



CHAPTER 11

MARGARET CAVENDISH (1623-1673)

MARGARET CAVENDISH, LIKE MOST WOMEN IN THE SEVENTEENTH century, received little formal education. However, her brother, John Lucas, was an early influence on her intellectual education, and she began writing “baby books” at a very young age. During the English civil war, Cavendish was a maid in the court of Queen Henrietta Maria and followed her into exile in Paris, where she met and wed William Cavendish. She, her husband, and brother-in-law, Charles Cavendish, held a salon known as the “Newcastle circle.” Visitors to the salon included Thomas Hobbes, Descartes, Kenelm Digby, Marin Mersenne, and Pierre Gassendi. In addition to these philosophers, Cavendish corresponded with Constantijn Huygens, Walter Charleton, and Joseph Glanvill. She discusses chemistry and alchemy, medicine, optics, astronomy, and physics in her works. She was the first woman to be invited to visit the Royal Society, where she watched Robert Hooke and Robert Boyle perform experiments.

Cavendish wrote plays, poems, a work of science fiction called *The Blazing World*, and six philosophical treatises, including *Philosophical Letters*, *Observations Upon Experimental Philosophy*, and *Grounds of Natural Philosophy*. In these treatises, she develops a unique metaphysical system of vitalistic materialistic monism.

We have provided selections from several of Cavendish’s works. From *Observations Upon Experimental Philosophy* (OEP), we have included the “Argumental Discourse” where Cavendish presents

ABOVE: Margaret Cavendish. Engraved frontispiece portrait of *The Philosophical and Physical Opinions*, 1655.

her views in dialogue form as a dispute between her former thoughts and her later thoughts. Here, the former thoughts represent her views from her published works while the later thoughts raise possible objections. Also, from OEP we include a section of her criticism of microscopy, and a section where she answers questions about her views on knowledge and perception. From *Philosophical Letters*, we include letters where Cavendish interacts with the philosophy of Thomas Hobbes, René Descartes, and Henry More. These letters are addressed to an imaginary lady with whom Cavendish is sharing her thoughts about various philosophers and her own views. From *Grounds of Natural Philosophy*, we include selections from the appendix where Cavendish considers religion, metaphysical questions about resurrection, and whether her vitalism requires vegetarianism. Lastly, from *Poems and Fancies* we include two poems: the first explains why thoughts are in the head and the second is a dialogue between an oak tree and a man.

STUDY QUESTIONS

Poems and Fancies

1. Given that Cavendish holds that rational matter is everywhere, does it make sense that thoughts would only be in the brain?
2. What makes the brain able to have thoughts according to Cavendish?
3. Compare Cavendish's dialogue to Shel Silverstein's *The Giving Tree*.
4. What can we gather about Cavendish's views about the relative value of a tree and a human from this poem?

Philosophical Letters

1. Explain the differences between Hobbes's view of perception and Cavendish's view.
2. What are Cavendish's views about dreams?
3. How do Cavendish's views about the reason of animals differ from Descartes's views?
4. Why does Cavendish reject the existence of witches? What are her views on immaterial spirits and fairies?

Observations Upon Experimental Philosophy

1. What are the features of matter according to Cavendish? What are the constituent parts versus the composed or effective parts?
2. Cavendish calls perception "patterning." How does it work?
3. What is self-knowledge and why is it important for all of matter to have it?
4. Why is Cavendish critical of microscopes? Provide one of her arguments against their usefulness.

Grounds of Natural Philosophy

1. Why does Cavendish think there are several religions? What does she think the idea of God is for humans?
2. What would it take for God to resurrect the same human according to Cavendish?
3. What are Cavendish's views about what we can and cannot eat? How does this fit with her vitalism?

