Introduction

Aristotle famously held that objects are comprised of matter and form. That is the central doctrine of hylomorphism (sometimes rendered “hylemorphism”—hyle, matter; morphe, form), and the view has become a live topic of inquiry today. Contemporary proponents of the doctrine include Jeffrey Brower, Kit Fine, David Hershenov, Mark Johnston, Kathrin Koslicki, Anna Marmodoro, Michael Rea, and Patrick Toner, among others. In the wake of these contemporary hylomorphic theories the doctrine has seen application to various topics within mainstream analytic metaphysics. Here, appeals to form and matter are used to shed light on problems about ontology, personal identity, philosophy of mind, and philosophy of religion. The current entry documents this resurgence of interest in hylomorphism, the ways it has been applied, and its reception.

Historical Primary Sources

Aristotle presents key arguments for hylomorphism in two places. In Aristotle 1984a, Aristotle provides an argument for hylomorphism, we call the Argument from Change, which attempts to show that the existence of form and matter are the preconditions for explaining change. In the latter, Aristotle 1984b, Aristotle offers a second argument we call The Regress Argument, which argues for the existence of forms as necessary to explain the difference between genuine unified wholes and mere congeries of parts.


In Book 1.7–8, Aristotle argues that we must posit form and matter to explain change. Aristotle claims that for something to change from being non-F to F, there must be something that survives the change, and some item in virtue of which it is F. The former is the “matter”; the latter the “form.” Book 2 attempts to connect these notions of form and matter to the explanation of natural phenomena and scientific inquiry.


In Book 7.17, Aristotle notes important differences between unified totalities (“wholes”) and mere aggregates of material parts (“heaps”). Aristotle claims that it is form that distinguishes the two. Form cannot simply be one more part, for then we would have to appeal to something else to explain why the original parts plus the form was a unity rather than a heap. Aristotle concludes from this that form and matter must be two distinct metaphysical principles.
Historical Secondary Sources

Hylomorphic metaphysics began with Aristotle and was developed in a variety of different ways by successive waves of translators, interpreters, and commentators in the Hellenistic, medieval, and early modern periods. The following selection of secondary literature aspires to be helpful, not comprehensive. Readers in search of a comprehensive bibliography on Aristotle are encouraged to consult Roberto Radice and Richard Davies’s *Aristotle’s Metaphysics: Annotated Bibliography of the Twentieth-Century Literature* (Leiden, The Netherlands: Brill, 1997). For a general discussion of Aristotle’s metaphysics aimed at undergraduates and non-specialists, see Shields 2007, especially chapters 2 and 6. Readers who would like a more detailed account of Aristotle’s *Regress Argument* and the position on the status of the form as a part of the substances should consult Koslicki 2006. There were a number of important debates about the details of hylomorphism in the Middle Ages. For a general overview of these see Pasnau 2010, and the corresponding chapters of Pasnau 2011. One crucial issue concerned the question of how many forms an object was said to have. Unicity Theorists such as Aquinas and Buridan held that each substance had exactly one substantial form. So Socrates’ form of humanity is the one single form for all of Socrates’ parts, such as his heart, lungs, and so on. Pluralists such as Scotus and Ockham, on the other hand, would have held that each of Socrates’ organs had its own distinct substantial form, in addition to Socrates’ form of humanity. The issue at stake was whether the matter that constituted the material object had independent existence apart from the substantial form of the whole substance. Aquinas, alluding to Aristotle’s *Regress Argument*, argued a plurality of substantial forms would make the substance a mere aggregate rather than a genuine hylomorphic unity. (See Brower 2014 for the details.) Scotus, on the other hand, argued that if matter did not have its own existence independent of the substantial form of the whole substance, then the matter could not play the role of the continuous subject that survives change, as was required by Aristotle’s *Argument From Change*. Cross 1998 gives a very clear presentation of Scotus’s argument against Aquinas’s position and Ward 2014 gives a useful account of Scotus’s version of the Pluralist Thesis. Spade 2008 shows the connection between the debate about the plurality of substantial forms and a further question about the scope of hylomorphism. These medieval debates about the details of hylomorphism also influenced early modern philosophy and science.

McCord Adams’s magisterial treatment of William of Ockham. Chapters 15 and 16 in the second volume discuss Ockham’s understanding of the hylomorphic structure of composite substances and Ockham’s understanding of matter.

