

Descartes

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The primary historical contribution of René Descartes (1596–1650) to the theory of action would appear to be that he expanded the range of action by freeing the concept of efficient causation from that of final causation. If to act entails being an efficient cause, and if efficient causes are, or at least can be, independent of final causes, then acting is independent of final causation. Yet at the same time Descartes is widely thought to hold views that limit the range of action considerably. Many contemporary commentators attribute to him the view that bodies are entirely passive and incapable of acting, and Jaegwon Kim has argued that immaterial substances are incapable of causing effects outside of themselves. If these views are correct, there is not much action in the Cartesian universe, and indeed there is no causal interaction between substances.

In this essay I want to explore a few broad themes concerning Descartes' theory of action. First, I will examine the relation of efficient causation to final causation. In so doing I will try to defend further the view held by me and others that Descartes does think bodies act. Second, I will offer a defense of Descartes' account of mental causation against Kim's deployment of the pairing problem.

Efficient and Final Causation

Thomas Aquinas, the most prominent among Descartes' scholastic–Aristotelian predecessors, held that final causation is the most fundamental of the four causes, so that there can be no efficient cause where there is no final cause. This means that, in order for an agent to act, it must be aiming at something as an end. It does not mean that an agent must always achieve its end, but it does mean that, in order to do anything, for example spilling wine on your shirt, I must be aiming at something – for example, pouring wine in your glass. An agent is said to aim at something in the most proper sense when it has cognition of the end as an end. So, among created beings, only those with an intellect are agents in the proper sense, because they are aimed at their end by themselves. Animals were thought to be capable of cognition of ends, for example food, but not as ends; in consequence they would not be aimed at their end by themselves, but rather by God. They were held to be aimed at their ends in the same way an arrow

is aimed at its end – namely, by something else. Plants – which, again like arrows, have no cognition of an end – were also thought to be aimed at an end, for example producing fruit, by God. As long as things of a given kind have a tendency to a certain outcome, which they do if they achieve that outcome for the most part, then they are aimed at that outcome as an end (Aquinas 2000: *Summa theologiae*, Ia–IIae, q.1 a.2 [1] (= *quaestio* 1, 2); see also Hoffman 2009a).¹

Descartes famously asserts that physics should proceed without recourse to final causes. His two principal arguments for this view are widely diverse. One is epistemological. The motions of bodies depend on God's will, but God's purposes are inscrutable to us (Descartes 1897/1913, Vol. 7: 55, 374–375). Thus we should restrict our search to the efficient causes of the motions of bodies (ibid., Vol. 8A: 15–16). The other argument is metaphysical. Descartes argues that nothing aims at its own destruction (ibid., p. 63). Thus he rejects the Aristotelian view that the motions of bodies have natural endpoints, for in that case the motion would be aiming to cease when it reaches a particular location (ibid., Vol. 9: 40). So he rejects the views that fire travels upward because it is aiming at its natural resting place near the heavens and that things composed of earth fall toward the center of the earth because that is their natural place. A third argument is that natural appetites or inclinations presuppose understanding (ibid., Vol. 3: 213), and so to attribute them to bodies is to attribute minds to those bodies. He argues that he cannot conceive how gravity could carry bodies toward the center of the earth unless it had knowledge of the center (ibid., Vol. 7: 442).

When one considers these arguments carefully, it is not actually evident that they amount to rejecting the Aristotelian principle that efficient causation presupposes final causation. Descartes does not deny purposes to God; and there is no indication, in spite of his identification of God's intellect and will, that he thinks God does anything without a purpose.² Thus if God is taken to be the sole cause of the motion of bodies, then Descartes could be interpreted as subscribing to the view that all efficient causation involves an act of will. On this interpretation Descartes could consistently endorse the view that efficient causation presupposes final causation. Indeed he would be narrowing the range of efficient causes to beings who possess wills. So to deny that we should search for final causes in physics because God's will is inscrutable is not necessarily to deny that there are underlying final causes.

The second argument does amount to a rejection of final causes under the common understanding of that notion. According to that common understanding, the end or final cause is an endpoint. It is the point at which the action ceases. On Descartes' view, even if the motion of a body has a final cause in the sense of having a purpose that is inaccessible to us, it nevertheless still does not have a final cause in the sense of aiming at an endpoint where it ceases. So Descartes has freed the notion of efficient causation from final causation in this important sense: an efficient cause need not be aiming at an endpoint at which it will cease acting. In other words, something can act without that action having a natural completion.

