

efficacy, so that materialism no less than dualism is threatened by epiphenomenalism.

If such interaction becomes mysterious for Cartesian dualists and materialists alike, so too does personal identity. The human body is, on both accounts, intrinsically devoid of the mental characteristics essential to persons. Being only contingently related to persons on the Cartesian account, the body thus cannot be used to identify the immaterial substances that the Cartesian view says constitute persons; being devoid of anything essentially mental on the materialist account, no robust subject of conscious experience and intentionality – no person – can possibly be found in it.

The only way to avoid these dire consequences would seem to be to find a more adequate conception of matter – in particular, a conception in which matter isn't utterly devoid of mental properties. At first glance, the Russellian position we considered earlier might seem to provide such a way. But as we saw, in its metaphysical aspects – the aspects relevant to the question at hand – that position arguably has serious problems (even if its epistemological aspects are arguably sound). Russellian metaphysics seems, for one thing, to entail panpsychism – which would seem a rather high price to pay to get a view of matter more congenial to mind. More to the present point, it seems also to be no less immune to epiphenomenalism than are Cartesian dualism and materialism.

## Hylomorphism

Russellianism is not the only option, though. Another possibility lies in the conception of the material world in general and of the human body in particular that Descartes, along with his materialist contemporaries, rejected in favor of mechanism: the *hylomorphism* associated with Aristotle (384–322 BC), St. Thomas Aquinas (1225–1274), and the schools of thought deriving from them.

The term “hylomorphism” derives from the Greek words *hyle*, meaning “matter,” and *morphe*, meaning “form,” and the central idea of the view is that a concrete substance is a composite of matter and form, and cannot properly be understood except as such. The form of a substance is its organizational structure; the matter is that which is given organizational structure by the form. (If a chair has a round seat, for example, the roundness is an aspect of the chair’s form, and the wood or plastic or whatever it is made of would constitute its matter.) *Substantial* form is that specific aspect of a substance’s organizational structure by virtue of which it is the kind of substance it is. (A seat’s roundness isn’t part of the substantial form of a chair – a chair could have a square seat instead, for instance, and still be a chair – but having some kind of seat would be.) Form on this view is understood in a decidedly realist way: it is abstract and universal, irreducible either to any particular material thing or to some aspect of our classificatory practices. Form exists in some sense out there, independent of our minds. Hylomorphists are generally Aristotelian rather than Platonic realists, that is, their view is that form generally exists in the substances it informs (rather than subsisting in a kind of Platonic “third realm” of the sort briefly described in chapter 3). Because a piece of matter wouldn’t be the particular thing it is without its specific form, however, hylomorphism entails that no material thing can be said to be “nothing but” a collection of particles (or whatever), after the fashion of materialistic reductionism. If form generally does not exist apart from matter, neither does matter exist without form; and thus, without grasping a material object’s form, we cannot understand it.

The fact that understanding a thing entails, in the hylomorphic view, understanding the form that makes it what it is indicates how different the view’s concept of explanation is from those of contemporary materialism and Cartesian dualism. In the classical hylomorphism of Aristotle and Aquinas, a full explanation of a material substance involves identifying at least four irreducible

causal components: its *material cause*, its *formal cause*, its *final cause*, and its *efficient cause*. A heart, for example, cannot be understood except as being an organ having a certain material constitution (its material cause), as possessing a certain form or principle of organization (its formal cause), as serving a certain function – to pump blood (its final cause) – and as having been brought about by antecedents such as the genetic programming inherent in certain cells that led them to develop into a heart rather than a kidney or liver (its efficient cause). Materialism and Cartesian dualism alike eliminate formal and final causes from the explanation of material things, replacing the classical hylomorphic conception of material substances as inherently purposive composites of matter and form with a conception of them as collections of particles or the like devoid of either intrinsic purpose or objective, irreducible form, and explicable entirely in terms of efficient causation.

Living things have form no less than chairs and the like, and the form of a living thing is precisely what a hylomorphist means by the *soul*. There is a sense in which plants and non-human animals have souls just as human beings do (though as we'll see, this by no means entails that they can think or continue to exist after death). The *nutritive soul* is the sort which informs the matter of which plants are composed, and imparts to them powers of nutrition, growth, and reproduction. The *sensory soul* is the kind of soul possessed by animals, and includes the powers of the nutritive soul as well as its own distinctive powers of perception, appetite, and locomotion or movement. Finally, the *rational soul* is the kind of soul possessed by human beings. Incorporating the powers included within the nutritive and sensory souls, it also imparts the further characteristics of intellect, will, and memory. The rational soul is the substantial form of the human body, in virtue of which human beings are what they are: rational animals. This is a very different concept of the soul from that of the Cartesian dualist, who regards it not as a substantial form – which is, in the hylomorphic view, only one aspect of a complete substance – but rather as a complete substance in its own

right, devoid of material properties but nevertheless (somehow) capable of efficient causation.

There is a tendency in Cartesian thinking – though Descartes himself, contrary to popular belief, did not take this view – to regard the Cartesian *res cogitans* as the person, with the body being an inessential excrescence. Materialists, by contrast, often identify a person with the body, or some aspect of the body. But in the hylomorphic view, just as the form of a chair is not a chair, neither is the matter of a chair is, apart from the form a chair, not a chair, neither is a person's body *qua* body a person. A person is, rather, essentially a composite of soul and body.

One consequence of this is that the disappearance of the person that seems entailed by Cartesian and reductionist accounts of personal identity is not entailed by hylomorphism. Since the soul is the substantial form of the body – of, that is, a certain material thing – there seems to be no difficulty in determining when a person's soul is present. Just as you know that a certain object has the form of a chair just by virtue of its being a chair at all, so too you know that a person's body is associated with the person's soul just by virtue of its being that person's body. The soul is present as long as the person's body is present, for that body just wouldn't be the body it is without the person's soul informing it. And, contrary to reductionist views, the person isn't reducible to some bundle of psychological or bodily characteristics. *Contra* Parfit in particular, there is indeed a "further fact," over and above one's having certain bodily and psychological traits, that constitutes being a person, just as there is a further fact over and above the existence of chair legs, a seat, and a back that constitutes a chair being a chair. It is that these various bodily and psychological traits are organized in just the way they are – that they involve a substantial form informing a certain kind of matter – that makes them a person, just as it is a chair's various components being organized in just the precise way they are that makes them into a chair.

Another consequence of the hylomorphic view is, arguably, that there is no mystery about how soul and body get into causal contact with one another, for the soul-body relationship is just one instance of a more general relationship existing everywhere in the natural world, namely, the relationship between forms – the form of a chair, the form of a tree, the form of an animal – and the matter they organize. If this general relationship is not particularly mysterious, neither is the specific case of the relationship between soul and body. The mistake of Cartesian dualists and materialists alike, according to the hylomorphist, is to think of all causation as efficient causation. When it is allowed that there are other irreducible modes of explanation – in particular, explanation in terms of formal causation – the interaction problem disappears.