# CARTESIAN DUALISM


René Descartes
(France/Netherlands, 1596-1650)

**René Descartes** (1596-1650) developed a metaphysical view that involved two distinct kinds of substance: mental substances (the essence of which is to think), and material substances (the essence of which is to be extended). This view is what we call 'Cartesian Dualism.'

According to Cartesian dualism, human beings are composites consisting of two distinct substances: the human body (a highly complex physical body) and a human mind (a simple soul). Cartesian dualism also claims that, in the context of the human body, mind and matter stand in causal interaction with each other. There is one human mind for each human body, and these two substances interact with each other. For instance, the mind experiences some sound coming from behind the body, and desires to have the body turn and look in that direction; here, the vibrations in the air strike the eardrums, causing a certain nervous excitation that travels to the auditory part of the brain, and ultimately "enters the mind" (or "I become aware of it"), at which point the sound occurs; the mind then directs the appropriate muscles of the body to contract or relax so as to turn the body in the proper direction.

This Cartesian world in which we live is actually two: a mental world in which minds exist with their ideas, and that is non-spatial and immaterial (and where each mind is connected to every other mind only indirectly, through their accompanying bodies), and a physical world in which bodies exist, extended in space, and where the material bodies are directly related to each other. My access to *my* mind is direct, but to *other* minds it is indirect.

## THE APPARENT IRREDUCIBILITY OF THE MENTAL

Mental experience and mental terms do not seem to be reducible to the physical, and this irreducibility offers *prima facie* support for Cartesian Dualism. First, experience has a subjectivity or interiority to it that would seem to set it wholly apart from the physical world. We have *external sensations* (e.g., I see a red chair) and *internal sensations* (e.g., I feel pain), we have *mental imagery*, we suffer *emotions* (e.g., fear, anxiety, joy, sorrow, hope) — and all of this seems to occur inside us (not inside our bodies or brains, but rather inside the mind itself). For instance, when I eat a chocolate bar and experience the taste of chocolate, we assume that *something* is happening in my brain that makes possible that sensation of chocolate; but if a brain surgeon opened up my skull, there would be no part of my brain that she could lick and thereby have the same experience I am having. She might record neuron firings that *correspond* with my experience, but those firings seem to be quite different from the experience itself.

Along with this interiority of experience, three related and common beliefs and desires seem to recommend dualism. The first is the nearly universal belief that we are "free agents," that we are more than programmed robots or puppets on a string, that we can choose and deliberate and will our actions freely and decisively. Sometimes I choose to do something with my body *now* (this is actual willing); or I choose to do something on condition of some future event (this is conditional willing or intending). Yet if we are nothing more than bits of matter, then all of our thoughts and actions will be caused by the motions of other bits of matter, and our freedom will be wholly illusory. So human freedom, *prima facie*, seems to require metaphysical dualism.

A second feature is our feeling of personal continuity or identity. The matter of our bodies is always changing and, while our experiences are changing as well, there seems to be a continuity to our persons that transcends this change. Yet if we were only material beings, then such continuity and identity would seem to be compromised.

Related to this second feature is a third, the hope for immortality or an afterlife. If I am nothing but matter, then I will cease to exist once my material being disintegrates (such as when my body dies). If, on the other hand, I am an incorporeal, indivisible mental substance, then the death of my body is nothing to me, for the real self cannot die (the only way it could die is through disintegration; but if it is simple and indivisible, then it obviously can't be divided into parts, and so it cannot disintegrate). Admittedly, it is a standard part of most Christian confessions that one's body will be resurrected at some future time, thus allowing for one's continued existence. But that sort of immortality depends upon divine intervention, and so lacks the certainty and universal appeal of a proof that the self is an immaterial soul.

## DESCARTES' ARGUMENTS FOR DUALISM

Descartes offered several arguments for viewing mind and body as distinct substances. One was a result of his methodological doubt: I can imagine not having a body, but I cannot imagine not having a mind. Therefore mind must be separate from body, and while it may be true that I *have* a body, it is the case that I *am* a mind.[1]

A slightly better argument for dualism is to note that a material body is divisible, but mind would seem to be indivisible. That is, I can imagine taking a bit of matter (some body) and dividing it into pieces or parts; but I cannot imagine doing the same to a mind (or *my* mind). Minds have a unity about them not found in matter. Since everything that is extended is divisible, mind must not be extended; and if it is not extended, then it obviously is distinct from matter; thus it is a different substance.

This argument from the indivisibility of mind has two different forms. The first is *conceptual*: I cannot conceive of mind having any parts into which it can be divided.[2] Mind must be unified, for otherwise it could not have a thought. For instance, if one part of the mind began a thought, and another part of the mind completed the thought, then there would be no thought at all. It would be like having separate individuals each thinking one word of the proposition: here, the whole thought (e.g., "There's a red balloon in that tree") would not occur at all.

The second argument is *experimental*: although the mind seems to inhabit the whole body, we do not sever or divide the mind when we sever or divide the body, such as when a foot is amputated: this does not result in a corresponding amputation of the mind.

