine Jones, Lady Ranelagh, to Richard Boyle, 13 April 1667; in the British Library, Althorp B4 (item 30):

and to shew y^u w^t things we are most taken up wth I assure y^u y^e Dutchess of NewCastle is more discoursed of yⁿ y^e Treatie, and by al y^e Characters I heare given her I am resolved she scapes Bedlam onely by being too rich to be sent theather. but she is madd enough to convey y^t title to y^e place of her Residence, whose boldnes and profannes is allowed to pass for wit because soe many others can put in noe other claymes to y^t qualtey yⁿ those very same. (*Ibid.*)

works have received more critical attention than any other woman's writings of the early modern period.¹⁶ But belief in her irrationality still persists. Joseph Knight in the *Dictionary of National Biography* writes that 'Her philosophy is the dead weight which drags her to the ground. In these deliveries an occasional piece of common sense is buried in avalanches of ignorance and extravagance.'¹⁷ Virginia Woolf remarks that 'order, continuity, the logical development of her argument are all unknown to her';¹⁸ Sylvia Bowerbank says that 'her writing is muddled and indecisive';¹⁹ and Carolyn Merchant claims that her theories are 'often inconsistent, contradictory, and eclectic'.²⁰

It must be acknowledged that these criticisms have some justification. Cavendish presents her ideas in a non-systematic, repetitive, and tortuous style; and she often simply asserts her views, rather than articulating

Katherine Jones, the sister of Robert Boyle, was also a woman of science, and her house a meeting place for the London intellectual community of the 1640s. Being an experimental philosopher herself, Jones may not have looked favourably on Cavendish's critique of the new science in her *Observations*. See Lynette Hunter, 'Sisters of the Royal Society: The Circle of Katherine Jones, Lady Ranelagh', in *Women, Science and Medicine 1500–1700*, edited by Lynette Hunter and Sarah Hutton (Stroud: Sutton, 1997), pp. 178–97.

¹⁶ For discussions on Cavendish's philosophy, see Battigelli, 'Political Thought/Political Action'; Sophia B. Blaydes, 'Nature is a Woman: The Duchess of Newcastle and Seventeenth Century Philosophy', in *Man, God, and Nature in the Enlightenment*, edited by Donald C. Mell, Theodore E. D. Braun and Lucia M. Palmer (East Lansing, MI: Colleagues Press, 1988), pp. 51–64; Sylvia Bowerbank, 'The Spider's Delight: Margaret Cavendish and the "Female" Imagination', *English Literary Renaissance* 14 (1984), 392–408; Clucas, 'The Atomism of the Cavendish Circle', pp. 247–73; Stephen Clucas, 'The Duchess and Viscountess: Negotiations between Mechanism and Vitalism in the Natural Philosophies of Margaret Cavendish and Anne Conway', *In-Between: Essays and Studies in Literary Criticism* 9:1 (2000), 125–36; Gallagher, 'Embracing the Absolute', 24–39; Sarah Hutton, 'Anne Conway, Margaret Cavendish and Seventeenth-Century Scientific Thought', in Hunter and Hutton (eds.), *Women, Science and Medicine*, pp. 218–34; Hutton, 'In Dialogue with Thomas Hobbes'; Susan James, 'The Philosophical Innovations of Margaret Cavendish', *British Journal for the History of Philosophy* 7:2 (1999), 219–44; Kargon, *Atomism in England*, pp. 73–6; Eve Keller, 'Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science', *English Literary History* 64 (1997), 447–71; Rebecca Merrens, 'A Nature of "Infinite Sense and Reason": Margaret Cavendish's Natural Philosophy and the "Noise" of a Feminized Nature', *Women's Studies* 25 (1996), 421–38; Eileen O'Neill, 'Cavendish, Margaret Lucas (1623–73)', in Craig (ed.), *Routledge Encyclopedia of Philosophy*, vol. 1, pp. 260–4; John Rogers, *The Matter of Revolution: Science, Poetry and Politics in the Age of Milton* (Ithaca and London: Cornell University Press, 1996), pp. 177–211; Lisa T. Sarasohn, 'A Science Turned Upside Down: Feminism and the Natural Philosophy of Margaret Cavendish', *Huntington Library Quarterly* 47 (1984), 289–307; Londa Schiebinger, 'Margaret Cavendish', in Waithe (ed.), *A History of Women Philosophers*, vol. 111, pp. 1–20; Smith, *Reason's Disciples*, chapter 3; and Jay Stevenson, 'The Mechanist-Vitalist Soul of Margaret Cavendish', *Studies in English Literature* 36 (1996), 527–43.

¹⁷ Joseph Knight, 'Cavendish, Margaret', in *The Dictionary of National Biography*, edited by Leslie Stephen and Sidney Lee (Oxford: Oxford University Press, 1917–), vol. 111, p. 1266.

¹⁸ Virginia Woolf, *The Common Reader* (London: Hogarth Press, 1968), p. 103.

¹⁹ Bowerbank, 'The Spider's Delight', 406.

²⁰ Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: Harper and Row Publishers, 1980), p. 270.

her reasons for holding them. Nevertheless, to be fair to Cavendish, her philosophy must be understood in light of its gradual development and in the context of seventeenth-century debate surrounding soul–body dualism and the new mechanical science. Viewed from this perspective, Cavendish’s thought can be seen as a rational contribution to the philosophical enterprise of her time.

II

First, Cavendish is undoubtedly inspired by the ‘popular Cartesianism’ that took hold on the English mind in the mid to late-seventeenth century, a Cartesianism characterised by opposition to ancient authority, and an emphasis on the thinking self as the source of knowledge.²¹ The shunning of tradition, and the emphasis on ‘starting anew’, inspires Cavendish to develop her own highly original and radical hypotheses. Like Elisabeth of Bohemia, Cavendish says that her own natural rationality is ‘a better tutor than education’.²² She claims her theories ‘did meerly issue from the Fountain of my own Brain, without any other help or assistance’.²³ This highly individualist approach is also promoted by Hobbes, a regular visitor to the Cavendish household in Paris. Cavendish seems to be influenced by Hobbes’s claim that true science depends on reason and rational deduction rather than sensory experience.²⁴ In ‘The Preface’ to *Observations Upon Experimental Philosophy* (1666), she expresses a mistrust of sensory experience, saying that ‘sense deludes more than it gives true Information . . . Wherefore Regular Reason is the best guide to all Arts’.²⁵ She also says that ‘the best judg is Reason, and the best study is Rational Contemplation joyned with the observations of regular sense, but not deluding Arts’;²⁶ and in her correspondence with Joseph Glanvill,

²¹ Nicolson, ‘The Early Stage of Cartesianism’, 369, 372.

²² Cavendish, *Philosophical and Physical Opinions*, ‘To the Reader’, sig. B 2^r.

²³ Margaret Cavendish, *Philosophical Letters: Or, Modest Reflections Upon some Opinions in Natural Philosophy, Maintained By several Famous and Learned Authors of this Age, Expressed by way of Letters: By the Thrice Noble, Illustrious, and Excellent Princess, The Lady Marchioness of Newcastle* (London: privately published, 1664), p. 3.

²⁴ On this topic, see Hutton, ‘In Dialogue with Thomas Hobbes’, 424; and Battigelli, ‘Political Thought/Political Action’, p. 44.

²⁵ Margaret Cavendish, *Observations Upon Experimental Philosophy. To which is added, The Description of A New Blazing World. Written By the Thrice Noble, Illustrious, and Excellent Princess, The Duchess of Newcastle* (London: A. Maxwell, 1666), sig. d1^r.

²⁶ *Ibid.*, p. 12. Cavendish’s preference for reason over the senses also informs her critique of the experimental method of Robert Boyle, Henry Power, and Robert Hooke. In her ‘Further Observations upon Experimental Philosophy’, she scorns the microscopists for trusting ‘more to the deceiving sights of their eyes, and deluding glasses, then to the perception of clear and regular Reason’ (*ibid.*, p. 4).

she objects to his setting ‘the perfection of the sense higher than that of Ratiocination’.²⁷ Cavendish is, however, non-dogmatic and open-minded about this approach: ‘I love Reason so well,’ she says, ‘that whosoever can bring most rational and probable arguments, shall have my vote, although against my own opinion.’²⁸

Cavendish’s reverence for reason is also evident in her occasional feminist remarks. In *Poems, and Fancies* (1653), she appeals to all ‘Writing Ladies’ to ‘show our selves a degree above Beasts; and not eate, and drink, and sleep away our time as they doe; and live only to the sense, not to the reason’.²⁹ In the *Philosophical and Physical Opinions*, she calls on the universities of Cambridge and Oxford to encourage her sex, ‘lest in time we should grow irrational as idiots, by the dejectedness of our spirits, through the carelesse neglects, and despisements of the masculine sex to the effeminate’.³⁰ She challenges those who think ‘it impossible we should have either learning or understanding, wit or judgement, as if we had not rational souls as well as men’.³¹ She regrets that women adopt the same negative view, and are led to ‘quit all Industry towards profitable knowledge’ and engage in ‘lowe and pettie employments’.³² She believes that by neglecting their intellectual capacities women ‘are become like worms that onely live in the dull earth of ignorance’,

for we are kept like birds in cages, to hop up and down in our houses, not suffered to fly abroad to see the several changes of fortune, and the various humors, ordained and created by nature; thus wanting the experiences of nature, we must needs want the understanding and knowledge and so consequently prudence, and invention of men.³³

Women are intellectually deficient not because they are without reason or a rational soul, but because they are prevented from improving their natural reasoning abilities. ‘Our counsels are despised, and laught at, the best of our actions are troden down with scorn, by the over-weaning conceit men have of themselves and through a dispisement of us.’³⁴

At first glance, Cavendish’s uncritical acceptance of reason places her at odds with recent feminist philosophers who believe that the Cartesian conception of rationality has negative implications for women. Genevieve Lloyd identifies a distinction between two types of reason

²⁷ Glanvill to Cavendish, [undated]; in Cavendish, *Collection of Letters And Poems*, p. 99.

