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# Margaret Cavendish on the Relation between God and World

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Abstract

It has often been noted that Margaret Cavendish discusses God in her writings on natural philosophy far more than one might think she ought to given her explicit claim that a study of God belongs to theology which is to be kept strictly separate from studies in natural philosophy. In this article, I examine one way in which God enters substantially into her natural philosophy, namely the role he plays in her particular version of teleology. I conclude that, while Cavendish has some resources with which to partially alleviate this tension, she is nonetheless left with a significant difficulty.

Margaret Cavendish is unusual (although not unique) in the seventeenth century because she explicitly rejects reference to God in her natural philosophy.[1] At the outset of *Philosophical Letters* (1664), for example, she writes:

> I shall merely go upon the bare Ground of *Natural Philosophy*, and do not mix Divinity with it, as many Philosophers use to do . . . for I think it not onely an absurdity, but an injury to the holy Profession of Divinity to draw her to the proofs of *Natural Philosophy*; wherefore I shall strictly follow the guidance of *Natural Reason*. (PL 3; cf. PPO [1663] pref.; OEP 217 and 230)

Cavendish maintains a skepticism about God's nature, though not about his existence: 'no part of nature can or does conceive the essence of God, or what God is in himself; but it conceives only, that there is a divine being which is supernatural' (OEP 17; cf. PL 139). Moreover, this skepticism with respect to God's nature is a skepticism *merely* with respect to what our reason is capable of ascertaining. Cavendish does not deny that faith can lead us to certain beliefs about God's nature. It is simply the case that faith, and beliefs derived from faith, belong to theology, a sphere of inquiry distinct from natural philosophy which is governed solely by our faculty of reason (PL 142). Despite Cavendish's explicit separation of theology and God from her natural philosophy, she writes often and substantially about God in her philosophical works about the natural world. Indeed, I believe that she must rely quite significantly upon God in order to make sense of her natural philosophy.[2] Specifically, Cavendish

takes the natural world to be essentially purposeful, and this teleological[3] account of nature can be adequately explained in her philosophy only by positing God as the conscious and moral source of natural norms. My first task (sections 1 through 3) is to substantiate this characterization of Cavendish's natural philosophy, including God's role in the natural world. My second task (section 4) is to assess the degree to which there remains a tension between her proclaimed bracketing of God from natural investigations on the one hand, and her implicit reliance upon God in her account of nature on the other hand. I conclude that while we can go a considerable distance in resolving this tension, one significant problem remains.[4]

## *1. Teleology in the Seventeenth Century: Some Helpful Background*

The teleological flavor of Cavendish's philosophy of nature has been noted by more than one commentator,[5] and while I believe this characterization to be true, more needs to be said in order to give a full account of the precise nature of Cavendish's teleology. The goal of this section is to lay some background for assessing Cavendish's particular brand of teleology by discussing a few key features of teleological thinking in the seventeenth century more generally.

An account of something (a whole, a part or a process) is teleological if one can give a reason for that thing by reference to an end or a goal. For example, a teleological account of a frog (as an organic whole) might make reference to the *end* or *goal* of the frog's self-preservation or survival. To be more precise, a teleological account, must make reference to an entity, part or process that is *prescriptively* normative, and not merely *descriptively* (or statistically) normative. An account that is merely descriptively normative makes reference to something which normally occurs but which does not occur *so as to* fulfill those norms as is the case with the prescriptively normative. As a result, in the case of a merely descriptively normative account, deviations from what normally occurs represent statistical anomalies rather than a failure to achieve an end or a goal, and events which are in line with what normally occurs cannot be characterized as successes which are good.

It is common to identify two main strains of teleology in the centuries leading up to and including the seventeenth. These can be called 'natural teleology' and 'unnatural teleology', with the former capturing a broadly Aristotelian approach and the latter capturing a broadly Platonic approach.[6] According to Aristotelian, natural teleology, some natural beings embody an immanent drive to fulfill purposes or achieve an end or goal that is their own end or goal, and they usually do so non-consciously or non-intentionally. According to Platonic, unnatural teleology, created beings have been designed by an extrinsic, conscious and intentional agent to fulfill the goals or ends of the agent who created them.[7] In the case of

unnatural (also called 'conscious design') teleology, God is often identified as the agent whose ends or goals are guiding the design of the created being, but any conscious or intentional agent can fulfill this role. Humans, for example, may design artifacts to achieve certain goals, and so a teleological account which refers to the human's intentions *vis-à-vis* the artifact can be given for such objects.[8]