PHILOSOPHICAL LETTERS²

Part I, Letter 4 (Discussion of Hobbes)

MADAM,

I have chosen, in the first place, the work of that famous philosopher Hobbes, called *Leviathan*, wherein I find he says, *That the cause of sense or sensitive perception is the external body or Object, which presses the Organ proper to each Sense*. To which I answer, according to the ground of my own *Philosophical Opinions*, that all things, and therefore outward objects as well as sensitive organs,

have both sense and reason, yet neither the objects nor the organs are the cause of them; for perception is but the effect of the sensitive and rational motions, and not the motions of the perception; neither does the pressure of parts upon parts make perception; for although matter by the power of self-motion is as much composable as dividable, and parts do join to parts, yet that does not make perception; nay, the several parts, between which the perception is made, may be at such a distance, as not capable to press. As for example, two men may see or hear each other at a distance, and yet there may be other

2. Excerpted from *Philosophical Letters* (London, 1664). [EEBO]

bodies between them, that do not move to those perceptions, so that no pressure can be made, for all pressures are by some constraint and force; hence, according to my opinion, the sensitive and rational free motions do pattern out each other's object, as figure and voice in each other's eye and ear; for life and knowledge, which I name rational and sensitive matter, are in every creature, and in all parts of every creature, and make all perceptions in nature, because they are the self-moving parts of nature, and according as those corporeal, rational, and sensitive motions move, such or such perceptions are made. But these self-moving parts being of different degrees (for the rational matter is purer than the sensitive) it causes a double perception in all creatures, whereof one is made by the rational corporeal motions, and the other by the sensitive; and though both perceptions are in all the body, and in every part of the body of a creature, yet the sensitive corporeal motions having their proper organs, as workhouses, in which they work some sorts of perceptions, those perceptions are most commonly made in those organs, and are double again; for the sensitive motions work either on the inside or on the outside of those organs, on the inside in dreams, on the outside awake; and although both the rational and the sensitive matter are inseparably joined and mixed together, yet do they not always work together, for oftentimes the rational works without any sensitive patterns, and the sensitive again without any rational patterns. But mistake me not, Madam, for I do not absolutely confine the sensitive perception to the organs, 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. Neither do I say, that there is no other perception in the eye but sight, in the ear but hearing, and so forth, but the sensitive organs have other perceptions besides these; and if the sensitive and rational motions be irregular in those parts, between which the perception is made, as for example, in the two fore-mentioned men, that see

and hear each other, then they both neither see nor hear each other perfectly; and if one's motions be perfect, but the other's irregular and erroneous, then one sees and hears better than the other; or if the sensitive and rational motions move more regularly and make perfecter patterns in the eye than in the ear, then they see better than they hear; and if more regularly and perfectly in the ear than in the eye, they hear better than they see. And so it may be said of each man singly, for one man may see the other better and more perfectly, than the other may see him; and this man may hear the other better and more perfectly, than the other may hear him; whereas, if perception were made by pressure, there would not be any such mistakes; besides the hard pressure of objects, in my opinion, would rather annoy and obscure, than inform. But as soon as the object is removed, the perception of it, made by the sensitive motions in the organs, ceases, by reason the sensitive motions cease from patterning, but yet the rational motions do not always cease so suddenly, because the sensitive corporeal motions work with the inanimate matter, and therefore cannot retain particular figures long, whereas the rational matter does only move in its own substance and parts of matter, and upon none other, as my book of *Philosophical Opinions* will inform you better. And thus perception, in my opinion, is not made by pressure, nor by species, nor by matter going either from the organ to the object, or from the object into the organ. By this it is also manifest, that understanding comes not from exterior objects, or from the exterior sensitive organs; for as exterior objects do not make perception, so they do neither make understanding, but it is the rational matter that does it, for understanding may be without exterior objects and sensitive organs. And this in short is the opinion of

MADAM,

Your faithful friend and servant.³

3. Each letter ends with this same signature.

Part I, Letter 7 (Hobbes)

MADAM,

Your author's opinion, concerning dreams (Leviathan 1.6) seems to me in some part very rational and probable, in some part not. For when he says, that *Dreams are only imaginations of them that sleep, which imaginations have been before either totally or by parcels in the sense; and that the organs of sense, as the brain and the nerves, being benumbed in sleep, as not easily to be moved by external objects, those imaginations proceed only from the agitation of the inward parts of mans body, which for the connection they have with the brain, and other organs, when they be distempered, do keep the same in motion, whereby the imaginations there formerly made, appear as if a man were waking.* This seems to my reason not very probable. For, first, dreams are not absolutely imaginations, except we do call all motions and actions of the sensitive and rational matter, imaginations. Neither is it necessary, that all imaginations must have been before either totally or by parcels in the sense; neither is there any benumbing of the organs of sense in sleep. But dreams, according to my opinion, are made by the sensitive and rational corporeal motions, by figuring several objects, as awake; only the difference is, that the sensitive motions in dreams work by rote and on the inside of the sensitive organs, whereas awake they work according to the patterns of outward objects, and exteriorly or on the outside of the sensitive organs, so that sleep or dreams are nothing else but an alteration of motions, from moving exteriorly to move interiorly, and from working after a pattern to work by rote: I do not say that the body is without all exterior motions, when asleep, as breathing and beating of the pulse (although these motions are rather interior than exterior), but that only the sensitive organs are outwardly shut, so as not to receive the patterns of outward objects, nevertheless the sensitive motions do not cease from moving inwardly, or on the inside of the sensitive organs. But the rational matter does often, as awake, so asleep or in dreams, make such figures, as the sensitive did

