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Why Aristotle took so long to die

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Like young people looking askance at their parents, we often have trouble taking seriously the interests or even the intellects of “scientists” from centuries gone by (an attitude already betrayed by the urge to use quotation marks). After all, their theories were wrong. But the greatest wrong physicist of them all was Aristotle. The earliest thinkers we today classify as scientists (Bacon, Galileo, Newton) cut their teeth trying to show how he was wrong—but it wasn’t easy. In order to see why it was so hard, we need to transport ourselves mentally back to the period between ancient Greece and seventeenth-century Europe and try to think like Aristotelians. That way we can catch a taste of the intellectual pleasures of Aristotelian physics and cosmology—including Aristotle’s concepts of elements, cause, natural motion, and the “two-storey” universe. By becoming (temporary) Aristotelians, we’ll be able to see better, for example, why Copernicanism took a hundred years to catch on. For the heliocentric “celestial machine” demanded a new physics that nobody had yet provided. Finally, to examine Aristotle’s long monopoly on physics—based on what had grown to look like simple common sense—is also to stir up questions about how we might gain enough perspective on our present habits of thought to avoid getting stuck in our own orthodoxies. We may even find that those habits, as exemplified by modern astrophysics, still conceal unpurged remnants of Aristotle.