A final helpful point I shall make regarding teleology in general in the seventeenth century is the relation between teleology and privation. The normative value of an entity can be measured in terms of how well that entity and its activities achieve the end or goal of the entity. An entity or activity is good or beneficial if it permits the realization of the entity's end. When an entity and its activities fall short of realizing the entity's end thereby failing to be the sort of thing it ought to be, privation occurs. In such cases, varying degrees of harm, or even evil, may ensue. But privation must be conceived of differently in Aristotelian forms of teleology than it is in Platonic forms of teleology. In Aristotelian forms of teleology, the end to be achieved is internal to the entity itself, such that it is in the being's *nature* or *essence* to strive toward the end. Failing to fully actualize the end therefore represents a privation in the being's own nature. In Platonic teleology, as I have thus far characterized it, the end to be achieved is in the mind of an agent external to the entity created by the agent, such that it in *not* in the being's nature or essence to strive toward the end. Failure to fully realize an end (for example, a clock not telling the correct time, or a dog dying at one year old from kidney failure if we believe the dog to be an artifact made by God) therefore represents a privation only with respect to the ends in the agent's mind. There is no privation within the entity's own nature – the dog or the clock *per se* have not gone wrong – because such a being does not have an intrinsic end-referred nature. And so, according to Platonic teleology, to say an entity fails to be the sort of thing it ought to be must be understood as a claim about the entity only relative to its maker's mind rather than a claim about the entity's own nature.[9]

While these two main strains of teleology indeed capture something important about teleology in the seventeenth century, in actual fact, there are many varieties of teleology, some of which blend these two strains together. Cavendish, as we shall see shortly, is a case in point.

## 2. *Cavendish's Ontology of the Natural World*[10]

As a prelude to situating Cavendish in this general picture of teleological thinking in the seventeenth century, and in order to provide a brief primer to central aspects of her natural philosophy, in this section, I offer a quick summary of her ontology of the natural world.

Four central features of Cavendish's mature account of the natural world are her materialism, plenism, non-mechanical account of change,

and belief that motion must inhere in matter.[11] Cavendish is a materialist and rejects the possibility of, for example, immaterial souls (PL 111) because reason tells us that the immaterial is not real and therefore cannot be substantial (PL 239; OEP 137; GNP 1f, 237f). Substance, therefore, must be material. Cavendish is a plenist both because she rejects the possibility of a vacuum which she takes to be incomprehensible and naturally impossible (PL 7, 452), and because she asserts the unending divisibility of matter (OEP 125, 263; GNP 239). Since there cannot exist empty space anywhere, this plenum of matter must be spatially infinite (OEP 130f). Cavendish rejects mechanical accounts of change because they are, she believes, dependent upon the transfer of motion from one body to another. But motion, as a mode, cannot transfer from body to body but must rather always adhere in material substance (PL 97f). And so, in order to explain the brute phenomenon of bodies in motion and collision, Cavendish attributes to (at least some) matter the capacity for self-motion (GNP 2f; the fourth feature noted above).

Cavendish believes that there are three aspects of the single type of matter that fills all of nature: inanimate, animate sensitive, and animate rational (e.g., OEP 23f). Inanimate matter is not equated with motion. It is the least agile, fine and pure, and serves as the limit on the activity of the other aspects of matter. Both forms of animate matter are responsible for all motion (and therefore change) that a being undergoes, but rational animate matter (as the most agile, fine, and pure) functions primarily as the planner or regulator of the actions performed upon the dense, animate matter by sensitive, animate matter. Rational animate matter is therefore less occupied with the task of moving the inanimate matter (GNP 3ff). Animate matter (both sensitive and rational) is also 'perceptive' (OEP 156; GNP 7f). Both forms of perception – sensitive and rational – will vary enormously from creature to creature depending upon the material construction and organization of their parts. In the case of humans, for example, sensitive perception would be the perception of bodies outside ourselves through the self-motion of the five external sense organs (e.g., OEP 29, 142), while perception of rational animate matter includes the representation of an external body's interior nature (OEP 47).[12]

One difficulty now before us is how Cavendish can claim both that matter is self-moving and that some matter is inanimate (not self-moving). She herself acknowledges this possible difficulty, but also offers a solution to it:

> [When I say that] none of nature's parts can be called inanimate, or soulless, I [Cavendish] do not mean the constitutive parts of nature, which are, as it were, the ingredients whereof nature consists, and is made up of; whereof there is an inanimate part or degree of matter, as well as animate; but I mean the parts or effects of this composed body of nature, of which I say, that none can be called inanimate. (OEP 16)

Composed bodies cannot be inanimate because all aspects of matter are 'inseparably commixt' such that no portion of material nature, regardless of how small it is, lacks any of the three aspects. Nature is thoroughly self-moving because each part of nature is either intrinsically motive or carried along by matter that is intrinsically motive. Further, in addition to being ubiquitously animate, nature is thoroughly sensitive and rational. So to refine the depiction provided above, as humans, sense perception occurs in the sense organs and rational perception occurs in the brain. But the human liver, as a liver, has its capacity to sense and reason too, and in a way appropriate for the kind of thing it is and how it must relate to its environment.