A systematic study of Aquinas’s hylomorphic metaphysics with applications to a broad range of contemporary issues, including: material constitution, identity over time, temporary intrinsics, substance, the mind/body problem, as well as problems in the philosophy of religion.

A systematic study of Scotus, with three chapters directly relevant to Scotus’s own distinctive brand of hylomorphism. Chapter 2 provides an analysis of Scotus’s arguments for the possibility of matter existing in its own right without form. Chapter 3 discusses Scotus’s understanding of substantial forms. And chapter 4 provides an excellent introduction to the medieval debate about exactly how many substantial forms could exist in a single object.

Koslicki offers her interpretation of Aristotle’s *Regress Argument* from *Metaphysics* Z according to which it is necessary to posit the
existence of form in order to distinguish “wholes” like living organisms from mere “heaps.” She argues, with respect to Johnston 2006 (cited under Material Constitution), that for Aristotle the form of a composite is a part of the composite, although in a different sense than the elements (air, earth, etc.) are parts.


Illuminating article on the history of the word “hylomorphism” which argues that the use of the term to refer to the metaphysical view of Aristotle arose in the 19th century, largely in response to the revival of interest in medieval philosophy in the Roman Catholic Church following Pope Leo XIII’s encyclical *Aeterni patris*. Manning argues, further, that in the early modern period it is inaccurate to regard “hylomorphism” as “a singular doctrine unifying all of the Peripatetic tradition that is capable of being unilaterally rejected.”


Accessible introduction to four key medieval debates about the nature of matter and form. Readers looking for more detailed treatment could find one in the corresponding chapter in Pasnau 2011.


A magisterial treatment of a number of important metaphysical debates in the Middle Ages and how these debates influenced early modern philosophers, including Hobbes, Descartes, and Locke. Chapters 2, 3, and 24 are particularly relevant to discussion of medieval debates about hylomorphism.


Excellent critical survey of Aristotle’s philosophy generally, with chapters addressing the Argument from Change in the *Physics* as well as Aristotle’s application of his hylomorphic theory to biology and the theory of cognition.


A helpful discussion of the medieval controversy about the connection between positions on the plurality of substantial forms on the one hand and the doctrine of universal hylomorphism on the other. Universal hylomorphism is the view, associated with Avicebron, that everything other than God, to include angels and even the human soul, is composed of form and matter.


Provides an exposition of Scotus’s notion of a “partial form” and contains a very nice treatment of Scotus’s argument that hylomorphism need not be committed to the claim that the universe as a whole is a substance.

Contemporary Theories

Various problems animate and motivate contemporary hylomorphic theories. Some such problems are distinctively formal (Fine 1999) or mereological (Koslicki 2008). Other theories (as in Pruss 2013 and Rea 2011) attempt to mitigate skepticism about form
and matter by explaining hylomorphism without the use of abstruse and distinctively Aristotelian resources. Yet other theories (as in Koons 2014, Jaworski 2014, and Oderberg 2007) are more inflationary and make free use of more controversial and distinctively Aristotelian metaphysical commitments.

Develops a theory according to which there is “both a formal and material aspect to most material things.” One key consequence is that material objects enjoy a hierarchical structure (similar to that of sets, which admit of division into members, members of members, etc.).

Jaworski’s version of hylomorphism posits structure as a basic ontological and explanatory principle within a broader substance-attribute framework. Includes a helpful application of hylomorphism to questions about composition (when some things compose or are parts of another).

Distinguishes “staunch” and “faint-hearted” themes in contemporary hylomorphic theories, where the former involves resolute commitment to “a sparse theory of universals and a sparse theory of composite material objects, as well as to an ontology of fundamental causal powers.” Koons argues that staunch theories enjoy a number of theoretical advantages of their faint-hearted kin. Contains useful and concise summaries of many contemporary discussions.

Must-read. Koslicki argues that forms or structures are literally parts of objects. This doctrine best accounts for the obvious difference between structured wholes and mere heaps (e.g., a motorcycle in running condition versus a pile of disassembled parts). Includes extensive and helpful discussion of classical mereology and Aristotle’s own hylomorphism.

Defends the thesis that everything has a real essence (“an objective metaphysical principle determining its definition and classification”), which in turn requires that “every finite material body has a twofold composition, being a compound of act and potency.” Includes applications to questions about the nature of living things and the nature of human beings.

According to hylomorphism, objects are made of form and matter. But what, exactly, are forms? Pruss proposes an answer according to which forms are lawmakers—those things in the world by virtue of which various truths are laws of nature.

