

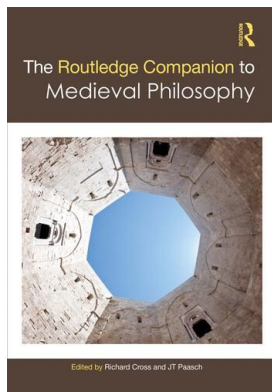
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MATTER

John Kronen and Sandra Menssen

These days it is common to see matter as a type of substance, that is, as an entity that possesses features such as shape or mass, as a sort of thing distinct in kind from mind or soul or spirit. This way of understanding matter is now common even among philosophers who deny that immaterial substances exist, and is inherited from Descartes and Locke. Locke, for instance, defined material substances as substances that are “extended, figured [i.e., have shape], and capable of motion,”¹ while spiritual substances as capable of thought, will, and action. In teaching that matter is a kind of substance, Descartes and Locke were themselves resurrecting a doctrine held by many pre-Socratic philosophers, and opposing Aristotle.

The medieval Aristotelian understanding of matter was radically different. Medieval Aristotelians appropriated, in various ways, Aristotle’s basic teaching that matter is *not* a substance. Aristotle held that matter, or rather *prime matter*—the most basic *stuff* out of which material substances are made—is not a substance but a “principle of potency” that needs to be actualized by what he called substantial form in order to constitute, with form, a complete natural body such as a stone, a tree, or a cat. Aristotle offered an explanatory analogy: just as a deposit of copper or silver is not a statue, but only potentially such, only such if given the right form (in this case, the right shape), so prime matter is not a stone or a tree, but is only potentially such, only such if given the right substantial form. This is merely an analogy since for Aristotle copper is a substance but a copper *statue* isn’t—it is a substance plus a certain “accident” (i.e., feature) impressed on it. But a substance and an accident together do not a substance make. Otherwise, when Jill sits down, a new substance will come into being and when she gets up the substance that was the “seated-Jill” will go out of being to be replaced by a new substance, the “standing-Jill.” For Aristotle, Jill getting up, or sitting down, or learning French, are all *accidental* changes, the subject of which is Jill. That is, Jill is the entity undergoing such changes. And the forms she acquires as a result of such changes are accidents, which means they don’t constitute with their subject a new substance, but only make the substance that was *already* there to be “such and such”—seated, standing, French-speaking, etc. But, Aristotle thought, other changes *are* substantial, such as the coming to be of a diamond, or a kitten’s conception, and the subject of such changes he held to be *prime matter*, and the forms acquired as a result of them, *substantial*. The details of Aristotle’s doctrine are controversial, and he changed his mind on certain important points, but its basic outline is clear enough. In this essay, we want to explain something of the dialectic through which Aristotle’s conception was appropriated and developed by various medieval philosophers.

Some philosophers (e.g., John of Damascus and Bonaventure) held that all created substances, even purely spiritual ones such as angels, are partially made of matter. In holding this they didn’t

mean to imply that angels have bulk or shape, or could be slain or burnt since they thought it is the substantial form of a thing, not its matter, that chiefly determines its essential features. Their reasons for thinking all created substances are partially made of matter stemmed from two propositions many medieval thinkers accepted: (1) creatures, unlike God, receive being from another, and (2) creatures, unlike God, are limited in being and perfection. John and Bonaventure held that the only way to explain these claims about creatures is to hold that all of them are partially constituted by prime matter since matter receives the form and limits it. In supposing all created substances are partially constituted by matter, John of Damascus and Bonaventure were not supposing (like Plato) that matter is something that God didn't create—God created all things, including matter, from nothing (i.e., not out of anything else); but even God, according to such thinkers, could not create angelic forms without “co-creating” the matter such forms are received in, just as not even God could create a replica of the shape of Michelangelo's “David” without co-creating some marble (or copper, etc.) to receive it.

By contrast, Aquinas opposed the thesis that all creatures are partially constituted by matter; in particular, he thought that the angels, being pure spirits, are pure forms without any matter. Certain activities of certain immaterial substances (e.g., intellectual understanding) require they not be made of matter. Although Aquinas agreed with John and Bonaventure that creatures receive being and partake in God's perfections only to a limited degree, he disagreed with them in thinking that such reception and limitation requires matter, arguing that the very *essence* of a created substance (what it fundamentally is) is a sufficient principle for such receptivity and limitation. Consider that even an angelic form, not being a divine form, must be in *itself* limited, not needing matter to limit it. Even if we supposed that the forms of angels are themselves infinite (something no medieval thinker would have supposed), such forms couldn't be limited by being received in matter. Indeed an infinite form could not be received in matter *at all*—only a form that is itself intrinsically limited could be received in matter.

