Mind & Body Cartesian Dualism



The great philosophical distinction between **mind and body** can be traced to the Greeks

René Descartes (1596-1650), French mathematician, philosopher, and physiologist gave the first **systematic** account of the mind/body relationship.

He claimed that minds and brains are **substances** of different kind.

Cartesian dualism = dualism of substances

What are substances in Descartes' sense?

- 1. Individual things* that can *exist independently* (this excludes shadows)
- 2. Most substances are complex; they are composed of other substances.
- 3. Substances enter into relationships with other substances (being part, causality)
- 4. Substances have properties, but they are more than bundles of properties
- 5. Substances are contrasted with non-substantial concrete individuals like *events* and with abstract entities like *sets* and *numbers*.

^{*} Stuff like water, wood is not considered as a substance, following tradition.

Descartes' attribute-mode distinction

Instead of properties of substances Descartes speaks of attributes and modes.

- An attribute is what makes a substance the kind of substance it is
- A *mode* can be that can be seen as specifying the attributes possible values. These "specifications" relate to properties in the ordinary sense.

Example: The attribute of a material substance is spatial extension. The particular shape and size possessed by material substances are modes, ways of being extended.

Remark: Descartes doesn't consider colour as a *mode*, instead he considers the texture that reflects light in a particular way as the relevant mode.

Discriminating material and mental substances

Material substance

Attribute of spatial extension

Modes of extension (form, location, texture, weight)

Public*

Mental substance

Attribute of thought (non-spatial!)

Modes of thought (images, emotions, beliefs, desires)

Private*

^{*} Epistemic properties – they concern the character of our knowledge of such things

Mind and body look very different, but there seems to be a mutual influence

The ontological grounding suggests that different attributes are *distinctive*, hence the exclude each other.

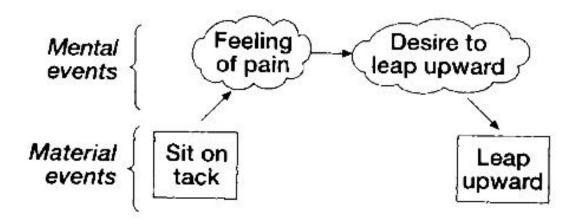


Minds are distinctive from bodies

Nevertheless, mind and bodies are intimately related

- The body **causally** affects the mind (the mind receives signals from your body)
- The mind **causally** affects the body (the body responses to your plans)

Cartesian dualism fits nicely with common sense



Dualism makes sense of the apparent bifurcation of mind and body. The qualities of our experience (modes of thought) seems to differ dramatically from the qualities of material bodies (modes of extension)

Joseph Breuer, Psychologist

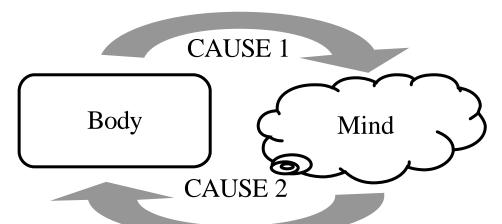
That the mind **causally** affects the body was demonstrated by Joseph Breuer in a very famous case, which involved a woman named Anna O. Anna came to Breuer with a multitude of unexplainable symptoms ranging from speech impairment to distorted vision to memory loss. There was no known cause for this sudden onset of physical disturbances that science could explain at the time.

As the case went on, it became apparent that Anna had not sufficiently coped with the death of her father. She repressed, and in some cases, suppressed, unwanted feelings into her unconscious that, in turn, caused her physical symptoms. These symptoms disappeared when she began to talk about and discover her hidden feelings.