But in fact this is not really an innovation. Aquinas did not think that all ends were necessarily endpoints. He distinguished between changes, which do have natural endpoints, and activities, which do not (for example, our thinking and the sun's shining were conceived of as activities), and activities were recognized as perfectly good ends (Aquinas 2000: *Summa contra gentiles*, Book 3a, ch. 2). So it is not a requirement of the

scholastic–Aristotelian notion of a final cause that it be an endpoint. Thus we cannot infer from the fact that Descartes has reconceived the motion of bodies so that it does not have a natural endpoint – in other words, from the fact that he has reconceived of the motion of bodies as an activity as opposed to a change – that he thinks that the motion of bodies does not have a final cause in the sense of having an end toward which it is aimed.

Now even though Descartes states that he rejects natural inclinations and appetites in the physical world because they presuppose understanding, he does not deny tendencies to bodies. He holds generally that things, in so far as they are simple and undivided, persist in the same state, unless something external changes them. So a square will remain square, a body at rest will stay at rest, a moving body will continue moving, unless an external cause changes them (Descartes 1897/1913, Vol. 8A: 62). He argues further that moving bodies tend to move in a straight line, because this is the only motion that can be defined in an instant (*ibid.*, Vol. 9: 44–45).

There are various ways, though none explicitly articulated by Descartes, by which his rejection of natural inclinations and appetites can be reconciled with his acceptance of the tendency of bodies to persist in the same state. First, he might be objecting to the view of various philosophers that there are different kind of bodies which have different inclinations and appetites, in contrast to his own view that all bodies have the same tendency to remain in the same state. Second, he might be objecting to inclinations and appetites which have an endpoint. That is, he might think that an inclination to move to particular a place requires knowledge of that place, whereas an inclination or tendency to move in a straight line does not. Third, he might be objecting to inclinations and tendencies which are considered natural in the sense that they belong to a thing's nature. In contrast, it might be argued, the tendency he recognizes of bodies to remain in the same state is not part of, nor is it a consequence of, their nature, but rather follows from God's immutability in sustaining them from moment to moment.

There is decisive evidence that, even if Descartes does not think this tendency to remain in the same state is a part of, or a consequence of, the nature of body, he does think it exists in bodies. Indeed he thinks that the tendency is grounded in a force located in these bodies:

He [Father J. Lacombe] is right in saying that it was a big mistake to accept the principle that no body moves of itself. For it is certain that a body, once it has begun to move, has in itself for that reason alone the force to continue to move, just as, once it is stationary in a certain place, it has for that reason alone the force to continue to remain there. But as for the principle of movement which he imagines to be different in each body, this is altogether imaginary. (Descartes 1897/1913, Vol. 3: 213)

Given that Descartes locates this force, and the resulting tendency to remain in the same state, in bodies, it seems correct to assert that Cartesian bodies are aimed toward a certain end (though not an endpoint), namely, remaining in that state. Indeed, since that tendency arises from an internal state – Descartes says that a body remains in that state *quantum in se est* (“insofar as it is in itself” “by its own force,” or “from its own nature” – see below; *ibid.*, Vol. 8A: 62) – bodies are appropriately characterized as striving to remain in that state:

When I say that the globules of the second element strive [*conari*] to move away from the centres around which they revolve, it should not be thought that I am implying that they have some thought from which this striving [*conatus*] proceeds. I mean merely that they are positioned and pushed into motion in such a way that they will in fact travel in that direction, unless they are prevented by some other cause. (Ibid., p. 108)

Since the Cartesian theory of motion includes the thesis that bodies in motion strive to preserve the same state of travelling in a straight line, his account of motion is no more independent of final causes, in the broader sense which includes ends that are not endpoints, than the account of his scholastic–Aristotelian predecessors. There is one important difference, however. According to his scholastic–Aristotelian predecessors, something tends to something only if things of its kind achieve it for the most part. Descartes has a much weaker account: for Descartes, bodies that are moving tend to move in a straight line even if they rarely if ever do move in straight lines, because the Cartesian world is a plenum and bodies are typically knocked off course by collisions with other bodies (ibid., Vol. 11: 43–4; Vol. 8A: 63). But Descartes' account seems correct. It seems correct to say that a body is striving to travel in a certain direction provided that it would, due to an internal force, continue in that direction were it not for the influence of external causes.