²⁸ Cavendish, *Philosophical Letters*, ‘A Preface to the Reader’, sigs. B 1^r–v.

²⁹ Margaret Cavendish, *Poems, and Fancies: Written By the Right Honourable, The Lady Newcastle*, facsimile reprint of 1653 edition (Menston: Scolar Press, 1972), sig. Aa1^v.

³⁰ Cavendish, *Philosophical and Physical Opinions*, ‘To the Two Universities’, sig. B 2^r.

³¹ *Ibid.* ³² *Ibid.* ³³ *Ibid.* ³⁴ *Ibid.*

in Cartesianism: the untrained reason that relies on the senses, subsequently associated with femininity; and a highly abstract, specialised kind of thought, aligned with masculinity.³⁵ In eschewing the senses, Cavendish appears to support the ‘masculine’ side of the dichotomy. Nevertheless, Lloyd also argues that Descartes’ concept of reason must be seen in the context of his *dualism*. She believes that in Cartesian method there is an association between untrained reason and the body. A true philosopher, according to Descartes, must avoid immersion in the senses; clear and distinct thought can be attained only by distancing the soul from the material body. **In Cavendish’s writings, however, we are shown that a reverence for rationality need not imply an acceptance of dualism.** Cavendish explicitly rejects Cartesian dualism by using the very ‘natural reason’ Descartes so revered. The reasons for this rejection can be traced to the materialist influences on her thought.

The first obvious influence is the natural philosophy of the Newcastle Circle. Robert Kargon believes that, as part of this group, Cavendish played ‘an interesting role in the establishment of atomism in England which has been largely overlooked’.³⁶ In her first published work, the *Poems, and Fancies*, she maintains that the world is composed of atoms and that all change in nature can be attributed to the motion of differently shaped atoms. In one poem, ‘A World Made by Atomes’, she says that these atoms ‘by chance, may a New *World* create’.³⁷ They bring about changes through forced impulsion: by cutting and piercing, taking hold and pulling, or by beating each other. This philosophy contains one key feature of Cavendish’s later philosophy – the view that **the natural world is entirely composed of matter in motion, without any dependence upon God or spiritual substances.** But Cavendish explicitly renounces her atomistic views a few years later in her *Philosophical and Physical Opinions*, a revised version of the *Philosophical Fancies* (1653).

In a prefatory piece titled ‘A Condemning Treatise of Atomes’, Cavendish says that she cannot believe that there is no solidity in the world except the solidity made up of atoms; and nor can she believe that there is ‘no change or variety, but as they move, onely by fleeing about as dust and ashes, that are blown about with winde, which me thinks should make such uncertainties, such disproportioned figures, and confused creations, as there would be an infinite and eternal disorder’.³⁸ Such ‘wandering and confused figures’ could never produce those ‘rare

³⁵ Lloyd, *The Man of Reason*. ³⁶ Kargon, *Atomism in England*, p. 73.

³⁷ Cavendish, *Poems, and Fancies*, pp. 5–6.

³⁸ Cavendish, *Philosophical and Physical Opinions*, ‘A Condemning Treatise of Atomes’.

compositions' that we see in nature; they cannot account for nature's constancy, or the exact rules and laws that govern the natural world; and nor can they explain why there is evidence of life and intelligence in nature. Moreover, if nature were really made up of 'dull and immoving' atoms, she says, then it is difficult to see how material things can move. Atoms must be 'of a living substance, that is innate matter, otherwise they could not move'.³⁹

Stephen Clucas claims that Cavendish's later works espouse a form of neo-atomism, 'in which the basic premises of atomism are augmented and enhanced'.⁴⁰ But the neo-atomistic label seems inappropriate when rather than expand on her former views Cavendish is at pains to deny or condemn them.⁴¹ Cavendish presents further arguments against atomism in *The Philosophical and Physical Opinions* (1663), the *Philosophical Letters* (1664),⁴² her *Observations Upon Experimental Philosophy* (1666, with a second edition in 1668), and a revised edition of the *Opinions*, titled the *Grounds of Natural Philosophy* (1668). In the *Observations*, Cavendish says that colours are not made by 'dusty Atomes, flying about as Flies in Sun-shine'. For if this were true, 'all colours, and other Creatures would be composed or made by chance, rather then by reason, and chance being so ignorantly inconstant, not any two parts would be of the like colour, nor any kind or species would be preserved'.⁴³ From this, it is clear that Cavendish rejects atomism because it fails to provide a satisfactory explanation for the appearance of order and harmony in the natural world. Susan James suggests that this teleological approach against atomism may be indebted to More's *Antidote Against Atheism* (1653).⁴⁴ It might also be the case that Cavendish adopts this method of argument independently of More, and then later develops it in light of her reading of the *Antidote* and More's *Immortality of the Soul* (1659). In any case, the attempt to explain the

³⁹ *Ibid.* ⁴⁰ Clucas, 'The Atomism of the Cavendish Circle', 249, 259–64.

⁴¹ Eileen O'Neill argues that there is more reason to think that Cavendish's mature philosophy is consciously developed in opposition to atomism, in O'Neill's paper 'Philosophical Ambition: The System of Nature in Margaret Cavendish's Corpus', presented at the 'Seventeenth-Century Women Philosophers' conference at the University of Massachusetts, Amherst, November 1997.

⁴² In this work, Cavendish argues against the atomistic views of her colleague Walter Charleton (see *Philosophical Letters*, p. 455). It is not surprising that Charleton wrote to Cavendish (7 May 1667), saying of her natural philosophy that 'I have not yet been so happy, as to discover much therein that is *Apodictical*, or wherein I think my self much obliged to acquiesce' (Cavendish, *Collection of Letters And Poems*, p. 111).

⁴³ Cavendish, *Observations*, 'Observations upon Experimental Philosophy', pp. 63–4. See also 'Observations upon Experimental Philosophy', pp. 135, 141–2, 209; and 'Observations upon the Opinions of Some Ancient Philosophers', p. 16.

⁴⁴ James, 'The Innovations of Margaret Cavendish', 222–3.

order and regularity of nature is a persistent theme in both Cavendish and More's writings.

In the *Philosophical Letters: Or, Modest Reflections Upon some Opinions in Natural Philosophy* (1664), teleological reasoning re-emerges in Cavendish's arguments against soul–body dualism and mechanism. Cavendish's letters are addressed to an anonymous female correspondent who has requested the duchess's opinions about Descartes, Hobbes, More, and the chemist Jan Baptiste van Helmont. In the process of rejecting their views, Cavendish spells out her own beliefs. **The soul and body are not two distinct substances, she says, but both are made from the same matter, which is infinite throughout the universe in bulk and quantity. We can distinguish – in theory, at least – between three different kinds of matter: rational, sensitive, and inanimate. The rational and sensitive kinds are animated and self-moving; they constitute 'the life and knowledg of nature'. The inanimate or 'grosser part of matter', on the other hand, is incapable of moving itself. The sensitive can be distinguished from the rational in that the sensitive alone acts on the inanimate part of nature, helping it to move, while rational matter remains 'subtil and pure'. This materialism has affinities with the Stoic theory of blending.⁴⁵ Every particular creature, Cavendish says, contains a thorough *intermixture* of the three different kinds of matter: 'all matter is partly animate, and partly inanimate, and all matter is moving and moved, and there is no part of Nature that hath not life and knowledg, for there is no Part that has not a comixture of animate and inanimate matter'.⁴⁶ Every human being, animal, vegetable, and mineral is endued with 'Life and Soul, Sense and Reason'. Although created things are 'discerned from each other by their several Figures', every particular body is still made of the same material substance.⁴⁷**

A vitalist–materialist philosophy, according to Cavendish, avoids explanatory problems associated with soul–body dualism. Like Elisabeth, Cavendish says that she cannot understand how an immaterial substance can make an imprint upon a material substance, 'for Printing is a corporeal action, and belongs onely to bodies'.⁴⁸ Nor can she imagine how an immaterial substance, being without body, can have an impact on 'gross, heavy, dull, and dead matter'.⁴⁹ 'I ask you,' Cavendish says, 'how a bodiless motion can have force and strength to carve and cut?'⁵⁰

⁴⁵ On this topic, see Eileen O'Neill's 'Introduction' to Margaret Cavendish, *Observations upon Experimental Philosophy*, edited by O'Neill (Cambridge: Cambridge University Press, 2001), pp. x–xxxvi. This modern edition of Cavendish's work has only recently come to my attention.

