

46. Form and Matter

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The first unquestionably big idea in the history of philosophy was the idea of form. The idea of course belonged to Plato, and was then domesticated at the hands of Aristotle, who paired form with matter as the two chief principles of his metaphysics and natural philosophy. In the medieval period, it was Aristotle's conception of form and matter that generally dominated. This was true for both the Islamic and the Christian tradition, once the entire Aristotelian corpus became available. For this reason, although there is much to say about the fate of Platonic Forms in medieval thought, the present chapter will focus on the Aristotelian tradition.¹

Aristotelian commentators have been puzzled by form and matter for as long as there have been Aristotelian commentators. Indeed, it would not be too much to say that these are topics about which Aristotelians have never formed a very clear conception, and that their failure to do so was the principal reason why Aristotelianism ceased to be a flourishing research program from the seventeenth century onward. For those who aspire to a modern revival of Aristotelianism, the concepts of *form* and *matter* can easily take on the aspect of a kind of Holy Grail, such that if only we could get these ideas clearly in focus, we could see our way forward on any number of philosophical fronts, such as the union of mind and body, the coherence and endurance of substances, the nature of causality, and so on. The historical record, however, suggests that this hope is a snare and delusion, insofar as there has never been any such thing as *the* theory of form and matter. Although medieval philosophers of all kinds used this terminology incessantly, it had no more of a fixed meaning than does the ubiquitous contemporary philosophical talk of "properties." Hence, the most a general survey of the topic can do is consider some of the more important areas of agreement and disagreement.

¹ Since medieval Latin before 1200 proceeded in ignorance of Aristotle's metaphysics and natural philosophy (see Chapter 4), one might suppose that it would have little to say about form and matter in anything like an Aristotelian sense. In fact, this is not always the case. Peter Abaelard works with a sophisticated conception of form and matter, although he treats these concepts in a highly reductive fashion (see Peter King, "Peter Abelard," in E. Zalta (ed.) *The Stanford Encyclopedia of Philosophy* <plato.stanford.edu>). Gilbert of Poitiers likewise gives form an important role in his thought (see John Marenbon's entry on Gilbert of Poitiers in J. Gracia and T. Noone, *A Companion to Philosophy in the Middle Ages* [Oxford: Blackwell, 2003] p. 264). See also Chapter 49.

Universal Hylomorphism

Our default theory of bodies today is taken from the seventeenth century, though it springs largely out of ancient atomism: we take material substances to be constituted by their integral parts, and are nothing more than the sum of those parts. On this picture, the bodies we are ordinarily acquainted with are just a collection of smaller bodies, perhaps with the further proviso that the whole be assembled in a certain way. The rightness of this picture can seem so self-evident as to require no defense. To medieval philosophers working in the Aristotelian tradition, however, this analysis would seem so incomplete as to be laughable. On their model, although bodies are composed of other bodies, this sort of analysis never gets to the fundamental constituents of the material world, however far down it goes, because it frames the analysis in the wrong way. For an Aristotelian, the fundamental constituents of physical bodies are not integral parts, but the metaphysical parts of form and matter.

On one understanding of matter, it is the counterpart of form – the stuff that gets informed – so that whenever there is a form there must also be some matter that serves as its subject. On this conception, there will often be hierarchies of matter, with the most basic stuff, *prime matter*, at the bottom, and various form–matter composites at higher levels, which may themselves be conceived as the matter for some further form. Wood, for example, is a form–matter composite that can itself serve as the matter of a bed (see Aristotle, *Phys.* II.1).

This conception of matter lends itself naturally to universal hylomorphism: the doctrine that every (created) substance is a composite of form and matter. Perhaps the most influential proponent of this view was Solomon ibn Gabirol, the eleventh-century Jewish philosopher and poet. According to Gabirol, everything that exists has a form, because “every existence of a thing comes from form,” and moreover “every difference [between things] occurs only through form” (*Fons vitae* III.39). These claims are relatively uncontroversial, inasmuch as all beings, material and spiritual, were standardly viewed as containing some form, and such forms are what give character to otherwise homogeneous matter. Gabirol’s further, highly controversial claim is that all created substances also contain matter:

[A]ll things are composed of matter and form. That is to say, a body at the lower extreme [of the hierarchy of being] – namely, a substance having three dimensions – is composed of matter and form. And if the whole of what exists is a continuum extended from the

highest extreme to the lowest extreme, and the lowest extreme is composed of matter and form, then it is clear from this that the whole of what goes from the uppermost extreme high to the lowest extreme is also composed of matter and form. (*Fons vitae* IV.6)

Many early scholastic authors, especially Franciscans, embraced this sort of view. From the time of Albert the Great and Thomas Aquinas, however, the view fell entirely out of favor, replaced by the idea that matter occurs only in the corporeal realm. Hence there arose the linkage we take for granted today, between corporeality and materiality, so that to be a body (*corpus*) just is to have matter.²

One way to confine matter to a narrower range of entities would be to restrict form as well to the corporeal realm. This strategy does not go very deep, however, inasmuch as it leaves untouched the principal rationale for universal hylomorphism – namely, to account for the mix of actuality and potentiality found everywhere among creatures, material and spiritual. That forms are what give actuality to their subjects, whereas matter is the corresponding potentiality for that subject to enter into a certain state, by acquiring a form – these are perhaps the only truly uncontroversial things that can be said about form and matter. This suggests that wherever there is the capacity for change, there will be both form and matter.

In response, one might try denying that spiritual entities – celestial intelligences, human souls – have any sort of potentiality for being affected in any way. This, however, would introduce a radical discontinuity among creatures that medieval authors were generally unprepared to accept. Aquinas, for instance, accepts Gabirol's basic assumption in the passage

² On hylomorphism among the early scholastics, see Erich Kleineidam, *Das Problem der hylomorphen Zusammensetzung der geistigen Substanzen im 13. Jahrhundert, behandelt bis Thomas von Aquin* (Breslau: G. Tesch, 1930); Lottin, *Psychologie et morale aux XII^e et XIII^e siècles* (Gembloux: Duculot, 1948-60) I: 427-60; Richard Dales, *The Problem of the Rational Soul in the Thirteenth Century* (Leiden: E. J. Brill, 1995); R. James Long, "Of Angels and Pinheads: the Contributions of the Early Oxford Masters to the Doctrine of Spiritual Matter," *Franciscan Studies* 56 (1998) 237-52. Among Franciscan authors, see Bonaventure (*Sent.* II.3.1.1.1c, II.17.1.2c) and John Pecham (*Quaest. de anima* 4), and the detailed discussion in Theodore Crowley, *Roger Bacon: The Problem of the Soul in His Philosophical Commentaries* (Leuven: Institut Superieur de Philosophie, 1950), ch. 2. For Albert the Great, see *Sent.* II.3.4c, *In De an.* III.2.9, and James Weisheipl, "Albertus Magnus and Universal Hylomorphism: Avicbron," in F. Kovach and R. Shahan (eds.) *Albert the Great Commemorative Essays* (Norman: University of Oklahoma Press, 1980) 239-60. On Gabirol, and especially the Neoplatonic background to his thought, see Lenn Goodman (ed.), *Neoplatonism and Jewish Thought* (Albany, NY: State University of New York Press, 1992).

quoted above, that what is found at the lower levels of creation will be found at the higher levels. *All* created substances exhibit complexity and changeability, which is to say that they exhibit potentiality and actuality. But Aquinas insists that not all potentiality is material potentiality:

To receive, to be subjected, and other such things do not apply to the soul and to prime matter in the same way (*rationem*), because prime matter receives a thing through transformation and motion. And because all transformation and motion goes back to local motion as to what is first and most common (as is proved in *Physics* VIII), we get the result that matter is found only in those cases where there is the potentiality for location. But only corporeal things, which are circumscribed to some place, are of this sort. Hence matter is found only in corporeal things, with respect to how the philosophers have talked about matter, unless one wants to use ‘matter’ equivocally. (*Quaest. de anima* 6c)

The argument aims to establish a general characterization of material change, so that it can be distinguished from spiritual change. Only things whose changes occur in virtue of local motion – and so only things that occupy place – can undergo material change. This limits material change to bodies, and so limits matter to bodies.³ Aquinas’s closing reference to a possible “equivocal” use of matter recognizes that someone might want to treat any sort of potentiality as matter, thereby retaining universal hylomorphism. Since Aquinas accepts that all creatures contain potentiality, inasmuch as they are a composite of being and essence (see Chapter 45), he can object to this locution only on the grounds that it would equivocate between very different senses of what matter is. It is much better, he claims, to restrict matter to the corporeal realm.

