Margaret Cavendish (1623?–1673)

Kenny Pearce

Great Philosophers Extramural Lecture Series
Trinity College Dublin

October 17, 2017
Margaret Cavendish (1623?–1673)

1. Who Gets to be a ‘Great Philosopher’?

2. Who was Margaret Cavendish?

3. Cavendish’s Panpsychism

4. Cavendish’s Critique of Experimental Philosophy
Who Gets to be a ‘Great Philosopher’?

Who was Margaret Cavendish?

Cavendish’s Panpsychism

Cavendish’s Critique of Experimental Philosophy
Ancient Philosophy

- Socrates
- Plato
- Aristotle
## The Textbook Narrative

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- Thomas Aquinas (Christian Aristotle)
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- Baruch (Benedict de) Spinoza
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Immanuel Kant
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- Our friend Margaret Cavendish was a woman and a British rationalist and her primary interests were in natural philosophy (i.e., science and philosophy of science). So she’s triply excluded from the textbook narrative.
Further Reading/Resources


- Peter Adamson, *History of Philosophy without any gaps* (giant podcast series, also available as several books), https://historyofphilosophy.net/
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Descartes

- Two sorts of substance, thinking (mind) and extended (matter).

Cavendish

- "all creatures of nature are produced but out of one matter" (Observations, ch. 1.14)
- "how can motion . . . quit one body, and pass into another?" (Philosophical Letters, §1, letter 30)
- "every part [of nature] having self-motion, has also knowledge, which is sense and reason" (Observations, ch. 1.25)
- "[Humans] would fain be above nature . . . not considering that they are but parts of nature, as all other creatures" (Observations, ch. 1.27)
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**Argument One**

Humans are made of the same matter as everything else and we have sense and reason, so everything else does too.
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Since motion is the essence of matter and can’t be transferred from one bit of matter to another, all matter must be *self*-moving, i.e., animate.
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**Argument Three**

Given that they can’t receive motion from outside, how do the parts of nature know what to do? They need *knowledge* to do their jobs, hence they must have sense and reason.
Occasional Causation

the perception of the motions of the fire in the fuel, and the fuel’s own consumption or burning, is not made by the fire, but by the fuel’s own perceptive motions, imitating the motions of the fire; so that fire doth not turn the fuel into ashes, but the fuel doth change by its own corporeal figurative motions, and the fire is only an occasion of it.

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– *Observations*, ch. 1.25

[No] rational man could conceive, that such a curious variety and contrivance of natural works should be produced by a senseless and irrational motion; or, that nature was full of immaterial spirits, which did work natural matter into such various figures; or that all this variety should be caused by an immaterial motion . . . for no man can conceive or think of motion without body.

– *Observations*, ch. 1.15
Cavendish’s Critique of Experimental Philosophy

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– Galileo, *Dialogue on the Two Chief World Systems* (1632), tr. Finocchiaro, Day III
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The senses are defective in two ways: they may fail us altogether or they may deceive. First, there are many things which escape the senses even when they are healthy and quite unimpeded . . . And even when the senses do grasp an object, their apprehensions of it are not always reliable.

microscopes, lately invented . . . reveal the hidden, invisible small parts of bodies, and their latent structures and motions. By their means the exact shape and features of the body in the flea, the fly and worms are viewed, as well as colours and motions not previously visible, to our great amazement . . . Galileo’s great achievement, [the] telescope . . . establishes that the galaxy is a knot or heap of small stars, which are plainly separate and distinct.

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The theater of nature is much enlarged since Aristotles time . . . for in the Heavens by the help of telescopes (a new invention) there are found an innumerable company of fixed stars unknown to the ancients, and amongst the planets the *ansulae* [little handles] of *Saturn* and four moons about *Jupiter* . . . but it were infinite to pursue particulars; I will not stand to reckon up the severall discoveries we are beholden to the new invented microscope for, nor shall I insist upon the many Chymical experiments that are of use in Philosophy. I passe by the wondrous effects of Gun-powder, nor shall I mention the discoveries of the Air-pump lately exhibited to the world by that Noble Gentleman [Boyle], or the ingenious experiments of *Galileo*, Lord *Bacon*, and many others.

