

## Mind and body in modern philosophy<sup>1</sup>

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### Article summary

European philosophers of the seventeenth and eighteenth centuries proposed a wide range of views about the nature of the mind and its relation to the body.

René Descartes (1596-1650) argued that there are two distinct parts to human beings, mind and body, which are of radically different kinds, and either of which could exist without the other – although in fact, in living humans, they are always connected together. This belief in two substances of two kinds is why Descartes is sometimes called a dualist. He argued for dualism in several works, including his *Meditations on First Philosophy* (Descartes 1641). Elsewhere, in his *Discourse on the Method* (Descartes 1637) he argued – based on empirical observation of the difference between humans and other animals – that reason is unique to humans. Indeed Descartes thought that, because non-human animals do not have an incorporeal mind, they do not even really have sensations.

Though Descartes's views have been very influential, they attracted critics from the outset. For example, Thomas Hobbes (1588-1679) argued against Descartes that the thinking mind is corporeal, Pierre Gassendi (1592-1655) objected to Descartes's method of investigating the mind, and Princess Elisabeth of Bohemia (1618-1680) objected to his explanation – or lack of explanation – of how the incorporeal mind and the corporeal body

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are related to one another.

Questions about that relationship continued to divide philosophers in the generation after Descartes. In different ways, occasionalists such as Nicolas Malebranche (1638-1715) and the anti-occasionalist Gottfried Wilhelm Leibniz (1646-1716) both denied that distinct created substances (such as the Cartesian mind and body) could really have a causal influence on each other. Benedict Spinoza (1632-1677) denied this too, in his own way, while also arguing for a claim that sounds materialistic, that mind and body are the very same thing “expressed in two ways” (Spinoza [1677] 1988:2p7s). Other philosophers, such as Hobbes, were more straightforwardly materialists, arguing that the structure and movements of various corporeal systems gave rise to thought. Margaret Cavendish (1623-1673), meanwhile, was a materialist who argued that matter itself was fundamentally and irreducibly thinking.

The Hobbesian sort of materialism seeks to explain the mind in terms of the body. Idealism, on the other hand, seeks to explain the body in terms of the mind. This is the view that what there are, fundamentally, are incorporeal thinking things and their states (e.g., thoughts, ideas, and perceptions). Material stuff somehow depends on these more basic things. Leibniz proposed this view at some points, as did the eighteenth-century philosopher George Berkeley (1685-1753).

Descartes’s views about animals’ lack of minds also continued to attract attention. A wide range of philosophers thought he must have gone wrong here. This debate has complex connections to others. For example, if you believe that animals can think, but you also believe that thought requires an incorporeal soul, what should you say about animals’ incorporeal souls? Where do they go when an animal dies and their body decays?

Dualistic, anti-materialist views were sometimes connected to the notion of simplicity. The idea was that the soul was a simple, indivisible thing, unlike corporeal things

such as human brains. Various philosophers thought they could prove that the soul had to be simple, and thus that it could not be corporeal. Leibniz (again), Christian Wolff (1679-1754), and Immanuel Kant (1724-1804) discussed such issues.

### 1. Descartes

René Descartes argued that there is an incorporeal part of human beings, which is their mind or soul, and is what allows them to be rational and conscious. In his technical terminology, he believed that there is a real distinction between mind and body. This means that a human's mind and their body are two distinct substances, and that either could possibly exist without the other – although in fact, in living human beings, mind and body are always paired together. Moreover, the mind and body are of two different kinds, having different principal attributes, or essences. The essence of mind is thinking, and all other features of a mind depend in some way on this. Typically we might think of them as ways of thinking. The essence of body, meanwhile, is extension, and all other features of body depend on this.

Descartes argues for that view of the mind in the sixth of his 1641 *Meditations on First Philosophy*. The subtitle of the first edition of that work claimed that it demonstrated “the immortality of the soul” (Descartes [1641] 1984:1). The second edition moderated that claim, saying only that the work demonstrated “the distinction between the human soul and the body” (Descartes [1641] 1984:12). Still, we can see why Descartes might have thought that showing the mind to be really distinct from the body was a step towards showing it was immortal. A mind that is really distinct from body would presumably not be subject to processes of bodily decay. So though the body may decompose after death, or be cremated, neither of these would affect an incorporeal being, such as Descartes thought he had shown the mind to be. Thus it is at least possible that the mind is immortal, and a significant

obstacle to believing in any sort of human immortality – the decay of the body after death – is removed.