⁴⁶ Cavendish, *Philosophical Letters*, pp. 98–9. ⁴⁷ *Ibid.*, p. 7. ⁴⁸ *Ibid.*, p. 330.

⁴⁹ *Ibid.*, p. 196. ⁵⁰ *Ibid.*, p. 77. ⁵¹ *Ibid.*, p. 197.

Appealing to the principle of causal similarity, she claims: ‘I cannot conceive how a Spirit should fill up a place or space, having no body, nor how it can have the effects of a body, being none itself; for the effects flow from the cause; and as the cause is, so are its effects.’⁵¹ She also rejects the ‘transfer’ model of causation, which she sees as part and parcel of the mechanist picture.⁵² Transference is the process whereby the cause gives or imparts something of itself to the effect. The immaterial soul cannot act by transference, Cavendish says, because ‘being individable, [it] cannot be diminished nor increased in its substance or Nature’.⁵³ As a consequence, Cavendish believes that soul–body interaction does not make sense within a dualist framework.

These views lead Cavendish to challenge Descartes’ ‘pineal gland’ theory. In *The Passions of the Soul*, a work that developed out of his correspondence with Elisabeth, Descartes says that the soul is conjoined with the entire body, but that there is a particular bodily part in which the soul exercises its functions more specifically.⁵⁴ This is the pineal gland, located in the innermost part of the brain. Here the soul has its principal seat, a place from where ‘it radiates through the rest of the body by means of the animal spirits, the nerves, and even the blood, which can take on the impressions of the spirits and carry them through the arteries to all the limbs’.⁵⁵ When I wish to kick my leg, my volition is so intimately united with this gland that my desire causes it to send the animal spirits to my leg-muscles, which then cause movement. The problem with Descartes’ pineal gland ‘solution’ is that it still fails to provide an intelligible account of soul–body interaction. By positing a physical location for soul–body interaction, he does not solve the basic metaphysical problem. If it is impossible for an unextended thing to influence an extended thing, then it must be equally impossible for the soul to influence the pineal gland. Hence, in the *Philosophical Letters*, Cavendish rejects the idea that

the Mind’s or Soul’s seat should be in the *Glandula* or kernel of the Brain, and there sit like a Spider in a Cobweb, to whom the least motion of the Cobweb gives intelligence of a Flye, which he is ready to assault, and that the Brain should get intelligence by the animal spirits as his servants, which run to and fro like Ants to inform it.⁵⁶

In the *Observations*, Cavendish says that this theory is absurd because it is inconceivable that unintelligent sensitive spirits ‘can inform the mind

⁵² On Cavendish and the transfer model, see O’Neill, ‘Cavendish, Margaret Lucas (1623–73)’, p. 261.

⁵³ Cavendish, *Philosophical Letters*, p. 330.

⁵⁴ Descartes, *The Passions of the Soul*, in *Philosophical Writings*, vol. 1, p. 340.

⁵⁵ *Ibid.*, p. 341.

⁵⁶ Cavendish, *Philosophical Letters*, p. 111.

of what they do not know themselves'; if they have no knowledge, then they are incapable of imparting information.⁵⁷

Cavendish overcomes the soul–body problem by making the soul and body sufficiently similar to allow them to interact. In Cavendish's theory, all substances are alike to the extent that they have some degree of sense and reason. Against Descartes, Cavendish denies that the soul is a distinct entity that can be separated from the body and subsist without it. What Descartes calls the soul, she says, is really only rational and sensitive matter: that is, 'the purest and subtilest parts of Nature, as the active parts, the knowing, understanding and prudent parts, the designing, architectonical and working parts'.⁵⁸ For Cavendish, there is no specific 'seat' of the rational such as the pineal gland: every particle of matter has sense and reason. 'I do not absolutely confine the sensitive perception to the Organs,' she says, 'nor the rational to the Brain, but as they are both in the whole body, so they may work in the whole body according to their own motions.'⁵⁹ Furthermore, the soul can never be separated from inanimate matter, since it is 'a part of one and the same matter the inanimate is of... onely it is the self-moving part'.⁶⁰ She writes that although 'there is but one Soul in infinite Nature, yet that soul being dividable into parts, every part is a soul in every single creature, were the parts no bigger in quantity then an atome'.⁶¹

III

Cavendish's arguments against dualism are partly indebted to the natural philosophy of Thomas Hobbes – especially his arguments against the conceivability of incorporeal or immaterial substances.⁶² Hobbes was a tutor in the Devonshire branch of the Cavendish family from 1608 onwards. During his exile in Paris from 1640–51, he occasionally dined with Margaret and William Cavendish at their salon. The period of Hobbes's exile was one of the most intellectually productive times of his career,⁶³ and the time in which he wrote *Leviathan, or The Matter, Forme, & Power of a Common-wealth Ecclesiasticall and Civill* (1651). In France, Hobbes found a sympathetic audience for his new ideas, something he did not

⁵⁷ Cavendish, *Observations*, 'Observations upon Experimental Philosophy', p. 183.

⁵⁸ Cavendish, *Philosophical Letters*, 'Preface', sig. b2^v.

⁵⁹ *Ibid.*, p. 19. ⁶⁰ *Ibid.*, p. 111. ⁶¹ *Ibid.*, p. 433.

⁶² For a full discussion of the similarities between Cavendish and Hobbes, see Hutton, 'In Dialogue with Thomas Hobbes', 421–32.

⁶³ See Quentin Skinner, 'Thomas Hobbes and his Disciples in France and England', *Comparative Studies in Society and History* 8 (1965), 153–67.

receive in England following the publication of his book.⁶⁴ Although Cavendish says that she never discussed philosophy with Hobbes, she reports overhearing his conversations with her husband about subjects in *Leviathan*.⁶⁵ In this work, Hobbes claims that the joining together of contradictory names, such as ‘round quadrangle’ or ‘incorporeal body’, produce unintelligible and senseless terms. He believes that the words ‘incorporeal substance’ are equally meaningless.⁶⁶ No one can conceive of incorporeal substances through natural cogitation; ‘though men may put together words of contradictory signification, as *Spirit*, and *Incorporeall*; yet they can never have the imagination of any thing answering to them’.⁶⁷ For Hobbes, the terms signify nothing. Similarly, according to Cavendish, it is impossible to conceive of immaterial substance. We cannot have an idea of anything that is beyond our own finite, natural intellects; yet the supernatural, immaterial soul is, by definition, a thing that surpasses our natural understanding. As such, she says, it is a meaningless concept, like ‘so many Hobgoblins to fright Children withal’.⁶⁸ On the other hand, it is possible to conceive of a material soul:

As for the Natural Soul, humane sense and reason may perceive, that it consists of Matter, as being Material; but as for the Divine Soul, being not material, no humane sense and reason is able naturally to conceive it; for there cannot possibly be so much as an Idea of a natural nothing, or an immaterial being, neither can sense and reason naturally conceive the Creation of an Immaterial Substance; . . . The truth is, what is Immaterial, belongs not to a Natural knowledge or understanding, but is Supernatural, and goes beyond a natural reach or capacity.⁶⁹

The terms ‘immaterial soul’, according to Cavendish, are purely metaphorical.

For Hobbes, the rejection of incorporeal substances also goes hand in hand with the exclusion of theological concerns from philosophy. He says that

The *subject* of Philosophy, or the matter it treats of, is every body of which we can conceive any generation, and which we may, by any consideration thereof,

⁶⁴ On the critical response to *Leviathan*, see Samuel I. Mintz, *The Hunting of Leviathan: Seventeenth Century Reactions to the Materialism and Moral Philosophy of Thomas Hobbes* (Cambridge: Cambridge University Press, 1970).

⁶⁵ Margaret Cavendish, *The Life of the Thrice Noble, High and Puissant Prince William Cavendish* (London: A. Maxwell, 1667), p. 144.

⁶⁶ Thomas Hobbes, *Leviathan, Or The Matter, Forme, and Power of a Common-wealth Ecclesiasticall and Civil*, reprint from the 1651 edition (Oxford: Clarendon Press, 1929), p. 30.

