‘MATTER’ AND ‘FORM’: BY WAY OF A PREFACE

CHRISTOPH LÜTHY

Max Planck Institute for the History of Science, Berlin

WILLIAM R. NEWMAN

Indiana University at Bloomington

1. The Issue

In his 1625 Cursus physicus, the philosopher Jean-Rodolphe Le Fèvre defended Aristotelian hylomorphism against rival definitions of the “inner principles of natural things.” His brief historical survey of positions begins with the monism of Parmenides and Melissus which posited that “all was one immobile being.” Le Fèvre rightly states that their theory denied the reality of the various changes we perceive to occur in nature. This was the reason—so he continues—why subsequent schools of thought rejected the Eleatic theory. Instead, they postulated principles that would both allow for and explain natural change. Le Fèvre suggests that their solutions came in the guise of various dualisms: the Pythagoreans spoke of the battle between good and evil, the atomists of full and void, and the Platonists of ideas and things, to name the more prominent among the fourteen pre-Aristotelian positions known to this author. But all of them are wrong: “The fifteenth [view] which is the only true one was Aristotelé’s who said that there were two principles internal to, and by themselves constitutive of, natural bodies, namely matter and form.”¹ All other analyses could be shown to be impossible on logical grounds alone, and Le Fèvre dismisses them with outrage and scorn.

In the “Preface” to his Essential Tension (1977), Thomas Kuhn

¹ J.-R. Le Fèvre (Faber), Cursus physicus in quo totius philosophiae naturalis corpus explicatur, (Geneva, 1625), 24-5: “principia interna rerum naturalium;” “omnia esse unum ens immobile;” “Decimaquinta [sententia] quæ sola vera est, fuit Aristotelis dicentis principia interna & per se constitutionis corporum naturalium esse duo, nempe materiam & formam [...].”
describes his first personal experience with a conceptual gestalt-switch. He had tried, quite in vain, to come to terms with what appeared to be Aristotle’s absurdly wrong theory of motion, until “one memorable (and very hot) summer day those perplexities suddenly vanished.” They vanished because Kuhn had mentally entered the alien system of Aristotelian physics whose subject he now recognized to be “change-of-quality in general,” and whose “elements” were “not material bodies, but rather the qualities which, when imposed on some portion of omnipresent neutral matter, constituted an individual material body or substance.” The experience of his own intellectual break-through into the core of Aristotle’s hylomorphic cosmos explained to Kuhn what Butterfield had meant by “putting on a different kind of thinking-cap.”

The 1625 view from within the hylomorphic model and the outsider’s view of 1977 appear to be complementary. Le Fèvre’s uncompromising insistence on an analysis of natural bodies in terms of matter and form and Kuhn’s difficulty at breaking into the Aristotelian paradigm may both seem to underline the monolithic nature of hylomorphism and its outlandish appearance from a twentieth-century point of view. They also appear to lend support to the common assumption that takes the natural philosophy of late scholasticism to have been so rigidly deductive in structure, so didactic in its goals, and so strongly dependent on metaphysics and logic as to render it incapable of adapting to new evidence and to new methods. According to such a view, the Aristotelians’ was a world-view that could only survive en bloc or disappear altogether. This is indeed the conclusion reached by Mary Patricia Reif, who with a sympathetic eye has surveyed a large number of seventeenth-century textbooks in natural philosophy. Reif supported her thesis with quotations such as the one she had found in Johannes Combach’s 1620 textbook of physics. This German philosopher expressed the hope

that someday someone will finally arise, who will show us more perfect principles, and gather into one certain system what Paracelsus and other teachers of truth have handed down here and there in scattered fashion, and deliver to us the order and connection of true physics.

---

3 J. Combach: Physicorum Libri IV (Marburg, 1620), 2: “[...]ut tandem mon-