It is an odd claim indeed to say that all parts of the natural world are perceptive, having both sense and reason. I shall not provide here an extended interpretation of Cavendish to explain why she takes such a position,[13] but I shall provide one explanation as a way of showing that Cavendish's position on perceptive matter is not wholly without justification, and as a way of presenting another key plank of her natural philosophy – her theory of occasional cause. According to Cavendish, many changes in the natural world come about as a result of occasional causal interaction (as opposed to the narrower occasionalism where God mediates between cause and effect).[14] One motivation she has for accounting for material interaction by occasional causation stems from her criticism of the theory, noted above, that bodies interact by transfer of motion. Motion can transfer from body to body, but only if it transfers together with the matter with which it is necessarily associated. Employing the example of a hand throwing a bowl, Cavendish shows why this cannot be:

> I cannot think it probable, that any of the animate or self-moving matter in the hand, quits the hand, and enters into the bowl; nor that the animate matter, which is in the bowl, leaves the bowl and enters into the hand'; 'if it did, the hand would in a short time become weak and useless, by losing so much substance. (PL 445; cf. PL 77f; OEP 200)[15]

According to Cavendish's theory of occasional causation, for a natural effect there is an occasional cause – the body eliciting the effect in another body – and there is a principal cause – the affected body itself bringing forth from within itself the appropriate effect. There is, however, a problem with this account. Occasional and principal causes have a significant degree of independence from one another; the occasional cause simply triggers (somehow) something within the principal cause to make the principal cause act. Moreover, Cavendish does not appeal to God as the mediator between occasional and principal causes in their interactions as per occasionalism. So she needs some other way of explaining how bodies correctly achieve the appropriate effect upon any given occasion. How can she explain nature's order or lawfulness? One possibility would be to suppose that every body has perceptive qualities. The causal efficacy

among natural bodies on a model of occasional causation takes the form of bodies *sensing* others around them and *knowing* how to react to these other bodies or rationally *suggesting* to another how to act. I believe that this is Cavendish's approach since it best solves the problem of orderly causal interactions noted above, and since it is the best explanation I know of for Cavendish's attribution of perceptive states to matter.[16]

But what are these natural individuals which have a significant degree of independence from one another in, for example, occasional causal interactions? In so far as their constitutive material natures are concerned, all individuals are the same – they all have the same nature, namely three kinds of matter thoroughly blended together. But how can this matter which is, after all, a plenum without empty space to separate portions off from one another, be individuated into independent individuals? There are two complementary answers one might find in Cavendish's works. First, conceived of purely physically, the individual is a figured portion of matter within the one whole that is nature, a figure that more or less maintains itself through motions – especially sympathy among parts – that lend it stability (e.g., PPO 75f; OEP 130–1, 166; GNP 32, 51, 75). So while all individuals are made up of the same sort of matter, there is nonetheless tremendous variety among individuals depending upon the structures of their various stable figures. However, precisely because these stable figures belong to the single body that is all of nature and that is in constant, destabilizing motion, they cannot endure forever and so disintegrate only to re-organize with other matter into other stable figures thereby making other creatures (e.g., PPO 17). As this first answer implies, the individual is a being that endures for some period of time, but not forever, and so this is a very loose form of individuation.[17] Second, conceived of psychologically, the individual stable figure, as a unity of matter, achieves a certain type of rationality and ability to sense (human figures, for example, have human sense and reason), and as long as it retains its figure, the individual retains its own reason and sense, and thus its own individuality. According to this conception of the individual, it is a center of unified sense and reason, and therefore, a center of phenomenological self-awareness (e.g., GNP 19ff). As humans, we can know what it feels like only to have human awareness – indeed, strictly speaking, only our own awareness – but the ubiquity of sense and reason throughout nature, and the variety of forms of sense and reason due to the variety of material figures, means that all individuals have some form of individual awareness appropriate to the kind of thing it is (e.g., PPO 16, 52–3, 114; PL 113–14, 518; GNP 81–2, 163–5). Moreover, if I am correct in my theory of why all natural individuals have sense and reason – that is, to receive and respond to the rational suggestion of other beings which is the grounding for the orderliness of occasional causal interaction – then natural individuals considered in this second, psychological, sense are also potential centers of free choice. Indeed, Cavendish does believe that

freedom is characteristic of non-humans as well as humans: 'That by reason every Part [of nature] had Self-motion and natural Free-will, Nature [as a whole] could not foreknow how they would move' (GNP 102; cf. PL 95). A natural individual, then, is a physically stable figure with a specific kind of sense and reason, which give rise to self-awareness and the capacity to act in a radically free fashion, potentially undetermined by any causal influence outside of itself.