⁶⁷ *Ibid.*, p. 84. ⁶⁸ Cavendish, *Philosophical Letters*, p. 187. ⁶⁹ *Ibid.*, pp. 230–1.

compare with other bodies, or which is capable of composition and resolution; that is to say, every body of whose generation or properties we can have any knowledge. . . . Therefore it excludes *Theology*, I mean the doctrine of God, eternal, ingenerable, incomprehensible, and in whom there is nothing neither to divide nor compound, nor any generation to be conceived.⁷⁰

The philosophical study of God's nature is pointless because 'the nature of God is incomprehensible; that is to say, we understand nothing of *what he is*, only *that he is*'.⁷¹ Cavendish also emphasises God's incomprehensibility: 'Gods attributes,' she says, 'are not Communicable to any Creature.'⁷² On this topic, she accords with Hobbes's view that 'the knowledge of what is infinite can never be attained by a finite inquirer'.⁷³ We cannot know the essence of God, according to Cavendish, because we have only a finite knowledge, whereas God's attributes are infinite; and 'how can there be a finite idea of an Infinite God?'⁷⁴ She agrees that the subject matter of philosophy should be kept apart from theological concerns. 'Faith and Reason,' she says, 'are two contrary things, and cannot consist together'.⁷⁵ She still holds the orthodox religious view that there are immaterial spirits and divine souls, but she does so through faith, not reason. Her arguments refer to divine matters only

in those places, where I am forced by the Authors Arguments to reflect upon it, which yet shall be rather with an expression of my ignorance, then a positive declaration of my opinion or judgment thereof; for I think it not onely an absurdity, but an injury to the holy Profession of Divinity to draw her into the Proofs in *Natural Philosophy*.⁷⁶

Like Hobbes, Cavendish shuns any appeal to God as an explanation for natural occurrences.⁷⁷

Nevertheless, Cavendish is also extremely critical of Hobbes's mechanical model of causation, according to which 'there is no cause of motion in any body, except it be contiguous and moved'.⁷⁸ Cavendish offers

⁷⁰ Thomas Hobbes, *Elements of Philosophy. The First Section, Concerning Body*, in *The English Works of Thomas Hobbes of Malmesbury*, edited by William Molesworth, reprint of 1839 edition, 11 vols. (London: Scientia Aalen, 1962), vol. 1, p. 10.

⁷¹ Hobbes, *Leviathan*, p. 304. ⁷² Cavendish, *Philosophical Letters*, p. 14.

⁷³ Hobbes, *Elements of Philosophy*, p. 411.

⁷⁴ Cavendish, *Philosophical Letters*, p. 139. ⁷⁵ *Ibid.*, p. 210. ⁷⁶ *Ibid.*, p. 3.

⁷⁷ In Cavendish's later works, there are exceptions to this rule. In the *Observations*, Cavendish uses God's attributes as an explanatory principle, arguing that there cannot be a vacuum, because God is the 'fulness and perfection of all things', and he would not allow a 'pure Nothing' to exist (Cavendish, *Observations*, 'Observations upon Experimental Philosophy', p. 57). Cavendish also appeals to God's attributes in her arguments against ancient philosophers in the same work.

⁷⁸ Hobbes, *Elements of Philosophy*, p. 125.

three main reasons for denying the mechanical view that the pressure of parts upon parts causes sensation. First, she says that if our sensations were caused by pressures, then the information we receive from the senses would be obscured and confused. This would be so, because the impression would remain ('or at least not so soon be dissolved'), and there would become a 'horrid confusion of Figures, for not any figure would be distinct'.⁷⁹ If several external objects should press upon the eye, 'the eye would no more see the exterior objects than the nose, being stopt, could smell a presented perfume'.⁸⁰ Second, if our sensations were caused by imprints, then we would be able to detect indentations and worn patches in our sensory organs.⁸¹ If light did press upon the eye, 'it might put the Eye into as much pain as Fire doth';⁸² and if loud music should impress upon the ear 'it would soundly be beaten, and grow sore and bruised'.⁸³ Moreover, if the mechanical theory were true, then the organs would eventually be moved; the eye, for example, 'would in time be pressed into the centre of the brain'.⁸⁴ Third, Cavendish notes that if our sensations were caused by impact and resistance (or 'reaction'), then there would be a continual warring between our senses and the objects, or else a cessation of all motion: 'if there were any Resistance, Reaction or Endeavour in the organ, opposite to the Endeavour of the object, there would, in my opinion, be always a war between the animal senses and the objects . . . and if equal in their strengths, they would make a stop'.⁸⁵

For Cavendish, the transfer model also poses a difficulty because it is impossible to conceive of motion without a body. She objects to the view that one body can give or transfer motion to another body: 'For how can motion, being no substance . . . quit one Body, and pass into another.'⁸⁶ On this point, Cavendish anticipates Leibniz's claim in the *Monadology* (1714), that 'Accidents cannot separate themselves from substances nor go about outside of them, as the "sensible species" of the Scholastics used to do.'⁸⁷ 'Perception, in my opinion,' Cavendish says, 'is not made by Pressure, nor by Species, nor by matter going either from the Organ to the Object, or from the Object to the Organ.'⁸⁸ If motion is always united to some portion of matter, then in the act of transference 'all bodies that receive motion from other bodies, must needs increase in their substance

⁷⁹ Cavendish, *Philosophical Letters*, p. 22. ⁸⁰ *Ibid.*, p. 68. ⁸¹ *Ibid.*, p. 22.

⁸² *Ibid.*, p. 63. ⁸³ *Ibid.*, p. 72. ⁸⁴ *Ibid.*, p. 60. ⁸⁵ *Ibid.* ⁸⁶ *Ibid.*, p. 98.

⁸⁷ Gottfried Wilhelm Leibniz, *The Monadology and Other Philosophical Writings*, translated and edited by Robert Latta (London: Oxford University Press, 1951), p. 219.

⁸⁸ Cavendish, *Philosophical Letters*, p. 20.

and quantity, and those which impact or transferr motion must decrease as much as they increase'.⁸⁹

Finally, in the *Observations*, Cavendish echoes a common theme in the Cambridge–Platonist literature of the time: the view that it is entirely implausible that 'such a curious variety and contrivance of natural works should be produced by a senseless and irrational motion'.⁹⁰ Cavendish points out that one part moving another part through pressure could not produce all things 'so orderly and wisely as they are in nature'.⁹¹ Her own theory (in her view) provides a more intelligible account of natural phenomena.

To explain how sensations are produced, Cavendish distinguishes between *principal* and *occasional* causes.⁹² In one sense, we might say that the sensation of heat is 'caused' by the presence of fire. This fire, however, is not the true cause of our sensation, but merely the occasion for the internal self-motion of matter. The *internal motion*, according to Cavendish, is the true or principal cause. Every particle of matter, at every moment, has a 'natural and inherent power to move' that can be triggered by external causes.⁹³ No material body is able to lose this power, or transfer it to another object: matter and motion are united as one. Instead, we gain sensations of external objects by a process of 'patterning'. The sensitive and rational corporeal motions in an object 'pattern out' the figure of another object, without that object actually applying pressure or transferring part of itself. 'The sensitive perception of forreign objects,' she says, 'is by making or taking copies from these objects.'⁹⁴ Such 'patterning' is made possible by a system of mutual agreement and sympathy between parts.

IV

Cavendish's rejection of Cartesian dualism and the mechanistic theory of nature also leads her to reject the view that animals are mere machines, devoid of reason, and incapable of experiencing pain.⁹⁵ In the fifth part of his *Discourse on the Method*, Descartes argues that an important

⁸⁹ *Ibid.*, p. 98.

⁹⁰ Cavendish, *Observations*, 'Observations upon Experimental Philosophy', p. 44.

⁹¹ *Ibid.*, p. 47.

⁹² Eileen O'Neill provides a useful definition of the terms 'occasional cause' and 'principal cause' in 'Cavendish, Margaret Lucas (1623–1673)', p. 261.

⁹³ Cavendish, *Philosophical Letters*, p. 24. ⁹⁴ *Ibid.*, p. 127.