– Simon Patrick, *A Brief Account of the New Sect of Latitude-Men* (1662), 20–21
The ‘new’ philosophers of the 17th century showed enormous enthusiasm about the ability of new scientific instruments and laboratory experiments to reveal the secrets of nature.
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This is in contrast with the traditional Aristotelian view which would have held:

The best way to make observations is by means of properly functioning natural sense organs under favorable conditions, not special instruments.

The observations that reveal the most about the nature of a thing are observations of its natural behavior in its natural habitat, not observation under laboratory conditions.

(Note that this makes a lot of sense if you think, as Aristotle did, that biology—not physics—is the most basic science.)

Cavendish’s view is closer to the Aristotelian side.
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the art of “micrography” . . . is not able to discover the interior natural motions of any part or creature of nature.

- *Observations*, ch. 1.3
Microscopes reveal only the outsides of things, not their internal motions or the principle of their self-motion.

Magnification is a kind of distortion.

The question is, whether [micrography] can represent yet the exterior shapes and motions so exactly, as naturally they are; for art doth more easily alter than inform: As for example; art makes cylinders, concave and convex glasses, and the like which represent the figure of an object in no part exactly and truly, but very deformed and misshaped: also a glass that is flawed, cracked, or broke, or cut into the figure of lozenges, triangles, squares, or the like will present numerous pictures of one object.

— *Observations*, ch. 1.3
Cavendish on Microscopes

Criticisms

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A louse by the help of a magnifying glass appears like a lobster, where the microscope enlarging and magnifying each part of it, makes them bigger and rounder than naturally they are. The truth is, the more the figure by art is magnified, the more it appears misshapen from the natural, insomuch as each joint will appear as a diseased, swelled and tumid body, ready and ripe for incision.

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But mistake me not; I do not say, that no glass presents the true picture of an object: but only that magnifying, multiplying, and the like optic glasses, may and do sometimes present falsely the picture of an exterior object; I say, the picture, because it is not the real body of the object which the glass presents, but the glass only figures or patterns out the picture presented in and by the glass, and there mistakes may easily be committed in taking copies from copies.

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Cavendish on Microscopes

**Criticisms**

- Microscopes reveal only the outsides of things, not their internal motions or the principle of their self-motion.
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- Microscope enthusiasts forget that the scientist and his instrument are themselves part of the nature they are studying.

**Nature Cannot be Known by Any of Her Parts**

... one creature is not able to comprehend or know all other creatures, no not any one single creature perfectly ... all mankind that have ever lived ... could never find out the truth of nature, even in the least of her parts, nay, not in themselves: For what man is he that knows the figurative corporeal motions, which make him to be such a creature as man, or that make any part of him?

- *Observations*, ch. 2.4
Cavendish on Microscopes

Criticisms

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but if I err, I ask [the microscopists’] pardon, and pray them to consider the nature of our sex, which makes us, for the most part obstinate and willful in our opinions, and most commonly impertinently foolish: And if the art of “micrography” can but find out the figurative and corporeal motions that make or cause us to be thus, it will be an art of great fame . . . but yet I doubt they will hardly find out the interior nature of our sex, by the exterior forms of their faces or countenances.

— *Observations*, ch. 2.4
Cavendish’s Alternative Approach

the best optic instrument is a perfect natural eye, and a regular sensitive perception; and the best study is rational contemplation joined with the observations of regular sense, but not deluding arts . . . natural reason is above artificial sense.

– Observations, ch. 1.3
Margaret Cavendish (1623?–1673)

- Margaret Cavendish was a poet, dramatist, and philosopher who published numerous books under her own name, at a time when this was a very unusual (and, indeed, rather scandalous) thing for a woman to do.

- Until recently Cavendish's philosophical work had received relatively little attention. Today, she is beginning to be quite widely studied by historians of early modern philosophy.

- Among Cavendish's key ideas are her naturalism (the human being is a part of nature like other parts), materialism (all of nature, including human beings, is made of the same matter), and panpsychism (sense and reason are everywhere in nature).

- Drawing on this combination of views, Cavendish offered important criticism of certain enthusiasts of new scientific instruments, challenging those enthusiasts to understand the functioning of the instrument, the specific conditions of its reliability, and the ways the scientist and the instrument form part of the natural world the scientist seeks to understand.
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