### *3. Cavendish's Blended Form of Teleology*

With these central tenets of Cavendish's theory of nature in place, I am now in a position to specify her particular form of teleology and to argue that God *must* play a role in her natural philosophy. What is meant when one says that Cavendish has a teleological conception of nature? We can interpret this claim in at least two ways. First, for Cavendish, nature as an infinite whole strives for overall harmony and peace. 'I say Nature hath but One Law, which is a wise Law, *viz*. to keep Infinite matter in order, and to keep so much Peace, as not to disturb the Foundation of her Government' (PL 146). The degree to which nature's finite parts contribute to this overall peace and harmony is the degree to which they serve this global end, and, conversely, the degree to which they undermine the overall peace and harmony is the degree to which they fail to serve this global end. '[T]hough she [Nature] is infinitely naturally wise in her self, yet her parts or particular creatures may commit errors and mistakes' (PL 509f). And:

> Thus the sensitive and rational motions do oftentimes cross and oppose each other; for, although several parts are united in one body, yet they are not always bound to agree to one action; nor can it be otherwise; for, were there no disagreement between them, there would be no irregularities, and consequently no pain or sickness, nor no dissolution of any natural figure. (OEP 145)

Second, and related, Cavendish thinks that in our world there are normal kinds or species of individuals, which have natures proper to them (e.g., PPO 215; OEP [1666] 53; OEP 197, 202–3; GNP 25–6, 27–8, 166–7, 234–5). These are not just statistical norms, but they are prescriptive norms. That is, in virtue of being of a specific kind, an individual ought to behave in certain ways, and failure to do so results in privation, indeed, privation within its own nature. So, for example, flight is behavior proper to a bird and their bodies are designed as they are in order that they might fly (PPO 131f). Were a human to fly, this would be a perversion of its nature (PPO 131) for it is 'not proper or natural for' it; a flying human would be 'monstrous' (OEP 64). Thus, individual bodily structures are as they are, according to Cavendish, because they serve the normal behavioral ends of the natural kind to which they belong. Deviations from

these ends are not just statistical anomalies but monstrous (see also, e.g., OEP 240; GNP 85). Moreover, many of an individual's behaviors serve the end of well-functioning such that failure to exhibit such behaviors leads to disease which is considered a disorder (e.g., PPO 43f; PL 342f, 408f; OEP 241; GNP 157f). Sometimes failure to exhibit normal behavior leads to sin which rightfully incurs God's punishment (e.g., PL 348–50; GNP 242). This second way of interpreting Cavendish's teleological account of nature relates to the first way noted above as follows. Insofar as a natural individual behaves in a fashion normal for its natural kind, that individual helps to contribute to the overall end of peace and harmony of infinite nature as a whole.

From the sketch of Cavendish's ontology of nature offered in the previous section together with these features of her teleological thinking, we can see some considerable overlap with Aristotelian teleology. Recall that Aristotelian teleology is marked in part by the following features: natural individuals have an immanent drive toward ends which are most often unconsciously held, and such individuals have intrinsic natures to achieve their ends such that should they fail to do so, this failure represents a privation within the individual's own nature. For Cavendish, too, natural individuals have an immanent principle of action and change. Moreover, through this immanent principle of action, Cavendishean individuals strive toward ends found intrinsic to themselves. But on this point, the divergence begins. It may seem that the striving toward intrinsic ends is an unconscious striving for Cavendish no less than it usually is for the Aristotelian. After all, one might reasonably suppose that the end of a specific organ or body part within a living body is to contribute to the health of the body, and this end does not seem to be the result of a conscious plan on behalf of the organ to pursue an end or not. But in fact, according to my interpretation of Cavendish offered in the previous section, orderly and disorderly behavior is the result of natural individuals rationally deciding upon the ends that they will pursue, and then acting upon this decision. When a body is diseased, for example, some part within it has rationally chosen (with a form of reason appropriate to the kind of thing it is) not to pursue the end proper to it; it has freely chosen to pursue 'irregular' (for the sort of thing it is) motions (e.g., PPO 43; PL 408; OEP 145; GNP 157, 243f). This free choice to do wrong may be an example of willfully doing what one knows to be wrong or it may be an example of acting wrongly due to ignorance of the correct course of action (PL 509f; OEP 144–5). Whatever the source, these are deviant actions that disrupt the orderly activity within the body as a whole. This is quite in contrast with the Aristotelian approach according to which individuals very often strive without awareness toward unconsciously held ends.[18] Moreover, Cavendish departs somewhat from the Aristotelian tradition on the intrinsic natures of individuals. While Aristotelian natures or essences are determined by substantial forms, Cavendishean natures

emerge from, and are therefore derivative of, their physical structures. So while all individuals for Cavendish are made up out of identical constitutive matter (a thorough blending of inanimate, animate sensing, and animate rational matter), the specific physical figure each achieves determines the individual's nature, including its kind-specific perceptive capacities (e.g., OEP 162). Because these capacities are intrinsic to the individual, the individual can therefore be said to have an intrinsic, kind-specific nature which is teleological because the individual has ends or purposes proper to the kind of thing it is. The degree to which an individual fulfills or falls short of its proper ends or purposes is the degree to which it does not or does exhibit privation. Any privation is within the individual's own nature. So both Aristotelian and Cavendishean individuals have intrinsic teleological natures, but they are of a very different ontological character.