Prime Matter

When matter is restricted to the corporeal realm, the notion of *prime matter* takes on a more precise meaning – not just as the basement level of any hylomorphic hierarchy, but more specifically as the stuff in virtue of which substances count as *corporeal* substances. This, at any

³ Aquinas’s argument is liable to misinterpretation in several respects. First, although the text literally says that all change “reduces” to local motion, Aquinas does not mean – and does not understand *Physics* VIII (at 260a27-261a27) to assert – that a reductive account of qualitative change in terms of local motion is possible. He means only that, since bodies act on other bodies in virtue of spatial proximity, local motion is always a basic and necessary condition for the onset of any material change. Second, Aquinas believes that spiritual substances can literally have location. God, for instance, is literally everywhere (*Summa theol.* 1a 8.3). But the actions of spiritual agents *need not* involve any sort of local change.

rate, is what the rationale that leads to restricting matter to the corporeal realm naturally suggests. At the same time, however, the logic of the form–matter distinction tends to drain the concept of *prime matter* of all content, making it very hard to see what exactly prime matter might be, or might do. This tendency appears in its most extreme form in Aquinas, who treats prime matter as pure potentiality to such a degree that it cannot possibly exist on its own, or even be understood on its own, not even by God.⁴ Yet although it would become a scholastic platitude to describe prime matter as pure potentiality, few later scholastics were willing to go as far as Aquinas in depriving prime matter of all actuality. Even Domingo de Soto, an influential sixteenth-century Thomist, would feel obliged to postulate within prime matter an “essential metaphysical actuality” that gives matter its distinctive character - a conclusion that, he remarks, “seems so certain to me that there can be no question about it, except in name” (*In Phys.* I.5).

The worry that prime matter, conceived of as nothing but potentiality, would lack character entirely, was stated forcefully by John Duns Scotus and then William of Ockham. Contrary to Aquinas’s claim that prime matter by itself would lack even existence, Ockham claims that “matter is a kind of thing that actually exists in the natural realm” (*Summula philosophiae naturalis* I.9). It must be so, he argues, because matter is a real principle of corporeal substances, but “that which is not an actual entity can be a part or principle of no being” (*ibid.*, I.10). Scotus had said much the same thing, but in somewhat more cautious terms, remarking that “if you ask whether or not matter ought to be called an actuality, I have no wish to dispute over names.” What is important, according to Scotus, is that “matter is a true reality” and “a positive being” (*Lectura* II.12 [ed. Vatican XIX nn. 38, 37]). On the usual reading of Aquinas, these are claims to which he, too, would assent; this raises the possibility that the dispute over whether matter has some actuality just is, in large part, a terminological dispute. Scotus, however, treats the strict “pure potentiality” line as tantamount to denying that matter is a thing in its own right, distinct from form, and there is indeed room to wonder whether this is

⁴ For Aquinas on prime matter’s dependence on form, see *Quodlibet* III.1.1; on its intelligibility, see *Quaest. de veritate* 3.5c and *Summa theologiae* 1a 15.3 ad 3 (see also John Wippel, *The Metaphysical Thought of Thomas Aquinas: From Finite Being to Uncreated Being* [Washington: Catholic University of America Press, 2000] ch. IX). The tendency appears in many other authors. Gabirol, for instance, insists that matter without form must lack being (*Fons vitae* IV.5), as does Avicenna (*Metaphysics* II.3).