## PROBLEMS WITH DUALISM

Despite these various considerations in favor of a dualist understanding of the mind, philosophers have been quick to point out several problems with Cartesian dualism that appear to be very nearly intractable. I consider them separately, below, but they all center on the basic puzzle of how immaterial minds and material bodies are supposed to causally affect one another.

### The conservation of matter and energy

It has been argued that any interaction between mind and body will violate the physical principle of conservation, for it opens up what was a closed physical system. On Descartes' account, minds appear to be adding energy to the material system whenever the mind moves the body to do something, and energy appears to be lost to the mind whenever the body affects the mind.

A Cartesian might reply that the principle does not apply to brain phenomena, or that the net gains over losses of energy may be so slight as to be undetectable and thus irrelevant. Or that there may not be any net gains or losses (it may take no energy for the body to act upon the mental, and the mental may be able to effect changes in matter that doesn't involve any addition in energy).

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[1] This is a horrible argument. It fails to notice that we might know the same thing in more than one way, and thus entertain contradictory beliefs about it; for instance, humans used to believe that the morning star and the evening star were separate planets, when in fact they are both Venus, but appearing on different sides of the sun. Another example: if you didn't know that Mark Twain was a penname for Samuel Clemens, you could well hold the beliefs that Mark Twain was the greatest author who ever lived and that Samuel Clemens was not an author at all, much less the greatest.

[2] One might, indeed, argue that the mind *does* have parts — after all, there are distinct abilities of thinking, feeling, and willing. But Descartes claims that each of these is performed by the whole mind.

**How can minds and bodies interact causally?**

Mental and material substance are so dissimilar that it is wholly unclear how they are supposed to causally interact with one another. We understand how two bodies interact: one bumps into the other, and causes it to move. This mechanical interaction is the sort of account that Descartes tried to give of the workings of our bodies. But the body cannot "bump" into the mind because there is nothing physical that it can bump into. Minds will offer no resistance to the bodies; similarly, the mind cannot "bump" into a body.

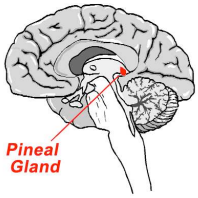
**LEIBNIZ ON CARTESIAN INTERACTIONISM**

"Descartes recognized that souls cannot impart any force to bodies, because there is always the same quantity of force in matter. Nevertheless he was of the opinion that the soul could change the direction of bodies. But that is because in his time it was not known that there is a law of nature which affirms also the conservation of the same total direction in matter. Had Descartes noticed this he would have come upon my system of pre-established harmony."

— G. W. Leibniz, *Monadology*, §80

In short, the causal interaction between my mind and my body — which, according to Descartes, is supposed to occur in the pineal gland — is wholly mysterious, and it is a mystery of the worst sort: not only do we not know how the interaction occurs, it appears that we can *never* know — it is, in principle, beyond our ken.

**The apparent dependence of the mind on the brain**




Whatever mind is, it seems to be closely dependent upon the condition and fate of the brain, which suggests that the mind is not a free-floating immaterial substance. When chemicals like alcohol are ingested, the mind is clearly affected — not just what it perceives, but how it operates and thinks. If the mind were a separate immaterial substance, one would think that the mind's operations would be safe from any changes to the brain, and the effects would be limited to whatever control it might have over the body or the ability of the brain to transmit information to the mind. Sensory information would be channeled through the brain, but since thinking is what the mind itself does, the thinking should not be impaired by the ingestion of alcohol or other "brain-altering" drugs. Similarly, too little oxygen to the brain can cause a person to faint or "black out"; if dualism is true, one might imagine the sensory inputs being disturbed at this point, but it isn't clear why the mind would lose its ability to function at all — to remain conscious, to think, and so on — and yet this is what happens. A blow to the head disturbs the brain and its functioning, but why would it also disturb the mind and its functioning, if the mind truly is an immaterial substance? In short, the fates of my mind and my brain are so closely intertwined, they seem to be identical, or nearly so.

**How are minds and bodies connected?**

Closely related to the problem of causal interaction is understanding how individual minds and bodies are connected together. What is it that connects my mind to my body, and not to someone else's body? If mind is immaterial and non-spatial, it would seem as though it might end up connected to anything. What ties it down to *this* particular lump of matter?

Initially, one might suppose that there is some sort of physical connection. But this can't be right, since the mind is (by definition) non-physical. There isn't any obvious way it might get hooked to a physical thing, such as a neuron, or something like the pineal gland. Lacking a straight-forward physical connection, we might turn to a connection by virtue of occupying the same space or contiguous spaces. But this won't work, either, for while bodies are in space, and therefore have a location, minds are non-spatial.

In order to talk about the location of minds and mental events, one might develop a distinction between *local* and *virtual* placement in space: the mind is in the body *virtually* but not *locally*, that is, the mind seems to have a location, but not a precise one — for instance, I'm certain that my mind isn't somewhere on the moon. In fact, I'm pretty sure that my mind is somehow inside my body, and perhaps even inside my skull. But I'm not sure where, exactly, it is in the skull — maybe it is co-extensive with the brain. But we don't want to say that the mind is extended, for it seems to have a unity that resists extension. This distinction between *virtual* and *local* placement in space, however, really seems to be just a fancy way of saying that we traditionally attach our minds to our bodies, although we aren't sure how this is done.