

its extent is so vast that it cannot be encompassed by any single mind; and its production calls for the assembled resources and far-flung collaboration of the world's scientific communities.

Finally, it is to be acknowledged of course that Aristotle was aware of the ideal character of ^{the} ~~his~~ notion of science expounded in the Posterior Analytics. As Sir David Ross testified, ~~it~~ throughout his writings Aristotle took the view that only ~~by~~ by courtesy was the name, science, to be given any subject except mathematics.⁸ Similarly, theologians that accepted Aristotle's notion of science ~~regularly~~ either denied that theology was a science or, if they made that claim, admitted that they were using the term in some mitigated, ~~or~~ analogous sense. It remains, however, that modern mathematicians do not conceive their basic premisses as necessary truths. It follows that in the contemporary catalogue there does not exist any science that ~~corresponds~~ ^{new} meets Aristotelian requirements; and since no such science ^{new} exists, the old analogy of science has to be dropped. ^{Its undue survival is responsible for the fact} ~~in fact, it is quite~~ ~~highly misleading~~ that ^{can} ~~when~~ ecclesiastics ^{can} praise science but mean, not the sciences that exist, but the Aristotelian ideal of demonstration; and that ^{can} ~~when~~ they brush aside the best scientific opinion of the day on the ground that it has not been demonstrated, ~~or inversely~~ that they claim to possess knowledge of necessity but ~~when they mistake tautologies for necessary truths and~~ ~~a posteriori or probable arguments for demonstrations~~

8) W. D. Ross, Aristotle's Prior and Posterior Analytics, Oxford 1949, p. 14.

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Finally, Aristotelian and modern science differ in their mode of are conceived in quite different manners. ideal of v necessary conclusions following from For the Aristotelian the deductivist ideal is realized in arithmetic and geometry⁸ and approximated in some analogous fashion in other fields

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Finally, ~~whilst~~ it is to be acknowledged that Aristotle himself was quite aware of the ideal character of his notion of science. As Sir David Ross has testified, throughout his writings Aristotle took the view that only by courtesy was the name, science, to be given any subject apart from mathematics.⁸ Similarly, theologians that accepted Aristotle's notion of science either denied that theology was a science or, if they made that claim, admitted that they were doing so in some mitigated and merely analogous sense. Today, however, the Aristotelian notion is just an anachronism, for even the mathematicians do not claim their axioms to be necessary truths. For the most part they are content if they can claim that their axioms are not contradictory. The more exacting intuitionist school ~~demanding~~ excludes the use of the principle of excluded middle and so demands that all mathematical entities have a positive intelligibility. Moreover, philosophers employing transcendental method take their stand not on necessity but upon fact, the fact that the subject operates in accord with certain native structures and, when he mistakenly claims to operate otherwise, is involved in an implicit contradiction. It would seem to follow that the old analogy of science has to be dropped. For the principal analogate has ceased to exist

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Finally, it is to be acknowledged, of course, that Aristotle was aware of the ideal character of the ^{notion of} science expounded in the Posterior Analytics. Sir David Ross has remarked that 'Throughout the whole of his works we find him (Aristotle) taking the view that all other sciences than the mathematical have the name of science only by courtesy, since they are occupied with matters in which contingency plays a part.'⁸ ^{Three} ~~Two~~ points, however,

8) W. D. Ross, Aristotle's Prior and Posterior Analytics, Oxford 1949, p. 14.

must be made. First, modern mathematicians do not believe that their basic premisses are necessary truths, so that there may be no science whatever of the type ~~expounded~~ set forth in the Posterior Analytics. Secondly, while the ~~modern~~ Aristotelian traditionalist might insist that, since the modern sciences do not demonstrate, they are not sciences properly so called but only sciences in some analogous sense, it remains that others might find this position somewhat perverse since there seems to be at the present time no science properly so called and so ~~rather than~~ nothing to which the sciences that exist are analogous. Thirdly, the differences between the Aristotelian ideal of science and the modern fact are far too great for any but the looser notions of analogy to be relevant to comparing them; and a loose notion of analogy cannot be precise and detailed enough to provide the modern sciences with the effective ~~guidance~~ guidance and control that they need. There is no road back from method to logic and the Posterior Analytics.

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Finally, it is to be acknowledged of course that Aristotle was aware of the ideal character of the notion of science expounded in the Posterior Analytics. As Sir David Ross put it, Aristotle throughout his writings took the view that only by courtesy was the name, ~~a~~ science, to be given any subject except mathematics.⁸

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It remains, however, that modern mathematicians do not conceive their basic premisses as necessary truths and so, in the contemporary catalogue, there exists no science that corresponds to Aristotelian requirements. This fact makes it somewhat perverse to object that, since modern sciences do not demonstrate, therefore they are not sciences properly so called but only sciences in some analogous sense. Moreover, even if the mathematicians were to change their minds on this point, still the differences between mathematics and empirical science are far too great for any but the loosest and least useful notions of analogy to be relevant to their comparison. The time, then, has passed when there was any point to a distinction between sciences properly so called, which demonstrate, and sciences in some analogous sense.