correct, or even whether it might be Aquinas's intended view.⁵

The chief argument for prime matter's having actuality was that it could not otherwise serve as the stuff that endures beneath every change, both substantial and accidental. On this conception of prime matter's role, it may not need any special sort of character. But if matter is also to play a role in explaining the corporeality of physical substances, then it must presumably be more than just a bare, purely potential, substratum. Specifically, since the defining character of *body* is three-dimensional, prime matter might naturally be supposed to account for extension. This idea, however, was extremely controversial. The usual medieval stance was to distinguish prime matter from extension, but there was a wide range of possible views. Both Avicenna and Averroes, for instance, had conceived of extension as a form that inheres directly in prime matter, prior to the substantial form that makes the matter be a stone or a horse. They disagreed, however, on how to characterize that form. For Avicenna, extension results from a substantial form – what would be known as the *forma corporeitatis* – that endures through all change and accounts for the corporeal character of matter. Averroes, in contrast, conceived of extension as an accidental form that inheres in prime matter perpetually but in such a way that prime matter apart from subsequent forms has merely “indeterminate” dimensions. Both of these views were influential on the later Latin tradition, but competed against the view – associated with Aquinas – that extension (or quantity) is posterior to the substantial form, just as other accidents are. On this view, when prime matter is conceived of apart from form, it lacks extension altogether.⁶

The notion of extensionless prime matter is, of course, puzzling - in part because it is unclear how we are to conceive of prime matter, if not as extended. Averroes took the rather surprising position that prime matter is numerically one everywhere it exists, even within corporeal substances:

⁵ For Scotus on prime matter, see also *Quaest. in Meta.* VII.5. For a reading of Aquinas as denying that prime matter has any real ontological standing, see Pasnau, *Thomas Aquinas on Human Nature* (Cambridge: Cambridge University Press, 2002) ch. 1.

⁶ For Avicenna, see *Metaphysics* II.2-3, and the discussion in Abraham Stone, “Simplicius and Avicenna on the Essential Corporeity of Material Substance,” in R. Wisnovsky (ed.) *Aspects of Avicenna* (Princeton: Markus Wiener, 2001) 73-130. For Averroes, see *De substantia orbis* ch. 1, and Hyman, “Aristotle's ‘First Matter’ and Avicenna's and Averroes' ‘Corporeal Form’,” in S. Lieberman et al. (eds.) *Harry Austryn Wolfson Jubilee Volume* (Jerusalem: American Academy for Jewish Research, 1965) pp. 400-6.

We have already said elsewhere that prime matter is numerically one. Let us then demonstrate how numerically one thing can be found in many places. This is not found in what is actual. But in what is potential it can be said that a thing is numerically one and common to many, and that it does not have the differentiating features by which [the many] differ from each other in singular individuals. And because they have no indivisible differences and they lack forms, through which is found numerical plurality, these things are said to be one. (*In Meta.* XII.14)

Averroes's view seems to be that prime matter is located throughout space, but that since it is the same everywhere, this does not count as being extended. This sort of extensionless spreading out, so as to exist wholly in multiple places at the same time, is more often associated with immaterial entities like the soul, or else with universal properties. Averroes, however, denies that a form, or anything actual, could be present in many places. This mode of existence is possible for prime matter, however, given its lack of actuality, inasmuch as there is nothing to distinguish one bit of matter from another. This is a view that would be defended in the early fourteenth century by the leading Latin proponent of Averroism, John of Jandun (*In Phys.* I.24).

If prime matter is strictly and purely potential, then it must lack any intrinsic distinctness. Thus, according to the fifteenth-century Thomist John Capreolus, prime matter is “actually indivisible and one, but potentially divisible, multiple, and plural.” Or, to avoid the impression that prime matter is *actually* anything, he goes on gloss “actually indivisible” as “not actually divisible” (*Defensiones* II.13.1.3). To others, however, it seemed that prime matter had to have some feature that at least lent itself to extension. According to Scotus, prime matter is not intrinsically extended, but nevertheless it has “substantial parts” – parts not necessarily spread out in space, but there nevertheless, and apt to be spread out, when informed by quantity.⁷ Scotus's idea that prime matter could have parts and yet lack extension struck Ockham as needlessly obscure, as did the Averroistic view that prime matter could be spread out without having parts at all, being numerically one at each location. Ockham's own conclusion, instead, is that prime matter is intrinsically extended:

It is impossible for matter to exist without extension, because it is not possible for matter

⁷ Scotus, *Reportatio* II.12.2 (ed. Wadding XI: n. 7; cf. VII: 683 n. 5). See also Paul of Venice, *Summa philosophiae naturalis* VI.13. For another statement of the Thomistic view, see Robert Orford (?), *De natura materiae* ch. 5 n. 390.