never make either from outward objects, or of its own accord; for the sensitive sometimes has liberty to work without objects, but the rational much more, which is not bound either to the patterns of exterior objects, or of the sensitive voluntary figures. Hence it is not divers distempers, as your author says, that cause different dreams, or cold, or heat; neither are dreams the reverse of our waking imaginations, nor all the figures in dreams are not made with their heels up, and their heads downwards, though some are; but this error or irregularity proceeds from want of exterior objects or patterns, and by reason the sensitive motions work by rote; neither are the motions reversed, because they work inwardly asleep, and outwardly awake, for madmen awake see several figures without objects. In short, sleeping and waking are somewhat after that manner, when men are called either out of their doors, or stay within their houses; or like a ship, where the mariners work all under hatches, whereof you will find more in my *Philosophical Opinions*; and so taking my leave, I rest ...

Part I, Letter 35 (Discussing Descartes)

Madam,

That the mind, according to your author's opinion, is *a substance really distinct from the body, and may be actually separated from it and subsist without it.* If he mean the natural mind and soul of man, not the supernatural or divine, I am far from his opinion; for though the mind moves only in its own parts, and not upon or with the parts of inanimate matter, yet it cannot be separated from these parts of matter and subsist by itself, as being a part of one and the same matter the inanimate is of (for there is but one matter only and one kind of matter, although several degrees), only it is the self-moving part; but yet this cannot empower it to quit the same natural body, whose part it is. Neither can I apprehend 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 fly, 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; or that the mind should, according to other's opinions, be a light, and embroidered all with ideas, like a herald's coat; and that the sensitive organs should have no knowledge in themselves, but serve only like peeping holes for the mind, or barn doors to receive bundles of pressures, like sheaves of corn. For there being a thorough mixture of animate, rational and sensitive, and inanimate matter, we cannot assign a certain seat or place to the rational, another to the sensitive, and another to the inanimate, but they are diffused and intermixed throughout all the body. And this is the reason that sense and knowledge cannot be bound only to the head or brain. For although they are mixed together, nevertheless they do not lose their interior natures by this mixture, nor their purity and subtlety, nor their proper motions or actions, but each moves according to its nature and substance, without confusion. The actions of the rational part in man, which is the mind or soul, are called thoughts, or thoughtful perceptions, for though man, or any other animal, has but five exterior sensitive organs, yet there are numerous perceptions made in these sensitive organs, and in all the body; nay, every several pore, or the ear. But both sorts, as well the rational as the sensitive, are different from each other, although both do resemble one another, as being both parts of animate matter, as I have mentioned before. Thus I'll add no more, only let you know, that I constantly remain, ...

Part I, Letter 36 (Descartes)

Madam,

That all other animals, besides man, want reason, your author endeavors to prove in his *Discourse of Method*, where his chief argument is, that other animals cannot express their mind, thoughts or conceptions, either by speech or any other signs, as man can do. For, says he, *it is not for want of the organs belonging to the framing*