The Sixth Meditation argument for the real distinction relies heavily on Descartes's notion of clear and distinct perception or understanding. This sort of perception, Descartes believes, is undeniable – “so long as I believe something very clearly and distinctly I cannot but believe it to be true” (Descartes [1641] 1984:48) – and – because of the way God has created us and the rest of the world – gives us a reliable insight into things. In this argument, Descartes begins from the thought that everything I clearly and distinctly understand can be created by God. That is, it is in an important sense possible. Moreover, Descartes says, if I can clearly and distinctly understand two things, A and B, “apart from” one another (Descartes [1641] 1984:54), then I can be sure that God could create either without the other, and thus that they are really distinct, are two different substances (even if they both happen to exist and be connected in the actual world). But I also perceive facts about the nature of myself, or my mind – it is a thinking, unextended thing – and about the nature of body – that it is an extended thing. This, Descartes claims, shows that I can understand them apart from one another. Thus they are, given the previous claims, really distinct.

In his earlier *Discourse on the Method* (Descartes 1637), Descartes had offered a rather different set of reasons for his view of mind and body. These rely on empirical observation of the differences between human beings and non-human animals. The first difference Descartes draws attention to involves language. Though animals make noises, and indeed parrots can speak human words, non-human animals cannot, Descartes thinks, “show that they are thinking what they are saying” (Descartes [1637] 1985:140). Meanwhile, humans can use language. Descartes thinks that this shows a sharp difference in kind between humans, who have reason, and all other animals, which lack it. Secondly, Descartes observes the way

that animals do some things much better than us, but other things much worse. A cheetah, for instance, can run faster than any human, but can make no start at all in many activities performed by humans. It cannot read philosophy books, or knit a scarf, or row a boat. Many humans do not do these particular things either: but very many humans could learn to do them, though no cheetahs could. Thus Descartes argues that animals, unlike human beings, are like specialized biological machines, designed and made to do one thing. Human beings though, with their faculty of reason, can adapt themselves to many things. These arguments from the *Discourse* are not, directly, arguments for the real distinction argued for in the *Meditations*. They are, however, arguments that human beings have a unique mental ability, reason. Reason, Descartes thought, must belong to an incorporeal mind.

## 2. Early critics of Descartes

When Descartes's *Meditations* were first published, they were accompanied by several sets of Objections from other philosophers, as well as Descartes's Replies. Thomas Hobbes, later to become famous as a political philosopher, was the author of the Third Set of Objections (Hobbes 1641). Hobbes suggested, in contrast to Descartes, the possibility of materialism about the human mind, the thing that has reason. His materialist account relies upon the powers of language in order to explain our reasoning ability. Our use of language does not, Hobbes thought, require us to have any mental faculty over and above the imagination – certainly not the sort of incorporeal rational faculty Descartes thought we possessed, with its ability to have clear and distinct intellectual perception of the natures of things. Instead, “reasoning will depend on names, names will depend on the imagination, and imagination will depend ... merely on the motions of our bodily organs; and so the mind will be nothing more than motion occurring in various parts of an organic body” (Hobbes [1641] 1984:126).

Pierre Gassendi was a French contemporary of Descartes's, who had been professor of philosophy at the university of Aix, and would later be professor of mathematics at the Collège Royal in Paris. He was the author of the Fifth Set of Objections to the *Meditations* (Gassendi 1641). Later, wrote a further book containing objections to Descartes's *Replies* (Gassendi 1644). Of particular note here is the way Descartes and Gassendi disagreed about how we ought to investigate the nature of the mind. Descartes thought that rational reflection and clear and distinct perception could lead us to knowledge of the mind's essence, which is its principal attribute, thinking. Gassendi thought this was the wrong picture of what we need to do to achieve "the kind of knowledge which is superior to common knowledge" (Gassendi [1641] 1984:193). He compared Descartes's investigation of the mind to an investigation of wine. To say that the mind is a thinking thing is like saying "wine is a liquid thing, which is compressed from grapes, white or red, sweet, intoxicating" (Gassendi [1641] 1984:193). This kind of superficial description is not what we are after. Rather, to have superior knowledge about the wine, you want to "explain its internal substance, showing how it can be seen to be manufactured from spirits, tartar, the distillate, and other ingredients mixed together in such and such quantities and proportions" (Gassendi [1641] 1984:193). That is, you want to investigate it chemically. And analogously, Gassendi said, to understand the mind we want "a kind of chemical investigation" of it (Gassendi [1641] 1984:193), which Descartes failed to provide – and which his method is perhaps not suited to provide.