to exist unless it has part distant from part. Hence although the parts of matter can be united in the way in which the parts of water and air can be united, still the parts of matter can never exist in the same place. (*Summula* I.13)⁸

On this view, prime matter is necessarily spread out in space, part-wise, in virtue of its own nature. Since this is a theory of prime matter, not of body, we are still a long way from Descartes's later identification of body with extension. Still, building extension into the notion of prime matter gives Ockham the resources to reduce much of the standard scholastic ontology – especially the accidental category of Quantity – to nothing more than matter variously situated. This move thus serves as a critical foundation for his parsimonious, nominalistic ontology (see Chapter 48).

Substantial Form

Although the obscurity of prime matter is naturally captivating, of far greater significance to medieval philosophy is the conception of form, which serves as the chief analytic tool in nearly every area of Aristotelian thought. There are two basic kinds of form, substantial and accidental. Although the status of accidental forms was one of the most controversial issues in later medieval philosophy, the focus here will be on substantial form, leaving the dispute over accidents for elsewhere (chapters 47-49). To concentrate on substantial form and prime matter, leaving aside accidental forms, is in fact to concentrate on the substance itself, since on the standard medieval Aristotelian understanding, a human being or a horse just is a composite of prime matter and substantial form.⁹ Thus, the substance's color, size, and shape *inhere* in it, but are not strictly speaking a *part* of it. (When Locke and other critics of scholasticism call into question our grasp of substance, they have in mind this notion of the substance as the thing itself, apart from its accidents.) In terms of Aristotle's often-cited example, a white man is not a genuine substantial unity, because it is a composite of a substance (the man) and an accidental form (whiteness). In contrast, what became known as the "essential parts" of a human being (prime matter and substantial form) make a thing that is one *per se* – that is, yield the sort of

⁸ See also Marilyn McCord Adams, *William Ockham* (Notre Dame, IN: University of Notre Dame Press, 1987) pp. 671-95.

⁹ Admittedly, this oversimplifies the views of some authors, who would add certain further ingredients to a substantial composite, such as Averroes's indeterminate quantity, Scotus's haecceity, or even multiple substantial forms (see below).

unity characteristic of substances.¹⁰

It is not at all easy to account for the unity of a form–matter composite, however, when form and matter are understood as distinct things. Scotus, for one, thinks there simply is no such explanation, but that instead their unity is a brute fact:

If you ask why there is one thing *per se* in one case more than in another, I reply that just as, according to *Metaphysics* VIII, there is no question of why one thing is made from actuality and potentiality, except that this is actuality *per se* and that potentiality *per se*, so too there is no cause for why one thing *per se* is made from this actuality and that potentiality, either in things or in concepts, except that this is potentiality with respect to that, and that is actuality. (*Ord.* IV.11.3 [ed. Wadding VIII n. 53]).

What Aristotle had said is that “if one is matter, the other form, one in potentiality, the other in actuality, then the question [of their unity] will no longer appear to be puzzling” (1045a23-25). Rather than try to explain *why* there is no longer a puzzle at this point, Scotus contends that the appeal to potentiality and actuality is the end of the story, leaving nothing more to be said. This is an unorthodox conclusion, but it captures the unsettled state of the discussion over how a hylomorphic account might explain the unity of soul and body, or of any other hylomorphic compound.

A substantial form is more than just a cluster of necessary properties, and more even than just those properties that give a thing its essential nature as a thing of some kind (*horse, gold, etc.*). To be sure, the substantial form is closely associated and sometimes identified with the essence of a thing.¹¹ But an essence is more than just a certain sort of defining property – an essence defines a thing because it plays a critical functional role within a substance, explaining the various characteristic properties of a thing, both necessary and accidental. This is not to say that the essence explains *every* property of a thing, however; some properties, like having a scar, have extrinsic causes. Thus, according to Avicenna, “among accidents, there are some that occur

¹⁰ For the case of white man, see *Metaphysics* VII. On the *per se* unity of substances, see, e.g., Aquinas, *De ente* 6 (ed. Leonine 43: 380.23-49); Scotus, *Lectura* II.12.1 nn. 45-51. I discuss Locke’s view in a forthcoming book on the origins of modern philosophy.