So far, there are no clear marks of Platonic teleology to be found in Cavendish. Recall that the crucial feature of this form of teleology is the fact that created beings have been designed by an extrinsic, conscious agent, and the created beings fulfill the ends in that agent's mind – they do not have ends intrinsic to them. But in fact, I believe that Cavendish does rely upon a blended form of teleology which brings together features of both Aristotelian and Platonic varieties. This comes clear when we ask after the source of the *normal* purposes or ends which characterize natural kinds. What is the source of the standards or norms against which natural individuals and their behaviors are measured such that one can distinguish privative behavior from prescriptively normal behavior? There are two possible answers to this question: the source which determines what counts as a normal end or purpose is either within nature itself or outside of nature. The latter just is God for Cavendish (e.g., GNP 241ff).

Let me first consider the former possibility: the standards against which individuals are evaluated are part of nature itself. At the outset of *Grounds of Natural Philosophy* (see also OEP 137), Cavendish notes that parts of material nature – finite natural beings – have finite sense and reason, and so are often ignorant of various aspects of the created world. The ignorance here could certainly include an ignorance of the norms and standards that govern nature's finite individuals. Further, as noted above, this limited epistemic ability is one of the sources of finite creatures' deviations from ultimate standards according to which their behavior is judged to be beneficial and good, or harmful and bad (PL 509f; OEP 144–5). And so, obviously, ultimate standards by which material beings' own ends are judged cannot be found in any finite part of nature itself. But also at the outset of the *Grounds* and elsewhere (again PL 509f and OEP 144–5), Cavendish expresses the belief that the whole of nature – infinite nature – has 'infinite wisdom'. This is to be expected given that infinite nature is the accumulation of all of its parts, including each part's share of reason. Perhaps, then, the source of standards against which individual goals are measured is to be found in the totality of the natural,

material world. There are some passages where Cavendish does seem to suggest this, including this one:

> Nature having Infinite parts of Infinite degrees, must also have an Infinite natural wisdom to order her natural Infinite parts and actions, and consequently an Infinite power to put her wisdom into act. (PL 8f; cf. PL 144, 161; OEP 121, 138, 214)

Still, I do not think that infinite nature is the *ultimate* source of normative standards for natural individuals since her account of the creation of nature indicates that God must be this ultimate source.[19]

What is Cavendish's theory of creation?[20] Recall that she believes that God exists though she explicitly claims that we cannot say anything positive about him by relying on reason since we cannot pattern out that which is immaterial (OEP 89). Thus the inquiries of theology and natural philosophy must be kept distinct. Our ignorance of God's nature sometimes leads her to say that we know nothing at all about creation (PL 107, 525–7; OEP 23) nor about how nature depends upon God (PL 199–200). Still, she does allow faith to lead us to some substantial claims about God's nature (e.g., PL 210–11), she reaches further conclusions about what God cannot be or do given what faith tells us about him, and these conclusions allow her to say something about creation. At present (though I shall return to this in the next section), I take a claim based upon faith to be one which we can conceive of but which is grounded upon Biblical or Church authority (in keeping with Cavendish's own occasional suggestion) as opposed to one based upon logical reasoning which is the hallmark of beliefs based on reason. So, she believes, in accordance with faith because it is in keeping with Church and Scriptural authority, that God is immaterial, divinely infinite, and perfect (e.g., PL 186–7; OEP 89; GNP 241f). With these faith-based beliefs in place, Cavendish can then argue for further reason-based beliefs as follows. Since nature is not immaterial, divinely infinite, and perfect, it follows that God must be wholly distinct from nature (OEP 199–200; GNP 241). Given the sharp distinction between God's and nature's characteristics, it seems that there can be no interaction between the two at all. One implication of this is that God could not have created matter *ex nihilo*, and indeed, this is an implication which Cavendish accepts; nature is eternal (PL 14ff). One might also suppose that God could not even *move* nature because God cannot move, and this is because motion can exist only in matter, but God is not material. Cavendish herself sometimes supports the belief that only that which is material can be the ultimate source of motion when, for example, she posits a material 'Diestical Centre' as a sort of stand-in for God as the source of motion, order and norms in the material world (PPO 452ff). Yet more regularly, and quite constantly in her mature works, Cavendish says that God is the author not only of nature's perceptive, knowing capacity (OEP 71) and therefore of nature's freedom (PL 16, 164, 503–5),

but also of nature's self-moving power (PL 164; OEP 71). How can the immaterial, and therefore unmoving, God move nature? The answer to this allows us to piece together Cavendish's theory of creation, which in turn allow us to infer that God is the ultimate source of nature's norms. Two passages in the *Observations* explain how God could be the source of nature's motion. They are:

> it is not probable, to wit, that God should be the immediate motion of all things himself; for God is an immovable and immutable essence: Wherefore it follows that it is only done by an omnipotent command, will, and decree of God. (OEP 209)

And:

> It is true, God is the first author of motion, as well as he is of nature; but I cannot believe that God should be the prime actual movent of all natural creatures, and put all things into local motion, like as one wheel in a clock turns all the rest: for, God's power is sufficient enough to rule and govern all things by an absolute will and comment, or by a 'Let it be done'. (OEP 212)

So I suggest that God's creative power is a form of emanation, but it is not emanation of anything natural, since God could emanate only something of himself, and so could not have emanated either matter or motion in order to create the world. But God could have 'created' by producing the order that eternal nature is guided by, and he could have done this by rationally suggesting this order to material nature. Given that nature is essentially rational, God's rational suggestion would be something that nature could 'understand'. This does, in fact, seem to be what Cavendish believes. While matter has existed forever, before this world was created, matter was chaos, and God brought order to it (PL 14). On this picture, the relation between God and Nature seems to be similar to one aspect of the relation between nature and its parts or between parts within nature: interaction is through a rational suggestion.

If I am right, then the relation for Cavendish between God and nature – both infinite nature and natural individuals – is as follows. Both God and nature exist eternally, but God does so as an immaterial, unmoving, atemporal, and unchanging rational being, while nature does so as a material, moving, temporal, and changing whole. God brings order out of an original natural chaos through rational communication with the whole of nature, and in doing so, is the ultimate source of nature's overall harmony as well as of the normative standards through which creatures come to have ends and purposes proper to the kinds of things they are. Infinite nature might attempt to impose or suggest order unto its parts, but this is not an order determined by nature itself. Rather, it is an order determined by God and merely *acknowledged* by the infinitely wise, infinite nature. Given this picture, we can see that Cavendish has a blended form of teleology – one which incorporates elements from both the Aristotelian, natural tradition and the Platonic, unnatural tradition. I

detailed her place in the Aristotelian tradition above. Here we see that she also relies upon an external agent – God himself – creating order within nature in accordance with his purposes *vis-à-vis* the natural world, and this is in keeping with the Platonic form of teleology. To the extent that Cavendish does depend upon God as the ultimate source of normative standards for nature and its parts, she relies upon God in her natural philosophy. My final goal is to asses the degree of the tension that this place for God in her natural philosophy presents given Cavendish's explicit claims that discussions of God belong to theology, not to natural philosophy.

### *4. Easing – but not Eliminating – the Tension in Cavendish's Natural Philosophy*

I have argued that God must play a role in Cavendish's natural philosophy as the source of order and therefore of the teleological norms and standards against which individuals and their behavior are measured. Does this conflict with her belief that inquires about God (theology, governed by faith) and inquires about nature (natural philosophy, governed by reason) be kept separate? In this concluding section, I shall argue that while much of the tension can be resolved, one significant problem remains.

Recall that Cavendish believes that we, as finite parts of rational nature, cannot have rational knowledge of God's nature or essence. Presumably, this would entail a belief that we cannot know God's purposes with respect to his creation, and so we cannot know the ends or norms of natural entities. Yet she seems to imply that we *can* know at least some ends. For example, we know that there are natural kinds, we often know what those kinds are, and we often know some of their ends or purposes. We know, for example, that birds are normally structured as they are so that they can achieve the end of flight. She also suggests that the proper political end of humans is to subordinate ourselves to a hierarchically-organized monarchy rather than an egalitarian democracy (e.g., NBW 95). Do these examples not represent a violation of her belief that we are ignorant of God's essence, including his aims for his creatures? We might answer this charge by turning to her account of privation, and how it is that finite natural beings, such as ourselves, go wrong. Recall that in section 3 above I showed that on Cavendish's account, we go wrong either because we are ignorant of the ends which we ought to pursue or because we know what ends we ought to pursue but we willfully deviate from them (PL 509f; OEP 144–5). The first source of error – our ignorance of our proper ends – obviously poses no problem for Cavendish since this exactly accords with her claim that our reason is unable to tell us anything about God's nature. The second source of error, however – we willfully diverge from what we *know* to be correct behavior – does potentially pose a problem for her.