Aquinas's arguments on these points seem to have been decisive. Although many later thinkers (e.g., John Duns Scotus) continued to defend certain other Franciscan notions (Bonaventure was a Franciscan) that Aquinas rejected (e.g., that human beings are constituted by a plurality of substantial forms), very few thinkers after Aquinas defended the view that all creatures, even spiritual ones, are partially constituted by matter.

Aquinas's arguments against the notion that all created substances have matter as a constituent allowed him to focus on Aristotle's central reason for thinking prime matter is real, namely that it is required for what's called “substantial change.” Aquinas sketched other arguments for the reality of prime matter besides the one based on change, but we will focus on the argument from change. This argument supposes that all changes require three conditions: (1) a subject of the change, i.e. the thing that undergoes the change, (2) the privation of some form, i.e. the lack of some form that the subject could have but currently doesn't, and (3) the new form that the subject acquires as a result of the change.

In the case of accidental changes it is clear what the subject of the change is, namely a substance that existed before the change and that picks up new accidents as a result of it. If Bastet the cat gets fatter, or loses her fur, or learns to turn doorknobs, then it is clearly *Bastet* that undergoes these changes, and Bastet is a substance. To say that Bastet is a substance *isn't* to say that Bastet possesses accidents (though they didn't deny this is true); rather, it is to say that Bastet *isn't* an accident. In other words, to say that Bastet is a substance is to say that she is the sort of thing that *cannot* be a feature of something else. Colors, shapes, thoughts, acquired abilities, are all accidents since they are things that *can* be features of something else. There cannot be colors without colored things, shapes without shaped things, thoughts without thinkers who have them, etc., and things that have colors, shapes, and so forth are substances (note that in a marble statue, it's the marble that has the shape, not the statue). Still, Aquinas did not *define* substance as that which has accidents—he defined it as something that exists “in itself,” not in another.

Though it is clear what the subject of accidental changes is, i.e., some substance or group of substances, it is less clear what the subject of substantial changes is, or *could* be. Suppose that Bastet gets hit by a car and dies, leaving a dead body, a “cat-corpse.” What changed into the corpse? Could it be Bastet? No; for then the change would be accidental—like Bastet’s getting fatter, losing hair, etc. But Bastet’s death isn’t like that—*Bastet is no more*, so it can’t be Bastet that changed into a corpse.

Could it be a number of molecules, atoms, etc. that before Bastet’s death were related in the right way to constitute a cat, and that after Bastet’s death have ceased to be related in that way, that are the subjects of the change? No; Aquinas thinks that if this were so, Bastet *would never have been a substance to begin with*, and the change, again, would be accidental. A substance is the sort of thing that cannot be an accident of some other thing, and a group of substances does not make a substance. If certain molecules are related in a particular way so as to constitute a cat, then the cat is (in all respects relevant here) like a number of Legos related in the right way to constitute a “Lego cat.” Suppose that the molecules and the Legos are substances. Then the entity “made” of them is an accidental unity, i.e., it is a number of substances plus certain of their relational accidents, like an army. But a number of substances plus their relational accidents are not a substance—they are not even *an entity*, in the way the blue color uniformly informing a blue marble is an entity. One might claim, of course, that when molecules are arranged in the right way, a new form, a cat form, comes to be “in” them, and that such a form is substantial. But Aquinas would say that any form that is in another substance or group of substances is accidental, and *no* accidental form can be a substantial form (i.e., none can “give” substantial being to a thing).

Could it be Bastet’s body that is the subject of the change? No; Aquinas thinks that if it were, then Bastet’s body would be one substance, not a number of substances put together; but then, again, the change would be accidental. This can best be understood if we suppose that every animal consists of a soul, conceived of as an immaterial substance capable of sensing and feeling, and a body, a material substance, possessing bulk, figure, etc. These two substances will, no doubt, intimately be related in a living animal. Still, if Bastet’s body and soul are distinct substances that can be joined and separated, then Bastet’s death just *is* the separation of her body from her soul. This separation can reasonably be thought to produce profound changes in both, but they will no more be substantial than the changes that occur to a diamond ring if the diamond is separated from the gold band holding it. True, neither the diamond nor the gold will any more be a diamond ring, just as neither Bastet’s soul nor her body will be a cat any more. But Aquinas thinks a diamond ring is not really a thing at all, any more than an army, or a forest; and Aquinas is assuming that an animal is *one* thing, indeed, one *substance*. So Bastet *was* one substance and her death was an instance of a *substantial change*.