A third early critic of Descartes was Princess Elisabeth of Bohemia, who corresponded with him in the 1640s. Early in their correspondence, she asked Descartes about his views about mind and body, and in particular about how they were related to each other. In the *Meditations*, Descartes had emphasized that there is a peculiarly close

relationship between the human mind and body. He had denied that we should think of the mind and body on the model of a sailor in a ship. On that model, there is causal influence in both directions, and the mind observes and controls the body. But that, Descartes thought, was not a close enough relationship: mind and body are “very closely joined and, as it were, intermingled” (Descartes [1641] 1984:56). Nevertheless, one might still ask what exactly this relationship is. And, as Elisabeth did, one might ask how they are able to interact at all.

Bodies, in Descartes’s picture of the physical world, are affected by being pushed by other bodies they are in contact with. But it seems that an incorporeal, non-extended mind is the wrong sort of thing to push on anything. So how, Elisabeth asked, can the Cartesian mind affect the body (Elisabeth [1643] 2007:62)?

Replying to Elisabeth, Descartes sketched an apparently new theory, involving three “primitive notions that are like originals on the pattern of which we form all our other knowledge” (Descartes [1643] 2007:65). In understanding the body alone, we use the notion of extension. In understanding the soul alone, we use the notion of thought. But we also, Descartes says, have a third notion, of their union. Trying to understand mind-body interaction using the notion of extension, and the model of bodies pushing on each other, is doomed to failure. But we have this additional notion of the union, involving the power of minds to act on bodies. We can understand those interactions well enough, Descartes thinks, and do so quite naturally, as long as we do not try to force them into the other model.

### 3. Occasionalism and pre-established harmony

Descartes’ philosophical influence was such that he came to have a considerable number of philosophical followers, known as Cartesians. Among those Cartesians, many were also occasionalists. The most famous of the early modern European occasionalists was Nicolas

Malebranche, author of the *Search after Truth* (1674–5) and *Dialogues on Metaphysics and Religion* (1678).

Occasionalism is, in the first instance, a view about causation. In its simplest and strongest version, it is the view that only God has causal powers. All other things – all finite, created things – lack causal powers. Thus even if finite beings, including humans and their minds, seem to be the causes of things, there is an important and fundamental sense in which they are not, because only God can really cause something to happen. Things other than God are said, rather, to be only occasional causes. Thus, for example, on the occasion of my deciding to make some tea, I walk to the kitchen and put the kettle on. But neither I, nor my decision, is really the thing with causal power. Only God has that. So it seems we must say that, according to the occasionalist, it was God, not me, who caused the change in the state of the kettle.

Occasionalism is, then, a general view about causation, and about God's relationship to the world. However, it can also appear to provide an answer to the puzzle about mind-body interaction that Elisabeth posed for Descartes. Put simply, the answer is that the mind can have no effect at all on the body. But this is not because of some defect of the mind, or some weakness of Descartes's system. Rather it is because the mind is a finite, created thing, and no created things have any causal power at all, for that belongs only to God. The mind does change on the occasion of changes in the body, but this is the work of God, not of the motions of corporeal things.

