

Aristotle on Demonstrative Knowledge

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A demonstrative science described in the *Analytica Posteriora* (*APo*) had a strong influence on the later philosophers, even in the period of the Scientific Revolution. For modern pioneers Aristotle's demonstrative science was one of their models of new sciences. This is why we tend to understand *APo* as a work on the philosophy of science. But at the same time it is also a work on epistemology (or theory of knowledge). Science is not so separate from knowledge as we understand it today. Aristotle says we cannot have knowledge without demonstration. How should we understand his demonstrative science (knowledge)?

Science is thought to be a systematized knowledge. We think we *come to know* a various things by observing natural phenomena, and that thereafter we systematize them into a science using demonstration. But Aristotle says we cannot know without demonstration. I show how demonstration makes possible our knowledge, or our comprehension of a fact and its cause. Comprehending a fact in a demonstrative scheme, we inquire its cause as a middle term of the demonstration.

Science is thought to be of universal thing and therefore of necessary thing. But we must also know many particular things. When we have a demonstration, how can we know particular things? I find the answer in Aristotle's theory of universal in *APo* I.4-5. The universal (*katholou*) used there has not just an extensive meaning (*kata pantos*) but also an intensive (or definitional) meaning (*kath' hautou*), and the latter contributes to our recognition of necessity. Aspect perception described there holds the intensive meaning and ensures necessary knowledge of particular things.