So neither Bastet, nor a number of molecules, atoms, etc., nor Bastet’s body, could be the subject that changes when Bastet dies. In other words, none of them could be the “thing” that changed from being an animal’s body to being a corpse.

What, then, *did* change into a corpse? The answer given by Aquinas is that *prime matter* did, something that isn’t a substance at all—indeed isn’t, in itself, an existent being, but only a *capacity* to be. Prime matter has no qualities, no quantity, no active powers—it’s pure stuff, formless gunk that, though real, can’t exist or have any accidental features unless informed by a substantial form that actualizes its capacity to be the body of a human, a cat, an oak, etc., and, in doing so, “clothes” it in all the accidental features characteristic of human, cat, and oak bodies.

Here it seems necessary to consider a certain objection. This objection is that we have overwhelming empirical evidence that chemical compounds are made of atoms, that trees are made of molecules, and so forth, so there just can’t be any prime matter of the sort Aquinas had in mind. Aquinas was aware of an analogous medieval objection to his doctrine, one based on the ancient theory of the four elements—earth, air, fire, and water. According to this theory, compound

substances are made of a mixture of two or more of the four elements. Aquinas's answer to this was to insist that if that were so, then (for reasons we have sketched), plants, animals, and humans wouldn't be single substances, and he thought they clearly *are*; and we cannot know the essences of things through the senses. In particular, different substances can have the same *sorts* of qualities and powers in virtue of different substantial forms (bats fly, but they aren't birds). Thus a water molecule, in virtue of its water-form, could have oxygen-like accidents in some of its parts, and hydrogen-like ones in others.

Some medieval philosophers (e.g., Scotus) held it isn't prime matter alone that changes from being the body of an animal into a corpse, but prime matter *informed by* a form of corporeity (something that makes matter have a human, cat, oak, etc. body), that does. On this view a cat is made of prime matter, a form of corporeity, and a cat soul (which is the *ultimate* substantial form of a cat), and when the cat dies, the corpse that is left is prime matter plus the form of corporeity, minus the cat soul. Still Scotus, like many medievals, held that prime matter is real and is the proximate subject of certain substantial changes, so Scotus agreed with Aquinas about certain cases.

There was, however, a profound disagreement between Aquinas and Scotus on the nature of prime matter, and in particular, on how minimally existent it must be to be the subject of substantial change. Aquinas and his followers insisted that it must have *no* actuality, must be so purely potential that it is given being absolutely speaking (being *period*, one might say) by substantial form, and that not even God could preserve it without substantial form. Scotus and others (e.g., Suarez), held that matter must have some actuality of its own, as well as certain attributes of its own that are unknown to us, though they agreed it could not, simply in virtue of its nature, possess the accidents characteristic of complete natural substances without being informed by the appropriate substantial form. Ockham departed even further than Scotus or Suarez from Aquinas's doctrine of matter (he thought it possessed some quantity of its own), but we will not discuss his views here since the more basic question is whether or not matter has any actuality of its own.

Aquinas's chief argument for the conclusion that matter has no actuality of its own and that existence is "channeled" to it through substantial form rested on the claim that if prime matter had any actuality or existence of its own, it would be a sort of diminished substance, and so *couldn't* be the subject of substantial changes. As he put it,

when matter is said to be a being in act, this doesn't differ from saying that matter is the very substance of a thing; for thus the ancient natural philosophers, who deemed prime matter to be being in act, said that matter is the whole substance of a [material] thing.²

In support of their master's doctrine, later Thomists pushed Aristotle's analogy as follows: just as natural bodies, the matter of artifacts, such as copper or wood, have no artificial being before receiving an artificial form (i.e., the form of an artifact), so prime matter, the matter of natural bodies, has no natural being "before" (i.e., independently of) receiving a substantial form. Aquinas also argued that to suppose matter to exist without form is to suppose there could be a substantial entity that is no particular sort of substantial being; but this is as absurd as supposing that there could be, say, an animal that is no particular sort of animal.

Those like Scotus who held, contra Aquinas, that matter has some existence of its own independently of form, gave various arguments for their view. One important argument (for later reference, let's call it "the argument for matter's actuality based on the principle of the excluded middle") went as follows. Either prime matter, taken in itself "before" being informed by substantial form, is something real outside a state of pure possibility and its creating cause (i.e., what created it, namely God), or not. If not, then it is nothing and so can't be the subject of substantial changes. But if so, then it has an existence and actuality of its own. Therefore, either prime matter is nothing and so can't be the subject of substantial changes, or it has an existence and actuality

of its own. But prime matter is not nothing and it is the subject of substantial changes. So, prime matter has an existence and actuality of its own.