¹¹ There was a running medieval dispute over whether the essence of a thing should simply be identified with its substantial form, as Averroes had argued (*In Meta.* VII.34), or whether, as Aquinas had argued (*Summa theol.* 1a 75.4c), a thing’s essence is its substantial form together with its common matter (those general features of its matter that it shares with all members of the species).

from without and some that occur from the substance of the thing” (*Sufficientia* I.6). Drawing on Avicenna’s discussion, Aquinas remarks that “everything that holds true of something is either caused by the principles of its nature, as is a human being’s capacity for laughter, or comes to it from an external principle, as light in the air comes from the sun’s influence” (*De ente* 4 [ed. Leonine 43: 377.127-30]). This idea runs through all of medieval Aristotelianism. Water, to take a common example, was thought to have all its various characteristic features – the tendency to be cold, to freeze at a certain point, to be transparent, etc. – in virtue of its essence. And just as the features of a substance that distinguish it as a natural kind stem from the kind of substantial form it has, so a substance’s intrinsic individual properties are often said to stem from the distinctive features of an individual’s substantial form. (Thus, it is *my* soul that accounts for the intrinsic accidental features that are distinctive of me in contrast with other human beings.) For medieval Aristotelians, the need to postulate some such intrinsic explanatory principle was the undisputed rationale for postulating substantial forms.¹²

Once substantial forms are justified in terms of this specific causal framework, the theory becomes at once more concrete and more vulnerable. There is no temptation to embrace any sort of conventionalism about essences, inasmuch as it is clearly more than convention that explains why water has its distinctive characteristics. But in taking on the aspect of a kind of proto-scientific hypothesis, the theory loses touch with its more metaphysical roots as an abstract principle of analysis. In Aristotle, these two aspects of form – proto-scientific and metaphysical – exist side by side, so that sometimes forms are conceived of on the model of souls, where souls are thought to have certain causal powers, whereas at other times forms are conceived of as abstract, functional principles, offering explanations at a level that is quite independent of whatever causal, physical story might be told about the natural world. Both of these aspects of form are present in medieval discussions as well, but the more pronounced tendency as time went on was to think of forms as causal agents. Hence, Francis Bacon would complain that in the natural philosophy of his day “forms are given all the leading parts” (*Philosophical Studies*, p. 206).

The Plurality of Forms

¹² For further discussion, see Pasnau, “Form, Substance, and Mechanism,” *Philosophical Review* 113 (2004) 31-88.

The doctrine of substantial form was never seriously challenged during the Middle Ages. There was, however, a very contentious dispute over how many substantial forms to postulate within a single substance. Avicenna's corporeal form, described above, marks him as a pluralist, and Gabirol postulates an even larger hierarchy of forms within living things (*Fons vitae* IV.3, V.34). Averroes, in contrast, seems to take the unitarian position, arguing that a substantial form can inhere only in prime matter, not in an actualized matter-form composite, and that therefore "it is impossible for a single subject to have more than one form."¹³ Among Latin authors, the initial tendency was pluralistic, at least until Aquinas forcefully defended the unitarian position. Although unitarianism was condemned at Oxford in 1277 and again in 1284, Aquinas's influence endured, and the result was a persistent division on the topic.¹⁴

In a sense, however, this ongoing dispute obscures the real story: although Aquinas's unitarian account was attacked for centuries, the consensus throughout was that such an account was preferable when available. When Henry of Ghent argued against the unitarian conception, for instance, he did so only for the special case of human beings, and even there he postulated only two substantial forms. Scotus likewise argued only for two forms, and only in the case of living things. Ockham was relatively extravagant in positing three substantial forms within a human being: a rational soul, a sensory/nutritive soul, and a form of the body. (Ockham was also unusual in his willingness to describe a human being as having two souls.) All three, however, agreed with Aquinas in the case of nonliving things, and they also agreed that the default view

¹³ *De substantia orbis* ch. 1, quoting from the medieval Latin translation (ed. 1562-74, IX: 3vK). Most Hebrew manuscripts have the inverted claim that "it is impossible for one form to have more than one subject." But the context of the passage, and the commentary tradition on the passage, suggest that the intended sense is as quoted (see *De substantia orbis*, ed. Hyman, p. 50n).

