Though the term 'body' (*corpus*) is commonly used in the early modern period to refer both to material substance as such and to particular material objects, such as tables or golf balls, Spinoza generally reserves the term for to refer to modes of extended substance, i.e., particular and determinate ways that extended substance can exist or particular and determinate forms extended substance can take. For example, in his definition of body in the *Ethics*, Spinoza writes: "by body I understand a mode that in a certain and determinate way expresses God's essence insofar as he is considered an extended thing" (E2d1). Of course, not all modes of extended substance are bodies. For example, motion and rest, though modes of extended substance, are not themselves bodies. Bodies correspond roughly to particular material objects—both tables and golf balls, but also molecules and galaxies, and even the physical universe as a whole.

Spinoza's views on the nature of body are important, in part because he explicitly links the powers of the mind to the powers of the body. For example, in part II of the *Ethics* he claims that "to determine what is the difference between the human mind and the other ones [i.e., non-human minds], and how it surpasses them, it is necessary for us [...] to know the nature of its object, that is, of the human body" (E2p13s). In other words, if we want to come to know how human minds differ from, and surpass in their abilities, the minds of non-human organisms, then we can do so by looking at how the human body—which includes the brain—differs from other bodies. This link between the powers of the mind and the body goes on to play a key role in understanding the nature of ethical perfection, e.g., how the mind becomes eternal (E5p29). As such, understanding body is important not just for understanding Spinoza's views of the physical realm, but also for understanding key theses about human minds and their flourishing.

But what is a body for Spinoza? It is not that easy to tell. As expressions of God's essence, bodies strive. That is, each body "insofar as it can by its own power, strives to persevere in its being" (E3p6). But bodies are not unique in this regard—all modes of substance, whether bodies or ideas or some modes of some other attribute, strive. Bodies *do* differ from ideas (and other non-bodily modes) in that the bodies alone are expressions of Extension in particular (E2p6). But Spinoza is not always clear what Extension itself is. For example, he doesn't offer a definition of Extension in the *Ethics*, and in one of the last letters of his life (Ep.83), written to Tschirnhaus in 1776, he admits both that he has not yet worked out his theory of extended substance, and that his concept of Extension differs in important ways from the Cartesian concept (of that which occupies space). Understanding Spinoza's notion of body therefore requires a more piecemeal undertaking.

The most important text for this undertaking is the so-called 'Physical Digression' in the second part of the Ethics. (Spinoza discusses the nature of body at great length in the early *Principles of Cartesian Philosophy*, but this is a work devoted to expositing Descartes' thought, so should not be treated as if reflected Spinoza's own thought on body). By the time of the Physical Digression, Spinoza has made clear that the physical world is a plenum (E1p15s)—that is, it is completely saturated with bodies, with no empty space between them. In the Digression, he outlines some of the basic features of individual bodies, including the following: bodies have kinetic properties, chiefly motion and rest (E2A1'), which is the basis of their identity (E2L1); they causally interact with each other on the basis of these properties (E2L3); all their changes are externally caused rather than self-caused (E2L3); they are governed by inertial laws (E2L3c); they can together compose larger bodies (E2L4); those larger bodies can persist (E2L7).

Nevertheless, some key questions surrounding the nature body remain. Here is a small sample. First, are there atoms in Spinoza's system, or is matter infinitely divisible? Spinoza mentions 'simplest bodies' in the Digression (2EL7s), suggesting that there is a bottom floor of matter, which cannot be divided further. But it is unclear whether he is entitled to such a claim. After all, indivisible bodies, or atoms, have historically been often associated with an empty space ("atoms and the void"), and Spinoza is clear that he rejects the notion of empty space (E1p15s). Likewise, the indefinite divisibility of body plays a key role in the all-important Cartesian theory of vortices (which, among other things, is intended to explain the force of gravity), and there is no evidence that Spinoza rejects that theory. So, the issue of simplest bodies is of great importance to understanding Spinoza's concept of body. Second, how exactly do individual bodies come to compose a larger body and remain so composed? Spinoza answers that they come to compose a larger body, and persist as that body, when the individual bodies maintain a fixed ratio of motion to rest among themselves (E2D7). But it is not clear what exactly a ratio of motion to rest is. For example, is the ratio a ratio of the number of moving parts to the number of parts at rest? Or is it a ratio of the total amount of motion of the parts to the total amount of rest of the parts? If so, how are total amounts computed? Is it a function of size and speed, or something else? Or is the ratio a ratio of the average motion of the moving parts and the average rest of the resting parts? Even in one and the same body, each of these ratios can differ, and some, but not all, might remain the same over time. So, we need to know more about the relevant ratio to know when bodies persist. Spinoza, unfortunately, offers nothing explicit to answer which ratio, if any, is the relevant one. Finally, to what extent can Spinoza's theory of body provide insight into the specifics of his theory of mind? Though he tells his readers that the two realms are isomorphic (E2p7) and that understanding the body is the key to understanding the mind (E2p13s), it is not clear how productive the comparison is when it comes to specifics. For example, in order for facts about body to inform us about, for example, how people reason, how they form beliefs, how they resist temptation, how they form emotional bonds, and so on, Spinoza would need, at the very least, to identify the bodily counterparts for each of these phenomena. Perhaps this identification is possible-but one would be forgiven for not holding their breath.

Key passages:

The Physical Digression (between E2p13 and E2p14)

E1p15

Ep.32

CM6; I/248

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Related entries:

Extension

Mode or affection

Physics

Mathematics (including number, unity, measurement)