One of occasionalism's most prominent opponents was Gottfried Wilhelm Leibniz. He attacked the occasionalist view for postulating too many miracles. To think that God, rather than some finite substance, was the cause of some change in a finite substance, was to think of God as intervening miraculously into the world every time something happened,



Leibniz thought. Leibniz took this to be the wrong sort of explanation to give. Thus he said in his “New System” (Leibniz 1695) that “in solving problems it is not sufficient to make use of the general cause and to invoke what is called a *Deus ex machina*. For when one does that without giving any other explanation derived from the order of secondary causes, it is, properly speaking, having recourse to miracle” (Leibniz [1695] 1989:143). That is, an explanation of an event in the natural world ought to involve another event in the natural world (what Leibniz here calls a “secondary cause”) not simply an appeal to God.

Leibniz’s own system also contained surprising claims about causation, however. In his picture, finite substances still do have some causal powers: an earlier state of a substance is genuinely the cause of a later state of it. But Leibniz thought that no finite created substance could, fundamentally, cause a change in any other. Rather, he believed that all the created substances evolved harmoniously. Suppose, for example, that you say something (“Leibniz wore a wig”) and a friend listens to you and comes to believe it. Their believing it does have a cause, but fundamentally for Leibniz that cause was an earlier state of your friend, not your saying what you did. God, however, created you and your friend so that your states would be synchronized, the belief arising just after your utterance. This is what Leibniz calls the pre-established harmony.

That view, like occasionalism, is a general view about causation. But like occasionalism, it might be employed in answer to puzzles about mind-body interaction. As Leibniz says, again in the “New System”: “It is this mutual relation, regulated in advance in each substance of the universe, which produces what we call their *communication*, and which alone brings about *the union of soul and body*” (Leibniz [1695] 1989:144). Here, as indeed with occasionalism, there are complications. Not the least of these involves understanding what Leibniz thinks bodies actually are: many have thought he was an idealist (see §5). But we can

at least see a possible view here: states of a mind are explained by its earlier states, states of a body are explained by its earlier states, and neither mind nor body exercises causal power on the other, but their states evolve harmoniously, thanks to the way God created the world.

#### 4. Materialism

Hobbes, as is suggested by his *Objections to Descartes's Meditations*, was a sort of materialist about the human mind. We can see this in other works too, such as the early chapters of his *Leviathan* (Hobbes 1651), in which he explains the various powers of the mind – sensation, memory, imagination, language, reason – without seeing any need to postulate an incorporeal part of human beings. Certainly Hobbes's views are strikingly different from those of, say, Descartes, Malebranche, and Leibniz. Nevertheless, Hobbes was far from the only materialist. The rest of this section provides some examples of materialist views among seventeenth- and eighteenth-century European philosophers.

Someone who knew Hobbes was Margaret Cavendish, the Duchess of Newcastle. She published her own materialist philosophy in several books of the 1650s and 1660s, such as her *Observations upon Experimental Philosophy* (Cavendish 1666). Cavendish disagreed with Hobbes and others who thought that the motions of parts of matter could explain why some material systems could think. Cavendish thought, instead, that matter was fundamentally and irreducibly thinking stuff. Combining this with the view that the world is wholly material, she thought that many things other than humans could, in their own way, think and have knowledge: not just animals, but also vegetables and even minerals.

Cavendish's materialism, like Hobbes's, is there on the surface for all to see. It is more difficult to know what to say about their contemporary Benedict Spinoza. It is clear from his *Ethics* (Spinoza 1677) that Spinoza thought there was just one substance, with

attributes that include thought and extension. Seeing this, one might be inclined to think he too was a sort of materialist, one who thought that the whole world was one extended, thinking thing. But this is far from the only way to read Spinoza, and many interpreters would strongly oppose the suggestion that he was a materialist. For example, one tradition of interpretation holds that he was an idealist, taking the attribute of thought as more basic.

Nevertheless, Spinoza clearly did hold that in some sense the human mind and the human body are identical – that they are “one and the same thing, but expressed in two ways” (Spinoza [1677] 1988:2p7s). And claims of mind-body identity are typically, these days, associated with materialism. Moreover, he thought that the relations between mental things were exactly parallel to the relations between physical things: “The order and connection of ideas is the same as the order and connection of things” (Spinoza [1677] 1988:2p7). There is a causal structure in the physical world, and a causal structure in the mental world, and they mirror each other exactly, though there is no causal interaction between them.