Other arguments contrary to Aquinas's view were more narrowly focused on substantial change itself, attempting to establish both that (1) matter must be the "carrier" of certain accidents from the substance corrupted in a substantial change to the one generated, and (2) if it is such a carrier, it must have some actuality and existence of its own not channeled to it by the substantial form that currently informs it. These arguments were stated with the greatest force by Suarez since he, like Aquinas, rejected the form of corporeity. To understand Suarez's arguments for the propositions (1) and (2), it must be realized that Suarez believed accidents can't normally "fly" from one substance to another—though Bob's constant complaining when he has a headache may causally contribute to Frank's getting one, Bob's headache, an accident *of* Bob, can't fly out of Bob, and land in Frank. So, if there are reasons to believe that certain accidents that were there in the corrupted substance (i.e., the substance that ceased to be during a substantial change) are there in the generated substance (i.e., the substance that comes to be as a result of the change), it must be that the matter that was in the corrupted substance "carried" certain accidents of that substance to the generated one. But if matter can carry some accidents from one substance to another, then matter must have some being of its own, absent substantial form, otherwise it could not, in itself, sustain the accidents it carries from the corrupted to the generated substance.

The most important argument given for the view that matter *does* carry accidents from corrupted to generated substances began with the assumption that, for a substantial change to occur, matter must gradually be worked on so that it ceases to be a fit "home" for a certain sort of substantial form, and becomes fit for a new sort. For example, if the matter that now partially constitutes a tree is to come to partially constitute some ashes, certain accidents favorable to the continued information of the matter by a tree-form must be destroyed, and others favorable to the information of it by an ash-form must be introduced. This happens if the tree is set on fire—the fire, if not put out, will gradually act on the matter of the tree so as to destroy accidents making that matter the fit home for a tree-form, and will dispose it more and more to being the home for an ash-form. And this requires that at the very moment the tree-form is corrupted and the ash-form generated, certain accidents introduced into the matter while it was still informed by the tree-form *continue* to be in it, thereby disposing it for the ash-form.

Scotus, Suarez, and others responded to Aquinas's insistence that if matter had any actuality of its own it would be a diminished substance, by arguing that something that in itself lacks all active powers isn't a substance, since every substance is able to efficiently cause some changes. So, a subject like prime matter, since it naturally lacks all active powers, can reasonably be held to be only potentially a substance (or part of a substance), rather than a complete substance, even if it has some existence of its own. They responded to Aquinas's argument that to suppose prime matter has an existence of its own is like supposing something could be a substance without being any particular kind of substance, by arguing that prime matter is an incomplete substance that has certain attributes (even if no accidents) of its own, though these attributes are not directly known by us. Specifically, prime matter has all those attributes (taken as the ground *in* it of predicates truly holding of it, though that ground is not really distinct from the essence of matter itself) it needs to be the subject of substantial changes and to contribute its share in the generation of certain accidents of material substances, e.g., quantity and the divisibility that follows upon quantity.

Aquinas couldn't directly respond to the arguments of Scotus and other later thinkers for matter's intrinsic actuality, but his followers, the Thomists, defended their master's teachings. They thought that the argument for matter's actuality based on the principle of the excluded middle committed the fallacy of the false dilemma. In particular, they held that its first premise ignored the reality of potency, and fell into the mistake of the "old natural philosophers" (i.e., the pre-Socratics), who held that whatever is real is actual, and whatever is not actual is nothing. John of

St. Thomas, a seventeenth-century Thomist, was perhaps the clearest on this point. He wrote that though matter is “outside a state of possibility” it is so only “dependently upon an act giving being formally,” not “independently of every act and form.”³

In short, defenders of Aquinas and his school insisted on the reality of *radical* potency, which though real, can only exist (or rather co-exist) with the help of something that intrinsically actualizes it by making it to be a “this something” rather than a “that something.” And here they were not afraid to use an analogy: just as some clay must be one shape or another to exist, so prime matter must be actualized by one substantial form or another to exist. This is only an analogy since, though having some shape is a necessary condition for clay to exist, the shape ontologically depends on the clay, not the other way around, while form gives *substantial* existence to matter, or rather is the channel through which existence is given to matter.

