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## Early Modern Medical Materialism



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### Related Topics

Biology · Mind-body · Soul (immortality of) ·  
Reductionism · Iatromechanism

### Introduction

“Medical materialism” is the historian’s name given to versions of philosophical materialism (according to which there is no soul, only body, or no immortal soul, or all mental processes can be explained in corporeal and/or cerebral terms) that specifically invoke or rely on medical information or more broadly a rhetoric of medical authority, according to which the doctor is the professional who is best informed about body-soul relations (better than the theologian or the philosopher).

### Medical Materialism and Philosophical Materialism

Scholars of early modern materialism have called attention, at least since the pioneering work of Bloch and Thomson (Bloch 1997; Thomson 2008), to the existence of a specifically medical

variant of this position. This is significant for a variety of reasons: to historians of medicine and intellectual historians, for instance, it is a major instance of the interaction between radical or heterodox intellectual traditions and scientific practices (the latter being understood broadly as including artisanal and vernacular practices); to historians of philosophy, the idea of a specifically medical materialism disturbs assumptions about materialism as synonymous with physicalism. Briefly put, if some forms of materialism are ontologies in which the physical world is all that is real (whether this is specified in Epicurean, Newtonian, and Laplacian terms, etc.), medical materialism is a family or ensemble of doctrines in which physics, or something like it, is not directly relevant, because the chief concern is (i) the living body, notably including the issue of (ii) body-soul relations (which by the mid-eighteenth century begin to be called “body-mind” relations), (iii) how medicine can treat the nature of these relations better or more successfully than traditional metaphysics could, and, by implication, (iv) how medicine thus confirms the truth of materialism while not necessarily taking the form of or a stand on the physicalists’ austere metaphysics. Forms of materialism espousing (i)–(iv) tend to be less driven by a notion of laws of nature; a foundational ontology of size, shape, and motion; and particularly physicalistic forms of determinism while nevertheless retaining a strong reductionist and – differently – determinist emphasis.

Medical materialism thus understood appears explicitly in the seventeenth century, in the wake of Descartes and Spinoza, with figures like **Regius** (Hendrik De Roy, 1598–1679, a physician and Professor of Theoretical Medicine at Utrecht University) and the Paris physician Guillaume Lamy (1644–1683). In his *Discours anatomiques* (1675, second revised edition 1679) and especially his *Explication mécanique et physique des fonctions de l'âme sensitive* (1677), Lamy presents a hybrid of Epicurean and mechanistic elements, giving rise to a new form of medically nourished materialism, particularly an Epicurean-materialist theory of soul presented in an anatomical and physiological direction. This view gains momentum and becomes a self-espoused, self-aware category when received and expanded upon by **Julien Offray de La Mettrie** (1709–1751) and endures at least until the work of Pierre-Jean-Georges Cabanis in the 1800s. It is worth noting that authors such as Antoine Le Camus and Cabanis explicitly call for a medical “filling in of the blanks” left by Locke on the neurophysiological underpinnings of mental processes, often with an explicit invocation of materialism. In his 1753 *Médecine de l'Esprit*, Le Camus praises Locke by name, calling him the “Chef des Philosophes” and asserting that knowledge comes from the senses, but regrets that Locke left out all the anatomical and physiological detail of how the senses work, which Le Camus claims he will provide (Le Camus 1753, Chap. 1, § 1). Some 50 years later, in his influential *Rapports du physique et du moral* (1802, based on lectures given in the 1790s), Cabanis reprises this idea of a Locke who is the great predecessor of a kind of sensationist-based, medically informed materialism, but who needs to be supplemented in precisely the latter terms. He referred to Locke as a physician (Cabanis (1802), Premier mémoire) but mainly discussed the doctrines of sensation in Locke and Condillac and commented that they were only missing a proper study of the structures and functions that subtend the senses, basically, the brain (Cabanis (1802), in Cabanis 1956, vol. 1, 141, 165, 196, etc.; for further discussion of these cases, see Wolfe 2016).

## The Doctor as Atheist: An Ancient Idea

Yet the idea of the doctor as materialist goes back much earlier, to rumors and accusations about Galen and the figure of the doctor as atheist (Wolfe 2015). Galen's treatise *Quod animi mores*, sometimes rendered as “On the soul's dependence on the body” (Galen 1997, 150–176) was central to this dispute. Here, Galen writes that the character or “substance of soul” is determined by, or “follows upon,” the mixture (*kraseis*: also “temperaments”; *krasis* is usually translated as “blending” or “mixture,” in the sense that our temperament is the result of a given humoral mixture, hence terms such as “idiosyncrasy,” *idiosunkrasia*) of elements in the body. The body in turn depends on diet and daily activities. The soul has three faculties (*dunameis*) that have their seats in specific bodily organs. More provocatively, Galen can be understood to affirm that soul and its parts actually *are* the temperaments of organs in which they reside: the mortal part of the soul (although he is at best agnostic and in fact skeptical regarding the immortal part) is just “the mixture of the body” (Galen 1997, 153, 157). Thus, even if there were a “separate substance” for the soul, it would still be dependent on (“a slave to”) the mixtures of the body (155).