of words, as we may observe in parrots and pies, which are apt enough to express words they are taught, but understand nothing of them. My answer is, that one man expressing his mind by speech or words to another, does not declare by it his excellency and supremacy above all creatures, but for the most part more folly, for a talking man is not so wise as a contemplating man. But by reason other creatures cannot speak or discourse with each other as men, or make certain signs, whereby to express themselves as dumb and deaf men do, should we conclude they have neither knowledge, sense, reason, or intelligence? Certainly, this is a very weak argument; for one part of a man's body, as one hand, is not less sensible than the other, nor the heel less sensible than the heart, not the leg less sensible than the head, but each part has its sense and reason, and so consequently its sensitive and rational knowledge; and although they cannot talk or give intelligence to each other by speech, nevertheless each has its own peculiar and particular knowledge, just as each particular man has his own particular knowledge, for one man's knowledge is not another man's knowledge; and if there be such a peculiar and particular knowledge in every several part of one animal creature, as man, well may there be such in creatures of different kinds and sorts. But this particular knowledge belonging to each creature does not prove that there is no intelligence at all between them, no more than the want of human knowledge does prove the want of reason; for reason is the rational part of matter, and makes perception, observation, and intelligence different in every creature, and every sort of creatures, according to their proper natures, but perception, observation and intelligence do not make reason, reason being the cause, and they the effects. Hence though other creatures have not the speech, nor mathematical rules and demonstrations, with other arts and sciences, as men, yet may their perceptions and observations be as wise as men's, and they may have as much intelligence and commerce between each other, after their own manner and way, as men have after theirs. To which I leave them, and man to his conceited prerogative and excellence, resting, ...

Part I, Letter 37 (Descartes)

Madam,

Concerning sense and perception, your author's opinion is, that *it is made by a motion or impression from the object upon the sensitive organ, which impression, by means of the nerves, is brought to the brain, and so to the mind or soul, which only perceives in the brain.* Explaining it by the example of a man being blind, or walking in the dark, who by the help of his stick can perceive when he touches a stone, a tree, water, sand, and the like; which example he brings to make a comparison with the perception of light. For, says he, *light in a shining body, is nothing else but a quick and lively motion or action, which through the air and other transparent bodies tends towards the eye, in the same manner as the motion or resilience of the bodies, the blind man meets withal, tends through the stick towards the hand; hence it is no wonder that the sun can display its rays so far in an instant, seeing that the same action, whereby one end of the stick is moved, goes instantly also to the other end, and would do the same if the stick were as long as heaven is distant from Earth.* To which I answer first, that it is not only the mind that perceives in the kernel of the brain, but that there is double perception, rational and sensitive, and that the mind perceives by the rational, but the body and the sensitive organs by the sensitive perception; and as there is a double perception, so there is also a double knowledge, rational and sensitive, one belonging to the mind, the other to the body; for I believe that the eye, ear, nose, tongue, and all the body, have knowledge as well as the mind, only the rational matter, being subtle and pure, is not encumbered with the grosser part of matter, to work upon, or with it, but leaves that to the sensitive, and works or moves only in its own substance, which makes a difference between thoughts and exterior senses. Next I say, that it is not the motion or reaction of the bodies the blind man meets withal which makes the sensitive perception of these objects, but the sensitive corporeal motions in the hand do pattern out the figure of the stick, stone, tree, sand, and the like. And as for comparing the

perception of the hand, when by the help of the stick it perceives the objects, with the perception of light, I confess that the sensitive perceptions do all resemble each other, because all sensitive parts of matter are of one degree, as being sensible parts, only there is a difference according to the figures of the objects presented to the senses; and there is no better proof for perception being made by the sensitive motions in the body, or sensitive organs, but that all these sensitive perceptions are alike and resemble one another; for if they were not made in the body of the sentient, but by the impression of exterior objects, there would be so much difference between them, by reason of diversity of objects, as they would have no resemblance at all. But for a further proof of my own opinion, if the perception proceeded merely from the motion, impression and resistance of the objects, the hand could not perceive those objects, unless they touched the hand itself, as the stick does; for it is not probable that the motions of the stone, water, sand, etc., should leave their bodies and enter into the stick, and so into the hand; for motion must be either something or nothing; if something, the stick and hand would grow bigger, and the objects touched less, or else the touching and the touched must exchange their motions, which cannot be done so suddenly, especially between solid bodies; but if motion has no body, it is nothing, and how nothing can pass or enter or move some body, I cannot conceive. 'Tis true there is no part that can subsist singly by itself, without dependence upon each other, and so parts do always join and touch each other, which I am not against; but only I say perception is not made by the exterior motions of exterior parts of objects, but by the interior motions of the parts of the body sentient. But I have discoursed hereof before, and so I take my leave, resting, ...