Develops a version of hylomorphism that is, unlike other versions of the view, unburdened by problematic commitment to a universal-particular distinction, to a primitive notion of inherence or constituency, or to a fruitless search for viable candidates for
Recent Collections

Aristotelian themes abound in contemporary metaphysics. Hylomorphism is but one element within this revival and has made appearances in recent edited volumes that document the revival. Papers in Novotný and Novák 2014 situate contemporary hylomorphism among more abstract concerns about the structure of objects and whether objects have their properties as parts. Papers in Oderberg 1999 apply hylomorphism to various (mostly contemporary) problems. Papers in Tahko 2012 offer a mix of contemporary and historical perspectives.

Wide-ranging collection. See especially the papers by Loux and Oderberg.

Short collection (132 pages) of six papers on “contemporary metaphysics from an Aristotelian perspective.” Now somewhat dated. (Originally published as special issue of Ratio, vol. 11, 1998).

Another wide-ranging collection. See especially the paper by Takho for an overview and defense of the recent Aristotelian revival within metaphysics (construed here as “first philosophy”).

Ontology

Contemporary metaphysics is full of puzzles and problems, and hylomorphic theorists often propose their views as solutions to these local problems. Three such problems concern material constitution (how does a statue relate to the clay of which it is made?), mereology (what is the nature of parthood?), and temporary intrinsics (how one and the same thing can, without contradiction, exemplify different properties at different times?).

Material Constitution

The problem of material constitution is the problem of what the relationship is between a material object (such as a statue) and the matter (e.g., clay) that constitutes it. Some argue that constitution is identity—the statue is the clay. The difficulty for this view is how to make sense of the diachronic identity of the statue over time, for if the statue is identical to this particular parcel of clay, then the statue cannot survive the loss of even a single particle of clay, which seems absurd. For this reason, others, such as David Wiggins, argue that the statue cannot be identical to the clay since the clay can survive smashing while the statue cannot. But if constitution is not identity, then the statue and the clay that constitute it must be two distinct objects, located in the same place at the same time. The grounding objection against asks what could possibly ground the distinction between the statue and the clay. Johnston 2006 argued that adopting hylomorphism could allow one to respond to the objection on behalf of Wiggins: the difference between the clay and the statue is explained by the fact that the clay and the statue have different forms. Fine 2008 follows the same line of argument, although Sidelle 2014 casts doubt on the success of this response. Rea 1998 offers a different hylomorphic
response to the problem. According to Rea, the solution is to recognize a relation of accidental sameness less than identity. On this view the statue is “the same” as the clay even though the statue and the clay aren’t identical, and so the statue can survive changes to the clay and yet there is no need for an account to ground the difference between the statue and the clay. Inman 2014 follows basically the same approach. Finally, there have been at least two worries expressed in the literature about the use of hylomorphism to solve problems about material constitution. Fine 1994 argues hylomorphic solutions to the problem of material constitution face an important dilemma about how to explain what makes two different hylomorphic compounds distinct. Barnes 2003, on the other hand, queries how the distinction between form and matter is to be understood.

Identifies a paradox at the heart of several recent critiques of hylomorphism. The paradox is that there are compelling reasons to think that the distinction between form and matter is mind-independent and real, and there are also compelling reasons to think that the distinction is mind-dependent and one of mere reason.

Describes a puzzle facing any hylomorphic theory according to which it is possible for items to exchange matter. Socrates is not Callicles, but Socrates and Callicles share the same form, and the matter that composes Callicles now could come to compose Socrates later. But, if Socrates is the composite of the same form as Callicles and the same matter as Callicles, then surely Socrates is Callicles, contrary to our initial assumption. Fine further argues that any resolution of the puzzle involves exegetical or metaphysical difficulties.

Argues that, if distinct material things may materially coincide at a time (e.g., a statue and its clay) and differ in their modal properties (the statue may be destroyed without destroying the clay), then the two must differ with respect to form.

According to plenitude, for every filled region of space, there is a material object that exactly occupies that space. Inman develops an Aristotelian variation on plenitude according to which the plenitude theorist’s many objects are accidental unities of form and matter.

Develops and defends the thesis that every complex item is governed by a form or principle of unity. In particular, every complex item has a canonical statement true of it with the following form: “What it is for. . . (the item is specified here). . . to be is for. . . (some parts are specified here) . . . to have the property or stand in the relation. . . (the principle of unity is specified here).”