Such discussions of a communicability between body and soul via humors may appear to run the risk of a dangerous kind of *category mistake*, shifting terrain from empirical medico-anatomical considerations to traditional metaphysics and theology. While Galen himself did not make any overt *philosophically* reductionist claims (as distinct from claiming to provide a *medically* reductionist account), in an early modern context, these ideas, whether directly quoted or modified, sound quite different, e.g., when the Gassendist François Bernier suggested that “it would appear that Galen was persuaded the Soul was a spirit that emerged out of the blood” (Bernier 1678, vol. V, 452), or when Thomas Browne, in his celebrated *De religio medici* (1643), a text which begins with Browne regretting rumors of doctors being atheists as the “general scandal of my Profession” (Browne 1892, § I,

1), alludes to the “wrong” sort of influence Galen could have: “I remember a Doctor in Physick, of Italy, who could not perfectly believe the immortality of the soul, because Galen seemed to make a doubt thereof” (ibid., § XXI, 45).

Galen’s example indicates that the figure of the *medical* materialist – or differently put, of the doctor who is a materialist (and an atheist) *because* she/he is a doctor – may be just as old as that of the *philosophical* materialist. At the least, the early modern rhetoric of materialism as identified both with atheism and with a kind of dangerous reductionism targeting entities like the immortal soul or human faculties like free will appears a very old trope. There is also a back-and-forth relation, with self-proclaimed materialists such as La Mettrie who invoke their status as medical practitioners, as a way of legitimizing their views. For when La Mettrie argues for the identity between mental and cerebral processes (or, more often, the dependency of the former on the latter), he does not just do so by debating with claims from Plato, Descartes, or Leibniz (or conversely, by defending ideas from Lucretius, Gassendi, or Spinoza in his idiosyncratic version). Rather, he insists that he possesses additional and uniquely relevant expertise as a doctor: “the best philosophy is that of the doctors,” and doctors should be “the only philosophers to whom their homeland should be grateful” (*Discours sur le bonheur* and *L’Homme-Machine*, respectively: in La Mettrie 1987, vol. 2, 36 and vol. 1, 62).

### Strands of Medical Materialism: Cartesians, Spinozist, and Others

The most common strategy of the physician when seeking to demonstrate their expertise in philosophy (or, which is not quite the same thing, to construct a form of legitimacy in philosophical discourse) was to present knowledge of the structure of the body (thus anatomy in particular) as supporting claims about knowledge of *design*. This was a standard early modern trope, actively promoted, for instance, by Robert Boyle, who pointed to William Harvey’s discovery of the circulation of the blood:

When I asked our famous Harvey . . . what were the things that induced him to think of a circulation of the Blood, he answered me, that when he took notice that the valves in the veins of so many several parts of the body, were so placed that they gave free passage to the blood towards the heart, but opposed the passage of the venal blood the contrary way: he was invited to imagine, that so provident a cause as nature had not plac’d so many valves *without design*. (Boyle 1772/1965, vol. 427)

But the physician’s knowledge of the body could also support the claim that there is no immortal soul (Lamy, La Mettrie); i.e., that there may exist a material soul, that dies with us, as doctors claim to have observed (Coward 1702). Of course, depending on their own ideological convictions, physicians can either claim that on the Last Judgment, we are resurrected as a whole (body and soul) or, in proper Lucretian fashion, that we need have no fear because afterward there is nothing. The Epicurean strand of medical materialism, influenced also by **Pierre Gassendi** (who is sometimes referred to as a doctor, e.g., by La Mettrie; see Wolfe 2009), elaborated on Renaissance ideas of a material soul, according to which (in the rendition of one clandestine anonymous manuscript from the 1720s), “the human soul is material, and is made up of the most subtle parts of the blood” (Anon. 2003, 228; see generally Garber 1998). Gassendi emphasized that even morals might fall under the purview of the Epicurean physician, who knows the functioning of the body and mind better than anyone else (Wolfe 2009; Wolfe and van Esveld 2014).