John Locke (1632-1704) seems to be agnostic about materialism in his *Essay concerning Human Understanding* and other works. He does say, however, that it is possible that God gave “to certain Systems of created senseless matter, put together as he thinks fit, some degrees of sense, perception, and thought” (Locke [1689] 1975: 4.3.6). Thus, our minds might perhaps be material, even though God himself could not be. Locke did not, however, assert that materialism was true. Moreover, he held that some materialist arguments (e.g., the argument that we should not believe in an immaterial mind because it is inconceivable) were bad arguments.

Locke’s seemingly moderate concession, that a sort of materialism might possibly be true, caused significant concern. Thus Leibniz wrote that “Natural religion itself seems to

decay [in England] very much. Many will have human souls to be material ... Mr. Locke and his followers are uncertain, at least, whether the soul is not material and naturally perishable” (Leibniz [1715] 1989:320). In talking of Locke’s followers, Leibniz was perhaps thinking of John Toland (1670-1722) or Anthony Collins (1676-1729). Meanwhile Pierre Bayle noted Locke’s view in his popular *Dictionary*, objecting (in note M to the article “Dichaearchus”) to what he took to be Locke’s combination of views: that thinking matter is incomprehensible, and that God could make matter think (Bayle [1696] 1991, 72–4).

One should not think, despite the above examples, that all early modern materialists were English speakers. There were for example several famous French materialists. These included Julien Offroy de la Mettrie (1709-1751), author of *L’Homme machine* (*Machine Man*, 1747), and Paul-Henri Thiry, Baron d’Holbach (1723-1789), author of the *Système de la nature* (*System of Nature*, 1770). Holbach, for example, argued that “those who have supposed in man an immaterial substance, distinguished from his body, have not thoroughly understood themselves” (Holbach [1770] 1889:1.48). Having reviewed various problems with the notion of an immaterial soul he concluded that “such a substance is a chimera; a being of the imagination” (Holbach [1770] 1889:1.49). He argued that the soul is, instead, “only the body itself considered relatively to some of its functions” (Holbach [1770] 1889:1.52).

## 5. Idealism

One could think of idealism as the opposite of materialism. A materialist such as Hobbes thinks that the world is made entirely of matter, and that everything, including minds and their thoughts, is somehow constructed from that material stuff and its motions. A stereotypical idealist holds instead that what there are fundamentally are (immaterial) minds and their thoughts. Everything else, matter included, is somehow constructed from them.

Again, Leibniz provides a good example, though complexities of interpretation mean it is not an entirely uncontroversial one. As Leibniz wrote to the Leiden professor Burcher de Volder (1643-1709) in 1704, “there is nothing in things but simple substances, and in them, perception and appetite” (Leibniz [1704] 1989:). The states of simple substances are mental ones, perceptions and appetites – what we might call thoughts and desires. And Leibniz did not think that bodies were simple substances. So somehow – and how is a big question – he thought that the entire material world was founded solely in these simple thinking things.

One approach to that question (seemingly not Leibniz’s) would be to identify the material things with the perceptions that minds have of them. Such an approach seems to appear in the work of George Berkeley. Berkeley was another who held an idealist view, which he called immaterialism (Berkeley [1713] 1949:257). He argued against the existence of material substance, something that underlies and gives rise to qualities (and ultimately then perceptions). Instead, he argues, there are minds (or spirits) and ideas. Everyday objects are, in fact, ideas, not the (mysterious) material substances philosophers have claimed they are. As one character summarizes the view toward the end of Berkeley’s *Three Dialogues*:

My endeavours tend only to unite and place in a clearer light that truth, which was before shared between the vulgar and the philosophers: the former being of opinion, that *those things they immediately perceive are the real things*; and the latter, that *the things immediately perceived, are ideas which exist only in the mind*. Which two notions put together, do in effect constitute the substance of what I advance (Berkeley [1713] 1949:262).

Thus, Berkeley did not look to deny the existence of things that we would often think of as bodies: rocks and trees, tables and chairs. Rather, he took himself to be disagreeing with

various philosophers about what those things ultimately are. They are, he argues, the very things we directly perceive (thus, our ideas) rather than something that underlies or gives rise to them (matter, material substance, substratum).