⁹⁵ On the reception of Descartes' views on animals, see Leonora Cohen Rosenfield, *From Beast-Machine to Man-Machine: Animal Soul in French Letters from Descartes to La Mettrie*, new and enlarged edition (New York: Octagon Books, 1968).

distinction between humans and brutes is that animals can conceivably be mistaken for mindless automata, whereas it is always possible to distinguish humans from machines. This is primarily because all human beings are capable of using a language, even those that must use sign language. Although magpies and parrots may have organs which enable them to utter words, they cannot show that they *understand* what they say, or declare their own thoughts, or give impromptu replies in a diversity of circumstances. The perfect uniformity and regularity of animal behaviour in some situations, and its complete absence in new circumstances, also indicates that animals function without the guidance of thought. From this basis – the idea that animals can give no linguistic or behavioural evidence that they think – Descartes argues that animals have no consciousness and are incapable of experiencing pain. Thomas Hobbes also maintains that animals lack reason, even though he believes that they are sentient.⁹⁶ Humans are superior to animals, he says, because they can inquire into the consequences of their conceptions, and because a man ‘can by words reduce the consequences he finds to general Rules, called *Theoremes*, or *Aphorismes*’.⁹⁷

Against these writers, Cavendish claims that the ability to use a language is irrelevant as an indication of whether or not an animal has consciousness. **Descartes’ mistake is that he assumes that animals will exhibit the outward signs of human intelligence, when intelligence can have various manifestations in nature.** If animals do not express their rational capacity in the same manner, she says, this ‘doth not prove that there is no intelligence at all betwixt them, no more then the want of humane Knowledg doth prove the want of Reason; for reason is the rational part of matter, and makes perception, observation, and intelligence different in every creature’.⁹⁸ In simple terms, Cavendish believes that the mind is a particular sort of thing (the ‘rational part of matter’) that enables creatures to behave in a diverse number of ways; the external behaviour patterns themselves are not constitutive of the mind. Descartes’ behavioural tests are inadequate because different parts of nature manifest different dispositions, depending on the degree of rational and sensitive matter they possess.

Here Cavendish’s remarks resemble a set of more famous criticisms – **those of the Epicurean atomist Gassendi** in his *Fifth Objections to Descartes’ Meditations*. Gassendi says that although animals are ‘without human

⁹⁶ In this respect, Hobbes follows the traditional scholastic view.

⁹⁷ Hobbes, *Leviathan*, p. 35. ⁹⁸ Cavendish, *Philosophical Letters*, p. 114.

reason, they do have a reason of their own'. They cannot be called irrational 'except in comparison with us, or relatively to our species of reason'. And 'though they do not reason so perfectly and about so many things as man, they still do reason; and the difference seems to be one of more or less'.⁹⁹ Cavendish agrees with Gassendi that animals have 'a reason of their own'. But where Gassendi fails to provide independent support for his claims,¹⁰⁰ Cavendish offers a plausible 'argument by analogy' against Descartes' tests. Cavendish directs this argument against Hobbes, but the criticism applies equally well to Descartes. In the *Philosophical Letters*, she considers Hobbes's view that animals lack reason alongside his claim that '*Children are not endued with Reason at all, till they they have attained to the use of Speech.*'¹⁰¹ In response, Cavendish says that

it might as well be said that a Child when new born hath not flesh and blood, because by taking in nourishment or food, the Child grows to have more flesh and blood... For though Reason doth not move in a Child as in a Man, in Infancy as in Youth, in Youth as in Age, yet that doth not prove that Children are without Reason.¹⁰²

In her 1995 paper on 'Animal Ideas', Margaret Wilson observes that pre-lingual human infants pose a problem for Descartes' tests because they inevitably fail both the linguistic and the behavioural criteria for thought. Yet, in his correspondence with Henry More, Descartes explicitly ascribes thought to human foetuses and newborn infants. Infants, he says, can be seen as rational because they are 'of the same nature as adults; but animals never grow up enough for any certain sign of thought to be detected in them'.¹⁰³ Descartes' claims about children significantly undermine his tests for rationality: as Wilson notes, pre-lingual children demonstrate that **there is no strict correlation between the possession of a mind (or a 'rational soul') and the ability to express thoughts in a language.**¹⁰⁴ **This is the same point that Cavendish makes against Hobbes.** To say that *animals* lack rationality because they cannot express their thoughts in words, is like saying that human infants have no

⁹⁹ Pierre Gassendi, 'Fifth Set of Objections', in Descartes, *Philosophical Writings*, vol. 11, p. 189.

¹⁰⁰ On Gassendi's criticisms, see Margaret Dauler Wilson, 'Animal Ideas', *Proceedings and Addresses of the American Philosophical Association* 69:2 (1995), 11.

¹⁰¹ Cavendish, *Philosophical Letters*, p. 41. ¹⁰² *Ibid.*, p. 42.

¹⁰³ Descartes to Henry More, 15 April 1649; in *Descartes: Philosophical Letters*, translated and edited by Anthony Kenny (Oxford: Clarendon Press, 1970), p. 251; and Descartes, *Oeuvres*, vol. v, p. 345.

¹⁰⁴ Wilson, 'Animal Ideas', 10.

reason because they cannot talk; yet the latter obviously have some form of rationality.

The Cambridge Platonists also maintain that animals have souls. Ralph Cudworth dismisses the Cartesian theory of animal mechanism as atheistic in tendency. Likewise, in his correspondence with Descartes, Henry More speaks in defence of animal souls against Descartes' 'murderous and cutthroat view'.¹⁰⁵ Despite this, however, in his *Antidote Against Atheism* (1653), More emphasises that animals are evidently designed to be useful to human beings, and he writes enthusiastically about the joys of hunting.¹⁰⁶ Cavendish does not support this theory of human supremacy. Against this view, she says that 'Man cannot well be judged of himself, because he is a Party, and so may be Partial; But if we observe well, we shall find that the Elemental Creatures are as excellent as Man.'¹⁰⁷ As finite creatures, humans can have no vantage point from which to judge that their perspective is best. Cavendish insists that human beings and animals share a common materiality; there is nothing distinctive about *Homo sapiens* to make them superior to the brute creation; in terms of their basic constituent substance, they are on an equal footing. It is ignorance that leads humans to think of themselves as 'flower and chief of all the products of nature',¹⁰⁸ when in reality the sharp distinction they make between species is untenable.

There are, however, close parallels between Cavendish's views and those of Cudworth in his *True Intellectual System of the Universe* (1678). Although Cudworth dismisses Cavendish's materialist philosophy as 'atheistic',¹⁰⁹ he appears to have been influenced by her claim that animals were not created solely in order to serve human beings. In the *Observations*, Cavendish says that 'Man, out of self-love, and conceited pride, because he thinks himself the chief of all Creatures, and that all the World is made for his sake; doth also imagine that all other Creatures are ignorant, dull, stupid, senseless, and irrational.'¹¹⁰ In similar terms, Cudworth criticises those writers (such as More) who believe that

¹⁰⁵ More to Descartes, 11 December 1648; Wilson, 'Animal Ideas', 7; and Descartes, *Oeuvres*, vol. v, p. 243.

¹⁰⁶ Henry More, *An Antidote Against Atheism, Or, An Appeal to the Naturall Faculties of the Minde of Man, whether there be not a God*, with a new introduction by G. A. J. Rogers, facsimile of 1655 second edition (Bristol: Thoemmes Press, 1997), pp. 114–15.

¹⁰⁷ Cavendish, *Philosophical Letters*, p. 147. ¹⁰⁸ *Ibid.*

¹⁰⁹ Ralph Cudworth, *The True Intellectual System of the Universe: The First Part; Wherein, All the Reason and Philosophy Of Atheism is Confuted; And Its Impossibility Demonstrated*, facsimile reprint of 1678 edition (Stuttgart-Bad Cannstatt: Friedrich Frommann Verlag, 1964), p. 137.

¹¹⁰ Cavendish, *Observations*, 'Further Observations', p. 41.

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‘the world and all things therein, were Created only for the Sake of Man... by their own Self-love, their Over-Weaning, and Puffy Conceit of themselves’.¹¹¹ He suggests that if fleas and lice had understanding they ‘might Conclude the Bodies of other greater Animals and Men also, to have been made only for them’. But, he says, ‘the Whole was not properly made for any Part, but the Parts for the Whole’.¹¹² Likewise, Cavendish says that ‘the Ignorance of Man concerning other Creatures is the cause of despising other Creatures, imagining themselves as petty Gods in Nature’.¹¹³

Cavendish’s opinions are also echoed in the writings of other seventeenth-century women. Queen Christina of Sweden questions Descartes’ doctrine of the beast-machine, saying that ‘If animals had the use of speech, they would convince men, that they were little more beasts than they.’¹¹⁴ Following her, Catherine Descartes and the French writer Madeleine de Scudéry (1607–1701) both reject the theory that animals are mindless automata.¹¹⁵ Then in 1696, Judith Drake belittles the credulity of those writers who hold ‘Brutes to be no more than meer Machines, a sort of Divine Clock-Work, that Act only by the force of unseen Springs without Sensation, and cry without feeling Pain’.¹¹⁶ Elizabeth Thomas, the poet also known as ‘Corinna’ (1675–1731), initiated a correspondence with John Norris in early 1699.¹¹⁷ In one letter (30 March 1700), Thomas tells John Norris that the ‘Generality of Readers’ cannot accept his view that ‘Brutes are *Mere Machines*’.¹¹⁸ In her essay ‘Of Anger’, Mary Chudleigh observes that animals ‘sure are more than Machines’ and ‘sensible of Pain’:

I cannot, without a sort of Horrour, without some Sentiments of Pity, see them tortur’d; they are part of thy Creation, and may claim the Good adapted to their Nature, and ought not to be treated cruelly to gratify a savage inclination, or divert a sanguinary Temper; I could with pleasure let them live, and satisfy

¹¹¹ Cudworth, *True Intellectual System*, p. 875. ¹¹² *Ibid.*

¹¹³ Cavendish, *Philosophical Letters*, p. 41. ¹¹⁴ Christina, *The Works of Christina*, p. 95.