The answer of the Thomists to the argument for the conclusion that prime matter must carry accidents from the corrupted to the generated substance in every substantial change consisted in saying that, though a created agent (i.e., any created substance, even an inanimate one, insofar as it is actively causing changes) may often need to work for some time on matter to strip it of dispositions making it a fit home for the substantial form currently informing it, the agent *need not* take time to give it new dispositions once it has stripped matter of all substantial and accidental forms. For at *that* moment matter, which is in potency to all material forms, will offer no resistance to an agent having the power to introduce into it a certain substantial form *simultaneously with all the ultimate dispositions necessarily accompanying such a form*. Fire may need to work on matter currently informed by a tree-form in order to destroy in it those dispositions necessary for it to have a tree-form. But once those dispositions are destroyed, and along with it the tree-form, the fire can immediately introduce into the matter the ash-form and, in the same instant, all the dispositions necessary for that form. The Thomists further added that the *ultimate* dispositions necessary for matter’s information by any particular sort of substantial form will not only exclude any other sort of substantial form from informing matter at that time, but also the ultimate dispositions that go along with any other form. For example, the ultimate dispositions necessary in matter for it to be informed by the human soul (perhaps dispositions associated with the human brain) will exclude any other substantial form from informing matter at that time, as well as excluding from it the ultimate dispositions necessary for any other sort of form (e.g., dispositions necessary for an oak-form, or a canine-form, or a gold-form).

Further Reading

Many texts on particular medieval thinkers include a significant discussion of the concept of matter. For example, see Adams (1987), Cross (1999), Hill and Lagerlund (2012), and Pasnau and Shields (2004).

Those who wish to delve particularly into the questions we raise in this article concerning matter might consult Des Chene (1996, 2000), O’Neill (1923), and Pasnau (2011). Pasnau’s book is totally devoted to problems surrounding the metaphysics of substance; it probes different views of matter and form in great detail.

Those especially interested in understanding how Aquinas’s philosophy of nature fits in with his theological views might consult Gilson’s *The Christian Philosophy of St. Thomas Aquinas*, sometimes called simply *The Philosophy of St. Thomas Aquinas*—various versions were published by Gilson; the last of these versions was Gilson (1994). Those interested in how Scotus’s philosophy of nature fits in with his theological views can consult Cross (1998).

Two recent studies arguing for the continuing relevance of Aquinas’s philosophy of nature to contemporary philosophy are Brown (2005) and Stump (2003). Studies that seek to show the philosophical core of Aristotle’s notion of matter is consistent with modern physics include Maritain (1995) and Suppes (1974).

Notes

- 1 Sandra Menssen would like to note that John Kronen is the lead author of this article. John Locke, *An Essay Concerning Human Understanding*, Bk. II, ch. XXIII, par. 8 (1975).
- 2 Aquinas, *Opusculum 15, On Separate Substances*, ch. 7, quoted by John of St. Thomas in *Cursus Philosophicus Thomisticus*, Vol. II, *Naturalis Philosophicae* (1933: 63).
- 3 John of St. Thomas (ibid.: 65).

References

- Adams, M. (1987) *William Ockham*, 2 vols. Notre Dame, IN: University of Notre Dame Press.
- Brown, C. (2005) *Aquinas and the Ship of Theseus: Solving Puzzles about Material Objects*. New York: Continuum.
- Cross, R. (1998) *The Physics of Duns Scotus: The Scientific Context of a Theological Vision*. Oxford: Oxford University Press.
- . (1999) *Duns Scotus*. New York and Oxford: Oxford University Press.
- Des Chene, D. (1996) *Physiologia: Natural Philosophy in Late Aristotelian and Cartesian Thought*. Ithaca, NY: Cornell University Press.
- . (2000) *Life's Form: Late Aristotelian Conceptions of the Soul*. Ithaca, NY: Cornell University Press.
- Gilson, E. (1994) *The Christian Philosophy of St. Thomas Aquinas*. Notre Dame, IN: University of Notre Dame Press.
- Hill, B. and H. Lagerlund, eds. (2012) *The Philosophy of Francisco Suarez*. Oxford: Oxford University Press.
- Locke, John (1975) *An Essay Concerning Human Understanding*, ed. P. Niddich. Oxford: Clarendon Press.
- Maritain, J. (1995) *The Degrees of Knowledge*, trans. G. Phelan. Notre Dame, IN: University of Notre Dame.
- O'Neill, J. (1923) *Cosmology, An Introduction to the Philosophy of Matter*. London: Longmans, Green and Co.
- Pasnau, R. (2011) *Metaphysical Themes 1274–1671*. New York: Oxford University Press.
- Pasnau, R. and C. Shields (2004) *The Philosophy of Aquinas*. Boulder, CO: Westview Press.
- St. Thomas, John (1933) *Cursus Philosophicus Thomisticus, Vol. II, Naturalis Philosophiae*. Turin: Marietti.
- Stump, E. (2003) *Aquinas*. New York: Routledge.
- Suppes, P. (1974) "Aristotle's Concept of Matter and Its Relation to Modern Concepts of Matter." *Synthese* 28: 27–50.