In suggesting above that Descartes does not think that the tendency of bodies to remain in the same state is a part or a consequence of their nature, I am going against the important argument of Michael Della Rocca, my fellow defender of the view that Descartes does attribute forces to bodies and does think that bodies are causes. I think the textual evidence cited by Della Rocca is problematic (Della Rocca 1999: 66). The first passage is one in which Descartes is reciting the scholastic–Aristotelian view he rejects: “It is in the very nature of motion to come to an end, or to tend towards a state of rest.” Della Rocca asserts that “Descartes here seems to be treating as equivalent the notion of what motion tends to do and the notion of what it does by its very nature.” But, at best, we can infer from this passage that Descartes thought his opponents were guilty of that identification, not that he himself is endorsing it. The second passage is one in which Descartes rejects the scholastic–Aristotelian view: “Nothing can by its own nature be carried towards its opposite, or towards its own destruction.” Contrary to Della Rocca's reading, this passage does not provide grounds for inferring that Descartes treats as equivalent what a thing does by its own nature and what it tends to do. The fact that something cannot have certain tendencies according to its nature does not show that all of its tendencies are things that it does by its own nature. The final piece of textual evidence cited by Della Rocca does provide genuine support for his interpretation. He appeals to I. Bernard Cohen's analysis of the phrase *quantum in se est*, used by Descartes in setting out his laws of motion. Cohen makes a convincing case that the phrase is plausibly understood to mean “from its own nature” (Cohen 1964). However, while I agree that this is a highly plausible interpretation of what Descartes meant, I do not see that there is conclusive evidence that this is what he meant (see n. 5). And indeed Della Rocca himself points out the leading problem with interpreting Descartes as he does. The problem is that it is hard to see how the nature of body could be constituted by extension and also involve the tendency to remain in the same state. Della Rocca's response to the problem is to say that Descartes may have been using the

term 'nature' appealing to a concept which he did not completely reconcile (Della Rocca 1999: 69).

It seems to me more charitable to interpret Descartes as denying that bodies persist in the same state according to their nature, even if, as is clear from the letter to Mersenne quoted above, there is something internal to them, namely, a force, which plays a causal role in their persisting in the same state. But even this might seem problematic. Commentators have wondered how force could be internal to bodies, because it is hard to see how it could be even a mode of extension, that is, a way of being extended. I myself do not find this so problematic. First, I am not sure that it is significantly more problematic to suppose that striving to move and striving to remain at rest are modes of extension than to suppose that motion and rest are modes of extension. That is, if one is willing to grant that motion is a way of being extended, why should it be any worse to grant that striving to continue to move is also a way of being extended? Second, even if striving to continue to move is not a way of being extended, it does not necessarily follow that it could not be internal to body.³ Duration is not a mode of extension, but Descartes thinks it is an attribute of bodies nevertheless (Descartes 1897/1913, Vol. 8A: 30).⁴ I don't see why striving to continue in the same state could not also be an attribute of bodies, even though, like the duration of bodies, its presence in bodies depends on the continued action of God.⁵ This is not to identify this striving with duration, as Martial Gueroult advocates, but merely to put it in the same category as duration (Gueroult 1980: 197).

Daniel Garber has argued that force cannot be an attribute like duration because, unlike duration, it does not exist in body in an unchanging way. Therefore it must be a mode of body, and hence a mode of extension, which, Garber and others claim, it cannot be (Garber 1992: 296–297). But I do not agree that Descartes has to hold that striving to persist in the same state exists in bodies in a variable way. It is true that Descartes sometimes identifies a body's force with its quantity of motion, so that there is a notion of force that is variable (Descartes 1897/1913, Vol. 8A: 66–67). But I think it is important to distinguish a body's striving to persist in its present state from both its force of resisting the action of another body and its quantity of motion (which amounts to a body's speed times its size) – that is, its force of acting on another body. It seems plausible to me to suppose that Descartes thinks a thing's striving to persist in its present state does not exist in it in a variable way. Nevertheless, since its present state can vary, the forces – namely its force of acting on another body and of resisting the action of another body – that result from its striving to persist in its present state can vary. Now Garber would object that such variable forces – forces which result from a thing's unchanging striving to persist in its present state and the present state that it is in – are not modes of extension and that Descartes is committed to the view that all of a body's variable features must be modes of extension (Garber 1992: 296–267). But my response is that, if these variable forces are not modes of extension, they are close enough for us not to worry about it. I think it is in no way problematic to amend Descartes' view to be this: all variable features of a body are modes of extension or arise from its present modes of extension and its unchanging attributes.

In this section I have argued that, contrary to what might appear at first glance, it is far from clear that Descartes did in fact conceive of efficient causation as independent of final causation – that is, it is far from clear that he thought that things, in acting,

need not be aimed at, or striving for, an end. It is true that he conceived of motion or moving bodies as not aiming at or striving for endpoints at which the motion would cease; but this is different from conceiving of motion or moving bodies as not aimed at or striving for an end. Moreover, I have defended the view that we should understand a body's striving to persist in its present state to be an unchanging attribute of body, distinct from its nature.