¹¹⁵ See Harth, *Cartesian Women*, pp. 98–9. ¹¹⁶ Drake, *Essay In Defence of the Female Sex*, p. 34.

¹¹⁷ Thomas sent Norris a laudatory poem, ‘Ode to the Reverend Mr. John Norris’. He wrote back on 25 April 1699 to tell her that her time would be better spent upon more serious and useful studies, rather than poetry, and he offered her advice on the direction of her studies. The letters between Norris and Thomas are in Elizabeth Thomas and Richard Gwinnett, *The Honourable Lovers: Or, The Second and Last Volume of Pylades and Corinna* (London: [E. Curll], 1732). The original manuscripts are in the Bodleian Library, University of Oxford, titled ‘Original Letters under the Hands of Mr John Dryden. [Mr] Charles Dryden. [Mr] Norris. [Mr] Pope. Lady Chudleigh. Lady Pakington. Mrs Thomas and Dr. Ed. Young’ (MS Rawlinson Letters 90).

¹¹⁸ Bodleian Library, University of Oxford, MS Rawlinson Letters 90, fol. 63.

myself with Roots and Herbs, and Fruits, the cheap and wholesome Viands Nature does provide.¹¹⁹

Finally, Catharine Trotter Cockburn also believes that ‘to give pain unnecessarily, even to brutes, out of a cruel humour, or wantonly only for sport, is contrary to nature and reason, and morally *unfit*’.¹²⁰

From these statements, it is apparent that early modern women have a special sympathy for animals. This affinity may stem from the recognition that animals and women are oppressed for the same reason: the belief that they were not fully rational or sentient beings. Three of these women – Drake, Chudleigh, and Cockburn – were outspoken defenders of women’s education.

There are certainly connections between Cavendish’s feminist remarks, her opposition to the Cartesian view of animal automata, and her broader metaphysical views. Cavendish’s philosophy is founded on a conception of nature as diffused with ‘sense and reason’. This leads Cavendish to reject those aspects of Cartesianism brought under scrutiny in Genevieve Lloyd’s analysis. Cavendish does not uphold a hierarchical conception of reason or maintain a distinction between the trained and untrained mind. Instead **she believes that reason is in ‘every Creature more or less’**. Just because animals cannot speak or learn sign language, this does not mean that they have no reasoning abilities *per se*. Similarly, even though women do not express their ideas in the language of the schools, this does not mean that they are devoid of reason either. Cavendish does not revere or glorify an ideal or specialised type of reason, nor does she make an alignment between untrained reason and the **body. For Cavendish, the rational soul could never transcend or separate itself from the body, because it is made of the same material substance.**

v

The anti-dualist aspects of Cavendish’s thought are further apparent in her criticisms of Henry More’s theory of the spirit of nature. More was once best known for introducing and popularising Cartesian philosophy in English universities and intellectual circles. Today, however, scholars tend to note that More’s attitude toward Cartesianism

¹¹⁹ Chudleigh, *Essays Upon Several Subjects*, p. 331.

¹²⁰ Catharine Trotter Cockburn, *Remarks upon the Principles and Reasonings of Dr Rutherford’s Essay*, in *The Works of Mrs. Catharine Cockburn, Theological, Moral, Dramatic, and Poetical*, edited by Thomas Birch, 2 vols. (London: J. and P. Knapton, 1751), vol. 11, p. 58.

was one of ambivalence.¹²¹ In particular, More suspected that, contrary to Descartes' intentions, Cartesian mechanism might be used to advance the atheist's cause: the construction of a thoroughgoing mechanistic–materialist world-picture, completely devoid of any reference to God or spiritual substances.

More's first major philosophical work, *An Antidote Against Atheism*, is an attempt to refute atheism by providing arguments for the existence of God and the immateriality of the human soul. His strategy is to use the ideas of materialists to convince them of his arguments, working on the principle that he who converses with a Barbarian, 'must discourse to him in his own language'.¹²² More argues that if one accepts the tenets of mechanistic philosophy – that matter is passive, mindless, and incapable of self-motion – then one must concede that the chance motions of matter cannot account for the appearance of design and structural perfection in the natural world. 'Wherefore the ordinary Phaenomena of Nature being guided according to the most Exquisite Wisdome imaginable, it is plain that they are not the effects of the meer motion of *Matter*, but of some *Immateriall* Principle.'¹²³ There are some phenomena, More says, that can be explained only by the existence of spiritual substances, which, in turn, provide proof of God's providence in the created world.

More specifically, More claims that all life, motion, and perception must be attributed to immaterial substances that pervade the material world. Toward this end, in *The Immortality of the Soul* (1659), he revitalises the Platonic doctrine of the World Soul, or the 'spirit of nature', which is

A substance incorporeal, but without Sense and Animadversion, pervading the whole Matter of the Universe, and exercising a plastical power therein according to the sundry predispositions and occasions in the parts it works upon, raising such *Phaenomena* in the World, by directing the parts of the Matter and their Motion, as cannot be resolved into mere Mechanical powers.¹²⁴

More also calls this substance the '*Inferiour Soul of the World*'.¹²⁵ The bodies of human beings are capable of movement only because they enjoy a

¹²¹ See Alan Gabbey's two papers 'Philosophia Cartesiana Triumphata: Henry More (1646–1671)', in *Problems of Cartesianism*, edited by Thomas M. Lennon, John M. Nicholas, and John W. Davis (Kingston and Montreal: McGill-Queen's University, 1982), pp. 171–250, and 'Henry More and the Limits of Mechanism', in *Henry More (1614–1687) Tercentenary Studies*, edited by Sarah Hutton (Dordrecht: Kluwer Academic Publishers, 1990), pp. 19–35.

¹²² More, *Antidote Against Atheism*, 'The Preface', sig. B 8^{r–v}.

¹²³ More, *Immortality of the Soul*, p. 88. ¹²⁴ *Ibid.*, p. 450.

¹²⁵ More, *Immortality of the Soul*, p. 266.

‘vital congruity’ with this part of the soul. In an appendix to the second edition of the *Antidote*, More writes that

it is demanded, why the Soul of Man which we acknowledge a Spirit, does not contract itself or withdraw itself from those parts which are pained, or why she does not dilate herself beyond the bounds of the Body. To which is answered, that the *Plantal faculty* of the Soul whereby she is unitable to this terrestrial body is not arbitrary, but fatal or natural; which union cannot be dissolved unless the bond of life be loosened, and that vital congruity (which is in the body, and does necessarily hold the Soul there) be either for a time hindred or utterly destroy’d.¹²⁶

This ‘congruity’ ceases once the soul forsakes its terrestrial body at death; but then the soul is able to enjoy another kind of congruity with an ‘aerial vehicle’, and then with an ‘aethereal’ one.¹²⁷

To explain how a spirit might pervade matter, More dissents from the typical Cartesian view that the essence of matter is extension and the essence of the soul is thought. He maintains that both spirit and matter have extension, but that spirit is essentially active, indivisible (or ‘indiscerpible’) and penetrable, whereas matter is passive, divisible, and impenetrable. To show that it is possible to conceive of something that is both indivisible and extended, More draws on a typical symbol for the spirit: ‘a Point of light from which rays out a luminous Orb according to the known principles of Optiques’.¹²⁸ It is not possible, he says, to imagine the luminous rays as divisible from the shining centre, because ‘there is no means imaginable to discern or separate any one ray of this Orbe and keep it apart by it self disjoyned from the Center’.¹²⁹ Likewise, a spiritual substance has a central essence that spreads out or extends into space; yet although it may be extended, one part is not separable or ‘discerpible’ from another. Thus we might conceive of a spirit or soul as analogous to an orb of light that is both extended and indivisible.

Like More, Cavendish challenges Cartesian and Hobbesian mechanism, and formulates an alternative hypothesis to explain the appearance of orderliness and intelligent behaviour in nature. But Cavendish turns More’s own argument against him, claiming that her theory of self-moving matter is the better available explanation for the appearance of design in the world. She offers an impressively thorough case for her own theory: a vitalist–materialist explanation, she says, does not go beyond the bounds of natural reason, it is much simpler than More’s theory of

¹²⁶ More, *Antidote Against Atheism*, pp. 306–7.

¹²⁷ More, *Immortality of the Soul*, p. 258.

¹²⁸ More, *Antidote Against Atheism*, p. 304.