¹⁴ On the thirteenth-century debate, see Zavalloni, *Richard de Mediavilla et la controverse sur la pluralité des formes* (Louvain: Éditions de l'Institut Supérieur de Philosophie, 1951), and Dales, *Problem of the Rational Soul*. For Aquinas, see, e.g., *Summa theol.* 1a 76.3-4, *Quaest. de anima* 9, 11. On the controversy in Oxford, see Francis Kelley's introduction to Richard Knapwell, *Quaest. de unitate formae*. For the Thomistic defense, see Frederick Roensch, *Early Thomistic School* (Dubuque, IA: Priory Press, 1964). Prominent pluralists include Henry of Ghent (*Quod.* IV.13), Scotus (*Quod.* IV.11), Ockham (*Quod.* II.10-11), and Paul of Venice (*Summa philosophiae naturalis* V.5). Unitarians include Thomists like Giles of Lessines (*De unitate formae*) and Capreolus (*Defensiones* II.15) and also Gregory of Rimini (*Sent.* II.16-17.2), John Buridan (*Quaest. Metaphys.* VII.14), Albert of Saxony (*Quaest. de gen. et cor.* I.5), and Marsilius of Inghen (*Quaest. de gen. et cor.* I.6). Francisco Suárez offers an extended defense of unitarianism in *Disputationes metaphysicae* XV.

should be the unitarian one, unless special considerations make it untenable. Aquinas thus succeeded in changing the terms of the debate. The kind of pluralism he attacked had posited a substantial form corresponding to each of a thing's necessary properties; the force of his arguments was such that this kind of promiscuous pluralism ceased to be a live view.

Although it is not immediately obvious that very much rests on the question of whether a human being has one substantial form or more, the debate in fact raises some fundamental metaphysical questions. The principal benefit of unitarianism is the work it does in accounting for substantial unity. Because of the substantial form's role in explaining the properties of a thing, one can say that a substance has its enduring character over time in virtue of having a single substantial form that gives rise to those characteristics. Pluralists, with their multiple substantial forms, need to have some further story about what unifies a living organism. By treating the rational soul as distinct from the form of the body, they in effect abandon the promise of hylomorphism to explain the unity of mind and body. Balanced against that cost, however, are the resources available to pluralism to explain various puzzling features of substantial change. Intuitively, it seems that in many cases where a thing goes out of existence, part of that thing remains. An animal dies, but its body remains. A statue is smashed, but the clay remains. Philosophers have sometimes been tempted to deal with these sorts of cases by holding either that there is no real substantial change (that is, nothing goes out of existence) or that in fact there were two substances overlapping for a time (the statue *and* the clay), only one of which remains. Pluralists are able to say something less strange: there is only one substance, but its identity is centered on two axes, as it were, around one or the other of which its various properties revolve. The animal is a single substance, then, and *it* goes out of existence when it dies, but nevertheless part of it endures, in virtue of its corporeal form. A unitarian must instead say that when a substance goes out of existence, it *wholly* goes out of existence. Thus when an animal dies, not only is the corpse not that same body, but nothing about that corpse is the same. The corpse may have qualitatively the same properties, but those properties are numerically distinct. It was this implausible consequence – and the difficulty of explaining *why* a numerically distinct corpse should happen to have the same properties as the living body – that fueled the philosophical opposition to unitarianism.¹⁵

¹⁵ For Aquinas, see e.g. *Summa contra gentiles* II.72, *Summa theol.* 1a 76.8 (see also Wippel,

Metaphysical Thought of Thomas Aquinas, pp. 327-51). Aristotle suggests this sort of view at *Meteor.* IV 12, 389b31-390a19, *De an.* II 1, 412b20-22. Pluralists had other, theological objections to unitarianism. For objections of both kinds, see Adams, *William Ockham*, pp. 647-69; Richard Cross, *The Physics of Duns Scotus* (Oxford: Clarendon Press, 1998) pp. 47-93. Because statues are artifacts, they would not generally have been regarded as substances, and so the analysis in such a case would run rather differently than in the case of a true substance like an animal.