## 6. Animal minds

Many early modern debates about mind and body were about the nature of human minds and their relation to human bodies. There was also an important related debate about the nature of other animals' minds.

Again, Descartes provides an interesting starting point. For while he holds that humans have reason, language, and a soul, he thinks that other animals lack all those things. Such an animal is a sort of biological machine or automaton. Moreover, if we combine this with Descartes's view that sensation involves the immaterial soul (Descartes [1637] 1985:164), it turns out that other animals do not even have sensation.

This view was unsurprisingly not persuasive to all. Thus, for example, Spinoza argued that "we can by no means doubt that beasts have feelings" (Spinoza [1677] 1988:3p57s) – though he also thought that nothing about their having feelings should stop us "making use of them as we please and dealing with them as best suits us" (Spinoza [1677] 1988:4p37s1). Later Bayle, in his *Dictionary*, reported arguments on both sides of the debate in notes to the article "Rorarius". The Cartesian view does appear to have a theological advantage in making a strong distinction between humans and other animals (Bayle [1696] 1991:216–21). If animals have immaterial souls, one must ask whether those souls are immortal, whether they could be subject to eternal punishment, and so on. All these difficulties are avoided by simply denying that non-human animals have souls in the first place. But on the other side, Bayle praises the arguments of Gabriel Daniel (1649-1728) in

his 1690 *La voyage du monde de Descartes*. Daniel, Bayle reports, claims that “the arguments of the Cartesians lead us to judge that other men are machines” too (Bayle [1696] 1991:231).

Later still, David Hume would argue that it is entirely obvious that Descartes is wrong about this issue. As he began his discussion “Of the reason of animals” (*Treatise* 1.3.16):

Next to the ridicule of denying an evident truth, is that of taking much pains to defend it; and no truth appears to me more evident, than that beasts are endow’d with thought and reason as well as men. The arguments are in this case so obvious, that they never escape the most stupid and ignorant (Hume [1739] 2001:1.3.16.1).

That is, Hume thought it was simply obvious that non-human animals could think, and that it would be ridiculous to follow Descartes in denying this – or, indeed, to spend a long time arguing against him. Moreover, Hume argues that, where we see similar behaviour in humans and animals, we should think there are similar internal causes. Thus we should think, unlike Descartes, that animals have thought and reason. More generally, Hume thinks that animal minds, and their similarities to human minds, give us evidence that many theories of human minds are wrong. Hume notes that many of the things done by human minds are also done by animal minds. In these cases, we should expect the explanations to be similar too. So whatever the explanation is, it should be one we can happily give in the animal case: not something involving very complex cognition that we would only want to attribute to humans. As Hume puts the point:

The common defect of those systems, which philosophers have employ’d to account for the actions of the mind, is, that they suppose such a subtilty and refinement of thought, as not only exceeds the capacity of mere animals, but even of children and the common people in our own species; who are notwithstanding susceptible of the

same emotions and affections as persons of the most accomplish'd genius and understanding. Such a subtlety is a clear proof of the falshood, as the contrary simplicity of the truth, of any system (Hume [1739] 2001:1.3.16.3).

## 7. Simplicity

Another theme that emerged repeatedly in modern discussions of the nature of the soul was that of simplicity, of the soul being a simple thing. Simplicity itself was often connected to immateriality, because material things – in particular the material things that seem the mostly likely candidates to be material minds, such as brains – are complex systems. This connection of simplicity and immateriality is sometimes associated with a famous passage in Leibniz's "Monadology" in which he uses the example of a mill.

Moreover, we must confess that the perception, and what depends on it, is inexplicable in terms of mechanical reasons, that is, through shapes and motions. If we imagine that there is a machine whose structure makes it think, sense, and have perceptions, we could conceive it enlarged, keeping the same proportions, so that we could enter into it, as one enters into a mill. Assuming that, when inspecting its interior, we will only find parts that push one another, and we will never find anything to explain a perception. And so, we should seek perception in the simple substance and not in the composite or in the machine (Leibniz [1714] 1989:215).