This example supports Descartes theory of interactionism. The mental state that Anna O. experienced led to her physical symptoms. Further, dealing with the repressed feelings resulted in a resolution of her physical symptoms. (From Richard G. Wiltshire)

Descartes' problem: so different and yet such mutual influence

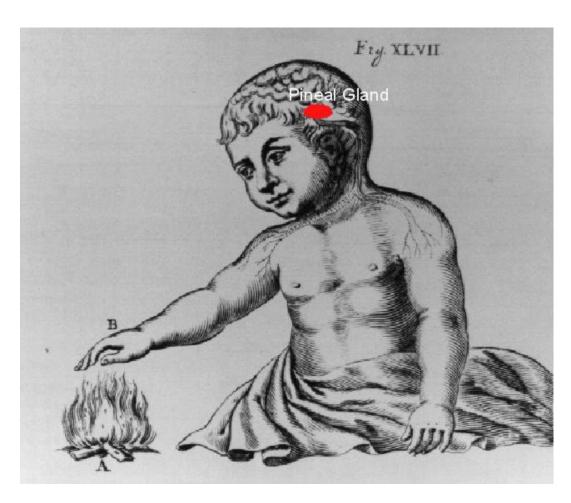
- How could an event in an immaterial mind alter a material object?
- How could a physical event produce a change in an immaterial mind?



The metaphysical distance Descartes places between minds and bodies seems to preclude their causally interacting.

Fundamental presumption of modern science: Immaterial minds cannot affect the material world. The material world is causally closed.

Descartes' causal interactionism

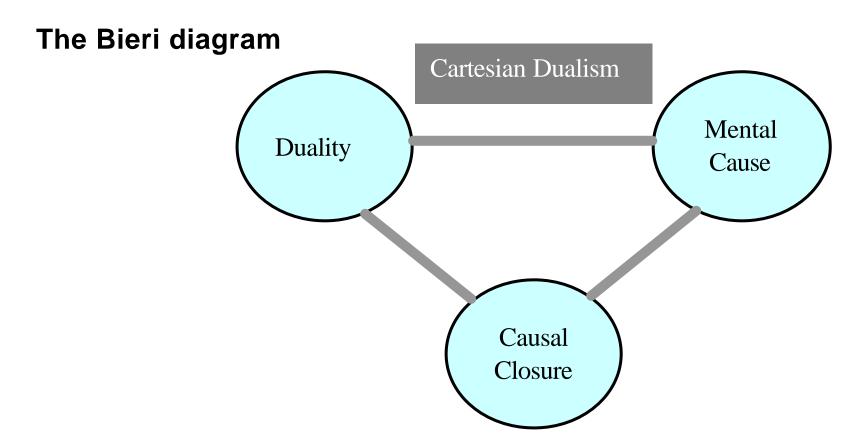


Causal interaction between the mind and the body occurs in the *pineal gland*. "Animal spirits", fluids made up of extremely fine particles flowing around the pineal gland, cause it to move in various ways, and these motions of the gland cause conscious states of the mind. Conversely, the mind can cause the gland to move in various ways, affecting the flow of the surrounding animal spirits. This in turn influences the flow of these fluids to different parts of the body.

The traditional mind-body problem

- 1. Mental phenomena are non-physical (Dualism)
 This is the basic assumption of each kind of dualism.
- 2. Mental phenomena can affect physical phenomena (Mental Cause)
 This is the assumption that mental states or events play a causal role. Mental states are effective, for example, when wishes or intentions lead to actions.
- 3. The domain of physical phenomena is causally closed (Causal Closure)
 This is the basic insights of modern science starting with the development of modern physics in the 17th century.

Obviously, the three claims are in conflict. They are logically incompatible!



Cartesian Dualism solves this conflict by skipping **Causal Closure**. Other solutions are possible. We sketch first idealistic solutions and consider then materialist solutions in more detail.

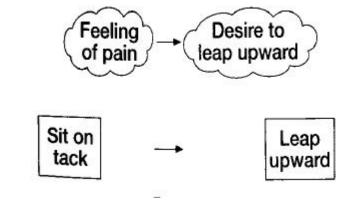
Gottfried Wilhelm von Leibnitz' (1646-1716) psycho-physical parallelism



According to Leibnitz no coherent sense can be made of Descartes' idea that the mind, which isn't even in physical space, can causally interact with a material body (pineal gland).

On his view, the mind and the body are in a preestablished

harmony, rather like the clocks that were synchronized by the shopkeeper in the morning, with God having started off our minds and bodies in a harmonic relationship.