Here is how I think we might partially ease the tension between Cavendish's seeming suggestion that we know at least some of nature's proper ends (together with the implication that we therefore know something of God's nature by knowing his intentions *vis-à-vis* nature) and her belief that we cannot know anything of God's nature. We might say that it is not God's nature which we know when we know natural ends. Rather, what we know are the ends and purposes communicated to us by infinite nature which serves as a buffer between us and God. One potential difficulty with this approach is the fact that Cavendish sometimes suggests that not even infinite nature can know God's essence because, while infinite and therefore possessing an infinitely accumulated wisdom, nature's infinite wisdom is of a wholly different kind than God's infinite wisdom (PL 141, 144). The implication of this is that nothing natural – not the whole of nature nor its parts – can ever know God's purposes or ends with respect to his creation. In short, any time a natural entity deviates from its proper ends, it does so *only* out of ignorance of those ends, not out of a willful deviation from the ends it *knows* it ought to fulfill.

In fact, I think this is precisely the suggestion we should make on Cavendish's behalf to ease the tension. That is, we do not in actual fact ever know conclusively what our proper ends are. We might have a best guess about what our ends are given which behaviors best maintain order (e.g. monarchies but not democracies, by Cavendish's lights). We may even willfully and freely deviate from these best guesses (e.g., as did those who fomented the civil war through which Cavendish lived). But we can never know for certain that our best guesses actually capture God's intentions for his creation. This does, indeed, seem to be what Cavendish herself suggests in the following passage:

> what Reason, or Cause, or Design is in Infinite matter and motion, that Birds are onely capable to Flie, and not Men or Beast; the Answer will be, it is their Shape causeth them to Flie, and Men and Beast to other Actions that Birds are not capable of; but I ask, Why and for what reason have Birds their Shapes, and Beast their Shapes, and Men their Shapes. . . . But this Question of the Designs, Causes and Reasons of these Differences, Human Sense and Reason hath not extended sofar as to give or declare the Reasons or Causes; I will not say, but that Human sense and reason may guess at them, and may probably and happily light or chance on the Right and Truth of some of them, but Human sense and reason can never attain to a Perfect knowledge. (PPO 131–2)

According to this reading, all Cavendish claims is that we know *that* God is the source of norms and standards through the order he imposes on the world in creation, and consequently *that* there are such normative standards. But we cannot know for certain *what* those standards are. We may turn to statistical prevalence of natural behaviors (e.g., birds almost always fly while humans do not), and we may turn to natural behaviors which we observe tend to preserve order and harmony in order to help

us guess *what* God's ends are. That is, we can turns to the effects in nature in order to help us guess what the nature of the cause might be. But we can never know for certain that we are right about the cause because that cause is God, and we cannot know his essence.

Still, while this approach helps us gain some ground in rendering Cavendish's system consistent, there remains a much deeper – and insurmountable – difficulty for her.[21] This takes us back to how I characterized her beliefs based upon faith in the previous section. There, I suggested that we take such a belief to be one which we can conceive of but which is grounded upon Biblical or Church authority rather than upon logical reasoning. But it is likely that she cannot go even this far. That is, the reason why, according to Cavendish, we cannot say anything positive about God based upon reason is that we cannot pattern out that which is immaterial (OEP 89). But if *this* is the case, then it seems we cannot even have an idea of God; we can *conceive* nothing of him, not even ideas communicated by authority. The thorough-going ontological breach between God and world has far-reaching impact on our knowledge of him. Indeed, despite her own insistence that all parts of nature know of God, her ontological commitments absolutely preclude such knowledge. And this is a tension for which there seems to be no resolution.

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*Short Biography*

Karen Detlefsen's research focuses on seventeenth- and eighteenth-century natural philosophy, including works on natural philosophy published by women in these centuries. She is also interested in the interplay between philosophy (metaphysics, methodology, and epistemology) and advances in the life sciences in the early modern period, and she is currently working on a book on the relations among organic generation, teleology, and individuation in Descartes, Malebranche and Leibniz. She has published or has forthcoming articles on these areas in (among others) *Archiv für Geschichte der Philosophie*, *Oxford Studies in Early Modern Philosophy*,

 

*Perspectives on Science*, and *The Problem of Animal Generation in Early Modern Philosophy* (edited by Justin E. H. Smith). She is also editing *Descartes' 'Meditations': A Critical Guide*, to be published in the new series of Cambridge Critical Guides to Philosophy. She has held a National Science Foundation Science and Technology Studies Scholars Award Program Grant. She did her undergraduate work in English and Philosophy at the University of Calgary, graduate work in Philosophy at the University of Western Ontario and the University of Toronto, and has taught at the University of Pennsylvania since earning her Ph.D. in 2001.

## *Notes*

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[1] Thomas Hobbes is another obvious example of a seventeenth-century philosopher who claims to bracket God from his natural philosophy (EW I, 10; see 'Works Cited' for abbreviations of frequently cited primary texts). For articles which deal with the conceptual relationship between Cavendish and Hobbes, see Ankers; Battigelli; Detlefsen ('Margaret Cavendish and Thomas Hobbes'); Hutton, 'In Dialogue with Thomas Hobbes'; Sarasohn ('Leviathan and the Lady'); Stevenson ('Imagining the Mind'). Depending upon how one interprets Spinoza's God, he may be another such philosopher, as Steven Nadler has recently argued (' "Whatever Is, Is in God" '). For an article which deals *passim* with Cavendish's conceptual relation with Spinoza, see Detlefsen ('Atomism, Monism, and Causation').