Leibniz concludes here that nothing complex or mechanical could ever explain perception or thought. Rather, he asserts, perception is done by simple substances. But why can the composite not explain perception? One possibility is that Leibniz is offering an argument from inconceivability: an argument that starts from the thought that we cannot conceive or understand how a mechanical device, large or small, could give rise to thought. This



inconceivability is used as evidence that a thinking material thing is impossible, and thus that thinking things must be immaterial simple substances.

Christian Wolff is often thought of as a follower of Leibniz. Indeed, one reads references to the “Leibnizian-Wolffian philosophy”, which might suggest they held a sort of unified view. As always in these matters, the details are rather more complicated. But we definitely can find Wolff echoing Leibnizian themes about the soul being a simple thinking thing, quite unlike material things.

Because a body cannot think according to its essence and its nature, and because neither a body nor matter can be given the power to think, the soul cannot be anything corporeal and cannot consist of matter. And since it is clear ... that thought cannot be attributed to a composite thing, the soul must be a simple thing (Wolff [1720] 2009:48).

Though they are not arguing in exactly the same way, both Wolff and Leibniz are attracted to the idea that only simple things can think. If that claim could be supported, it would appear to provide the possibility for an argument for the soul’s immateriality, on the grounds that material things are complex, not simple. Now, someone might suggest that there are simple material things: atoms or some other sort of fundamental particle. But those are usually not the material things to which people want to attribute thought: human beings or human bodies or brains, all of which are complex.

Immanuel Kant later discussed these issues of simplicity and immateriality in his *Critique of Pure Reason* (Kant 1781). This discussion occurs in particular in the “Second Paralogism: Of simplicity”. Here Kant discusses an argument, related to those of Leibniz and Wolff, that the soul cannot be a complex thing, such as a material system, but must instead be simple: “For because the representations that are divided among different beings

... never make up a whole thought ... the thought can never inhere in a composite as such. Thus it is possible only in a **one** substance, which is not an aggregate of many, is hence it is absolutely simple” (Kant [1781] 1999:A352). Moreover, Kant notes that the reason why people want to show the simplicity of the soul is to show that it is not corporeal (Kant [1781] 1999:A356–7). However, he argues, one cannot do what some have hoped to do here. He agrees there is a sort of simplicity of consciousness – my thoughts are somehow all collected together and belong to me, one thinker. However, he also argues that “the simplicity of consciousness is thus no acquaintance with the simple nature of our subject, insofar as this subject is supposed thereby to be distinguished from matter as a composite being” (Kant [1781] 1999:A360). The details of his objections are interwoven with his own terminology and approach. But there is a more general question we can surely ask, separate from the details of his views: even if our experience as thinking things involves a certain (subjective) simplicity, why should we take that to show the (objective, metaphysical) simplicity of the thinking thing itself?

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*sciences plus la dioptrique, les meteores, et la geometrie, qui sont des essais de cete methode* (*Discourse on the Method for Properly Conducting Reason and Searching for Truth in the Sciences, as well as the Dioptrics, the Meteors, and the Geometry, which are Essays in this Method*), in vol. 1 of *The Philosophical Writings of Descartes*, ed. and trans. J. Cottingham, R. Stoothoff, D. Murdoch and A. Kenny, Cambridge: Cambridge University Press, 1985.

(This was Descartes's first published work. The *Discourse* served as an introduction to a collection of three scientific works.)

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question about mind-body interaction.)

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(Gassendi's further book of replies and objections to Descartes.)

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(Hobbes's most famous work of political philosophy. A Latin edition was published in 1668, with some changes in the content. Malcolm's is now the standard edition, but many other useful editions are available.)

Holbach, P.-H. Thiry, Baron d' (1770) *Système de la nature (System of Nature)*, trans. H.D.

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(A significant work of Holbach's, in which he presents his materialism, as well as defending

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(Hume's first philosophical book, containing an extended account of many aspects of the human mind, as well as forceful expressions of skeptical views. References are by book, part, section, and paragraph.)

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(An enormously influential work in which Kant presented his later ("critical") views. Though reason is the designated topic, this also addresses in its own way many metaphysical topics, such as substance, the soul, causation, and God. References are to pages of the first (A) edition.)

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(This is the work also known as Wolff's "German Metaphysics". In quoting from this text I omit Wolff's references to other sections of the book.)