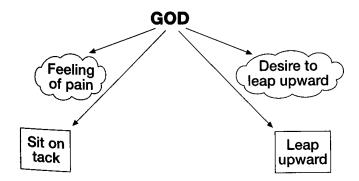
Nicolas Malebranche's (1638-1715) occasionalism



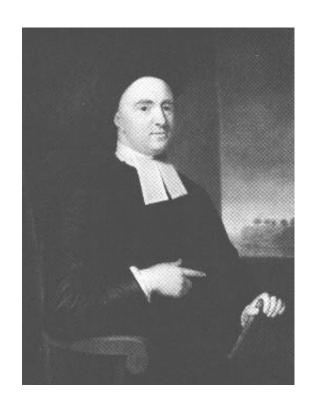
Malebranche argued that both of Descartes' substances, mind and body, are causally ineffective. God is the one and only true cause. Not only is there no influence of mind on body or of body on mind, there is no causality operative at all except insofar as God, the one true cause, intervenes to produce the regularities that occur in experience.

Thus, for example, when a person wills to move a finger, that serves as the occasion for God to move the finger; when an

object suddenly appears in a person's field of view, that serves as the occasion for God to produce a visual perception in the person's mind.

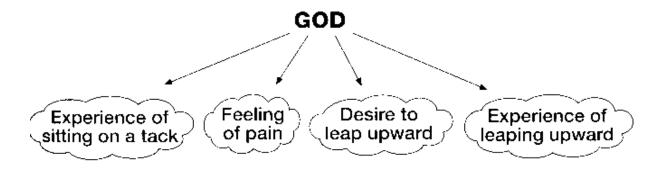


George Berkeley's (1685-1753) idealism



Idealists hold that not only the impression of mind-body causal interaction is an illusion, but that the material world is itself an illusion. Bishop George Berkeley, the founder of idealism, wrote that we do not perceive the physical world directly because there simply is no physical world. On this view, the world consists exclusively of minds and their contents. What we do experience is our sensations.

Idealism has the advantage of saving the appearances.



Discussion

It banishes problems associated with causal interaction between minds and the material world. In some way, idealism has a kind of elegant simplicity of the sort valued in the sciences.

But this is simply not enough. Consider the schizophrenic whose mental experiences consist of various hallucinations. A patient such as this may strongly believe that he is, for example, Stalin. Of course, in the reality of those who are not schizophrenic this is absurd. What must be considered is that these are two very different realities, yet both are very real as well. If the mind is the only reality, as idealists hold, then the schizophrenic really is Stalin in his own reality.

Berkeley addressed the issue of free will as well. He claimed that we do not produce our own sensations, but that God puts sensations into our minds. With this, Berkeley completely eliminates the possibility of free will. Instead he was left with determinism. Thus he proposed that God telepathically controls humans.

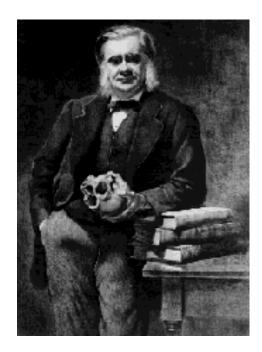
Baruch Spinoza's (1632-1677) double-aspect theory



Spinoza abandoned Descartes' two-substance view in favour of what has come to be called double-aspect theory. Double-aspect theories are based on the notion that the mental and the physical are simply different aspects of one and the same substance. For Spinoza, that single substance was God.

While agreeing with Descartes that the world of consciousness and that of extension are qualitatively separate, Spinoza rejected the Cartesian view that consciousness and extension are attributes of two finite substances in favour of the notion that they are attributes of only one infinite substance. That substance, God, is the universal essence or nature of everything that exists.

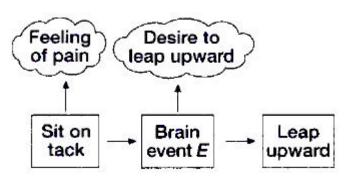
Thomas H. Huxley's (1825 - 1895) epiphenomenalism



Epiphenomenalists hold that the brain causes mental events, but those mental events cannot cause behaviour. In this view, mental events are neurological by-products and are behaviourally impertinent. Mental events exists, but they are side effects of complex physical systems only, without any **causal** consequences.

Epiphenomenalism, just as idealism, precludes the possibility of free will. If the environment causes brain activity and brain processes

dictate our behaviour, then humans simply exist passively and in a state of powerlessness.



Summary