Articulates and defends a solution to the problem of material constitution. The solution deploys sameness without identity, according to which, for example, a statue and the clay of which it is made are (despite not being identical) to be counted as one

Sidelle argues in the negative.

**Mereology**

Mereology is the study of parts and wholes. Since the time of Aristotle’s *Regress Argument*, understanding the part/whole relation has been a crucial preoccupation of hylomorphists. One central question is whether to call the form and matter “parts” of the substance, or not. Johnston 2006 (cited under Material Constitution) argued that the *Regress Argument* requires one to say that the form is not part of the substance, Koslicki 2007 and Toner 2013 disagree. Britton 2012 finds the mereological hylomorphism championed by Koslicki gives a nice account of the mereology of several kinds of entities, although she thinks it cannot explain some other instances of the composition of a whole out of parts. Marmodoro 2013, on the other hand, argues against Koslicki’s mereological interpretation of Aristotle on philosophical as well as exegetical grounds.


Argues that, though contemporary hylomorphic theories correctly explain the mereology of both concrete and abstract objects, they fail as accounts of properties and their parts. Hylomorphic theories cannot say, for example, how color is composed of hue, saturation, and brightness.


Develops a formal reconstruction of one half of Aristotle’s hylomorphism (that concerning matter), expressed as various axioms and their consequences.


Detailed examination of Kit Fine’s Aristotelian account of objects and their parts, with a special critical focus on what Koslicki regards as its excesses. See also Fine 1992, Fine 1999 (cited under Contemporary Theories), and Fine 2008 (cited under Material Constitution).


Argues that contemporary hylomorphists who hope to fix the alleged errors of Aristotle miss the mark in taking form and matter to be parts of objects. When properly understood (that is, in terms of actuality and potentiality), Aristotle’s hylomorphism needs no revision.


Defends the view that substances have forms as parts.
Temporary Intrinsics

The problem of temporary intrinsics is the problem of saying how one and the same thing can, without contradiction, exemplify different properties at different times. Brower 2010 argues that hylomorphists can solve the problem in an interesting way, but Bailey 2015 disagrees.


Argues that a number of views run afoul of a plausible priority principle according to which we exemplify mental properties in a primary or non-derivative sense. One target is the hylomorphism of Brower 2010.


Brower argues that hylomorphism can supply a distinctive and compelling solution to the problem. On Brower's proposed solution, an item can have different properties at different times by being the matter of various hylomorphic compounds (so Socrates is the matter of seated-Socrates and also the matter of standing-Socrates).

Philosophy of Mind

Hylomorphism, when applied to the case of thinking human beings, promises to disrupt contemporary categories and trace a plausible and moderate path between extreme alternatives. In the philosophy of mind, Aristotle has been understood as a substance dualist, a property dualist, a physicalist, and a functionalist (Cohen 1992). Klima 2007 shows that Aquinas at least is not a substance dualist. The author of Jaworski 2011 and Jaworski 2016 develops an interpretation of hylomorphism as a novel theoretical position (in the contemporary literature) on the relationship between mind and body that is genuinely different than either substance or property dualism on the one hand or various forms of reductive or non-reductive physicalism on the other. Hylomorphism is supposed to be a third alternative because, according to Jaworski, hylomorphists recognize structure as a fundamental, but non-physical feature of material objects, and yet hylomorphists are not required to deny the causal closure of the physical world. At least two papers in the literature express important misgivings about the prospects for hylomorphism as a third way beyond dualism and physicalism. Williams 1986 argued that there was no tenable middle ground for hylomorphism to occupy, and so the view must in the end boil down to either a variety of substance dualism or a variety of physicalism. In a similar vein, Robinson 2014 has argued Jaworski cannot make form a fundamental explanatory principle without rejecting the causal closure of the physical.


A number of Aristotle's interpreters read him as endorsing functionalism, according to which mental states are defined by their relations to other mental states and behavioral inputs and outputs. Cohen defends this interpretation against recent criticism.


Comprehensive, introductory treatment of the main positions available on the mind/body problem. Later chapters introduce hylomorphism as a viable competitor to dualist and physicalist positions on mind and body. Excellent secondary text for an undergraduate or MA-level Philosophy of Mind course.

Expands on treatment of hylomorphism in Jaworski 2011. Argues that structure or form is a first-order explanatory principle. Further, he argues that endorsing this position provides the necessary metaphysical tools to solve various versions of the mind/body problem familiar from the current philosophy of mind literature.