¹²⁹ *Ibid.*, p. 357.

the spirit of nature, it explains more, and (in her view) it conforms best with religious orthodoxy. Above all, Cavendish challenges More for upholding a dualist philosophy when his views lend greater support to a monist theory of substance.

First, Cavendish takes a Hobbesian approach against More's views: her arguments appeal not only to the inconceivability of immaterial substances, but to the separation of theology and philosophy. She claims that because our natural faculties are unable to conceive of immaterial substances, it is pointless to invent such substances when they are of no instrumental value: all the effects of nature can be explained by self-moving matter.¹³⁰ In the *Observations*, she says 'why should we puzzle ourselves with multiplicity of terms and distinctions when there's no need of them . . . we need not introduce an incorporeal mind, or intellect'.¹³¹ It is unnecessary to appeal to a *divine* executor of God's will when a *natural* explanation will do just as well. Since all parts of nature are knowing, they have the intelligence to order themselves wisely, and nature knows how 'to adapt and fit [her laws] . . . to her designed ends'.¹³² Every part of the human body, for example, knows 'its own office, what it ought to do'.¹³³ Subverting the traditional symbol of woman-as-nature, Cavendish says that it is

absurd to believe Immaterial substances or spirits in Nature, as also a spirit of Nature, which is the Vicarious power of God upon Matter; For why should it not be as probable, that God did give Matter a self-moving power to her self, as to have made another Creature to govern her? For Nature is not a Babe, or Child, to need such a Spiritual Nurse, to teach her to go, or to move; neither is she so young a Lady as to have need of a Governess, for surely she can govern herself; she needs not a Guardian for fear she should run away with a younger Brother, or one that cannot make her a Jointure.¹³⁴

As part of this attack, Cavendish highlights the materialistic aspects of More's conception of the soul. In his 1986 article on More's materialism, John Henry notes that 'a close reading of his pneumatology reveals a number of confusions and inconsistencies which bedevil, and even

¹³⁰ Cavendish, *Philosophical Letters*, p. 195.

¹³¹ Cavendish, *Observations*, 'Observations upon the Opinions of some Ancient Philosophers', p. 40.

¹³² *Ibid.*, 'Observations upon Experimental Philosophy', p. 44.

¹³³ Cavendish, *Philosophical Letters*, p. 189.

¹³⁴ *Ibid.*, pp. 149–50. Cavendish often draws on this symbol to celebrate the autonomy of nature and the self-moving power of matter. In another passage in the *Philosophical Letters*, she says that 'though Nature is old, yet she is not a Witch, but a grave, wise, methodical Matron, ordering her infinite family, which are her several parts, with ease and facility, without needless troubles or difficulties' (pp. 302–3).

belie, More's vigorously dualistic rhetoric'.¹³⁵ In his attempt to 'discourse with the Barbarians', More's views end up acquiring distinctly materialist overtones. Recognising this weakness, Cavendish targets More's idea that the soul can be both extended and indivisible. In her opinion, there is nothing in nature that is indivisible, for every substance 'hath extension, and all extension hath parts, and what has parts, is divisible'.¹³⁶ To show this, Cavendish dissects More's concept of the spirit of nature. She questions how it could be possible for one indivisible spirit to be in so many dividable parts throughout nature.¹³⁷ For example:

When a Worm is cut into two or three parts, we see there is sensitive life and motion in every part, for every part will strive and endeavour to meet and joyn again to make up the whole body; now if there were but one indivisible Life, Spirit, and Motion, I would fain know, how these severed parts could move all by one Spirit.¹³⁸

According to Cavendish, if More's spirit of nature moves every part individually, then there must be as many spirits as there are parts in nature. She also points out that More's orb-of-light analogy does not really work because we can easily conceive of a light split into parts. For example, 'when a dark body is interposed, or crosses the rays of the Sun; it cuts those rays asunder, which by reason they cannot joyn together again, because of the interposed body, the light cut off, suddenly goeth out'.¹³⁹ This criticism falls somewhat short of its mark because the light is not really disjoined or separated from its source when a dark body interposes – the remainder of the sunbeam could not subsist independently of the sun. But Cavendish is not mistaken in questioning the strength of More's analogy. It was well known that More himself regarded light as a material body, and hence according to his *own* theory of matter the light would have to be divisible.¹⁴⁰ So, as Cavendish suggests, More's one attempt to illustrate the idea of an extended yet indivisible entity does not work.

Cavendish also challenges More's claim that the immaterial soul is 'dilatable' and 'contractible'. She says that 'contraction and dilation belong onely to bodies, or material things'.¹⁴¹ Her argument for this view draws on the idea that 'dilation and contraction cannot be without extension'.¹⁴² (With these remarks, Cavendish bears out John Henry's

¹³⁵ John Henry, 'A Cambridge Platonist's Materialism: Henry More and the Concept of Soul', *Journal of the Warburg and Courtauld Institute* 49 (1986), 173.

¹³⁶ Cavendish, *Philosophical Letters*, p. 194. ¹³⁷ *Ibid.*, p. 197. ¹³⁸ *Ibid.*, p. 198.

¹³⁹ *Ibid.*, p. 201. ¹⁴⁰ See Henry, 'A Cambridge Platonist's Materialism', 179.

¹⁴¹ Cavendish, *Philosophical Letters*, p. 186. ¹⁴² *Ibid.*, p. 208.

claim that ‘The seventeenth-century reader could only regard an amplitude of dilation or contraction as taking place through space or “corporeal dimensions”.’¹⁴³ According to Cavendish, if one allows that the soul occupies spatial dimensions, then one must also concede that it is divisible. But if the soul is extended, divisible, and capable of contracting and dilating, then this is one and the same as saying that it is material.

As for the typically spiritual attribute of ‘penetrability’, Cavendish believes that this too may be an attribute of matter. In her view penetrability is ‘nothing else but division; as when some parts pierce and enter through other parts, as Duellers run each other thorow, or as water runs through a sieve’.¹⁴⁴ On this interpretation, matter could be both penetrable *and* impenetrable depending on what is doing the penetrating.

In addition, Cavendish dismisses More’s claim that the immaterial soul must always be united to a body of some sort, whether terrestrial, aerial, or aetherial. More believes that upon release from the earthly body, the soul ‘transmigrates’ into either an aerial or aetherial body. He believes that few souls attain an aetherial body straight away, because this body is made of more subtle parts of matter than aerial bodies. Against More, Cavendish says that

as for the Natural Soul, she being material, has no need of any Vehicles, **neither is natural death any thing else but an alteration of the rational and sensitive motions, which from the dissolution of one figure go to the formation or production of another.** Thus the natural soul is not like a Traveller, going out of one body into another, neither is air her lodging; for certainly, if the natural humane soul should travel through the airy regions, she would at last grow weary, it being so great a journey, except she did meet with the soul of a Horse, and so ease her self with riding on Horseback.¹⁴⁵

Cavendish’s tongue-in-cheek remarks illustrate the notion that although the soul may be ‘translated’ into a more subtle kind of body after death, in her view it is still undeniably material. She also says that ‘Since Spirits cannot appear without bodies, the neerest way is to ascribe such unusual effects or apparitions, as happen sometimes, rather to matter that is already corporeal, and not to go so far as to draw Immaterial spirits to Natural actions, and to make Spirits take vehicles fit for their purposes.’¹⁴⁶ Here Cavendish highlights a central weakness in More’s concept of an immaterial soul: if this soul is *always* united to some body or other, as he says, then how is this any different from saying the soul

¹⁴³ Henry, ‘A Cambridge Platonist’s Materialism’, 178.

¹⁴⁴ Cavendish, *Philosophical Letters*, p. 204.

¹⁴⁵ *Ibid.*, p. 218.

¹⁴⁶ *Ibid.*, p. 228.

is material? In conclusion, she remarks that ‘By this you may plainly see . . . that I am no Platonick; for this opinion is dangerous, especially for married Women, by reason the conversation of Souls may be a great temptation, and means to bring Platonick Lovers to a neerer acquaintance, not allowable by the Laws of Marriage, although by the sympathy of the Souls.’¹⁴⁷ Here again her emphasis is on the materiality of the soul, for she does not believe that ‘the conversation of Souls’ is a completely disembodied exercise, but must inevitably lead to a more carnal kind of relationship.

In sum, to show that More’s spirit of nature is an unviable explanatory hypothesis, Cavendish collapses every one of More’s distinctions between spirit and matter, soul and body. In particular, she expands on the implications of More’s view that the soul is extended.¹⁴⁸ If a substance is extended, then it is capable of being divisible, contractible, and dilatible. And if the soul is capable of being extended and divisible, then it is also capable of being both penetrable and impenetrable. But if the soul is extended, divisible, contractible and dilatible, penetrable and impenetrable, then it is redundant to say that it is always ‘united’ to matter. Instead, it makes more sense to say that the soul *is* material.