Unsurprisingly, early modern medical materialism, like early modern materialism in general, includes different tendencies, some more Cartesian (in which considerations on the union and/or the passions slowly overwhelm the dualism and allow the physiological “blanks” to be filled in), some more Epicurean. A notorious instance of the Cartesian trend toward medical materialism was Regius, who was initially close to Descartes but controversially asserted that the soul could be a mode of the body, with the body being understood as a machine, and the human mind, inasmuch as it exists in a body, understood as simply organic or organized matter (Regius 1646, 248, 246; see Alexandrescu 2013). Regius’s ideas indicate that

one doesn't *have to go through* medicine to get to this materialist claim, but medicine – or a certain *idea of medicine* – helps a lot (e.g., deathbed stories in which the physician declares that she/he has never seen the soul leave the body).

Sometimes these trends – Cartesian, Epicurean, and others – are combined more or less deliberately, as in La Mettrie (Lo Presti 2010). It may seem surprising that such views were sometimes called Spinozist, given that nowhere in Spinoza is there any kind of “biological” or “embodied” emphasis on living beings as possessed of a unique set of properties or powers. For instance, the great Dutch physician and professor of medicine **Herman Boerhaave** – *Communis Europae Praeceptor* – was accused of being a Spinozist (partly due to his funeral oration: Wolfe 2014, 199n69). But clearly, in the eighteenth century, there was a kind of ready-made Spinozism which seemed to be a philosophy tailor-made to the developments in the life sciences, whether or not it was fair to accuse, say, Boerhaave of Spinozism, or whether La Mettrie is a Spinozist in the restrictive sense defined by extensive acquaintance with Spinoza's system (Wolfe 2014). That is, a certain idea of Spinozism was associated with more or less experimental inquiries into the connections between the mind and body.

Yet sometimes medical materialism was a kind of inadvertent invention. Thus, Jerome (Hieronymus) Gaub (1705–1780), a student of Boerhaave's who took over his Chair at the University of Leiden, gave a lecture in 1747 which La Mettrie claimed to have attended (some months prior to finishing *L'Homme-Machine*), entitled *De regimine mentis* (translated in Rather 1965). Here, Gaub laid the ground for a clinical perspective on the problem of mind-body interaction. La Mettrie spoke favorably about the ideas he heard there, and his enthusiasm makes sense, for Gaub had argued that the metaphysical distinction between the mind and body was irrelevant for the physician. “Although the healing aspect of medicine properly looks toward the human body only, rather than the whole man, it does refer to a *body closely united to a mind* and, by virtue of *their union*, almost continually acting on its companion

as well as being itself affected in turn” (Gaub 1747, in Rather 1965: 70, emphasis mine). He also described Descartes, “the most ingenious philosopher of his age,” as having “yielded to physicians” as to the priority of medicine in these matters (74), referring to the well-known passage in the 6th Part of the *Discourse on Method* where Descartes praises medicine. (Descartes names medicine as the most useful way of “making men wiser and more skilful than they have been up till now” and freeing us from infirmities mental and physical: AT VI: 62–63.) Gaub adds that due to the variability of bodily temperaments, itself explainable in humoral terms, the philosopher “cannot dispense with the aid of the physician” where the mind is concerned (86). But all the same he was horrified at the idea that his position could be characterized as materialism and strongly rejected La Mettrie's enthusiastic offers of intellectual friendship (Vila 1998, 82).

## Conclusion

Historians have been known to overlook early modern medical materialism, and it can appear far removed from traditional debates on mind-body dualism, given that it recognized what Montaigne called “the tight weave of the mind and the body” (Montaigne (1595/1992), I, 21). That is, ordinary history of philosophy tends to focus on issues like monism, dualism, and epiphenomenalism – but this approach masks a much more hybrid, bastardized, and *embodied* reality on the ground (it is also possible to see *specifically medical* versions of dualism, including substance versus function dualism (Wright 2000)). Mind was also **animal spirits**, “tiny messengers” bearing information materially through the body; matter's smallest parts might indeed have had minds, desire, memory, if not personhood. La Mettrie, the author of perhaps the most provocative materialist work ever written, *Man a Machine* (1748), spoke elsewhere, in his medical commentaries, of the mind's “corporeal nature” (La Mettrie 1747, 111). Diderot, in his late manuscript on “physiology” and its conceptual ramifications, imagines

what he calls a “physical medicine”: since “every sensation and every affection is corporeal, it follows that there is a physical medicine which is equally applicable to the body and the soul” (Diderot 1975–, vol. XVII, 512). These and other highly provocative materialist claims made by well-known figures in the history of philosophy speak to the significance of early modern medical materialism.

## Cross-References

- ▶ [Early Modern Conceptions of Embodiment](#)
- ▶ [Materialism](#)
- ▶ [Mental Disease in Early Modern Medicine](#)
- ▶ [Mind/Body Problems](#)
- ▶ [Soul](#)

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