[2] Others have noted Cavendish's tendency to discuss God more than one would expect given her explicit prohibition of this, but not a lot of attention has been paid to how God enters into her philosophy and to the degree of damage this poses for her work. For those who note the role of God in Cavendish, see Broad 48fn77; Detlefsen, 'Atomism, Monism, and Causation' fns. 6, 37; 'Reason and Freedom' fn33; Hutton, 'Margaret Cavendish and Henry More' 190; James 231; Sarasohn 'Science Turned Upside Down' 295; Smith 36ff. Wilson (42) conversely, believes that God plays little role in Cavendish's philosophy.

[3] I use the term 'teleology' for ease of expression while being mindful that this term did not actually appear until Christian Wolff coined it in 1728. I use it, as did Wolff, to designate that part of natural philosophy which deals with the ends of things or the purposes which they serve.

[4] A second way in which we may study the relation between God and world in Cavendish's philosophy is to analyze her doctrine that the human has two souls, a material soul and a divine soul, the latter being immortal and bearing a special relation with God (e.g., PL 41, 111, 209f). I will not deal with this issue in this paper.

[5] For example Ankers 249; Broad 43; Detlefsen, 'Atomism, Monism, and Causation' fn. 23.

[6] The term 'unnatural teleology' used for the Platonic variety is James Lennox's in 'Plato's Unnatural Teleology'.

[7] Lennox fleshes out this distinction in considerable detail in Lennox, 'Teleology' 325–6.

[8] For two exceptional accounts of the development of teleological thinking from the Scholastic period into the early modern period, see Carriero and Des Chene ch. 6. For an exceptional account of Aristotle's teleology, together with an analysis of later developments, see Johnson.

[9] For an especially enlightening article on the issues of natures and teleology, as these issues pertain to Aristotle and his predecessors, see Meyer.

[10] The material in this section is an abridged and altered version of material found throughout my 'Reason and Freedom'.

[11] In her earlier accounts of nature, she accepted atomism, whereby atoms are separated from each other by a void. See her *Poems, and Fancies*, for example, PF 5 and 9. For various accounts of Cavendish on atomism, see Clucas; Detlefsen 'Atomism, Monism, and Causation'; Kargon; Stevenson, 'Mechanist-Vitalist Soul'; Wilson.

[12] For a thorough account of Cavendish's epistemology, see Michaelian.

[13] For more thorough accounts of why Cavendish supposes the world to be thoroughly perceptive, and the viability of this position, see Cunning, 'Cavendish'; Detlefsen, 'Reason and Freedom'; James; Wilson.
[14] For an outstanding account of Cavendish's theory of causation and its historical context, see O'Neill. See Nadler 'Descartes and Occasional Causation' for the distinction between occasional cause and occasionalism.
[15] Not all natural change is due to occasional causation, and this argument against causal interaction by influx of motion applies in only some cases of change (e.g., PL 428). For a discussion of different types of change which Cavendish addresses, see James.
[16] For a fuller argument in favor of this interpretation, including an account of how her general philosophical method supports this interpretation, see Detlefsen, 'Reason and Freedom'.
[17] Spinoza, with whom Cavendish has some affinity, would call such so-called individuals 'modes': 'Particular things are nothing but affections of God's attributes, *or* modes by which God's attributes are expressed in a certain and determinate way' (EIP25Cor).
[18] It is possible that the difference between Aristotle and Cavendish on this point is merely semantic, and that what Cavendish calls 'perceptive', thereby indicating consciousness, is what Aristotle would consider to be a non-conscious, end-oriented action. In fact, given that Cavendish believes that humans can have phenomenological acquaintance with only human mental states, we are in principle ignorant of what it feels like to have any other form of perception. So one might believe that she can make no final pronouncement on whether non-human individuals are conscious of the rational and sensitive states which she does believe every individual has. Still, given that she widens considerably the scope of what counts as rational and sensitive capacities, she might also widen considerably what counts as consciousness. See Cunning, 'Systematic Divergences' for a discussion of these points as they pertain to other early modern thinkers. Thanks to David Cunning for drawing this issue to my attention.
[19] See Hutton, 'Margaret Cavendish and Henry More' for another account similar to one I shall now offer.
[20] See Smith 36 for an alternative account of creation which sidelines God altogether.
[21] Many thanks to David Cunning for drawing my attention to this difficulty, and to the broader, related, issue of what is meant by Cavendish's distinction between beliefs of faith and beliefs of reason discussed in the previous section of this paper.

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