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## Matter–Form (Hylomorphism) in Early Modern Alchemy



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### Keywords

Alchemy · Natural philosophy · Medicine

### Synonyms

Forma, Species; Materia, Materies

### Introduction

Hylomorphism is a recent term in the history of philosophy and the sciences. What was used from Antiquity to the early modern period was the terminological couple “matter” and “form.” According to the Aristotelian physics, matter and form are indissociable principles which constitute the elements and preside over the generation and destruction of natural beings. Matter is the material substrate of the elements while form defines their essence. Together, they play a central role in the formation of beings during the union of elements or “mixture.” In the late Middle Ages, the Aristotelian framework of matter–form was integrated into alchemical theories about material change and transmutation. In reference to Latin–

Arabic alchemy, medicine, and meteorology, alchemists began to develop pre-corpuscular interpretations of elements as discrete components made of matter–form. In the early modern period, despite Paracelsus’ rejection of the Aristotelian physics, alchemists tended to maintain the notion of matter–form while proposing eclectic accounts of elements in the example of the atomistic theories of Libavius and Sennert. The Aristotelian conception of matter–form was nonetheless challenged by mechanical perspectives on chymistry in the late seventeenth and eighteenth centuries along the lines of Boyle and Newton.

### Heritage and Rupture with the Tradition

Originally Aristotle in *On Generation and Corruption* developed his physics of matter–form, elements, and mixture to defeat the natural philosophy of his predecessors, in particular the atomistic philosophy of Democritus. In his view, elements unite through the “combat” of their qualities by means of their matter and form. Their mixture leads to the formation of a homogeneous compound with a substantial form in actuality, while the initial elements remain in potentiality (Wood and Weisberg 2004). The Aristotelian account of mixture prompted discussions on the status of matter–form, elements, and qualities in medieval and early modern natural philosophy and medicine (Maier 1982; Lüthy and Newman

1997; Lüthy et al. 2001; Manning 2012; Petrescu 2015). In the medical curriculum, the physics of matter–form, elements, and mixture was part of the Galenic theory as it determined the essential and material constitution of bodies, from the temperament of the human body to that of drugs.

In the late medieval West, learned alchemists attempted to establish alchemy as an art and a science by grounding it in Aristotelian physics and Galenic medicine (Obrist 1993). To do so, they established a series of analogies between the transformation of alchemical substances and the development of a new being (Crisiani 1993). The transmutation of matter during the alchemical work was described as a progressive passage from prime matter to a series of mixtures which were each endowed with a form (Principe 2012). The latter was understood as a perfectible essence with specific properties like color, texture, and odor.

In the late Renaissance, Paracelsian physicians like Petrus Severinus in his *Idea medicinae philosophicae* (1571) challenged the Aristotelian definition of generation by replacing the mixture of elements with the “progression” of celestial seeds which were incubated in some “elements” – in the sense of receptacles and matrices (Shackelford 2004). However, many alchemists retained from Severinus the idea that the Paracelsian notions of element and seed somewhat overlapped those of matter and form. This view was merged with Renaissance Platonic accounts of the form as an entity of celestial origin which gave specific properties to beings (Emerton 1984; Hirai 2011).

In turn, the notions of matter, form, and mixture were integrated into seventeenth-century accounts of transmutation, drug making, and physiological processes. In this regard, the German physician Andreas Libavius (c.1550–1616) explained the Paracelsian principles (Salt, Sulfur, and Mercury) in light of medieval and Renaissance alchemical theories. In his view, the principles are “perfect” mixtures of elements holding a superior form as a quintessence (Newman 2006; Moreau 2019). The German physician Daniel Sennert (1572–1637) relied on Libavius’ interpretation by stating that the perfect “mixtures” involved in chymical processes were atomic

entities whose superior form caused their powers (Newman 2006; Klein 2014).

Mechanical accounts of chymistry like these of Boyle and Newton challenged the notion of substantial form although it has been shown that both scholars drew a considerable part of their corpuscular theories on medieval and Renaissance alchemy including the Aristotelian physics of matter–form (Clericuzio 2000; Newman 2006, 2019).

## Cross-References

- ▶ [Boyle’s Mechanical Philosophy](#)
- ▶ [Chymistry \(Alchemy/Chemistry\)](#)
- ▶ [Complexion \(cf. Temperament\)](#)
- ▶ [Corpuscularianism](#)
- ▶ [Galenism in Early Modern Philosophy and Medicine](#)
- ▶ [Iatromechanism and Iatrochemistry](#)
- ▶ [Libavius, Andreas](#)
- ▶ [Newtonianism and Chemistry](#)
- ▶ [Paracelsus and Early Modern Paracelsianism](#)
- ▶ [Principles in Early Modern Philosophy and Science](#)
- ▶ [Seeds \(\*Semina\*\) in Early Modern Natural Philosophy](#)
- ▶ [Sennert, Daniel](#)

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