

in recent centuries. I now must add three qualifying observations that open the way to presenting an alternative view of the basic and total science.

First, the resistance of modern science to Aristotelian notions was primarily a resistance to Aristotle's physics, and here, I feel, it can be granted that Aristotle in his physics was not true to his own principle. For in principle he distinguished between the first for us and the first in itself, but in his account of material objects he conceived their forms as the sensibilia propria, the hot and cold, the wet and dry, the rough and smooth, etc., which certainly are the first for us.

Secondly, as Sir David Ross pointed out in the Introduction (p. 14) to his edition of Aristotle's Prior and Posterior Analytics, Aristotle himself would not admit the strict application of his Posterior Analytics outside the field of mathematics.

Thirdly, Aristotle did not, it seems, distinguish two types of intelligibility: the intelligibility of what must be; and the intelligibility of what may or may not be. But that distinction achieved general recognition only through Riemann's paper on the various hypotheses on which geometries may be constructed. And, in fact, when Aristotle in chapter 19 of the second book of the Posterior Analytics explains the origin of our knowledge of first principles, his analogy of a rout followed by a rally is as relevant to the discovery of a mere hypothesis as to the discovery of a necessary truth.

Let us now turn to our main point in this section, the indication of an alternative view on the basic and total science.

Here the key element is that there occur within human knowledge two quite different ways of returning from the propositional and conceptual to the particular and sensible.

The first and most familiar way is the logical: one proceeds from "man" or "horse" to "this man" or "this horse."

The second way, equally familiar in actual usage, but not commonly thematized, is through the act of understanding to the actually understood imagined or sensible data.

The first way does not step outside the set of logical operations: it is simply the application of the conceptual universal to the conceptualized particular.

The second way returns along the prelogical, prepropositional, preconceptual path that runs from sensible presentations through inquiry and insight to intelligent speech. So when intelligent speech says that this plane curve is a circle because its radius vector is constant, inquiry has asked why this plane curve is perfectly round, and insight has discovered why, namely, the constant radius vector, or, in other words, were the radius vector not constant, then the curve could not be perfectly round.

To be noticed in this illustration is the fact that the insight yields not an actual but only a potential universal. The actual universal emerges only in the conceptual definition which prescind from the parts of the matter of the sensible presentation (color, size) and speaks only of the parts of the form (plane curve, constant radius vector) as Aristotle noted in Metaphysics Z, 11. But the insight itself, though the prior ground of the actual universal, is simply the discovery in the presentation of its intelligibility. As the form in matter, or the soul in the body, is a particular form and a particular soul, so the intelligibility grasped in the sensible presentation is the particular intelligibility of that presentation.

So we come to the precise difference and significance of the second way. The first way returns from "man" to "this man," or from "horse" to "this horse," by way of the ostensive gesture, "this." But the second way returns from the universal expression through the recovery of the act of insight that originally generated the universal.

What follows?

Strictly, nothing follows. We have only been indicating a clue. But we have been looking for a post-Aristotelian alternative to the basic and total science. What our clue suggests is that the basic and total science has to be, not just metaphysics, but the compound of (1) cognitional theory, (2) epistemology, and (3) the metaphysics of proportionate being.