Descartes' Account of Mental Causation

Jaegwon Kim has argued that we cannot solve the problem of mental causation – the problem of explaining how psychological properties/events can be the cause of physical properties/events or of psychological properties/events belonging to numerically distinct psychological beings – by positing immaterial substances. This is because immaterial substances fall prey to the pairing problem. The pairing problem is as follows: given two simultaneous causes (to use Kim's example, two guns being fired) and two simultaneous effects (two people being killed), what pairs one cause with one effect and the other cause with the other effect? Kim argues that, in order for this problem to be solved, the causes and effects must be spatially located. But, since immaterial substances are not spatially located, we could never pair simultaneous psychological properties/events of two immaterial substances with simultaneous effects belonging to distinct beings, whether those other beings are physical or immaterial (Kim 2005, Ch. 3).

I think there is much to be said in defense of Descartes against this objection. First, it seems to me that, if Kim's argument succeeds in undermining immaterial substances, it equally undermines material substances. Here is why. Kim considers the reply to his argument that, if each immaterial substance stood in some relation *R* to a particular body, then immaterial substances could be located spatially. But he argues there is no good candidate relation *R*. Causation is ruled out because to say that an immaterial substance causally interacts with a particular body and therefore can inherit its spatial location presupposes that the pairing problem has already been solved, and thus it begs the question (Kim 2005: 89). Kim also rejects the hypothesis that there is some primitive notion of union by which immaterial substances are united to particular bodies. He says that such talk of a union is a mere label (pp. 77–78). My response is that, if Kim wants to admit the existence of material substances, he has to concede that there is some primitive relation *R* which qualities such as shape and size bear to those material substances. Philosophers have tended to say that shape and size exist in substance; but, as Berkeley argued convincingly, this relation cannot be a spatial one (Berkeley 1979: 33–35). So either we follow Berkeley and Hume in rejecting material substances or we are forced to accept that there is some primitive non-spatial relation between a material substance and its qualities. Now if we read Descartes as endorsing the hylo-morphic account of the relation between mind and body – that mind is related to body as form is to matter, and thus can be said to exist in the body – then we can reply to Kim on Descartes' behalf that his account of the relation between mind and body is the same as, or at least sufficiently similar to, the relation that qualities bear to material substances, so that immaterial and material substances stand or fall together. And if

minds exist in bodies, then we can attribute a spatial location to them and thereby solve the pairing problem.

Kim further objects, however, that if a mind exists in a body, then it has to exist in some particular place within it, which he thinks is problematic (Kim 2005: 88–89). But this seems wrong. Shape and size exist in body, but they don't exist in some particular place within it. Rather it seems that the shape of a body exists in the whole body, as does its size. Descartes, endorsing the language of his Aristotelian–scholastic predecessors in describing the relation of substantial form to matter, says that the mind exists whole in the whole body. He also endorses their view that a substantial form exists whole in each part of the body, which is obviously not true of shape or size, which are perhaps better described as existing part in each part of the body (Descartes 1897/1913, Vol. 7: 442; Vol. 11: 351).

Now I certainly do not want to assert that the hylomorphic account of the relation between form and matter is unproblematic. One might well be troubled by the notion of something's existing whole in the whole and whole in each of the parts, and one might further be troubled by the notion that a form can stand in such a relation to a material thing and still be considered immaterial and non-extended. But it seems to me that much more work needs to be done to show that such a view should be cast aside and that it can be cast aside in way that does not also jeopardize material substances.

There is another important way in which Descartes can claim to solve the pairing problem. The pairing problem arises only on a Humean conception of causation according to which cause and effect are distinct non-simultaneous events – a conception that is utterly foreign to the Aristotelian conception of causation endorsed by Descartes. I have argued elsewhere that Descartes is committed to the Aristotelian doctrine of the identity of action and passion – an agent's action is one and the same thing as the passion undergone by the patient (Hoffman 2009b, chs 7–9). It is not the case that there are two distinct non-simultaneous events when one substance acts on another. My lifting the vase is not numerically distinct from the vase's being lifted; they are one and the same event. On this Aristotelian conception, the action of the agent, since it is the same as the effect, namely the passion in the patient, already comes paired. Now this is not to say that the Aristotelian doctrine of the identity of action and passion is unproblematic; but I would assert that it is no more – and, in my view, less – problematic than the Humean conception of causation.⁶

See also: VOLITION AND THE WILL (13); TELEOLOGICAL EXPLANATION (16); MENTAL CAUSATION AND EPIPHENOMENALISM (23); AGENCY, PATIENCY, AND PERSONHOOD (26); AUGUSTINE AND AQUINAS (56); BERKELEY (61).