Cavendish also recognises that More’s ‘vital congruity’ theory faces difficulties in accounting for soul–body interaction. Typically, if two things have a ‘congruity’ then they have an agreement or correspondence in qualities that promotes their union. But More’s theory fails to explain how two entirely different substances can have an agreement in qualities. ‘He may say, perchance, There is such a close conjunction betwixt Body and Spirit, as I make betwixt rational, sensitive, and inanimate Matter’,¹⁴⁹ but for Cavendish these are all degrees of one and the same substance, whereas body and spirit in More’s view ‘are things of contrary natures’.¹⁵⁰ Hence Cavendish’s theory has an explanatory advantage: it is easier to account for soul–body interaction when the soul and body share an essential likeness, as her theory claims.

Cavendish completes her rejection of More’s spirit of nature by retorting the charge of atheism against his views. First, she asks, why should an all-powerful God need an intermediary when he could just give sense

¹⁴⁷ *Ibid.*, p. 219.

¹⁴⁸ Sarah Hutton makes a similar point about Conway’s critique of More in her paper ‘Anne Conway Critique d’Henry More: L’Esprit et la Matiere’, *Archives de Philosophie* 58:3 (1995), 371–84. I expand on the similarities between the views of Cavendish and Conway in the following chapter.

¹⁴⁹ Cavendish, *Philosophical Letters*, p. 196.

¹⁵⁰ *Ibid.*, p. 197.

and reason to nature itself? It is much more pious to say that self-moving nature ‘proves and confirms’ the ‘omnipotency and Infinite wisdom of God’.¹⁵¹ To say otherwise, is a prejudice to God’s power.¹⁵² Second, Cavendish believes that it is irreligious to make immaterial spirits in nature like so many deities or demi-gods, who govern nature ‘by a dilating nod, and a contracting frown’.¹⁵³ In what way do they differ from God if they are spiritual substances capable of bestowing motion on natural things? In her own philosophy, Cavendish stops short of affirming that God is corporeal. God and nature are *not* coequal: ‘God is a Spirit, and not a bodily substance’;¹⁵⁴ he is an ‘Infinite Immaterial Purity’,¹⁵⁵ with a ‘Supernatural and Incomprehensible Infinite Wisdom and Power’.¹⁵⁶ It is impossible for Nature to change into God, because God cannot ‘admit of diminution or addition’.¹⁵⁷ Third, Cavendish suggests that according to More’s dualist theory only a very small part of the natural world is able to worship God. Yet it is more reasonable to affirm that all of creation is capable of adoring the creator, because ‘it is very improbable that God should be worshipped onely in part, and not in whole, and that all creatures were made to obey man, and not to worship God, onely for man’s sake . . . for man’s use . . . for man’s spoil’.¹⁵⁸ It is also more consistent to say that God is able to bestow freedom and self-motion on nature as a whole, given that he is capable of bestowing this capacity on human beings.

Cavendish is clearly inspired by More’s method of argument to the best explanation. Like More, she rejects the atomistic and mechanistic models because they cannot provide a satisfactory account of nature’s orderliness and perfection.¹⁵⁹ This means that Cavendish’s philosophy shares a central feature of Cambridge Platonism: the rejection of Hobbesian mechanism. But Cavendish challenges More’s dualism with the very criticism he turns against his opponents: a failure to account for the teleological aspects of nature. Her sympathy for Hobbesian *materialism* leads her to claim that while nature is the executor of God’s commands, it does not partake in God’s essence, and is in no way spiritual or immaterial. For these reasons, Cavendish’s final position on created substance is essentially anti-dualist.

Cavendish’s stand against all supernatural or immaterial substances, apart from God, is further strengthened in her later works, the *Observations*

¹⁵¹ *Ibid.*, p. 164. ¹⁵² *Ibid.*, p. 199. ¹⁵³ *Ibid.*, p. 195. ¹⁵⁴ *Ibid.*, p. 8.

¹⁵⁵ *Ibid.*, p. 10. ¹⁵⁶ *Ibid.*, p. 9. ¹⁵⁷ *Ibid.*, p. 10. ¹⁵⁸ *Ibid.*, p. 138.

¹⁵⁹ Cavendish and More also share an opposition to Hobbesian determinism (see Cavendish, *Philosophical Letters*, p. 96), and a mistrust of Epicurus.

and the much-revised edition of the *Philosophical and Physical Opinions*, the *Grounds of Natural Philosophy*. In her ‘Observations upon the Opinions of some Ancient Philosophers’, Cavendish says that God cannot be the ‘Soul of the World’ because the body of nature is dividable, whereas God is essentially indivisible.¹⁶⁰ She emphasises that ‘God is a Supernatural, Individable, and Incorporeal Being, void of all Parts and Divisions’.¹⁶¹ In an appendix to the *Grounds of Natural Philosophy*, Cavendish includes a chapter on ‘the Differences between God, and Nature’. She says that ‘GOD is an Infinite and Eternal Immaterial Being: Nature, an Infinite Corporeal Being. GOD is Immovable, and Immutable: Nature, Moving, and Mutable, GOD is Eternal, Indivisible, and of an Incompoundable Being: Nature, Eternally Divisible and Compoundable. GOD, Eternally Perfect: Nature, Eternally Imperfect.’¹⁶² In highlighting the differences between God and his creation, Cavendish is led to abandon her earlier religious belief that human beings have ‘supernatural souls’. The idea of created immaterial beings, she suggests, is inconsistent with her faith:

I cannot conceive how an Immaterial can be in Nature: for, first, An Immaterial cannot, in my opinion, be naturally created; nor can I conceive how an Immaterial can produce particular Immaterial Souls, Spirits, or the like. Wherefore, an Immaterial, in my opinion, must be some uncreated Being; which can be no other than GOD alone. Wherefore, Created Spirits and Spiritual Souls, are some other thing than an Immaterial: for surely, if there were any other Immaterial Beings, besides the Omnipotent God, these would be so much near the Divine Essence of God, as to be petty gods; and numerous petty gods, would, almost, make the Power of an Infinite God. But God is Omnipotent, and only God.¹⁶³

With these remarks, Cavendish takes her monistic philosophy to its logical extreme: the entire created world is material, the only wholly immaterial being is uncreated, and that is God. In Cavendish’s view, Heaven and Hell are also material realms, and Christ too is ‘partly Divine, and partly Natural’.¹⁶⁴ Although Cavendish does not fully abandon the separation between theology and philosophy, in this later work her concept of God plays a significant role in her final rejection of immaterial substances. In this respect in particular, Cavendish’s philosophy is poles apart from that of More.

¹⁶⁰ Cavendish, *Observations*, ‘Observations upon the Opinions of some Ancient Philosophers’, p. 5. This part of the *Observations* provides a commentary on the views of Thales, Plato, Pythagoras, Epicurus, and Aristotle, the writers discussed in Thomas Stanley’s *The History of Philosophy* (1655–62).

¹⁶¹ Cavendish, *Observations*, ‘An Argumental Discourse’, sig. p2^v.

¹⁶² Cavendish, *Grounds of Natural Philosophy*, p. 241. ¹⁶³ *Ibid.*, p. 239. ¹⁶⁴ *Ibid.*, pp. 247–8.

In sum, although Cavendish values reason above the senses, this ‘rationalism’ is not supported by the dualist metaphysics of Cartesian philosophy. Although she renounces her early atomistic views, she upholds a consistent monistic materialist position throughout her career. According to Cavendish, the soul cannot subsist apart from the body, the soul is really only ‘rational and sensitive’ matter, this matter is capable of self-motion and perception, and no single particle of the material world is dead or inert. Contrary to historical opinion, this theory of nature emerges out of a careful and thorough analysis of the philosophical literature of the time. Her criticisms focus on those aspects of Cartesian philosophy also attacked by her contemporaries, including the problem of soul–body interaction, the idea of unextended substance, the mechanical conception of nature, and the belief that animals are mindless automata. Like her respected contemporary, Elisabeth of Bohemia, Cavendish points out that the dualist cannot explain how two entirely distinct substances are capable of causal interaction. Like Thomas Hobbes, Cavendish maintains that the idea of immaterial substance is inconceivable, and for this reason she also dismisses the explanatory value of the Cambridge–Platonist theory of the ‘spirit of nature’. But like Henry More and Ralph Cudworth, Cavendish rejects mechanistic conceptions of the natural world, and defends the view that animals have the capacity for sense and reason. Furthermore, from a modern feminist viewpoint, Cavendish does not advocate a ‘male-biased’ metaphysical outlook. It has been claimed that in the context of cultural associations between the ‘feminine’ and the body, Cartesian dualism has detrimental consequences for women. Recent feminists oppose hierarchical conceptions of reason in which the body, matter, and nature are devalued or denigrated. In Cavendish’s writings, every part of nature possesses some kind of rational capacity; we are not encouraged to transcend or conquer our material natures; and matter and the body are co-equal with the spirit and the soul.