Argues persuasively Aquinas’s hylomorphic theory of mind is not a variety of substance dualism.


Argues that hylomorphic realism—according to which structures are part of the basic furniture of the world—is incompatible with the causal closure of the physical world.


Argues that although hylomorphism may appear to offer a compromise position in philosophy of mind between reductivism and dualism, this appearance is illusory. Hylomorphism must bottom out as either a “polite” form of reductionism or a confused kind of quasi-dualism.

**Personal Identity**

Hylomorphism has been put to two different uses in the personal identity literature. In the early part of the 20th century, the most common views on personal identity all followed Locke in holding that personal identity rests upon some sort of psychological criterion. Against the psychological view, Eric Olson’s *The Human Animal* (New York: Oxford, 1999) reintroduced a view called animalism, according to which persons are animals and the criterion for personal identity is simply biological continuity. Toner 2011 uses hylomorphism to defend animalism. Hershenov 2008 and Hershenov 2011 attempt to show that hylomorphists need not endorse animalism, nor the psychological criterion either. Toner 2014 contains Toner’s response to Hershenov.


Argues hylomorphism provides a middle way between animalist and psychological accounts of personal identity. On his view, humans are animals, but only contingently. He then attempts to show how his position offers a superior explanation of the intuitions in classic personal identity thought experiments than the competing views.


A more extended comparison of Hershenov’s hylomorphic theory of personal identity with animalism, including an extended
Develops a hylomorphic version of an animalist theory of personal identity and argues with respect to Hershenov that this is the view of Aquinas, and that it does not conflict with the metaphysical possibility of resurrection.

Distinguishes hylomorphic animalism from other contemporary animalist views and answers an objection to Toner’s hylomorphic animalism.

Philosophy of Religion

Contemporary philosophers of religion have applied hylomorphism to several long-standing debates in the philosophy of religion, including those about theism (Dumsday 2012, Kronen and Menssen 2012), the possibility of incarnation (a divine being becoming human—see Rea 2010), the Christian doctrine of the Trinity (Brower and Rea 2005), and the possibility of resurrection after death (Blaschko 2010). In some cases (especially resurrection), the success of the proposed application hinges on the particular kind of hylomorphic theory at issue (Madden 2013). Students of Thomas Aquinas, especially, have spilled much ink on how to best understand his hylomorphism and its application to the post-mortem existence of human beings (Toner 2010, Toner 2011, Van Dyke 2014, Van Dyke 2009, and Wood 2015).

Presses three objections against extant hylomorphic models of post-mortem survival and resurrection (they trade on non-unique replication, gappy existence, and divine injustice). In answer to the objections, Blaschko argues for the post-mortem identification of a human person with her substantial form.

Introduces and defends a hylomorphic model of the Christian doctrine of the Trinity. Hylomorphism’s account of how a statue relates to the clay of which it is made ("sameness without identity") can also illuminate the relation between three divine persons.

Argues that substratum theorists should abandon their view for hylomorphism or posit a powerful agent outside of nature (i.e., a god).

Argues that hylomorphism offers powerful support for one formulation of Aquinas’ “Fifth Way.” Includes further defense of Thomistic hylomorphism against three objections.

A helpful overview of Thomistic hylomorphism and the middle route it promises between dualism and physicalism. Madden argues that hylomorphism as applied to human persons should be construed as a version of emergent property dualism and that it can, furthermore, provide a coherent account of the possibility of resurrection.


Argues that hylomorphism can provide a compelling model of the Christian doctrine of the incarnation. This hylomorphic model is, furthermore and unlike other proposals, fully compatible with the Christian doctrine of the Trinity.


According to some Thomists, human beings exist in the interim interval between death and resurrection. Toner argues against this interpretation in favor of the view that human beings cease to exist upon dying.


Considers what hylomorphists who believe in post-mortem existence should say about the identity of the person post-mortem. Toner argues that hylomorphists should endorse corruptionism, the view that the person ceases to exist at death until he or she is bodily resurrected.


Some contemporary hylomorphic theorists classify the rational soul as an immaterial substance and identify it with the human person. Van Dyke argues that each claim is implausible on both Thomistic and broader philosophical grounds.


Identifies a “two-person” problem for Thomistic accounts of human nature and the resurrection of the body and argues that the best solution requires that resurrection be *immediate*. Such a solution is not, however, without costs.


Argues that Aquinas must endorse survivalism, the view that the possibility of the resurrection requires the individual to continue to exist in some form after death and before resurrection.