Notes

- 1 Jeffrey McDonough has noted, in correspondence with me, that someone might object that “things could achieve a certain outcome for the most part, and yet not be aimed at that end – an elephant (say) might regularly kill the grass it walks on, but not have that as an end.” I think Aquinas would grant that there are exceptions of this sort. But, in order for them to arise, there must be some other outcome that is aimed at, and the process of moving toward

- that end must have as a typical side effect the outcome that is not aimed at. So a more precise statement, which includes the exceptions, would be this: as long as things of a given kind have a tendency to a certain outcome, which they have if they achieve that outcome for the most part, they are aimed at some outcome as an end.
- 2 Here I disagree with Tad Schmaltz (2008: 62), who makes the opposite assertion. To say, as Descartes does, that God's choices are not impelled by God's idea of the good simply does not imply that God has no purpose in making choices. God can act for a reason without being impelled by that reason. In general, the liberty of indifference is not incompatible with acting for a purpose.
 - 3 It is worth noting that, while Descartes asserts in a letter to Regius that "in corporeal things, every action and passion consists of local motion alone" (1897/1913, Vol. 3: 454), in *The World* he asserts that a body's tendency ('*inclination*') to move in a straight line is an action that differs from its motion (ibid., Vol. 11: 44).
 - 4 Here I am using the term 'attribute' as Descartes sometimes does to refer to features of a thing that exist in it in an unchanging way, and not to its nature or essence.
 - 5 Della Rocca holds that this striving to continue in the same state is part of a body's nature, but not in the sense of the term 'nature' according to which extension is the nature of body. I agree that this striving is not part of a thing's nature in the sense in which extension is the nature of body, and I hold that it is instead an attribute of body that exists in it in an unchanging way. So the difference between us is that I am not confident that there is some other appropriate sense of 'nature' according to which this striving would count as belonging to a body's nature. It is also important to note that Cohen's paper does not support Della Rocca's interpretation over mine. Cohen suggests that the phrase *quantum in se est* is as plausibly translated as "by its own force" as "from its own nature" or "naturally," and for his purposes there is no significant difference in the use of these different interpretations. But the dispute between Della Rocca and me amounts to a dispute over which of Cohen's approved translations is better. If "by its own force" is as adequate a rendering as "from its own nature" or "naturally," then Descartes' use of the phrase *quantum in se est* does not favor Della Rocca's interpretation over mine (see Cohen 1964: 147–148).
 - 6 I would like to thank Jaegwon Kim, Jeffrey McDonough, Michael Della Rocca, and Alan Code for helpful discussion.

References

Primary sources

- Aquinas, T. (2000). *Summa contra gentiles*. Available at: [<http://www.corpusthomicum.org/iopera.html>].
- Aquinas, T. (2000). *Summa theologica*. Available at: [<http://www.corpusthomicum.org/iopera.html>].
- Berkeley, G. (1979). *Three Dialogues between Hylas and Philonous*, edited by R. M. Adams. Indianapolis: Hackett Publishing Company.
- Descartes, R. (1897/1913). *Oeuvres de Descartes*, Vols 1–12 and Supplement, edited by Charles Adam and Paul Tannery. Paris: Leopold Cerf.

Secondary sources

- [2] Cohen, I. B. (1964). '*Quantum in se est*': Newton's concept of inertia in relation to Descartes and Lucretius. *Notes and Records of the Royal Society of London*, 19, ••.

- Della Rocca, M. (1999). 'If a body meet a body': Descartes on body–body causation. In R. J. Gennaro and C. Huenemann (eds), *New Essays on the Rationalists*. Oxford: Oxford University Press, 48–81.
- Garber, D. (1992). *Descartes' Metaphysical Physics*. Chicago: University of Chicago Press.
- Gueroult, M. (1980). The metaphysics and physics of force in Descartes. In S. Gaukroger (ed.), *Descartes: Philosophy, Mathematics and Physics*. Sussex: Harvester Press Limited, 196–229.
- Hoffman, P. (2009a). Does efficient causation presuppose final causation? Aquinas vs. early modern mechanism. In S. Newlands and L. M. Jorgensen (eds), *Metaphysics and the Good: Themes from the Philosophy of Robert Merrihew Adams*. Oxford: Oxford University Press, 295–312.
- Hoffman, P. (2009b). *Essays on Descartes*. New York: Oxford University Press.
- Kim, J. (2005). *Physicalism, or Something Near Enough*. Princeton: Princeton University Press.
- Schmaltz, T. (2008). *Descartes on Causation*. New York: Oxford University Press.